Agenda setting in the clinical encounter: what is it, and is it measureable?

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Dedication

For Nathan, his papa, and his grandparents.

Acknowledgments

This thesis began in clinical practice, and crystallised around an interaction with a troubled young woman, who wanted to return to work, when as her care provider, I wanted her to quit using cannabis, and take her medication. So first, thanks to her for challenging me to think differently about how to establish a shared focus in the face of competing priorities.

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Summary

The term agenda setting has been used variably across the healthcare literature, in particular in writings on doctor-patient communication, medical education, and behaviour change. No attempt has yet been made to integrate these different conceptualisations. This impacts both investigation and teaching of this communication skill.

The studies in this thesis aim to clarify a conceptual foundation, and to develop a measure of agenda setting, for use in teaching clinicians. A context of long-term condition management was selected. In these clinical encounters clinician and patient agendas naturally intersect and may disagree, and patient participation is essential to effective management.

Phase 1 of this thesis involved a structured literature review, and focus group study with clinicians in primary and secondary care to map components of agenda setting. These were refined through a consensus group study involving patients, clinicians, researchers and educators. An integrated model of agenda setting is proposed that adopts new terminology: *agenda mapping* involves establishing shared focus, and *agenda navigation* involves tracking natural shifts in focus throughout an interaction.

Agenda mapping includes six core domains: (1) identifying patient talk topics, (2) identifying clinician talk topics, (3) agreeing shared priorities, (4) agreeing focus, (5) collaboration, and (6) engagement. Clarifying these domains established a foundation for measurement.

Phase 2 of this thesis addresses measurement of *agenda mapping*. A review of measures confirmed that no existing measure includes all agenda mapping domains. The Evaluation of AGenda mapping skiL Instrument (EAGL-I) was developed, and tested in a study with third year medical students. EAGL-I scores were shown to represent reliable and valid assessment of agenda mapping. Conditions, under which reliable assessment may occur, are also discussed.

Educators and researchers now have a tool for use in teaching agenda mapping to clinicians. Further investigation of agenda mapping in long-term condition management may also now progress.

Key words: agenda setting, agenda mapping, healthcare communication, motivational interviewing, focusing, measurement, psychometric, teaching, training, education, long term conditions, behaviour change

List of abbreviations

COPD	Chronic Obstructive Pulmonary Disease
EAGL-I	Evaluation of AGenda mapping skilL Instrument
G theory	Generalisability theory
MI	Motivational Interviewing
MITI	Motivational Interviewing Treatment Integrity measure
RIAS	Roter Interactional Analysis system
SDM	Shared decision making
QOF	Quality and Outcomes Framework

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1 Background and introduction

1.1 The context

1.1.1 The policy context

The start of the 21st century has been characterized as a time of "radically increased interdependence" (Chan 2010) with the impact of climate change, a worldwide financial recession, and industry trends such as the globalization of the food market, impacting population health and resources. In the UK different governments over the past two decades have initiated change proposals about the best use of finite resources in delivering the National Health Service, leading to changes in the structure and financing of clinical services (Department of Health 2000, Department of Health 2006, Department of Health 2008). The nature of health threats is also changing with mortality due to chronic non-communicable disease in an ageing population increasing, currently accounting for two thirds of deaths globally (Boerma 2011). In the UK mortality linked with infectious disease has reduced considerably and now accounts for only 2% of deaths in England (Department of Health 2010a). In England 50% of all GP appointments and 70% of the healthcare spend are accounted for by people with long-term conditions (Dunstan 2011, Department of Health 2012). New communication technologies and social media have changed the landscape and availability of health information and individuals have a wealth of available resources to develop their own expertise in areas of health and wellbeing (Hawn 2009). Against this backdrop of a changing landscape of healthcare needs, expectations and delivery, the role of both the healthcare clinician and patient, has become more demanding and complex (Hawn 2009, Greysen, Kind et al. 2010).

In 2000 the UK government laid out its plan for modernising the National Health Service (NHS) in the *NHS Plan* (Department of Health 2000). Quality standards were set out in National Service Framework documents in a range of areas, including mental health (Department of Health 1999), and long term conditions (Department of Health 2005b, Department of Health 2005c). At the heart of

these proposals was the drive to a more patient –centred service, in which patients were involved in the planning, delivery and improvement of healthcare services (Department of Health 2004, Department of Health 2005a). While the NHS plan and the NSF documents set out the aspirations and quality standards associated with a modernised, patient-centred NHS, the challenge that remained was to identify ways in which finite resources could be re-organised to deliver on these. A report commissioned to consider this challenge, *Securing Our Future Health: Taking a Long-Term View*, reinforced the idea that high quality care is dependent on the fully engagement of the population in health improvement (Wanless 2002). This included patients taking an active role in maintaining health and preventing illness, and embraced the importance of supporting patient self-management.

Patient self-management is a key feature of the Chronic Care Model (Bodenheimer, Lorig et al. 2002). This model has been influential to UK health policy. It stresses the importance of a health service that is proactive, supporting people to make better choices about how to prevent illness and to make informed choices about actively managing their health. The Chronic Care Model emphasises the importance of patients being active and informed participants in their care, and as such contributing to a productive healthcare encounter. To achieve this objective, patients would require appropriate information and professional advice (Wanless 2002). *Supporting People with Long Term Conditions,* in which the NHS and Social Care Model, is laid out, a structure of management of people with long term conditions is present in which 70-80% (level 1) of the population with a long term condition should receive supported self-management (Department of Health 2005c). This was described as collaboratively developing the knowledge, skills and confidence to care for themselves effectively. Two additional levels of care, namely high risk (level 2) and high complexity (level 3), were identified for the remaining 20-30% of the population, where more intensive interventions were also considered necessary.

Supporting self-management involves recognising the contribution make in actively participating in their care (Department of Health 2005c). There is a

history of service user involvement and engagement in mental health settings in which service users view themselves as active participants in the shaping of health services (Wallcroft and Bryant 2003). Patient engagement and empowerment is fundamental to this approach. The term co-production may better describe the notion of collaboration in healthcare clinical encounters. Co-production can be defined as "the contribution of services users to the provision of services" (Realpe and Wallace 2010, p.8). The process of co-production is therefore highly individualised and influenced by the knowledge, skills and confidence of both parties in the communication process.

In 1978 the Declaration of the Alma-Ata was presented as an international statement outlining critical actions needed to "protect and promote the health of all the people of the world". Embedded in the Alma-Ata declaration (1978) is the recognition that "people have the right and duty to participate individually and collectively in the planning and implementation of their healthcare". This "right and duty" of participation in healthcare is considered central to government healthcare strategy (WHO 1978). In the UK a radical reform of the NHS aspiring to create a truly patient centred service was initiated at the turn of the century (NHS Plan 2000). A decade later these aspirations continue to be reflected in policy documents in the UK aimed at improving clinical services (Department of Health 2010b)

The political and ideological impetus to involve patients actively in their care mirrors the development of clinical approaches with the same objective (de Haes 2006). In the 1950s a humanist psychologist, Carl Rogers developed client centred therapy (Rogers 1951) and Michael Balint, a psychoanalyst, introduced the concept of "patient centred medicine" through his work with GPs in the 1950s and 1960s (Balint 1964). The patient centred method, which has strong parallels with Roger's psychotherapeutic concept of client centeredness (Levenstein, McCracken et al. 1986), is recognised today as a guiding paradigm of healthcare provision (Bensing 2000). A number of clinical approaches and models have developed from this foundation e.g. Shared Decision Making (SDM), an approach to facilitating clinical decision making (Makoul and Clayman 2006)

and Motivational Interviewing (MI), an approach to facilitating behaviour change (Miller and Rollnick 2012).

This research focuses on agenda setting within the clinical encounter, an approach that arose from patient and client centred ways of working. It considers what agenda setting is, and how it might be measured and taught to healthcare clinicians. The overarching aim is to illuminate this one element of communication within the clinical encounter by considering what it is and how it might be measured. From here questions about if or how it may promote partnership, and high quality interpersonal care may more readily be addressed

1.1.2 The clinical encounter

The clinical encounter is the fulcrum around which clinical services operate and lies at the "heart of health-care" (Dieppe, Rafferty et al. 2002, p.280). It is the point central to transactions that take place between patients and health professionals, and central to the relationship established between them (Pendleton, Schofield et al. 1984, Kurtz, Silverman et al. 2003, Draper 2010). Current understandings of the nature and potential of the clinical encounter are multidisciplinary and driven by theoretical, empirical and experiential perspectives.

Four key elements of clinical encounters have been identified as: (1) the *values and attitudes* of patients and health professionals, (2) how *time* available for the encounter is used, (3) the *trust* that exists between patient and health professional, and (4) the *context* i.e. the organizational system that may dictate the nature of the encounter (Dieppe, Rafferty et al. 2002). Interpersonal communication is the primary activity that takes place during the clinical encounter (Peltenburg, Fischer et al. 2004, de Haes and Bensing 2009) and different theories and models of effective communication exist across professional disciplines (Neuman, Young et al. 1972, Mattingly and Fleming 1994, Stein, Frankel et al. 2005, de Haes and Bensing 2009). These theories and models guide clinical practice and underpin teaching efforts in clinical communication.

Communication is a complex and multi-faceted process influenced by intrapersonal and interpersonal processes, states and traits. Analysis of the clinical encounter has helped to illuminate the communication that occurs within the clinical encounter with a view to better understanding and improving the quality of interaction, thereby influencing health outcomes (Epstein, Franks et al. 2005). Methods of analysis have been developed to support teaching, learning and/or research, enhancing depth of understanding, coherence and rigour (Roter and Larson 2002). These methods of analysis are based on theories or models that outline a particular approach to clinical practice, and may reflect attempts to measure specific constructs related to these approaches. Clarity about measurement provides some understanding of the structure of complex clinical interactions, and facilitates investigation between specific communication behaviours and clinical outcomes (Epstein, Franks et al. 2005).

Two interdisciplinary approaches to clinical practice in healthcare are now presented here, with particular reference to their definitions, measurement and impact. These approaches provide a context to the clinical foundation of this thesis.

Note: Shared Decision Making (SDM) is not described here as a clinical approach underpinning agenda setting. SDM has been described as both an element of patient centred medicine and an extension of it (Makoul and Clayman 2006). It is defined as "…. a process in which clinicians and patients work together to select tests, treatments, management or support packages, based on clinical evidence and the patient's informed preferences… (and) involves the provision of evidence-based information about options, outcomes and uncertainties, together with decision support counselling and a system for recording and implementing patients' informed preferences" (Coulter and Collins 2011, p.2). The approach has not been included at the introduction to this thesis, primarily because when scoping the healthcare literature on agenda setting, it was not explicitly linked with shared decision making. This may be because the literature on SDM emphasises its use in instances of clinical equipoise, e.g. including considering

uncertainties and risks in decision making about treatment interventions. However its application is often broader than this, and can be considered as extending into self-management support. Also, in practice, agenda setting does not occur in isolation, but is naturally linked with a conversation that follows through the rest of the clinical encounter. SDM may occur in this part of the clinical encounter and may arise therefore as naturally complementary with an agenda setting approach. This is expanded on at various stages of this thesis.

1.1.3 Patient centred medicine

Balint (1969) used the term patient centred medicine in contrast to the idea of illness centred medicine (Levenstein, McCracken et al. 1986) or a biomedical model of care (Mead and Bower 2000a) where diagnosis and treatment of illness lie at the centre of the clinical interaction. A bio-psychosocial approach is advocated as opposed to a biomedical perspective (Levenstein, McCracken et al. 1986). To engage more fully with the patient's illness experience, clinicians should respond to patient cues, and attempt to understand the full patient agenda including disclosure of emotions (Bensing 2000). Patient centred medicine can also be considered in contrast with doctor centred medicine (Byrne and Long 1976, Levenstein, McCracken et al. 1986). A patient centred approach would involve sharing control of the consultation, in which there is a "mutual tuning of the doctors' and the patients' agenda" (Bensing 2000, p.22) before reaching a decision that is satisfactory to both parties.

Stewart et al (1995) developed these ideas into a model of patient centred medicine. The origins of this model arose from the work of McWhinney (1972) in exploring the "real reason" patients see their doctors, expanding understanding at that time of both the depth and breadth of the patient's agenda (Stewart, Brown et al. 1995). The work being done by Stewart et al (1995) at the Department of Family Medicine at the University of Western Ontario merged with that of Dr Joseph Levenstein, a visiting professor from South Africa. Levenstein inductively developed a method of interacting with patients that involved them more actively in the clinical encounter by eliciting their concerns

and expectations, and attending to their cues (Stewart, Brown et al. 1995). A paper published by this group describes the patient centred clinical method "in terms of two agendas: the physician's and the patient's" and describes the method as an attempt to reconcile these agendas (Levenstein, McCracken et al. 1986).

Stewart et al (1995) describe six interacting components of patient centred medicine namely (1) assessment of both disease and illness, (2) understanding the whole patient, (3) finding common ground, (4) seeking opportunities for prevention and promotion, (5) enhancing the therapeutic alliance and (6) being realistic and working within constraints. Although these components are described separately, in practice they are intricately interlinked, and clinicians practice both flexibility and responsiveness while moving across these components (Stewart, Brown et al. 1995).

Five key dimensions of patient centred medicine have been described in an attempt to clarify its conceptual framework (Mead and Bower 2000a). These dimensions relate to aspects of the clinician-patient relationship and include:

1. Bio-psycho-social perspective
2. The "patient-as person", i.e. understanding the patient's experience of their illness and the meaning they attach to it
3. Sharing power and responsibility, i.e. greater patient involvement and demonstrating respect for patient autonomy
4. The therapeutic alliance, i.e. good rapport is considered to be a fundamental requirement of quality care
5. The "doctor-as-person", i.e. qualities such as self-awareness in doctors, are valued.

The term patient centeredness has been used to describe "a philosophy of medicine, a clinical method, a type of therapeutic relationship, a quality-of-care indicator, a professional and moral imperative, and a communication style" (Roter and Hall 2006, p.499). Epstein et al (2005) highlight the distinction between patient centeredness, patient centred care, and patient centred

communication. Patient centeredness is described as a "moral philosophy" with three core values: namely (1) considering the patient's perspective, their needs, wants and experiences; (2) involving patients in their care and (3) enhancing partnership in the interpersonal relationship. The term patient centred care relates to actions that promote patient centeredness such as specific interpersonal behaviour, or technical and health service innovations. Patient centred communication – the focus of this thesis - describes communication in the service of patient centeredness, including (1) eliciting and understanding the patient's perspective; (2) understanding the patient within his/ her context (3) reaching common ground, i.e. a shared understanding of the problem and the best approach to management, and (4) sharing power and responsibility (Epstein, Franks et al. 2005).

Patient centred medicine is considered a guiding paradigm of healthcare provision (Bensing 2000) and patient centeredness is considered essential for providing high quality care (Mead and Bower 2000a). Research suggests that patient centred practice improves health outcomes and improves both patient and doctor satisfaction (Kinmonth, Woodcock et al. 1998, Stewart, Brown et al. 2000, Mead and Bower 2000a) However the evidence is also contradictory at times (Mead and Bower 2000a). For example in a large randomised controlled trial in type 2 diabetes management an intervention to improve patient centred communication impacted positively on patient satisfaction, and negatively on other disease related parameters such as weight (Kinmonth, Woodcock et al. 1998).

Attempts to understand contradictions such as this have centred on the complexity of the concept of patient centeredness and the diversity in which it is understood, complicating efforts to measure and research it (Mead and Bower 2000a, Epstein, Franks et al. 2005, de Haes and Bensing 2009). For example, in a study rating a clinical encounter using three different measures of "patient centeredness", correlations between the instruments suggested they were not in fact measuring the same construct (Mead and Bower 2000b). Rather each of the measures was possibly measuring different components of patient centeredness.

There have been a number of attempts to measure patient centred communication (Epstein et al 2005) and these can be thought of in two distinct groups: (1) measures where the clinical interaction is observed using real or standardized patients (i.e. objective assessment), and (2) self-report measures (i.e. subjective assessment). Direct observation of clinical encounters, whether live or via audio or video recordings can be analysed using coding systems that divide the discourse into meaningful segments such as utterances or units of time (Brown, Stewart et al. 2001, Roter and Larson 2002) or checklists that identify a desirable behaviour, or require the observer to make a global judgment about some aspect of that behaviour (Lang, McCord et al. 2004). Self-report measures capture the subjective experience of a person involved in the clinical encounter, i.e. patient or health professional. Each of these approaches has individual strengths and weaknesses, e.g. observation measures allow for objective measurement, but the process of being observed or recorded may influence clinician's behaviour (Epstein, Franks et al. 2005).

Stewart (2001) suggests that breaking patient centred communication into smaller components may make measurement more feasible, and lead to more rigorous hypothesis testing about which aspects of the model influence which outcomes. In addition different measurement designs, e.g. observation scales or self report measures, contribute unique perspectives that may be difficult to capture using one single measure (Epstein, Franks et al. 2005). Taken together, each measure would therefore provide a unique perspective to a broader understanding of patient centeredness (Epstein, Franks et al. 2005). As will be highlighted later in this chapter, it is hoped that the development of a measure of agenda setting – one component of patient centred communication - might contribute in some way to this body of knowledge.

1.1.4 Motivational Interviewing

Motivational Interviewing (MI) is an evidence based method aimed at helping patients resolve ambivalence about behaviour change (Miller and Rollnick 2002,

Rubak, Sandbaek et al. 2005, Rollnick, Miller et al. 2007). MI emerged from clinical experience in the treatment of alcohol misuse when a psychologist trained in client-centred counselling explored his clinical practice with a group of Norwegian psychologists in the early 1980's (Miller 1983). By 1990 Miller had begun to evaluate the effect of empathic listening on evoking motivation from clients (Miller 1983). He then formed a collaboration with Rollnick, and together they produced a number of texts that expanded the depth and scope of the method (Miller and Rollnick 1991, Miller and Rollnick 2002, Rollnick, Miller et al. 2007, Miller and Rollnick 2012). There have been over 200 published controlled trials to date, and evidence for efficacy varies across a wide range of settings and problem areas (Hettema, Steele et al. 2005, Rubak, Sandbaek et al. 2005, Knight, McGowan et al. 2006, Lundahl and Burke 2009, Hettema and Hendricks 2010).

The development of MI was strongly influenced by the work of Carl Rogers, a psychologist who developed client-centred counselling (Rogers 1951). In particular, the use of empathic listening and an attitude of unconditional positive regard are fundamental aspects of the method. Where MI differs from Rogers' approach, is that it is purposefully directional (Miller and Rollnick 2002, Miller and Rollnick 2012). A key part of MI involves identifying and selectively reinforcing linguistic markers of change. This is known as "change talk" and has been demonstrated to be a predictor of behaviour change (Moyers, Martin et al. 2007, Apodaca and Longabaugh 2009). Because change talk is identifiable in relation to a specific change being discussed, agreeing the behaviour change focus for discussion is an important precursor to being able to use this approach (Miller and Rollnick 2002, Rollnick, Miller et al. 2007). A strategy for agreeing a change focus is agenda setting, the topic of this thesis. Change talk is understood to reflect one side of a patient 's ambivalence, and statements reflecting the other side of the ambivalence are described as "sustain talk". The primary goal of MI is to help patient's resolve ambivalence about behaviour change (Miller and Rollnick 2002, Miller and Rollnick 2012).

The essence or "spirit" of MI involves a way of being with patients that is collaborative, evocative and autonomy supporting (Miller and Rollnick 2002).

Expressing this way of being involves holding an attitude toward the patient that believes in their worth as a person (Miller and Rollnick 2012). This includes letting go of the "righting reflex", a natural tendency for clinicians to want to "solve problems" for patients, rather than eliciting patient's ideas about the ways in which they might do this for themselves (Rollnick, Miller et al. 2007). While clinicians retain control of the overall direction of the consultation, they allow the patient to control the *what*, *why* and *how* of change. Clinicians may continue to offer their opinions and expertise, however this is done within a style that is collaborative, and emphasises the patient's freedom to choose a different course of action. In this sense MI is a means of coming alongside people and evoking their own sense of why and how they might change in line with their values and aspirations (Miller and Rollnick 2012). It is based on a guiding style that can be used in any consultation about change (Miller and Rollnick 2012).

Efforts to reliably measure MI-consistency have led to an interesting set of hypotheses about how and why it might work (Amrhein, Miller et al. 2003, Moyers, Martin et al. 2007, Apodaca and Longabaugh 2009, Moyers, Martin et al. 2009). Many of these studies have been conducted in the field of alcohol and substance misuse research, an area where MI is particularly well established. In their examination of MI studies conducted in this field, Apodaca et al (2009) identified three key constructs: (1) client change talk related to better outcomes; (2) client experience of discrepancy related to better outcomes; and (3) clinician MI inconsistent behaviours related to poorer outcomes. The extent to which these findings may be generalised to other settings is however unclear.

Despite decades of study there is still much to learn about how and why people make the lifestyle choices they do, and how health care professionals can influence these. Behaviour change interventions arise from a number of theoretical approaches, many of which are rooted in a "cognitive-rational" paradigm where motivation for change arises as a product of a planned, rational process (Resnicow and Vaughn 2006). An alternative view describes a "non-linear, quantum" approach to behaviour change that embraces a more intuitive appreciation of the motivational process. Change occurs as a result of an insight

or epiphany. Rather than being mutually exclusive, these views can be conceptualised at opposite ends of a continuum (Resnicow and Vaughn 2006). Behaviour change efforts that fail to appreciate the quantum nature of change potentially miss an essential element of this complex phenomenon. MI is one approach that is consistent with this broader view of motivational processes.

Having outlined the context of this PhD, the focus now turns to the topic of the thesis itself, agenda setting.

1.2 Agenda setting

In the face of multiple interrelated expectations and priorities, how are decisions made about the best way of using the time available for the clinical encounter? To what extent is the process of identifying the reason for the clinical encounter a collaborative one? And how best might this be achieved?

In some instances the reason for the clinical encounter is clear and straightforward. A patient may present with a single acute concern, e.g. sore throat. Alternatively the clinical context might demarcate a particular conversational focus, e.g. a smoking cessation clinic. In both of these examples the focus for the clinical encounter is clear at the outset. In the first example the conversational focus will revolve around the sore throat, in the second, the conversation will centre on discussions about smoking. Additional concerns or ideas may arise through the course of conversation but both parties have a relatively clear idea of how the time available to them is likely to be used. At the other end of the continuum are clinical encounters where the agenda of either or both parties is less clearly articulated or less clearly formed. Examples here might include a patient presenting with a headache who is worried about having a brain tumour and reluctant to disclose her concerns; or a patient with angina presenting to their GP for a review of their condition. This is a reality in many clinical services even those with a clearly defined focus, e.g. case management of people with severe and enduring mental health problems or substance misuse clinics. In these instances the process of identifying how best to use the time

available for the clinical encounter and in planning for follow up encounters, is more complex.

The term agenda setting has been used to describe exactly this process of deciding how best to use the time available for the clinical encounter (Stott, Rollnick et al. 1995, Marvel, Epstein et al. 1999). Its origins lie in the patient centred approach where the clinical encounter is described as a meeting of two "agendas" (Stewart, Brown et al. 1995) The clinician is tasked with integrating these agendas in such a way that the clinical agenda is located firmly in the patient's experience thereby making it meaningful and relevant to the patient. Agenda setting is described as a process that is implicit and fundamental to the integrated method of the patient centred approach (Levenstein, McCracken et al. 1986). Henbest and Stewart (1989) defined patient centeredness as "a response by the doctor in a way that allows the patient to express all of his or her reasons for coming to the doctor, including symptoms, thoughts, feelings and expectations. In doing so, the doctor tries to understand the whole meaning of the illness for the patient; that is, attempts to understand the person as well as the disease."(p.250)

Agenda setting has also been described as a conversational strategy in which the clinician explicitly presents their agenda as a menu of options, inviting patients to contribute to this menu and/ or selecting a conversational focus for discussion (Stott, Rollnick et al. 1995). This strategy is particularly useful in finding a conversational focus where there are multiple interrelated priorities, e.g. in the management of long-term conditions. Other definitions of agenda setting frame it as a task or skill (Marvel, Epstein et al. 1999) through which clinicians attempt to elicit a full list of patient concerns before prioritizing and planning how best to use the clinical encounter. These differences in conceptualisation of agenda setting are described in more detail later in this chapter.

Agenda setting has been described in many different contexts from generalist (Beckman, Frankel et al. 1984, Stott, Rollnick et al. 1995, Marvel, Epstein et al. 1999, Mauksch, Hillenburg et al. 2001, Peltenburg, Fischer et al. 2004) to

specialist (Berg-Smith, Stevens et al. 1999, Brown, Butow et al. 2002, Channon, Huws-Thomas et al. 2007) and is used by many different clinicians including doctors, (Marvel, Epstein et al. 1999) nurses (Pill, Stott et al. 1998) and psychologists (Channon, Huws-Thomas et al. 2005). Given its origins in patient centred medicine this is perhaps unsurprising, particularly as healthcare trends increasingly emphasise the need to empower and engage patients, and for consultations to be conducted in partnership (Bodenheimer, Lorig et al. 2002). Skilful shared agenda setting may offer a way of operationalizing this in the clinical encounter by ensuring that both parties "have a voice" in defining the purpose of their meeting. This in turn sets the stage for collaboration throughout the clinical encounter (Gafaranga and Britten 2003). What the components of skilful shared agenda setting are, and how clinicians themselves can be best enabled to learn and practice it, is the subject of this thesis.

1.3 Evolution of the research questions

1.3.1 The starting point – reviewing the literature

This research set out to examine the conceptual underpinnings of agenda setting in the clinical encounter from which to develop a measure of skilful practice. The starting point was therefore a preliminary review of the healthcare literature. This was neither fully comprehensive nor systematic and involved scoping the literature (Mays, Pope et al. 2005) to better understand how agenda setting had been described and investigated (see appendix C1-1 for method). A "literature scoping" exercise is increasingly regarded as good practice in areas where a later stage of reviewing may seek to answer a question beyond the "effectiveness" of an intervention (Mays, Pope et al. 2005). The aims of the exercise were (a) to gain some understanding of the breadth of evidence available, (b) to map some common themes and (c) to develop clear, focused research questions both for this PhD and for a structured review of the literature (Chapter 2).

From this preliminary review of the literature four observations were made that laid the foundation for this PhD.

1.3.2 Observation 1: The term agenda setting means different things in different bodies of literature

The term agenda setting in the clinical encounter is used in different bodies of literature. While there is some shared understanding of what the term means within each of these bodies of literature, there does not appear to be a consensus view on what skilful agenda setting is, when it should occur, or why it might be useful. There are three overlapping bodies of literature in particular where agenda setting has been described and investigated, namely physician-patient communication, medical education and health behaviour change.

1.3.2.1.1 Agenda setting and physician-patient communication

The term agenda setting is used in physician-patient communication to describe a strategy of eliciting the full patient agenda at the start of a medical encounter to establish their "chief complaint" (Cole and Bird 2000). Even where the term itself is not used the principle of opening a clinical encounter in this way is reflected in a number of dominant models of physician–patient communication (Keller and Carroll 1994, Cole and Bird 2000, Makoul 2001, Kurtz, Silverman et al. 2003).

Developments in this area originate from research by Byrne and Long (1976) and Beckman and Frankel (1984). Through examination of 1000 recordings of medical encounters, Byrne and Long (1976) found that patients come with an average of three concerns, and that the initial concern stated is seldom the most important to address. In an observational study with resident physicians, Beckman and Frankel (1984) found that when patients were asked to describe their concerns, they were interrupted after 18 seconds on average. Once interrupted, patients were unlikely to return to their opening statement (1 in 52 patients returned to their uncompleted statement of concern). This impacted the amount and quality of information that doctors received from their patients and indicated a physician-controlled discourse in the medical encounter. Patients who were allowed to complete their opening statement took a maximum of 2.5 minutes. The term agenda setting is not used in either Byrne and Long (1976) or Beckman and Frankel (1984)'s original papers, but is used in a later study

(Marvel, Epstein et al. 1999) that replicated Beckman and Frankel's (1984) original study design. Here the term is used to refer to the phase of the medical interview where a full list of patient concerns is elicited before more focused questions to clarify each concern (Marvel, Epstein et al. 1999).

In this body of literature the aim of agenda setting is for the clinician to establish the patient's primary concern by asking a question such as "what else?" or "anything else?" until the patient indicates there is nothing more to discuss (Keller and Carroll 1994, Cole and Bird 2000, Makoul 2001, Mauksch, Hillenburg et al. 2001, Kurtz, Silverman et al. 2003). From here clinicians can identify the patient's chief concern by prioritising with the patient and negotiating if there is disagreement. Starting a clinical encounter this way improves efficiency (Barrier, Li et al. 2003, Mauksch, Dugdale et al. 2008), requires little extra patient talk time (6 seconds more on average) (Marvel, Epstein et al. 1999) and allows clinicians to elicit more information from the patient (Keller and Carroll 1994, Marvel, Epstein et al. 1999). In addition where agenda setting is a collaborative process, patients reported greater satisfaction with the consultation as a whole (Mauksch, Hillenburg et al. 2001).

A key function of upfront agenda setting is that it allows doctors to avoid late arising concerns that can impact time management during brief clinical encounters (Mauksch, Dugdale et al. 2008, Rodondi, Maillefer et al. 2009). Concerns raised by patients at the end of the clinical encounter occur in about 20% of primary care consultations (White, Levinson et al. 1994) and are described as "doorknob questions" or the "oh, by the way dr…." interview syndrome (Baker, O'Connell et al. 2005). Prior to publication of Beckman and Frankel's (1984) work the "oh by the way dr…" phenomenon had been partially explained by looking at how and why patients choose to hold these concerns until the end of the consultation. The term "hidden agenda" was used to describe the psychosocial concerns raised and the observation was made that patients might not feel comfortable to expose these non biomedical concerns at an earlier stage of the clinical encounter (Barsky 1981). Beckman and Frankel (1984) extended this work by considering the role of physician behaviour in influencing

the "oh by the way doctor" phenomenon. They concluded that physician behaviour had a significant effect on the type and quality of information obtained from patients in the opening moments of the encounter.

1.3.2.1.2 Agenda setting and medical education

Research into physician-patient communication has been recognised by medical educators, as providing teaching in effective communication is considered an essential part of training new doctors (Simpson, Buckman et al. 1991, Makoul 2001). The term agenda setting is not consistently used in research on medical education and a number of other terms have also been used to describe this task including "screening" (Silverman, Kurtz et al. 2005) and "surveying" patient concerns (Lipkin and Lipkin 1996, Cole and Bird 2000, Dyche and Swiderski 2005).

The Kalamazoo consensus statement (Makoul 2001) emerged from an international effort to obtain an evidence-based consensus on the essential elements that would delineate effective communication in a variety of clinical contexts (Makoul 2001). The statement (see fig 1-1) was based on commonalities across five dominant models of physician-patient communication (Novack, Dube. C et al. 1992, Keller and Carroll 1994, Stewart, Brown et al. 1995, Kurtz and Silverman 1996, Makoul 2001), and was developed in part to provide "tangible examples of skill competencies" (Makoul 2001, p.390) that could be used in medical education programs at all levels. Seven "essential elements" (fig 1-1) were identified with the establishment of an "effective relationship" identified as a fundamental task occurring throughout the encounter. The Kalamazoo consensus statement identifies "allowing the patient to complete his or her opening statement" and "elicit the full set of patient concerns" as key skills when starting the clinical encounter. The Toronto consensus statement (Simpson, Buckman et al. 1991) also highlights the need for patients to discuss their main concerns without interruption as one of the "most important things that (can) be done to improve clinical communication by doctors"(p.1386). Similarly, a UK consensus statement on undergraduate medical education

communication curricula, includes "setting the agenda" as part of the task of initiating the clinical encounter (von Fragstein, Silverman et al. 2008).

Figure 1-1:Essential elements of communication in medical encounters: the Kalamazoo consensus statement (Makoul 2001)

Based on five dominant models of physician-patient communication

1. Bayer Institute for healthcare communication E4 model
2. Three function model
3. Calgary-Cambridge observation guide
4. Patient centred clinical method
5. SEGUE framework for teaching and assessing communication skills

Essential elements

1. Build a relationship (fundamental task)
2. Open the discussion
3. Gather information
4. Understand the patient perspective
5. Share information
6. Reach agreement on problems and plans
7. Provide closure

While these consensus statements provide some foundation for achieving greater uniformity in teaching communication skills to medical clinicians, there is considerable variation in the way in which these communication skills are understood and perceived by educators in the field (Buyck and Lang 2002). When faculty members were asked to watch a video of a simulated consultation and to identify moments where clinician feedback could be offered to help them develop more effective communication skills, 77.6% of members failed to identify the agenda setting opportunity (Buyck and Lang 2002). This variation in understanding even among well-qualified and experienced faculty members highlights the value in developing more robust definitions of specific communication skills such as agenda setting.

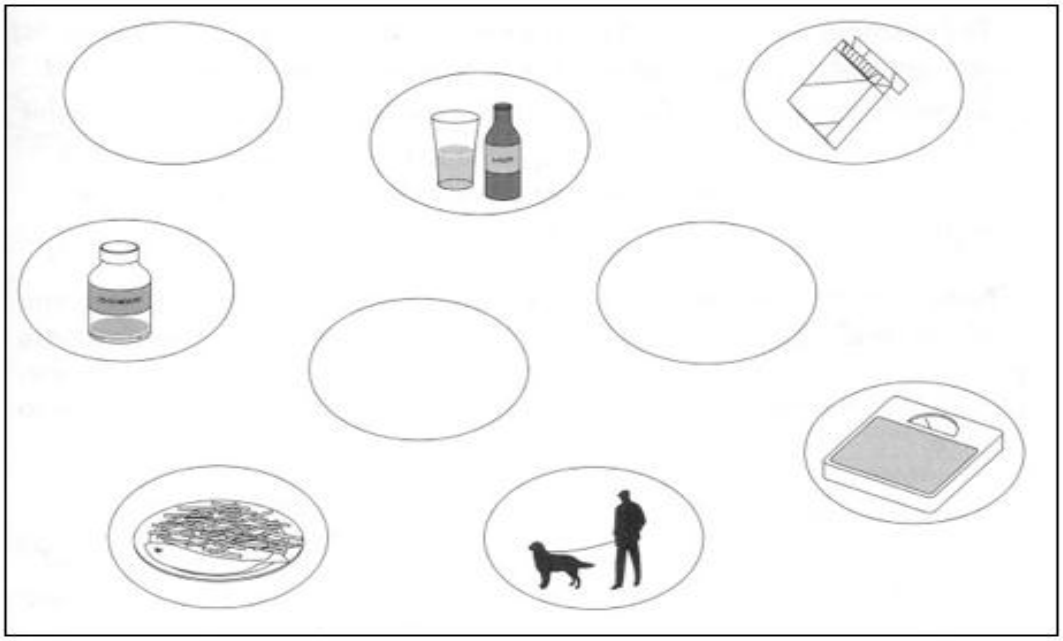
1.3.2.1.3 Agenda setting and health behaviour change

The term agenda setting has also been used in research about behaviour change to describe a strategy that enables a single behaviour change focus to be agreed for discussion. The need for this arises in conversations where multiple

behaviour changes could be discussed and MI may be used in facilitating behaviour change (Miller and Rollnick 2002, Miller and Rollnick 2012). As described earlier, MI was initially developed in the drug and alcohol field (Miller 1983) where a single behaviour change focus was immediately apparent by the nature of the helping environment – i.e. the person would attend a drug and/or alcohol treatment centre and the focus for discussion did not need to be explicitly agreed. However as MI began to be integrated into other clinical areas, the challenge of how best to identify the behaviour change focus for discussion arose. This observation led to the development of agenda setting as an explicit conversational strategy potentially accompanied by a visual chart (Stott, Rollnick et al. 1995, Rollnick, Miller et al. 2007).

Initially developed as part of a complex intervention in a randomized controlled trial in type 2 diabetes management in primary care (Pill, Stott et al. 1998), the agenda setting chart (figure 1-2) is easily generalizable to other contexts and may be particularly useful in conversations with multiple interrelated foci (Stott, Rollnick et al. 1995, Berg-Smith, Stevens et al. 1999, Channon, Huws-Thomas et al. 2005, Rollnick, Miller et al. 2007). The use of a chart to map out a number of conversation topics is unique to descriptions of agenda setting in this context (Rollnick, Butler et al. 1997, Rollnick, Miller et al. 2007, Miller and Rollnick 2012). It may be particularly useful in clinical interactions where healthcare clinicians have a clearly articulated agenda, and anticipate having a conversation about health behaviour change. In this way patients are involved in the decision making about which behaviour change they might like to discuss, and premature focus on a behaviour change topic that the patient may not be ready to address can be avoided (Rollnick, Miller et al. 2007). Additionally, involving patients in this way establishes a conversational atmosphere of collaboration and enhances patient autonomy, at the outset of the clinical encounter, setting the relational tone for that encounter (Rollnick, Miller et al. 2007).

Figure 1-2: Agenda setting chart (Stott, Rollnick et al. 1995)



The varying descriptions of agenda setting outlined above highlight differences in which it is conceptualized. Each of these conceptualisations are underpinned by the core values of patient centeredness identified by Epstein et al (2005) namely, (1) considering the patient's perspective, their needs, wants and experiences; (2) involving patients in their care and (3) enhancing partnership in the interpersonal relationship. However the understanding of the purpose of agenda setting and the competencies involved in skilful practice differ. Observation 2, i.e. that agenda setting is context dependent, may provide some explanation of why this is so.

1.3.3 Observation 2: Agenda setting is context dependent

The clinical context influences ways in which agenda setting is described and researched. This observation is reflected in the different descriptions of agenda setting described above (Stott, Rollnick et al. 1995, Marvel, Epstein et al. 1999). In settings where time for the clinical encounter is brief, greater emphasis is placed on agenda setting and time management (Mauksch, Dugdale et al. 2008). Where clinical encounters are frequently patient-initiated, emphasis has been

placed on eliciting the full patient agenda (Marvel, Epstein et al. 1999). Where clinicians may have a number of agenda items to raise, emphasis has been placed on enabling them to do this collaboratively (Stott, Rollnick et al. 1995). In the management of long term conditions, where patient lifestyle choices influence the progression of their condition, principles of behaviour change underpin agenda setting (Stott, Rollnick et al. 1995).

Considering agenda setting from this perspective, it may be possible to map the variations in agenda setting and identify common features across them. In this way developments in different clinical areas, and within different professional disciplines, can inform and enrich a broader understanding of agenda setting.

1.3.4 Observation 3: Challenges with integration into clinical practice

Research suggests that for agenda setting to be integrated into routine clinical practice it would need to be taught (Marvel, Epstein et al. 1999, Haas, Houchins et al. 2003, Moran, Bekker et al. 2008). Following the publication of Beckman and Frankel's (1984) seminal research, Marvel et al (1999) replicated the study ten years later to assess whether there had been a change in physician behaviour. Marvel et al (1999) found that the likelihood of a doctor eliciting the full list of patient concerns was not associated with years of clinical experience, but was associated with additional communication skills training.

There is an increasing emphasis on communication skills training both within and beyond the teaching environment (Lipkin and Lipkin 1996, Makoul 2001). Several studies have demonstrated an increase in agenda setting competence after teaching it to clinicians (Mauksch, Hillenburg et al. 2001, Haas, Houchins et al. 2003, Rodriguez, Anastario et al. 2008). However skills acquired in a training environment are not necessarily integrated into routine clinical practice (Mauksch, Dugdale et al. 2008). The agenda setting intervention described earlier for example (Stott, Rollnick et al. 1995) was found to be both acceptable and useful to clinicians at the onset of the trial where 71% of clinicians used the tool frequently and 22% occasionally (Stott, Rees et al. 1996). However despite

this, 2 years later only 19% of clinicians were continuing to use the method (Pill, Stott et al. 1998). This finding points to some of the inherent challenges not only in introducing new methods and approaches but to facilitating their integration into routine everyday practice.

A practical example of this is evidenced in GP practices in the UK, where it is not uncommon for notices to be posted on the walls reminding patient that "each appointment is for one problem only" (Coslow 2008, Greystone surgery 2008, Leeds student medical practice 2008, Manor Drive surgery 2008, Wrafton House surgery 2008). Research published over three decades ago demonstrated that patients *will* bring on average three concerns to each consultation, these concerns may be interrelated, and the first stated concern is often not the most important one to prioritise (Byrne and Long 1976, Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999). Agenda setting – defined as eliciting a full list of patient concerns at the outset of the clinical encounter - may represent a more effective strategy for managing patient expression of multiple concerns (Mauksch, Hillenburg et al. 2001).

Once clinicians are taught agenda setting, it seems to have intuitive appeal and to be considered useful, particularly in conversations with multiple interrelated priorities e.g. those with multiple behaviour change challenges. For example, The Family Nurse Partnership (FNP) in the UK has also adopted, and adapted, agenda setting as part of their intervention with young pregnant mothers from low socio-economic background (Barnes, Ball et al. 2011). It has also been identified as one of three key "enablers " in a national programme aimed at enhancing self-management support with people who have long term conditions in the UK (Health Foundation 2008). These projects may shed some light on the process and outcome of agenda setting, and in particular, on this question of integration to practice.

1.3.5 Observation 4: Evidence about effectiveness is limited

Despite developments in understanding agenda setting within each of the bodies of healthcare literature outlined above, it is difficult to draw firm conclusions about its "effectiveness". This is in part due to a lack of common conceptual foundation across the healthcare literature leading to variations in its definition.

Nevertheless a number of hypotheses about it effectiveness have been made both explicitly and implicitly suggesting that agenda setting is a useful skill that has potential to enhance the efficiency and effectiveness of the clinical encounter (Marvel, Epstein et al. 1999, Mauksch, Dugdale et al. 2008). More specifically, agenda setting can promote effective time management (Mauksch, Dugdale et al. 2008), facilitate understanding (Dyche and Swiderski 2005, Rodriguez, Anastario et al. 2008) and engage patients actively in discussion (Stott, Rees et al. 1996). Where agenda setting is used as part of a complex intervention, in particular in interventions based on MI, patient behaviour change has been hypothesized as a more long-term outcome (Pill, Stott et al. 1998, Berg-Smith, Stevens et al. 1999).

Clarification of a conceptual foundation for understanding the variations and similarities in differing descriptions of agenda setting is needed as a foundation for measurement, and to develop the evidence base for agenda setting. Investigating the potential "effectiveness" of agenda setting will allow for greater clarification of its purpose and impact on both proximal and distal outcomes. The Medical Research Council guidelines (MRC 2002) for the development and evaluation of complex interventions highlight the importance of understanding the "specific ingredients" of an intervention so that inferences may be drawn for wider implementation. Where agenda setting is a component of a complex intervention its use and potential impact may also be more clearly articulated.

1.4 Rationale and research questions

As with many terms used to describe aspects of communication (Arnold, Losh et al. 2009), the term agenda setting has been defined variably in medical and healthcare literature. Without some consensus about the core tasks, skills and

processes involved in skilful agenda setting, it will remain a challenge to teach it to students and clinicians. In addition it will be difficult to reliably investigate the potential usefulness of agenda setting and the ways in which it may enhance the effectiveness and efficiency of the clinical encounter. Establishing a consensus conceptual foundation, and developing a measure of agenda setting is a logical starting point to lay some foundation for future teaching and research efforts.

An appreciation of the changing landscape of healthcare described at the start of this chapter led to a focus on long-term condition management as a broad context for this work. These clinical encounters are characterised by a number of key features. Firstly they involve conversations about multiple interrelated priorities that often include discussion about lifestyle choices and/ or behaviour change by way of patient self-management (Rollnick 1996, Rollnick, Miller et al. 2007). Secondly, they require active participation of the patient, who is the person primarily responsible for managing their condition outside the clinical encounter (Bodenheimer, Lorig et al. 2002). Recognising the patient's expertise in managing their condition outside the clinical encounter, it follows that that expertise should be recognised and actively supported within the clinical encounter (Rollnick 1996). These conversations also offer an opportunity to reflect on an instance where the patient and clinician's agendas intersect but may not necessarily agree, an area where agenda setting might be particularly useful (Haas, Houchins et al. 2003, Meeuwesen, Tromp et al. 2007).

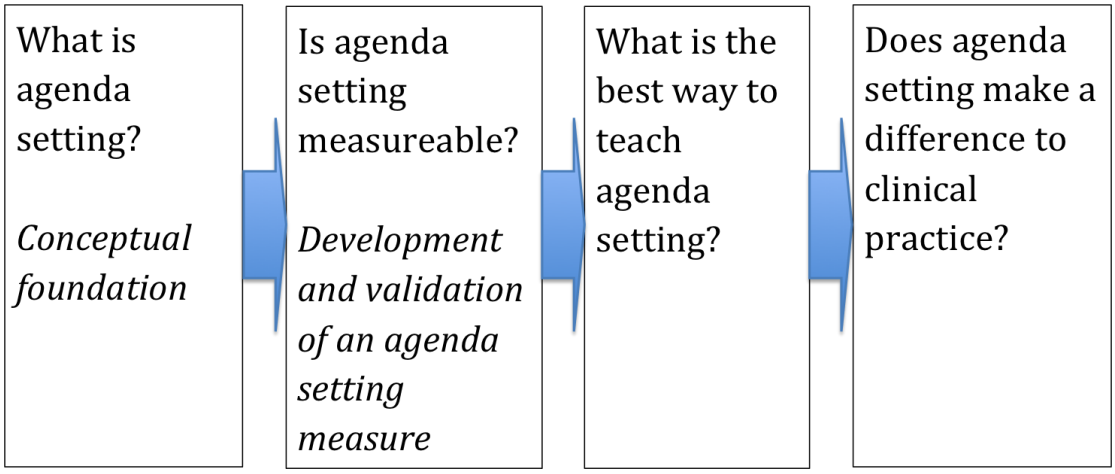
Agenda setting has been used to address some practical clinical challenges. Research suggests it is useful in preventing late arising concerns (Marvel, Epstein et al. 1999, Baker, O'Connell et al. 2005), enhancing consultation efficiency (Mauksch, Dugdale et al. 2008) and facilitating behaviour change conversations (Stott, Rollnick et al. 1995) et al 1995). This is potentially significant in a healthcare context that increasingly emphasizes the need for better quality care to be delivered to more people in less time (Young and McClean 2009). In addition, given the patient centred origins of agenda setting, and the relevance of this paradigm in contemporary healthcare delivery, further

investigation of agenda setting in the clinical encounter is a worthwhile endeavour.

1.5 Overview of thesis

Figure 1-3 represents an approach to investigating agenda setting in the clinical encounter. The primary purpose of this thesis is to consider the first two phases of this approach in order to lay the foundation for work to be conducted in the next two phases.

Figure 1-3: Investigating agenda setting in the clinical encounter



Phase 1 of this thesis involved development of the conceptual foundation of agenda setting following a structured literature review and a focus group study. These research activities informed the development of a model of agenda setting together with core competencies of skilful practice. A Delphi study was conducted to clarify elements of the model, and to refine the core domains of a measure of agenda setting. Finally a measure of agenda setting in the management of long term conditions was developed to give structured feedback to clinicians in a teaching environment. Efforts to validate the measure in a medical education setting are reported.

A note on terminology:

(1) In this thesis, the term "long term conditions" refers to a disease or medical condition that is ongoing and incurable. These can include non-communicable disease (e.g. Cardiovascular disease, Asthma), communicable diseases (e.g. HIV/AIDS), or mental disorders (e.g. Schizophrenia, Depression). A key feature of these conditions is that the people who experience them make daily choices that influence their course.

(2) The term clinical encounter is used to refer to instances where a health professional and patient meet to talk about the patient's healthcare. The term "consultation" was not used, as it is often associated with clinical encounters in medicine. The range of potential encounters was initially conceived more broadly in this research to include, for example, home visits, opportunistic in-patient encounters, and/ or out-patient appointments. The use of the term "clinical encounter" also reflects a research priority at Cardiff University at the time, where the term "clinical encounter research" was used to embrace research on shared-decision making, motivational interviewing and patient-centred communication.

2 Agenda setting: a structured review of the literature

2.1 Introduction

Chapter 1 described a process of scoping relevant healthcare literature and developing the research questions for this thesis. This chapter describes a closer look at publications on agenda setting by way of a structured literature review.

Systematic reviews tend to be driven by questions of effectiveness and methodology in conducting reviews of this type is relatively well developed (Higgins and Green 2011). However where the research question guiding the review is focused beyond "effectiveness" – such as in this review – rigorous methodological processes are less well defined (Mays, Pope et al. 2005). This is particularly noticeable when a review may include both quantitative and qualitative evidence and/or include literature from a wide range of sources. From the literature scoping exercise (Chapter 1) it was clear that a comprehensive literature search would need to include a wide range of evidence including empirical papers, review and discussion papers. As a result the approach to integrating findings would need to be flexible and inclusive, while retaining the transparent and reproducible process characteristic of systematic reviews. A narrative approach was therefore adopted. The literature scoping exercise (Chapter 1) helped in mapping the scope of this review and in structuring the review process.

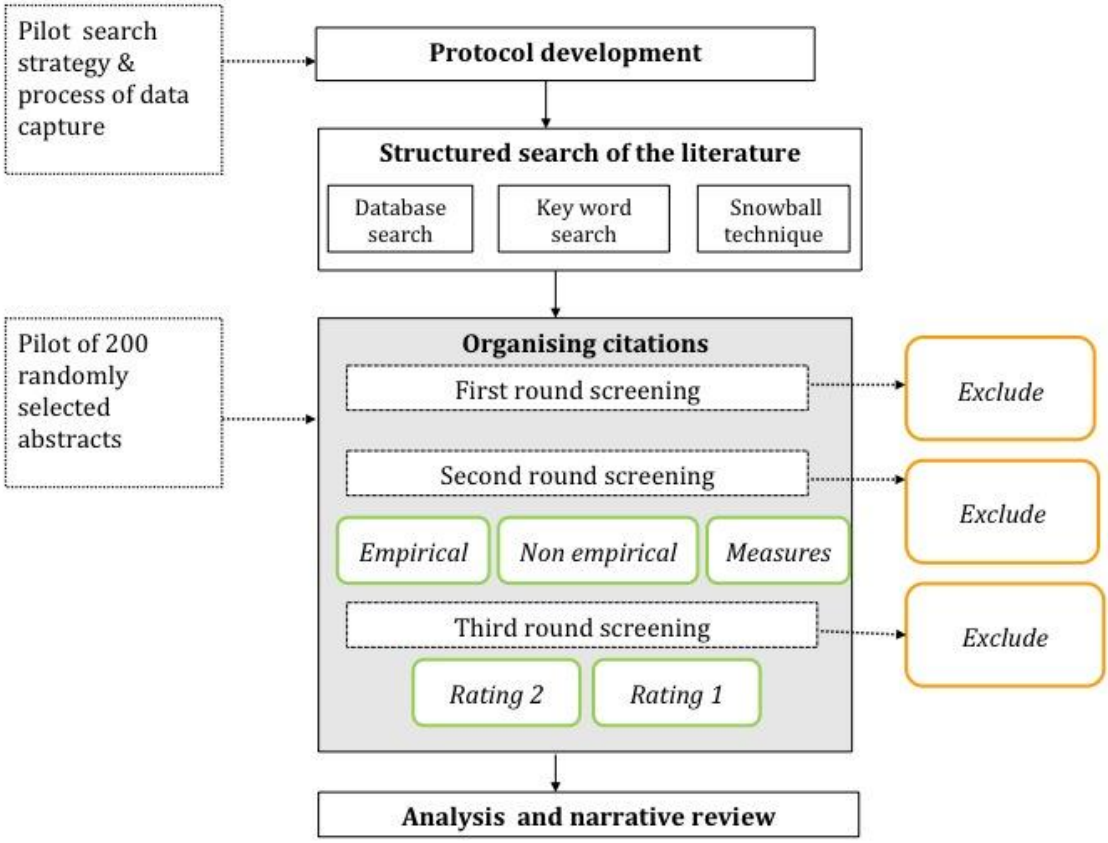
A note on terminology: In this chapter the review process has been described as structured rather than systematic. While the method used was indeed structured and transparent so as to be easily replicable, there is no attempt to assess the quality of included studies or to combine the study outcomes as might be expected in a systematic review (Sutton, Abrams et al. 1998). From the literature scoping exercise two things were apparent: (1) that agenda setting was defined differently in different bodies of literature, and (2) that, perhaps consequently, published writings on agenda setting varied considerably, ranging from anecdotal descriptions on engaging fully with the patient's agenda to more formally described and conducted empirical research. It was considered therefore premature to consider the question of effectiveness. The review itself may still have been described as systematic however, as this term may be

understood as describing a structured and replicable approach to searching the literature and synthesizing research findings (Sayers 2007). Questions about how to conduct systematic reviews where the evidence is heterogeneous and/ or of variable quality have also been considered, however the methodology for conducting reviews of this kind is nevertheless relatively well developed. The difficulty in defining exactly what a systematic review involves, led to the adoption of a more conservative approach in this thesis. Consequently the review was described as structured.

2.2 Method

This literature review aimed to address the main research question: "what is agenda setting in the clinical encounter?" It involved a structured and replicable search of the published literature across four databases. Relevant citations were screened at three different time points. Both the search strategy and the process of screening papers were developed through a dynamic iterative process that involved a pilot phase (figure 2-1, and section 2.2.4). Data were extracted from the final group of eligible papers and summarised in line with three objectives identified at the start of the review. Figure 2-1 provides an overview of this process.

Figure 2-1: Overview of the literature review process



2.2.1 Aim

The literature review aimed to examine the conceptual foundation of agenda setting, answering the question "what is agenda setting in the clinical encounter?"

This question was divided into three objectives namely:

1. What elements or components make up agenda setting?
2. What approaches or theories underpin descriptions of agenda setting?
3. What outcomes have been considered as a consequence of agenda setting?

In addition attempts at measuring agenda setting were identified and used in the review of measurement of agenda setting described in Chapter 6.

2.2.2 Search strategies

2.2.2.1 First search

The main search strategy was run on four different databases. It was initially developed in Medline, and amended to fit the subject headings of successive databases. The final search strategies are presented in appendix C2-1.

Search terms and subject headings were identified from publications identified in the literature scoping exercise (Chapter 1). The search strategy was developed through a pilot phase and was initially structured using a modified version of the populations, intervention, comparison, and outcomes framework (PICO)(Richardson, Wilson et al. 1995). The modification involved considering the "C" as standing for "context" rather than "comparison". In later versions the strategy was simplified to two groups of search terms or subject headings (i.e. "intervention" and "context") linked with Boolean characters (see figure 2-2).

Figure 2-2: Framework for final search strategy

Intervention		*Context*
negotiat*		exp Physician-patient relations [MeSH]
OR		OR
priorit*		exp Professional-patient relations [MeSH]
OR		OR
patient* agenda		exp Nurse-patient relations [MeSH]
OR		OR
set* agenda	AND	Consultation*
OR		OR
share* agenda		Clinical encounter*
OR		OR
agenda set*		Medical encounter*
OR		
hidden agenda*		
OR		
emerging agenda*		
OR		
patient concern		

The search was designed to be as sensitive as possible i.e. producing a high number of citations, many of which were anticipated to be irrelevant to the research question yet containing most if not all of the key papers. Relevant papers identified in the initial pilot

stage were cross-referenced to ensure that they were included in the citations retrieved in later versions of the search strategy.

In selecting databases for the literature search, two criteria – coverage and currency - were considered (Eyers 1998). As this research is positioned within the health sciences, databases housing healthcare literature were selected. "Healthcare" was defined in its broadest sense as writings about improving the health of individuals, i.e. embracing preventative, acute, chronic and other such definitions of healthcare. The following databases were identified: Medline (medicine), British Nursing Index (nursing), EMBASE (medicine and drugs) and PsycINFO (psychology/ psychiatry). Databases were searched from their earliest entry to August 2009 when the search was conducted.

2.2.2.2 Second search

A search using "agenda set*" as a keyword was also run on each of the 4 databases. This search was anticipated to have a high positive predictive value, i.e. a high proportion of relevant citations among the citations retrieved (London School of Hygiene and Tropical Medicine (LSHTM) 2010). Searches with a higher positive predictive value are likely to have a lower sensitivity and vice versa. The first search strategy was designed to maximise sensitivity and this second search aimed for a high positive predictive value using a more narrowly defined key word search. This second search was conducted to ensure that, at a very minimum, citations using the term agenda setting would be identified.

Additional papers were identified through use of snowballing techniques. Also, where citations were part of a series of papers for a single study, the other papers in the series were also collected.

2.2.3 Criteria for considering studies

Citations and papers were reviewed and screened at three time points (see figure 2-1). This iteration allowed for refinement in identifying the sample. Decision rules for including citations were developed through the initial pilot process and refined once the search strategy was finalised. At this point a random selection of 200 abstracts were reviewed, decision rules tested and methods of data capture refined. The decision rules

guiding inclusion and exclusion at each round of screening are outlined in table 2-1. The candidate (NG) both developed and applied these criteria.

First round of screening – broad identification of the sample

Citation abstracts were reviewed and included or excluded based on the criteria outlined in table 2-1. Where there was uncertainty about inclusion the full paper was retrieved to make the decision. Duplicates were also removed at this stage.

Second round of screening –categorisation (empirical, non empirical and measures)

Full papers were retrieved and classified into three mutually exclusive categories, namely empirical papers, non-empirical papers (discussion and review papers) and measures. Where there was overlap between the categories, empirical and non-empirical categories took precedence over the measures category, however a note was made that the paper was identified as useful to the review of measures of agenda setting (Chapter 6). Letters, editorials and commentaries were excluded.

Third round of screening – refinement of the sample

This final screening round involved closer scrutiny of included publications. A classification system was used to separate papers that addressed a single element of agenda setting (e.g. identifying patient preferences), and papers that addressed more than one element of agenda setting (e.g. eliciting the patient's agenda, *and* considering priorities) (appendix C2-2). Where the term agenda setting was used in full, these papers tended to embrace this more comprehensive definition. A number of papers were also excluded at this stage. Data capture sheets were completed for papers rated a 1 or a 2. The following information was extracted: context in which the paper is written e.g. general practice, chronic conditions; professional group; construct, e.g. patient-centred medicine; description of agenda setting or similar terms; outcome(s); and additional notes.

Table 2-1: Criteria for organising citations at different time points

First round of screening: broad identification of sample

Inclusion

Citation met at least one of the following criteria:

- Agenda setting in a one-to-one encounter between a health or relevant clinician (e.g. tele-coach) and a patient
- Detailed description/ model or theory of: Collaboration/ mutuality, negotiation, Shared Decision Making, patient participation (i.e. being active), motivation regarding self-management, opening stage of the consultation – related to interaction within the clinical encounter
- Consultation models - opening sequence; structuring
- Measure of agenda setting or communication in a clinical encounter

Exclusion

- Agenda setting in triadic consultations or groups; research agendas
- Consent for research or a clinical procedure

Second round of screening: Categorisation

- Empirical: clinical trial, observational study, evaluation (e.g. evaluating teaching/ training model), qualitative design (e.g. conversational analysis, interactional analysis)
- Non-empirical: Discussion papers, review papers and other
- Measures: description, design and/ or validation of identified measures

- Exclusion: Letters, editorials, commentaries

Third round of screening: Refined identification of the sample

Inclusion

- 1 – addresses one aspect of agenda setting e.g. patient expectations
- 2 - addressed a number of steps involved in agenda setting e.g. eliciting the patient's concerns and/ or raising the clinician's agenda and/ or discussing, negotiating a focus for the session.

Exclusion

- No aspect of agenda setting, usually papers that had been captured in the "peripheral" category – see section 2.4.2
- Potentially relevant but peripheral constructs e.g. mechanisms of action in MI, clinician perceived needs, clinical dilemmas, and models of shared decision making.
- Papers discussion constructs that extend well beyond the happenings of the clinical encounter, i.e. that these may be relevant in thinking more broadly about integration, but do not address the enactment of agenda setting itself

2.2.4 Analysis and synthesis

Given the nature of the research questions and the heterogeneity of literature included for review, a narrative approach was used to summarise findings in line with each objective (Mays, Pope et al. 2005).

Objective 1: Identifying components of agenda setting

The full sample of identified publications was used to meet this objective. Components of agenda setting were identified through the process of screening and categorising papers. Themes identified across these papers were then summarised.

Objective 2: Identifying conceptual or theoretical underpinnings

A subset of papers in which agenda setting was conceptualised as consisting of more than one component (i.e. rated 2 at the third screening) were tabulated (appendix C2-3). Citations used to reference descriptions of agenda setting were also identified. The aim was to map which definitions of agenda setting had been adopted by other authors to gain some understanding of the primary models underpinning these conceptualisations of agenda setting. This method replicates the one used by Makoul et al (2006) in developing an integrated model of Shared Decision Making.

Objective 3: Identifying outcomes of agenda setting

A subset of papers was also used to meet this objective, namely empirical papers that were rated 2. The aim of this analysis was to map some ways in which agenda setting had been investigated, together with any outcomes that had been considered.

2.2.5 Assessing quality

Assessing the quality of published literature is an important feature of any literature review (Mays, Pope et al. 2005) and a number of guidelines exist for this purpose (Tong, Sainsbury et al. 2007, Schulz, Altman et al. 2010). However, given that the purpose of this review was to establish a conceptual foundation for agenda setting, it was decided not to exclude any papers based on quality alone (Garcia, Bricker et al. 2002).

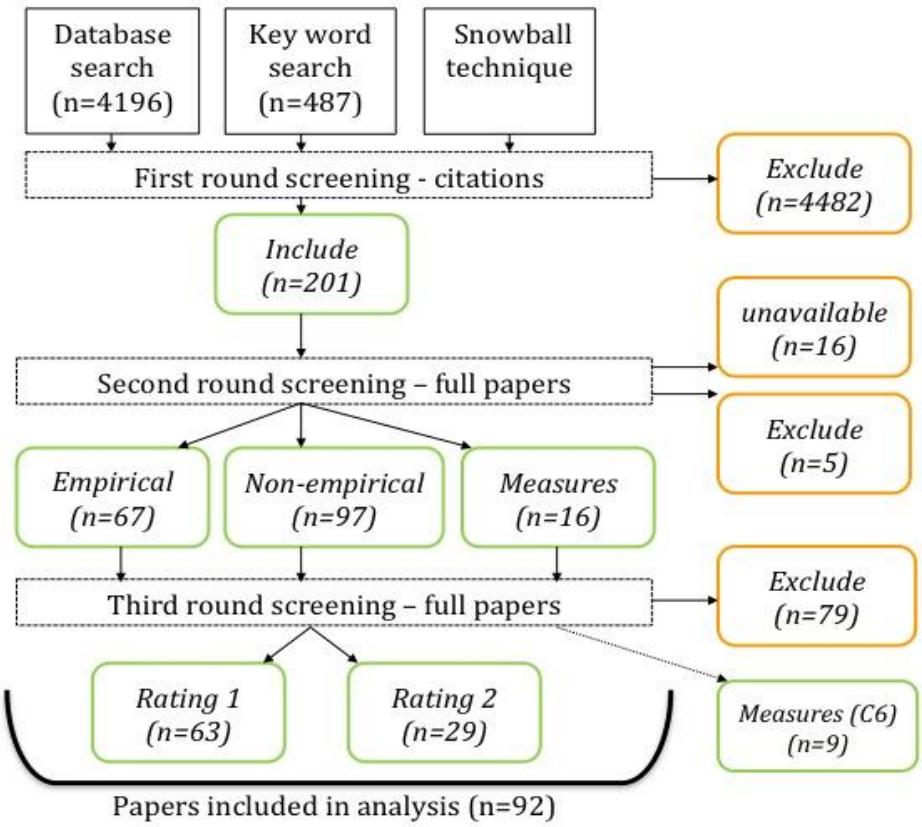
2.3 Results

In total, 92 papers were included in the final review (table 2-2). A flow diagram identifying the numbers of papers reviewed and excluded at each screening round is presented in figure 2-3.

Table 2-2: Results of second and third round of literature searching (n=92)

	Rating =1	Rating =2	Total
Empirical	37	20	57
Non empirical	26	9	35
			92

Figure 2-3: Flow diagram of literature review process and results (n=92)



Of the 16 unavailable references, most were foreign language articles, unpublished dissertations or book chapters of texts that were out of print.

Empirical and non-empirical

Except for papers reporting randomized controlled trials (RCTs), and reports of qualitative studies, the majority of papers reviewed did not have a clearly defined study design. Most of the eight observational studies used a cross-sectional design and the majority of qualitative papers (n=27) used conversational analysis or semi-structured interviews. Discussion papers (n=26) included descriptions of clinical cases and models

of good practice. In addition there were four papers attempting conceptual analyses of terms. Appendix C2-2 provides references to the 92 papers by category.

Measures

A smaller group of papers were identified in the measures category (n=9) and no specific measures of agenda setting were identified in this review. In addition there were five papers in the empirical papers category that included descriptions of attempts at measuring agenda setting. At this stage of the review, this sample of papers was set aside for later use (see Chapter 6).

2.3.1 Objective 1: Components of agenda setting

Components of agenda setting are summarised here. Through discussion of each of these components, a number of potential functions of agenda setting are highlighted.

2.3.1.1 The patient's agenda

An inherent goal of clinical practice involves understanding and fulfilling a patient's needs and expectations (Lazare, Eisenthal et al. 1975, Eisenthal and Lazare 1977, Ruiz-Moral, Perula de Torres et al. 2007). As a result, one of the most important tasks of the clinical encounter is for the clinician to accurately identify a patient's agenda (Stott, Rollnick et al. 1995, Silverman, Kurtz et al. 2005, Robinson, Heritage et al. 2006). This involves paying attention both to the content of that agenda and the process through which it is elicited (Eisenthal and Lazare 1977, Beckman, Frankel et al. 1984, Levenstein, McCracken et al. 1986, Marvel, Epstein et al. 1999, Barry, Bradley et al. 2000, Dyche and Swiderski 2005).

2.3.1.1.1 Content of the patient's agenda

Levenstein et al (1986) described the patient's agenda in terms of their expectations, feelings and fears, distinguishing "fears" from "feelings" in an attempt to highlight this "universal component of illness" (p.26). Understanding the patient's agenda allows the clinician to engage with the patient's perspective and to work in a patient centred manner (Levenstein, McCracken et al. 1986). In some clinical encounters, e.g. acute primary care visits that are time-limited, identifying the patient's agenda equates with

the phase of "problem presentation" (Robinson, Heritage et al. 2006). This incorporates identifying the patient's ideas, expectations and concerns (Barry, Bradley et al. 2000). In other clinical encounters, e.g. secondary care long term condition management, identifying a patient's agenda may also include eliciting strengths and aspirations (Channon, Huws-Thomas et al. 2005) and priorities for behaviour change (Stott, Rees et al. 1996).

Some researchers have defined the content of the patient's agenda more explicitly. In an attempt to develop a method for interactional analysis of medical consultations, Butler et al (1992) identified a number of different categories of patient agenda such as physical, emotional, social and historical psychological. An agenda is defined here as a "problem", either implicit or explicitly stated, which could become the focus of conversation during the clinical encounter (Butler, Campion et al. 1992). In a qualitative study conducted across 20 general practices in southeast England, Barry et al (2000) described the "complex and multifarious" nature of patient agendas (p.1246). These researchers classified patient agendas as symptoms, diagnoses theories, illness fears, wanted and unwanted actions, self-treatment, and emotional and social issues. Another research group classified the patient's agenda in terms of "taxonomy of requests" for either information or action (Kravitz, Bell et al. 2002). Patient concerns have also been classified more specifically as related to particular broader issue e.g. orthopaedic surgery (Hudak, Armstrong et al. 2008).

Of the range of topics raised by patients, doctors tend to overlook social and emotional agenda items (Butler, Campion et al. 1992, Campion, Butler et al. 1992, Barry, Bradley et al. 2000). Barry et al (2000) noted that patients did not generally express fears about the implications of diagnoses, ideas about their symptoms, reluctance to accept prescriptions or social agenda items. In a study investigating older patients' concerns about orthopaedic surgery, patients raised 53% of their concerns and were selective in what they discussed (Hudak, Armstrong et al. 2008). These findings suggest that clinician sensitivity to the range of potential agenda items, as well as attention to the way in which these items might be elicited, is needed.

These descriptions of the content of the patient's agenda highlight the different ways it can be conceptualised. In short the patients' agenda can be described as including "all (their) reasons for the (clinical) encounter" (Barry, Bradley et al. 2000, p.1246) or the things the patient wants to talk about (Stott, Rollnick et al. 1995).

2.3.1.1.2 Process of eliciting the patient's agenda

In many clinical encounters identifying the patient's agenda occurs upfront (Mauksch, Dugdale et al. 2008) and is significant as it is one of the few opportunities where patients are systematically given the conversational space to describe their concerns and ideas in pursuit of their own agenda (Robinson 2001, Robinson and Heritage 2005, Robinson, Heritage et al. 2006). The extent to which a patient verbalizes their agenda depends in many instances on the quality of the clinical interaction (Eisenthal and Lazare 1977, Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999). A number of studies have considered the impact of interventions to identify patient concerns *prior* to the clinical encounter (Hornberger, Thom et al. 1997, Sepucha, Belkora et al. 2002, Middleton, McKinley et al. 2006, Hamilton, Russell et al. 2007), and a meta analysis of such studies identified small effects on increasing patient question asking and on patient satisfaction (Kinnersley, Edwards et al. 2008). It is the clinician's task to elicit the patient's agenda and the skill with which this is done influences both the quality of the interaction that follows and the outcome of the clinical encounter itself (Lazare, Eisenthal et al. 1975, Eisenthal and Lazare 1977, Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999, Mauksch, Hillenburg et al. 2001, Mauksch, Dugdale et al. 2008). Through the way in which they communicate, clinicians may therefore either inhibit or facilitate full expression of the patient's agenda.

In their research Eisenthal et al (1977) identified over 50 different ways that clinicians attempted to elicit patient requests. Despite this over 30% of patients didn't articulate specific requests possibly because they had either not formulated their request (and may need some help doing so), or that they may feel inhibited and "constrained by their role as patient" in doing so (Eisenthal and Lazare 1977, p.137). Eisenthal et al (1977) identified that patients may express ambivalence, saying "I don't know" while giving subtle non-verbal cues of their uncertainty to express something. Where clinicians are sensitive to these cues and give patients space to elaborate or gently encourage them to

do so they "sanction" a shift in the patient's role to becoming more active (Eisenthal and Lazare 1977). Barry et al (2000) also highlight the effect of role expectations linked with unvoiced patient agendas, urging doctors to be aware of how this inhibits the full expression of the patient's agenda. In their study they outline the effect this had on patient outcomes (un-used prescriptions and non-adherence) and misunderstandings that arose within the clinical encounter as identified by both doctors and patients (Barry, Bradley et al. 2000).

Beckman and Frankel (1984) identified that only 23% of patients were able to complete their opening statement of concerns and that doctors interrupted patients after an average of 18 seconds of patient talk time. Interruption was understood as a way in which doctors exercised control over the clinical interaction, however this action inhibited the amount of information doctors were able to elicit from patients (Beckman, Frankel et al. 1984). It served the function of shifting the discourse to the next phase of the clinical interview namely information gathering about a specific symptom or problem also described as diagnostic questioning (Robinson, Heritage et al. 2006). Beckman and Frankel (1984) identified that only 1 in 52 patients returned to complete their opening statement once interrupted. Other studies have reported similar findings of between 26% (Dyche and Swiderski 2005) and 28% (Marvel, Epstein et al. 1999) of patients being able to complete their opening statement, and between 16.5 seconds (Dyche and Swiderski 2005) and 23.1 seconds (Marvel, Epstein et al. 1999) to interruption.

A number of linguistic devices serve to interrupt the patient's opening statement of their concerns. Beckman and Frankel (1984) identified these as (a) closed questions, (b) recompleters (a restatement of the content of what the patient just said), (c) elaborators (request for more information about what has just been said) and (d) statements (a comment about what has just been said). These devices allowed physicians to control the discourse and practice in a doctor-centred way (Beckman, Frankel et al. 1984). Marvel et al (1999) used this same coding system and made additional, more subtle observations as to how these linguistic markers operate, reported as differences in physician style (Marvel, Epstein et al. 1999). For example experienced clinicians may use elaborators and recompleters in an effort to gain more information about a

particular concern, and then return to the process of soliciting the patient's agenda. In this way interruption served a useful function and supported the broader task of eliciting the full list of patient concerns. Marvel et al (1999) reframed the concept of interruption as redirection to highlight this subtle difference.

Whether interruption or redirection serves a useful or less useful function depends in part on whether or not a patient is then able to return to the task of articulating their statement of concerns. Given that patients bring on average three concerns to each clinical encounter, it is important for clinicians to avoid prematurely focusing on the first concern raised by the patient (Byrne and Long 1976, Beckman, Frankel et al. 1984, Mauksch, Hillenburg et al. 2001). Elicitation of fewer patient concerns, late arising concerns and missed opportunities to gather important information were all associated with an incomplete statement of concerns (Marvel, Epstein et al. 1999).

Dyche et al (2005) investigated the association between physicians' interrupting behaviour and the accuracy with which they identify patient concerns. Whereas earlier studies had incorporated non-solicitation of concerns with the concept of interruption (Marvel, Epstein et al. 1999), Dyche et al distinguished between these two actions. They found a high degree of accuracy with which patient concerns were identified in the group of patients able to complete their full list of concerns (84.6% concordance). Surprisingly a similarly high degree of understanding was noted in the group of patients who were interrupted by physicians (82.2%). The authors concluded that the action of interruption itself does not necessarily lead to a reduction in understanding of patient concerns, possibly for reasons already noted by Marvel et al (1999). However there *was* a significant reduction in understanding where doctors failed to solicit the patient's agenda at all. In the group where no solicitation of patient concerns was attempted (37%) the degree of accuracy dropped significantly to 59.2%. These findings suggest that while priority should be given to enabling patients to express their full agenda, at the very least clinicians should attempt to elicit it.

One hypothesis as to why doctors do not encourage patients to either make or complete their opening statements is that this would take too long in a time-limited clinical setting (Larsen, Risor et al. 1997, Langewitz, Denz et al. 2002, Haas, Houchins et al.

2003). When asked the reason for the clinical encounter, patients may respond with a single statement of concern, or may respond with a story, attempting to provide some contextual information to their concern (Manning and Ray 2002). This patient story is information rich but can conflict with the clinician's desire to identify the key concern (Manning and Ray 2002) and anxiety about time management. However research suggests that the maximum time a patient will talk without interruption is 2 to 2.5 minutes (Beckman, Frankel et al. 1984, Langewitz, Denz et al. 2002). Marvel et al (1999) identified that patients who were allowed to complete their opening statement used an average of 6 seconds more than those who were redirected. This relatively small increase in patient talk time is described as a worthwhile investment, not only in terms of the additional important information a clinician is able to gather but also in terms of the quality of the interaction that can be established (Langewitz, Denz et al. 2002). Indeed patient satisfaction is more closely linked with physician's use of open questions than with the amount of time spent discussing their concerns, suggesting that patients value this *opportunity* to talk regardless of whether they choose to use it or not (Robinson, Heritage et al. 2006).

The extent to which patients provide a lengthy opening statement depends in part on the way in which clinicians formulate their opening question soliciting the patient's agenda. Heritage et al (2006) identified that general enquiry questions, i.e. questions that assume no knowledge of the patient's presenting concern (e.g. "How can I help today?") allowed patients to present their concerns in their own way and led to significantly more lengthy opening statements. This was compared with a narrower, less common confirmatory opening question in which the clinician had some knowledge of why the patient was presenting, e.g. "I understand you're having some sinus problems?" Heritage et al (2006) also highlighted the potentially ambiguous nature of "how are you?" as an opening question. Where this question is used at the start of a clinical encounter it is unclear whether it serves the function of eliciting the patient's agenda or a more vague and general enquiry about non-medical issues.

Gafaranga et al (2003) investigated the distinction between "how are you?" and "what can I do for you?" type questions as openers to the clinical encounter in more detail using conversational analysis of 62 primary care consultation recordings. They

identified a selection rule in which new consultations were initiated with "what can I do for you?" type questions and follow up consultations were initiated with "how are you?" questions. This selection rule operates as a proposal from the doctor to the patient as to how to view the clinical interaction, i.e. rather than dictating the way in which patients should respond it rather invites a particular response (Gafaranga and Britten 2003).

Research has also focused on how best to structure questions that prompt patients to express additional concerns they may have at the start of a clinical encounter. One approach to do this is to ask the question "anything else?" or "what else?" until the patient indicates there is nothing more to discuss (Marvel, Epstein et al. 1999, Baker, O'Connell et al. 2005, Rodriguez, Anastario et al. 2008). However Heritage et al (2007) suggest rephrasing this question as "is there something else you want to address in the visit today?" to more effectively identify patient concerns. The use of both "anything else" and "something else" to solicit additional patient concerns are phrased as closed questions i.e. that they anticipate a yes/ no response from the patient. The authors argue that the question "anything else?" is linguistically negatively polarized in that it calls for a negative response. In contrast "something else" calls for a positive response as it is linguistically positively polarized. In their study of 224 consultations in primary care they were able to demonstrate a reduction of unmet concerns when doctors used derivations of the "something else" question that could not be identified when doctors used derivations of the "anything else" question. Manning et al (2002) suggested in their research that the derivations of the question "anything else" in fact operated as a closing device in conversation.

Agenda items may also emerge that could not be anticipated by either the patient or the clinician at the outset of the clinical encounter (Peltenburg, Fischer et al. 2004). This concept of the emerging agenda was first described in an observational cross-sectional study in primary care across Europe (Peltenburg, Fischer et al. 2004). The emerging agenda is distinct from the concept of the "hidden agenda", a term used by Balint (1957) to describe the unrevealed psychosocial background of the patient. The hidden agenda is conceptualized as being known to the patient prior to the consultation but remaining unvoiced (Barry, Bradley et al. 2000). Attention to patient cues at the outset of the consultation can help clinicians to identify these unexpressed concerns (Style, Rafferty

et al. 1980, Botell 2005). In contrast, the emerging agenda arises during the clinical encounter as an unanticipated biomedical or psychosocial item as a priority for discussion.

The emerging agenda arose every sixth or seventh consultation in primary care and appeared to be related in part to clinician consulting style (Peltenburg, Fischer et al. 2004). Where clinicians were able to recognize underlying psychosocial issues and spent time listening to the patient, building rapport and providing medical explanations, they were better able to facilitate the emerging agenda, i.e. appeared to facilitate a conversational atmosphere with greater potential for an agenda to emerge (Peltenburg, Fischer et al. 2004). The occurrence of the emerging agenda was not related to length of consultation time reinforcing the idea that part of the skill of a successful clinician is how they make use of the time available rather than the amount of time available for the encounter (Peltenburg, Fischer et al. 2004).

In summary, it is possible to begin to identify elements of communication that allow for effective elicitation of the patient's agenda. These include (a) the structure of both the opening question to elicit the patient's agenda and additional questions to elicit the full patient agenda; (b) the way in which patients present their concerns, i.e. either as a statement or as a story; (c) the length of time patients may need to talk uninterrupted; (d) the number and differing priority of the patient's presenting concerns and (e) that there is a distinction between presenting concerns and emerging concerns, the latter being more effectively elicited though attention to patient cues and active listening during the unfolding clinical encounter. Identifying the patient's agenda is an important component of one of the functions of agenda setting namely identifying the reason for the clinical encounter.

2.3.1.2 The clinician's agenda

Levenstein et al (1986) defined the clinician's agenda as the "voice of medicine". This agenda may be broadly stated in terms of making correct diagnoses and providing appropriate treatment, management and/or preventative procedures (Levenstein, McCracken et al. 1986). The clinicians' agenda is expressed both in terms of the content they may raise and in the way in which they communicate.

The extent to which a clinician will add new content to the agenda for the clinical encounter depends on the context for that encounter. In many patient-initiated primary care visits for example the content of the clinicians' agenda is likely to develop and take shape in response to the patient's presenting concerns (Levenstein, McCracken et al. 1986). Clinicians may equally have more specific agendas for individual patients based on their prior knowledge of the patient or if they have initiated the visit themselves, e.g. a follow up session or review (Levenstein, McCracken et al. 1986). In some instances, e.g. the management of long term conditions, clinicians may have a number of topics they would like to cover including symptom management, medication management and lifestyle factors, e.g. smoking, physical activity (Stott, Rees et al. 1996). Developments in identifying skilful ways of raising the clinician's agenda in this context emerged from an integration of the patient centred method and behaviour change principles inherent in MI (Stott, Rollnick et al. 1995, Berg-Smith, Stevens et al. 1999, Zimmerman, Olsen et al. 2000, Channon, Huws-Thomas et al. 2005).

An agenda setting chart was designed by a multi-disciplinary working group of clinicians and researchers as part of a randomized control trial in type 2 diabetes management in primary care (Pill, Stott et al. 1998). The intervention was designed to accommodate the complexity of everyday clinical practice working with patients of varying ages and literacy levels, yet still be useful in relatively brief consultations. The primary purpose of the agenda setting chart (figure 1-2, p.18) was to present the clinician's agenda in a clearly structured, explicit manner thereby giving the patient choice in establishing the conversational focus of the session (Stott, Rollnick et al. 1995). In addition several circles were left blank to invite thoughts and ideas from the patient (Stott, Rollnick et al. 1995). The agenda setting chart (Stott, Rollnick et al. 1995) informed the design of an option setting tool for a clinical trial with overweight young people (Berg-Smith, Stevens et al. 1999).

Perhaps more important than the content of these tools was the process through which the clinician facilitated discussion to promote patient autonomy and involvement in the session (Stott, Rollnick et al. 1995). Core principles of behaviour change were reflected in an emphasis on working collaboratively, eliciting patient ideas and facilitating patient

choice both during the conversation and beyond. In addition patient ambivalence to change was expected and considered a normal feature of any conversation about change (Stott, Rollnick et al. 1995, Rollnick 1996)

Channon et al (2005) also described this process in the use of agenda setting in a trial with adolescents with type 1 diabetes. The context and time available for work in this study allowed for more detailed use of the strategy. Agenda setting took between 30 and 60 minutes and formed the basis for the initial clinical encounter. While an agenda setting chart was used to outline possible content for the session, the exact wording of each item was agreed between the clinician and participant before being charted (Channon, Huws-Thomas et al. 2005). This gave the clinician time to talk with the patient in some detail about each of the different topics that could be discussed in the session. Agenda setting was "used as an integral part of the therapeutic contact, helping to organize thoughts and a complex array of behaviours" (Channon, Huws-Thomas et al. 2005, p.46). The participant was encouraged to reflect and become curious not only about their behaviours, but also about their strengths and successes. This in turn allowed the clinician to obtain a detailed window into the young person's experience of living with diabetes and set a foundation for meaningful therapeutic work to continue in this area (Channon, Huws-Thomas et al. 2005). These developments in agenda setting highlight the skill involved not only in raising a clinical agenda but also with integrating it into a meaningful interaction for the patient.

From a patient-centred perspective, in all clinical encounters the clinician is tasked with integrating the "voice of medicine" with the patient's agenda (Levenstein, McCracken et al. 1986). As such the clinician's agenda can be said to be expressed both explicitly through the content they introduce to the clinical encounter, and implicitly through their facilitation of the clinical interaction. The implicit expression of the clinician's agenda reflects a particular attitude or orientation and their style of interaction can be inhibitive or facilitative (Beckman, Frankel et al. 1984). Proponents of a patient centred approach advocate being "present and critically curious" (Epstein, Mauksch et al. 2008, p.1390), and "focused, without distractions externally or internally" (Lipkin 1996, p.36S). These attitudes are also described in agenda setting linked with MI (Channon, Huws-Thomas et al. 2005).

Lipkin (1996) describes adopting this attitude as preparation to the interview, drawing links with the psychological concept of "centeredness" or "mindfulness". In practice this means developing self-awareness and attentiveness (Gallant, Beaulieu et al. 2002, Epstein, Mauksch et al. 2008). A practical description outlining the steps needed for clinicians to agenda set skilfully include a series of "cognitive cues" (Mauksch, Hillenburg et al. 2001) or "mindfulness cues" (Epstein, Mauksch et al. 2008) that accompany specific micro skills. For example the first micro skill of "make a list" is followed by a cue to "remind (clinicians) that (they) need not address all problems in one visit" (Mauksch, Hillenburg et al. 2001, p.41). These cues are useful to circumvent premature focus on any single content issue raised either by the patient or the clinician (Stott, Rollnick et al. 1995, Epstein, Mauksch et al. 2008). In addition, the clinician's attitude and actions are interrelated and impact directly on the quality of the clinical interaction (Beckman, Frankel et al. 1984).

In summary, the following features characterize the clinician's agenda: (a) the content may be clearly defined at the start or may develop through interaction (b) where the clinician's agenda is clear, it is best presented as a "menu of options" (c) is integrated through the clinician's style and skill in communication, and (d) involves intrapersonal skills such as self awareness. Clarifying the clinician's agenda is part of one of the functions of agenda setting, namely agreeing the conversational focus of the clinical encounter.

2.3.1.3 Prioritising and negotiation

It is through negotiation and prioritising that the agenda is structured and agreement or alignment achieved (Manning and Ray 2002, Haas, Houchins et al. 2003). This may be particularly necessary where there is disagreement between the patient and clinician's agenda, or where the time available for the clinical encounter is insufficient to cover all agenda items (Haas, Houchins et al. 2003, Meeuwesen, Tromp et al. 2007). Prioritising and negotiating are described as key, yet frequently neglected, tasks involved in agenda setting (Manning and Ray 2002, Haas, Houchins et al. 2003, Meeuwesen, Tromp et al. 2007, Epstein, Mauksch et al. 2008, Rodriguez, Anastario et al. 2008).

Clinicians are reportedly concerned about time management when eliciting a full list of patient concerns (Langewitz, Denz et al. 2002, Haas, Houchins et al. 2003). Prioritising and negotiation about the best use of time are critical steps to addressing this concern (Mauksch, Hillenburg et al. 2001, Keitz, Stechuchak et al. 2007, Mauksch, Dugdale et al. 2008). In a small pilot study investigating a teaching intervention of agenda setting among practicing family physicians (n=3), Haas et al (2003) identified that "agenda negotiation" was not observed in any pre-workshop consultations (n=36). This increased to 38% after the teaching intervention. Agenda negotiation was defined as discussions "about which topics would be covered and in what order" (Haas, Houchins et al. 2003, p.727). Disagreements between the patient and clinician were identified in 14% of visits although little detail is provided in their paper about the nature of these, if or how they were negotiated.

Mauksch et al (2001) address physician's concerns about time management directly by incorporating cognitive cues in their "Establishing Focus" protocol teaching agenda setting to physicians: e.g. "remind yourself that you need not address all problems in one visit" (p.149). They also outline micro skills aimed at prioritising collaboratively with patients, e.g. "Ask the patient to prioritise the list" (p.149). Medical clinicians in Mauksch et al's (2001) experimental group charted more problems and more follow up requests than those in the control group, but did not in fact use more consultation time. In addition patients of clinicians in the experimental group reported greater satisfaction and experienced collaborative prioritising in the consultation (Mauksch, Hillenburg et al. 2001). This study is the first to emphasise a link between agenda setting that involves a collaborative process of prioritising, and time management (Mauksch, Hillenburg et al. 2001). The term "establishing focus", with the implication of prioritising and negotiation, is used deliberately instead of agenda setting to highlight the importance of these tasks.

Manning et al (2002) described the delicate interactional sequences that allow for effective negotiation of the agenda. Agenda negotiation begins with a "formulation" or summary statement that serves to "reflexively comment on the conversation itself" (Manning and Ray 2002, p.462). The summary statement is selective in that the clinician focuses on a particular aspect of the patient's discourse. For successful negotiation to

occur the formulation must be acceptable to the patient and if the patient rejects it, the clinician must attempt to reformulate it before continuing with the consultation (Manning and Ray 2002). Not attending to this can result in miscommunication and rupture to the alignment between patient and clinician (Manning and Ray 2002). Negotiation is described here at a micro-level as the clinician formulates and may re-formulate the focus of discussion until there is agreement or alignment between both parties (Manning and Ray 2002).

Manning et al (2002) describe these micro-sequences in response to each agenda item raised by the patient however they may apply equally to negotiation of the full agenda as identified by the patient and clinician together. Bothelo (1992) proposed a negotiation model for the doctor-patient relationship. In an attempt to capture the dynamic nature of the negotiation process he highlights three interrelated dimensions: content, relationship levels and the problem solving process. The goal of negotiation is to foster collaboration and clinicians must work to establish a relational foundation of trust, warmth and empathy (Botelho 1992). Bothelo (1992) viewed agenda setting as a "problem solving" component of the clinical encounter that intersects with different "relationship levels". These "relationship levels" are underpinned by the constructs of autonomy, power, control and responsibility and are described on a continuum from autonomism to egalitarianism to parentalism to autocracy. In this way Bothelo (1992) highlights that negotiation occurs in the context of a relationship and is influenced by the quality of that relationship.

In summary, it is this process of negotiation and prioritising that allows a number of functions of agenda setting to be realized, namely that agenda setting (a) is about "meta-communication" i.e. talking about talking, (b) can facilitate or inhibit agreement and alignment between both parties, and (c) aims to establish focus for the clinical encounter to enhance efficiency. Negotiation and prioritising are relational processes in that the qualities inherent in the relationship will be reflected in how they are conducted. Where patient autonomy is encouraged, and power, control and responsibility is shared, agenda setting will be a collaborative process.

2.3.1.4 Collaboration and patient participation

In the context of a patient centred approach, agenda setting is a collaborative process in which the patient and clinician share power, control and responsibility for the clinical encounter (Levenstein, McCracken et al. 1986). The term "collaboration" has been associated with similar terms such as partnership (Gallant, Beaulieu et al. 2002, Hook 2006), mutuality (Henson 1997) and patient participation (Sahlsten, Larsson et al. 2007).

The concepts of partnership and mutuality have been examined and are described particularly in relation to nurse-patient relationships (Henson 1997, Gallant, Beaulieu et al. 2002, Hook 2006). Hook (2006) identified eight attributes of partnership including (a) negotiation, (b) mutuality in relationship, (c) professional competence, (d) shared knowledge, (e) self-determination and autonomy, (f) reciprocal, flexible, clear communication, (g) participation and engagement, and (h) shared power and control. Hensen (1997) identified attributes of mutuality that included "a feeling of intimacy, connection, understanding of another" (p.79). Antecedents to partnership include the beliefs and values that the partners hold about people and relationships – "partners must value co-operation and feel a commitment to share responsibility, risk, power and accountability" (Gallant, Beaulieu et al. 2002, p.152). Development of self-awareness (Hook 2006), a common language and an interpersonal style that "facilitates comfort" (Henson 1997) are other antecedents to partnership. Empowerment and self-determination are understood to be consequences of partnership (Gallant, Beaulieu et al. 2002, Hook 2006).

Attainment of partnership and mutuality is a dynamic process underpinned by power sharing and a sense of shared purpose (Henson 1997, Gallant, Beaulieu et al. 2002, Gafaranga and Britten 2003). Using conversational analysis of 62 primary care consultations Gafaranga et al (2003) identified conversational "rules" that operate in the opening moments of the clinical encounter. Where these rules are broken and not repaired, the broader goal of concordance or mutuality within the clinical encounter is undermined (Gafaranga and Britten 2003). The interaction at the outset of a clinical encounter has an impact therefore on the interaction that follows (Manning and Ray 2002, Gafaranga and Britten 2003).

Mutuality is "an achievement of both patients and doctors (that) requires the active participation of patients" (Gafaranga and Britten 2003, p.242). Clinicians will use different skill sets in facilitating patient participation in response to a patient's preferences and capacity (Brown, Butow et al. 2002). For example explicit agenda setting was considered a particularly useful strategy in managing active patients, i.e. those who take control by asking questions, stating their preferences and verbalizing their distress (Brown, Butow et al. 2002) and patients perceived as difficult or demanding (Elder, Ricer et al. 2006). With more "passive" patients, e.g. those with limited verbal responses or who don't initiate speech, doctors used different approaches such as inviting participation and responding to patient cues. Responsiveness to patient cues is at the heart of the patient centred approach and is the key to facilitating meaningful patient participation (Levenstein, McCracken et al. 1986). In addition, where patient rapport is enhanced, e.g. through warmth or humour, a more interactive and shared foundation for decision-making can be established (Brown, Butow et al. 2002).

Collaboration lies at the heart of behaviour change interventions based on MI (Stott, Rollnick et al. 1995, Berg-Smith, Stevens et al. 1999, Channon, Smith et al. 2003, Channon, Huws-Thomas et al. 2005). In a process evaluation of their intervention patients with diabetes, Pill et al (1998) noted that patients in the experimental group participated more actively, e.g. by taking the lead in discussions about behaviour change than those in the control group. Channon et al (2005) describe agenda setting as allowing the young person to reflect and become curious about their own behaviours, as well as about their strengths and successes. In this context patient participation is thought to enhance patient autonomy and intrinsic motivation (Stott, Rollnick et al. 1995, Berg-Smith, Stevens et al. 1999, Buyck and Lang 2002, Channon, Smith et al. 2003, Channon, Huws-Thomas et al. 2005).

In summary, collaboration and patient participation (a) develop through interaction, (b) are underpinned by attitudes, values and beliefs, (c) are observed in communication that is reciprocal, responsive and inviting, (d) enhance autonomy and (e) establish a

relational foundation of partnership. They are not unique to agenda setting, but are an essential element of it.

2.3.1.5 Meta-communication

A function of agenda setting is that it provides a clear framework for structuring the conversation so that both parties contribute to the clinical discourse (Meeuwesen, Tromp et al. 2007). Agenda setting involves "talking about talking" or meta-communication that involves taking a metaphorical "step back" from the conversation to engage with it reflexively (Manning and Ray 2002).

The clinician leads the structuring of a clinical encounter moving it through a number of phases, of which agenda setting is one (Makoul 2001, Meeuwesen, Tromp et al. 2007). The agenda setting phase begins at the point at which there is an attempt to identify the conversational focus of the clinical encounter (Mauksch, Hillenburg et al. 2001). This may begin with eliciting the patient's reason(s) for the encounter, and ends when the clinician moves into more detailed exploration of this reason (Beckman, Frankel et al. 1984). Clinicians may signal the process of agenda setting, e.g. by saying "these are some of the things we …like to talk …about …" (Rollnick 1996, p.S24) or " before we go further I'd like to find out if there is something else bothering you" (Epstein, Mauksch et al. 2008, p.36). In this way the clinician makes the structuring process explicit by talking about what they are doing or about to do.

This structuring process continues throughout the clinical encounter (Makoul 2001) and agenda setting could be understood as a process that continues throughout the clinical encounter in statements of meta communication about the conversational focus (Haas, Houchins et al. 2003, Meeuwesen, Tromp et al. 2007). Where clinicians notice that the conversation has deviated from its agreed focus they may build an "empathic bridge" to return to the agreed focus (Baker, O'Connell et al. 2005).

In summary, meta-communication (a) relates to talking about talking, (b) facilitates structuring of the conversation and (c) continues throughout the clinical encounter. Agenda setting could be described as meta-communication about the conversational focus of the clinical encounter.

2.3.2 Objective 2: Conceptual underpinnings

Mapping the key references suggests two main conceptualisations of agenda setting in the healthcare literature (appendix C2-3). Beckman and Frankel (1984), Marvel et al (1999) and Stott et al (1995, 1996) were the most frequently cited references reflecting the primary models underlying descriptions of agenda setting in the literature namely the patient centred method (Stewart, Brown et al. 1995) and MI (Miller and Rollnick 2002). The conceptualisations of agenda setting are compared in table 2-3, highlighting many areas where they overlap. This has implications for the feasibility of identifying a unified conceptual framework.

Table 2-3: Conceptualisations of agenda setting

	Doctor-patient communication/ Medical Education	**Behaviour change**
Underlying approach	Patient-centred communication, medical interviewing	Patient centred communication, MI
Key references	Beckman & Frankel (1984), Marvel et al (1999), Byrne and Long (1978)	Stott et al (1995, 1996)
Attributes		
• Clinician's aim	To identify patients primary presenting concern	To initiate conversation about behaviour change
• When during the encounter	Early in the encounter or clarification later in encounter	To initiate behaviour change conversation –at the start or later on
• What follows agenda setting	The rest of the clinical encounter is based on the agreed agenda set at the start. Topics should be tracked. A new agenda item may "emerge"	Conversation about behaviour change or lifestyle choice (using MI)
• Benefits/ outcome	Immediate: time management, eliciting primary concern, patient involvement	Immediate: behaviour change focus, patient involvement
Components		
• Patient's agenda	Elicit full agenda using "what else?" question until patient indicates there is nothing more.	Patient invited to raise alternative agenda items
• Clinician's agenda	May or may not have an agenda item/ topic to raise.	Clearly formulated in terms of behaviour change (or other) areas – present it in a summary statement
• Prioritising	Clinical urgency or topics leading to functional decline	Determined by patient readiness
• Agree a focus	Focus is "primary concern"	Focus is behaviour change conversation
• Meta communication	Defined as "structuring" or "signposting"	Occurs explicitly e.g. "there are a number of things we could talk about…."
• Collaboration	Mutual agreement at start of clinical encounter – impacts on experience of collaboration	Autonomy support and collaboration part of MI spirit

2.3.3 Objective 3: Outcomes of agenda setting

A framework for considering outcomes of agenda setting involves identifying immediate (within the clinical encounter), intermediate (just after the clinical encounter) and long-term endpoints (de Haes and Bensing 2009). Table 2-4 summarises empirical studies identified in this review that investigated agenda setting, in an attempt to identify which endpoints have been considered by researchers. In addition theoretically driven endpoints have been identified and are presented below. The aim of this section is to map this work so that it might inform the emerging model of agenda setting.

Immediate endpoints of agenda setting include eliciting all the patient's concerns (Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999, Dyche and Swiderski 2005) thereby improving understanding (Beckman, Frankel et al. 1984, Dyche and Swiderski 2005) reducing late arising concerns (Beckman, Frankel et al. 1984, Botelho 1992, White, Rosson et al. 1997, Marvel, Epstein et al. 1999, Mauksch, Hillenburg et al. 2001, Dyche and Swiderski 2005) and improving time management (Mauksch, Hillenburg et al. 2001). In addition agenda setting is understood to establish a relational foundation for the clinical encounter (Manning and Ray 2002, Gafaranga and Britten 2003) facilitating patient engagement (Stott, Rollnick et al. 1995), and involvement in making decisions (Brown, Butow et al. 2002). Despite these assertions, the evidence in support of a number of these hypotheses is mixed. For example Mauksch et al (2001) demonstrated that doctors elicited more concerns but did not use more consultation time when agenda setting explicitly. However Middleton et al (2006) found that doctors elicited more problems, and did use more consultation time. White et al (1997) highlight the occurrence of late arising concerns even in encounters that were initiated with clinicians attempting to elicit all concerns at the outset.

Patient and clinician satisfaction have been considered as intermediate endpoints of agenda setting as indicators of improved quality of care (Beckman, Frankel et al. 1984, Mauksch, Hillenburg et al. 2001, Haas, Houchins et al. 2003, Dyche and Swiderski 2005, Rodriguez, Anastario et al. 2008). However, the evidence for this is mixed with some studies showing improvements in this area for both clinicians (Haas, Houchins et al. 2003) and patients (Mauksch, Hillenburg et al. 2001, Rodriguez, Anastario et al. 2008)

and others showing no association (Dyche and Swiderski 2005). A second intermediate endpoint is enhanced motivation for behaviour change, and agenda setting has been included in the design of complex interventions to assess this (Pill, Stott et al. 1998, Berg-Smith, Stevens et al. 1999, Channon, Huws-Thomas et al. 2007). In these instances it is difficult to isolate the effect that agenda setting may have on treatment effects and difficult therefore to assess the impact of agenda setting itself. In addition, closer examination of the hypothesized causal chain from agenda setting to actual change is required, e.g. while agenda setting may facilitate a focused conversation about change, the process of behaviour change is non-linear and patients vary in their readiness both to consider and make changes, and to maintain them (Pill, Stott et al. 1998).

The long-term endpoint of healthcare in general is optimal health and all healthcare communication contributes toward that end (de Haes and Bensing 2009, Street Jr, Makoul et al. 2009). The inclusion of agenda setting in educational settings suggests recognition of its valuable function in supporting healthcare communication in general (Makoul 2001). Educational programmes that have included agenda setting as a component suggest that participants value it (Mauksch, Hillenburg et al. 2001, Kemper, Foy et al. 2008, Rodriguez, Anastario et al. 2008). Pragmatically, identifying all a patient's concerns leads to more accurate diagnosis that in turn influences medical outcomes (Beckman, Frankel et al. 1984). Agenda setting is an essential component of a patient centred approach to care in which the illness experience is integrated with the disease (Levenstein, McCracken et al. 1986, Makoul 2001). This reflects an ideological position of healthcare delivery that implies a greater degree of humanity (Levenstein, McCracken et al. 1986). While these endpoints highlight the value of agenda setting, it is difficult to draw meaningful conclusions from this evidence available beyond the hypothetical.

Table 2-4: Agenda setting - investigations and outcomes

Reference, study name	Setting	Study details	Inclusion of agenda setting	Outcome of study	Outcome of agenda setting
Arnold et al (2009)	Medical education, USA	A consensus study to develop a lexicon of terms using in teaching communication skills to second year medical students.	Agenda setting was one of a number of terms on which consensus was sought.	Consensus was established across campus on the terms used for teaching.	Agenda setting defined as involving both agenda elicitation and prioritising.
Beckman and Frankel (1984)	Primary care, USA	Cross-sectional observational study to investigate the physician's role in developing the patient's concern at the start of a clinical encounter	Investigates whether the physicians (a) solicits the patient's concerns or not and (b) if they do then how they respond to them	Highlighted the active role of physicians in controlling the discourse, and the role of premature interruption	Authors suggest that premature interruption results in potential loss of information.
Berg-Smith et al (1999), Obarzanek et al (2001) Dietary Intervention Study in Children (DISC)	Obesity management, USA	A randomised multi-centre controlled trial for children with elevated low-density lipoprotein cholesterol (LDL-C) aged 8-10yrs (n=663). Intervention: a dietary behavioural intervention	Agenda setting included as part of a complex intervention	Reductions in dietary total fat, saturated fat and cholesterol – greater in the intervention group compared to usual care group	Unclear due to the complex nature of the intervention.
Brown et al (2006)	Oncology, UK	Qualitative research using grounded theory methodology to identify strategies used by experienced oncologists in	Agenda setting was identified as a helpful strategy by oncologists to manage active patients.	Oncologists use both helpful and unhelpful strategies to manage different patient presentations.	Agenda setting was noted as particularly useful in managing patients with active styles of participating.

Reference, study name	Setting	Study details	Inclusion of agenda setting	Outcome of study	Outcome of agenda setting
		handling patients with extremely passive or extremely active styles of participation.			
Buyck (2002)	Medical education, USA	Observation study to investigate the variability among medical faculty in identifying opportunities in teaching communication skills.	Agenda setting was one of a number of communication skills included for assessment.	Wide variation in the way in which different communication skills were understood.	77% of faculty failed to identify the agenda setting teaching opportunity
Channon et al (2003, 2005, 2007)	Type 1 diabetes, UK	Randomised controlled trial to examine the efficacy of MI with teenagers aged 14-17 years with type 1 diabetes	Agenda setting included as part of a complex behavioural intervention. A shared agenda was created together with participants during the first contact. The clinician gave ideas or examples of topics, invited participant involvement and facilitated a process of reflection, expression and organizing.	Biochemical marker of significant improvement in the intervention group (A1C), as well as psychosocial variables (well being, quality of life).	Hypothesised that agenda setting (a) increases motivation to participate, (b) invites co-operation, and (c) avoids premature goal setting. In addition it provides the initial terms of reference, marker for change, prompt when therapeutic work seems "stuck" – "sets the scene" for discussion of behaviour change and exploring discrepancies Unable to draw clear conclusions though due to the complex nature of the intervention.

Reference, study name	**Setting**	**Study details**	**Inclusion of agenda setting**	**Outcome of study**	**Outcome of agenda setting**
Dyche et al (2005)	Primary care, USA	Cross-sectional observational study replicating Beckman and Frankel's original design, investigating the effect of physician interruption on understanding.	Looks at physician behaviour in soliciting patient concern and if so, how they respond.	There was no loss of understanding between patients who were allowed to complete their full agenda, and those that were interrupted. Failure to ask for the patient's agenda at all was associated with a 24% reduction in physician understanding.	Suggests that the most important aspect of agenda setting in promoting understanding is soliciting it. Physician "interruption" is not necessarily linked with loss of information.
Haas (2003)	Primary care, USA	Uses a pre-test, post-test design in teaching agenda setting to a small group of physicians (n=3). Aim was to assess the impact of a teaching intervention on structuring the opening moments of the clinical encounter. Outcomes measured included (a) number of patient concerns, (b) presence of agenda eliciting, setting and negotiating, and physician and patient satisfaction.	The teaching intervention included: "agenda eliciting" i.e. asking the patient for the reason(s) for the visit, agenda setting i.e. summary statements indicating which topics would be covered in the visit, and "agenda-negotiating" i.e. discussions about which topics would be covered and in what order.	Patient concerns were explicitly elicited more frequently, and both agenda setting and agenda negotiating behaviours were increased after the teaching intervention. Physician satisfaction increased. Patient satisfaction was uniformly high.	Same as the study outcome (i.e. see column to the left).

Reference, study name	**Setting**	**Study details**	**Inclusion of agenda setting**	**Outcome of study**	**Outcome of agenda setting**
Kemper (2008)	Paediatric mental health, USA	Evaluation of an online communication course for multi-disciplinary clinicians working in paediatrics.	Agenda setting included in five of the course modules	Online communication course feasible, desirable and associated with increased confidence in participants.	In the comments provided, teaching in agenda setting appeared to be valuable.
Manning (2002)	Primary care, USA	Qualitative study using conversational analysis to examine the process where doctors and patients set the agenda for medical interviews. Involved analysis of 22 videotapes collected in an urban, teaching and research hospital.	The process of setting the agenda was the focus of analysis.	Developed a three stage model that includes (a) an opening sequence, (b) an initial statement of concerns, and (c) the negotiation process.	The interaction at the very beginning of an interview significantly alters the ensuing interaction.
Marvel (1999)	Primary care, USA	Cross sectional survey with linguistic analysis. Replication of Beckman and Frankel's (1984) methodology	Looks at physician behaviour in soliciting patient concern and if so, how they respond.	Similar findings to Beckman and Frankel (1984). Reframed the concept of "interruption" as "redirection".	Reduction in late arising concerns (data provided, but not statistically significant) Fellowship-trained physicians more likely to elicit full list of patient concerns.
Mauksch (2001)	Primary care, USA	Pilot study - experimental study with family medicine residents and faculty. Experimental group trained in an "establishing focus protocol".	The "establishing focus" protocol outlines the micro skills and cognitive cues to elicit the full patient agenda at the outset of the clinical encounter.	In experimental group (a) physicians charted more concerns and more follow up requests but did not use more time and (b) patients more satisfied, perceived more problem elicitation and collaborative	Study outcome directly related to agenda setting

Reference, study name	Setting	Study details	Inclusion of agenda setting	Outcome of study	Outcome of agenda setting
				prioritising	
Meeuwesen (2007)	Primary care, Netherlands	Sequential analysis of 103 transcripts to determine the role of doctors and patients in structuring the clinical encounter, the influence of ethnicity on this interaction, and mutual understanding.	Agenda setting considered a communication variable that includes (a) taking initiative at start, (b) an invitation to the patient to give their reason for the encounter and (c) meta communication	Ethnic-minority patients don't necessarily communicate that mutual understanding is not occurring.	In most cases (86%) doctors initiated the encounter. Doctors explicitly checked the agenda in only a small number of encounters (n=7) and this was not related to ethnicity.
Pill (1998), Stott et al (1995, 1996)	Primary care, UK	Randomised controlled trial to examine the effect of a patient centred intervention delivered by doctors and nurses for patients with type 2 diabetes in primary care,	Agenda setting included as part of a complex behavioural intervention. An agenda setting chart was used to establish a conversational focus on behaviour change.	No biochemical or functional improvements noted. Process evaluation – more topics raised and patients took the lead in behaviour change conversations more often (intervention group)	Unable to draw clear conclusions due to the complex nature of the intervention
Rodriguez et al (2008)	Primary care, USA	A controlled intervention to evaluate the effect of agenda setting on patients' experience of care. The intervention involved teaching agenda setting through a three hour workshop and two 45minute follow up teleconferences.	Agenda setting was defined as a way of initiating the clinical encounter by eliciting the full list of patient concerns and then prioritising and negotiating the conversational focus for the clinical encounter.	Doctors were better able to explain things in a way that was easy for patients to understand. Also there was a modest improvement in the overall quality of doctor-patient interactions.	Same outcome as for the main study (i.e. see column to the left).
Stein et al (2005)	Communication skills training, USA	A longitudinal case study describing the integration of a communication skills programme in a large healthcare organisation.	The communication skills model – the Four Habits – incorporates agenda setting behaviours.	Authors highlight the feasibility of integrating this training across a large organisation with multi-disciplinary staff.	Unable to identify.

2.4 Discussion and synthesis

2.4.1 Principal findings

This review aimed to clarify the conceptual foundation of agenda setting in the clinical encounter and suggests that an integrated framework that can apply across diverse clinical contexts may be valuable. Three objectives were considered, namely to identify (a) components of agenda setting, (b) models or frameworks underpinning current conceptualisations of agenda setting, and (c) outcomes of agenda setting that have been hypothesised or tested.

Agenda setting can be thought of as involving a number of components taken together. In essence, it involves meta communication, i.e. "talking about talking" (Meeuwesen, Tromp et al. 2007) in agreeing a conversational focus for the clinical encounter (Stott, Rollnick et al. 1995, Mauksch, Hillenburg et al. 2001). Where this is a shared and explicit process, the full patient agenda is elicited (Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999, Mauksch, Hillenburg et al. 2001, Dyche and Swiderski 2005, Epstein, Mauksch et al. 2008) and integrated (Levenstein, McCracken et al. 1986), enhancing understanding (Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999, Dyche and Swiderski 2005) and setting the stage for a collaborative interaction to follow through the clinical encounter (Manning and Ray 2002, Gafaranga and Britten 2003). Both patients (Rodriguez, Anastario et al. 2008) and clinicians (Haas, Houchins et al. 2003) should experience greater satisfaction with the clinical interaction, patients should experience greater motivation to take charge of their illness and recovery process (Stott, Rollnick et al. 1995, Stott, Rees et al. 1996, Rollnick, Butler et al. 1997) and time available for the clinical encounter should be more efficiently utilized (Mauksch and Roesler 1990, Mauksch, Hillenburg et al. 2001).

Agenda setting has been developed in the literature on doctor-patient communication both in research (Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999, Dyche and Swiderski 2005) and in medical education (Mauksch, Hillenburg et al. 2001, Haas, Houchins et al. 2003), and in the literature on

behaviour change, linked in particular with MI (Stott, Rollnick et al. 1995, Berg-Smith, Stevens et al. 1999, Channon, Huws-Thomas et al. 2005). Mapping the main features of these conceptualisations illustrate that there are perhaps more similarities than differences between them, suggesting that the development of an integrated model is feasible. The underlying approaches of patient centred medicine and MI share an underlying humanist philosophy (Bensing 2000, Miller and Rollnick, 2012). What is reflected in these approaches are shared values, in particular about working in partnership and engaging fully with the patient perspective (Miller and Rollnick 2002, Epstein, Franks et al. 2005). Indeed both the patient centred method and MI began with clinicians working inductively with their patients in an effort to improve the quality of care provided (Balint 1969, Miller 1983, Levenstein, McCracken et al. 1986). Levenstein (1986) draws parallels between the patient centred method and the psychotherapeutic concept of client centred counselling, developed by Carl Rogers (1951), and Rogers' work was influential in the development of MI (Miller and Rollnick 2002). While emerging in different contexts – the patient centred method in family medicine, MI in substance misuse – both were efforts at moving away from clinician or disease centred models of practice that involved a predominantly biological or pathological perspective (Stewart, Brown et al. 1995, Miller and Rollnick 2002).

Both of these approaches emphasise the importance of inter-personal factors in the clinical interaction. Conceptualisations of agenda setting within these models involve power sharing where decisions are taken jointly in an effort at integrating both the clinician and patient perspectives. In everyday clinical practice agenda setting may be more likely to occur where there is a power *imbalance*, for example either the clinician or patient assumes a more dominant role. It is hypothesised that this relational dynamic will then continue throughout the rest of the clinical encounter (Manning and Ray 2002, Gafaranga and Britten 2003). Shared agenda setting is intended to redress this imbalance, thereby promoting a more collaborative communication process throughout the clinical encounter.

Mapping the ways in which agenda setting has been included in empirical studies and the outcomes that have been tested, suggests a mixed picture. Given the differences between studies and the differences in conceptualisations and descriptions of agenda setting, it is not possible to synthesise findings more formally and obtain a coherent picture of effect. This observation reinforces the rationale for this thesis: i.e. for developing an integrated model, and measure. A clear picture of effect requires stability in conceptualisation and definition, and high internal validity for evaluative studies. Without these foundations in place, empirically driven conclusions are difficult to make at this stage. Rather the outcomes identified in this review contribute to the development of a model to inform future research.

2.4.2 Strengths and limitations of the review

There are two main advantages to searching for relevant citations in published literature: (1) ease of access to vast quantities of publications via online databases and (2) some degree of quality control through the peer review process (Bryman 2008). However publication is not an automatic guarantee of quality, and the candidate (NG) noted when reviewing papers that the quality of included studies varied. Given the primary purpose of this review was to map a conceptual foundation for agenda setting, studies were not excluded based on the quality of their conduct or reporting, nor was greater weight given to findings from higher quality studies. This may have influenced the findings, particularly in terms of mapping agenda setting outcomes. Publication bias – i.e. when certain features of studies make them more likely to be published than others, and therefore more likely to be retrieved through searching in this kind of literature – may also have influenced findings (Cochrane 2010).

Two search strategies were used, and the aim here was to ensure that all relevant publications were identified. The first search was developed through piloting and was structured so as to be easily replicable. The aim with this search was to identify a large number of citations to include work that addressed themes related to agenda setting that used different labels, e.g. “patient concerns”. It was developed using combinations of keywords identified in the

literature scoping exercise. On reflection it would also have been useful to ask colleagues what keywords they might use when searching for articles on agenda setting as an additional strategy for generating terms. Also, additional citations may have been identified by hand searching relevant journals. The strategy was developed by one person, as was identification of relevant citations and data extraction. Both human error and/or personal bias may have influenced these processes.

The second search strategy was a key word search designed to identify any citations where the term agenda setting had been used. The implication then is that the authors of these publications had a particular conceptualisation of that term. While theoretically it would seem that key papers identified using this search should be a subset of the first search, a small number of citations were identified through this second search that were not identified in the first search. This would have happened because the first search used a Boolean operand to select citations where both agenda set* and a second factor were present, whereas the second search did not have this limitation. This second search lends rigour to the identification of the sample used in this review.

A key challenge of this review was the inevitable circularity in developing a search to conceptualise agenda setting based on what had been described in healthcare literature. A comprehensive strategy would incorporate both explicit and implicit forms of agenda setting. However defining implicit forms of agenda setting involves a certain degree of definition to begin with. This impacted the research process in two ways.

Firstly, the iterative nature of screening papers contributed to the process of conceptualising agenda setting. While some citations were clearly relevant and some clearly irrelevant, a large proportion of papers fell into the "middle ground", and these were difficult to judge. It was in making these judgments that the candidate (NG) had to reflect on the nature of agenda setting, as described by papers that offered a clearly articulated model, to determine whether to include or exclude a new citation. To manage this uncertainty, the candidate (NG)

developed an additional category, labelled "peripheral" where papers that were particularly difficult to decide on were held. At each screening round papers that were particularly difficult to classify were held in the "peripheral" category and revisited to classify later in the screening process. Decision rules were also developed in an attempt to make this process transparent, and potentially replicable. However these rules were both developed and applied by the candidate (NG) and human error and bias may well have affected the results. Involving a second researcher in the screening of papers would certainly have been preferable.

Note: The "peripheral" category was particularly useful in refining the sample from round two to three when a more precise definition of agenda setting was used. At this point it became clearer that when authors used the term agenda setting they conceptualised it as involving a number of aspects such as eliciting patient expectations, and/ or negotiation. Up until this point in the review, articles that also included models of potentially relevant constructs e.g. collaboration, shared decision making, mutuality (see inclusion criteria first round of screening, table 2-1) had been included. At the final screening round many of these papers were reappraised in order for the final sample to reflect different aspects of agenda setting for clearly. Papers that were excluded embraced broader aspects of communication e.g how MI works (Moyers, Miller et al 2005), or the nature of ambivalence in making lifestyle changes (Kehler, Christensen et al. 2008). This process of refinement prompted the candidate (NG) to reflect more deeply about the nature of agenda setting and stimulated an appreciation of aspects relevant to agenda setting (such as the making of shared decisions, or the detailed interactional sequences of communication processes) that extend throughout the clinical encounter. As such, a number of these papers that were set aside at this third round informed different aspects of the thesis as a whole.

Secondly, the process of determining which papers to be included in the final sample suggests a degree of interpretation. While the process of screening and identifying papers can be articulated it cannot easily be replicated and different

researchers would have made different observations and decisions about what questions to ask and how best to process the information collated (Garcia, Bricker et al. 2002, Dixon-Woods, Agarwal et al. 2004).

2.5 Conclusion

In summary, this review aimed to clarify the conceptual foundation of agenda setting and its outcome proposes components, underlying models, and potential outcomes to guide further investigation. These findings should be considered in the context of limitations of the methodology used.

Having attempted to clarify the conceptual foundation of agenda setting through a structured review of the literature, consideration is now given to the view of healthcare clinicians.

3 Clinicians' experience of agenda setting with patients who have long term conditions – a focus group study

3.1 Introduction

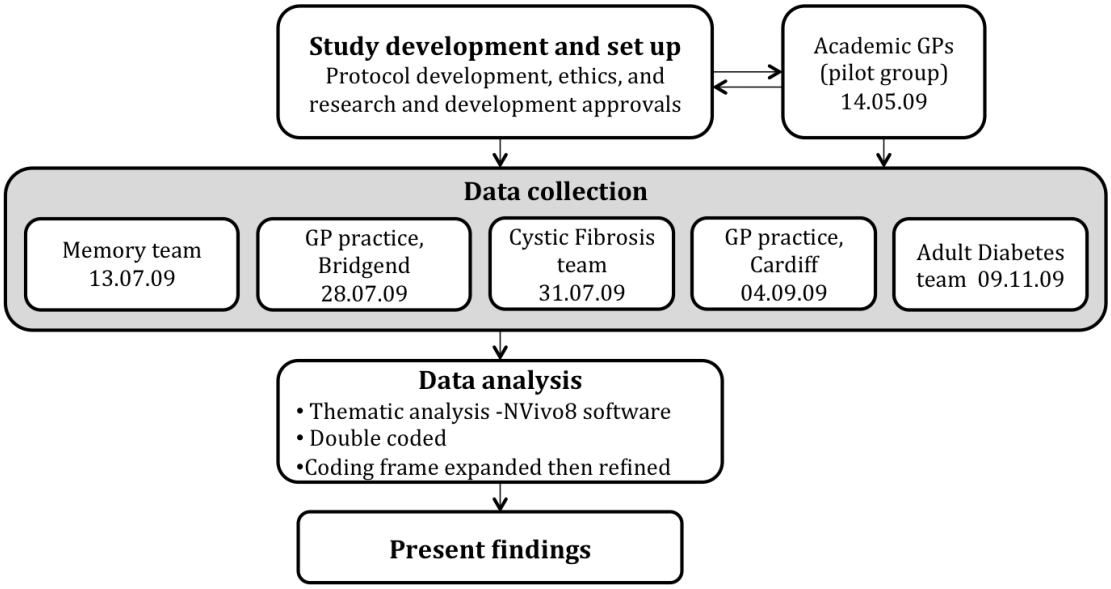
Phase 1 of this thesis aims to clarify the conceptual foundation of agenda setting. The study reported in this chapter represents an attempt at understanding the experience of clinicians when agenda setting in clinical encounters involving long term condition management.

3.2 Method

3.2.1 Overview

An overview of the research process is presented here in figure 3-1. This section then goes on to describe the focus group study in more detail.

Figure 3-1: Focus group study - overview of the research process



3.2.2 Rationale

This study aimed to explore the conversational processes of agenda setting, with a view to clarifying an integrated model and developing a measure. The focus of this work was exploratory and intended to embrace a range of differing perspectives. It was anticipated that the outcome would reveal a more nuanced picture of clinical processes that could then enrich the developing model and measure. The research question asked in this study was aimed at eliciting the *experience* of clinicians and as such lent itself to qualitative research. Qualitative research methods aim to clarify and articulate the meanings, experiences and views of participants, and through analysis, establish concepts that can help provide an understanding of social phenomena in natural settings (Pope and Mays 1995). In contrast to quantitative methods, this research does not seek primarily to provide numerical answers to research questions.

Of the range of qualitative methods available, focus groups were considered as most appropriate, particularly as the findings from the group would inform the content of the measure being developed (Streiner and Norman 2003). Firstly this would allow for eliciting the views from different members of a clinical team simultaneously. As such there would be room for discussion and debate among the participants about the differences and similarities among them (Kitzinger 1994, Kitzinger 1995, Sim 1998, Britten 2005). These dynamics are anticipated to reflect "real world" dynamic. Also, group participants' ideas may develop and clarify through this process (Sim 1998). It was this aspect of interaction that was anticipated to lend depth to the themes initially identified in the literature review. Secondly using this method allowed the candidate (NG) to engage expediently with clinicians working in the National Health Service.

The primary aim of this thesis is to develop an integrated conceptual foundation of agenda setting and to develop a measure that may be useful in teaching clinicians. Understanding the experience of clinicians was therefore an important part of this process. The rationale at the start of this study was that elements of agenda setting occur naturally in clinical practice. For example a conversational focus is established in all clinical encounters. Consequently the term agenda

setting was not used. Rather, clinicians were asked about aspects of their practice that related to agenda setting.

Focus group methodology was selected for two reasons. Firstly it allowed for expedient engagement with members of different clinical teams working in the National Health Service. In this way a number of perspectives from clinicians from different professional disciplines working in the same setting could be collected simultaneously. Secondly it allowed for a process of interaction and discussion through which individual's views were explored and clarified (Kitzinger 1995). This is a unique feature of focus group methodology (Kitzinger 1994, Rabiee 2004).

3.2.3 Aim

The primary aim of this study was to understand the conversational processes of agenda setting from the clinician's perspective.

Specific objectives were:

a) To refine a definition and model of agenda setting
b) To identify content for a measure of agenda setting

3.2.4 Protocol development

The consolidated criteria for reporting qualitative research (COREQ), a 32 item checklist aiming to enhance the rigour with which qualitative findings are reported (Tong, Sainsbury et al. 2007), was used in developing the study protocol. Once materials for the study had been developed, a pilot focus group was conducted (14th April 2009) with five academic GPs at Cardiff University. Pilot group members were asked for feedback after the group had been completed and this discussion was recorded with the consent of all participants. This allowed for testing and refinement of the research processes that occurred prior (e.g. provision of information), during (e.g. case scenarios, group moderation) and after the focus group itself (e.g. data management, transcription). A report was written of this process and the protocol amended

accordingly. The study was then submitted to the South Wales Research Ethics Committee (NHS) for review (16th April 2009) (see section 3.2.8.1).

3.2.5 Participant selection

3.2.5.1 Sampling strategy and group composition

Purposive sampling was used to select focus group participants based on pre-defined characteristics in line with the variations of agenda setting identified in the healthcare literature (Carter and Henderson 2005). Consequently, full clinical teams were recruited based on variations in: (1) average length of consultation and (2) focus of consultation i.e. generic/ specialist. Three focus groups were conducted with primary care practitioners (Academic GPs, GP surgery Cardiff, GP surgery Bridgend) and three with secondary care practitioners (Cystic Fibrosis team, Adult Diabetes team, and Memory team). An additional variable of mean age of patient group was used to guide sampling of clinical teams in secondary care. This allowed for capturing a range of practitioner experiences in engaging with patients at various developmental life stages. All focus group participants were working in and around Cardiff.

The approach to sampling was also opportunistic to a degree, as the candidate (NG) took opportunities that arose through the course of this work (Ritchie and Lewis 2008) to engage "link" people in teams that could help recruitment to this study. So for example, during the course of a workshop she met with GPs in a practice in Bridgend, and took this opportunity to determine their willingness to potentially be involved in the research.

3.2.5.2 Recruitment

Teams were recruited by making contact with a manager or senior clinician to determine a team's willingness and capacity to be involved. Of the teams approached in this way only one team refused participation based on limited capacity to free up staff time. Information sheets and invitation letters were distributed ahead of time.

3.2.5.3 Sample size

Six focus groups were conducted with between five and ten participants in each. This was sufficient to generate "sample redundancy" i.e. sampling until no new themes emerge (Carter and Henderson 2005). This decision was reviewed and confirmed after the first round of data analysis.

3.2.6 Data collection

Focus groups of 45-60mins in length were held between July and November 2009.

3.2.6.1 Topic guide

A topic guide was developed to provide structure to data collection. The guide (appendix C3-1) employed three devices to stimulate discussion: a) structured reflection on a contextually relevant clinical case; b) focussed reflection on the challenges and successes of self-management (an area where the clinician and patient agendas naturally intersect) and c) engaging participants as "teachers". This last section was intended to reveal some of the finer skills and competencies clinicians saw as vital in enabling them to work effectively with their patients in self-managing their conditions. The topic guide was developed and refined during the pilot phase of the focus group study.

Prior to each focus group the content of the case study used in the topic guide was changed to match the context of the clinical team. Key elements of the case study were however retained namely (a) the balance of clinical and psychosocial priorities, (b) inclusion of a patient's concern that they would be unlikely to raise spontaneously, and (c) inclusion of a clinician's concern that they see as important to raise. Once these case studies were drafted they were shown to an independent clinician familiar with the specific clinical context (e.g. a GP, a physiotherapist working in Cystic Fibrosis team, a psychologist working in care of the elderly) to provide feedback on the case study and to ensure it was realistic.

3.2.6.2 Participant questionnaire

Participant information such as professional background and number of years clinical experience, was collected through a brief questionnaire.

3.2.6.3 Facilitation

Two facilitators moderated all groups. The candidate (NG) was the primary facilitator for all groups and was responsible for structuring the session, keeping to time, engaging all group participants, managing the group dynamics, and facilitating relevant discussion. A number of different colleagues took the role of second facilitator and in each instance their role varied from being a silent observer, to being a more active co-facilitator. A reflective log of the facilitation experience was kept and supplemented during transcription, allowing for critical reflection of this process. A summary of some key learning points and of the responsibilities of each facilitator is outlined in appendix C3-2.

3.2.6.4 Field notes

A detailed written reflection was captured within 48hrs of each focus group. These included observations made during debriefing, feedback from the second facilitator and some early identification of themes.

3.2.7 Data analysis

3.2.7.1 Thematic analysis

The data were analysed using thematic analysis (Braun and Clarke 2006). Prevalence of a particular theme was not used as an indicator of importance and the main theoretical frameworks that informed data analysis were the Patient-centred method (Stewart, Brown et al. 1995) and Motivational Interviewing (Miller and Rollnick 2002). Identification of themes was also influenced by the review of literature on agenda setting and this influenced the grouping together of codes in line with the research questions (Braun and Clarke 2006).

The process of analysis began with emersion in the data. As the candidate (NG) was primarily responsible for data collection and data transcription she became

very familiar with the data both in audio and written form. The identification of themes began as an exploratory, inductive process during the data collection phase where reflective logs captured some key observations made in the focus group discussions. This reflexivity is inevitable and documentation was intended to enhance the transparency of the analytic process. This process of reflexivity continued through data transcription, data coding and discussions following double coding of the data by two independent qualitative researchers[1].

The coding process involved identifying ideas from the data that were relevant to the research question (Pope, van Royen et al. 2002). These ideas were systematically labelled. Similar ideas in different parts of the data can then be grouped together (Pope, van Royen et al. 2002). A key aspect of this process involves reflection on what each idea is interpreted to mean. This reflective process was facilitated through the use of a research journal that was open throughout the coding process to record key reflections being made during the analytic process. During the course of coding the data a better formulation of each code developed and several codes could be combined to reflect higher order categories. In this way patterns were identified in the data inductively, i.e. through a process of identifying what participants said. It was at this stage too that the data was double coded by two other researchers. This expanded the coding frame to include other perspectives. At this stage the analysis became more deductive in that the main conceptual models underpinning the work as a whole, namely the patient-centred approach and MI, together with the findings from the literature review, influenced the reorganisation of the coding frame. This reflects a shift to a more deductive analytic approach, an important shift given that this work was to inform the development of a model and measure of agenda setting.

[1] Dr Fiona Wood, lecturer at Cardiff University, Ria Poole, PhD student Cardiff University

3.2.7.2 Dataset

The dataset was made up of the transcriptions of the focus groups. While field notes were used to help identify themes and codes, they did not form part of the dataset being coded.

3.2.7.3 Transcription

The candidate (NG) transcribed all focus groups within 72hrs of the group. The verbatim content of what was spoken in the focus group was transcribed. On completion the group transcript was sent to the second facilitator for comment and review.

3.2.7.4 Data coding

The candidate (NG) conducted the primary analyses of all focus groups. One third of the data was double coded by two independent and experienced qualitative researchers (FW and RP). The double coders were given some brief background to the study and asked to identify important themes as they saw them in the data. The double coding process helped to refine the coding frame. As suggested by Barbour (2001) this occurred less through reflection on the level of agreement among the coders, and more through the differences in perspective that were introduced in this process. After the double coding process the coding frame was significantly expanded. At this point a deductive approach was used to narrow and refine the coding frame in line with the research questions.

Double coding the data has been recommended as an approach to verifying the analytic process, and this can occur in a number of ways (Mays and Pope, 1995, Barbour 2001). For example, a second researcher may be involved in the process of identification of themes and higher order categories, and/ or be involved at a later stage once the coding frame is more stable (Pope, van Royen et al. 2002). However, Barbour (2001) cautions against the use of “technical fixes”, such as multiple coding, saying that, unless used judiciously, they can provide a false impression of rigour. In this study double coding occurred at an early stage of data analysis. The main reason for this was to explore the extent to which the

themes being identified by the candidate (NG) may be identified by a second, independent researcher. It is in this context that the previous paragraph describes the richness of this double coding process as being less in the agreement between researchers than in the disagreement between them. These disagreements suggested alternative interpretations that could be made about the data. It was through the process of discussion that agreement could be obtained about a coding category and/ or higher order category that might better describe the data.

NVivo8 (QSR International 2008) was used to support data analysis.

3.2.8 Governance

3.2.8.1 Ethical approval

Given that this study aimed to interview clinicians during their NHS work times, an application was made for ethical approval. On review, the committee concluded that the research could be viewed as "service development" and therefore did not require ethics committee approval. Following this process Research and Development approvals were obtained from Cardiff and Vale NHS trust, Cardiff Local Health Board and the Bridgend Local Health Board together with approvals to work on NHS sites.

3.2.8.2 Confidentiality and data protection

Participant identities were concealed by use of unique identifiers at the point of transcribing the data. Data were handled and stored securely in line with data protection policies.

3.3 Results

3.3.1 Characteristics of the sample

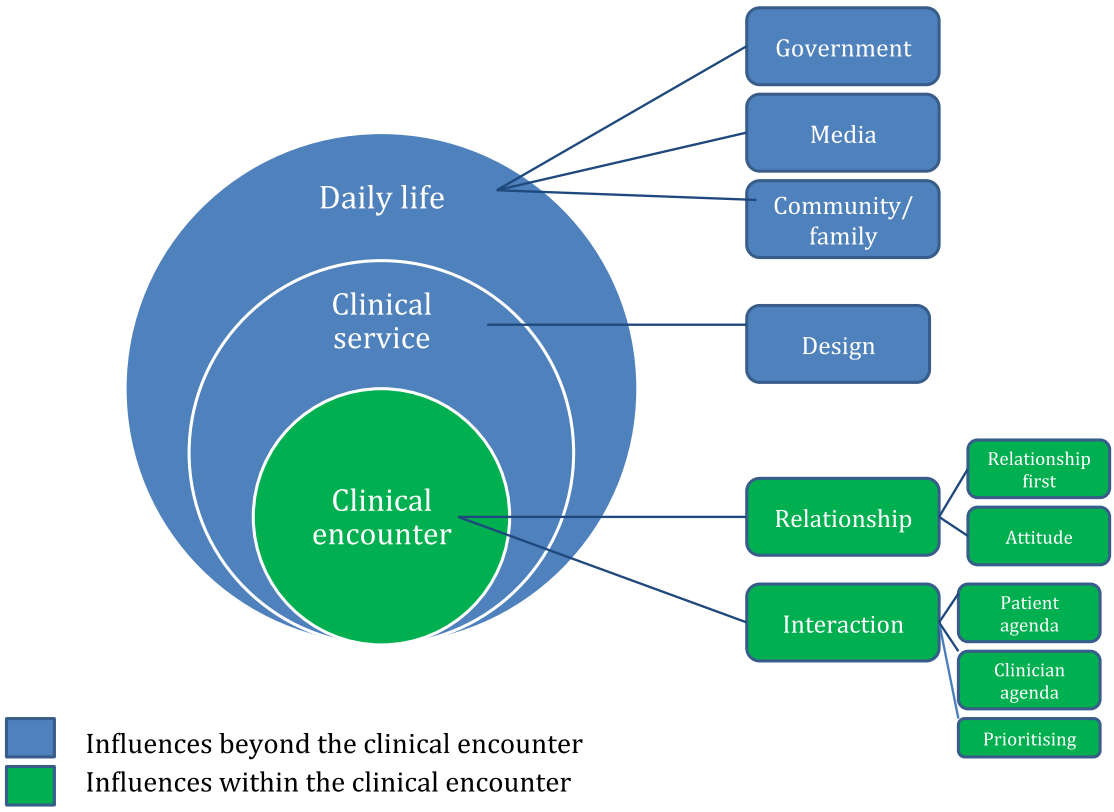
An equal number of clinicians from primary care (n=22) and secondary care (n=22) settings took part. Five out of the six groups were multidisciplinary, with the sixth group consisting of academic GPs only. The majority of participants were doctors (n=22) and nurses (n=17). A dietician, psychologist and three

physiotherapists also participated. Most practitioners had between 5 and 20yrs clinical experience. The ratio of male to female participants was roughly 1:2 with 13 men and 31 women taking part. Ethnicity of the sample was predominantly white British (n=33), with the remainder of the study sample being White-Irish (n=2), White-Welsh (n=4), Asian/Indian (n=3), Chinese (n=1) and Mediterranean (n=1). All were fully conversant in English.

3.3.2 Thematic analysis

Themes identified can be broadly divided into those related to the clinical encounter itself and those beyond the clinical encounter (see fig 3-2). Themes related to the clinical encounter reflect talk about (a) the clinician-patient relationship and (b) tasks related to the interaction. Themes beyond the clinical encounter capture the influence of context – both at a clinical service and a broader "daily life" level. Themes are described in this section.

Figure 3-2: Overview of focus group themes and subthemes



3.3.3 The clinical encounter

3.3.3.1 The relationship

In their talk about the relational context clinicians described the ideal working relationship, contrasting this at times with examples of what they considered as less skilful practice. Two sub- themes were evident in namely (1) valuing the "relationship first" and (2) "adopting a (particular) attitude".

3.3.3.1.1 Relationship first

Clinical interactions occur in a relational context and the quality of that relationship is seen as influencing patient outcomes. Clinicians talk about valuing the relationship above immediate outcomes. In this sense there is recognition that the work with patients who have long term conditions will take time and investment in the relationship will pay dividends over time.

"It is trying to build something with them first and not be judgemental and try and get where they are at" (dietician, DT1, Adult Diabetes team).

"…you probably would say: 'come back and see me again', … and develop a relationship with them" (doctor, D3, Academic GPs).

"Gain his confidence and trust …. You've got to try and work it so that they come back" (doctor, D1, Cystic Fibrosis team).

One clinician described this in terms of a shift in orientation from being *"task orientated with the patient to being patient orientated" (nurse, N1, GP surgery, Bridgend).*

The actions of the clinician should be congruent with this orientation:

"… (you need) to look like you're interested in what they're saying, … look away from the computer, look at them, look like you're interested, … look like you want to help them, … get the task things off your head (and ignore) what the computer is saying" (nurse, N2, GP surgery, Cardiff).

In establishing the "relationship first" clinicians talk about being responsive to verbal and non-verbal cues to engage patients.

"I suppose if you consider yourself that you are a radio and that you're trying to tune in to what the patient is broadcasting and … you can (then) introduce your own script if you like to some extent but it's got to be based on what you're hearing on that tuning in" (doctor, D3, Memory team).

Clinicians also talk about recognising and working with patients' strengths, and deliberately looking for ways to help patients feel less anxious.

"We … help them realise their potential from within themselves" (nurse, N2, Adult Diabetes team).

"You highlight all the positives like if we've done some form of cognitive testing instead of highlighting what they haven't been able to do you talk about the things they have been able to do. And you talk about labels and how you know walking out" (doctor, D2, Memory team).

The qualities of an effective "helping" relationship with patients who have long term conditions were described as autonomy supportive, collaborative and empowering.

"Yeah, you're giving them autonomy… you're saying 'this is what I would like you to do, what would you be willing to do? … let's find some sort of compromise' and give them choice. (So) rather than tell(ing) them what to do, you just ask them 'would you do this?'" (physiotherapist, P3, Cystic Fibrosis team).

However the extent to which clinicians establish these qualities was seen in part as a reflection of their personal values and attributes.

"*… different people have different characters and um there are some who are going to be more forthright um more sympathetic more listening more.. some who are going to suggest non directional counselling to patients and other people are going to give directional counselling. And it's all very well being taught to do things in a certain way but it doesn't sit right on everyone's shoulders and err… you could tell me oh no you're supposed to listen to the patient and reflect their feelings back onto them and what have you whereas I would tell them what to do and if they didn't like it they could go and see someone else and my life would be easier and they might take on board what I said or they might go and see someone else who they really liked and related to" (doctor, GP1, GP surgery, Bridgend).*

3.3.3.1.2 "Adopting an attitude"

Talk about valuing the "relationship first", being responsive and engaging patients, was underpinned by attitudinal characteristics, namely:

Being accepting

In relation to patients, clinicians spoke of being accepting both of what the patient talks about, as well as what they choose not to talk about.

" …the rest of the problem - the stress and so on - behind the façade of all this may not come to the fore. You have to be accepting of that" (doctor, GP5, GP surgery, Bridgend).

"I think I have learnt over the years that when the door is shut, the door is shut and you can't open it, they have to" (doctor, D3, Memory team).

Clinicians also talked of being accepting of the limitations they work within e.g. to *"realise that you're not going to solve everyone's problems in the 10 minutes that you've got" (doctor, GP surgery, Cardiff, GP3).*

"..you can't cure every problem" (nurse, N1, Memory team).

Being curious – staying open to surprises

"Be curious enough about why they are here to park your own stuff and …. always do your own stuff second" (doctor, GP2, GP surgery, Cardiff).

"Playing the long game"

Clinicians described adopting an attitude of ease, patience and persistence

"It's playing the long game in cystic fibrosis really. First meetings it is just so unlikely to have a conversation about smoking and cannabis and partying too hard and alcohol….if we're looking after these patients for 20, 25 years .. then you don't want to go in like a bull in a china shop wrecking all relationships to start with" (physiotherapist, P2, Cystic Fibrosis team).

"…if they're determined not to give an inch then they won't but it is worth trying different, a couple of different avenues before giving up" (doctor, D1, Adult Diabetes team).

"This is just the start …..You're not, you're not going to solve this (in) this session or the next session …you'll have to break it down and encourage him to come back and (if) he does come back … that's saying that you are developing a relationship …. so you delve into these problems deeper. It's the start of a long process" (doctor, GP3, GP surgery, Cardiff).

<u>Recognising the "patient as person"</u>

This encompassed clinicians seeking to connect as a person and searching for commonality, adopting belief in the abilities of the patient, and understanding the patient in the context of their life circumstances.

"I would find out what kind of person he is with regards to making changes and maintaining (them)… within the whole context of all the things he has going on. To find out what he thinks he could tackle next from his perspective" (nurse, N1, Adult Diabetes team).

"Taking that time to get to know him as a person" (physiotherapist, P3, Cystic Fibrosis team).

3.3.3.2 The interaction

This theme relates to the tasks and skills involve in agenda setting. Three subthemes are identified here relating to (a) understanding the patient's agenda, (b) the clinician's agenda, and (c) prioritising a focus.

3.3.3.2.1 Understanding "what (the patient) want(s)"

Providing opportunity for the patient to express what they want both from the clinical encounter and, more broadly, from on-going contact with the clinical team, was described as a fundamental task of any successful encounter.

"Engagement" was described as the underlying process to facilitate this. Open questions and listening are described as core skills.

"It's only by asking open questions and um being responsive to his um cues that you're going to be able to find out what his …agenda is" (doctor, GP1, GP surgery, Cardiff).

"It's just trying to find that avenue in that's going to be from their agenda rather than (yours)" (nurse, N1, Adult Diabetes team).

While this task is at times easily accomplished, at other times clinicians talk about needing to spend time actively facilitating it, particularly where the patient's agenda may be less clearly formulated or less clearly formed.

"… the first 30 to 60 seconds of the consultation is the most important part because patient's will be sitting in the reception area thinking about what they are going to say … and often when they come in its all garbled and blurted out …. And its trying to let them speak and then trying to work it through with them" (doctor, GP4, GP surgery, Cardiff).

Clinicians also talked about suspending their own priorities to engage with the patient's priorities first.

"I suppose the all encompassing question is "how are you?" because usually they'll bring up the thing that's most important to them at that time so, although it's a really kind of obvious thing to ask: how are you? .. and then they might say oh I'm really stressed with college … whereas we're wanting them to talk about their chest. You (can) actually find out what is most important to them quite often with that simple question" (physiotherapist, P2, Cystic Fibrosis team).

"There is no set way of following this through except listening to what somebody is saying …instead of having an agenda in your own mind about how you think

(things should go) ..you have to listen to hear what they say, hear what the issues are for them and take your cue from there" (doctor, D3, Memory team).

"…you've had a agenda before he came in as to what his on-going needs are but obviously he's got other things which needs discussing here and now" (doctor, GP4, GP surgery, Cardiff).

Allowing for silences and reflective spaces can help with this.

"You can learn a lot from silence… I'm not saying in every situation but it can affirm what that other person is saying in a way you know and that's why you just got to try and resist the temptation – I know it's not always easy - but you've got to resist the, try and resist the temptation to break it but you know especially when we are busy" (nurse, N2, Adult Diabetes team).

Clinicians also talked about the importance of eliciting the full patient agenda upfront and avoiding a premature focus on the first topic that the patient raised.

"…I almost assume that the patients have got several things to talk about so I almost let them tell me about the first problem but don't go into it too far you know whatever it is the sore throat or the sick note and the I sort of say yeah and what else do you want to talk about today and if they then say well nothing else then I know I can go back to the first thing…" (doctor, GP2, GP surgery, Cardiff).

Not doing this can impact on time management.

"….it is the third thing that is actually the thing that you think 'actually I really should be dealing with this today' and that if you go through A and B first of all and then they bring out C you think 'ah I've got to spend time'…." (doctor, D2, Academic GPs).

However some of the academic GPs in particular, talked about feeling inhibited from doing this.

"I do want to say or find a way of saying "err is there anything else today?" or "is there anything else I can help you with today?" but it seems very difficult to do (and) I haven't found a satisfactory way of doing that without sounding like I'm belittling the first problem that they came in with. I can't really think of a way of doing that. But that's what I want ideally I want my structure to be governed by their structure and I want them to tell me right I've got A, B and C I want to sort out today so that then I can say "right well lets deal with A and B today and we'll deal with C next week" or whatever it is. But a way of getting them to do that I'm not sure" (doctor, D1, Academic GPs).

"The more you deal with the patient's agenda and the more you really explain … or (reassure), the more problems they suddenly seem to come out with cause they think 'ah this is a nice person who is taking me seriously and takes time to explain stuff to me so actually now I've suddenly thought of 3 other things I'd quite like to bring up' " (doctor, D5, Academic GPs).

3.3.3.2.2 Talking about the clinician's agenda

This theme relates to talk about agenda items that are not raised by patients. At times this reflects a different perspective about the relative importance of a particular agenda item and those items are sensitive to raise.

"A guy came in to see me this morning he was a 27 year old and had raised blood pressure and a BMI of 40 plus and he was a challenge because…. I think you can alienate patients by just saying "you've got raised blood pressure so go and lose weight", because he didn't think he was overweight" (doctor, GP4, GP surgery, Cardiff).

"You are going to be touching on a lot of the points here… (that are) quite sensitive … he might say I don't feel I've got a weight problem, my drinking is fine ….they're seeing themselves (differently) to maybe where the healthcare person thinks they are" (dietician, DT1, Adult Diabetes team).

Clinicians describe skilful and less skilful ways of doing this. Less skilful practice was described where judgments about the patient as a person underlie clinician's interaction, or when clinicians move swiftly to a biomedical agenda or solution.

"'Let's have a look at the numbers here you know your HbA1C has gone from z to 3z and your weight has gone up so you know I know that you're just not taking the problem seriously and you're not sticking to your diet'. Now a lot of juniors would do that, or even worse they'll say: 'your weight has gone up and you know your control is worse but never mind we've got that new drug which actually can treat both of these things at the same time'" (doctor, D1, Adult Diabetes team).

In raising their agenda skilfully clinicians describe three approaches. The first is to relate their agenda to something the patient talks about.

"Sometimes you can use one thing that they come in to ask for … to lead you down a different path" (doctor, GP3, GP surgery, Cardiff).

"It's just trying to find that avenue in that's going to be from their agenda rather than …trying to foist down this number and that number" (nurse, N1, Adult Diabetes team).

"She was (coming to see me) about her smoking but she was more worried about the fact that she won't be able to walk up the hill to see her grandchildren" (nurse, N1, GP surgery, Bridgend).

"If they've come because they are having a lot of trouble with back pain or something like that and you can say "well you know…." And that might be a way to go in about addressing sort of lifestyle measures in a positive way that would help them" (doctor, D5, Academic GPs).

The second approach involves "coming alongside" their patients.

"I speak of other patients, not in personal terms, but what other lads have found, what other girls do, that they have found beneficial" (doctor, D1, Cystic Fibrosis team).

"It's not me…. It's me and you against the world and we're going to check this out just to tick a box and things" (doctor, D1, Academic GPs).

The third approach involves giving patients choice or options.

"I give them the message look it's your choice. You can make a choice about what you want to do, it's not for me to decide but in essence I'm here to help you get off it if you want to and we can make some arrangements to do our best to get you off the cigarettes" (doctor, GP5, GP surgery, Bridgend).

"What's important to them might be very different to what is important to you so… letting them choose really what is the most important thing is, what is going to make a difference to them" (nurse, N1, Adult Diabetes team).

Clinicians also describe a "seamless" integration of their agenda with that of the patient.

"It's kind of a dropping little nuggets of information of what you ideally want them to achieve but letting them find their own route to it and just kind of guiding them more than telling them" (physiotherapist, P1, Cystic Fibrosis team).

"Sometimes it's just hearing themselves talk about it as a risk and then its coming from them sort of thing and when they talk if they have got several risk factors then you ask them 'do you mind talking about your smoking?'" (nurse, N2, GP surgery, Bridgend).

3.3.3.2.3 Prioritising

On the whole clinicians talk about prioritising as a pragmatic and automatic process that is guided by what the patient presents.

"The priority is the presenting complaint rather than potential problems" (doctor, GP1, GP surgery, Bridgend).

The need to prioritise is dependent in part on the time available for the clinical encounter.

"It is a case of prioritising what you can achieve in the time that you have got" (nurse, N4, GP surgery, Bridgend).

Clinicians described a number of different approaches to prioritising. First was the need to ensure patient safety and risk reduction.

"If he wanted to talk about sleeping tablets and whatever if we found that his fasting glucose showed he was diabetic and we didn't know about it before you'd have to deal with that in that circumstance so its also prioritising in terms of safety" (doctor, D5, Academic GPs).

A second approach involved balancing immediate agendas and more long-term agendas.

"And it's trying prioritise those needs for him as well as yourself….. there are going to be short term agendas and long-term issues for both the patient and the doctor which can be a challenge" (doctor, GP4, GP surgery, Cardiff).

A third approach to prioritising involved consideration of "the whole picture"

"It's a matter of looking at the whole picture… (For example) if this chap had diabetes then the smoking is a priority to um reduce his risk of cardiovascular disease" (doctor, GP1, GP surgery, Bridgend).

Prioritising was also described as a collaborative approach.

"It is a case of prioritising what you can achieve in the time that you have got and then actually agreeing with the patient that you will deal with something else the next time and yeah, prioritising what you've got to do that day and the most important things…" (nurse, N2, GP surgery, Cardiff).

"Nurse (N3): … you can ask the patients what they feel …are the 3 most important things (they) want to sort out first.
Doctor (GP1): or what the one important thing is… (laughter) if they come in with a list of things… "

- (GP surgery, Bridgend).

"It is a matter of prioritising - or de-prioritising, from my perspective - the medical issues in the context of their agenda.. (although) there are some issues that can't really be deprioritised completely" (doctor, D1, Adult Diabetes team).

3.3.4 Beyond the clinical encounter

These themes reflect talk about factors that originate beyond the clinical encounter and have a direct impact on what gets talked about in that encounter.

3.3.4.1 The clinical service context

Clinical interactions take place in the context of an overall service design. This influences what takes place in the clinical encounter in a number of ways that are outlined here.

Length of time for the encounter

Clinicians had different lengths of time for the clinical encounter and this impacted on their clinical practice in different ways.

"And then it depends on time pressures and things as well" (doctor, GP2, GP surgery, Bridgend).

"Sometimes when you are in clinic you have to cut to the chase cause you've got 20mins with them tops so you have to cut straight to the chase of how they're how

they're really doing at the moment cause you've got like a one snapshot as it were" (physiotherapist, P2, Cystic Fibrosis team).

"The difficulty is we've only got 10minutes and most of us tailor our style to the 10minutes" (doctor, GP1, GP surgery, Cardiff).

Multiple encounters –continuity

Clinicians talked about conversations continuing across clinical encounters. This feature of design of clinical services allowed for continuity of care, and was seen as particularly important when working with patients who had long term conditions.

"It also depends as well how many times they come and under what circumstances" (nurse, N1, Adult Diabetes team).

"You want to be seeing them regularly if they've got issues going on" (nurse, N2, GP surgery, Cardiff).

"They come to us several times so you can raise… touch base with them over different issues and they might not be ready on this occasion to do anything about it and you step down as you say then but then later because you've raised it somehow is more appropriate and easier perhaps to talk about that" (doctor, GP3, GP surgery, Bridgend).

Different environments for the clinical encounter

The clinical encounter is shaped in part by the environment in which it is taking place. For example clinical encounters that take place in the patients home offer different opportunities to those that take place in the clinic environment. This is a feature of clinical encounters specific to teams working in the community, such as the Memory team.

"In clinic there are little hints …as to why you might want to go and visit someone at home" (psychologist, P1, Memory team).

"If we as the nurses have seen them in clinic and then we see them at home it's almost reversing the territory. They've been on our territory, …and (now) we're going into their territory…. (and) it's about picking up on the cues. It might be the cat that disappears into the kitchen it might be the nice garden it might be the photograph just something that gives you a human side" (nurse, N2, Memory team)..

Inpatient clinical encounters also offer different opportunities to outpatient encounters. This was a feature of the Cystic Fibrosis team in particular.

"If you're having contact with patients for like two times a day for like half an hour at a time, you start to know the patient and then you can pick up on the smaller things whereas if it was a clinic appointment and you haven't seen them for months then well you still know them but you wouldn't necessarily remember their little trademark things" (physiotherapist, P3, Cystic Fibrosis team).

<u>Multidisciplinary teams</u>

Another feature of the design of clinical services is that clinicians operate within teams. At times a patient may progress through a process of seeing several clinicians one after the other.

"Nurse (N4): …They usually have seen the consultants (by the time they see me) and you can say, the consultant or the doctor has recommended this, how do you feel about that?
Nurse (N2): …when I see the patients after they have seen the doctors I usually um ask them oh, I see you have seen the doctor, how did you get on, what did you discuss?
Nurse (N3): …I see patients before they see the doctor, I just prompt them to open up…"

- (Adult Diabetes team).

Clinicians also talked about their role as a member of a multidisciplinary team as

being able to enhance the service offered to patients.

"Perhaps we can move on to his Adult Diabetes team or maybe pass him to one of our specialist nurses as well so giving a multi-disciplinary approach um to his on going problems" (doctor, GP4, GP surgery, Cardiff).

"If we see a patient that we can't deal with and they have a certain problem there are certain GPs that we say well I would go and see this GP" (nurse, N4, GP surgery, Bridgend).

"We …have multi-disciplinary meetings .. where the whole team (is) here, (and) we went through individual patients and we talk about what has happened to them and what we can achieve, we look at the graphs so exactly what we say to the patient is what we actually go through ourselves, what can this patient achieve, what can they do, what is their x-ray like and .. our psychologist and social worker (understands) lung function …and, although that's not their forte, they know what it means … and then we learn about psychology, social work, dietetics …. so the team learns from (each other)" (doctor, D1, Cystic Fibrosis team).

3.3.4.2 The daily life context

This theme reflected the awareness of both clinicians and patients operating within a broader "daily life" context. Agenda items that arise within the clinical encounter may be an expression of this broader context rather than being an expression of either party's own agenda.

<u>Government agenda</u>

Some clinicians viewed the influence of government agendas as interfering.

"Alot of this information is stuff that the Quality and Outcomes Framework interferes with the delivery of general practice and um recording information and ticking the boxes is quite often totally irrelevant to the reason that patients come in and um we may at times record the information but um haven't got the time to act

on it um and we might not even be interested in it" (doctor, GP1, GP surgery, Bridgend).

One participant viewed Quality and Outcomes Framework (QOF) as potentially helpful.

"I'm often prompted by the QOF and the various software packages which will come up with little prompts which will say you haven't measured this person's blood pressure in 12 months or whatever it is and that can sometimes I can use that depending on the patient …… I can use that and say "oh you know the computers say we haven't done this for a while so sometimes using the QOF or the quasi… the government or whatever it is…. that "the powers that be want us to check this for you" (doctor, D1, Academic GPs).

Media

The information that patients have via the media can influence what they bring to the clinical encounter for discussion.

"Newspapers are probably the worst for it cause they tend to get the people who are looking (for a cure)" (psychologist, P1, Memory team).

Bio-psychosocial perspective

While patients are seen for a "snapshot" of time within the clinical encounter, they live their lives within the broader daily life context. Their choices are both influenced by and influence their immediate family and community.

"…to find out how, what kind of person he is ….. within the whole context" (nurse, N1, Adult Diabetes team).

3.4 Discussion

3.4.1 Principal findings

The primary aim of this study was to understand the conversational processes of agenda setting from the clinician's perspective with a view to refining a model and developing a measure of skilful practice. The results highlight the need to consider factors occurring both within and beyond the clinical encounter. There are two key factors to consider within the clinical encounter namely, the quality of the clinician-patient relationship and the skilfulness with which tasks related to agenda setting are conducted. Some specific skills and strategies to enhance skilfulness were also described. Consideration of contextual factors beyond the clinical encounter suggests that agenda items may arise from a number of different sources including the clinical service, government, media and daily life.

These different levels of contextual influence shape agenda setting in a number of ways. At the relationship level, the quality of the rapport may influence the extent to which both clinicians and patients may feel able to discuss sensitive subjects. The service design influences how much time is available to talk about any one topic or agenda item, how easily agenda items can be deferred to another clinical encounter or to another clinician. It also influences the kinds of talk topics that are expected to be on the agenda. Global "daily life" factors may also influence the content of the clinical interaction. For example, part of what appears to be the clinician's agenda may in fact be an expression of a broader government agenda. Likewise part of what appears to be the patient's agenda may in fact be an expression of a broader agenda from the patient's family, employer or other significant influence.

The context for the clinical encounter and the "happenings" that occur within that encounter are interdependent. As a result, while certain aspects of agenda setting can be described – e.g. the tasks and skills involved – skilful practice inevitably involves a degree of flexibility and an ability to be responsive to what is occurring at any particular moment. This observation underlines the need for

clinical practice that involves "mindfulness" – an ability to be present, free of distraction, and attentive to what arises in any given moment. These findings are consistent with what has been described elsewhere in the healthcare literature (Epstein 1999, Mauksch, Hillenburg et al. 2001, Rollnick, Miller et al. 2007, Epstein, Mauksch et al. 2008, Mauksch, Dugdale et al. 2008). Equally, while the assessment of agenda setting skill may capture observable clinician behaviour, any approach to teaching would be enhanced by development of self-awareness (Moore, Wilkinson et al. 2009) or mindfulness (Zoppi and Epstein 2002).

This focus group study lends depth and richness to the developing model of agenda setting that is expanded in Chapter 5 of this thesis. These findings should be considered in the light of the limitations of this study, which are discussed here.

3.4.2 Strengths and limitations of the study

Qualitative research has been criticised for lacking scientific rigour. Behind this criticism are valid concerns about researcher bias, lack of generalisability and lack of reproducibility. However these concerns are equally applicable to quantitative research, and rather than invalidating qualitative approaches, do more to advocate for systematic and rigorous conduct and reporting of studies (Pope and Mays 1995). Qualitative researchers should therefore aim to achieve two goals: a) to account for the data and record the method of analysis that another trained researcher could carry out the study in the same way and come to the same conclusions and b) to produce a believable and coherent explanation of the phenomena being studied (Pope and Mays 1995). Following guidelines, such as the one used in the planning and reporting of this study (Tong et al 2007), contributes to robust and comprehensive research conduct.

3.4.2.1 Focus group methodology

Focus group methodology was selected for a number of reasons. Exploring these ideas in a group was intended to stimulate discussion of varied ideas and perspectives, while at the same time capturing agreement among participants.

The clinical focus of the discussions meant that there would naturally be many different "right" ways to approach the subject matter and it was this variation that would provide richness in the data. The decision to run focus groups with full clinical teams was also, in part, a pragmatic attempt to maximise attendance. It had an additional advantage in that group members could relate easily to each other and may be better able to challenge each other (Kitzinger 1994). However talking about practice in front of peers is exposing and little is known about the influence of social desirability and conformity on these group discussions (Kitzinger 1995). It is possible therefore that the familiarity of group members, or unspoken power dynamics, may have inhibited the expression of honest and spontaneous views (Thomas, MacMillan et al. 1995). Finally, the use of focus groups, rather than observation of clinical practice for example, meant that what was captured was what practitioners *say they do*, which is often different from what they actually do (Miller and Mount 2001). The results of this study may be better understood therefore as a reflection of what clinicians *aspire* to do, or what they think they do, rather than what they actually do.

3.4.2.2 Thematic analysis

The choice of thematic analysis offered a number of clear advantages. Firstly it is not wedded to any particular theoretical framework and does not require the theoretical and technological expertise of other approaches such as grounded theory (Braun and Clarke 2006). Thematic analysis can therefore be used flexibly and offers a more accessible approach to analysis for researchers (Braun and Clarke 2006). The flexibility of this approach should not be used to account for a lack of rigour however. Identification of themes is primarily a matter of judgement and guided by a number of decisions that are often poorly articulated, and thematic analysis has been criticised for its subjectivity and lack of reproducibility (Braun and Clarke 2006). Two approaches were taken in this study to ensure rigour and transparency. Firstly the main theoretical frameworks guiding identification of themes have been highlighted. Secondly one third of the data were double coded by two independent researchers.

The themes identified in this study reflect the theoretical frameworks informing them. In this sense the findings from this study confirm and illuminate previously described ideas and constructs, rather than originate new ideas or constructs. For example, the five dimensions of patient-centeredness have been articulated (Mead and Bower 2000a) - i.e. a bio psychosocial perspective, understanding the patient-as-person, sharing power and responsibility, good rapport, and clinician-as-person - and it is unsurprising therefore that these dimensions are reflected in this analysis.

Thematic saturation was reached. Fewer new codes needed to be developed as each focus group was coded, and by the time the final group was coded the coding frame was relatively stable. This suggested that no new themes were arising (Carlsen and Glenton 2011). The coding frame was reorganised however, as has been discussed previously, and other coders identified other themes in the data, suggesting that additional focus groups may have generated new insights. Nevertheless the data collected for this study was sufficient to answer the questions asked of it.

3.4.2.3 Participant selection

The sample for this study was deliberately chosen to reflect the experiences of clinicians working with patients who have long-term conditions in different contexts. Despite this theoretical approach to sampling, there is likely to have been an element of selection bias in the sample. It is reasonable to assume that the clinical teams that were identified and willing to take part in the study are more motivated, possibly more cohesive, and have a greater propensity to engage in reflective practice. In addition these teams had the capacity to provide protected time for staff members to come together as a group. In fact the one team that refused participation in the study did so on the basis of staff shortages. At an individual level it can be assumed that clinicians who chose to participate in the groups would themselves be motivated, and willing to reflect on their practice. No information was recorded on non-participation of individual clinicians within the teams that were involved in the study. Findings from this study may be best interpreted therefore as an effort to articulate “best practice”,

that is, where teams have the resource, cohesion and motivation to work in a way that they perceive to be most effective.

3.4.2.4 Topic guide

The topic guide was designed to stimulate discussion and the term "agenda setting" was deliberately avoided in an attempt to minimise the use of jargon. Questions aimed to elicit reflection on tasks that have been linked with agenda setting in the literature (e.g. opening a clinical encounter, establishing conversational focus) and to capture themes related to these. This disjuncture between what is directly asked of participants and the question asked in analysis was deliberate (Braun and Clarke 2006). On reflection however, it would have been useful to elicit clinicians understanding of the term "agenda setting" itself and it was interesting that very few clinicians described using highly structured strategies as described in the healthcare literature. Few conclusions about the familiarity of clinicians with more formalised definitions of agenda setting, or the variability of their understandings of this term, can be made from the data generated in this study.

3.4.2.5 Logistics

Running the focus groups in clinicians' place of work had a number of advantages and drawbacks. Most groups were conducted during lunchtime professional development slots allowing for optimal attendance of clinical team members. However the time available for the focus groups was compromised at times with groups starting later than anticipated, participants arriving later or leaving earlier than other group members and discussions at times being interrupted mid-way. These factors may have affected the depth of discussion that was achieved.

3.5 Conclusion

The results from this study provided some fascinating insights into what clinicians attempt to do, how they aspire to work and what they consider important when engaged in elements of agenda setting with patients who have

long-term conditions. Also, these findings suggest that while elements of agenda setting occur in everyday clinical practice, they are unlikely to arise in the highly structured way that is described in some healthcare literature. This reinforces the rationale that agenda setting would need to be taught. Clinicians may be engaging with different elements of agenda setting with varying level of skill, but these elements need to be identified, articulated and organised into coherent skillset. Obtaining consensus on which the core components of agenda setting are, is therefore an important next step.

These results together with the findings from the structured literature review (Chapter 2) informed a consensus group study presented in the following chapter.

4 Expert consensus on agenda setting definition and domains using modified Delphi technique.

4.1 Introduction

Thus far two overlapping perspectives have been considered in conceptualising agenda setting: those of researchers, educators and clinicians who have published in the field of health communication (literature review - Chapter 2) and those of clinicians working with patients who have long term conditions (focus group study – Chapter 3). What emerges from these research activities is that the conceptualisation and practice of agenda setting is variable and shaped by clinical context. The term itself means different things to different people, while at the same time, sharing many common elements across definitions. No formal attempt has as yet been made to integrate these different understandings.

This chapter presents a consensus group process of consultation with experts in agenda setting. The aim of the study was twofold, first to obtain feedback on the model of agenda setting that was in development (i.e. conceptual foundation), and secondly to refine components of agenda setting that can be used in developing a measure of skilful practice (i.e. measurement). This process would then support content validity of the measure. As established earlier in this thesis, the clinical context of long-term condition management was selected as these clinical interactions frequently involve conversations about multiple inter-related priorities that may be raised by both patients and clinicians. This contextual umbrella was also sufficiently broad to capture the variations in agenda setting described in the literature.

The consensus group study provides a bridge between the two research questions – "what is agenda setting?" and "is it measurable?" It provides a way of ensuring the conceptual platform is sufficiently sound that measure development can in fact begin. Content domains were proposed together with items that could capture clinician skilfulness in agenda setting. This is the starting point of measure development (Streiner and Norman 2003). It is presented here, prior to presentation of the model (Chapter 5), as it informed the model's development. It also informed much of the work

in subsequent thesis chapters that focus on measurement (Chapters 6,7 and 8), and supported integration and consolidation of ideas.

4.2 Method

Consensus group methods were identified as a useful methodology to structure this consultation exercise. These methods provide a way of synthesizing information efficiently from a number of people with different perspectives on a single topic (Jones and Hunter 1995), such as has been identified with agenda setting. Of the different consensus methods, Delphi technique was chosen for this study, primarily because it does not require participants to meet face to face (Linstone and Turoff 2002). The use of the method was adapted from its conventional form and it is therefore described here as a *modified* Delphi technique.

This section starts with an introduction to Delphi technique and goes on to describe how Delphi informed the process of obtaining consensus on agenda setting definition and domains of skilful practice.

4.2.1 Delphi technique

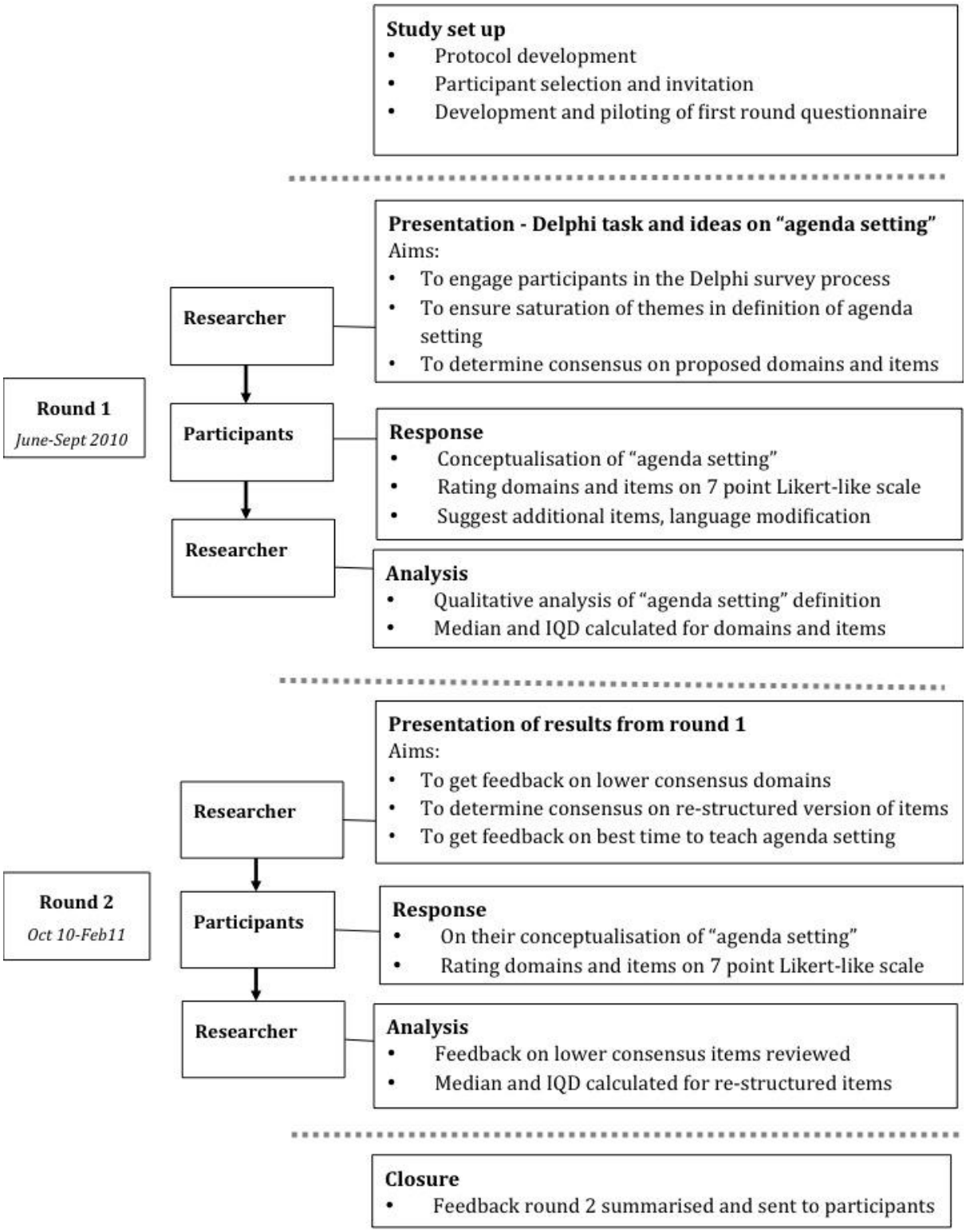
The Delphi technique provides a way of structuring group communication such that the expertise in the group can be combined to address a "complex problem" (Linstone and Turoff 2002). It is based on the premise that pooled intelligence enhances individual expert judgment (de Villiers, de Villiers et al. 2005). The process unfolds in a series of rounds where participants are asked to rank their agreement with specific statements in a questionnaire (Jones and Hunter 1995). Delphi technique is characterized by three features: (1) anonymity - participants respond independently via questionnaire and their responses are not therefore influenced by group inter-personal processes, (2) controlled feedback - group responses are summarised and presented back to participants; and (3) statistical group response – a quantified summary of the group response (Pill 1971).

Where the Delphi technique has been used for survey or questionnaire designs, it typically begins with participants proposing a list of items to include (Linstone and

Turoff 2002). These are then refined at each round as participants indicate the extent of their agreement for including the particular item. Here is where this study differs somewhat to the more traditional form of the method. Given the developmental work that preceded it, a definition of agenda setting together with domains of skilful practice and possible items for inclusion in a measure, were already identified. This approach follows that of other researchers (Cook, Brismee et al. 2010, Rao, Anderson et al. 2010).

An overview of the study process is provided in figure 4-1.

Figure 4-1: Flowchart of modified Delphi process



4.2.2 Aim

The aim of this study was to consult with a group of experts:

a) To confirm the conceptual model of agenda setting

b) To inform the content domains for development of a measure of agenda setting

4.2.3 Participant selection

4.2.3.1 Sample size

Sample sizes in Delphi studies vary depending on the aim of the study, its complexity and resources available (de Villiers, de Villiers et al. 2005). As a general guide the panel usually consists of 15 to 30 participants (Linstone and Turoff 2002, de Villiers, de Villiers et al. 2005). Consequently it was decided to recruit between 20 and 30 experts for this study.

4.2.3.2 Recruitment

A list of participants was generated from the authors of healthcare literature, recommendations and personal contacts. Participants were invited by email, telephone or face-to-face in an attempt to personalize the process. At the point of initial invitation participants were also asked to recommend other suitable colleagues. Additional invitations were then sent to these colleagues. Recruitment ended once 30 experts had agreed to take part.

4.2.3.3 Sampling strategy and group composition

A maximum variation purposive sampling strategy was used to select participants (Patton 1990). This strategy is useful when attempting to capture and describe themes (i.e. commonalities) that extend across differences in participants' perspectives (Patton 1990). Consequently while criteria for participant inclusion were relatively broad, attention was also paid to the overall group composition such that it reflected some of the variability with which agenda setting has been described and practiced.

The criteria for participant inclusion were that the participant either (a) had contributed to expanding the agenda setting construct – evidenced through publication or affiliation with an organisation which includes agenda setting as part of its initiatives;

or (b) had clinical, educational and/ or research expertise in agenda setting and long term condition management evidenced through publication or clinical role.

Participant identification also aimed to capture clinician, patient, educator and research perspectives, and therefore participants with expertise in these areas were selected. The patient perspective was particularly important to include in this group and consequently a group of expert patient tutors were recruited through the Health Foundation. This organisation was delivering a programme, called Co-creating Health, aimed at embedding self-management support in health services (Health Foundation 2008). In this programme, agenda setting was one of three key enablers in long term condition management, and the expert patients were involved in co-delivering training to both patient and clinicians (Health Foundation 2008). Consequently the expert patient tutors had expertise in agenda setting both from a patient and an educational perspective.

From the structured literature review (Chapter 2), the theoretical underpinnings of agenda setting were identified as the Patient Centred approach and MI. A balance of experts in each of these fields was also ensured. Participants who did not have a specific affiliation with either of these approaches were also identified. Many of these judgments were guided by the literature review findings.

4.2.4 Data collection

Two to three rounds of data collection were initially planned and two executed using SurveyMonkey, a web-based survey system.

4.2.4.1 Survey design and development

4.2.4.1.1 Design principles

The design of each modified Delphi round was guided by two factors: (a) functionality i.e. that it collect the “right” information to meet the study aims, and (b) retention of participants, i.e. that it is user-friendly, concise and attractive. Each round of the modified Delphi was refined through piloting both in paper and/or online formats, as well as piloting participant access to the online survey.

4.2.4.1.2 Piloting

Two rounds of piloting occurred. The first involved piloting a paper version of the modified Delphi round, to refine the content, e.g. questions asked, ease of understanding. The survey was distributed to three participants (academic GP colleagues at the Department of Primary Care and Public Health, Cardiff University) who were asked to complete it and record the length of time it took to complete. The candidate (NG) then met with the participants to elicit feedback on clarity of instructions, wording and the general design. Amendments were made and the paper survey then formed the basis for the on-line survey. This paper version was developed for the first modified Delphi round only.

For the second round of piloting, eight colleagues (PhD students and academics at the Department of Primary Care and Public Health, Cardiff University) were sent the survey link and asked to complete the modified Delphi round, providing feedback on the design and ease of following instructions. Amendments were made in line with feedback from these colleagues. This process was repeated for both modified Delphi rounds.

4.2.4.1.3 Modified Delphi round 1 design

This first round (appendix C4-1) was presented in three sections:
(1) Respondent's definitions of agenda setting, and feedback on the definition of agenda setting used in round 1.

(2) Rating of the nine domains proposed as core components of agenda setting. These core components were identified as broad themes in the literature review (Chapter 2) and focus group study (Chapter 3). During the course of piloting the survey it became clear that participant responses clustered toward the higher end of the scale. To create greater variability in the responses therefore, the seven-point response scale was anchored at "somewhat important" and "extremely important" at either end (see figure 4-2). This would allow for greater discrimination between degrees of "importance"

(Streiner and Norman 2003). Participants could also identify that a domain was "not applicable". This format did not explicitly include a "neutral" centre point.

(3) The third section asked respondents to rate 23 items that represented "what *practitioners* might do", using the same seven-point response scale i.e. anchored with the descriptors of "1=somewhat important" and "7=extremely important".

In addition participants were invited to give specific feedback about suggested changes, or any general feedback.

4.2.4.1.4 Modified Delphi round 2 design

The second round (appendix C4-2) was also presented three sections:
(1) Feedback from round 1 was presented. This included a narrative summary of participant definitions of agenda setting, and a summary of the domains and items that had reached higher and lower consensus.

(2) The group were asked for feedback on: (a) three lower consensus domains (domains 1,4 and 9), where participants were asked for narrative feedback and were not asked to re-rate the items; (b) the terminology of the new model of agenda setting; and (c) a reorganisation of the higher consensus domains and items into three groups, namely the "conversation" (quality), "tasks" and "skills". Additional items, identified from participant feedback in round 1, were proposed under these classifications in an attempt to represent agenda setting more fully. Participants rated these items on a seven-point response scale anchored by "strongly disagree" and "strongly agree" (see figure 4-3).

(3) Finally participants were asked to indicate when in clinical training agenda setting should be taught. Responses to this question informed the design of a study to validate the measure of agenda setting (Chapter 8).

4.2.4.1.5 Modified Delphi closure – feedback

Feedback from round 2 was presented to participants by way of closure.

4.2.4.2 Data collection process

Data collection took place between June 2010 and February 2011. Participants were invited to participate through a personalized link, with a date by which each round would close. Non-responders were followed up by email.

4.2.5 Data analysis

4.2.5.1 Quantitative analysis

Data analysis of Delphi rounds typically involves the calculation of the median and interquartile deviation of responses (Linstone and Turoff 2002). These statistics are more appropriate for the kind of data that are generated, as the distribution of responses is often skewed (Murphy, Black et al. 1998). Two different kinds of agreement can be identified using Delphi (Jones and Hunter 1995): (1) the first is the extent to which an individual expert agrees with a statement, represented by the median or mode (2) the second is the collective agreement of the group, represented by interquartile range (IQR)(i.e. the distance between the 25th and the 75th percentiles). A smaller IQR represents a greater level of agreement (Linstone and Turoff 2002, De Vet, Brug et al. 2005). While no single approach is advocated for analyses of Delphi responses, researchers are advised to decide a priori their approach to determining when consensus (either for or against a Delphi item) is reached (Cook, Brismee et al. 2010).

In this study different levels were used at each round based on the kind of response scale that collected the participant responses. These are summarised below.

4.2.5.1.1 Round 1 criteria for consensus

For round 1 the seven-point response scale was anchored at “somewhat important” and “extremely important” (figure 4-2).

Figure 4-2: Response scale used for round 1

1--------2--------3--------4--------5--------6--------7 N/A
Somewhat important Extremely important

For the nine agenda setting *domains* proposed, the following criteria were used to determine consensus: median ≥ 5 and IQR≤1. Domains that fell outside this range were returned to the group for feedback.

For the 23 agenda setting *items*, the following criteria were used to determine consensus: median ≥ 5 and IQR≤2. Items that fell outside that range were dropped.

The reason for this difference was that less variation in responses was expected for the domains, hence the setting of more stringent criteria.

4.2.5.1.2 Round 2 criteria for consensus

For round 2, the seven-point response scale was anchored at "strongly disagree" and "strongly agree" (figure 4-3). This scale was used because it was not clear that participant scores might cluster at the higher end of the scale. Criteria used to determine consensus were: median ≥ 6 and IQR≤1.

Figure 4-3: Response scale used for round 2

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

4.2.5.2 Qualitative analysis

Participant definitions of agenda setting from the first modified Delphi round were uploaded to NVivo8 for thematic analysis. The candidate (NG) conducted this analysis.

These themes were then presented back to participants at the start of the following round for comment. Identification of themes was influenced by those identified in the literature review (Chapter 2).

Other free text that was captured through the survey design was also summarised and presented back to participants in a subsequent round with opportunity for comments.

4.2.6 Data security and protection

The Deputy Director of Governance Compliance at Cardiff University gave permission to use SurveyMonkey software for this study. This was important to obtain, as SurveyMonkey is a company based in the USA and data would therefore be held abroad. Permission was granted as SurveyMonkey adheres to US-EU Safe Harbour Privacy principles with regard to data security, and also uses SSL encryption for data transfer (SurveyMonkey 2013). In addition, the requirements of the Data Protection Act 1989 were not violated by use of this software, as the data collected (apart from email addresses) was personal opinion (personal communication, Deputy Director Governance, Cardiff University, July 2010).

Note: It was agreed that formal ethical approval for the Delphi study was not required as it was considered a survey. All participants had consented to participate prior to the study and were free to withdraw by opting out of the survey via a personalised link. The expert patient tutors that were involved were recruited for their expertise as educators of patients and while they could provide feedback from a patient perspective this was not considered their primary role.

4.3 Results

Of the 30 experts who agreed to take part in this study, 29 responded at the first round and 27 responded at the second round, giving a response rate of 97% and 90% respectively. Consensus was obtained on the core domains of agenda setting, together with a number of clinician behaviours through which these domains may be measured.

4.3.1 Characteristics of the sample

Of the 30 experts who agreed to take part, two thirds were men (n=20) and one third were women (n=10). The sample was made up of eight expert patient tutors, ten medical doctors (three with an additional training in psychotherapy), eight psychologists, a social worker, nurse, dietician and healthcare communication PhD graduate. Several participants held senior academic or teaching positions.

The non-respondent at the first round was a clinical psychologist with expertise in MI. This participant also did not respond at the second round. The other two non-responders at the second round were (a) a medical professor with expertise in both the patient centred approach and MI, and (b) an expert patient from the Co-creating Health project. Given the high response rates overall, and the fact that the non-responders were not from any single area of expertise, it is unlikely that there would be any significant loss of expertise between the two Delphi rounds.

A full list of participants is provided (with their permission) in the appendix C4-3.

4.3.2 Principal findings

The principal findings from this study are summarised into three sections. First a narrative summary is presented as a collection of the essential components of agenda setting. Secondly agenda setting domains and items initially proposed are reviewed and selected based on participant feedback. Thirdly the way this exercise informed the approach to measurement is presented.

4.3.2.1 Participant definitions of agenda setting

A summary of the group's individual responses to defining agenda setting is presented in box 4-1.

Box 4-1: Summary of consensus group participant's definitions of agenda setting

1. Agenda setting is a process that allows practitioners and patients to align themselves in three areas:
   a. On the content of what will be discussed in the session – e.g. clarifying both parties' concerns and/ or expectations
   b. On the overall course of their work together i.e. what both parties hope to achieve as a consequence of their work together. This captures a broader purpose of agenda setting where the practitioner and patient work to define the "trajectory" of the clinical encounter or clinical encounters that may follow.
   c. On the relational "ground rules" e.g. who will adopt what kind of role through the clinical encounter(s).

2. Agenda setting involves a particular kind of attitude and involves being open-minded, accepting of potential disagreement, willing to negotiate and collaborative.

3. Agenda setting provides a "meta-perspective" i.e. allows both parties to "step back" to consider a range of options before agreeing which to focus on.

4. Agenda setting involves a number of tasks that include:
   a. Identifying, raising and/or clarifying individual agenda items (including "problem definition")
   b. Discussion, negotiation and prioritising to reach agreement on a focus/ foci
   c. Planning how the time will be used to address the agreed focus/ foci

5. Agenda setting is a conversational device or strategy. It involves the use of conversation structured in a particular kind of way to achieve a specific purpose.

6. The purpose of agenda setting is:
   a. Time management – to structure a time efficient consultation
   b. Focus – to agree a conversational focus for the work being done based on a collaborative attempt at considering a variety of options.
   c. Adjustment and/or realignment – to "maintain a constructive alliance" This may involve "checking out" how things are progressing and a re-prioritisation or re-negotiation of the focus of the work being done.

7. When to use agenda setting:
   a. Agenda setting is often used at the start of a clinical encounter, but can be used at any stage in a clinical encounter (e.g. for realignment).
   b. It can be used to shape a single clinical encounter, or a series of encounters.

8. Agenda setting needs to be flexible. Unexpected items may arise in conversation and practitioners need to be responsive to these e.g. by re-visiting agenda setting.

9. Agenda setting looks different in different clinical encounters and settings.

Feedback from group members about this summary was positive and confirmatory:
"*…this reflects agenda setting as I understand it to be. I really like the areas of alignment that you have suggested and the multiple purposes of agenda setting." (ASD1010)*

"The use of the word alignment is especially meaningful" (ASD1004)

"(These) definitions seem more inclusive of the patient journey" (ASD1027)

The summary presented was deliberately framed as something that both patients and clinicians have responsibility for in the clinical encounter – e.g. "practitioners and patients … align themselves". However, participants noted that the balance of power implied here, may not necessarily reflect the reality of clinical interactions:
"The physician takes a much more active role than is implied" (ASD1018)

"Agenda setting initiated by the clinician allows the opportunity to share responsibility with the patient in a gradual transition from clinical management to self-management" (ASD1020)

4.3.2.2 Agenda setting domains and items

Participant ratings of the nine agenda setting domains and 31 items that mapped to those domains are presented in table 4-1. For all *domains* the median and mode were ≥ 5 suggesting a high degree of individual agreement on the importance of each of the identified domains. However for obtaining *consensus*, the a priori decision was for the median to be ≥5 and the IQR to be ≤ 1. Using these criteria three domains (domains 1, 4 and 9) could be described as obtaining lower consensus. Participant feedback in round two gave some insight into this observation (see table 4-2).

For all the *items* (except item 23), the median and mode were ≥5. For obtaining consensus, the a priori decision was for the median to be ≥5 and the IQR to be ≤ 2. Using these criteria nine items obtained lower consensus at round 1 and were dropped.

Table 4-1: Results of modified Delphi round 1

Domain*	Results round 1			Items – clinician behaviours*	Results round 1		
	Median	Mode	IQR		Median	Mode	IQR
1. A broad overview of potential discussion topics is constructed	7.0	7	5.00-7.00	1. Clinician explains the agenda setting process e.g. "Let's start by thinking about all the things we may want to cover today….."	6.5	7	5.00-7.00
				2. Clinician clarifies the purpose of agenda setting	6.0	7	4.00-7.00
2. Patients talk about their concerns, requests, wishes and/ or goals	7.0	7	6.00-7.00	3. Clinician asks for the patient's agenda e.g. how can I help today? Or where should we start?	7.0	7	6.00-7.00
				4. Clinician identifies the patient's agenda from the patient's story	6.0	6	4.00-6.75
				5. Clinician elicits the patients concerns or ideas	6.0	7	6.00-7.00
				6. Clinician elicits the patient's goals and aspirations - for the session	6.0	7	5.25-7.00
				7. Clinician elicits the patient's goals and aspirations - for the management of their condition	6.0	7	5.00-7.00
				8. Clinician asks for brief elaboration on each agenda item raised	6.0	6	4.25-6.75
				9. Clinician avoids going into too much detail on any one agenda item	7.0	7	5.25-7.00
				10. Clinician keeps asking about the patient's agenda until the patient indicates there is nothing more	6.0	7	5.00-7.00
				11. Clinician checks they have understood patient's agenda	7.0	7	6.00-7.00
				12. Clinician checks there is nothing else the patient wants to add	5.0	7	4.00-6.75
3. Clinicians raise subjects they consider important	7.0	7	6.00-7.00	13. Clinician raises things that they want to talk about	5.0	7	4.00-7.00
				14. If clinician has seen patient before, refer to/ raise items discussed in previous sessions	6.0	7	3.25-7.00
4. Conversations about behaviour change and self-management are raised°	5.0	5	4.00-7.00				
5. Clinicians and patients agree shared priorities	7.0	7	6.00-7.00	15. Clinician links agenda topics	7.0	7	6.00-7.00
				16. Clinician summarises shared agenda	6.5	7	6.00-7.00

*Orange highlighted items are those that did not obtain consensus at round 1

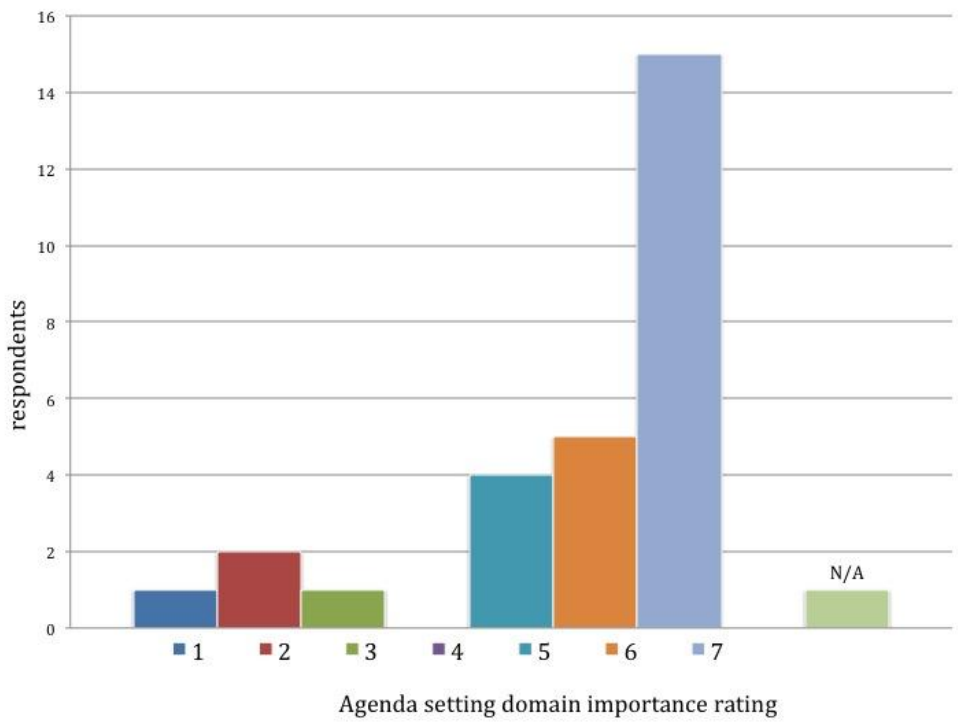
°Individual items not identified for this domain as the content of talk topics covered in domains 1&2

Domain	Results round 1			Items – clinician behaviours*	Results round 1		
	Median	Mode	IQR		Median	Mode	IQR
6. *A focus of what to talk about during the session is agreed*	7.0	7	6.00-7.00	17. Clinician clarifies the patient's priorities	6.0	7	5.00-7.00
				18. Practitioner clarifies their own priorities e.g. states clinical priorities	7.0	7	6.00-7.00
				19. Clinician gives the patient options	6.0	7	5.00-7.00
7. *The conversation is a collaborative process*	7.0	7	6.00-7.00				
8. *Patients are involved and engaged in the conversation*	7.0	7	6.00-7.00	20. Clinician is responsive to emotional cues from the patient	6.0	7	4.25-7.00
				21. Clinician recognises and comments on the patient's strengths	6.5	7	5.25-7.00
				22. Clinician gives the patient time to talk	7.0	7	5.25-7.00
				23. Clinician gives patient choice about where to start	6.5	7	6.00-7.00
9. *Clinician structures the consultation based on the shared agenda*	6.0	6	5.00-7.00	24. Clinician asks for the patient's agenda again at later stages in the consultation	4.0	5	3.00-5.75
				25. Clinician addresses each agreed topic on the shared agenda	5.0	5	4.25-6.00
				26. Clinician maintains focus on one topic at a time	5.0	5	4.00-6.75
				27. Clinician checks topic is addressed to patient's satisfaction before moving on	6.0	7	5.00-7.00
				28. Clinician refers back to shared agenda to decide on next topic	6.0	7	5.00-7.00
				29. Clinician uses the shared agenda to manage time	7.0	7	5.00-7.00
				30. Clinician uses the shared agenda for goal setting/ follow up planning	6.0	6	6.00-7.00
				31. Clinician refers back to the shared agenda when concluding the session	6.0	7	5.25-7.00

*Orange highlighted items are those that did not obtain consensus at round 1

The second round allowed for examination of lower consensus (IQR ≥ 1) on three domains (domains 1, 4 and 9). It should be noted that even though the criteria used in this study meant that these domains were categorised as "of lower importance", there were still high levels of agreement that these domains were important. For example for domain 1 the median and the mode were at a 7, the highest possible level, indicating that over 50% of the participants considered it as extremely important to skilful agenda setting (table 4-1, and figure 4-5). The IQR for this domain was between 5 and 7, again suggesting that 75% of participant responses clustered at the very top end of the scale (figure 4-5).

Figure 4-4: Domain 1: A broad overview of potential discussion topics is constructed – participant responses round 1



Findings were similar for the other two "lower" consensus domains (figures 4-6 and 4-7). Responses for domain 4 (figure 4-5) had the most evenly distributed scores across response categories. Nevertheless the majority of participant responses still clustered toward the higher end of the scale with 75% of participants rating it a 4 or higher.

Figure 4-5: Domain 4: Conversations about behaviour change and self-management are raised – participant responses round 1

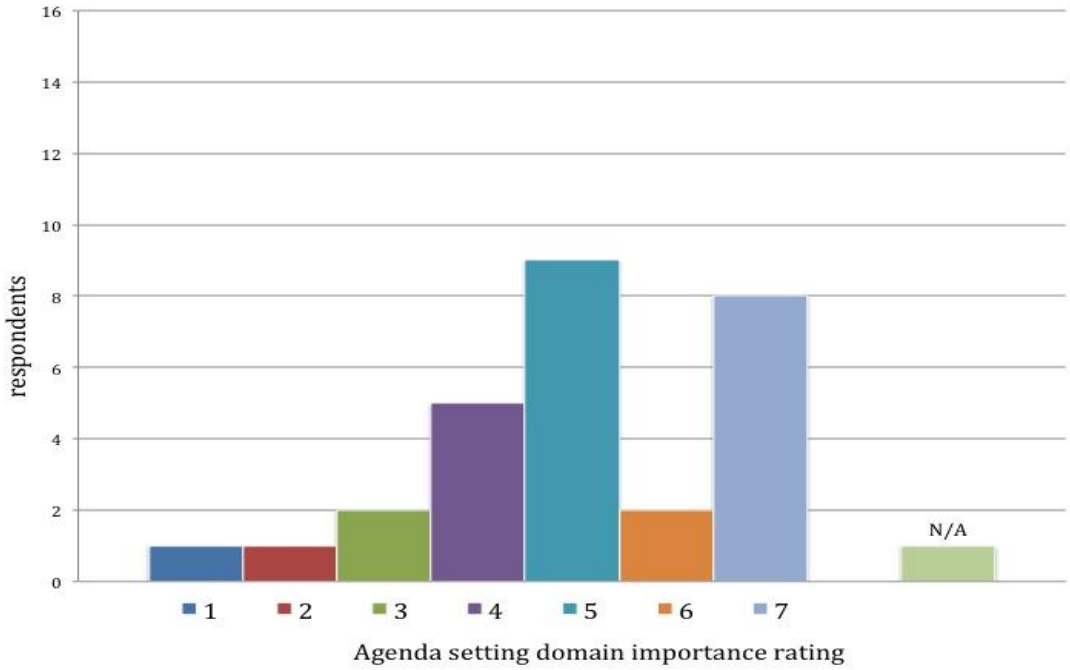
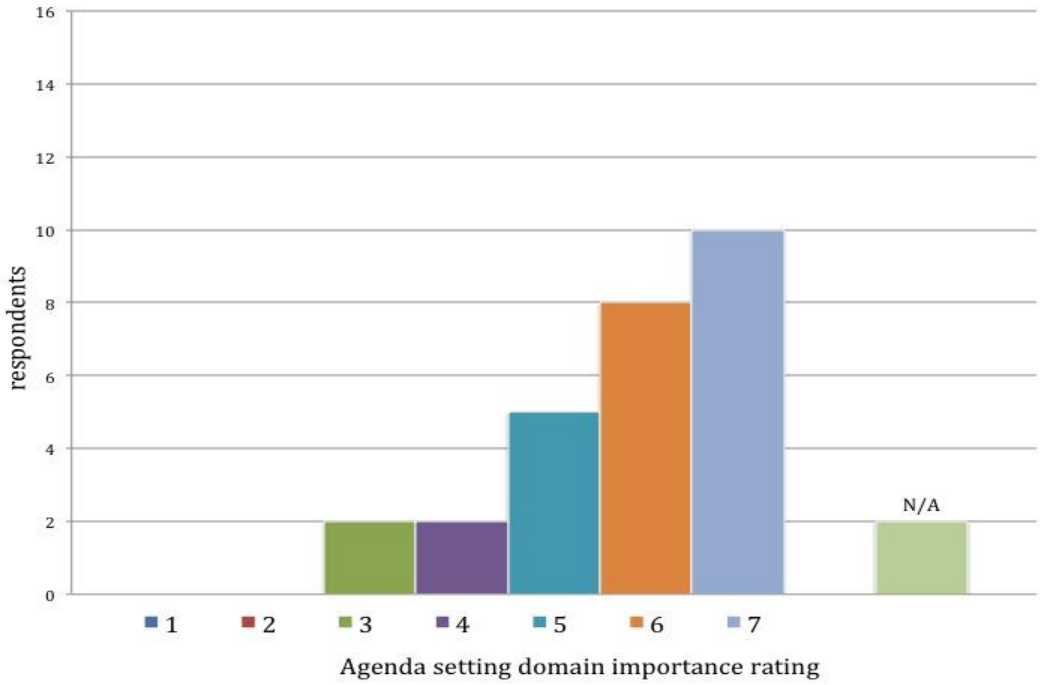


Figure 4-6: Domain 9: Clinician structures the consultation based on the shared agenda – participant responses round 1



These findings suggested a high level of agreement among participants and, rather than getting participants to re-rate items, narrative feedback was solicited. This feedback was used to guide thinking about the model of agenda setting (Chapter 5) as well as the development of a measure of agenda setting (table 4-2).

Attention was also paid to outliers or discriminant cases, in particular where participants had noted a domain or item to be "not applicable" (N/A). For example one participant marked domain 2 as "not applicable" for the following reason: *"it limits the spectrum of items (for discussion) to be considered, - that's against the idea of a free process of sharing" (ASD1002).*

Some other explanations for lower scoring items were:
"Items 3 and 5 have nothing to do with agenda setting as a shared process. It's the patient's responsibility to raise his/her topics of any kind…Items 12-14 are from a paternalistic style of consultation" (ASD1002).

"Item 11 means too many different things to different people - too vague" (ASD1005).

"Item 20, I would only agree if autonomy supported whilst doing this" (ASD1011).

Table 4-2: How agenda setting domains informed the development of a model and measure

Domain	Feedback round 2	Action
*A broad overview of potential discussion topics is constructed**	• General agreement on the principle • Wording of "broad overview" and "potential" confusing. May be more clearly described e.g. "putting together a list of options". • Some clinical encounters the agenda is clear – e.g. an acute presentation, or smoking cessation clinic.	Retained conceptually in the model of agenda setting.
Patients talk about their concerns, requests and/ or goals		**Retained for measure**- included as a task – "Elicits the patient's agenda"
Clinicians raise subjects they consider to be important		**Retained for measure-** included as a task – "Raises the clinician's agenda"
*Conversations about behaviour change and self-management are raised**	• Not a feature of all long –term condition consultations • Conversations about self-management do not always prompt conversations about change • Behaviour change conversations may arise later in the clinical encounter, or as part of a broader agenda item – suggesting agendas within agendas	Retained conceptually as relevant to some clinical encounters – not formally included in measure design
Clinicians and patients agree shared priorities		**Retained for measure**– included as a task– "clarifies the shared agenda"
A focus of what to talk about during the session is agreed		**Retained for measure-** included as a task– "agrees a focus"
The conversation is a collaborative process		**Retained for measure**– included as the "quality" of the conversation
Patients are involved and engaged in the conversation		**Retained for measure** – included as the "quality" of the conversation
*Clinician structures the consultation based on the shared agenda**	• Structuring is a separate though related task • Structure is a "scaffold" i.e. should retain flexibility	Retained conceptually - "agenda navigation" - not included in measure design.

* lower consensus domains

The domains of agenda setting were then slightly reframed to focus more fully on the clinician's behaviour. So, for example, domain 2 - "patients talk about their concerns, request, wishes and/or goals" - was reframed to a task of agenda setting "elicit the patient's agenda". Reframing the agenda setting domains in this way was intended to help clarify these elements for use in teaching clinicians agenda setting. The information from round 1 was then organised into three higher order categories defining agenda setting, namely (1) the quality of the conversation, e.g. that it is collaborative and engaging, (2) the tasks of agenda setting, and (3) the skills (table 4-3).

Table 4-3: Agenda setting domains refined for use in teaching

		Results round 2			Action
		Median	**Mode**	**IQR**	
Conversation	**Collaboration***				
	Engagement*				
	Respect	7	7	6.0-7.0	
	Sensitivity	6	6	6.0-7.0	
	Responsiveness	6	7	6.0-7.0	
	Ease	*6*	*6*	*4.0-6.0*	*Dropped*
Tasks	**Elicit patient agenda***				
	Raise clinician agenda*				
	Clarify shared agenda*				
	Agree focus*				
	Introduces agenda setting	*6*	*6*	*4.0-6.5*	*Dropped*
Skills	**Listening**	7	7	6.0-7.0	
	Asking	7	7	6.0-7.0	
	Summarising	7	7	6.0-7.0	
	Checking understanding	*6*	*7*	*5.0-7.0*	*Dropped*
	Giving information	*5*	*7*	*4.0-7.0*	*Dropped*

*from domains agreed in round 1

4.3.2.3 Contribution to decisions about measurement design

Feedback from Delphi participants also informed the design of a measure of agenda setting in a number of ways.

4.3.2.3.1 "Setting" an agenda and then structuring the clinical encounter based on that agenda are two different tasks – what is the focus of measurement?

Agreeing an agenda upfront and the subsequent process whereby this agenda provides structure to the clinical encounter are separate tasks. The structuring of the clinical encounter based on the pre-agreed agenda is incorporated into different models of clinical communication, e.g. Calgary Cambridge Guide uses terminology such as "signposting". In the first round of this survey these tasks were presented as distinct from each other and feedback from participants confirmed this.

In round 2, participants were presented with a distinction between an upfront process of "agenda mapping", and a complementary "navigational" process, that unfolds throughout the clinical encounter. These ideas are expanded in Chapter 5. Feedback suggested this to be an acceptable distinction, and a decision was then taken to focus measure development on the former of these tasks (agenda mapping).

4.3.2.3.2 Is a checklist of behaviours the correct measure design for what is a complex interactional process?

Participants gave feedback about the nature of agenda setting and the task of measurement. This included comments such as:
"Not sure (agenda setting) can be (measured) in this way." (ASD1007)

"The problem of such a scale is that it doesn't accommodate 'frequency' or 'incidence'" (ASD1029)

"The list (of items) does not address process issues" (ASD1004)

This prompted a rethink of the approach to measurement taken thus far. Limitations of a "behavioural checklist" approach were acknowledged and other approaches to measurement considered. The way in which this observation

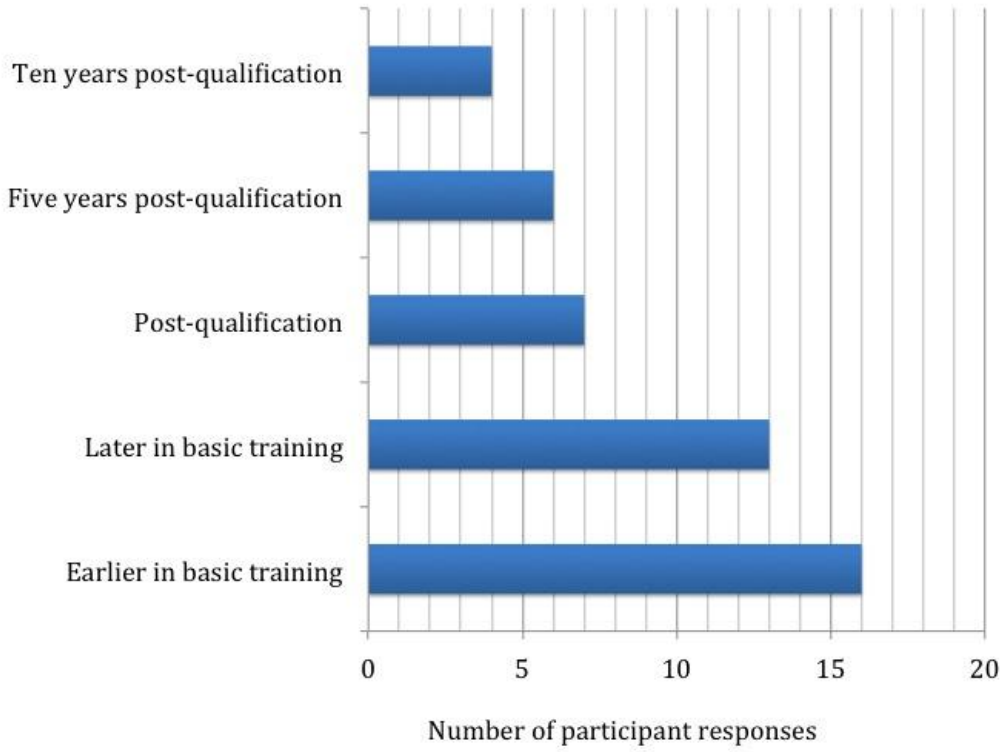
informed the design of a measure of agenda setting is considered and discussed further in Chapter 7 of this thesis.

4.3.2.3.3 Identifying the " best time" to teach agenda setting

The measure under development was being designed for use in teaching. Consequently it was decided to elicit feedback from modified Delphi participants about when they felt it most useful to teach agenda setting to clinicians. Participants were surveyed in round 2 to give this feedback and results are presented below.

Note that participants were invited to indicate each stage where agenda setting might be useful and were not limited to a single choice only.

Figure 4-7: When to teach agenda mapping



Responses to this question suggested agenda setting might be most useful when taught during undergraduate training when core skills are being embedded. It may be useful too, to reinforce this learning at later stages of training. Participants suggested that while agenda setting might not be useful in every clinical encounter the flexibility with which it can be used makes it an important core skill for health clinicians to have.

"It is a method that can be used across disciplines so it needs to become the extended professional greeting – 'what do you do after you say hello?' (ASD1009)

"Early awareness of a skill brings awareness of use in different settings… (agenda setting) is a useful (and) transferable." (ASD1027)

"It seems a fundamental part of any consultation with a patient, so once some basic communication skills have been grasped then this would follow on well from that point." (ASD1011)

Another motivation for teaching agenda setting earlier was that ways of communicating with patients become habitual. Later in training or professional practice it may be more difficult to integrate new ways of doing things.

"Practitioners are high-level thinkers and learners. The concept of 'agenda setting' is not a difficult one, and if it isn't learnt early, it becomes more difficult to incorporate later in consulting life."(ASD1012)

"Practitioners have to elicit info from patients from day one, so how are they going to do it? It will make sense (if taught earlier) and the clearer the skills canvas the more likely it is to fit - otherwise practitioners will have to unlearn a method of eliciting info from patients." (ASD1009)

However participants also recognised that the use of agenda setting may only become more relevant as undergraduate students gain more experience.

"The concept needs to be introduced as part of the initial training in consultation skills. However people may only really appreciate the need for it once they have been in practice." (ASD1015)

"Need to have grasped basic knowledge and confidence to then think about applying (agenda setting)." (ASD1006)

"I think 'later' rather than 'sooner' .... there's other stuff on which to focus first. Agenda setting is a higher level skill set and should be left until later." (ASD1029)

Consequently there was some recognition within the group that teaching agenda setting may be useful at any stage of a clinician's career.

"At this point, evidence continues to show that most of the time agenda setting does not occur therefore we need to introduce and reinforce across the spectrum of professional development." (ASD1014)

"At any time in their careers, if they have not been taught it previously."(ASD1024)

4.4 Discussion

4.4.1 Principal findings

This study aimed to consult expert opinion on an emerging model of agenda setting from which to develop a measure of skilful practice. It allowed for confirmation and refinement of the core domains of agenda setting, enriching the emerging model and providing a foundation for measure development.

The findings from this exercise suggest high levels of agreement for the pre-identified domains representing agenda setting. This suggests that while agenda setting may be described differently in different bodies of literature, these conceptualisations do not differ that widely. This was revealed in this study through consultation among experts from different backgrounds. Differences

described in the healthcare literature may then reflect different forms of agenda setting, suited to different contexts, but there is little disagreement among experts about the core elements that define it. One explanation for this may lie in the main models underpinning descriptions of agenda setting, i.e. the patient centred clinical method (Stewart, Brown et al. 1995) and Motivational Interviewing (Miller and Rollnick 2012). These approaches share similar values of working collaboratively with patients and sharing responsibility for the encounter with them (Stewart, Brown et al. 1995, Epstein, Franks et al. 2005, Miller and Rollnick 2012). The implication then is that an integrated model of agenda setting rests on these shared values.

The domains represent core aspects of the clinical interaction that, when taken together, signify agenda setting. These domains were identified through integrating different descriptions of agenda setting with attention to the similarities across these. The findings from this consensus exercise suggest that this integration was comprehensive and robust. At the same time, by setting stringent criteria for determining different kinds of agreement within the group it was possible to refine these domains further.

While the model itself is presented in detail in the following chapter, several ways in which the consensus findings informed the model's formulation are briefly considered here. Firstly consensus group feedback reinforced the distinction between agenda setting that occurs upfront, where the conversational focus is agreed explicitly, and agenda setting, that extends throughout the clinical encounter, where the conversational focus shifts across topics. This distinction is also reflected in different models of communication. For example Mauksch et al (2008) distinguish between "skills used sequentially" – where "collaborative upfront agenda setting" is seen as occurring at the start of a clinical encounter – and "skills with on-going influence" – where "topic tracking" is described as complementary to agenda setting. The model presented in Chapter 5 uses new terminology to distinguish these aspects. The process of considering options to agree a focus is described as "agenda mapping" and the "topic tracking" process is described as "agenda navigation".

Secondly the consensus findings stimulated deeper reflection on both the formulation of agenda items and the task of prioritising. For example several participants highlighted that both patients and clinicians may arrive at the clinician encounter with a poorly formulated agenda of their own. Participants also reflected on the complexity of clinical interactions where patients present with two or more long-term conditions. Here there may be many things to talk about but real struggles in prioritising. Agenda setting may therefore expand (e.g. by requiring more time and attention) or contract (e.g. requiring less time and attention), and does so based on the immediate needs arising in the situation.

Following these observations, agenda mapping can be described as involving two steps: (a) identifying options from all present, and (b) prioritising to agree a focus. The process underpinning these steps is collaborative and all parties should be engaged. In some clinical encounters this is a relatively straightforward process. For example a single agenda item is raised, and the need for considering options is not an issue. Likewise in some clinical encounters a number of options may indeed be raised, but the priority focus is self-evident. However in other clinical encounters this process may be less straightforward. There may, for example, be agendas that clinicians or patients feel uncomfortable about expressing and the process of identifying talk topics may require greater attention. There may equally be encounters where multiple inter-related priorities are identified and then require more thoughtful consideration before a focus can be agreed.

Thirdly the consensus findings offered a way of integrating conversations about behaviour change into a more generic description of agenda setting. The domain that caused the greatest debate was the one suggesting that behaviour change is a feature of agenda setting in long term condition management. The focus on self-management in current approaches to long-term condition management suggests that conversations about behaviour change (taking medication, dietary changes) are indeed often a feature of these clinical encounters. However they do not always arise in conversation, and when they do they do not always arise

upfront. Equally, conversations about self-management do not always involve talk about change. Using the two-step model presented earlier, behaviour change conversations arise when they are (a) identified as talk topics, and (b) prioritised in the context of other identified talk topics.

In summary, the consensus group findings add richness to the emerging model of agenda setting. The intended value of this model is that it may enhance the understanding and use of agenda setting in practice, education and research both with and for clinicians, patients and their families. Thus the model is a generic foundation that can be used to inform a variety of activities to support teaching and research efforts. In this thesis it has informed the development of a measure aimed to support efforts at teaching agenda setting to clinicians.

4.4.2 Study design – Strengths and limitations

4.4.2.1 Modification of Delphi technique

Consensus studies vary widely in their type of task, and in the way in which the method is modified to meet the study objective (Murphy, Black et al. 1998). In this study the use of Delphi technique was modified from its traditional form in two ways. Firstly, in a conventional Delphi the first round involves generating ideas about the topic. Given the developmental work that preceded this study, this first step was unnecessary. Instead a hybrid approach was adopted in which participants provided their understanding of agenda setting, as well as gave feedback on the ideas that had already been developed.

A second deviation is that in conventional Delphi participants are provided with feedback from the previous round and invited to reconsider their previous selection. What was partly unanticipated in this study however was the high degree of consensus that was obtained at the end of the first round. Consequently, the second round consisted of giving this feedback to group participants and asking for narrative feedback via open text. The idea was to generate more information this way as well as to retain participant engagement. However on reflection, an additional round of rating revised descriptors of the

domains would have been a useful way of tracking any changes in participants' views through the consensus process.

4.4.2.2 Choice of Delphi over other consensus techniques

The modified Delphi technique was chosen to structure the exercise primarily because it could be conducted without requiring group participants to meet face to face. This meant that people with expertise living in different geographical locations could take part, and take part in their own time. The choice of technique was certainly an advantage in this sense, evidenced by the willingness of these experts to take part in the study as a whole, and by the high response rate at each round. There is little evidence to suggest that an alternative method such as nominal group technique would have enhanced the findings. Murphy et al (1998) conducted a review of literature in which consensus methods were compared, and demonstrated mixed findings. They do conclude however that formal methods such as Delphi appear to do better than informal methods when seeking consensus views. The reasons for this are unclear but may be linked with the highly structured nature of the interaction, which ensures that all participants are given equal opportunity to share their opinion, as well as to reflect confidentially on the opinion of the group.

4.4.2.3 Participant selection

Particular attention was given in assembling this group of experts to ensure a balance of views and a mix of expertise from different perspectives. In general the evidence suggests that "to identify and explore areas of uncertainty" a heterogeneous group is appropriate (Murphy, Black et al. 1998, p.38). In this study experts were identified based on their experience with agenda setting in personal experience, clinical practice, education, and/or research. From the inclusion criteria for this study a wide range of participants could have been invited to take part in the study. Limiting the numbers meant that participants were selected based on their being known to the candidate (NG) and being willing to participate when approached. This was a pragmatic approach however

the limitation for this approach is that the sample cannot be taken as fully representative of all perspectives on agenda setting.

The inclusion of expert patients in the sample was particularly helpful in developing a generic conceptual model that embraced the patient perspective. These participants gave feedback on their experience as patients, as well as their experience of teaching agenda setting both to other patients and to clinicians. However, this group were all from the same organisation (the Heath Foundation) with a fairly specialist understanding of agenda setting. They shared a similar perspective of agenda setting through the way in which it was incorporated into the Co-creating Health project of which they were a part. These expert patients were involved in co-tutoring the *patient* self-management programme (SMP). While several of these participants may have also been involved in co-tutoring the *clinician* advanced development programme (ADP), this group could provide particular expertise in their role as patients and in training other patients in agenda setting. In this sense the patient perspective in the development of this model is only partially represented and the model is limited by not having fuller consultation with a patient group.

Student clinician perspectives were not sought at this stage of the study for two reasons. Firstly the aim of the instrument – i.e. that it be used in undergraduate settings – was only decided at the end of this study (with input from the Delphi participant group). Secondly student clinicians would not necessarily have expertise in agenda setting and the primary aim of this study was to obtain consensus on expert views of agenda. However engaging with the student perspective is important in taking this work forward, particularly when considering its integration in undergraduate curricula.

4.4.2.4 Criteria for consensus

The distribution of participant responses for domains and items were all skewed toward the higher end of the response scale. This was partly anticipated at the early stages of piloting after which the scale was redesigned in an attempt to

reduce the skew. While modifying the scale in this way did allow for greater variability in the responses, this clustering of responses remained.

The approach taken in this study was to set different criteria for consensus for the domains and for the items. Approaching the analysis in this way created complication that was perhaps unnecessary and avoidable. Setting more stringent criteria for the domains was intended to create greater discrimination in this area where less variability in responses was anticipated. However, these criteria meant that some domains were described as obtaining lower consensus despite clustering at the extremely high end of the response scale. On reflection a better way of obtaining discrimination between the proposed domains may have been to ask participants to rank them in terms of importance, or to identify their top 5 with a rationale for their choice.

4.4.2.5 Design and structuring of the task

In general, group participants appeared well engaged in the modified Delphi process evidenced by the high response rates, and the level of detail provided in participant responses. A challenge in the design of the survey was the diversity of modified Delphi participants. While all participants had expertise in agenda setting, they nonetheless were from different cultural backgrounds (international group), working in diverse areas (primary care, prison service, addiction treatment), in different roles (expert patient tutors, researchers, clinicians, management) with different educational backgrounds (non-tertiary level to doctoral level). Ensuring that the survey was clear and accessible to all participants was important particularly as the survey design influences the judgments participants are likely to make (Murphy, Black et al. 1998, Hsu and Sandford 2007).

Murphy et al (1998) suggest a structured approach to content development of a Delphi round, e.g. through literature review, while at the same time giving participants many opportunities for stating their own views. This principle was followed in the design of the survey. In addition, as described earlier, attention

was given to the design of the task with a number of pilot rounds and testing of questions. In particular attention was given to the phrasing being clear, and free of jargon or bias. Despite this attention to detail, it is probable that participant responses were moulded by the task designed to gather them. Therefore the findings should be interpreted in this light, i.e. that this is a consensus of opinion among a non-representative group of experts.

4.4.3 Modified Delphi findings and the teaching of agenda setting

The modified Delphi exercise was an important activity for bridging the two research questions - (1) what is agenda setting? (2) is it measureable? From this study the conceptual model has been developed to embrace both the clinician and patient perspectives in defining agenda setting (Chapter 5). The inclusion of expert patients in the modified Delphi expert participant group prompted a shift in perspective when describing agenda setting. Domains were phrased in a more objective manner for example. In this way the model is intended to be useful for a wide range of activities. A measure of *patien*t skilfulness in agenda setting might be developed from this platform for example. In this study the purpose of measure development was to produce a tool that can be used to teach *clinicians*. It was necessary therefore to shift perspective again, this time to embrace the clinician perspective more fully. This shift from refining the content of domains to considering their measurement in teaching *clinicians* was a significant part of this consensus exercise.

Organising the information from round 1 to round 2 into three higher order categories defining agenda setting – i.e. the (1) conversation, (2) tasks, and (3) skills – was intended to create a simple framework that might be useful in teaching. Two domains were included as the "quality of conversation". Four domains were rephrased as tasks as the task approach is a familiar to learners, allowing them to focus on a discrete action while retaining flexibility in being responsive to the patient and situation (Makoul 2001). Skills were also identified.

The consensus group was particularly useful in considering when in clinical training agenda setting should be taught, with some indication that it is a core

communication skill that should be taught in basic training. These findings are consistent with consensus statements that considered agenda setting as a one of a number of core clinical communication skills in medical education (Simpson, Buckman et al. 1991, Makoul 2001, von Fragstein, Silverman et al. 2008). Similar consensus statements in other professional disciplines were not identified.

Note: To clarify, the preceding paragraph refers to empirically based *consensus statements* of core communication skills, such as the Kalamzoo consensus statement for medical communication (Makoul 2001, Duffy, Gordon et al. 2004). A consensus statement of inter-disciplinary communication skills has recently been published and is the first of its kind (Bachmann, Abramovitch et al. 2013). These authors also noted the lack of consensus statements that have been published in other disciplines. All professional groups have guidelines with regard to *communication competence*, and this is highlighted in Chapter 9, section 9.1.2.)

Given some recognition of its importance in educational settings two questions arise: (1) to what extent and in which way is agenda setting already included in undergraduate communication skills training; and (2) how might the findings from this study enhance teaching efforts both where agenda setting is already part of the curricula and where it is not? This last question will be revisited later in the PhD through the development of a measure based on this framework.

Equally however it could be argued – and was argued by some participants in this study - that evidence to support the impact of agenda setting on patient outcomes remains underdeveloped. This argument suggests that integration of agenda setting into teaching curricula is premature. The value of this framework is not undermined in this instance though as it may be used to teach agenda setting to clinicians when conducting research. As highlighted in the literature review presented in Chapter 2, the evidence for the usefulness of agenda setting is mixed, and meaningful conclusions are difficult to make.

4.5 Conclusion

This consensus exercise provided a bridge between the primary research questions, allowing for clarification of the "what is agenda setting?" question from which to consider whether or not it is measureable. There was high degree of consensus across this expert group, suggesting that while agenda setting descriptions may be variable, there is nonetheless a considerable amount that unites these differences. The integrated model of agenda setting is an attempt to capture this and is presented in the following chapter. Measure development follows, and is described in Chapters 6, 7 and 8 of the thesis.

5 An integrated model of agenda mapping: agenda setting redefined

5.1 Introduction

As observed and discussed earlier in this thesis, the term agenda setting means different things to different people. The first part of this thesis has focused on identifying the commonality across these conceptualisations of agenda setting to identify core domains. These domains mark out the boundaries of agenda setting and represent essential content areas that provide evidence of agenda setting taking place. A question arises here about how these domains relate to each other, and to the clinical interview as a whole.

Agenda setting is a dynamic and, at times, temporary process from which the agreed focus for a clinical encounter might shift and change at different points of that encounter. This occurs within a relational context in which values may be clarified or new content areas emerge (Peltenburg, Fischer et al. 2004). The use of metaphors may capture these shifting processes more fully. Consequently the terminology of agenda setting was revisited and redefined. Where content areas for discussion are mapped out, before committing to a course to action for the clinical encounter, this is described as *agenda mapping*. Through the rest of the clinical encounter the mapped agenda may guide the conversation but there is nevertheless a *navigational* process that occurs through which the clinician and patient will respond to what arises in the moment. It is this parallel focus on both the "meta process", i.e. the structure and on the workings of the immediate conversation that encapsulate the skilful dimension of these processes. This terminology will now be adopted for the rest of this chapter.

A conceptual model is presented here as an integration of the work conducted in the first part of this thesis. The aim is to propose a unified framework that can be useful for students, clinicians, educators and researchers in learning, practicing and researching agenda mapping, and critically, as a conceptual foundation for

addressing the second research question in Part 2 of this thesis that considers measurement.

The model was developed from research activities described in the previous chapters and this is summarised in Table 5.1. Key components of the model are listed in this table and crosses indicate the main research activity that informed its inclusion. For example it was through the focus group study (Chapter 3) that the influence of contextual factors are three levels was identified, whereas the theoretical underpinnings and potential outcomes of agenda mapping were identified in the literature review (Chapter 2). Specific reference to these research activities will be made throughout this chapter.

Table 5-1: Research activities in which components of the model were identified and expanded.

Aspects of the agenda mapping model	***Research activities – part 1***		
	Literature review	***Focus group***	***Consensus group***
Theoretical underpinnings			
- Patient centred method	x		
- Motivational Interviewing	x		
Contextual influences			
- Daily life	x	x	
- Clinical service	x	x	
- Clinical encounter	x	x	
The interaction			
Domains of agenda mapping			
- Patient's talk about their concerns, expectations and aspirations	x	x	x
- Clinicians raise topics they consider important	x	x	x
- Clinicians and patients agree shared priorities	x	x	x
- A focus of what to talk about in the session is agreed	x		x
- The conversation is collaborative	x	x	x
- Patients are involved and engaged	x	x	x
Other features			
- Meta-communication	x		x
- Clinical encounter structured on the agreed agenda	x		x
Outcomes			
- Immediate	x		
- Intermediate	x		
- Long term	x		

In addition, the candidate (NG) listened to audio recordings of clinical interviews conducted by different health professionals (doctors, nurses, dieticians, psychologists) in both primary and secondary care (paediatric diabetes clinic). These included training DVDs (Miller, Rollnick et al. 1998, Rollnick, Butler et al. 1999, Mash, Human et al. 2008, Mauksch 2012) as well as audios of both simulated and real clinical encounters that had been collected for research (Edwards, Elwyn et al. 2004, Channon, Huws-Thomas et al. 2005, Robling, McNamara et al. 2012, Butler, Simpson et al. 2013). In all instances, required permissions to access these data were obtained. Further information about these datasets is provided in Chapter 7. It was through this process of listening to audios that the terminology of agenda mapping was redefined.

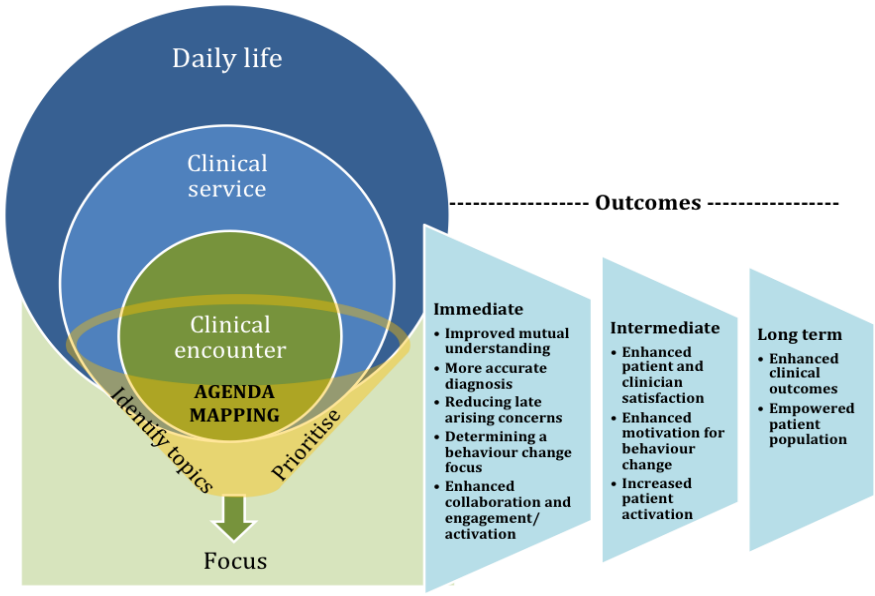
The theoretical underpinnings of agenda mapping identified in the literature review were the patient centred method and MI. One contribution of these frameworks is that they offer a coherent model through which to operationalize a philosophical foundation in everyday clinical practice. What is reflected in these approaches are shared values, in particular about working in partnership and engaging fully with the patient perspective (Stewart, Brown et al. 1995, Epstein, Franks et al. 2005, Rollnick, Miller et al. 2007). Both approaches emphasise the importance of a relational foundation that is expressed throughout the clinical interaction as an expression of the values that underpin it. The model presented in this chapter is rooted in these foundations.

5.2 Agenda mapping: an integration of findings

The model (figure 5.1) provides a way of thinking about agenda mapping across the variations in clinical context, and the differences in patient, clinician, service and clinical encounter characteristics. It is a generic model that presents agenda mapping as (a) occurring within the clinical encounter, (b) influenced by the context of that encounter, and (c) impacting on outcomes beyond that encounter.

These three elements of the model are described here.

Figure 5-1: Model of agenda mapping in the clinical encounter



5.2.1 Agenda mapping within the encounter

Agenda mapping involves a structured conversation through which participants agree what to talk about. Its defining feature is the underlying quality of "stepping back" to obtain an "eagle eye" view of the conversation. This is achieved by the use of meta-communication that creates distance between the speaker and their speech (Fairclough 1992). In the model agenda mapping is depicted as a funnel suggesting a process through which focus for the clinical encounter is established. On either side of the funnel are the two steps involved in agenda mapping that occur together and in sequence. These are: (1) identifying and gathering talk topics and then (2) prioritising to agree the focus. This linear, logical portrayal offers a framework through which to structure the agenda mapping conversation.

Where the talk topics are clear and both parties in the clinical encounter agree on the priority order of these agenda mapping is a relatively straightforward process. However this is not always the case. At times the talk topic options may be unclear. Patients may be reluctant to raise them, or they may not yet be

clearly formulated. In the first instance sensitivity to patient cues may alert the clinician to an agenda that the patient is hesitant to bring up. In the second the clinician may need to take some time to exploring what these might be. Similarly the process of prioritising may also be straightforward, e.g. where there is a clear priority or immediate agreement of the priority order of topics. Alternately it may be less straightforward with multiple interrelated priorities or disagreement about the priority focus. At times both steps of the agenda mapping process may be unclear or poorly formulated. In this instance agenda mapping may be appropriate only at a later stage of a clinical encounter. For example, if a patient bursts into tears at the start of an encounter the clinician may take some time to understand the patient's distress before considering how best to use the available time.

In essence, establishing focus involves determining where the patient and clinician will place their attention. It involves deciding about the work that is to be done in that encounter, and for this to be a collaborative process, it involves alignment of the patient and clinician's reason or goal for that encounter (Chapter 4). The domains of agenda mapping mark out its boundaries and represent core content areas that provide evidence of agenda mapping taking place (Chapter 4). While not explicitly depicted in figure 5-1, they can be thought of as being contained within the funnel structure. Where patient involvement and partnership working are valued, establishing focus will be a collaborative and engaging process. The focus that is established defines what will be talked about in that encounter. However it might also be used to map the trajectory of work that might be done over a series of encounters (Channon, Huws-Thomas et al. 2005). This second function of agenda mapping embraces a longitudinal perspective of the clinical encounter (Bensing, van Dulmen et al. 2003).

Agenda mapping can take as much or as little time as is needed, and can arise at any stage of the clinical contact. It precedes a focused conversation about a mutually agreed topic and usually therefore occurs relatively early in a clinical encounter. Given the dynamic nature of the clinical interview agenda mapping requires flexibility and can be revisited at any stage (e.g. for realignment).

5.2.2 Context

Contextual influences are depicted at three "levels": (1) clinical encounter, (2) clinical service, and (3) daily life. They affect three aspects of agenda mapping. Firstly, they influence *what gets raised in the clinical encounter* as an agenda item i.e. the content. For example a patient may raise a concern of a family member who may or may not be present at the encounter ("my wife says I've been more irritable these past few weeks"), or raise issues they have heard on the media or from the internet ("I'm worried about cervical cancer, Jade Goody had it and she was quite young") (see box 5-1). Clinicians may raise talk topics that are part of a broader government agenda e.g. in the focus group study clinicians spoke of the impact of the Quality and Outcomes Framework in the UK, an incentive scheme to promote standards of "quality care" that have been defined by the government (see box 5-1).

Box 5-1: Participant quotes: context influencing content of agenda mapping

"Newspapers are the worst cause there's like a story in the newspaper and then somebody comes back the following week … and it's like 'I read that daffodils can help your memory' …" – (focus group participant, Memory team, P1)

"In terms of getting things onto the agenda … I'm often prompted by the Quality and Outcomes Framework and the various software packages which will come up with little prompts…" – (focus group participant, Academic GP, P1)

"…the QOF interferes with the delivery of general practice… recording information and ticking boxes is quite often totally irrelevant to the reason that patients come in…" – (focus group participant, GP surgery, Bridgend, GP1)

Secondly contextual factors influence *the form* of agenda mapping. The parameters of the clinical encounter are determined by the service design and the way in which the service is used (Bensing, van Dulmen et al. 2003), and agenda mapping will reflect this. Clinical encounters vary in their length, setting

(e.g. primary care, in-patient admission, out-patient review), funding structure (private vs public health services) and pre-defined purpose (patient –initiated, clinician-initiated, review etc.). Any one encounter may occur as an isolated event or be part of a series of encounters either with the same clinician over time or with a number of different clinicians in one time period (e.g. a morning clinic) or a longer time period (see box 5-2). These factors influence what is known to the clinician and the patient at the start of the encounter, the priority of different topics, as well as the length of time that may be available for agenda mapping, and/or the time and opportunity available for following up different topics.

Box 5-2: Participant quotes: context influencing the form of agenda mapping

"I see the patients after they have seen the doctors I usually um ask them oh, I see you have seen the doctor, how did you get on, what did you discuss?" – (focus group participant, Diabetes team, N2)

"*I no longer think of agenda setting as an activity for only the physician. It can start via use of web portals before the visit, continue with a request from the receptionist, and the nurse or medical assistant can do a lot. So when the physician comes in less time is needed for the elicitation phase and more effort can go into the planning or organization phase of agenda setting." – (consensus group participant, ASD1014)*

Finally, context influences both patients and clinicians on a personal level as well as within their role in the clinical interaction (Feldman-Stewart, Brundage et al. 2005). While emphasis is placed on understanding patients in their life context, understanding that clinician's function within this context is equally important (Rollnick, Miller et al. 2007). This reflects a valuing of both patient-as-person, and doctor-as-person (Mead and Bower 2000a). In the focus group study for example clinicians made reference to approaching clinical encounters in different ways depending on external factors, including "what sort of day" they were having (see box 5-3). Clinicians are as influenced by everyday personal and professional pressures as patients are (Fischer and Ereaut 2012) and this

highlights a need for self-awareness and mindfulness in clinical practice (Mauksch, Hillenburg et al. 2001, Zoppi and Epstein 2002).

Box 5-3: Participant quotes: context influencing patients and clinicians as people

"And a lot does depend on where you are on your list, and how much you're running behind and how you feel yourself " – (focus group participant, Academic GP, P2)

"…. the person (i.e. GP) communicating with them (i.e. patient) has their own personality" – (focus group participant, GP surgery, Bridgend, GP1)

An appreciation of the influence of context in the clinical encounter highlights one of the paradoxes of developing a generic model: that every clinical encounter will be uniquely determined by countless factors, that include clinician factors, patient factors, clinical service factors, and environmental factors (Eva 2003). Consequently while agenda mapping can be described as reflecting certain competencies, it will nevertheless will "look different" in each new clinical encounter.

5.2.3 Outcomes

The model includes the outcomes of agenda mapping identified in the literature review (Chapter 2) at three levels (de Haes and Bensing 2009): (1) immediate outcomes relate to what occurs immediately within the clinical encounter as a consequence of agenda mapping, e.g. enhanced mutual understanding, reduction of late arising concerns; (2) intermediate outcomes are those occurring immediately after that encounter, e.g. satisfaction with the interview, enhanced motivation, and (3) longer-term outcomes are those that occur later in a patient's journey within and beyond the health care system.

Agenda mapping has potential advantages that will briefly be highlighted here. These observations help, in particular, to illuminate the immediate outcomes of

agenda mapping. Firstly, mapping options and deciding collaboratively how best to organise the time available promotes efficiency (Mauksch, Dugdale et al. 2008). Focusing involves cognitive processes of attention and memory. When focusing on one particular area in detail, other stimuli that might normally attract attention are involuntarily ignored (Kahneman 2011). Focusing can therefore either be broad and relatively superficial, or more restricted and thorough, but it cannot be both of these at the same time. Focusing prematurely on a particular talk topic involves mental effort and time, and it makes sense therefore to spend a few moments to decide where best to place attention for the work being done in the time available. It is in this sense that mapping options and deciding collaboratively how best to organise the time available promotes judicious use of that time.

A second advantage is in the potential of agenda mapping to promote patient involvement. As has been argued elsewhere in this thesis, this is particularly important in the management of long term conditions, where patients make daily choices that impact on the progression of that condition (Bodenheimer, Lorig et al. 2002). If supporting self-management is a goal in the management of long-term conditions, then finding ways of engaging and activating patients within the clinical encounter is clearly essential.

A third advantage lies in the potential of agenda mapping to resolve differences. It is not uncommon for patients and clinicians to hold different viewpoints to each other about a particular issue. Nor is it uncommon for patients and clinicians to hold different viewpoints within themselves about a particular issue, e.g. ambivalence about a behaviour change (Rollnick, Miller et al. 2007). Agenda mapping may offer one way of managing this kind of discrepancy where opposing views could be considered in the context of a "shared agenda". This occurs by acknowledging and accepting all ideas from both the patient and clinician without having to explain or defend them, then stepping back together to consider these options collaboratively. What might seem like a difference in opinion from the "forest floor" perspective – e.g. an asthmatic patient worried about having energy to look after her grandchildren, and a clinician worried

about the impact of the patient's smoking on lung function – looks different from the "eagle eye" perspective – e.g. that same patient recognising her breathlessness as being the primary cause of her tiredness and agreeing to talk about smoking in that context.

Finally, a fourth advantage may involve raising sensitive subjects – often topics related to lifestyle change. Clinicians or patients for example may feel awkward about addressing a sensitive subject such as weight. Agenda mapping offers a way of managing this by providing both parties with options of different talk topics and holding them at a distance, thereby "opening the door" to these conversations without requiring a commitment to action.

5.3 Agenda mapping: an example

Two conversations[2] are contrasted in this section to illustrate what agenda mapping involves, and how it influences the clinical interaction. Conversation A demonstrates all the components of agenda mapping. Conversation B demonstrates an approach to establishing the focus for the clinical encounter but without the explicit structure of agenda mapping. They are presented below and then contrasted to consider in what way they might inform the agenda mapping model.

Conversation A (box 5-4) illustrates a structured approach to establishing focus for the clinical encounter. The clinician gathers a number of talk topics both from the patient (see lines 3,5,7) and herself (line 9) and does so without exploring any of the content areas raised by the patient in detail. Note that some of these potential talk topics are related to management of Diabetes (e.g. medication use, diet, and exercise – line 4) while others appear unrelated (e.g. sleeping – line 6). At this stage the clinician facilitates a "scanning" of potential topics and can

[2] These conversations are adapted from a study with third year medical students described in Chapter 8 of this thesis, to provide a concrete illustration of agenda setting. Conversation A was captured after the student had been taught agenda setting, and conversation B was from before teaching.

return to these. She then attempts to prioritise (line 9) and suggests an order (line 11) before beginning to address one of the content areas in more detail (line 13). The interaction is collaborative and the clinician makes a number of efforts to fully involve the patient.

There is also a certain distance that is created by the clinician's use of meta-communication. This is illustrated in line 5 where in response to the patient's description of her efforts to manage her diabetes, the clinician responds, "so we'll talk about that today". The clinician's comment is about the task (identifying what to talk about) rather than about the content of what the patient has raised. This kind of communication implies that "the speaker is situated above or outside her own discourse" (Fairclough 1992, p.122). In this sense the clinician maintains a control over where the focus of the conversation will rest, and can have a conversation with the patient about that. It is this feature of agenda mapping that allows for an explicit and collaborative focusing process to occur.

Box 5-4: Conversation A

C:	How are you?* [1]	
P:	I got a letter about my diabetes, about reviewing it. [2]	
C:	So how has that been going? [3]	*Gathering talk topic*
P:	Well I've been taking medication, I feel like I'm on top of that. I have been trying to eat more sensibly. You know, more salad and fruit. Not having so much salt, sugar, that kind of thing. I've got a bit of a sweet tooth but I do try my best. And with exercise um I've just been trying to walk more. [4]	
C:	So we'll talk a bit about that today. Is there anything else? Are there any other concerns that you have at the moment? [5]	*Gathering talk topic*
P:	Well I haven't been sleeping very well, and so it would be great if I could have some sleeping tablets as well. That would help. Things have been quite stressful of late, but that would help. [6]	
C:	Ok, so you'd like to talk about the lifestyle things, and how things are going with your diabetes, and then also about the tiredness. Is there anything else you'd like to talk about today? [7]	*Gathering talk topic*
P:	Well, no, that's it. If I can sort out the sleeping then that would alleviate some of the stress. [8]	
C:	Ok, so I too would like to talk about some of the lifestyle modifications you've been making and maybe how we can further that on because obviously that will help. Umm. So, is your main concern the sleeping today, or would you prefer to talk about the diabetes first? [9]	*Raises clinician agenda* *Attempts to prioritise*
P:	Umm, well it would be good to talk about the diabetes, and it would be good to talk about the sleep. I don't really mind. [10]	
C:	Ok, well we'll start with the diabetes first then and if we have time we'll talk about the sleep. Would that be ok? [11]	*Suggests an order*
P:	Yes, that's great. [12]	
C:	Ok, so you said you've been trying to make some changes to the way you eat. Tell me about that? [13]	*Focus established*

*This scripted opening is in line with Gafaranga and Britten (2003) selection rule for a clinician-initiated clinical encounter

Contrast this with conversation B in which agenda mapping is not evident (box 5-5). The clinician starts by following the pre-established agenda (line 3). His next question (line 5) is driven by his own need for more information about this patient. He demonstrates empathy (line 11, 17) and is responsive to patient cues (line 13, 15) and the patient responds by revealing sensitive information ("we

may split up" line 18), suggesting that she is developing trust in this doctor. The clinician then reverts back to his primary agenda (line 23). The transition is delicate because new content areas have now been opened up and the clinician has already entered a sensitive area in the patient's world. In a time limited situation the clinician must now make a judgment about how best to use the time available, to follow the patient's lead or revert to the original purpose for the encounter, i.e. a review of diabetes. In this conversation he chooses the latter, with the effect of closing down the conversation about the patient's marital distress. Should the patient wish to discuss something more about her situation, she may only do so at the end of the encounter – i.e. at the "doorknob" moment described in the literature.

Box 5-5: Conversation B

C:	How are you?* [1]	
P:	I got a letter about my diabetes, about reviewing it. [2]	
C:	What more can you tell me about that? How have things been going? [3]	
P:	Well you know I've been trying to take my medication. I'm on metformin. And I've been trying to change my diet and exercise more, and lose a bit of weight. I've been trying to do that kind of thing but sometimes its really hard. [4]	
C:	Mmm. who's at home with you, other than your three children? [5]	
P:	My husband [6]	
C:	What does he do? [7]	
P:	He works for Boots, he's a manager at Boots [8]	
C:	Ok, are you finding there is any success in what you've been telling me, with the weight loss and so on? [9]	
P:	Well things have been quite stressful of late um and you know I've been trying to eat healthily and stuff and I've been trying to do a bit of exercise, but you know when you don't see the weight go off, then you kind of lose the will sometimes [10]	
C:	Hmm, its always difficult initially I think but if we can encourage you to keep at it, it will have a good outcome. I know it can be difficult with a family life, three children - its not as if you can just give up everything and fully commit to this [11]	*Demonstrates empathy*
P:	Well yes, that's just it. I don't have the time to try and fit the things in because I'm busy… and I haven't been sleeping very well. [12]	
C:	Why is that? [13]	*Responsive*

P:	Well things have been going on recently at home. [14]	
C:	Tell me more about that. [15]	*Responsive*
P:	Well it's my husband and I have just been arguing more and stuff. And well things just haven't been good. So it just feels like… [16]	
C:	Bit stressful for you at home. [17]	*Demonstrates empathy*
P:	Yes, … we may… we may you know split up [18]	
C:	I'm sorry to hear that [19]	
P:	Its been going on for a while so yeah, I haven't been sleeping very well. And not been able to be on top of everything. [20]	
C:	Have you sought any help about that? Talked to family or friends? [21]	
P:	My husband is quite a private man, and …I wanted to see if we could work it out. Once you get other family members involved then it becomes kind of whole different thing [22]	
C:	I'm sorry to hear that things have been difficult for you. But, with reference to the diabetes that we wanted to have a chat about today, I do understand that things have been difficult at home also with trying the new diet and exercise. But what I wanted to discuss with you if that's all right is your last blood test that you had done. [23]	*Returns to clinical agenda*

*This scripted opening is in line with Gafaranga and Britten (2003) selection rule for a clinician-initiated clinical encounter

In both conversations the clinician is attempting to identify the patient's agenda, and to raise their own agenda in an effort to establish the conversational focus for the encounter. In the first example the clinician deliberately avoids going into detail about any topics raised, and does this by distancing the conversation using meta-communication. The focus of possible talk topics is identified in response to the clinician's questions – i.e. diabetes (line 2), medication, diet, and exercise (line 4) and sleeping (line 6). In this way she is able to map out a number of options before attempting to prioritise.

In the second example the clinician follows the patient's story by responding to cues and elicits more about the patient's current situation than the first clinician. The conversational focus shifts as one topic leads to another i.e. diabetes (line 2), medication, diet, exercise (line 4), family (line 5) and sleep (line 12). This natural shift across topic areas occurs through the clinician's skill in listening,

demonstrating empathy and responding to patient cues. However a dilemma now arises – does the clinician continue to follow the patient's lead, or does he revert back to the previously agreed, and his own agenda, the diabetes review?

Through the lens of this two-step model, conversation B could be described as incomplete agenda mapping. This clinician engages the patient's concerns, and raises his own agenda, thereby enacting the first of the two-steps (identifying talk topics). What is missing is an attempt to organise the talk topics and to share the task of prioritising and agreeing a focus for the session. To do this the clinician might summarise: e.g. "so there are quite a number of things we could talk about today. You're worried about the future of your relationship, which is really stressful right now, you've not got much support to talk about that at the moment and you've not been sleeping well. You've also been trying to make a few changes to help manage your diabetes, and I also had hoped to talk about your last blood test in particular. What do you think is the best way for us to use this time today?" A summary such as this together with whatever dialogue followed in considering priorities and agreeing the focus would then represent the second step.

These examples illustrate how even when clinicians use an empathic, patient-centred consulting style, patients will not necessarily raise their primary requests or concerns, unless asked directly (e.g. conversation A – lines 3,5). Once the conversational focus has been explicitly agreed, then the clinician may enter the patient's world more fully, e.g. as the clinician does in the conversation B. If this occurs prematurely, it is more difficult to shift focus, more difficult to fully elicit the patient agenda and more difficult to manage the brief time often available for clinical encounters.

5.4 A complementary process: agenda navigation

Agenda navigation is a complementary process that may or may not be accompanied by agenda mapping. Navigation involves "accurately ascertaining one's position and planning and following a route" (Oxford University Press

2013). Agenda navigation can be provisionally defined as follows: if agenda mapping is the explicit discussion of topics to be covered, agenda navigation is the steering of the conversation by the practitioner, as it unfolds, the shifting of focus, changing of the subject, to reach a conclusion to the consultation. It can be done skilfully, or less so, and with greater or lesser attention to the needs of the patient. Put simply, a practitioner might use agenda mapping at key points but will navigate for much of the clinical encounter time.

The construct is proposed in an attempt to capture the focusing process that extends throughout the clinical encounter. This is important in extending the conceptualisation of agenda mapping as something that is not only relevant to a particular part of the clinical encounter but something that influences that encounter as a whole. In clinical encounters where agenda mapping is present, the "map" provides a structure for how the clinical encounter time may be used. Clinicians may refer back to it to ensure they cover all items in the available time for example. In this sense they use the map to navigate the clinical encounter.

The concept of agenda navigation may also be useful in thinking about how the focus in a clinical interaction shifts when agenda mapping is not present. When listening to a clinical interaction where a number of different talk topics are covered in a single encounter, there is a difference between those in which the focus shifts effortlessly across topics, and those in which this shifting appears more stilted. Articulating what makes for a more skilful conversation when there are multiple interrelated topic areas may be helpful in understanding how to teach clinicians to manage these conversations.

When asking clinicians about the way in which they structure their clinical encounters (Chapter 3), many referred to models of practice that guide their decision-making (see box 5-6). They also described following intuition that had developed through experience. Clinicians seek opportunities to raise and integrate their agenda into the conversation. For example they might look to link an agenda item (e.g. smoking) with something the patient has raised (e.g. exacerbation of asthma symptoms). Inherent in these strategies is a sense of

being aware of where the conversation is focused in the here and now, and to where they might want to steer it, much like a process of navigation. On a broader level, these kinds of actions can be seen against existing model of the consultation. So for example there might be a shift in the focus of the clinical interaction from management of the patient's presenting concern (exacerbation of asthma symptoms) to opportunistic health promotion (smoking) (Stott and Davis, 1979).

Box 5-6: Reflections from focus group participants about how they structure their consultations

Consultation models
"Well communication skills, that's where we usually start and the structure of the consultation and looking at consultation models" (focus group participant, GP practice, Cardiff, GP4)

"When they come in during the consultation doing the history then examine and then we'll sit down then we'll come to the investigations part and we look at all the numbers and we see how they are and what they can be and how the symptoms are explaining with the numbers that are there on the papers and what else can be done err to invade those symptoms." (focus group participant, Cystic Fibrosis team, D3)

Intuition and experience
"… a big part of it is intuition that you learn from experience" (Academic GPs, P5)
"I'm not sure that I necessarily think to myself "right, how shall I structure this consultation" its maybe a bit more of a free flowing entity than me thinking I'll do this first. I'll allocated that a few minutes and then move onto this" (focus group participant, Academic GPs, P4)

Shifting topics
"Sometimes you can use the one thing that they came in to ask for …. to lead you down a different path" (focus group participant, GP practice, Cardiff, GP3)

"…I find relating (my agenda) to something they've come in about the most useful way (to raise it).." (focus group participant, Academic GPs, P5)

Clinicians appear to do this naturally with varying degrees of expertise, and skilful navigation may be best conceptualised as intuitive and mindful. With clinicians who are more highly skilled, navigation appears seamless and integrated, with different talk topics arising from each other. These clinicians find ways of creating links or "bridges" across topic areas. Where there is less skilfulness, conversations may seem disjointed and even awkward. Clinicians may find that they have delved too deeply into one topic area without knowing how to shift focus for example. Agenda navigation can occur with differing degrees of collaboration. Where this is a shared process, clinicians will pay attention to shared goals and aspirations, and where these are unclear, may take time to formulate these with patients before considering the direction both of the conversation and of the clinical contact overall. Navigation involves maintaining a dual focus on the immediate happenings of the clinical encounter, and the "meta-process" of where the conversation is going with regard to immediate and longer-term goals or aspirations. Much like a sailor navigating the seas, clinicians will guide the conversation in a particular direction while shifting flexibly to respond to what arises in the moment.

The concept of agenda navigation is relatively underdeveloped in this thesis. It is proposed in an effort to capture the naturally occurring strategic process that occurs when focus is established in a clinical interaction. It may be particularly relevant in the management of long-term conditions where multiple interrelated areas for discussion are common. In the words of one of the focus group participants:

"We're being put under a lot of pressure because we're not only dealing with … chronic disease but also we're dealing with all the other things that patients are coming to see us about… there would be a lot of things (to talk about) and we're having to refocus the way we structure consultations in order to meet those demands." (Focus group participant, GP surgery, Cardiff, GP4)

A hypothesis arising from attempts to define it here, is that when agenda navigation occurs together with explicit agenda mapping, this will result in a

more collaborative interaction that is more efficient and effective because both parties are focused on the priority area of their work together.

5.5 Conclusion

The model presented in this chapter is a consolidation of the conceptual development phase of this thesis. New terminology of agenda mapping and agenda navigation is proposed as a refinement of the concept of agenda setting. Agenda mapping is defined as a structured conversation involving two-steps: (1) identifying talk topics, and (2) prioritising these to establish a focus. Agenda navigation is defined as a focusing process that arises more naturally in the clinical interaction and occurs throughout that encounter. Clarification of this conceptual foundation provides a rationale for measure development.

At this stage of the research the candidate needed to decide which direction it should progress toward. On the one hand the candidate (NG) could have developed the construct of agenda navigation more fully. To take this forward the candidate (NG) considered using qualitative techniques such as discourse analysis to examine naturally occurring clinical encounters, i.e. real life clinical encounter. The aim would be to consider where and how the focus of the conversation shifted, if and how any explicit or implicit agreement was made about that shift in direction, and who initiated that shift. In this way the more naturally occurring shift of focus within clinical encounters could be described in rich detail. This work might also provide some insight into if and how this process may be measured, and consequently if and how it links with agenda mapping.

The second option was to progress with measurement of agenda mapping along the lines that are described in the second part of this thesis. This second option was selected for two reasons. The first was that no measure of agenda mapping had been identified, suggesting that this was a worthwhile piece of work. Having a measure of agenda mapping would also be useful in terms of later work that might be conducted with agenda navigation. Secondly, by progressing with

measure development, the candidate (NG) would develop research skills in quantitative analysis. Given that the PhD involves training in research it was decided on balance that this would be a suitable option.

The second part of this thesis considers the question "is agenda setting measureable?" and is grounded in the model presented here. From this point onward the emphasis is on agenda mapping and the research question is therefore reformulated, as "is agenda *mapping* measureable?"

6 Measurement of agenda setting: a literature review

6.1 Introduction

Thus far this thesis has examined the conceptual foundation of agenda setting, and proposed a model distinguishing between agenda mapping and navigation. The second part of the thesis presents a measure of agenda mapping developed from this platform. This chapter presents an important stage of measure development: review of previous attempts at measurement.

Reviewing existing measures[3] is a critical part of scale development for a couple of reasons (Streiner and Norman 2003). Firstly a measure may already exist that suits the intended purpose of a new measure, saving the researcher time and resources. Secondly, if a new measure is to be developed, existing measures are often an invaluable source of information. It is common for example to see similar items being used in different measures of the same or similar constructs, suggesting that the items have proven to be useful (Streiner and Norman 2003). The measure under development here is an attempt at quantifying a newly defined construct – agenda mapping. As such it is fair to assume that there is unlikely to be an equivalent measure in existence. However, given that agenda mapping has been defined through detailed examination of its parent construct, agenda setting, this is not impossible. More likely though is that existing measures of agenda setting[4] or of which agenda setting is a part, could helpfully inform the development of this new measure.

Measures can be thought of in two distinct groups: (1) where the clinical interaction is observed using real or standardized patients, and (2) self-report measures (Epstein, Franks et al. 2005). Direct observation measures capture observable communication behaviours and, theoretically, provide an objective assessment of the construct being

[3] "Measures" is used as a generic term for rating scales, measurement tools or instruments.
[4] "Agenda setting" is used to reflect this construct as defined by the authors of existing measures. The new terminology of "agenda mapping" is used to reflect the construct as it has been re-defined in this thesis.

measured. Self-report measures capture the subjective experience of a person involved in the clinical encounter i.e. patient or health professional. Each of these approaches has individual strengths and weaknesses, and each provides different forms of evidence regarding communication skills (Epstein, Franks et al. 2005). This review focuses on the first of these forms of measurement. Consequently, measures that involved observation of clinician agenda setting were critically reviewed to answer two questions: "what kinds of measures have been developed?" and "how have they been used?"

6.1.1 What kinds of direct observation measures have been developed?

Direct observation of clinical encounters, whether live or via audio or video recordings can be analysed using coding systems that divide the discourse into meaningful segments such as utterances or units of time, or checklists that identify the presence of a desirable behaviour (Epstein, Franks et al. 2005). Both kinds of measures are used for different purposes, including for research as process or outcome measures, or as educational tools. One of the aims of this review was to consider the different approaches that have been taken in the measurement of agenda setting. For this reason measures were included regardless of their quality as the focus was rather on understanding their development, purpose for use and design.

6.1.2 How have they been used?

As described earlier, the search strategy described in Chapter 2 was also used to identify measures of agenda setting that were included in this review. A second search was also carried out that focused specifically on identifying measures that included agenda setting, and were used in education and training. This was done because it was anticipated that the measure of agenda mapping would be used in these settings.

6.2 Methods

6.2.1 Aim

The primary purpose of this review was

(a) To identify existing measures of agenda setting in the clinical encounter

(b) To inform the development of a new measure of agenda mapping
(c) To inform the validation of this new measure.

Specific objectives included identifying:
(a) Items or subscales measuring agenda setting or similar construct
(b) Reliability and validity assessments
(c) Feasibility assessments
(d) Measure design and purpose.

6.2.2 Search strategy

Measures were identified in three ways:

Search 1: From structured literature review (Chapter 2)
The search strategy developed and described in Chapter 2 was broad and inclusive in identifying publications on agenda setting. At the time of doing this first search, measures of agenda setting were identified and set aside (n=14) (see appendix C6-1). These were included in this review (Chapter 2, p.33).

Search 2: Tools to assess competence in communication skills
A second search was developed to identify measures used to assess competence in communication.

This search was run on Medline, British Nursing Index, EMBASE and PsycINFO from the earliest possible entry to May week 1 2012: [competence AND assess* AND communication] AND [consult* OR clinical encounter].

Search 3: Snowballing
Additional citations were identified through snowballing (i.e. identifying relevant instruments from references).

6.2.3 Criteria for including citations

Measures were included if they met both the following criteria:

(1) Involved observation of clinical encounter (real or simulated)

(2) Included an assessment of agenda setting – where the term itself is used, or where there is an assessment of (a) how the reason or focus for the encounter is established, or (b) the opening sequence.

The candidate (NG) applied these criteria to the title and abstract of identified citations to identify relevant papers. Where a decision could not be made on the title and abstract alone, full papers were retrieved. Measures that met the inclusion criteria were included irrespective of their quality.

6.2.4 Data extraction

Once relevant citations were identified, full papers were retrieved together with any additional publications related to the development and validation of the measure. In addition, where possible, copies of the measure and/or coding manuals were obtained. An abstraction form was designed to capture relevant data from these publications. Descriptive data, including the content of items or subscales relevant to agenda setting, and data related to the examination of psychometric properties were captured, using the exact wording and scoring of the identified items and domains. Items identified in existing measures were matched with the domains of agenda setting identified in part 1 of this thesis (see section 6.3.3, table 6-4). A single data abstractor (NG) was involved in this process.

6.2.5 Analysis

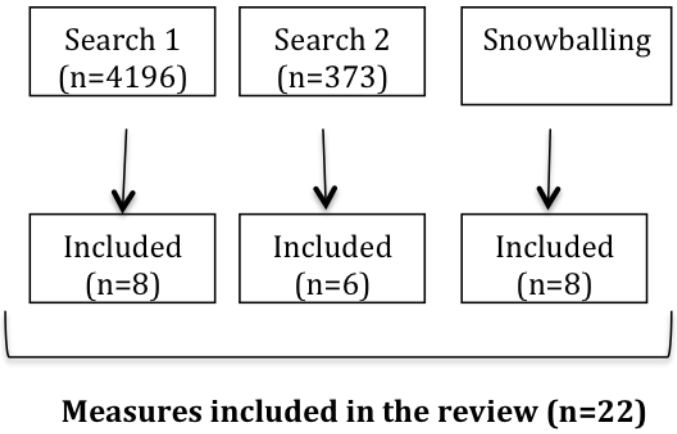
A narrative approach was used to summarise the findings of this review. Particular attention was given to identifying items and subscales relevant to the measurement of agenda mapping. These were identified through identifying reports of measurement of agenda setting or similar constructs. Reports of reliability and validity assessments were summarised together with reports of the measure's feasibility. Feasibility was

determined by considering the method of administration, time required to complete a measure, the attributes required of raters, and the time and intensity of rater training.

6.3 Results

This review identified 22 measures that met the inclusion criteria (see figure 6-1). The first search yielded 4196 citations, of which eight publications were identified as relevant to this literature review (Beckman, Frankel et al. 1984, Butler, Campion et al. 1992, Marvel, Epstein et al. 1999, Haas, Houchins et al. 2003, Lang, McCord et al. 2004, Dyche and Swiderski 2005, Lane, Huws-Thomas et al. 2005, Krupat, Frankel et al. 2006) (see appendix C6-1). An additional 373 citations (after duplicates were removed) were identified from the second search strategy. Six papers were included from this search (Henbest and Stewart 1989, Fraser, McKinley et al. 1994, Utting, Campbell et al. 2000, Enzer, Robinson et al. 2003, O'Neill, Williams et al. 2003, Howells, Davies et al. 2010). Eight measures were included from other methods, i.e. snowballing (Ford, Hall et al. 2000, Brown, Stewart et al. 2001, Makoul 2001, Kurtz, Silverman et al. 2003, Egnew, Mauksch et al. 2004, Kalet, Pugnaire et al. 2004, Bonner, Madden et al. 2008, Del Piccolo, Mazzi et al. 2008).

Figure 6-1: Identification of measures included in the review



6.3.1 Descriptive data of included measures

This review identified a number of different approaches to the measurement of agenda setting. Measures are summarised in table 6-1 in line with two kinds of measurement design: (1) rating scales or checklists (n=14), in which raters are required to make broad judgments about the extent to which particular tasks were present and/or the skill with which observed tasks were enacted, at a particular stage of the clinical interaction; and (2) measures requiring rater judgment at a "micro-level", coding utterances or interaction sequences according to specified rules (n=8).

6.3.1.1 How agenda setting has been included in these measures

Agenda setting was generally included as one of a number of components, phases, tasks or skills in measures designed for use through the whole clinical interview. Items that assess agenda setting were identified (by the candidate, NG) in the "initiating" or "opening" phase of measures (Kurtz, Silverman et al. 2003, Egnew, Mauksch et al. 2004, Krupat, Frankel et al. 2006, Howells, Davies et al. 2010); in the "information gathering" phase (Fraser, McKinley et al. 1994, Kalet, Pugnaire et al. 2004); and in sections assessing "structuring" skills (Enzer, Robinson et al. 2003, Bonner, Madden et al. 2008). Generic skills relevant to the measurement of agenda setting were also identified in sections that assess "interpersonal skills" (Utting, Campbell et al. 2000, Enzer, Robinson et al. 2003). See appendix C6-1 for verbatim description of these items.

Five measures were designed to measure agenda setting only. These were all designed for use in research and involved analysis of a segment of the clinical encounter only. The segment of the encounter was identified by time, e.g. the first five minutes (Dyche and Swiderski 2005), or by speech markers, e.g. patient says there is nothing more to add (Beckman and Frankel, 1984). Of these five measures of agenda setting, three were variations of each other (Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999, Dyche and Swiderski 2005) and these, plus one other (Haas, Houchins et al. 2003), were designed to support a particular research question. One measure (Henbest and Stewart 1989) was designed to measure "patient centeredness" defined as the doctors responsiveness to the patient in eliciting all the reasons for their attendance, and in understanding the patient's illness experience. A similar form of Henbest and Stewart's (1989) method is included in a later measure that aimed to measure patient centeredness more fully (Brown, Stewart et al. 2001).

6.3.1.2 How these measures have been used

Measures were designed for education or training (n=9), research (n=6), or both (n=7) (table 6-1). Most measures were designed to measure dyadic doctor-patient communication. Of these most were developed in generalist medical settings, the exceptions being O'Neill's (2003) observer checklist for use in rheumatology, Ford et al's (2000) measure for use in oncology settings and Howells et al's (2010) tool for use in paediatrics that in addition, rated triadic communication.

Table 6-1: Descriptive data for measures that include items or subscales relevant to agenda setting (n=22)

Name of measure, reference, country	Context; construct framework	Aim and aspect of clinical encounter measured	Method of assessment	Measurement of agenda setting (see appendix C7-1 for full detail)
Measures that assess tasks, phases or stages of the clinical encounter				
1. Behaviour Change Counselling Index (BECCI); (Lane, Huws-Thomas et al. 2005); UK	Healthcare communication; behaviour change counselling	Aim: training and research Whole clinical encounter	Behaviour checklist – four domains, 11 items – five point global rating to assess the extent to which a communication behaviour is evidenced.	One of the four domains is "agenda setting and permission seeking". It is assessed with two items.
2. Behaviour change skills rating sale (BCSRS) (Bonner, Madden et al. 2008); UK	Behaviour change skills; dietetics	Aim: dietetic education Whole clinical encounter	A 29 item rating scale measuring skills and techniques – six point global rating is assigned to assess both presence and level of skill	One of four items measuring "structure"
3. Calgary-Cambridge Observation guide, (Kurtz, Silverman et al. 2003); Canada & UK	Doctor-patient communication, medical education Calgary-Cambridge model	Aim: medical education Whole clinical encounter	Behavioural checklist of 71 items presented in a framework of tasks and objectives for the clinical encounter	All four items related to the task of initiating the session, and identifying the reason for the consultation.
4. Common Ground Instrument; (Lang, McCord et al. 2004); USA	Doctor-patient communication, medical education	Aim: medical education Whole clinical	Behaviour checklist: (a) presence and frequency of skills, (b) global rating of skilfulness. Includes space for comments and feedback for learner. Has a	Agenda setting is one of one of eight core content areas. Three items are used to assess the presence of agenda setting skills.

Name of measure, reference, country	**Context; construct framework**	**Aim and aspect of clinical encounter measured**	**Method of assessment**	**Measurement of agenda setting (see appendix C7-1 for full detail)**
	Patient centred communication	encounter	complementary standardized patient rating form and rater feedback form.	A global rating of agenda setting skilfulness is also included.
5. Communication skills scale, (Utting, Campbell et al. 2000); UK	Doctor-patient communication, medical education	Aim: medical education Whole clinical encounter	A 23-item behaviour checklist of communication "process skills". Covered nine content areas. Global assessment of skilfulness made on a five-point scale.	Three items relevant to agenda setting tasks, and six items relevant to agenda setting process were identified.
6. Four Habits Coding Scheme; (Krupat, Frankel et al. 2006); USA	Doctor-patient communication Four habits coding scheme (4HCS), Kaiser Permanente	Aim: training and research Whole clinical encounter	Checklist of 23 items mapped onto core skills identified in the 4HCS model. Behaviours evaluated against five levels of skilfulness in performance	One of four domains (habit 1) is "invest in the beginning". Three out of six items in this domain are relevant.
7. Interview tracking form,(Egnew, Mauksch et al. 2004); USA	Patient-centred communication, medical education	Aim: medical education Whole clinical encounter	A 23 item "tracking form" developed to capture essential communication skills. Used to providing formative feedback. Not scored.	One of seven content areas is "opening the discussion – establishing focus". It includes four items.
8. Leicester assessment package, (Fraser, McKinley et al. 1994); UK	Doctor-patient communication	Aim: assessing competence	Checklist of seven categories of consultation competence	One of the seven categories is "interview/ history taking" nine of the 12 items in the category are relevant

Name of measure, reference, country	Context; construct framework	Aim and aspect of clinical encounter measured	Method of assessment	Measurement of agenda setting (see appendix C7-1 for full detail)
9. LIV-MAAS (UK); (Enzer, Robinson et al. 2003); UK	Doctor-patient communication, primary care	Aim: assessment of consultation competence Whole clinical encounter	Behaviour checklist – 95 item scale divided into six subscales. Raters note presence or absence of doctor's behaviours.	Five of the 19 items within the "structuring the interview" subscale, and 3 items in the interpersonal skills subscale are relevant.
10. Macy model checklist, (Kalet, Pugnaire et al. 2004); USA	Doctor-patient communication, medical education "Macy initiative" competency framework	Aim: medical education Whole clinical encounter	Checklist developed from model –rated as "done", "done but needs improvement" or "not done"	One of nine content domains is the "gathering information phase". Two tasks assessed by six and two items respectively, are relevant.
11. Observer-rated sheet, (O'Neill, Williams et al. 2003)); UK	Doctor-patient communication, rheumatology and orthopaedic surgery	Aim: training Whole clinical encounter	Behaviour checklist – 10 items assessed using global rating on three-point scale.	One of the 10 items relevant
12. Paediatric Consultation Assessment Tool, (Howells, Davies et al. 2010); UK	Doctor-patient communication, paediatrics	Aim: assessing competence	Itemised rating scale - triadic communication – measuring doctor-child and doctor-parent communication in parallel. Global rating of skill on seven-point scale.	One of seven content areas is "initiating the session". Two of the three items are relevant
13. SEGUE; (Makoul 2001); USA	Doctor-patient communication, medical education	Aim: assessing competence and research Whole consultation	Checklist of medical communication tasks (25 items). Identification of whether behaviour was enacted at least once (yes) or not (no). Detailed feedback also given.	One of six content areas is "set the scene". Two of five items measure agenda setting:

Name of measure, reference, country	**Context; construct framework**	**Aim and aspect of clinical encounter measured**	**Method of assessment**	**Measurement of agenda setting (see appendix C7-1 for full detail)**
14. Verona Patient-centred communication evaluation scale (VR-COPE); (Del Piccolo, Mazzi et al. 2008), Europe	Patient centred communication	Aim: research Whole clinical encounter	A nine item rating scale that combines evaluation of skills and process. Global ratings are made on a 10-point scale anchored by verbal descriptors.	The first of the nine items is "patient agenda" defined as all current complaints brought forward by the patient in the present consultation are explored and made explicit. Five clinician behaviours are included for rating.
Measures that assess interaction at "micro" level (segments and utterances)				
15. Beckman and Frankel (1984); USA	Doctor-patient communication, primary care	Aim: research First phase of the medical interview (soliciting the chief complaint)	Identification of doctor and patient behaviours in opening sequence. Content of speech categorised.	Doctor's skills in the opening sequence coded to identify whether they asked for the patient's concerns
16. Butler et al (1992); UK	Doctor-patient communication, primary care	Aim: training and research Whole clinical encounter	Doctor-patient interaction based on identification of both the content and form of "floor holding" (unit of analysis) i.e. time that each person is speaking	Doctor and patient speech classified in terms of content, process and procedure.
17. Dyche et al (2005); USA	Doctor-patient communication, primary care	Aim: research First phase of the medical interview (soliciting the chief complaint)	Identification of doctor and patient behaviours and content of speech – via audio	Doctor's skills in the opening sequence coded to identify whether they asked for the patient's concerns
18. Haas et al (2003); USA	Doctor-patient communication, primary	Aim: research	Identification of doctor and patient behaviours, and content of speech	Presence or absence of "agenda eliciting", "agenda setting", and "agenda negotiating"

Name of measure, reference, country	Context; construct framework	Aim and aspect of clinical encounter measured	Method of assessment	Measurement of agenda setting (see appendix C7-1 for full detail)
	care	Whole interview		noted from observation of doctor's speech.
19. Henbest et al (1989); Canada & USA	Doctor-patient communication Patient centeredness	Aim: research and teaching Opening segment	Doctor-patient interaction – to assess doctors' responsiveness to verbal "offers" from the patient	Patient "offers" are classified as "symptoms, thoughts, feelings, expectations and prompts". Doctor's response to each offer is coded on a behaviourally anchored three-point scale.
20. Marvel et al (1999); USA	Doctor-patient communication, primary care	Aim: research First phase of the medical interview	Identification of doctor and patient behaviours and content of speech – via audio	Doctor's skills in the opening sequence coded to identify whether they asked for the patient's concerns
21. Measure of patient centred communication (MPCC), (Brown, Stewart et al. 2001), USA	Doctor-patient communication Model of patient centred communication (Stewart, Brown et al. 1995) – first three components	Aim: research Either segments or the whole clinical encounter	Patient utterances that reflect the patient centred method are classified into three content areas based on the patient centred model. Doctor's response captured in a "process category".	One of the three content areas is "exploring both the disease and the illness experience". Patient utterances classified as falling into one of six subcomponents e.g. "reason for visit (symptoms)", "feelings", "ideas" etc. Doctor's responses are then identified e.g. "cut-off", "preliminary exploration"
22. Medical interaction process system (MIPS), (Ford, Hall et al. 2000); UK	Doctor-patient communication, oncology Patient centred communication	Aim: training and research Whole consultation or segments	Measure of interaction - codes both the occurrence of an utterances and sequences/ reciprocity.	"Agendas" are one of a number of content codes that are paired with "dependent modes" e.g. "asks", "seeks information" or "advises"

6.3.2 Development and psychometric testing of included measures

The development of measures together with reports of reliability, validity and feasibility assessments are summarized in table 6-2. In general, the authors of more recently developed measures provided fuller descriptions of measure development and validation (Lane, Huws-Thomas et al. 2005, Krupat, Frankel et al. 2006, Del Piccolo, Mazzi et al. 2008, Howells, Davies et al. 2010).

6.3.2.1 Reports of reliability assessments

Most measures were published with some report of reliability. Inter-rater and intra-rater reliability statistics were the most often quoted and these were calculated in a number of different ways, e.g. kappa statistics (Beckman, Frankel et al. 1984, Butler, Campion et al. 1992), Pearson correlations (Lang, McCord et al. 2004). The internal consistency of measures was also often reported. Three studies used generalisability theory to determine reliability coefficients (Fraser, McKinley et al. 1994, Lang, McCord et al. 2004, Howells, Davies et al. 2010). Using this approach meant that these authors were able to stipulate conditions under which reliable assessment may occur, such as the number of raters required, or the number of observations per clinician required. Most authors qualified their reported reliability statistics using descriptors such as “good” or “moderately high”, however not all these reports included a reference to criteria for judging these statistics. One author reported poor reliability using an earlier version of the measure, with improved statistics after the measure’s revision (Bonner, Madden et al. 2008).

Five authors did not provide information about reliability (Haas, Houchins et al. 2003, Kurtz, Silverman et al. 2003, O'Neill, Williams et al. 2003, Egnew, Mauksch et al. 2004, Kalet, Pugnaire et al. 2004). Of these, three measures were used in education settings (Kurtz, Silverman et al. 2003, Egnew, Mauksch et al. 2004, Kalet, Pugnaire et al. 2004). Egnew (2004) presented their measure as used solely to guide feedback in formative assessment and having therefore “no

reliability or validity" (p.739). O'Neill et al 's (2003) measure was administered by one person only in their research, and Haas et al (2003) used their measure with two raters but used a joint score in their analyses.

6.3.2.2 Reports of validity assessments

Most authors provided evidence of content validity in which the content of their measure was judged by experts as relevant to the construct being measured (Streiner and Norman 2003). A number of authors also made reference to face validity, a weaker form of validity in which a measure is judged as acceptable to the users, i.e. that is appears suitable for measuring its purported construct (Fraser, McKinley et al. 1994). Where a "gold standard" measure was available, findings from the newer measure were correlated with findings from that "gold standard. For example both the Four Habits coding scheme (Krupat, Frankel et al. 2006), and the Medical Interaction Process System (Ford, Hall et al. 2000) were correlated with the Roter Interactional Analysis System (RIAS) (Roter and Larson 2002), a detailed coding system widely cited in the medical literature. In their measure of patient centred communication, Henbest and Stewart (Henbest and Stewart 1989) used an earlier version of the Measure of Patient Centred Communication (MPCC) (Brown, Stewart et al. 1986, Brown, Stewart et al. 2001).

Measures designed for teaching were also assessed for responsiveness or sensitivity to change in trainee skill before and after teaching (Makoul 2001, Lane, Huws-Thomas et al. 2005).

6.3.2.3 Reports of feasibility

In general, reports of feasibility in included measures varied in detail. Most of the measures assessing tasks, phases or stages in the clinical encounter involved single pass coding in real-time, suggesting that the measure would take the time of the clinical encounter, plus perhaps some extra time for aggregating scores (Lane, Huws-Thomas et al. 2005, Krupat, Frankel et al. 2006). In contrast, measures that involved coding in finer detail reported needing more time,

requiring more than a single pass to assess (Brown, Stewart et al. 2001), or taking three and a half times the clinical encounter time to complete (Ford, Hall et al. 2000). Measures that involved coding from transcripts are also more labour intensive, as transcribing time must be considered in their administration (Butler, Campion et al. 1992, Marvel, Epstein et al. 1999).

The majority of measures were intended for use by educators and/ or researchers. Two measures was designed for use by standardised patients (Makoul 2001, Kalet, Pugnaire et al. 2004) and one was also designed for use by peers (Kalet, Pugnaire et al. 2004), in giving feedback to students.

Table 6-2:Development and psychometric testing of measures (n=22)

Reference, measure name, country	How the measure was developed	Report of validity assessment	Report of reliability assessment	Feasibility
Measures that assess tasks, phases or stages of the clinical encounter (e.g. "Gathering information phase") tasks (including behavioural checklists)				
1. Behaviour Change Counselling Index (BECCI); (Lane, Huws-Thomas et al. 2005); UK	Literature review, expert consensus (behaviour change counselling)	Content validity determined through expert consultation Responsiveness investigated using the standardized response mean (SRM = 1.76) suggesting the measure is sufficiently sensitive to detect changes in a clinician's performance.	Internal consistency (Cronbach's alpha) = 0.71 (baseline) to 0.63 (final). Inter-rater reliability (intra-class correlation coefficient) *R*=0.79 (dataset1) & *R*=0.93 (dataset2) Intra-rater reliability *R*= 0.66 & *R*= 0.90 (rater 1); *R*=0.60 & *R*=0.87 (rater 2)	Single pass[5] coding from live or audio-recorded observation. Coding time: time of the clinical encounter plus 1 minute for aggregating scores. Training time: no information
2. Behaviour change skills rating sale (BCSRS) (Bonner, Madden et al. 2008); UK	Literature review, mining education syllabi (behaviour change skills, and parent disciplines i.e. counselling, Motivational Interviewing, Cognitive Behaviour Therapy); expert consensus	Content validity determined through expert consultation. Reported poor outcomes of formal assessment of validity. In which dieticians' scores were correlated with a psychologist's rating of BCS considered as a "gold standard" (ICC=0.584).	Measure revised in response to poor reliability indices. Inter-rater reliability statistics ICC=0.640 using a revised version of the measure.	Single pass coding from audios. No information available regarding training or coding time.

[5] Single pass coding involves a single round of observation e.g. a rater will listen once through an audiotape.

Reference, measure name, country	How the measure was developed	Report of validity assessment	Report of reliability assessment	Feasibility
3. Calgary-Cambridge Observation guide, (Kurtz, Silverman et al. 2003); Canada & UK	Expert consensus, theoretical model (Calgary-Cambridge) (Kurtz and Silverman 1996)	Content validity determined through authors' expertise. Validity not formally assessed. Measure is used for feedback during formative assessment.	No published data	No information available.
4. Common Ground Instrument; (Lang, McCord et al. 2004); USA	Expert consensus (Toronto and Kalamazoo consensus statements)(Simpson, Buckman et al. 1991, Makoul 2001)	Content validity determined through expert consensus. Construct validity established by comparing performance of random selection of first year students with that of third or fourth year students. Concurrent validity – "good agreement between expert mean rating and rater ratings and percentage scores for skills" (0.84, 0.85)	Internal consistency –Pearson correlation coefficient (r) = 0.95 and 0.91. Inter-rater reliability - (r) = 0.85, 0.92; Intra-rater reliability - (r) = 0.63 to 0.87 Generalisability coefficient i.e. "the reliability of an assessment when one student is compared to the performance of others" = 0.80 using 5 cases	Single pass coding from video recordings of ten-minute simulated patient encounters. Raters with a minimum of two years college education were recruited and trained. No information provided about coding and training time required.
5. Communication skills scale, (Utting, Campbell et al. 2000); UK	Mining and adaption of other measures	No published data	Inter-rater reliability (intra-class correlation) = 0.90; 0.88 Intra-rater reliability (intra-class correlation) = 0.93; 0.81; 0.79	No published data

Reference, measure name, country	How the measure was developed	Report of validity assessment	Report of reliability assessment	Feasibility
6. Four Habits Coding Scheme; (Krupat, Frankel et al. 2006); USA	Theoretical model and teaching framework (Four Habits model) (Stein, Frankel et al. 2005)	Content validity determined from model. Construct validity: correlations with other measures (Roter Interactional Analysis System)(Roter and Larson 2002).	Internal consistency (Cronbach's alpha) – Habits 1-4: 0.71, 0.51, 0.81, 0.61 Inter-rater reliability inter-rater coefficients 0.69 to 0.80	Coding time: time of the clinical encounter, plus 2-5 minutes. Single pass coding. Average visit length 14.32 minutes. Training time: 8-10hrs.
7. Interview tracking form,(Egnew, Mauksch et al. 2004); USA	Expert consensus (Kalamazoo consensus statement) (Makoul 2001)	No published data	No published data	Used to guide medical educators in giving formative feedback. This process is conducted with students. Positive feedback from students received about the 10-week training course in which the form is used.
8. Leicester assessment package, (Fraser, McKinley et al. 1994); UK	Expert consensus	Content validity and face validity determined by expert feedback (Fraser, McKinley et al. 1993)	Internal consistency analyses conducted (α>0.8) For reliable assessment (G coefficient = 0.80), two assessors scoring eight clinical encounters are required. G theory used for this analysis.	Coding from live or videotaped clinical encounters.
9. LIV-MAAS (UK); (Enzer, Robinson et al. 2003); UK	Adaption of previous measure (MAAS-GP) (Van Thiel, Kraan et al. 1991)	Content validity established in parent instrument.	Inter-rater reliability – intra-class correlation coefficient = 0.69, 0.91	Coding from video, no information about coding time.

Reference, measure name, country	How the measure was developed	Report of validity assessment	Report of reliability assessment	Feasibility
				Training of raters involved familiarisation with items, practice with video material and a one-to-one tutorial. Five hours training time.
10. Macy model checklist, (Kalet, Pugnaire et al. 2004); USA	Expert consensus, teaching framework (Macy model)	Content validity established through expert consultation.	No published data	Used in formative training by fellow students and standardised patients to give feedback to learners.
11. Observer-rated sheet, (O'Neill, Williams et al. 2003)); UK	Mining of a local OSCE proforma (rheumatology)	No published data on validity.	No published data.	Single pass coding of a clinical encounter - 4mins on average. No information available about training time.
12. Paediatric Consultation Assessment Tool, (Howells, Davies et al. 2010); UK	Expert consensus, Theoretical model (Calgary-Cambridge guide) (Kurtz, Silverman et al. 2003)	Content validity determined by expert consensus. Construct validity investigated – investigation of specific study related hypotheses.	Reliable assessment (G coefficient >0.7) obtained using a single rater assessing 2-3 cases. When clinician skill with parents and children assessed separately, 3-4 cases are needed for reliable assessment.	Single pass coding of video-recorded clinical encounters. For reliable assessment of a clinician's skills a minimum of 2 encounters would need to be observed. Clinicians used as assessors. Training time 90-120minutes.
13. SEGUE; (Makoul 2001); USA	Teaching framework developed by the author.	Content validity determined by author's expertise. Responsiveness tested using	Inter-rater reliability (*Kn*) calculated by taking the mean from results over a 2 year period = 0.80	Used as an assessment tool, a standardised patient completes the SEGUE after a clinical encounter with a

Reference, measure name, country	How the measure was developed	Report of validity assessment	Report of reliability assessment	Feasibility
		change in student performance - reported "acceptable degree" Concurrent validity – tested using brief feedback from simulated patients and reported at "relatively high" (r=0.65, p<0.001) Construct validity – tested using the American Board of Internal Medicine (AMBI) questionnaire – moderate correlation noted (r=0.49, p<0.001)		student. No information is provided regarding completion time. Standardised patients receive a half-day of training both in their role and their use of the measure. Used as a research tool, raters received an initial 2 hr training to code clinical encounters between 5 and 50minutes. No additional detail given about coding time.
14. Verona Patient-centred communication evaluation scale (VR-COPE); (Del Piccolo, Mazzi et al. 2008), Europe	Theoretical models (patient centred method); data mining of existing measures - including Henbest and Stewart (1989), Roter (1993) and Byrne and Long (1976)	Content validity determined from theoretical foundation. Construct validity investigated through correlation with Verona Medical Interviewing Classification System (VR-MICS) (Del Piccolo, Putnam et al. 2004). Study specific hypotheses tested and confirmed.	Internal consistency (Cronbach's alpha)= 0.75 Inter-rater reliability = 0.85	Coding using transcripts, audio or video recordings. Coding time: average of 30mins per transcript Raters need "short" training but no information provided about the expertise of these raters.

Reference, measure name, country	How the measure was developed	Report of validity assessment	Report of reliability assessment	Feasibility
Measures that assess interaction at "micro" level (segments and utterances)				
15. Beckman and Frankel (1984); USA	No published information	No published attempt has made to formalize the measure	Inter-rater reliability coefficient (Kappa statistic) (*K*) = 0.81	Coding using audio recording. No additional information.
16. Butler et al (1992); UK	Grounded in research on doctor-patient interaction and methods of interaction analysis	Content validity established through literature review	Inter-rater reliability – *K*=0.6 to 1.0	Coding occurs through observation of video and written transcript (Campion et al 1992). No information about training time or process available.
17. Dyche et al (2005); USA	Adaption of Beckman and Frankel's (1984) and Marvel et al's (1999) method of coding	No published data	Inter-rater reliability reported as 90%	First five minutes of a clinical encounter coded. No additional information.
18. Haas et al (2003); USA	No published information	No published data on validity.	No published data.	Coding from audio by research assistants. No additional information.
19. Henbest et al (1989); Canada & USA	Adaption of Beckman and Frankel's (1984) and Marvel et al's (1999) method of coding	Criterion validity – assessed by comparison with: (1) an earlier version of Brown et al's Measure of Patient centred communication (MPCC) (r=0.51, p<0.05) and (2) an empathy scale (r=0.89, p<0.001)	Inter-rater correlation *rs*=0.91 Intra-rater correlation *rs*=0.88	First two minutes of the clinical encounter coded from audiotape or live observation. Information about training raters not presented.

Reference, measure name, country	How the measure was developed	Report of validity assessment	Report of reliability assessment	Feasibility
		Able to detect differences among doctors (p<0.001) and responses to different patient offers (p<0.001).		
20. Marvel et al (1999); USA	Adaption of Beckman and Frankel's (1984) and Marvel et al's (1999) method of coding	No published data	Inter-rater reliability coefficient (K) = 0.66	Coding from transcribed audio recordings. No additional information.
21. Measure of patient centred communication (MPCC), (Brown, Stewart et al. 2001), USA	Original method of measuring patient centeredness developed by the research group who first described the patient centred method.	Content validity determined by authors' expertise. Validity of scoring system "established by high correlation (0.85) with global scores of experienced communication researchers"	Inter-rater reliability r=0.687 to 0.835. Intra-rater reliability r = 0.73	Coding from video or audiotape. Often requires second pass of coding. Information about training raters not presented.
22. Medical interaction process system (MIPS), (Ford, Hall et al. 2000); UK	Adaption of Roter Interactional Analysis System (RIAS) (Roter and Larson 2002) for oncology setting	Convergent validity – tested by comparison with its parent measure (RIAS). Pearson correlation coefficients (*r*) calculated > 0.50	Inter-rater reliability = 0.89	Coding using video or audio recordings, time taken three and a half times the length of the encounter. Coders must be trained, no indication of time required to acquire coding proficiency.

6.3.3 Clustering of items from existing measures

Items from measures identified in this review were clustered against the domains of agenda mapping identified earlier in this thesis. This provides an overview of the ways in which different aspects of agenda mapping have been assessed. The main focus in existing measures of agenda setting has been on ensuring patients talk about their concerns, and that they are given opportunity to express their full agenda. Assessment of the clinician raising their agenda appears under-represented. Collaboration and engagement are captured through measures of clinician responsiveness that most often occurs through the design of measures that captures communication sequencing or reciprocity. These measures assess clinician behaviour immediately following a patient statement to determine the kind of response offered (Beckman, Frankel et al. 1984, Henbest and Stewart 1989, Marvel, Epstein et al. 1999, Brown, Stewart et al. 2001, Dyche and Swiderski 2005). For example where a patient raises a request these measures require raters to identify whether clinician behaviour is facilitative or inhibits further expression of this agenda.

Table 6-3: Clustering of items to the domains of agenda mapping

Domain	Items found in existing measures
Patients talk about their concerns, requests, wishes and/ or goals	*Content – patient statements categorised by content* Patient statements coded e.g. symptoms, feelings, ideas, effect of symptoms, expectations, prompts (MPCC, Brown et al 2001) Content coded as introduction, physical, emotional, social, open, historical psychological, video, conversation, uncertain, conclusion (Butler et al 1991) Content coded as introduction, medical, other medical, tests, treatment, side effects, drugs, psychological, lifestyle, social/demographic, social/personal conversation, administrative or practical, end, uncoded (MIPS, Ford et al 2004) Patient "offers" - symptoms, thoughts, feelings, expectations, prompts (Henbest & Stewart 1989)
	Process *Asking for patient agenda* Agenda eliciting i.e. asking the patient the reason for the visit (Haas et al 2003) Clinician asks for the patients's concerns (Beckman & Frankel 1984, Marvel et al 1999, Dyche et al 2005) Asks for patient agenda (Common Ground, Lang et al 2004) Asks reason for the encounter (LIV-MAAS, Robinson et al 2002) Identifies problem, listens attentively (Calg-Camb, Kurtz et al 2003) Process codes e.g. asks questions, checks information (MIPS, Ford et al 2004) *Eliciting full agenda* Attempts to elicit more than 1 concern (Haas et al 2005) Expansion of concerns (4 Habits, Krupat et al 2006) Elicit full agenda (4 Habits, Krupat et al 2006) Elicits full agenda, checks for additional items (Common ground, Lang et al 2004) Checks if the list of symptoms is complete (Del Piccolo 2008) Facilitates the patient to list all his/her current problems that brought him/her to the present consultation. (Del Piccolo 2008) Screens (Calg-Camb, Kurtz et al 2003) Allows the patient to complete his or her opening statement (Egnew 2004) Elicits the full patient agenda (Egnew, 2004) *General items* Survey patients reason for the visit (Macy model, Kalet et al 2004) Identifies problem, listens attentively screens (Calg-Camb, Kurtz et al 2003) Establish the reason for the visit (SEGUE, Makoul 2001) The physician sets up a problem list (Del Piccolo 2008)
Clinicians raise subjects they see as important	Content and process coded (Butler et al 1991, Ford et al 2004) Identifies doctor's and family's reasons for the consultation (Howells et al, 2010) Invites patient to talk about behaviour change (BECCI, Lane et al 2005)
Clinicians and patients agree shared priorities	Statements identifying topics to be covered and in what order (Haas et al 2003) Negotiates agenda taking both patient's and physician's needs into account

	(Calgary-Camb, Kurtz et al 2003) If several agenda items, prioritizes (global) (Common ground, Lang et al 2004) Negotiates the consultation's agenda (Howells et al 2010) Negotiates a prioritised agenda (Egnew et al, 2004) Tries to clarify and check all new information. (Del Piccolo 2008) Tries to understand how relevant each reported symptom is (Del Piccolo 2008)
A focus of what to talk is agreed	Determine the chief concern (Macy model, Kalet et al 2004) Outline agenda for the visit (SEGUE, Makoul 2001) Agrees purpose of interview with patient (O'Neill et al 2003)
Patients are involved and engaged	Demonstrates sensitivity to talking about other issues (BECCI, Lane et al 2005) Establishes/ maintains a personal connection (Egnew 2004)
The conversation is collaborative	Clinician response (Beckman & Frankel 1984, Marvel et al 1999, Dyche et al 2005) Clinician responsiveness (MPCC, Brown et al 2001) Clinician response to patient offer (Henbest & Stewart 1989)

6.4 Discussion

6.4.1 Principal findings

The primary purpose of this review was to inform the development and validation of a new measure of agenda mapping for use in educational settings by considering previous researchers' attempts at measuring its parent construct, agenda setting. Given that agenda mapping is a newly defined construct this review examined existing measures of agenda setting, and considered the possibility that an existing measure may meet the purpose of the newer measure being proposed. One measure was identified that provides reliable measurement of agenda setting as a discrete skill, i.e. separate from assessing communication skills more broadly (Henbest and Stewart, 1989). This measure was developed for use in research, but its authors suggest its use in education settings too. However this measure did not encompass all the domains of agenda mapping as it did not include assessment of the clinician's agenda or prioritising to agree a focus. It could not therefore be used to fully assess this construct. Other measures of agenda setting only were designed for use in a particular research study and report few formal efforts at measure validation (Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999, Haas, Houchins et al. 2003, Dyche and Swiderski 2005). The remainder of measures included in this review

incorporated agenda setting as one of a number of content areas and, for reasons discussed below, could not be adapted to meet the need of the new measure in development. These observations suggest that development of a new measure of agenda mapping is a worthwhile undertaking.

This review also suggests that the assessment of agenda setting varies considerably. The way in which a construct is conceptualised determines how it is measured (Elwyn, Edwards et al. 2001) and these differences in conceptualisation of agenda setting were observed in mapping the different ways in which agenda setting is included in these measures. Much like observations made in the review of the healthcare literature of agenda setting, three primary areas where efforts at measuring agenda setting were noted: namely (1) "doctor-patient" communication (Makoul 2001, Enzer, Robinson et al. 2003, Kurtz, Silverman et al. 2003, Kalet, Pugnaire et al. 2004, Krupat, Frankel et al. 2006, Howells, Davies et al. 2010), (2) patient centeredness (Lang and McCord 1999, Brown, Stewart et al. 2001) and (3) behaviour change (Lane, Huws-Thomas et al. 2005). While not a surprising finding this does provide some confirmation of the earlier conceptual development work and substantiates efforts made in this thesis to articulate a shared conceptual foundation across these approaches.

At the outset of this review two questions were asked: (1) what kinds of measures have been developed; and (2) how have they been used. These questions are now reconsidered together with implications for measure development.

In general there was a distinction between measures designed to assess tasks, stages or phases of the clinical encounter and those measuring speech units or interaction sequences with the former being used more frequently as educational tools and the latter being preferred as research process or outcome measures. This observation mirrors findings in other published reviews (Boon and Stewart 1998, Elwyn, Edwards et al. 2001). Measures using a "checklist" or rating scale design typically require raters to make broad judgements about the

occurrence and/ or skilfulness of a communication tasks or skill. Measures designed to assess the interaction between participants employ more complex coding systems identifying speech units and interaction sequences in finer detail. These systems provide a more detailed assessment of communication that offers a rich insight into that process, though they tend to require more time and resource to administer. While there is some overlap across these categories (Henbest and Stewart 1989, Makoul 2001), this distinction reflects how the form or design of a measure is determined by its function. Measures designed for use in educational settings were of particular interest given the focus for the measure in development. The review did not set out to identify and exhaustive list of measures that are used in assessing communication skills competence. Rather the aim was to understand how measures (that included some assessment of agenda setting) designed for this purpose, are used.

At this stage the best design for the measure of agenda mapping remains unclear. While it may seem at the outset that a measure involving assessment of interaction at a "micro" level might be too time consuming in an education setting, this may not necessarily be so. Agenda mapping can be identified as occurring in a segment of the clinical interview and therefore the whole clinical encounter may not need to be reviewed in fine detail to obtain an assessment of clinician skill. What is required though is a way of identifying the segment of the encounter to be rated. Existing measures used two methods for doing this: (a) identifying a time period, e.g. Dyche et al (2005) measured the first five minutes of the encounter; or (b) a speech marker (e.g. Beckman and Frankel (1984) measured up until the patient indicated they had nothing more to add.

Reports of measure validation give some insight into the performance of that measure (Streiner and Norman 2003). However as the measures included in this review were not initially designed for measuring agenda setting, conclusions about the validity with which they might be able to do so are limited. A measure may report validity and reliability statistics that are robust for the measure as a whole but weaker for the agenda setting component for example. Lang et al (2004) report lower inter-rater reliability statistics for the agenda setting

component of their measure, the Common Ground Instrument (r=0.69) compared to use of the full instrument (r=0.92). Also, in their assessment of validity in which expert scores were compared with scores from their measure, they report lower correlations in the agenda setting aspect of their measure (r=0.57, r=0.37) compared with the measure as a whole (r=0.84, r=0.83).

Examining different approaches to measure validation was nevertheless useful in informing the approach to validation of the new measure in development. Particularly valuable was identifying the use of Generalisability Theory (G Theory) as an alternative framework through which to investigate reliability (Fraser, McKinley et al. 1994, Lang, McCord et al. 2004, Howells, Davies et al. 2010). Analyses using G theory allow researchers to stipulate the conditions under which reliable assessments may be obtained, e.g. the number of times a student would need to be observed for a reliable assessment of their competence. This has practical advantages for educators needing to find effective ways of appraising students' skills in summative assessment. Given the practicability of G theory analyses, this offers a compelling analytic framework for development of the new measure.

An appreciation of G theory also highlighted an often misrepresented aspect of measure validation. Many reports included in this review describe reliability and validity investigations as properties of a measure. A more accurate representation is that reliability and validity assessments relate to the inferences that can be drawn from scores obtained using these measures. The reliability statistics presented relate to the sampling procedure of the research through which they are assessed. In other words they are determined by specific parameters of the research and provide an estimate of measurement under research conditions. While statistics are used to strengthen arguments for validity, they are in themselves not evidence of a scale "being validated".

None of the measures reviewed here involved an assessment of acceptability to the subjects being assessed by the measure. While this feature of a measure is more often reported in patient-reported outcome measures (Fitzpatrick,

Bowling et al. 2006) the principle of acceptability nevertheless holds, in particular with measures used for teaching.

6.4.2 Limitations of the review

There were a number of limitations to this review. Firstly, only one person was involved in decision making about inclusion and exclusion of papers, and in data extraction. Despite attempts at rigour in conducting this process (i.e. note taking, double checking, and discussion within supervisory team) both human error and personal bias may have influenced the screening, selection of papers and accuracy of information identified and retrieved.

Secondly, the approach to identifying citations could be criticised. A number of measures were identified through the literature search described in Chapter 2 rather than through a specific search for "measures". The reason for this is twofold. First, in piloting the search for the literature review (Chapter 2), inclusion of terms relating to "measures" did not generate additional citations. This was mainly because that search strategy was particularly broad. Therefore citations related to measurement identified in this earlier search were grouped and used to inform this review of measures rather than a new search strategy being devised for this review. Second, by including measures identified in the earlier search it was possible to identify attempts at measurement that would have been missed by using a narrower definition of agenda setting than the one used in Chapter 2. For example in Beckman and Frankel's (1984) seminal research, the doctor's attempts to elicit the full patient agenda were measured by describing the interaction in fine detail - patient concerns were counted, and doctor responses were categorised. By identifying this attempt at measurement through the earlier literature review, it could be included in the review reported here. It may however have been better to redevelop the search strategy based on the content domains identified through phase 1 of this thesis, and including a search filter to identify measures (Terwee, Jansma et al. 2009). However an additional search identifying measures involved in assessment of competence may nevertheless have needed to be carried out. It is unclear therefore whether there would have been sufficient gains to redeveloping the search strategy given

the purpose of the review. On balance, the strategy adopted was considered sufficient to identify the range of different approaches to measuring agenda setting and to using such measures. For rigour, a new approach could have been tested though.

Thirdly, only measures involving direct observation of agenda setting were included in this review. This decision was made as a deliberate attempt to focus the review on these types of measurement. However, there is undoubted value in considering alternative forms of measurement, in particular self-report from patients and/ or learners. These types of measures offer a perspective on competencies that are difficult to assess using objective measures alone such as the extent to which the clinician is mindfully aware and adaptive (Schirmer, Mauksch et al. 2005). Additionally evaluating the patient's experience of agenda mapping would also add considerable value. Epstein et al (2005) highlight that patients value the overall sense of being listened to and understood over the mechanics of the communication process. It is noted that one measure identified in this review (Fraser, McKinley et al. 1994) has in fact supplemented their objective measure with a complementary patient rating form in an attempt to capture the patient perspective. Epstein et al (2005) recommends that when attempting to measure aspects of patient centred communication, the measure should account for the behaviour of all people present in the encounter as well as the interaction between them. Indeed the best approach to learning may well be the integration of self-reflection, patient feedback and observer feedback (Duffy et al 2004).

Finally, the majority of measures identified in this review were developed to assess doctor-patient communication, and were developed in the USA and/ or the UK. This may represent a bias given the nature of the search, i.e. primarily in databases housing medical literature and English language articles, or a limitation of the search strategy, e.g. by identifying measures to assess competence. However it may equally be a fair representation of the prevalence of work conducted in these contexts. To conduct a more thorough review that included a multi-disciplinary focus, and that considered foreign-language and

cross cultural attempts at measurement, alternative strategies would need to be employed, e.g. contacting educators working with different disciplines in university settings internationally.

6.5 Conclusion

This review informed key decisions in the development of a new measure of agenda mapping. Firstly it confirmed that no existing measure captures all the domains identified earlier in this thesis as core components of agenda mapping. Secondly it informed the design of the measure by highlighting the different approaches that can be taken when assessing aspects of agenda mapping. Finally it informed the approach taken to validating the measure for use in education setting, in particular by identifying G theory as a potentially useful approach to analysis. The following chapters describe the development of the measure itself (Chapter 7) and investigations of reliability and validity in a medical education setting (Chapter 8).

7 Measure development

7.1 Introduction

This chapter presents the development of a new measure of agenda mapping, the Evaluation of AGenda mapping skilL Instrument (EAGL-I) for helping learners acquire skill in agenda mapping. The development and validation of this measure are presented in both this chapter and the following one. In this chapter background information is presented about the approach to measure validation as well as the early pilot work that contributed to its development. Once the measure was considered "fit for purpose" it was then used in a study where agenda mapping was taught to third year medical students, reported in Chapter 8. Data from this study were then used to validate the measure more formally.

7.1.1 Conceptual approach to measure development and validation

Measurement is an essential part of good clinical practice and research in the health sciences (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999, Streiner and Norman 2003). Well-developed measures can result in better decisions being taken about individuals and programs in education, research and healthcare delivery (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999). In educational settings, measures facilitate the development and assessment of competence (Epstein, Franks et al. 2005). In research settings they are used as outcome measures, or to support process analyses and fidelity checks (Epstein, Franks et al. 2005).

To be useful, approaches to measurement should be both psychometrically sound and clinically beneficial (Streiner and Norman 2003). While some guidance is available for those seeking to develop new measures, these are necessarily broad and non-prescriptive (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999, Streiner and Norman 2003). Measure development is shaped by consideration of

its purpose, format, and both the context and consequence of its use (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999). In this sense the development of a new measure is an innovative process where the finished product should add something new to existing measures or approaches.

Measurement science is concerned primarily with the inferences that can be drawn from scores of psychometric measures (Streiner and Norman 2003, Cook and Beckman 2006). For a measure to be useful the scores obtained from it should be both reliable and valid. Current thinking embraces a unified approach in which both reliability and validity assessments are embraced under a single umbrella of "construct validity", i.e. the extent to which a score does in fact represent its underlying construct (Downing 2003, Cook and Beckman 2006). From this perspective, dichotomous notions of a measure being "validated" or not are inaccurate (Cook and Beckman 2006). Rather arguments are made through the testing of hypotheses to build evidence in support of particular inferences made in particular contexts.

Measure validation involves a process of argument that is dynamic and on-going, linking "the interpretation of …data to a network of theory, hypotheses and logic which are presented to support or refute the reasonableness of the desired interpretations" (Downing 2003, p.831). Five sources of evidence support measure validation, namely: (1) content – evidence that items fully represent the construct, (2) response process – the thinking of observers or subjects reflects the construct, (3) internal structure – that the items conform to the construct from which interpretation of measure scores is made, (4) relations to other variables – the degree to which relationships are consistent with interpretations from the underlying construct, and (5) consequences – the impact of the scores (Messick 1989, American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999, Downing 2003, Cook and Beckman 2006). The validity argument is built through a critical and scientific justification of how the accumulated evidence supports interpretation of scores from the

measure (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999).

The development of EAGL-I was informed by the development of other communication skill measures (Chapter 6) as well as by the Standards for educational and psychological testing (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999). These standards provide a comprehensive list of criteria to evaluate "tests[6], testing practices, and the effects of test use" (p.2). The use of generalisability theory (G Theory) is recommended when considering validation of measures and this is the approach taken in this thesis (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999, Cardinet, Johnson et al. 2010). A brief introduction to G theory is provided here as it informed the analytic approach to measure validation, beginning with the pilot phase reported in this chapter.

7.1.2 Introduction to G theory

Developed over 30 years ago, G theory is increasingly becoming used as an approach to measurement in the health sciences and in medical education (Streiner and Norman 2003, Wass, Wakeford et al. 2003, Howells, Davies et al. 2010, Silverman, Archer et al. 2011, Karabilgin, Vatansever et al. 2012). G theory provides a powerful conceptual framework through which to understand and quantify measurement error (Cardinet, Johnson et al. 2010). It extends beyond classical test theory in that multiple sources of variance are considered simultaneously (Bloch and Norman 2012).

In contrast to classical test theory analyses, coefficient values are not the central focus of an analysis using G theory. While they give an indication of the quality of

[6] The term "test" is used broadly – and synonymous with "scale" or "inventory" - to refer to "an evaluative device or procedure in which a sample of (a participant's) behaviour in a specified domain is obtained and subsequently scored using a standardized process" (American Educational Research Association (AERA), American Psychological Association (APA) et al p.3)

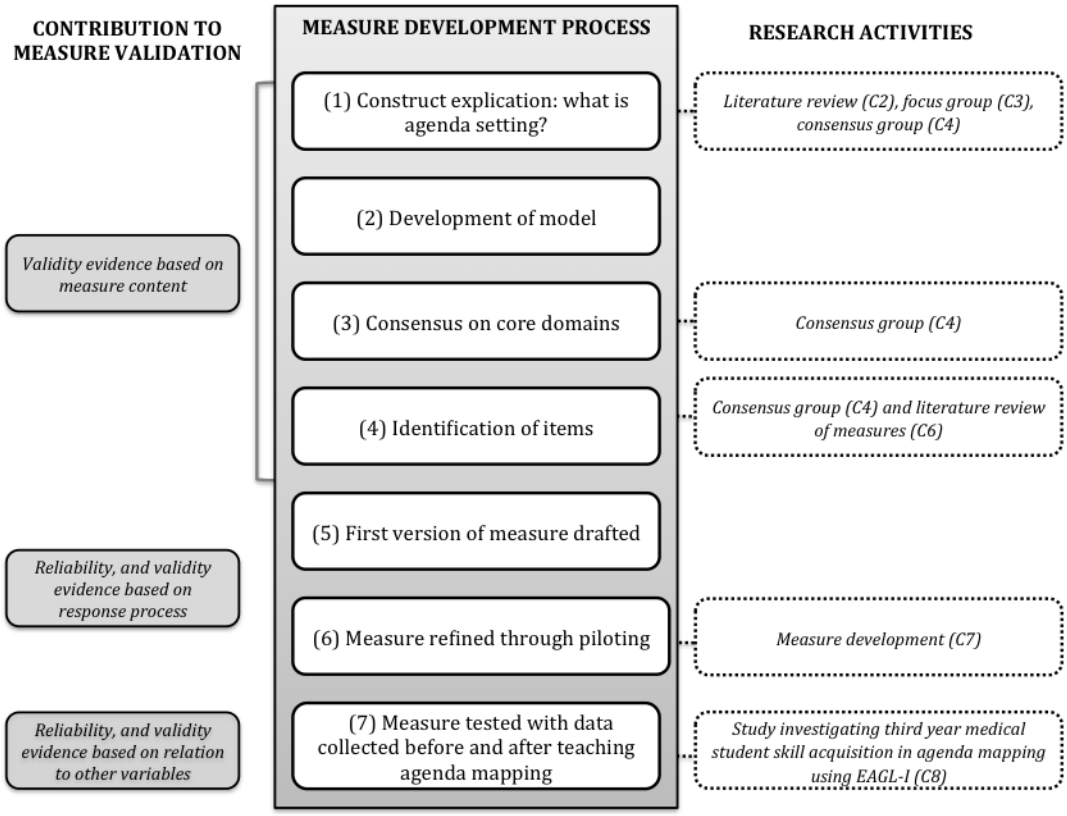
the measure, G coefficients have a greater advantage in that they give detailed information about the sources of error variance and how these are partitioned. As a result different approaches to sampling can be adopted to minimize the effects of error. G theory analyses are able therefore to inform not only the measure but the measurement procedure (Cardinet, Johnson et al. 2010). This occurs through the use of an extrapolation technique. Analyses can be manipulated to change the "levels" of particular variables to produce a more reliable estimate (Bloch and Norman 2012). So for example it is possible to determine how many times a student may need to be assessed to produce a reliable assessment of their skill (e.g. how many times they need to be observed). This has very real implications for planning both teaching programs and assessment procedures.

Note: Generalisability theory was identified to inform the analytic approach to measure development for two reasons. Firstly the Joint Standards for educational and psychological testing recommends the use of G theory in measure validation (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999). This key text informed the approach to measure validation adopted in this thesis. G theory is also increasingly used in medical education studies, for example, when considering the reliability of competence assessment using OSCE exams (Karabilgin, Vatansever et al. 2012). Given the positioning of the initial measure validation work in a medical education setting, the use of this analytic approach was fitting. Secondly, on review of measures reported in chapter 6, it was apparent that researchers who used G theory in measure validation were able to provide more information on the measurement procedure that might allow for reliable assessment. The practical usefulness of this information made it a compelling choice for use in this thesis. While the statistics and mathematics underlying this theory are complex, the candidate (NG) identified resources that have recently been develop to enable novice researchers to use this theory more readily (Cardinet, Johnson et al. 2010, Bloch and Norman 2012)

7.2 Overview of EAGL-I development

An overview of the process of measure development is presented visually in figure 7-1. Steps in the measure development process are referred to in the accompanying narrative below. Figure 7-1 also links research activities from the first part of the thesis with the measure development process. Ways in which different aspects of the research contributed to measure validation are also presented. It should be noted that while the development of EAGL-I is presented here as a linear process (figure 7-1), there was in fact a "subtle interplay between the process of conceptualising (the) construct … and the development of a (measure) of that construct" (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999, p.41). The model of agenda mapping informed the initial development of the measure, and the process of measure development in turn clarified elements of the model.

Figure 7-1: Overview of measure development



In the health sciences, measurement often involves quantifying "what was previously thought to be unmeasurable" (Streiner and Norman 2003, p.1) and begins therefore with a process of construct explication (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999). This was the approach taken in this thesis (figure 7-1, step 1). Domains of skilfulness in agenda mapping were clarified together with a model that clarified tasks, skills and values expressed through an observable "quality" of the conversation (figure 7-1, step 2). EAGL-I was developed from this model.

Measure items were identified and selected through two research activities: (1) the Delphi consensus exercise, and (2) a structured review of existing measures (figure 7-1, steps 3 and 4). While these items were matched to domains of agenda mapping, it was not clear how they might come together in the final measure design. Feedback from the expert consensus group was to carefully consider how best to capture the more subtle and nuanced interpersonal processes of agenda mapping such as "collaboration" and "engagement". Additionally Delphi participants criticised the behavioural checklist initially planned for the measure's design for not being able to fully capture these processes. A literature review of measures of communication competence gave some insight into how these processes had been assessed in other measures, suggesting the use of global judgments, or a more refined process of coding patient or clinician utterances.

Developing the measure for use in educational settings set some parameters for its design. The challenge was to balance feasibility and ease of use with robustness: educators may not have time or inclination to be involved in complex coding processes but would need a tool that is efficient to administer, from which reliable inferences can be made about a candidates' knowledge or skills. Following additional expert consultation it was decided to pilot EAGL-I with experienced coders who could give feedback in the developmental process of the measure design (figure 7-1, steps 5 and 6). The pilot, reported in this chapter, allowed for decisions about the content, format and scoring of items to be made, together with coding "conventions" or rules that should help yield

reliable measurement. This was exploratory work prior to more formal evaluation of the measure in a study with third year medical students (figure 7-1, step 7).

The process of measure development provides evidence for the measure validation argument (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999). Evidence that the *content* of EAGL-I v1.5.1 represents the construct of "agenda mapping" is presented through the development work that was conducted and reported in earlier chapters of this thesis. The approach to measure development in which a coding group was formed to pilot the measure, provided evidence of the *response process* of raters. The *internal structure* of the measure was investigated through investigation of reliability and responsiveness to change. Finally the *relationship* between the underlying agenda mapping construct and EAGL-I was investigated by testing a hypothesis about how the measure should function in an interaction when a simulated patient had a hidden agenda.

This chapter will now present the first draft of the measure (figure 7-1, step 5) and the pilot process through which the measure was developed and refined (figure 7-1, step 6) prior to more formal attempts at validation (figure 7-1, step 7).

7.3 Piloting the measure - from EAGL-Iv1.0 to EAGL-Iv1.5.1

This section presents an overview of the early phases of measure development in which the measure was piloted.

7.3.1 First draft of EAGL-I

When drafting the first version of the measure, the main decision to be made was about the best approach to measure design. Domains had been identified through the consensus exercise, as well as some clinician behaviours that would represent these domains. In addition, ways in which these domains had been measured in existing measures were identified. What was not clear at this point

was the best way to assess these domains through the design of the measure. From the literature review of measures it was clear that the use of behavioural checklists tended to be most feasible for use in educational settings. However capturing the reciprocal nature of communication through a measure design that assessed interaction sequences was potentially a better approach in that sequences of speech acts can be captured. Additionally it was not clear that this would *not* be a feasible method of assessment, as a measure had been identified in the literature review that employed such a design to support teaching (Henbest and Stewart 1989).

Following expert consultation[7] it was decided to develop a first draft of the measure that included both aspects of the design. EAGL-Iv1.0 (figure 7-2) included two complementary aspects – (1) a global rating of agenda mapping tasks (eliciting patient agenda, raising clinician agenda, clarifying shared agenda, agreeing focus) and processes (engagement, and collaboration) and (2) a more refined coding process that involved identifying patient and clinician utterances and assigning task and process codes to these. This second part of the measure involved attending to both patient and clinician speech, and assigning codes to reflect the nature of the *clinician*'s micro-skills in facilitating each of the agenda mapping tasks (table 7-1). Statements through which a new content area was suggested were assigned a "patient agenda" or "clinician agenda" task code to indicate the source of the agenda item. A "shared agenda code" was used for statements reflecting previously raised content from both patient and clinician. Once a task code was identified this would then be paired with a process code that captured the skilfulness of the *clinician* in managing this agenda mapping task. Their communication was classified as "facilitative", "neutral" or "inhibitive" to that task. An "agree focus" code was also used and this was taken to signal the

[7] Expert consultation with Theresa Moyers - Assistant Professor, University New Mexico, developer or Motivational Interviewing Treatment Integrity scale (MITI) and co-developer of Motivational Interviewing Skills Code (MISC) - and William Miller - Emeritus professor at University of New Mexico, developer of MI and Motivational Interviewing Skills Code (MISC), now retired - at the 3rd International Conference of Motivational Interviewing (ICMI3), June 2012

end of agenda mapping. A coding manual was developed alongside this first version of the measure.

Figure 7-2: Scoring sheet for EAGL-Iv1.0

Tape identifier: …… Rater: …… Date: ……

Global ratings

Eliciting the patient's agenda	1----------2----------3----------4----------5	
Raising the clinician's agenda	1----------2----------3----------4----------5	N/A
Establishing shared focus	1----------2----------3----------4----------5	
Engagement	1----------2----------3----------4----------5	
Collaboration	1----------2----------3----------4----------5	

Measurement of tasks

	Code as F, N, I	**Summary**
Patient agenda (PA)		
Clinician agenda (CA)		
Shared focus (SA)		
Agenda process (AP)		

Notes:

Table 7-1: Summary for assigning EAGL-Iv1.0 task and process codes

Content	*Process*		
Tasks	**Facilitative**	**Neutral**	**Inhibitive**
Patient agenda (PA) ▪ Content of what the patient says – i.e. a statement that reflects a concern, idea, goal or aspiration ▪ Verbal or non verbal auditory cues – i.e. "hints" suggesting an underlying agenda item	▪ Open questions – asking for more information to elaborate on agenda item; questions that encourage identification of more than one agenda item; ▪ Active listening that encourages elaboration, understanding; clarifying; empathic statements ▪ Summaries that help to focus the dialogue – e.g. ▪ Phrasing - language that reflects understanding ▪ Meta-communicative statements that orientate the patient	▪ Closed questions that don't inhibit patient speech, asking for repetition, signals of listening e.g. uhuh	▪ Closed questions that inhibit patient speech, interruption e.g. with diagnostic questioning; expression of disapproval or judgement
Clinician agenda (CA) ▪ New content raised by the clinician	▪ Timing, phrasing, permission asking, being objective, offering choice ▪ Meta-communicative statements that orientate the patient		▪ Giving instruction; proceeds with line of questioning without clarifying their agenda; expressions of disapproval
Shared agenda (SA) ▪ Summary statement capturing content of both parties' agendas	▪ Gives direction – e.g. use of an open question to establish focus; suggests direction while respecting autonomy/ offering choice ▪ Meta-communicative statements that orientate the patient	▪ Suggests direction without offering choice	▪ Lack of direction – e.g. questioning about an unrelated topic, summarises shared agenda without moving toward direction or focus
Agree focus (F)	NOT CODED	NOT CODED	NOT CODED

7.3.2 Pilot process

7.3.2.1 Aim

The aim of the pilot process was to refine EAGL-I prior to its use in a study with third year medical students. This involved exploring the feasibility and reliability of EAGL-I with three coders using a number of different datasets. The measure was substantially amended through this process.

7.3.2.2 Datasets used

Datasets from a number of different sources were identified for use in the EAGL-I development process. These are summarised in table 7-2. The rationale for considering these data as suitable for piloting a measure of the agenda mapping construct is also outlined below.

Table 7-2: Summary of data used in piloting EAGL-I

	Description of source of data	*Description of data*
Training DVDs (Miller, Rollnick et al. 1998, Rollnick, Butler et al. 1999, Mash, Human et al. 2008, Mauksch 2012)	Expert demonstrations developed for teaching purposes	Mixed clinical settings. Simulated patient encounters.
MI and NH[8] audios	A workshop to explore new directions in MI (Jan 2011). Agenda mapping and agenda navigation constructs were presented at this workshop and participants practiced skills with actors in simulated patient scenarios.	Simulated patient encounters. Scripted scenarios.
DEPICTED[9] (Robling, McNamara et al.)	Pragmatic, cluster randomised controlled trial with paediatric diabetes teams to evaluate the effectiveness of a communication skills training programme (including agenda setting). An agenda setting chart, completed by patients prior to the clinician encounter, or at the start of that encounter, was part of the intervention.	Real patient encounters with young people (type 1 diabetes) and, at times, their parents. Multidisciplinary group of clinicians. Mixture of dyadic and triadic consultations.
PRE-EMPT[10] (Butler, Simpson et al. 2013)	General-practice based cluster randomised controlled trial to evaluate the effect of training primary care professionals in behaviour change counselling on patient self reported change in smoking, alcohol use, exercise and healthy eating. Agenda setting included as one of the skills taught to health practitioners.	Simulated patient encounters. GP and practice nurse. Pilot data for this trial used.

7.3.2.2.1 Training DVDs

[8] Motivational Interviewing and new horizons
[9] Development and Evaluation of a Psychosocial Intervention for Children and Teenagers Experiencing Diabetes (DEPICTED)
[10] Preventing disease through opportunistic, rapid engagement by primary care teams using behavior change counseling (PRE-EMPT)

The initial piloting occurred with educational DVDs developed to teach agenda setting. DVDs about MI (Miller, Rollnick et al. 1998, Mash, Human et al. 2008), or health behaviour change (Rollnick, Butler et al. 1999, Mash, Human et al. 2008) included a teaching segment in which agenda setting was described and then demonstrated. Expert examples were contrasted with examples of interactions without agenda setting. The DVDs were developed by recognised experts in the field to support training in MI and health behaviour change.

An online resource used to teach agenda setting to third year medical students at the University of Washington was also used (Mauksch 2012). This teaching program included two demonstrations of practice – one with and one without agenda setting. Dr Larry Mauksch, a developer of the course, made this resource available to the candidate (NG) after his involvement in the Delphi consensus exercise.

Each of these agenda setting resources was reviewed by the candidate (NG) before their use, to ensure that each identified agenda mapping domain was represented in the example of expert agenda setting.

7.3.2.2.2 MI and new horizons workshop

A workshop was held with a small number of participants (n=8) to explore new ideas being developed in the conceptualisation of MI. As part of this workshop, the candidate (NG) presented the model of agenda mapping and participants practiced these skills with simulated patients. These interactions were audio recorded and used in this pilot process.

7.3.2.2.3 DEPICTED

The aim of this clinical trial was to evaluate the effect of a communication skills training programme with paediatric diabetes team members on clinical and psychological outcomes for young people with type 1 diabetes (McNamara, Robling et al. 2010). Agenda setting was an important part of the complex intervention (Gregory, Robling et al. 2011). It involved the use of an agenda

setting chart that young people were to complete prior to the clinical encounter. This would facilitate reflection and identification of talk topics prior to the start of the clinical encounter. Clinicians received training both face-to-face and online about agenda setting as a collaborative process. Training also embraced other skills and strategies about having constructive conversations about behaviour change (Robling, McNamara et al. 2012).

Having reviewed the training program and listened to a number of audios from the trial, the approach to agenda setting was considered consistent with the agenda mapping construct. The most suitable data were those from the post-teaching intervention arm of the trial. Data from this trial were particularly interesting as these encounters involved real as opposed to simulated patients. A limitation of the use of this dataset was that some encounters included parents or other professionals. Also these encounters were in a specialist clinical area, and with teenage patients. Given that EAGL-I was developed as a generic measure, it was decided that the dataset could nevertheless be useful to test the measure and form preliminary conclusions.

7.3.2.2.4 PRE-EMPT

This clinical trial was developed to evaluate the effect of a training intervention for primary care practitioners on patient self-reported behaviour change (Spanou, Simpson et al. 2010). Agenda setting was included as one of a number of components of the blended learning programme that was based on behaviour change counselling and MI. The audio recordings available were of a simulated patient encounter as part of the learning programme. After having reviewed the learning programme content, the taught construct was considered consistent with agenda mapping.

7.3.2.3 Data protection

In all cases necessary permissions to use the data were obtained. A data protection and confidentiality agreement was signed with each coder to ensure responsible handling of the data. Data were also encrypted when transferred.

7.3.2.4 The coding group

7.3.2.4.1 Selection of coders

Two coders (CL and IC[11]), together with the candidate (NG), were involved in the pilot process. Both coders were selected for their skill in assessing communication skills, and experience at teaching and training students and clinicians. The selection of coders with a high level of experience was an advantage at this stage of the development of the measure. The nature of the work involved tolerating a relatively high degree of uncertainty and "rough and ready-ness" of the measure's design. It was an advantage that the coders involved were able to articulate questions and uncertainties that arose through early stages of EAGL-I development as well as suggest approaches to resolving these. Coders were also familiar with using communication tools for assessment of competence and could give feedback about ways in which the measure could be used in these settings.

7.3.2.4.2 Group process

Each pilot round had a similar format. The coding group met face-to face to (a) listen to examples of clinical encounters using the latest iteration of EAGL-I, (b) compare ratings and discuss discrepancies, (c) identify anomalies and where appropriate agree decision rules. Following each coding meeting the candidate (NG) documented the meeting, and followed up any action points. Agreed amendments to the measure were made and a new sample of data was identified for use with the most up to date iteration of the measure. Coders were then sent the new data, the latest version of the measure and a "what's new" document highlighting the agreed changes in the measure. They rated the data and submitted their results to the candidate (NG) who would analyse these in preparation for the next meeting.

[11] Dr Claire Lane (CL), PhD, clinical psychologist, developed BECCI; Ian Cooper (IC), language and communication specialist, Individual Support Programme, Cardiff University

This process was repeated four times to produce EAGL-Iv1.5.1 – the version of the measure used for a study with medical students (Chapter 8).

7.3.2.5 Development of the coding manual

A coding manual was also developed through this process. The first version of the manual was amended and refined at each round in response to feedback from coders and as the measure developed. More detailed scoring guidelines were included as well as a score sheet that included behavioural anchors. Coders were asked to work closely with the latest iteration of the coding manual and measure to ensure their decisions were being guided by descriptors embedded in that iteration. This was necessarily detailed work and was influenced in particular by the use of different data sets.

7.3.2.6 Analysis

The pilot process was an opportunity to test and develop the analytic approach to measure validation. Pilot analyses were developed using Generalisability theory (G theory) and G_string IV (version 6.1.1) (Bloch and Norman 2011) software was used to support the analysis. An online support group for G_String users is co-ordinated from MacMaster University and moderated by software developers Prof Ralph Bloch[12] and Prof Geoff Norman[13]. Both of these moderators gave the candidate (NG) additional email support in developing the approach to this analysis.

[12] Ralph Bloch, now retired, formerly Professor of Medical Education at University of Berne, Professor of Rehabilitation Medicine at McMaster University, and part-time professor in Dept of Clinical Epidemiology and Biostatistics at McMaster University Hamilton Ontario.
[13] Geoff Norman is Professor of Clinical Epidemiology and Biostatistics, and assistant dean of the Program for Educational Research and Development at McMaster University

7.3.3 Development of EAGL-I across pilots

Fitzpatrick et al (1998) distinguish between the operational characteristics of a measure (i.e. feasibility and acceptability) and the psychometric properties of its scores (i.e. reliability and validity). Attention was given to both of these aspects in the pilot process. Eliciting feedback from raters about the ease and the time taken to complete the rating task provided an assessment of the feasibility of using the measure. As the raters had expertise in teaching communication skills they could also provide a judgment about how feasible the measure might be for use in educational settings. Preliminary investigations of the measure's reliability also contributed to decisions taken in refining EAGL-I. A summary of each pilot together with results and subsequent amendments made to EAGL-I is presented in table 7-3. This tracks the development of the measure from EAGL-Iv1.0 to EAGL-Iv1.5.1. An overview is presented here.

The first pilot followed a three-hour training session with raters in which the underlying construct of agenda mapping was presented, together with the first version of the measure. Raters then used the measure with a small sample (n=4) of audios deliberately selected to reflect different levels of skilfulness. Reliability coefficients were promising (Φ=0.933, Ep^2=0.951)[14], but the choice of audios may have artificially inflated these findings (personal communication Geoff Norman, 15.9.2012). This was because extreme examples of "very high" and "very low" skilfulness were used and the mixed skill level that is likely to be observed in more naturally occurring clinical encounters, was not evident. Raters are more likely to be able to consistently distinguish phenomena that are conceptually far part than close together.

Pilot 2 was planned therefore using real examples of clinical practice. Results from this second pilot were much less promising (Φ=0.477, Ep^2=0.620). The difference between pilot 1 and pilot 2 findings (beyond sample size) suggests a difference between the measure's ability to function in clinical encounters where agenda mapping occurs as a structured and coherent skill set (e.g. training

[14] Additional information about these intra-class coefficients is presented in Chapter 8. Both the absolute value (Φ) and relative value (Ep^2) are presented.

scenarios), compared with encounters where it is less explicit (e.g. "real life" clinical encounters). A key difficulty identified by the raters was that in "real life" clinical encounters it is much less clear where agenda mapping starts and ends and indeed if it is present or not. These observations led to changes to the design of the measure. In particular the detailed coding structure was dropped and two subscales were included – a fidelity subscale that assessed whether agenda mapping was happening, and a competence subscale that determined whether it was happening skilfully. A coding rule about selecting the part of the audio to rate was also implemented.

A new and slightly larger subset audios from DEPICTED and PRE-EMPT was used for the third pilot. Results from this pilot suggested that the inter-rater reliability of the measure was improved by having a way of distinguishing whether or not agenda mapping was taking place (same dataset used, G coefficient increased). The internal consistency of EAGL-Iv1.3 (Ep^2 =0.951)[15] reflected that the scale was measuring the same construct. Internal consistency of items within the subscales was higher in the competence subscale (Ep^2 =0.981) than in the fidelity subscale (Ep^2 = 0.780). The high scores for the competence subscale suggested that although it made theoretical sense to include all these items in this subscale, it did not make empirical sense. These items on competence subscale were therefore reduced after investigation of how internal consistency changed with different combinations of items (appendix C7-1) Decisions about which items to reduce or collapse were driven theoretically. High internal consistency scores (>0.9) may also be a reflection of "halo" or bias operating where a rater assigns scores based on a global judgment of the individual being a skilful or less skilful communicator in general (Streiner and Norman 2003). Consequently the measure was designed to include behavioural anchors embedded in a marking sheet, one approach to mitigate the effect of halo (Streiner and Norman 2003).

[15] Note that only the relative coefficient values (Ep^2) are presented here, as these are most relevant to internal consistency analyses.

The final two pilots were conducted with small samples to refine the wording of the measure and as a final feasibility check. Raters reported being able to use the measure in a single pass of coding. The layout and wording of the measure was clear and additional information provided in the coding manual was also considered useful in making judgments in rating agenda mapping skill. At this point the measure was considered fit for purpose to use with data collected in a study with third year medical students. A single audio was selected from this dataset for this last round, and this audio was not then included in the larger study.

Table 7-3: EAGL-I development across pilot phases

	Pilot 1	**Pilot 2**	**Pilot 3**	**Pilot4**	**Pilot 5**
EAGL-I version	EAGL-Iv1.1	EAGL-Iv1.2	EAGL-Iv1.3	EAGL-Iv1.4	EAGL-Iv1.5
Aim	(a) Preliminary analyses of EAGL-I reliability (b) Develop and test analysis plan (c) Consider feasibility	32. Further analyses of EAGL-I reliability 33. Extend development of analysis plan	34. Examine the reliability of EAGL-I version 1.3 35. Identify areas of strength and weakness in EAGL-Iv1.3 design	Consider feasibility of latest version - EAGL-Iv1.4	Test EAGL-I with medical student data
Data used	Training & pilot (n=4)	DEPICTED (n=10)	DEPICTED & PRE-EMPT (n=16)	DEPICTED & PRE-EMPT (n=5)	Med student data (n=1)
Analyses	G coefficients, inter-rater reliability and internal consistency equivalents	G coefficients, inter-rater reliability and internal consistency equivalents	G coefficients, inter-rater reliability and internal consistency equivalents	Qualitative – feedback from raters	Qualitative – feedback from raters
Results	G coefficients: ϕ=0.933; Ep^2=0.951 Raters: ϕ=0.838; Ep^2=0.882 Items: ϕ=0.904; Ep^2=0.919 Suggests reliable measure (>0.8) – but small sample purposely selected as examples of very high and very low skill.	G coefficients: ϕ=0.477; Ep^2=0.620 Raters: ϕ=0.499; Ep^2=0.628 Items: ϕ=0.876; Ep^2=0.923 Coefficients (reliability) lower – tougher to discriminate mixed skill level in more representative sample.	G coefficients: ϕ=0.589; Ep^2=0.631 Raters: ϕ=0.877; Ep^2=0.900 Items: ϕ=0.954; Ep^2=0.966 The overall reliability of the measure was improved by having a way of distinguishing whether or not agenda mapping was taking place (same dataset used, G coefficients higher). Very high internal consistency scores suggested item redundancy.	Feedback from raters - clearer and easier Minor amendments made to wording of behavioural anchors	Minor amendment to wording of a behavioural anchor
Measure amendment	Made in response to difficulties identified by the raters rather than problems identified empirically	Amendments: (a) 2 subscales were included – the fidelity and competence subscale. (b) Listen for 20% of overall clinical encounter time	Amendments: (a) Inclusion of behavioural anchors (b) Redesign of the layout to a single page with behaviour anchors embedded in a marking sheet (c) Reduce items, competence subscale	Amendments to measure as identified by raters – no empirical work	Amendment to second item on fidelity subscale
Plan for next pilot round	Select larger sample of mixed skill (pilot 2)	Use larger sample (pilot 3)	Test the refined design primarily for feasibility - Analysis plan refined	Final feasibility pilot using med student data	

7.3.4 Outcome of piloting

The pilot phase had two primary outcomes. First it led to decisions begin taken about the design of EAGL-I including the format of the measure, the approach to scoring, and the development of the coding manual (full manual appendix C7-2; summary score sheet figure 7-2). Secondly working in a small coding group allowed for insight into how the measure was being used by raters, in particular the thought process they went through in assigning scores.

7.3.4.1 EAGL-I design

In its first version EAGL-I included two aspects – (1) global judgments, and (2) a more refined coding process of assigning codes for each domain. This second aspect of the measure was dropped as feedback from raters suggested that while the coding process helped them focus when making the global judgments, it is unlikely it would be feasible for use in education settings. Some reflections on the piloting of this aspect of the measure are provided here before considering other ways in which the pilot contributed to the final design of the measure.

First, a key difficulty with the refined coding task was in identifying agendas. While agendas can be conceptualised as separate content areas, in practice they often overlap, or arise out of each other. Others have managed to establish reliability while coding agendas in this way, but also encountered this difficulty (Henbest and Stewart 1989, Butler, Campion et al. 1992). A second limitation of the coding process was that while the task was sequential – first a task code was assigned then a process code followed - this did not always mirror the sequence of interactions. For example where a clinician asks, “how can I help?” this is a skill (open question) that requires a process code (facilitative) linked to an agenda mapping task (eliciting the patient’s agenda). The patient’s response (e.g. “my asthma’s playing up”) indicates a content area for discussion that would receive a task code (patient agenda). The coding task required the rater to assign the task code first and then track back to identify the process code. This was a limitation of the coding system itself. The coding system was intended to capture

the extent to which the clinician's communication was facilitative or inhibitive to the agenda mapping process. It is similar to other measures designed to capture this process more fully such as VR-CoDES-P, a process of sequence analysis that measures clinician responses to patient verbal and non-verbal cues (Zimmermann, Del Piccolo et al. 2011). These measures are often coded from transcripts and piloting this refined coding aspect of EAGL-I gave insight into the complexity of applying such a coding system. On balance it was agreed to design the measure using global judgments only.

Once this decision was taken, the pilot process influenced the measure design in (a) the selection of items, (b) the inclusion of behavioural anchors embedded in the marking sheet, (c) the scoring levels assigned to behaviours and (d) the selection of a segment of the clinical encounter to rate. These decisions were taken to clarify and simplify the rating task in line with the agenda mapping model. Figure 7-3 presents EAGL-Iv1.5.1 scoring sheet and provides an overview of the measure at the end of piloting.

Figure 7-3: Summary score sheet for EAGL-Iv1.5.1

***FIDELITY SUBSCALE – is agenda mapping happening?* -- Complete first**				
	1	**3**	**5**	**score**
Identifying talk topics	One talk topics is raised and provides the sole focus of the interaction	More than one talk topic is raised – from the patient, family members or clinician. (An agenda chart may be used.)	A number of talk topics are raised – clinician actively elicits a full agenda from all present	
Agreeing a focus	No evidence of explicit prioritising or agreement, or no need for it –one item takes focus	Some attempt to explicitly prioritise or agree a focus e.g. a focus may be suggested with agreement assumed e.g. "let's start here"	Explicit attempt at agreeing priority focus e.g. "what's most important?" and/ or agreeing a talk topic focus e.g. "where should we start?"	

COMPETENCE SUBSCALE – is agenda mapping happening skilfully? **Only complete if the clinician has scored ≥3 on either of the above items, if not mark all items 1**						
	1	**2**	**3**	**4**	**5**	score
Eliciting the patient's agenda-	Clinician makes little effort to engage with patient's agenda or appears dismissive of it.	Some attempt to elicit agenda. Clinician does not consider additional agenda items. May respond inflexibly when patient initiates several talk topics.	Clinician engages with the patient's agenda. Clinician may attempt to elicit full agenda items but this seems formulaic.	Clinician gives patient time to talk. Makes a clear effort to elicit or respond to agenda. Considers that there may be more than 1 topic to discuss.	Clinician demonstrates excellent listening skills, is responsive, respectful and sensitive. Considers full agenda.	
Raising the clinician/ service agenda - *mark N/A if there is no new content raised by the clinician.*	Clinician assumes their agenda takes the focus. If there is an agenda chart, clinician makes no reference to it.	Clinician suggests agenda then purses it without seeking patient's views. May acknowledge agenda chart.	Clinician raises agenda explicitly, acknowledges agenda as their own. Makes reference to chart if applicable. Identifies own agenda in it.	Clinician raises agenda with sensitivity e.g. to timing and phrasing. May link their agenda to patient's. Refers to agenda chart to consider options.	Introduction of clinician agenda is respectful, notably skilful and seamless. Clinician actively supports patient autonomy, Uses agenda chart strategically with patient to consider options	
Establishin g shared focus	Clinician exerts too much or too little control in determining the focus.	Clinician provides little structure to establishing focus, No consideration of priorities.	Clinician clarifies purpose of session. May suggest a focus. May be weak efforts to prioritise.	Clinician follows a clear structure is establishing focus. May attempt to consider priorities and engage patient in talk about these. Good use of skill, e.g. summarising	Clinician explicitly considers options *with* the patient, actively structures the interaction for collaboration and engagement. Is explicit about the process of establishing focus. Excellent use of skill.	

An important observation highlighted in the pilot process was in the measure's ability to perform better in highly structured examples of agenda mapping, than in more naturally occurring examples. The rating task was relatively straightforward with audios in which agenda mapping was occurring skilfully. These followed a clear process of eliciting talk topic options, then prioritising to agree a focus. Likewise where agenda mapping was absent or incomplete – for example where a clinician addressed the first topic raised – rating was relatively straightforward. This is reflected in the scale design where the end points are clear, and the middle points more difficult to define. However, in many of the audios of "real-life" clinical practice – either with simulated or real patients – agenda mapping was more difficult to observe. For example a clinician may spend some time eliciting a patient's concern and it is unclear to the rater whether they are doing so with the intention of gathering options or with the intention of addressing the concern. Individual domains of agenda mapping (e.g. eliciting the patient's agenda) may arise naturally in these clinical encounters, and these domains may be expressed throughout the whole clinical encounter. These observations gave rise to confusion when attempting to use EAGL-I and this in turn imposed the need for rules governing the agenda mapping construct.

Two rules in particular were imposed. The first involved listening to a proportion of the clinical encounter time (20%) to determine whether agenda mapping was happening or not. Given that most clinical encounters even in similar settings will vary in length, a proportion of time was considered a better guideline than a fixed time period. In the coding manual it is highlighted that this rule is flexible and context dependent. So for example if the dataset requires that the raters listen to the full encounter (e.g. if agenda mapping is expected to arise toward the end of the clinical encounter) then this should take place. What is important is consistency and transparency in deciding the segment of the clinical encounter to rate.

Secondly, for agenda mapping to be occurring, raters should observe the clinician (a) consider a number of talk topic options, and (b) attempt to prioritise or agree a focus. These two items formed the fidelity subscale of the measure. It

was decided that clinicians should score at least three out of a five-point scale on the first of these items for agenda mapping to be occurring. It was initially planned for raters to listen to the audio twice – once to determine whether agenda mapping was happening or not, and if it was, then a second pass would enable them to judge skilfulness. However in practice both subscales could be completed in a single pass coding. While this provided raters with clear guidance on how to discriminate between evidence of agenda mapping, and/ and evidence of skilfulness in agenda mapping, this also reflects an artificiality and limitation of the measure in its current design. A more sophisticated measure that captured clinician behaviours at micro-level e.g. through coding of utterances and clinician-patient interactions, may reveal a more nuanced understanding.

Decisions taken about the design of EAGL-I reflect its intended purpose. It was anticipated that the measure be used in educational settings to give structured feedback to trainees when learning agenda mapping. Consequently raters gave feedback about the time required to rate audios, amendments that could be made to make the rating task simpler, and the clarity of wording in the score sheet and coding manual with the aim of producing a reliable measure that can be administered in a single pass of coding. However given that the raters were selected for their expertise in communication skills, and were involved in the developmental process of the measure it is unclear how transferrable this feasibility assessment is and few conclusions can be made about rater training time based on this experience.

Finally the process of EAGL-I design highlights the many ways in which a construct such as agenda mapping may be assessed. Compromises are made in shaping the measure to its purpose. Despite the rigour of any approach to measure development, error will arise in the selection of items and measure design. Statistical analyses provide some assessment of the degree of error involved when interpreting scores (Cardinet, Johnson et al. 2010).

7.3.4.2 Coding group response process

Response process is a source of evidence for arguments of construct validity (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999, Cook and Beckman 2006). Response process is defined as the "actions and thought process of …observers to review the fit between the construct and the detailed nature of performance…actually engaged in" (Cook and Beckman 2006, p.166). While this was not formally evaluated here, the process of coding group meetings did give some insight into how coders rationalized coding decisions in line with the "agenda mapping" construct.

Two sources of response process evidence from this pilot are the training of raters and subsequent coding meetings, and the documentation of these activities (Downing 2003, Streiner and Norman 2003, Cook and Beckman 2006). Documentation provides some insight into the thought process of coders when working with the measure at different stages of development with different datasets. For example the discussion reported in the previous section in which the coding group debated the best way of assessing agenda mapping provides evidence of the level of discussion involved in clarifying how the agenda mapping construct, that was defined theoretically, might be observed in everyday clinical interactions. Once the core structure of the measure was decided, these discussions centred on identifying behavioural anchors for measuring the domains of agenda mapping and agreeing the scoring of these. For example in the third item on the competence subscale ("establishing shared focus") it was agreed that if a clinician explicitly states the purpose of the clinical encounter (e.g." this is your review") they score a 3, signifying that they are already at the central point of the scale because they are attempting to establish a shared focus on the session's content. This observation arose from listening to audios where some clinicians did this and others did not and considering the way in which making this statement contributed to agenda mapping overall.

Each new dataset presented different challenges to the rating task. While this pilot involved the use of a measure still in development, and data collected for

other purposes using different conceptualisations of agenda mapping (based on its parent construct, agenda setting), the process nevertheless enriched the delineation of the agenda mapping process. Much of the coding meeting involved wrestling with confusion and asking questions, the answers to which were rooted in the agenda mapping model. This was an exploratory and discursive process, and the preliminary statistical analyses contributed to our decision making. The process also had a natural conclusion where to extend our understanding of how this measure might function, a larger sample of audios that represented agenda mapping more specifically was required. It was at this point that the measure was ready for use in the study reported in the following chapter.

7.4 How to use EAGL-I v1.5.1

This section provides a summary of the final version of EAGL-I that was ready for use after the pilot. It is provided here for ease of reference. The full manual is available in appendix C7-2.

The starting point in using EAGL-I is to identify the segment of agenda mapping that is to be rated. Raters need a clear consistent strategy for identifying the part of the audio to be listened to. There are two decisions to be made here: (1) where in the audio might you identify agenda mapping, (2) how long should agenda mapping be occurring for?

In many clinical contexts agenda mapping occurs at the start of the clinical encounter which makes this decision clear – raters should listen from the start of the audio. Raters are then advised to listen for a proportion of the overall clinical encounter time (20%) to determine if agenda mapping is occurring (using the fidelity subscale). In training environments this step is more easily controlled when rating audio from other contexts raters may choose to adjust this strategy. Provided there is consistency in how the audio segment is identified the reliability of the measure should not be too greatly compromised, however this has not as yet been tested empirically.

Raters then listen to the pre-identified segment and allocate a score for each item on the measure. Behavioural anchors are embedded in the coding sheet and additional information is provided in the manual to guide the rater's choice. The fidelity subscale includes two items that capture actions suggesting there is (a) some attempt at considering a number of topics before (b) prioritising and agreeing a focus. The competence subscale reflects the skilfulness with which the clinician enacts these aspects of agenda mapping. If the clinician does not raise any new topics for discussion than the clinician agenda is marked as not applicable (n/a). The items are then averaged to provide a single agenda mapping score. A point to note is that if a student or clinician scores a 1 on both items on the fidelity subscale the competence subscale automatically gets scored as a 1 right the way through. This is because it is illogical to say that agenda mapping is not happening (i.e. fidelity subscale score) but is happening skilfully (competence subscale score).

The EAGL-I manual states that raters may choose to complete the fidelity subscale first and then listen to the segment a second time to complete the competence subscale. In practice however raters did not find this necessary. This may however be a reflection of the familiarity of the coding team with using this measure and training new raters to use EAGL-I may reveal that this strategy has value in obtaining reliable scores.

Each item on EAGL-I is assigned a global rating from 1 to 5. An average score is then calculated to provide a single agenda mapping score. This continuous variable has been used in the analyses as a total EAGL-I score. The fidelity subscale has three behavioural anchors while the competence subscale has five. This is because rating the skilfulness with which something is enacted requires greater discrimination than rating its presence or absence. While theoretically it is possible to rate the fidelity subscale at a 2 or a 4, in practice this level of discrimination did not seem reasonable. However to avoided potential confusion, the measure may be better presented on a five-point scale but with behavioural anchor embedded at three of these points only.

7.5 Strengths and limitations

The pilot phase of measure development reflects important decisions that were made about constructing the measure prior to its use in a study with third year medical students. This work was iterative and exploratory providing opportunity to test it with a number of different datasets, while concurrently refining the approach to analysis to be used with this final study. The main limitation of this phase was the small samples of data used at each stage. In retrospect, as discussed in the following chapter, the decision to reduce the number of items based on these analyses was premature. However this phase did provide opportunity to identify some issues that might arise in other datasets, for example how best to identify the agenda mapping segment. In a training scenario, such as the one reported in the following study, identifying the agenda mapping segment is more straightforward as this can be controlled more easily.

In everyday practice agenda mapping may arise at any stage of the clinical encounter, and its identification is therefore more challenging than in a training scenario. Guidance is provided in the EAGL-I manual that, prior to measurement, a consistent approach to identifying the agenda mapping segment should be agreed. The 20% rule is a useful rule of thumb for when agenda mapping is expected to occur upfront, for example if students or clinicians have been taught to start their clinical encounters in this way. In real life encounters the full audio may need to be listened to in order to identify the agenda mapping segment. In this instance it may be advisable to obtain reliability estimates in identifying the segment *before* rating that segment with the measure. As EAGL-I is developed primarily for teaching purposes it is anticipated that in most instances of its use identification of the agenda mapping segment should be reasonably easy to identify. EAGL-I should not be used where clinicians or students have not been taught agenda mapping, and the findings from the following study corroborate this.

7.6 Conclusion

This chapter outlined the approach taken in developing EAGL-I, a measure of agenda mapping in the clinical encounter. After a number of rounds of piloting, the content and design of the measure were determined. The next step was to use EAGL-I in a teaching environment and to more formally validate the measure.

8 Assessment of third year medical student agenda mapping using EAGL-I

8.1 Introduction

This chapter presents findings from a study in which third year medical students were taught agenda mapping as a way of opening a clinical encounter with patients who had a long-term condition. EAGL-I[16] was used to measure student agenda mapping with simulated patients before and after teaching and these data then used to validate the measure. This was the final step of measure development.

Up until this stage of measure development, a multi-disciplinary focus had been retained. Conceptual development work for example had embraced a multi-disciplinary perspective, as had the consensus group work, and piloting of the measure reported in the previous chapter. The aim was to develop both a model and measurement tool that could reach across differences in professional groupings, healthcare settings, patient presentations, and chronic conditions. The study presented in this chapter represents an opportunity to test the measure in one particular setting: primary care, in undergraduate medical education.

8.2 Methods

8.2.1 Aims and objectives

The aim of this study was to investigate the reliability and validity of EAGL-I scores in teaching agenda mapping to third year medical students.

[16] Note that version numbers used in the pilot process (Chapter 7) have now been dropped

Specific objectives are:

- Objective 1: To determine the extent to which EAGL-I provides a reliable measure of student agenda mapping.
- Objective 2: To investigate the hypothesis that students will have higher EAGL-I scores after teaching them "agenda mapping" than before.
- Objective 3: To investigate the hypothesis that skilful agenda mapping will result in patients presenting their full agenda upfront, i.e. that in audios with higher EAGL-I scores the scripted patient hidden agenda is more likely to be heard.

8.2.2 Overview of study design

A workshop was conducted in which third year medical students were taught agenda mapping. Data were collected at practice stations with simulated patients at three different time points during a three hour workshop: once before any teaching was delivered (pre-teaching), and twice after teaching (post-1 and post-2). Three coders used EAGL-I to rate the audio-recorded data that were then analysed to consider the reliability and validity of measurement scores. Three analyses were conducted to build an argument for measure validation.

8.2.3 Recruitment

8.2.3.1 Planning and preparation

Medical students were approached during their communication skills teaching modules and asked to indicate whether they would be interested in attending a workshop on agenda mapping. This suggested there was interest in the proposed workshops. An informal meeting was then held with third year intercalated students to discuss the best approach to recruitment.

8.2.3.2 Study recruitment

Third year medical students were invited to participate in the study via email. An information sheet was attached to the email with further details of the workshop

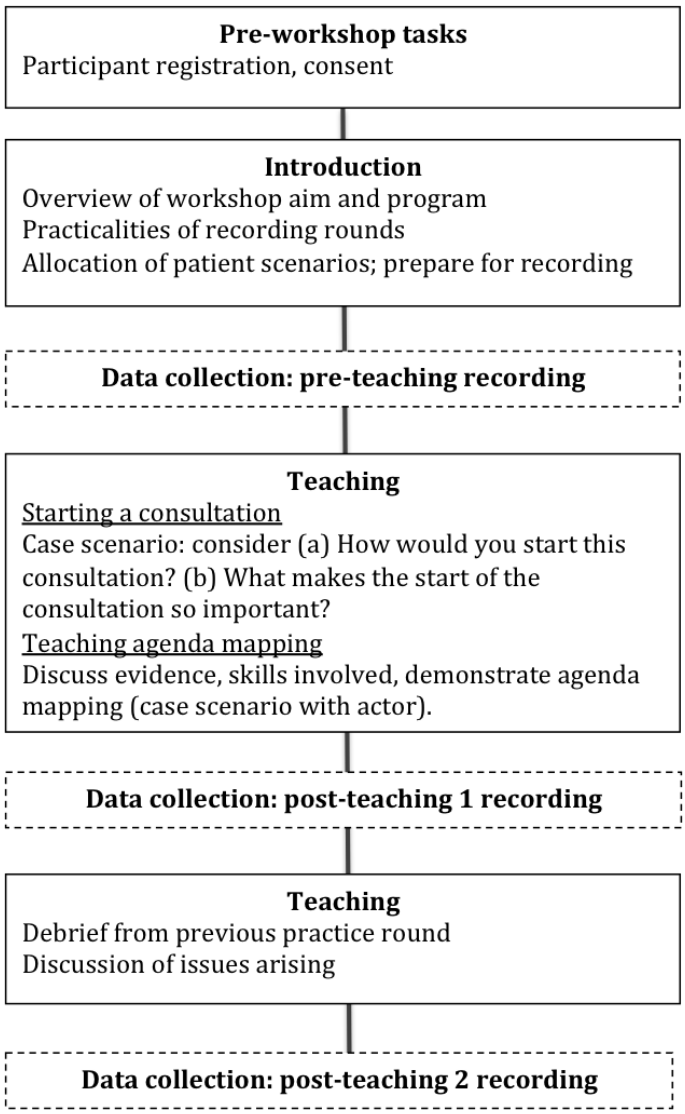
and of the study. Contact information for queries was included in the main body of the email. The candidate (NG) received queries and registered interested participants.

8.2.4 Data collection

Two workshops were planned for data collection in February and March 2011, and students self selected which one to attend. At the start of the workshop students registered, completed consent procedures and received their scenario allocations together with a briefing sheet for each scenario. After a general introduction to the workshop the first round of data collection began. Students were called up in rounds to meet with their allocated simulated patient. Students were given a signal to begin and to end the interviews.

Once all students had completed their first recording round they took part in a workshop aimed at teaching "agenda mapping" as a way of establishing shared focus at the start of a clinical encounter with patients with long-term conditions. The teaching was a mix of eliciting student knowledge and skill, didactic presentation, and demonstration with an actor. After this period of teaching students were invited back to practice agenda mapping in the next two recording rounds, coordinated like the first. Between these recordings a discussion was facilitated by way of additional teaching. An overview of the workshop design is presented in figure 8-1.

Figure 8-1: Data collection process



8.2.4.1 Development of teaching

8.2.4.1.1 Design principles

The workshop was designed to be brief and focused. Given that students have different learning styles, teaching involved a mix of methods including group discussion, didactic presentation that included visual media, live demonstration and agenda mapping practice. Grounding the learning in patient scenarios provided a context that was accessible and familiar to all learners. Finally the approach to teaching was strengths based in that it was designed to build on

what students knew and did well. This was also reflected in written feedback provided to students at the end of the workshop.

8.2.4.1.2 Teaching schedule

The aim of the workshop was to teach agenda mapping as a strategy for finding focus collaboratively at the start of a clinical encounter. A patient scenario was presented and students were asked to discuss two questions about the start of a clinical encounter. Key learning points were elicited from this discussion. Agenda mapping was then presented as a strategy to manage the start of a clinical encounter. Some evidence was presented together with a model of agenda mapping and the steps involved. The "mapping" element of agenda mapping was emphasised, with a memory hook to "log" different content elements of what they were hearing, thereby learning the skill of pausing to reflect on what might be talked about before agreeing a focus.

Students were taught to:
a) "Ask-listen-log" to capture different elements of the patient's agenda.
b) "Ask permission-raise" in clarifying their own agenda.
c) Then to "summarise" the shared agenda before "prioritizing and agreeing a focus".

The candidate (NG) then demonstrated agenda mapping with an actor playing the patient presented at the start of the teaching. This stimulated further discussion after which the students were invited to practice agenda mapping with simulated patients.

8.2.4.1.3 Materials

A teaching schedule was developed together with materials to support teaching (PowerPoint presentation, patient scenario, teaching schedule etc) (see appendix C8-1). In setting up the workshop, the candidate (NG) also developed

information packs for students, workshop facilitators, actors, door marshals and other support staff.

8.2.4.2 Development of patient scenarios

8.2.4.2.1 Design principles

Patient scenarios were developed to reflect specific similarities and differences, both in terms of patient and clinical encounter characteristics. These are summarised in table 8-1.

Table 8-1: Principles guiding the design of simulated patient case scenarios

	Similarities	Differences
Patient characteristics	• All patients will have a long term condition • All will have concern that is sensitive for them to raise • No patient will have an immediate acute problem needing clinical management – i.e. no pressing clinical priority	• Patient age – range is from age 30 to age 60 • Four different conditions are included namely hypertension, type 2 diabetes, rheumatoid arthritis and COPD • Each patient would have a different attitude to his or her condition and different readiness for changes. • Within the clinical encounter patients would present differently with some being naturally more active, and others naturally more passive.
Characteristics of clinical encounter	• Encounters occur within a primary care setting. • Patients will not have met this clinician before but will be known to the surgery (this is to make it more realistic for the students)	• Some sessions will be patient initiated, and others will be practitioner initiated

8.2.4.2.2 Process for refinement of case studies

Case studies needed to be clinically realistic and reasonably uncomplicated, allowing participants to focus on the core skills of agenda mapping as opposed to complex management decisions. Equally however if these scenarios were too simplistic this would reduce the opportunity for learning, and may impact on the variability in clinical skill captured. As a result the patient scenarios were reviewed and adjusted at four stages, following feedback from (1) two practicing

GPs, (2) actors (in a pilot workshop, Motivational Interviewing and new horizons, described previously, table 7.2), (3) intercalated BSc medical students (3rd year), and (4) a medical education expert (Professor Paul Kinnersley).

8.2.4.2.3 Actor briefing

Actors regularly involved in the communication skills course for medical students were recruited to the study. Prior to the workshop the actors received written information, and were briefed on the research and teaching objectives of the workshop.

8.2.5 Data management

8.2.5.1 Data quality

The simulated clinical encounter was digitally recorded using a hand-held digital recorder. Two simultaneous recordings were made of each encounter to ensure no loss of data occurred.

8.2.5.2 Data coding

Three raters (CL, IC, and the candidate, NG) coded the first three minutes of each audio using EAGL-I (Chapter 7, section 7.4.3.1). These raters were involved in the earlier pilot work and were therefore familiar with EAGL-I. They received no additional training. Raters were familiar with the study design, though audios were numbered so that the occasion of measurement was concealed. The raters had no further contact with each other about the rating task until the rating of the full sample had been completed.

For the third analysis reported here, an additional rater (PT) was recruited to listen to the first three minutes of the audios and identify whether or not the patient had expressed their scripted hidden agenda. One of the five patient scenarios did not include a hidden agenda and was therefore excluded from this sample. For this task the rater (PT) was asked to provide a yes/no answer. Training was provided by way of written information and a half hour telephone

session to explain the background and principles of the task. Both the third rater and the candidate (NG) then coded 10 of the audios in order to identify discrepancies and questions that might arise through the process. After an additional telephone session to consolidate the task, the rater (PT) completed the remainder of the sample.

8.2.5.3 Consent and confidentiality

Participant consent to participate in the study was obtained in writing at the start of the workshop.

8.2.5.4 Data protection

Raters received data on password protected, encrypted data sticks, and signed data protection and confidentiality agreements at the start of the study.

8.2.6 Data analysis

Descriptive statistics together with three analyses considering (1) the reliability of the measure, (2) its ability to detect change before and after teaching, and (3) the relationship between its scores and the patient's expression of the scripted hidden agenda are presented.

8.2.6.1 Descriptive statistics

Summary statistics are presented to describe how EAGL-I captured student agenda mapping. Means, medians, standard deviations and the interquartile range (IQR) are presented for individual items as well as for student total scores both across the two workshops (where homogeneity is expected) and across the three occasions of data collection (where greater heterogeneity is expected). Distribution of data was examined by looking at histograms.

8.2.6.2 Analysis 1 – reliability

This analysis considers the extent to which EAGL-I provides a reliable measure of student agenda mapping. The reliability of a measure relates to its consistency and a measure can be said to be reliable when the same results are obtained with repeated measurements of the same phenomena (Streiner and Norman 2003). Reliability places an "upper limit" on validity such that "the higher the reliability, the higher the possible validity" (Streiner and Norman 2003, p.175). An unreliable measure cannot therefore produce valid findings. It is a necessary but not sufficient requirement for valid inferences to be made (Cook and Beckman 2006).

G theory was used in this analysis to consider two sources of variability – the design of the measure (subscales and items) and its administration (raters). When planning a G study the first step is to consider the sources of variance that may be influencing the measurement procedure, and how they relate to each other (Cardinet, Johnson et al. 2010, Bloch and Norman 2012). The variance partition diagram (Cronbach, Gleser et al. 1972, Cardinet, Johnson et al. 2010) is a useful way of visually depicting these sources of variance (see appendix C8-2).

The use of G theory means that all hypothesised and measureable sources of variation are considered in a single design (Bloch and Norman 2012). Consequently a G coefficient was calculated as a global indicator of the reliability of EAGL-I scores. In addition both internal consistency and inter-rater reliability was investigated in this single analysis. Table 8-2 (Bloch et al 2012) provides an overview of the different elements that informed the design of the study.

To reflect its distinction from classical test theory, G theory uses distinctive terminology (Bloch and Norman 2012). This can create confusion when working across different core texts describing G theory (Bloch and Norman 2012). The terminology used here is that outlined by Bloch and Norman (2012) and detail explaining the terminology used is provided in the footnotes.

Table 8-2: Approach to analysis of reliability of EAGL-I scores

Object of measurement: Facet of differentiation[a]	***Facets of generalisation[b]***		***Question***	***Classical Test Theory equivalent***
	Fixed[c]	***Random[d]***		
Audio	Item, Subscale	Rater	To what extent can we generalise EAGL-I scores from one rater to another?	Inter-rater reliability
Audio	Rater	Subscale, Item	To what extent can we generalise across EAGL-I items and scales?	Internal consistency
Audio	Rater, Item	Subscale	To what extent can we generalise across EAGL-I subscales?	
Audio	Rater, Subscale	Item	To what extent can we generalise across items within subscales in EAGL-I?	Average internal consistency within each subscale
Audio		Rater, Subscale & Item	To what extent can we generalise to a comparable measure of agenda mapping?	

[a] Facet of differentiation (object of measurement)- i.e. the set of objects that are to be compared, where variance is desired or expected ("signal"). A measure is designed to maximize this variance.
[b] Facets of generalisation – these contribute to measurement error ("noise"). A measure is designed to minimise variance arising from these facets.
[c] Fixed facets are those that are held constant (and do not contribute to error) for that particular analysis
[d] Random facets are the focus of generalization (and those that contribute to error) for that particular analysis.

First a G study is conducted, and this is followed by D studies in which different levels of the included variables are altered to consider how the reliability coefficient changes.

<u>Generalisability studies (G studies)</u>

G theory analyses are based on analysis of variance (ANOVA). A G coefficient is calculated that provides a global indicator of reliability. G coefficients are intra-class correlation coefficients providing a ratio of differentiation variance ("true" variance") to total variance (i.e. "true" plus error variance). These coefficients are presented in values between 0 (completely unreliable measurement) and 1 (perfectly reliable measurement).

In interpreting G coefficients in this study, there are two points to note:

(1) Coefficient values of ≥ 0.7 were considered acceptable, with values ≥ 0.8 preferable. These guidelines are consistent with other published measures using G theory in their validation (Fraser, McKinley et al. 1994, Lang, McCord et al. 2004, Howells, Davies et al. 2010) as well as with the core texts (Cardinet, Johnson et al. 2010, Bloch and Norman 2012).

(2) Both the absolute value (Φ) and the relative value (Ep^2) are presented. In interpreting these coefficients, the absolute value (Φ) gives information about the exact position a student occupies on a measure while the relative value (Ep^2) gives this information relative to other students.

<u>Decision studies (D studies)</u>

Decision studies (D studies) are performed to consider how reliability coefficients change under different conditions. Decisions about which variables to manipulate are guided by appreciation of the error variance components, as well as by practical considerations of the measurement procedure. For example it may be impractical to change the measure itself, but increasing the number of raters could compensate for weaker reliability.

The design of this study allowed for investigations of internal consistency and inter-rater reliability. In the framework of G theory these analyses are framed as questions of generalisability as follows:

(1) *To what extent can we generalise across EAGL-I subscales and items?*

Conceptualised in G theory, EAGL-I items are considered a random sample of an infinite set of items that could have been used to measure agenda mapping. The question of whether the internal structure of EAGL-I i.e. the items and subscales provide a reliable assessment of agenda mapping is framed in terms of generalisability across subscales and items. In this case, even though the conceptual and technical approach to analyses are different, the G coefficient is equivalent to Cronbach's alpha, and represents the internal consistency of the measure designed with two subscales of two and three items respectively

(Cardinet, Johnson et al. 2010, Bloch and Norman 2012). Relative coefficient values (Ep^2) are of interest here[17].

(2) *To what extent can we generalise across raters?*
These analyses are the equivalent of inter-rater reliability analyses. Absolute coefficient (Φ) values are of interest here as the raters used in this study are considered a random sample of all possible raters. Relative coefficient (Ep^2) values would be useful if we wanted to compare EAGL-I scores within the specific rating team used in this study. Both values are considered in the analysis but the absolute values are of most interest.

Separate analyses were also conducted to compare pre-teaching and post-teaching (post1, post2) occasions of measurement as it was anticipated that the variance in these groups would be different. Lower reliability coefficients for pre-teaching occasion of measurement were anticipated. This was for two reasons. Firstly there were more observations in the post-teaching group. Secondly the anticipated effect of teaching would be to reduce the variability in student behaviour in line with the communication strategy being taught.

G_String IV software (Bloch and Norman 2011) was used for these analyses.

8.2.6.3 Analysis 2 – change in student agenda mapping (responsiveness)

In developing an argument for the validity of interpretations of EAGL-I scores, the following hypothesis was investigated: students will have higher EAGL-I scores after teaching them "agenda mapping" than before teaching. If this occurs it suggests the measure is able to respond to change. As the data were collected immediately before and after a period of teaching, it is reasonable to assume that differences in scores obtained on EAGL-I would be attributable to the teaching.

[17] Note: as a point of comparison Cronbach's alpha and item-total correlations were conducted to investigate internal consistency using classical test theory. These are presented in appendix C8-3.

This analysis considers how student scores changed at the three occasions of measurement (pre-teaching, post1 and post2). It is conducted in two stages. First the difference between teaching occasions is examined using summary statistics (mean, 95% confidence intervals) and a repeated measures ANOVA with post hoc analysis of the difference between occasions.

A G study then examines this variance to identify the major contributing factors to the variation (see appendix C8-3). The facet of differentiation for this study was "occasion" as this is where variance is anticipated and desirable. Three facets of generalisation were considered: students (candidates) (C), raters (R) and items (I)[18]. The variance partition diagram used for this study design is presented in appendix C8-2.

PASW statistics 18 (IBM 2009), G_String IV (Bloch and Norman 2011) and EduG (Edumetrics 2010) software packages were used to support these analyses.

8.2.6.4 Analysis 3 – prediction of hidden agenda

Multilevel logistic regression was used in this analysis. For the included audios (n=60), student agenda mapping score was averaged across the three raters' observations. This yielded a single EAGL-I total score per audio (the predictor variable). The expression of the hidden agenda was the outcome variable.

Multilevel logistic regression was performed in the analyses to account for clustering of EAGL-I total scores at two levels: (1) occasion of measurement, and (2) patient scenario.

PASW statistics 18 software was used for these analyses (IBM 2009).

[18] This design was simplified from a five facet design where items were nested in subscales (I:S) and candidates were nested in workshops (C:W)

8.2.7 Governance

The Cardiff University School of Medicine Research Ethics committee approved the study.

8.3 Results

The analysis is presented here in four sections:

(1) Descriptive statistics

(2) Analysis 1: EAGL-I reliability

(3) Analysis 2: EAGL-I used to detect change in student agenda mapping

(4) Analysis 3: EAGL-I prediction of the scripted hidden agenda

8.3.1 Descriptive statistics

Two workshops were held with 16 and 10 students in each. Each of the 26 students that took part in the study was observed at three different occasions in the workshop, and by three different raters through their audio recordings. This yielded 234 observations for analysis. Descriptive statistics are presented in table 8-3. The lowest scoring item was F2 (prioritising to agree a focus) and the highest scoring item was C1 (eliciting the patient's agenda). The full range of possible values (1-5) was used for each of the items, and standard deviations for each of the items ranges from 0.944 to 1.944.

Table 8-3: Descriptive statistics for each item of EAGL-I (n= 234)

Items*	Mean*	SD	Median	Inter-quartile range
F1: Identifying talk topics	3.6	1.02	3.0	2.0
F2: Agreeing a focus	1.8	1.16	1.0	2.0
C1: Eliciting the patient's agenda	3.3	1.05	4.0	1.0
C2: Raising clinician's agenda	2.9	0.94	3.0	2.0
C3: Establishing shared focus	2.5	1.94	2.0	1.0
Total*	*14.1*	*4.04*	*14.0*	*6.0*

*F1, F2 = items 1&2, fidelity subscale, C1, C2, C3 = items 1,2,&3, competence subscale

*Total EAGL-I score per student[19] (i.e. the average of the 5 items)

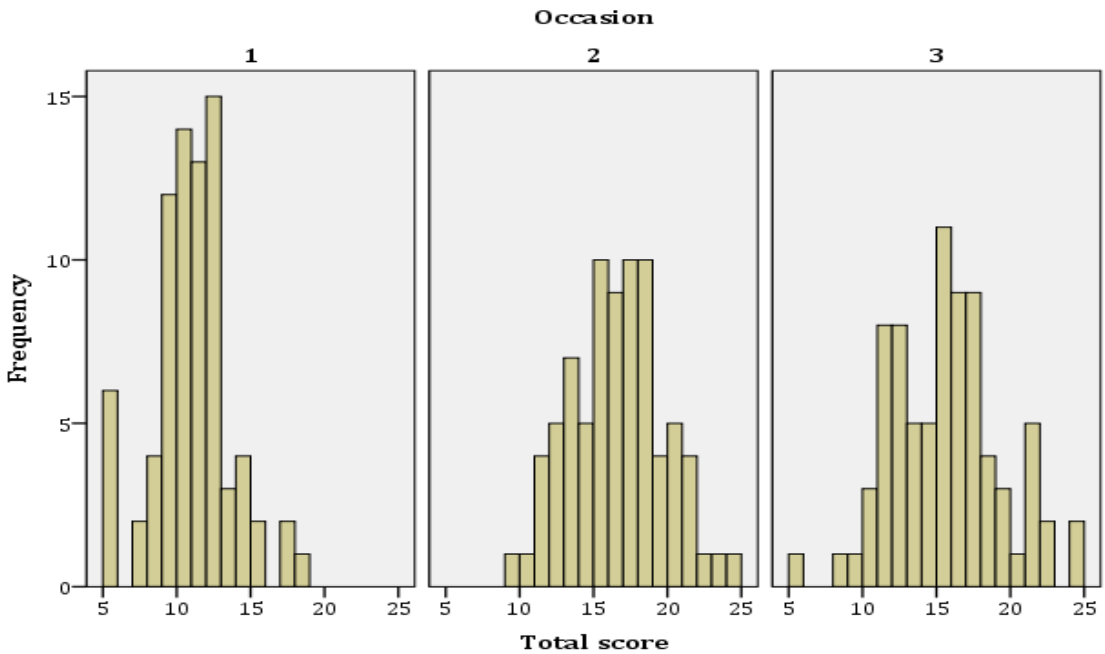
[19] A total EAGL-I score was calculated as an indicator of overall skillfulness in agenda mapping.

Table 8-4 presents the summary student EAGL-I scores at each workshop and then at each occasion of measurement. Workshop summary scores suggest a homogeneous group with similar skill levels evidenced by similar means and identical range. Both the means and the range of scores increase in both occasions after teaching occurred. This suggests an increase in agenda mapping after teaching. Data are normally distributed. Histograms are presented in figure 8-2.

Table 8-4: Descriptive statistics of summary student scores by workshop and occasion (n=234)

	N	Mean	SD	Median	IQR
Workshop					
1	144	14.0	3.91	13.9	11.0 – 17.0
2	90	14.3	4.25	14.4	11.0 – 17.0
Occasion					
Pre-teaching	78	10.8	2.79	11.0	9.0 – 12.0
Post-teaching 1	78	16.2	3.20	16.0	14.0 – 18.0
Post-teaching 2	78	15.3	3.78	15.0	12.0 – 17.0

Figure 8-2: Histograms of total EAGL-I scores by occasion of measurement



8.3.2 Analysis 1 - reliability

G coefficients are presented in table 8-5. The results show that when considering the score as an "absolute" measure of a student agenda mapping, under study conditions (i.e. 3 raters), 67.5% of EAGL-I variance is detecting agenda mapping while 32.5% of the variance is error variance. Relative to other students, 83.2% of the score is detecting agenda mapping while 16.8% is error variance (Ep^2=0.832). When a single rater uses the measure the G co-efficient is 0.540 (Φ) and 0.653 (Ep^2).

Table 8-5 presents the variance components apportioned to differentiation and error variance. Identifying the main sources of error here has informed the D studies presented below.

Table 8-5: G study table apportioning variance to differentiation variance and error variance (absolute and relative)

Source of variance	Differentiation variance	Source of variance	Relative error variance	% relative	Absolute error variance	% absolute
A	0.36193		.....		.....	
	.....	R	.....		(0.00000)	0.0
	.....	S	.....		(0.00000)	0.0
	.....	I:S	.....		0.09596	55.3
	.....	AR	0.03349	46.1	0.03349	19.3
	.....	AS	0.00117	1.6	0.00117	0.7
	.....	AI:S	0.01389	19.1	0.01389	8.0
	.....	RS	.....		(0.00000)	0.0
	.....	RI:S	.....		0.00503	2.9
	.....	ARS	(0.00000)	0.0	(0.00000)	0.0
	.....	ARI:S	0.02409	33.2	0.02409	13.9
Sum of variances	0.36193		0.07265	100%	0.17364	100%
Standard deviation	0.60161		Relative SE:	0.26953	Absolute SE:	0.41670
Coef_G relative	0.83					
Coef_G absolute	0.68					

*Note: A = audio, R = rater, S= subscale, I:S – items (nested in subscale); Yellow highlights indicate largest variance components for relative measurement; Green highlights indicate largest variance components for absolute measurement.

For relative measurement the greatest sources of error variance (highlighted in yellow) occurs at the point of interaction of facets so, in the way each rater interacts with the audio (AR; 46.1%), and the interaction between items (nested in subscales) and the audio (AI:S; 19.1%). This suggests that increasing the number of raters or items may reduce measurement error. There is also a relatively high proportion of error at the point of interaction of all the facets (ARI:S; 33.2%). This interaction between all the facets is confounded with

random error and these effects are difficult to control (Cardinet, Johnson et al. 2010).

For absolute measurement (highlighted in green) over half the error variance is attributed to the items (I:S, 55.3%) suggesting that increasing the number of items on the measure may reduce error. Much of the remaining error variance occurs at points of interaction with raters and audios (AR 19.3%), and with all facets together (ARI:S 13.9%).

A D study was conducted to consider how the G coefficient changes with different numbers of raters and items. These are presented in table 8-6.

Table 8-6: D studies with changing numbers of raters and items

	1 rater		2 raters		3 raters	
Items	Ep^{2}*	ϕ*	Ep^{2}	ϕ	Ep^{2}	ϕ
5 items	0.666	0.575	0.787	0.671	0.838	0.711
6 items	0.684	0.603	0.802	0.699	0.850	0.738
7 items	0.697	0.624	0.812	0.720	0.860	0.760
10 items	0.723	0.666	0.832	0.762	0.876	0.801
15 items	0.744	0.702	0.848	0.799	0.890	0.837

* Ep^2 = relative; Φ = absolute

For absolute measurement, reliability of EAGL-I scores at ≥ 0.700 can be obtained with a combination of six items with two raters (Φ = 0.699) or five items with three raters (equivalent to study conditions) (Φ = 0.711[20]). For relative measurement, a single rater may provide reliable assessment (reliability ≥ 0.700) using EAGL-I if the number of items on EAGL-I were increased to at least 7 (Ep^2= 0.697).

[20] Note: these figures are slightly different to those obtained under study conditions because of the software programs used. EduG cannot handle unbalanced designed so the variance components associated with the subscales have been omitted, providing slightly different results.

8.3.2.1 EAGL-I reliability – subscales and items

These results (table 8-7) suggest that 83.6% of the variance across EAGL-I scores is attributable to agenda mapping, with 16.4% being attributable to error. Generalisability across the measure as it is currently designed with subscale and items suggests reliable measurement of agenda mapping (Ep^2= 0.836) (table 8-7) when the full measure is used. That the coefficient value is much the same across subscales and items (Ep^2 = 0.836) (table 8-7) as when averaged across items only (Ep^2 = 0.844) (table 8-7) suggests that the subscale structure makes little difference to the internal consistency of the measure overall. Generalisability across the subscales provides a measure of the average correlation between subscale scores (Ep^2 = 0.726) (table 8-7). When individual subscales are considered, the reliability of the measurement reduces. Generalisability across items in the fidelity subscale fell below the guideline of 0.700 (Ep^2=0.610) (table 8-7). This subscale consists of only two items, which may explain this finding.

Table 8-7: Generalisability across subscales and items

	Ep^2	ϕ
Generalisability across subscales & items	0.836	0.691
Generalisability across all items only (subscales excluded)	0.844	0.729
Generalisability across subscales only	0.726	0.538
Generalisability across items only		
• Fidelity subscale	0.610	0.311
• Competence subscale	0.786	0.718

* Ep^2 = relative; Φ = absolute

8.3.2.2 EAGL-I reliability – across rater

When three raters use EAGL-I, 85.5% of the observed variance in their total scores is related to differences in agenda mapping, with 14.5% of the variance attributable to error (Φ=0.855) (table 8-8; 3 raters). When considering a single item, 70.7% of the overall variance detects differences in EAGL-I scores, with 29.3% attributable to error (Φ = 0.707) (table 8-8, 3 raters). However when a single rater rates the audio the error increases to 33.70 % for total scores (Φ = 0.663) and 55.4% for a single item (Φ=0.446) (table 8-8, 1 rater).

Table 8-8: Generalisability across raters

	1 rater		2 raters		3 raters	
Items within subscales	Ep^2	ϕ	Ep^2	ϕ	Ep^2	ϕ
IRR for any one item	0.484	0.446	0.652	0.617	0.738	0.707
IRR for total score	0.682	0.663	0.811	0.797	0.865	0.855
Items only	Ep^2	ϕ	Ep^2	ϕ	Ep^2	ϕ
Average – IRR total score	0.692	0.677	0.818	0.807	0.871	0.863
Fidelity subscale – IRR total score	0.625	0.565	0.769	0.722	0.833	0.796
Competence subscale – IRR total score	0.194	0.190	0.325	0.319	0.420	0.413

* Ep^2 = relative; Φ = absolute

These observations suggest that at least 2 (Φ = 0.797) and preferably 3 (Φ = 0.855) raters are needed for reliable assessment of agenda mapping using EAGL-I. Inter-rater reliability for the competence subscale alone is unacceptably low with Φ=0.190 with a single rater (suggesting 81.0% error variance) and Φ = 0.413 for 3 raters (suggesting 58.7% error). This suggests that the full measure should always be used. The subscale design was conceptually driven. Empirical examination demonstrates however, that these subscales cannot be separated and used to produce a reliable assessment of agenda mapping.

8.3.2.3 Comparison of pre-teaching and post-teaching occasions of measurement

Comparisons of EAGL-I reliability between pre-teaching and post-teaching occasions of measurement, findings suggest poorer overall reliability at the pre-teaching occasion of measurement (table 8-9).

Table 8-9: G coefficients for all occasions, pre-teaching and post-teaching occasions

	1 rater		2 raters		3 raters	
	Ep^2	ϕ	Ep^2	ϕ	Ep^2	ϕ
All occasions (3 occasions)	0.653	0.540	0.777	0.631	0.832	0.675
Pre-teaching only	0.214	0.164	0.331	0.233	0.411	0.277
Post-teaching only (2 occasions)	0.579	0.435	0.711	0.524	0.774	0.571

* Ep^2 = relative; Φ = absolute

With regard to generalisability across raters (table 8-10), there is again poorer reliability pre-teaching than post-teaching. Post teaching, reliable measurement may be obtained with 2 or more raters.

Table 8-10: Generalisability across raters - comparison

	1 rater		2 raters		3 raters	
	Ep^2	ϕ	Ep^2	ϕ	Ep^2	ϕ
All occasions	0.682	0.663	0.811	0.797	0.865	0.855
Pre-teaching	0.291	0.274	0.451	0.430	0.552	0.531
Post-teaching	0.628	0.580	0.771	0.734	0.835	0.806

* Ep^2 = relative; Φ = absolute

8.3.3 Analysis 2: change in student agenda mapping (responsiveness)

8.3.3.1 Is there a difference in EAGL-I scores across occasions of measurement?

Summary statistics and 95% confidence intervals are presented in table 8-11 as well as figure 8-3 and 8-4. These suggest that student scores did improve post teaching.

Table 8-11: Means and 95% confidence intervals for each occasion

Occasion	Mean	95% CI
Pre-teaching	10.8	10.1 to 11.4
Post-teaching 1	16.2	15.5 to 16.9
Post-teaching 2	15.3	14.4 to 16.1

There is an increase in the total score from the pre-teaching occasion of measurement to the 2 post teaching occasions. The second post-teaching occasion of measurement drops slightly from the first suggesting a slight decline in the teaching effect toward the last part of the workshop.

Figure 8-3: Box plots of the distribution of EAGL-I scores by occasion

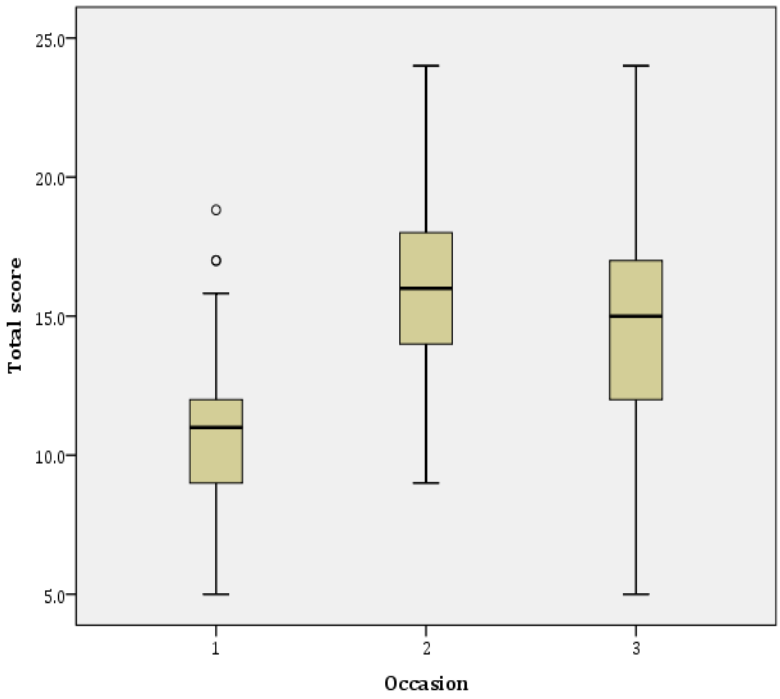


Figure 8-4: EAGL-I mean scores and 95% confidence intervals for 3 occasions (pre-teaching, post-1, and post-2)

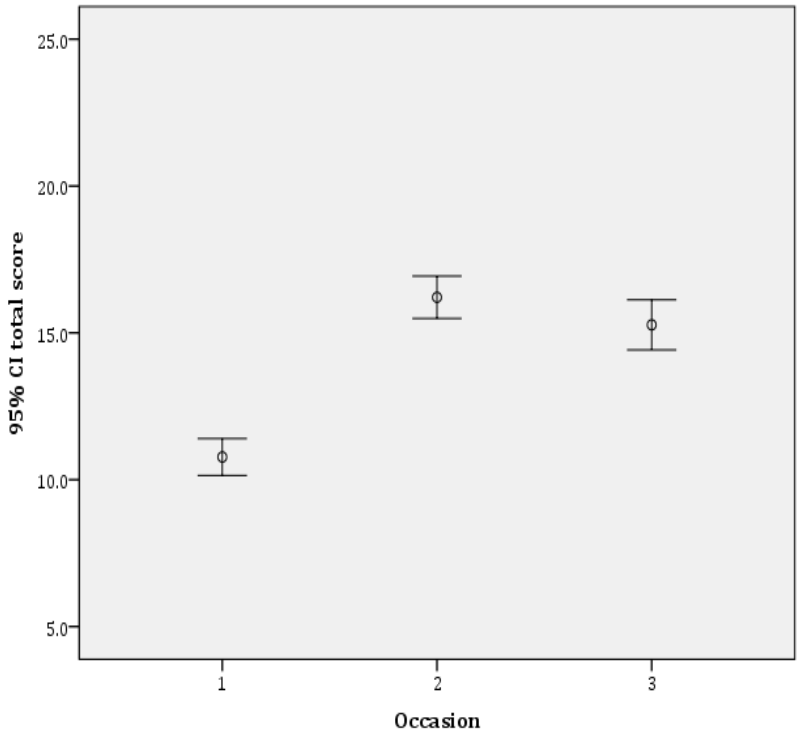


Table 8-12: Post-hoc analysis comparing differences in EAGL-I scores across three occasions of measurement

Occasions		Mean difference	Standard error	Significance	95% CI for difference	
					Lower	Upper
Pre-teaching	*Post-1*	-5.833	0.479	<0.001	-7.006	-4.661
Pre-teaching	*Post-2*	-4.679	0.526	<0.001	-5.966	-3.393
Post-1	*Post-2*	1.154	0.516	0.0850	-0.109	2.417

A one-way, repeated measures ANOVA was used to compare EAGL-I scores across occasions of measurement (pre-teaching, post1 and post2). There was a significant effect for occasion of measurement (Wilks' Lambda = 0.324, $F_{2,76}$ = 79.343, p<0.001). An effect size is estimated with the multivariate partial eta squared statistic (0.676). Based on Cohen (1988) criteria, this suggests a moderate effect of change across these three occasions (Pallant 2010).

A post-hoc comparison was then conducted to examine the differences between groups (see table 1-12). There was a statistically significant difference between the pre-teaching occasion of measurement and each post teaching occasion of measurement. Statistical significance was obtained both before (with alpha = 0.05) and after Bonferroni adjustment (with alpha = 0.05/3=0.016). However there was no significant difference in means between the two post-teaching occasions.

8.3.3.2 G study

The results presented in the previous section clarify that there was a difference between pre- and post-teaching occasions of measurement using EAGL-I.

A G study confirms this finding (table 8-13). The absolute coefficient (Φ) of 0.750 (Table 8-13) suggests that 75.0% of the variance of EAGL-I has to do with the occasion of measurement. Of the remaining unexplained variance, 80% (20% of the overall variance) of it lies within the items (table 8-13, green highlight). The relative coefficient (Ep^2) of 0.950 (table 8-13) suggests that, when scores obtained at each occasion are compared, 95.0% of the variance has to do

with the occasion of measurement. Error variance in this instance has to do with the interaction between occasion of measurement and candidates (44.7%) and the interaction between occasion and raters (26.8%) (table 8-13, highlighted in yellow). For a study of this kind – i.e. when EAGL-I scores are to be used to estimate agenda mapping - relative measurement provides the most meaningful estimate of reliability.

Table 8-13: G study table apportioning variance to differentiation variance and error variance (absolute and relative) for EAGL-I v1.5.1 scores at three occasions of measurement (pre-teaching, post-1, and post-2).

Source of variance	Differ-entiation variance	Source of variance	Relative error variance	% relative	Absolute error variance	% absolute
O	0.32606		.....		.....	
	.....	C	.....		0.00071	0.6
	.....	R	.....		(0.00000)	0.0
	.....	I	.....		0.08894	80.0
	.....	OC	0.00758	44.7	0.00758	6.8
	.....	OR	0.00454	26.8	0.00454	4.1
	.....	OI	(0.00000)	0.0	(0.00000)	0.0
	.....	CR	.....		(0.00000)	0.0
	.....	CI	.....		0.00021	0.2
	.....	RI	.....		0.00428	3.9
	.....	OCR	0.00161	9.5	0.00161	1.4
	.....	OCI	0.00051	3.0	0.00051	0.5
	.....	ORI	0.00173	10.2	0.00173	1.6
	.....	CRI	.....		0.00007	0.1
	.....	OCRI	0.00098	5.8	0.00098	0.9
Sum of variances	0.32606		0.01695	100%	0.11116	100%
Standard deviation	0.57102		Relative SE:	0.13020	Absolute SE:	0.33341
Coef_G relative	0.95					
Coef_G absolute	0.75					

Note: O = occasion of measurement; C= medical students; R= rater, I – items; Yellow highlights indicate largest variance components for relative measurement; Green highlights indicate largest variance components for absolute measurement.

8.3.4 Analysis 3: prediction of hidden agenda

Simple logistic regression was performed using EAGL-I total scores predicting the patient hidden agenda. The model was statistically significant (n=60, χ^2 = 20.440, p<0.001). It explained between 28.9% (Cox and Snell R square) and 39.2% (Nagelkerke R squared) of the variance in expression of the hidden agenda and correctly classified 80.0% of cases. The odds ratio was 1.528 (95% CI 1.212 to 1.927).

Multilevel logistic regression analyses suggest that EAGL-I scores predict the expression of the patient's scripted hidden agenda irrespective of any effect of occasions, or of patient scenario (n=60, wald χ^2 = 8.019, p=0.005). For each score increase in EAGL-I simulated patients were 1.528 times more likely to express their scripted hidden agenda (OR = 1.528, 95% CI 1.139 to 2.049). This finding was consistent regardless of any potential clustering by occasions of measurement or patient scenarios.

8.4 Discussion

The primary aim of this study was to investigate the reliability and validity of EAGL-I scores in teaching agenda mapping to third year medical students. Results suggest that EAGL-I does provide a reliable measure of student agenda mapping under the following conditions: if a student has been formally taught agenda mapping, if a student has been observed on 2 or more occasions and their scores are compared (e.g. by looking at a pre-teaching occasion and a post teaching occasion, and considering whether there was an increase in skilfulness), and if two or more trained raters are used for each observation. Amendments to the measure may improve the measure's reliability. Having established the reliability of EAGL-I scores, two hypotheses were examined to build an argument for validity. Empirical investigations confirmed these hypotheses, suggesting that EAGL-I scores represent a valid assessment of agenda mapping.

Findings from this study contribute to the argument for EAGL-I validity. While work conducted through the earlier part of this thesis provides evidence of content validity this study provides evidence of reliability and predictability in the relationship of EAGL-I score with other variables (Downing 2003). These are important sources of evidence for building an argument for validity (American Educational Research Association (AERA), American Psychological Association (APA) et al. 1999, Downing 2003).

8.4.1 Reliability

The first objective of this study was to determine the extent to which EAGL-I provides a reliable measure of student agenda mapping. Findings suggest that when the full measure is used by a minimum of two raters for each clinical interaction, reliable assessment is obtained.

The use of G theory in investigating the reliability of EAGL-I sores meant that a number of sources of variance were considered in a single design. The advantage here was threefold. Firstly, a single reliability coefficient was produced as a global estimate of reliability (Cardinet, Johnson et al. 2010). Secondly a reliability coefficient for each individual variable (e.g. rater) was estimated across multiple observations, effectively increasing the sample size and improving precision. Third, interaction effects between variables (e.g. rater interaction with the measure subscale and items) were estimated (Cardinet, Johnson et al. 2010). In addition these analyses allowed for identification of major sources of error that could then be controlled in subsequent investigations. In contrast with classical test theory reliability coefficient values are not the central focus in analyses based on G theory (Cardinet, Johnson et al. 2010). What is more important is observing how reliability coefficients change under different conditions. In this way coefficients provide an indication of conditions under which the effect of measurement error can be minimised.

From this perspective, the following conclusions may be drawn about the reliability of EAGL-I scores in this study:

(1) At least two raters should rate each clinical encounter
(2) The full measure should be used and while the subscale design is supported conceptually, empirically the measure assesses a single construct and these subscales cannot be separated
(3) More reliable assessments can be made after teaching students agenda mapping than before. This is because before teaching student agenda mapping is more variable, while after teaching student agenda mapping becomes more homogeneous. If the measure is to be used before teaching, more observations per student should be made.

EAGL-I provides a poor measure of agenda mapping prior to teaching. This observation is consistent with what was observed in the pilot stage, i.e. that in examples of clinical practice where agenda mapping has not been taught, the measure performs poorly. An explanation for this is that teaching has the effect of unifying skills into a *structured* process of agenda mapping, as has been defined and developed earlier in this thesis. In other words, teaching enhances the homogeneity of student agenda mapping, bringing student competence up to a particular standard. Post-teaching there will still be variability among students but this variability will be of the aspects of agenda mapping that we are looking to assess. Consequently reliability coefficients should (and did) increase when looking at how the measure performed post-teaching.

This does suggests though that EAGL-I may not provide reliable measurement of agenda mapping in samples of practice where it has not been taught. It is reasonable to assume that clinicians may be using skills that are relevant to agenda mapping, for example students are routinely taught skills in eliciting the patient's presenting concern. The difference is that the skill of "eliciting the patient's agenda" *in the service of* agenda mapping, has a subtly different form in that the aim is to identify potential talk topics rather than understand the patient's presenting concern in detail.

8.4.2 Validity

Findings from this study contribute to the argument for EAGL-I validity. Work conducted through the earlier part of this thesis provides evidence of *content*[21] validity, and the investigations of EAGL-I's reliability provide "*internal structure*" evidence (Downing 2003). Additionally, the *relationship* between EAGL-I total scores and other variables has been investigated demonstrating that EAGL-I functions in a way that can be predicted theoretically from the conceptualisation of agenda mapping presented in this thesis.

8.4.2.1 EAGL-I can detect change in student agenda mapping after teaching

Evidence supporting the first hypothesis suggests that the measure is sensitive to changes in student agenda mapping. This is important to have established, particularly as the measure was designed for use in educational settings.

A G study was conducted to complement findings from the ANOVA with post-hoc analysis comparing difference in EAGL-I total scores. Using G theory in this way is a valid but perhaps unconventional approach (Norman 1989). Despite its unconventionality this is nevertheless an approach that can be taken when considering whether EAGL-I is responsive to change (Cardinet, Johnson et al. 2010). Using this approach allowed for more detailed examination of the variance across occasions and to identify where much of the error lies. For absolute measurement, much of the error lies at the variability among items suggesting that increasing the number of items on the measure may be useful in improving measurement precision.

[21] The italics here signify one of five categories of sources for validity evidence as outlined in the Standards for Educational and Psychological testing (American Educational Research Association et al 1999)

8.4.2.2 Higher EAGL-I scores are more likely to result in the patient's hidden agenda being expressed

Evidence supporting this second hypothesis suggests that the measure is performing in a predictable way in line with its underlying construct. This is important to have established, particularly given the importance of eliciting the full patient agenda evident in the published literature (Beckman, Frankel et al. 1984, Marvel, Epstein et al. 1999, Mauksch, Hillenburg et al. 2001, Mauksch, Dugdale et al. 2008). Rodondi et al (2009) noted that patients, who did not raise agenda items toward the end of the visit, were more likely to have been asked at least twice about their agenda during the course of that visit. The way in which clinicians asked about the patient agenda was as important as the fact that they did ask. Interaction analysis of medical visits identified orientation statements and statements in which information is exchanged as also being linked with whether the patient expresses an agenda item at the end of the visit or not (White, Levinson et al. 1994). Skills identified in these studies are integral parts of agenda mapping and of EAGL-I.

An advantage of this study was that characteristics of the patient and their agenda could be controlled, allowing for investigation of this hypothesis with relative ease. It is interesting to note that this finding holds even when controlling for the effect of occasions of measurement, suggesting that the link between total EAGL-I scores and expression of the hidden agenda is not affected by the occasion of measurement (i.e. the influence of teaching). What is suggested here is that patient expression of their full agenda in the pre-teaching group did not occur purely by chance. In addition, aspects of EAGL-I tap into some of the skilfulness involved in enabling patients to express their full agenda. Indeed EAGL-I taps into not just the presence of a skill (fidelity subscale), but also the quality with which that skill was enacted (competence subscale). However the structure of agenda mapping deliberately creates space for the patient to raise their ideas and concerns so that they are *more likely* to express them. This was demonstrated in this study.

8.4.3 Strengths and limitations

8.4.3.1 Non-representative sample

The statistical approach presented above assumes random sampling of all components (Cronbach and Shavelson 2004). The student sample in this study was however self selected and represents a cohort of third year medical students who are interested in communication skills and self-motivated to attend a voluntary workshop. Rather than invalidate the findings, this observation impacts the interpretations that can be made using these data. It is possible for example that EAGL-I may perform differently in a more representative sample of third year medical students. Investigations of reliability depend on variability within a sample and it is hypothesised that a more representative sample would include greater variability in agenda mapping. Reliability findings are unlikely to be compromised in this instance, although there may be poorer reliability indices pre-teaching with greater variability in baseline agenda mapping.

8.4.3.2 Rater bias

One of the strengths of this study was that three raters were involved. However a limitation arises here too. Firstly, the candidate (NG) was part of the rating team. Because of her familiarity with every aspect of the training programme, there were instances in which the occasion of measurement (pre or post teaching) was identifiable. This may have introduced bias in the ratings. To mitigate this, the candidate (NG) did two things. Firstly the order of the audios being rated was mixed so that there was no easily identifiable pattern when rating tapes (e.g. by rating all the pre-teaching audios, then the post-teaching ones). Secondly she used the coding manual and behavioural anchors at all times.

Secondly the rating team was comprised of two raters (CL, IC) who had been involved in the development of the measure itself. While this is not in itself a limitation it does impact on the conclusions that can be drawn about how feasible it is for others to use the measure. On reflection, a more rigorous approach would have been to train a new team of raters to use the measure with

this data set. This process would have given a more realistic assessment of the feasibility of using the measure. While the process of development was lengthy and time consuming, the aim of this process was to produce an uncomplicated tool that could be used with ease in a teaching environment. Feasibility needs testing therefore, in which new raters are trained to use the measure, reliability assessed and their feedback solicited. This same dataset could be used in this next stage of measure development.

8.4.3.3 Approach to analysis

G theory was selected for these analyses after review of the literature on measure development (Chapter 6) where it was identified as offering a more precise and comprehensive approach to measurement science. The theory offers a complex and powerful framework through which to estimate measurement precision, particularly where multiple sources of error are inevitable. However these analyses are complex and simpler approaches could be used at times.

The use of G theory in this thesis was informed by two core texts. The first was a monograph by Professor Ralph Bloch and Professor Geoff Norman (2012) that Prof Bloch kindly gave permission for use prior to its publication. This text provides an accessible framework for the novice G theory user, and an introduction to conducting G theory analyses using G_string software environment. This software was developed as an alternative to the more complex resources available and users are supported through an online discussion group moderated by the software developers at McMaster University. The second text presents a slightly different conceptualisation of G theory and was written by a group of collaborators involved in developing the EduG software programme (Cardinet, Johnson et al. 2010). EduG was developed through a scientific collaboration across universities in Switzerland and Canada over many years (Cardinet, Johnson et al. 2010). Each core text emphasised different aspects of G theory and reflects some divergence in conceptualisations

of G theory[22] (Shavelson foreword, in Cardinet, 2010). In this study each core text, together with their corresponding software programs, were used to complement each other in the analysis.

The main advantages of using this approach have been highlighted earlier in this chapter. A limitation of using G theory was the level of complexity that was introduced. Certainly some analyses were more complex than perhaps necessary. For example G theory was used to calculate the internal consistency of the measure, and this aspect of reliability could equally have been done using a different approach (see appendix C8-3).

8.4.3.4 Reliability in the "real world"

The use of raters who had been involved in the measure development work (CL and IC) may also have influenced the reliability reported in this study. At present it is unclear how long it might take to train a new group of raters to use this measure and what reliability coefficients might be revealed through this process. A key aspect of the design of this measure was that it should be accessible to educators and clinicians, who would not necessarily have the time or motivation for extensive training in its administration. As discussed earlier this needs testing.

8.4.4 Implications for teaching

A key question arises about how transferrable this model of teaching agenda mapping is to a real teaching environment. The primary purpose was for the measure to be useful in providing feedback to learners, an important part of the teaching process (Aspegren 1999, Thompson O'Brien, Freemantle et al. 2001, Wass, Van Der Vleuten et al. 2001, Forsetlund, Bjørndal et al. 2009, Moore, Wilkinson et al. 2009).

[22] The detail of this divergence is beyond the scope of this PhD. It centres around a conceptualisation of G theory as a mixed effects theory that embraces variance from both random and fixed sources (Shavelson in Cardinet et al 2010)

8.4.4.1 Teaching component

The workshop was initially developed with transferability in mind and the teaching component was designed to be brief (75mins) and focused. The teaching itself was structured to include specific skills as well as a cognitive cue (ask-listen-*log*). This approach is consistent with what has been described by other authors (Mauksch, Hillenburg et al. 2001, Zoppi and Epstein 2002, Rodriguez, Anastario et al. 2008).

8.4.4.2 Practice with simulated patients

Combining teaching with opportunity to practice is a well-recognised approach in teaching communication skills (Aspegren 1999, Thompson O'Brien, Freemantle et al. 2001, Forsetlund, Bjørndal et al. 2009, Moore, Wilkinson et al. 2009). In this workshop students had a number of opportunities to practice, and in their workshop feedback, they highlighted this as something they valued (appendix C8-4). However on balance, the pre-teaching occasion of measurement may not to be of real benefit unless students are able to reflect on how this baseline assessment compares with a post-teaching practice opportunity (Aspegren 1999). As EAGL-I scores after teaching provide a more reliable measure of agenda mapping, this suggests two post-teaching occasions of measurement may be sufficient.

8.4.4.3 Raters

Findings from this study suggest that the average of two raters observations provide reliable assessment of student agenda mapping. This may not be feasible in education settings however. A potential goal may be for undergraduates to be able to rate their peers, or to rate their own agenda mapping ability. For example students may rate each other in small groups during live demonstrations or after skills practice. Any new design such as this would naturally require fresh investigations of reliability and validity.

8.4.5 Amendments to measure - recommendations

Findings from this study suggest that the reduction of items on EAGL-I at the pilot stage may have been premature. Adding additional items is one way of improving the reliability of a measure (Streiner and Norman 2003), and given that the items were identified as a main source of error variance, the approach here is justified.

Experience of having used the measure in this study, together with feedback from raters, has helped to identify items that may require attention. For example the item related to eliciting the patient's agenda (see figure 8-5) could be reworked as conceptually, this item contains two separate ideas: (1) skill associated with eliciting the agenda; (2) skill associated with eliciting the full agenda.

Figure 8-5: EAGL-I item - eliciting the patient's agenda (competence subscale)

	1	2	3	4	5
Eliciting the patient's agenda-	Clinician makes little effort to engage with patient's agenda or appears dismissive of it.	Some attempt to elicit agenda. Clinician does not consider additional agenda items. May respond inflexibly when patient initiates several talk topics.	Clinician engages with the patient's agenda. Clinician may attempt to elicit full agenda items but this seems formulaic.	Clinician gives patient time to talk. Makes a clear effort to elicit or respond to agenda. Considers that there may be more than 1 topic to discuss.	Clinician demonstrates excellent listening skills, is responsive, respectful and sensitive. Considers full agenda.

Once the measure has been reworked, new raters could be trained to use the measure with data from this study to consider how the coefficients change. This would also provide an opportunity for a more realistic assessment of the feasibility of EAGL-I use, in particular in terms of the time required to train raters, and the ease with which they find using it.

8.5 Conclusions

Findings from this study suggest that EAGL-I scores represent reliable and valid assessment of agenda mapping. Amendments to the measure, in particular around increasing the number of items, may result in more reliable scores. At least two raters should use the measure when assessing each instance of student skill practice. The measure also yields more reliable scores post-teaching and may not be suitable for use in groups where agenda mapping has not been taught. Some evidence for the validity of EAGL-I has also been presented.

While these findings are promising, they represent the start of the measure validation process in a medical education setting. The next steps would include using the measure in studies involving larger cohorts of students, and to consider how it might be best integrated into teaching curricula. Additionally the measure may be used in real as opposed to simulated patient encounters. From here investigations of the agenda mapping construct may be extended to consider if and how this strategy impacts clinical practice and patient experience of care.

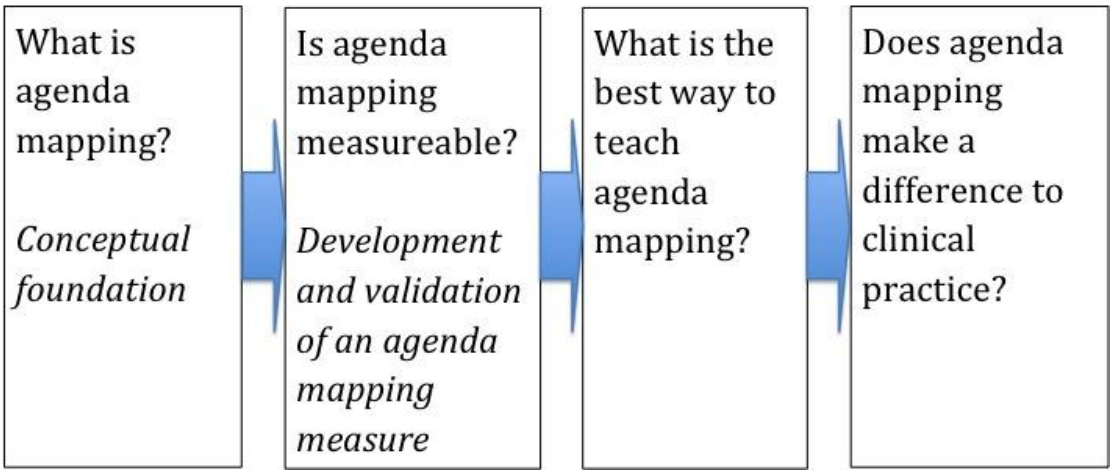
Finally, the measure can be used in many different ways. For example it could be used for formative assessment, where feedback from the measure is used to support and inform on-going learning. It could equally be used for summative assessment purposes although its focus may be considered too narrow in these kinds of assessments where agenda mapping would be just one of a number of communication skills to be assessed. Also for high stakes exams a reliability of at least 0.800 would be required. However these kinds of assessments are not the only fora in which the measure may be of use, and other possible applications are discussed further in the final thesis chapter.

In conclusion, while caution is advised at this stage of the measure development, these findings are nevertheless encouraging that EAGL-I may be of use to those wishing to work with a validated measure of agenda mapping in clinical, teaching and research settings.

9 Recent developments and new directions

Four questions were posed at the outset of this PhD with two forming the primary focus of the work (see figure 9-1, a revised version of figure 1-4). This chapter revisits these questions in the light of the findings from this thesis. Recent developments in agenda mapping are considered, together with potential directions for future research.

Figure 9-1: Investigating agenda mapping in the clinical encounter



This thesis considered two questions: (a) what is agenda setting[23]; and (b) is it measureable? An integrated model has been proposed with new terminology defining an explicit process of agenda mapping that involves establishing shared focus in a clinical encounter, and a complementary navigational process. A measure of agenda mapping has been developed to support teaching, and this measure has been tested in a medical education setting with third year medical students. From this foundation, the next two questions about teaching, and the impact of agenda mapping on clinical practice, can be approached more fully.

[23] Note that where the term agenda setting is used in this chapter this reflects the way use of the term in the studies being referenced. Where the term agenda mapping is used this reflects the conceptualisation established in this thesis.

9.1 PhD findings in the context of recent developments

An overview of recent studies involving agenda setting is presented in appendix C9-1. This table provides an updated version of studies identified in the literature review (table 2-5). Reviewing these studies highlights a number of challenges that were identified at the start of the thesis, reinforcing the rationale for having completed this piece of work. In particular, the term agenda setting is used variably across the healthcare literature, complicating comparisons across studies (Brock, Mauksch et al. 2011, Wissow, Gadomski et al. 2011, Robling, McNamara et al. 2012, Jansink, Braspenning et al. 2013, Kuhle, Truitt et al. 2013). Also, there is evidence to suggest that agenda mapping is not routinely observed in clinical practice, (Rodondi, Maillefer et al. 2009, Frankel, Salyers et al. 2013), and that incorporation of agenda mapping into everyday practice would require specifically designed training programmes (Wallace, Turner et al. 2012).

The work from this thesis can now contribute to the healthcare literature in three ways:

1. The model presented in this thesis explicates an integrated conceptual foundation of agenda mapping.
2. Clarifying this conceptual foundation means that empirical work conducted into how agenda mapping impacts clinical practice can more readily be compared and evaluated.
3. Researchers and educators now have a measurement tool they can use to train clinicians, and to assess competence in clinical practice.

9.1.1 Conceptual development

The stimulus underpinning this thesis lay in an early observation that the term agenda setting in the healthcare literature meant different things to different people. Review of recent studies suggests that this has not changed. While some researchers provide a detailed description of how they conceptualised agenda setting (Brock, Mauksch et al. 2011, Wissow, Gadomski et al. 2011, Robling, McNamara et al. 2012), others simply use the term (Jansink, Braspenning et al.

2013). Even where researchers do provide a more detailed description of their conceptualisation of agenda setting, these conceptualisations, and the interventions that are developed from them, vary (Wissow, Gadomski et al. 2011, Robling, McNamara et al. 2012, Kuhle, Truitt et al. 2013). This makes it difficult to generalise findings across studies, and difficult to build a comprehensive picture of how agenda mapping might impact clinical outcomes.

For example Kuhle et al's (2013) study investigating agenda setting in Occupational Health use the term to refer to a pre-consultation tool completed by patients only. No additional training was provided to clinicians about how to use this tool within the clinical encounter (Kuhle, Truitt et al. 2013). The authors conclude that this may be one reason why they found no difference in patient satisfaction between the intervention and control group (Kuhle, Truitt et al. 2013). From the perspective adopted in this thesis, use of a pre-consultation tool represents an extension of the first agenda mapping step in which talk topics are identified. Kuhle et al's (2013) findings may then contribute to an understanding of the first step of agenda mapping, but are unable to illuminate what follows, particularly in *how* this pre-consultation tool is used within the clinical encounter.

In contrast, other researchers have both clarified the components of their conceptualisation of agenda setting, and attempted to assess them. Robling et al (2012) used a pre consultation tool (3T) *and* provided training for clinicians in agenda setting within a *guiding* style of communication. The implication here is that the style of communication with which agenda mapping was enacted was considered as important as its technical aspect (i.e. eliciting and prioritising discussion topics). Similarly, Wissow et al (2011) taught agenda setting - defined as an approach to "elicit concerns, engage child and parent, (and) promote turn taking" (p.228) - as one of a number of clinical skills, while also considering the overall patient centeredness of the clinical interaction. Their assessment of patient centeredness was measured through variables of Roter Interaction Analysis System (RIAS) (Roter and Larson 2002), and included identifying clinician empathy and partnership building utterances.

These last two examples mirror the conceptualisation of agenda mapping proposed in this thesis, i.e. that agenda mapping is not just a technical matter of enacting tasks and skills, but also a relational matter in which partnership is valued. In this instance, even though Robling et al (2012) and Wissow et al's (2011) conceptualisations differ from each other, the clarity with which they have been described makes them easier to compare. In this way the generic model developed in this thesis provides a framework through which to consider and evaluate agenda mapping within these different interventions. It also offers a conceptual platform for researchers wishing to investigate agenda mapping in the future, and contributes to building a coherent picture of how agenda mapping functions as part of the clinical interaction as a whole. Using the reformulation of agenda setting as agenda mapping it may now be possible to conduct a new review of the literature using this more clearly defined conceptualisation, to re-evaluate the evidence available in the healthcare literature.

Even in studies where agenda mapping is clearly defined and evaluated, identifying the links between agenda mapping and clinical outcomes are difficult to establish (Mauksch, Dugdale et al. 2008). Of the publications reviewed, only one looked at agenda mapping as a stand alone intervention: Brock et al's (2011) randomised controlled trial of upfront agenda setting in primary care. These researchers found an impact of agenda setting on within-consultation activities, but no impact on other, more distal outcomes. In other studies where agenda setting was part of a complex intervention, the precise effect of agenda setting is difficult to isolate (Wissow, Gadomski et al. 2011, Robling, McNamara et al. 2012, Wallace, Turner et al. 2012, Jansink, Braspenning et al. 2013). The evidence does suggest that when clinicians receive training in agenda setting, they tend to use it more than other communication skills in their training program or more than their colleagues who had not received training (Brock, Mauksch et al. 2011, Wissow, Gadomski et al. 2011, Robling, McNamara et al. 2012, Wallace, Turner et al. 2012).

A key aspect of the model of agenda mapping presented in this thesis is that it involves both a relational (collaboration, engagement) and technical (tasks, skills) dimension. The relational component of this model is not unique to agenda mapping, but is anticipated to extend throughout the clinical encounter. So one hypothesis for further investigation may be that clinicians who demonstrate competence in agenda mapping will be more collaborative overall in their interaction with patients.

Future research on agenda mapping may well be best positioned in terms of understanding its impact on immediate outcomes within the clinician encounter to better illuminate its potential impact on more distal outcomes. So for example a hypothesis raised at the start of the PhD was that agenda mapping engages and activates patients. This is particularly crucial in the management of long term conditions as patients live with these conditions and make daily choices that impact on their control of these conditions, e.g. through adherence to medication, and in lifestyle choices. Given the active patient role required for self monitoring and self-management it is vitally important that patients are viewed as active participants in the management of their condition and that this is reflected through their active involvement in the clinical encounter. Investigating the impact of agenda mapping on immediate consultation outcomes that suggest enhanced patient activation for example, may provide some insight into if and how it relates to this construct.

9.1.2 Development of EAGL-I

Having a tool to support teaching of agenda mapping is useful both to educators, and to researchers. In the first instance, educators now have a tool that can help learners reflect on their skill acquisition through detailed and structured feedback. Communication skills are among a number of areas of competence in which clinicians and trainees should demonstrate proficiency (Epstein and Hundert 2002, Duffy, Gordon et al. 2004) and most professional registration bodies have standards for clinical, professional and educational competence (Academy of Medical Royal Colleges 2006, Health Care Professions Council 2009,

Nursing and Midwifery Council 2010). Assessment of competence varies across professional bodies and teaching institutions, and increasingly involves a multi-method approach (Wass, Van Der Vleuten et al. 2001, Wass, Wakeford et al. 2003, Epstein 2007). Observation of clinical practice either with real or simulated patients is a commonly used approach in communication skills teaching and assessment in medicine (Epstein and Hundert 2002, Duffy, Gordon et al. 2004), nursing (Rushforth 2007, Langewitz, Heydrich et al. 2010) and other allied health professions (Hawker and Walker 2010, Vegni, Mauri et al. 2010). Educators may use these opportunities to provide feedback and coaching to trainees to help them acquire skills, and observation of communication skills may also be included as part of a final evaluation of clinician or trainee competence (Epstein and Hundert 2002, Langewitz, Heydrich et al. 2010).

EAGL-I was developed from a multidisciplinary perspective. However, the teaching intervention where EAGL-I was used was developed for third year medical students. This study highlighted several strengths and weaknesses of the measure, and EAGL-I can now (a) be amended in the light of these findings, and (b) be tested further in other environments with other groups of trainees, and/or clinicians. From here further consideration about how EAGL-I might be used in teaching curricula to support learning objectives could progress. Investigating how else the measure might be used in teaching is another exciting area of potential future research. For example clinicians may be able to use the measure to assess their own skill using video feedback, and these ratings could be compared with an independent observer. Discrepancy generated in this way might make for helpful insights into learning.

From the study reported in this thesis, a workshop format involving several attempts at practice appears feasible. However no assessment can be made about whether students retain these skills, or whether they use them in real clinical encounters. A more longitudinal study would need to be developed to consider this question. Also no firm conclusions about training undergraduate students from other disciplines, or training qualified healthcare clinicians can easily be drawn.

Finally, testing the use of the measure in real clinical encounters is clearly also an important next step to extend its usefulness in these settings. Questions about how people develop competence and how these skills translate into performance in actual clinical settings are particularly relevant here. The integration of agenda mapping into everyday practice is a complex and important question to consider in this regard, and may require a multi-dimensional approach aimed at clinicians, as well as patients, and the health system as a whole (Haskard, Williams et al. 2008, Wallace, Turner et al. 2012).

It could be argued however that efforts to integrate agenda mapping into communication skills curricula are premature, as the evidence base demonstrating its effectiveness on clinical outcomes is underdeveloped. From this line of argument, the conceptual development and measure of agenda mapping may be more useful to teaching in research settings. In these settings EAGL-I could be used as a process or fidelity measure. One recent study that took this approach looked at clinician agenda setting practice in a mental health setting (Frankel, Salyers et al. 2013). To date, this is the only other published attempt at measuring agenda setting that has been identified (Frankel, Salyers et al. 2013). These researchers conceptualised agenda setting as a shared decision, and used a modified version of Braddock's coding scheme for measuring Shared Decision Making, in their study. The primary aim of this study was to observe agenda setting practice in a mental health setting, and the approach to measurement was demonstrated to be reliable. This is an exciting development that opens up the possibility of correlating assessments using Frankel et al (2013)'s measure with EAGL-I. Although developed for different purposes, both of these measures drew on similar theoretical frameworks in their development, and further investigation of EAGL-I in this direction may be of value.

9.2 Agenda mapping and patient focused interventions

One area of recent research, and one that is relatively underdeveloped in this thesis, involves helping *patients* develop their communication skills in clinical

encounters. This is a relatively underdeveloped area in communication research as a whole that is increasingly receiving attention (Cegala, Coleman et al. 1998, Haskard, Williams et al. 2008, Arnold, Coran et al. 2012). While a decision was taken early in the development of this work to focus on developing *clinician* skilfulness, the consensus work and development of a model was deliberately positioned to embrace both perspectives. This represents an opportunity for further development.

Recent publications suggest that agenda mapping is seen as a valuable skill for patients to develop to enhance the patient centeredness of clinical communication (Arnold, Coran et al. 2012). Physicians report that among other skills, they value patient preparation and organisation in presenting information (Talen, Grampp et al. 2008), and an RCT in which patients were taught these and other skills, suggests that this approach improves clinical communication from both the patient and physician's perspective (Talen, Muller-Held et al. 2011). A second study showed that physician satisfaction increased and stress decreased when *both* physicians and patients were trained in communication skills, as opposed to just one or other of these groups (Haskard, Williams et al. 2008).

One project that included specific training for patients, and did so within a system wide approach, was the Co-creating Health programme delivered through the Health Foundation in the UK. The programme aimed at integrating self-management support in routine healthcare in the NHS, for four long-term conditions (COPD, pain, diabetes, depression). Three enablers were identified as fundamental to self-management support, namely agenda setting, goal setting and follow up. The enablers were at the centre of the programme that was delivered at three levels: (1) a self-management support programme for patients, (2) an advanced development programme for clinicians, (3) and a service improvement programme that functioned at service level. A unique feature of this project was that both the clinician and patient training programmes were co-delivered, with a clinician and a person living with a long term condition involved in the delivery (Wallace, Turner et al. 2012).

An evaluation of phase 1 of this programme identified increases in patient activation, defined as a patient's knowledge, skill and confidence in self-management, and measured by the patient activation measure (PAM) (Hibbard, Stockard et al. 2004). While it is unclear how agenda setting contributed to this finding given the complexity of the programme as a whole, the evaluation did identify that agenda setting was well received and implemented, suggesting that it may well have had some contribution to this outcome (Wallace, Turner et al. 2012). The teaching of agenda setting to both patients and clinicians in this programme was co-delivered by patients and clinicians, an experience both parties reportedly valued (Wallace, Turner et al. 2012). This represent an innovative and exciting direction in shifting the overall culture of health services to true partnership in service delivery.

The work conducted in this thesis may be complemented by, or potentially inform, future research in this direction. For example an evaluation of the patient role in the Co-creating Health project highlighted that, from the patients' perspective, there was variable understanding of the three enablers, including agenda setting (Ahmad, Wallace et al. 2009). This was despite there being good evidence that agenda setting had been covered in the self-management programme with patients (Wallace, Turner et al. 2012). Recommendations to enhance patient acquisition of skilfulness in use of agenda setting (together with the other enablers) included providing coaching and feedback (Wallace, Turner et al. 2012). The work conducted in this thesis could be extended to develop a patient agenda setting measure that could be used in a patient communication skills training programme.

9.3 Agenda mapping in MI

The third edition of the core text on MI was published in 2012 (Miller and Rollnick 2012). This new addition presents a reformulated model of MI and integrates evidence accumulated over the previous 10 years about how and why it might work. Among the changes is a new framework that describes four processes in an MI consistent conversation. These are (1) engage, (2) focus, (3)

evoke, and (4) plan. Each process calls attention to key tasks that can aid an efficient and thoughtful conversation about change.

Within this new framework, the focusing process is described in three scenarios:

(1) Where there is *clear direction* for change e.g. there is mutual agreement on a single behaviour change goal, e.g. "I want to talk about how to quit smoking". In this instance the focusing process takes little time and it is merely a matter of clarifying that this is the agreed direction.

(2) Where there are *choices* of different things that could be talked about e.g. multiple potential talk topics but no clear primary focus. Here the task is to clarify the talk topics and prioritise to agree a focus. It is in this scenario that agenda mapping is seen as useful.

(3) Where there is *unclear direction* and the clinician is attempting to formulate together with the patient a picture of where they might go in their work together. This is described as "orientating".

In this new edition of MI, the work from this thesis is credited and the term agenda mapping is adopted (Miller and Rollnick 2012).

Given these recent developments in MI, the development of a measure of agenda mapping is a potentially useful contribution to teaching, practice and research in this area. In particular the relationship between agenda mapping and other aspects of MI can now be investigated and many unanswered questions arise. For example what if any might the link be between change talk that arises in the focusing process, the identification of a potential change goal and actual behaviour change? In what way might the agenda mapping construct be useful to clinicians navigating conversations involving multiple behaviour changes? Extending this idea further, the construct of agenda navigation that emerged in this thesis may also be worth examining further.

9.4 The policy context updated

The UK policy context for this work was outlined at the start of this thesis. Further developments to UK healthcare policy are outlined in this section to reconsider this work within current UK policy. In July 2010 the government set out its vision for the NHS in a white paper, *Equity and excellence: Liberating the NHS* (Department of Health 2010). This document articulates the coalition government's commitment to a patient-centred health service in which "shared decision-making will become the norm: no decision about me, without me" (p.3). In considering the implementation of the commitments made in this white paper, a number of consultation exercises were conducted, and a summary of the outcome of these was presented in a subsequent paper, *Liberating the NHS: No decision about me, without me* (Department of Health 2012). Part of the public response to the implementation of these ideals emphasised that giving patients choice about which service they may access did not necessarily equate with patient involvement in decision-making. More needs to be done to enable patient participation and true partnership to become routine practice (Department of Health 2012). Alongside these developments, have been developments in the legal framework for change in the NHS. The Health and Social Care Act 2012 outlines the duties of NHS commissioning boards, and includes the establishment of Healthwatch organisations responsible for ensuring patient involvement (UK government 2012). This act, together with the Care Bill (UK government 2013), provide a legislative context to patient involvement in healthcare.

Against this background the challenge on how to truly involve patients in their care remains. Many different approaches have been developed, and these may in fact have more similarities than differences. For example a recent report *Making shared decision making a reality: No decision about me, without me* argues that different approaches, such as shared decision making, self-management support and personalised care planning, all share similar philosophies (Coulter and Collins 2011). The findings from this thesis mirror this finding in that while different explanatory models had been used in the literature describing agenda

mapping, each of these model shared similar values. Coulter and Collins (2011) describe "negotiated agenda setting and prioritising" (p.25) as part of an approach that embraces shared decision making. If this view is adopted then clearly having a more fully articulated agenda mapping construct, together with a measure that can guide the development of skilful practice, is of value not just to clinicians and educators, but also to commissioners and policy makers. Measurement provides some quantification of a construct that is particularly difficult to assess, thereby providing the opportunity for benchmarking skill. In addition, as has been argued elsewhere in this thesis, measurement offers a starting point for the development of a more comprehensive evidence base, providing further insight into whether or not investment into agenda mapping skill acquisition is worthwhile.

9.5 Strengths, limitations and new directions

This thesis has developed through a series of smaller studies. The strengths and limitations of each piece of work have been appraised concurrently. The aim of this section is to consider the strengths and limitations of the work as a whole, and to highlight new directions that the work can now develop into.

As highlighted in the previous section, this work addresses a conceptual challenge that was identified at its inception, as well as in a recent review of publications on agenda setting: that agenda setting means different things to different people, and this lack of shared conceptual foundation, complicates the development of an evidence base and its integration to clinical practice. Establishing an integrated model, that distinguishes between agenda mapping and agenda navigation, has highlighted a number of important considerations. Firstly, that agenda mapping is not something that occurs naturally. Rather it involves a collection of skills and competences that need to be taught to clinicians for it to be adopted more widely in clinical practice. Secondly, agenda mapping should not occur in isolation. There is a complementary navigational process that occurs *throughout* the clinical encounter, in which joint decisions should be taken about the direction of that encounter. An assumption of this work has been that shared agenda mapping should result in a more collaborative

clinical encounter. However efforts to integrate agenda mapping into everyday clinical practice suggest that even where shared agenda mapping may be evidenced, clinicians do not necessarily extend this collaborative process throughout the encounter (Wallace, Turner et al. 2012). A better way to think about integration of agenda mapping into practice may be to consider that clinicians who practice in a more patient centred way, are more likely to use shared agenda mapping. This hypothesis suggests a new direction for this work.

An additional strength of this work was that it moved from the generic conceptual foundation into a more specific context. The integrated model highlighted a number of contextual factors that influence agenda mapping, and the immense range of these meant that a specific content needed to be identified for the work. This followed a logical progression, and as has been highlighted, the candidate (NG) or other researchers may use the model now to progress in other directions. This serves a dual purpose of both extending the evidence base for agenda mapping, and testing both the model and the measure.

Pragmatic constraints i.e. that the work needed to be completed within a particular timescale, meant that decisions needed to be taken along the way about the overall direction. Key decisions were made along the way, for example to progress with measuring agenda mapping, meant that some aspects of this work were underdeveloped, for example developing the agenda navigation construct. Likewise, the decision to validate the measure using medical students means that little can be said about the use of this measure in other professional groupings. At the time, these decisions were made with consideration of the pros and cons of each option, often with the candidate (NG) completing a decision grid outlining what these were. In retrospect, these decisional junctures may now offer opportunities for further development of the work. In particular the following research pathways stand out as new directions of this work:

(1) Development of the agenda navigation construct. This construct is hypothesised to arise in more naturally occurring examples of clinical practice and may be studies using analytic techniques such as discourse analysis. Given

the importance of considering how clinicians navigate their clinical encounter in *partnership* with patients, this is a worthwhile endeavour. It is hypothesised that a clinical encounter that is the product of co-production, is more likely to exhibit situations where joint decision making about the *direction* of the clinical encounter is evidenced.

(2) Development of patient competences in shared agenda mapping. An assumption of shared agenda mapping is that both the clinician and patient have an active role in producing the agenda and therefore in shaping the clinical encounter that follows. While it has been argued that agenda mapping is the clinician's role and responsibility (Makoul 2001), both parties nevertheless have a role and responsibility in the production of what takes place in any clinical encounter (Rao, Anderson et al. 2010). In this thesis the clinician perspective was considered in detail, primarily because the measure was deigned as a teaching tool *for clinicians*. A natural next step is therefore to consider what the complementary patient competences may be and to design a measure that may be useful in a teaching programme for patients.

(3) Further development of EAGL-I. As discussed in chapter 8, there are a number of refinements to the measure as yet to be made. These include some minor adjustment to the measure itself and training a new set of raters to use the measure, in order to retest reliability and establish feasibility. The use of the measure now needs to be extended too and this should occur in a number of different directions. Firstly, as this measure was designed for use in educational settings, a larger sample of data from this setting should be used. Extending its use with third year medical students is a natural next step. However it could also be used with students from other disciplines, in particular with nursing students or students in the allied health professions. When testing the measure in this way it is anticipated that simulated patients would be used, as this is standard practice in undergraduate communication skills training. Secondly, the measure could also be used in teaching programmes where examples of real patient interactions would be captured. In this way clinician performance in real clinical practice may be assessed. It is important thought that this assessment occur as

part a programme where agenda mapping is taught to clinicians, as the purpose of the measure was to detect agenda mapping defined as a coherent skill set. The validation study reported in chapter 8 suggests that the measure cannot provide reliable measurement in examples of practice where agenda mapping has not been taught.

(4) Investigating the impact of skilful agenda mapping on proximal and distal outcomes. At the outset of this thesis, immediate (proximal), intermediate (distal) and long-term (distal) outcomes of agenda setting were identified from the literature review (section 2.3.3), and included in the model of agenda mapping. A number of these outcomes have been investigated, in particular with regard to agenda setting in medical interactions where the primary outcomes involve reduction of late arising concerns, and full elicitation of patient concerns. A number of other outcomes have also been hypothesised. With regard to long-term condition management, perhaps the most important of these is the notion of patient activation, the knowledge, skills and confidence a patient has to manage their long-term condition (Hibbard, Stockard et al. 2004). From the perspective of MI, agenda mapping precedes a focused conversation about change, and indeed this hypothesis may now be tested, e.g. by assessing agenda mapping using EAGL-I, and comparing EAGL-I scores with whether or not a focused change conversation follows the period of agenda mapping. In this way it may be possible to begin to understand more fully exactly if and how agenda mapping impacts immediate clinical encounter outcomes, and from here, consider how this may impact more distal outcomes, in particular, actual behaviour change. This causal chain would be useful to examine more closely, particular because it was not possible to understand if and how agenda setting, that is included as part of a complex intervention, impacted study outcomes (Robling, McNamara et al. 2012, Wallace, Turner et al. 2012, Butler, Simpson et al. 2013).

9.6 Conclusions

In conclusion, the integrated model of agenda mapping developed in this thesis provides a broad conceptual foundation from which to investigate this approach further. Developed specifically to support teaching, EAGL-I offers a resource to educators, practitioners and researchers wishing to develop skilfulness in agenda mapping, and wishing to investigate the effect on the clinical interaction where a clinician is agenda mapping skilfully. The measure has been developed to capture both the skills involved in agenda mapping, and the quality of the interaction – a reflection of the clinician's attitude and an expression of patient or client centred values. For congruence, the teaching of agenda mapping should embrace both these aspects. Involving patients in both teaching and learning agenda mapping, represents an exciting opportunity for developing this work.

Finally, while the impact of agenda mapping on immediate, intermediate and longer term outcomes has been identified, both theoretically and empirically, there is much still to discover about how agenda mapping impacts clinical practice. In particular the question about if and how agenda setting promotes engagement and collaboration within the clinical encounter as a whole, is worthy of attention. From here links with more distal outcomes such as the impact of agenda mapping on self-management, can be examined more fully.

10Appendices

10.1 Appendix C1-1 - Method used for the literature scoping exercise

Databases housing healthcare publications were searched in October 2008 (Ovid Medline, EMBASE, PsycInfo, Web of Knowledge) using the following search terms and combinations thereof: Agenda setting; Patient Centred care; Physician-patient relations; Motivation; Health behaviour OR Lifestyle OR Risk factors OR Smoking; Chronic disease; Health promotion; Patient participation OR decision making ; Structure of consult* OR family practice; Nurse-patient relations; Patient satisfaction.

Additional references were found by searching key authors in the field and cross referencing to some key words, as well as by snowballing. Book chapters and available textbooks were also reviewed. Of the citations and full papers reviewed, articles discussing interventions aimed at individual patient care, training of practitioners or aspects of healthcare communication were included. Articles discussing broader ideas of setting research or treatment agendas at organisational levels, were excluded.

10.2 Appendix C2-1- Literature review - Search strategy

MEDLINE (1950 to September week 1 2009)
1. negotiat*.mp.
2. priorit*.mp.
3. patient* agenda.mp.
4. set* agenda.mp.
5. shar* agenda.mp.
6. agenda set*.mp.
7. hidden agenda*.mp
8. emerg* agenda*.mp.
9. patient concern*.mp.
10. open* sequence*.mp.
11. 6 or 3 or 7 or 9 or 2 or 8 or 1 or 4 or 5 or 10
12. exp Physician-Patient Relations/
13. exp Professional-Patient Relations/
14. exp Nurse-Patient Relations/
15. consultation*.mp.]
16. clinical encounter*.mp
17. medical encounter*.mp.
18. 12 or 17 or 14 or 13 or 16 or 15
19. 11 and 18

EMBASE (1980 to week 35)
1. negotiat*.mp.
2. patient* agenda.mp.
3. set* agenda.mp
4. shar* agenda.mp.
5. agenda set*.mp.
6. hidden agenda*.mp.
7. emerg* agenda*.mp.
8. patient concern*.mp
9. open* sequence*.mp
10. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11. exp Physician-Patient Relations/
12. exp Professional-Patient Relations/
13. exp Nurse-Patient Relations/
14. consultation*.mp.
15. clinical encounter*.mp.
16. medical encounter*.mp.
17. 11 or 16 or 13 or 12 or 15 or 14
18. 10 and 17
19. limit 18 to (human and (child or school child <7 to 12 years> or adolescent <13 to 17 years> or adult <18 to 64 years> or aged <65+ years>))

PsycINFO (1806 to September week 1 2009)

1. negotiat*.mp.
2. patient* agenda.mp.
3. set* agenda.mp.
4. shar* agenda.mp.
5. agenda set*.mp.
6. hidden agenda*.mp
7. emerg* agenda*.mp.
8. patient concern*.mp.
9. open* sequence*.mp.
10. exp Motivational Interviewing/
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. clinical encounter*.mp.
13. medical encounter*.mp.
14. exp Interpersonal Interaction/
15. 13 or 12 or 14
16. 11 and 15
17. limit 1 to treatment & prevention
18. 6 or 3 or 7 or 9 or 17 or 2 or 8 or 4 or 10 or 5
19. 18 and 15

British Nursing Index and Archive (1986 to week 2 October 2009)

1. negotiat*.mp. [mp=title, abstract, heading words]
2. priorit*.mp. [mp=title, abstract, heading words]
3. patient* agenda.mp. [mp=title, abstract, heading words]
4. set* agenda.mp. [mp=title, abstract, heading words]
5. shar* agenda.mp. [mp=title, abstract, heading words]
6. agenda set*.mp. [mp=title, abstract, heading words]
7. hidden agenda*.mp. [mp=title, abstract, heading words]
8. emerg* agenda*.mp. [mp=title, abstract, heading words]
9. patient concern*.mp. [mp=title, abstract, heading words]
10. open* sequence*.mp. [mp=title, abstract, heading words]
11. 6 or 3 or 7 or 9 or 2 or 8 or 1 or 4 or 5 or 10
12. exp Physician-Patient Relations/
13. exp Professional-Patient Relations/
14. exp Nurse-Patient Relations/
15. consultation*.mp. [mp=title, abstract, heading words]
16. clinical encounter*.mp. [mp=title, abstract, heading words]
17. medical encounter*.mp. [mp=title, abstract, heading words]
18. 12 or 17 or 14 or 13 or 16 or 15
19. 11 and 18

10.3 Appendix C2-2: Classification of literature review papers

Table C2-2.1: All papers by category, type and relevance category (n = 92)

Q1: Category A: empirical papers	
1: one aspect of agenda setting	***2: More than 1 aspect of agenda setting***
Quantitative – observational	
1. Eisenthal (1977) 2. Dyche (2005) 3. Heritage (2007) 4. Kravitz (2002) 5. Van Dulmen (2004) 6. White (1994)	1. Beckman (1984) 2. Marvel (1999) 3. Meeuwesen (2007) 4. Peltenburg (2004)
Intervention/ RCT	
7. Hamilton (2006) 8. Hornberger (1997) 9. Middleton (2006) 10. Sephucha (2002)	5. Berg-Smith (1999) 6. Channon (2003) 7. Channon (2005) 8. Channon (2007) 9. Mauksch (2001) 10. Pill (1998) 11. Rodriguez (2008) 12. Stott (1995) - descriptive 13. Stott (1996)
Teaching (pre-post, evaluations)	
11. Nathan (1991)	14. Buyck (2002) 15. Haas (2003) 16. Kemper (2008)
Cohort	
12. Langewitz (2002) 13. Ruiz-Moral (2005)	
Qualitative – Discourse, interaction or conversation analysis	
14. Barrere (2007) 15. Butler (1992) 16. Campion (1992) 17. Emmison (2007) 18. Garafanga (2003) 19. Heritage (2006) 20. Karhila (2003) 21. Pappas (2009) 22. Rhodes (2006) 23. Robinson (2001) 24. Robinson (2005) 25. Robinson (2006)	17. Manning (2002)
Qualitative – interview study	
26. Barry (2000) 27. Elder (2006) 28. Haidet (2006) 29. Kirsh (2006)	

Qualitative – focus groups	
30. Allcock (2007) 31. Sahlsten (2007)	
Qualitative	
32. Hudak (2008) (content analysis) 33. Like (1986) 34. Lown (2009) 35. Rosa (2005) 36. White (1997)	18. Brown (2006) (grounded theory)
Other	
37. Ahmed (2009) – cross sectional survey	19. Arnold (2009) – consensus study 20. Stein (2005) –longitudinal case study
Q2: Category B: Discussion, review papers	
1: one aspect of agenda setting	***2: More than 1 aspect of agenda setting***
Discussion	
38. Anderson (2005) 39. Anstett (1981) 40. Botell (2005) 41. Buetow (1998) 42. Christie (2007) 43. Copely (2008) 44. Drass (1982) 45. Feldman (1999) 46. Goodyear-Smith (2001) 47. Hubert (1998) 48. Huffman (2005) 49. Larsen (1997) 50. Lazare (1975) 51. Nehmkis (1982) 52. Rodning (1992) 53. Schofield (2008) 54. Shendell-Falik (2002) 55. Style (1980) 56. Teutsch (2003)	21. Baker (2005) 22. Bothelo (1992) 23. Epstein (2008) 24. Levenstein (1986) 25. Olson (2002) 26. Rollnick (1996) 27. Zimmerman (2000)
Concept analysis	
57. Flardeau (2002) 58. Gallant (2002) 59. Henson (1997) 60. Hook (2006) 61. Lepper (1995)	
Review	
62. Kinnersley (2008) (systematic review) 63. Virtanen (2007) (meta-summary)	28. Mauksch (2008) (literature review) 29. Lipkin (1996)

Table C2-2.2: Papers rated 1 – including the aspect of agenda setting investigated (n=63)

Reference	Description	Aspect of agenda setting
1. Ahmed (2009)	Cross sectional survey	Patient fears & expectations
2. Allcock (2007)	Qualitative – focus group	Patient beliefs & priorities
3. Anderson (2005)	Review	Empowerment
4. Anstett (1981)	Discussion	Negotiation
5. Barrere (2007)	Qualitative – discourse analysis	Power
6. Barry (2000)	Qualitative – interview	Patient agenda – unvoiced
7. Botell (2005)	Discussion	Hidden agenda
8. Buetow (1998)	Discussion	Negotiation
9. Butler (1992)	Interaction analysis	Patient agenda
10. Campion (1992)	Interaction analysis	Patient agenda
11. Christie (2007)	Discussion	Patient agenda
12. Copely (2008)	Discussion	Negotiation
13. Drass (1982)	Discussion	Negotiation
14. Dyche (2005)	Quantitative - observational	Patient's presenting concern
15. Eisenthal (1977)	Quantitative – observational	Patient requests
16. Elder (2006)	Qualitative –interview	Collaboration, priority setting
17. Emmison (2007)	Qualitative	Patient problem presentation
18. Feldman (1999)	Discussion of a model	Partnership
19. Flardeau (2002)	Discussion	Negotiation
20. Gallant (2002)	Discussion	Partnership
21. Garafanga (2003)	Conversational analysis	Opening sequence
22. Goodyear-Smith (2001)	Discussion	Power
23. Haidet (2006)	Qualitative –interview	Patient participation
24. Hamilton (2006)	RCT	Pre-consultation form
25. Henson (1997)	Review	Mutuality
26. Heritage (2006)	Qualitative	Patient participation
27. Heritage (2007)	Cross-sectional observation	Patient agenda - concerns
28. Hook (2006)	Review	Partnership
29. Horberger et al (1997)	Balanced two arm trial	Pre-consultation form
30. Hubert (1998)	Discussion	Patient agenda – concerns
31. Hudak (2008)	Qualitative	Patient concerns
32. Huffman (2005)	Discussion	Partnership
33. Karhila (2003)	Interaction analysis	Negotiation
34. Kinnersley (2008)	Review	Pre-consultation agenda form
35. Kirsh (2006)	Qualitative – interview	Partnership
36. Kravitz (2002)	Quantitative – observational	Patient requests
37. Langewitz (2002)	Cohort	Patient talk time
38. Larsen (1997)	Discussion	Patient agenda
39. Lazare (1975)	Discussion with cases	Patient agenda
40. Lepper (1995)	Literature review - concept	Patient participation
41. Like (1986)	Qualitative	Pre-consultation agenda form
42. Lown (2009)	Qualitative	Mutuality
43. Middleton (2006)	Intervention	Pre-consultation agenda form
44. Nathan (1991)	Teaching (pre/post test)	Hidden agenda

Reference	Description	Aspect of agenda setting
45. Nehmkis (1982)	Discussion	Hidden agenda
46. Pappas (2009)	Conversation analysis	Opening sequence
47. Rhodes (2006)	Conversation analysis	Pre-consultation agenda form
48. Robinson (2001)	Conversation analysis	Closing consultation
49. Robinson (2005)	Conversation analysis	Patient agenda – concerns
50. Robinson (2006)	Conversation analysis	Patient agenda – concerns
51. Rodning (1992)	Discussion with case study	Negotiation
52. Rosa (2005)	Qualitative	Mutuality
53. Ruiz-Moral (2005)	Prospective cohort	Patient expectations
54. Sahlsten (2007)	Qualitative	Mutuality
55. Schofield (2008)	Discussion	Patient agenda and cues
56. Sephucha (2002)	Intervention – descriptive	Pre-consultation agenda form
57. Shendell-Falik (2002)	Discussion	Negotiation
58. Style et al (1980)	Discussion with cases	Hidden agenda
59. Teutsch (2003)	Discussion	Hidden agenda & structure
60. Van Dulmen (2004)	Large scale longitudinal study	Patient preferences
61. Virtanen (2007)	Review	Empowerment
62. White (1994)	Cross-sectional observation	Late arising concerns
63. White (1997)	Qualitative	Late arising concerns

Table C2-3: Measures identified through the literature search

Reference	Measure
1. Del Piccolo, Putnam et al (2004)	Verona Medical Interview Classification Scheme (V-MICS)
2. Epstein, Shields et al (2006)	Measure of Patient Centred Communication
3. Kravitz, Bell et al (1999)	Taxonomy of Requests by Patients (TORP)
4. Krupat, Frankel et al (2006)	Four Habits Coding Scheme
5. Lane, Huws-Thomas et al (2005)	Behaviour Change Counseling Index
6. Lang, McCord et al (2004)	Common Ground Instrument
7. Martin, DiMatteo et al (2001)	Facilitation of Patient Involvement Scale
8. Richard, Lussier (2007)	MEDICODE
9. Robinson, Walley et al (2002)	LIV-MAAS

10.4 Appendix C2-3: Descriptions of agenda setting from literature review

Table C2-3: Descriptions of agenda setting

Reference; type of paper, setting	Description of agenda setting	Tasks/ skills i.e. what	When in the encounter is a/setting likely to occur	Reference
Arnold (2009) Consensus Medical education, USA	**Agenda setting**: The interaction, early in a clinical encounter, in which the physician and patient identify and prioritize the issues to be covered. Agenda clarification or alteration can occur at different points throughout the encounter, and can be a useful tool during the closure. ‘‘Mr. Smith, you have clearly explained a number of things that you are concerned about. Of the five items you described, which two are of the highest priority to you right now?’’ “ (p.182	Identify issues to be covered Prioritise issues to be covered Clarify agenda later	Early in the clinical encounter Clarification/ alteration can occur at different time points Useful to return to at the end of the encounter	Not explicitly stated
Baker (2005) Discussion Primary care, USA	Managing the oh by the way syndrome	What are patient’s most important concerns? - Collect patient ideas and concerns & guard against premature ”attack” Identify clinicians concerns What are patient’s most important tasks? Negotiate and prioritise	Early in the encounter Can return to agenda if patient becomes tangential – i.e. build an “empathic bridge”	Beckman and Frankel (1984) Marvel et al (1999)

Reference; type of paper, setting	**Description of agenda setting**	**Tasks/ skills i.e. what**	**When in the encounter is a/setting likely to occur**	**Reference**
Beckman (1984) Cross sectional observational; Primary care, USA	Managing the oh by the way syndrome Determining the patient's major reason for seeking care	Soliciting agenda - Open questions Inhibitive practitioner behaviour - Closed questions, elaborators, recompleters, statements Eliciting patient agenda Practitioner behaviour –influences patient presentation Avoid practitioner interruption	At the start	-
Berg-smith (199) Multi-centre RCT; young people dietary control, USA	Structured opening statement Option setting tool	Options tool – "brainstorming" and identifying change options	No specified time point -	Stott et al (1995)
Bothelo (1992) Discussion; Dr-patient communication, USA	Sequentially follows "relationship building" in the problem solving phase of Bothelo's "negotiation model"	Dr and patient raise different items for discussion, Dr & patient then implicitly or explicitly negotiate which items to discuss further	Early in the encounter	Byrne and Long (1978)
Brown (2006) Qualitative grounded theory Dr-patient communication – Oncology, Australia	Facilitator for making shared decision	Acknowledge patient's agenda State practitioner agenda Ask patient how they want to progress	Start	Not explicitly stated
Buyck (2002) Observational, University education, USA	Communication skill Patients get to identify all agenda items (Toronto consensus statement)	Elicit full list of patient concerns Don't shift control to clinician	Early in encounter	Beckman and Frankel (1984) and Marvel et al (1999)
Channon (2003) Intervention study –				

Reference; type of paper, setting	**Description of agenda setting**	**Tasks/ skills i.e. what**	**When in the encounter is a/setting likely to occur**	**Reference**
pilot, Type 1 diabetes, UK				
Channon (2005; 2007) Intervention – RCT; Type 1 diabetes, UK	Facilitated conversation about behaviour change "a sort of map"	Construct a shred agenda Give ideas or examples of topics Facilitate a process of reflection, expression and organizing	First of a number of sessions (therapeutic)	Stott et al (1995)
Epstein (2008) Discussion; Primary care; USA	Establishing focus – using patent centred communication to "structure the initial moments f a medical encounter so that the physician can more reliably elicit, explore and respond to patients concerns" (p.36)	Structuring the opening moments of the consultation "so that you and your patient stay on the same page"	Opening moments	Marvel et al (1999)
Haas (2003) Teaching pre-test – post-test design; Primary care, USA	"Agenda-setting comments were defined as summary statements by the physician indicating which topics would be covered in the visit." Agenda eliciting: the physician asking the patient the reason(s) for the visit. (specified that the questions must have been explicitly asked or stated. Implicit questions such as "You're not feeling well today?" were considered too general to be rated as agenda-eliciting questions. Agenda-negotiating statements were defined as discussions	Agenda eliciting Agenda setting Agenda negotiating	Early (implied) Recorded late arising concerns	Marvel et al (1999)

Reference; type of paper, setting	Description of agenda setting	Tasks/ skills i.e. what	When in the encounter is a/setting likely to occur	Reference
	between physician and patient concerning which topics would be covered and in what order.			
Kemper (2008) Evaluation – teaching; Paediatric mental health, USA	Communication skill	Elicit concerns Develop agenda Prioritise	Opening	Unclear – references pt-centred medicine and MI
Levenstein(1986) Discussion; General medicine; South Africa	"Reconciling two agendas." (L's term)	Task of Patient Centred Medicine is to integrate the two agendas	-	-
Lipkin (1996) Consensus; Reproductive counselling; USA	Surveying problems	Initiate problem list Elicit full list using "what else?" Negotiate priority problem – pt's priority, clinician's priority, mutual interests, agree order	Start of interview	Lipkin (1987) – the medical interview
Manning (2002) Qualitative – conversation analysis; Primary care, USA	Opening sequence	Problem definition – patients may provide single statement or story with context. If latter, practitioner must identify relevant elements. Negotiation – formulation provided using summary, returned to patient, if accepted can continue, if rejected must continue cycle until acceptable to patient	Opening	Beckman and Frankel (1984)
Marvel (1999); Primary care, USA	Survey of patient concerns	Eliciting patient agenda Practitioner behaviour –influences patient presentation Flexibility – redirection can be useful to clarify		Beckman and Frankel (1984) & Smith (1996)

Reference; type of paper, setting	**Description of agenda setting**	**Tasks/ skills i.e. what**	**When in the encounter is a/setting likely to occur**	**Reference**
Mauksch (2001) Experimental; Primary care, USA	Survey of concerns Finding a focus Time management Facilitating patient involvement	Finding focus protocol Make a list Put the relationship first Prioritise list Raise practitioner concerns Seek confirmation and commitment	Upfront	Beckman and Frankel (1984)
Mauksch (2009) Review; Primary care, USA	Skill used sequentially Time management Prevent late arising concerns.	Elicit full list of patient concerns Prioritise Negotiate Protect time for urgent medical problems Follow up visits	Agenda setting done upfront Topic tracking through the session – extra task to agenda setting	Marvel et al (1999)
Meeuwesen (2007) Quantitative; Primary care, Holland	A structuring device Metacommunication Negotiation because conflict may exist	Considers it the clinician's task Metacommunication about the reason for the encounter Structuring device	At the start of the encounter then throughout	Makoul (2001) - SEGUE
Olson (2002) Discussion; Primary care, USA	Mutually agree focus of session Prevent late arising concerns	Eliciting patient agenda – using the "exhaustive what else?" Negotiating	Early in the encounter	Beckman and Frankel (1984)
Peltenburg (2004) Cross sectional observation; Primary care, Europe	Emerging agenda	Eliciting patient agenda – must read cues	During the course of the encounter	Levenstein (1986)
Pill (1998) Stott (1996); Intervention; Primary care, type 2 diabetes, UK	Facilitating a conversation about behaviour change – use of a chart		At the start of a conversation about change	Stott et al (1995)

Reference; type of paper, setting	**Description of agenda setting**	**Tasks/ skills i.e. what**	**When in the encounter is a/setting likely to occur**	**Reference**
Rodriguez (2008) Intervention; Primary care, USA	Survey of patient concerns	Full list of concerns, prioritise	At the start	Beckman and Frankel (1984); Four Habits model (Krupat 2006)
Rollnick (1996) Discussion; Obesity, UK	As in Stott et al 1995	Patient is active decision maker – patient sitting forward, actively involved, scrutinising the card Conversation aid – the conversation is the focus not the chart Can be used at any stage of the consultation	At the start of a conversation about behaviour change	Stott el al (1995)
Stein (2005) Organisation – longitudinal case study; USA	Implicit in habit 1 – "invest in the beginning"	Eliciting full list of concerns, prioritise, negotiate	Early on	Beckman and Frankel (1984); Four Habits model (Krupat 2006)
Stott (1995) Intervention description; Primary care, type 2 diabetes; UK	Facilitating a conversation about behaviour change – use of a chart			Levenstein et al (1986) and Miller& Rollnick
Zimmerman (2000) Discussion; Primary care Long term condition management	Promoting discussion about change	Identifying patient priorities so that goal can be set for next visit	Not specified	Stott et al (1996)

10.5 Appendix C3-1: Topic guide

Focus Group Study: Topic guide

Facilitator prompt sheet: Welcome and setting the scene

1. Introductions
2. The process and purpose of the group
   - Qualitative data
   - Will be recorded
   - Data anonymised at time of transcription
   - Roles – facilitator/ participant
   - Mobiles off
3. Consent forms
   - Check consent - sign
   - Check info sheet
4. Ground rules
   - Confidentiality
   - Respectful about differences
   - Wait for the other to finish speaking (ease of transcription)
   - Questions?
5. Any questions?

(TURN THE TAPE ON)

A: INTRODUCTIONS

We are developing a teaching tool to help practitioners working with clients who have long term conditions. We are interested in hearing from you about your clinical experience of this. We have chosen to run these groups with experienced health professionals and it is your insights and experience that will be used to guide what we put in the teaching tool.

We'll be asking you specific questions to prompt you to reflect on your clinical experience. Although some of these scenarios may raise interesting points from a clinical management point of view we are most interested in what happens during the time you are sitting face to face with your patient – in other words, that consultation or clinical encounter.

At the end of the discussion I' happy to answer any additional questions you may have about the study and how the results etc will be used.

Any questions at this stage?

To start off:

Primary aim: (1) to locate the discussion in "long term condition management" (2) to elicit practitioners' aspirations and challenges in working with this group

a) What kinds of long term conditions do you work with in your daily clinical practice?

b) What specific challenges arise in your clinical work with this patient group?

c) What are your aspirations in managing long term conditions i.e. what do you hope to achieve/ what is a measure of "success"?

B: CASE STUDY – STARTING A CONSULTATION/ ENGAGEMENT

Primary aim: (1) how do practitioners start a consultation? (2) how do practitioners engage with patients through the session?

Please read through this short scenario and answer the question at the end of the page.

Secondary care – Memory team

Mrs Johnson is a 78 year old afro-Caribbean woman who lives alone after her husband of 52 years died suddenly several years ago. She lives in the family home where she raised her 3 children who now live in other parts of the country. Mrs Johnson had been a cook at a school cafeteria earlier in her life. Her work and family are a source of pride for her. Mrs Johnson recently started attending the Memory clinic after being diagnosed with early Dementia. She comes to see you for a 1:1 session.

Mrs Johnson's children are concerned at the diagnosis and want her to move to more supported accommodation. Mrs Johnson is defiant and insists she is coping fine. She is actually very upset with her children but is unlikely to raise this spontaneously with you as she says she is a "private person". You want to find out more about how she is coping with everyday activities. She also asks you for sleeping tablets saying the neighbours are noisy at night.

1. *What is the most productive way to start this session?*
2. *How would you identify the most important thing(s) to talk about? i.e. how do you prioritise*

- How important is it that Mrs Johnson has an active role in a session like this?
- How would you try and encourage her to be active?

Imagine you are some way into the session with Mrs Johnson. Her eyes sort of glaze over and she starts fiddling with her handbag…… She's lost interest…..

1. *What might you do to re-engage her in the session?*
2. *How else can you tell when someone has disengaged from a session and what do you usually do?*

C: SELF MANAGEMENT

Primary aim: (1) how do these practitioners understand "self management" (2) how do they promote it?

- What do you understand by the term "self management"?
- In your clinical experience, what is it like trying to promote this?
- What challenges do you come up against?
- What successes/ surprises have you had?
- How do you help patients develop confidence in managing their long term condition at home/ in their everyday life?
- What do you do in the consultation to help people "live a quality life with Dementia"?

Probes:

- Of the things we have discussed, which is the most important?

C: DEVELOPING A TEACHING TOOL

Primary aim: (1) what are the essential components for teaching? (2) what skills are key?

- Imagine you were teaching someone the best way of running a session about self management with Dementia:
    - What would you teach them?
    - What skills would you teach them?
    - What attitude is essential to have?

- What are your "top tips" about how you engage with patients? How do you make sure they are on board all the way through the session? What do you do when they start to look bored or disengaged?

- What are the qualities of a "top clinician" in helping these patients?

10.6 Appendix C3-2: Focus group facilitation reflections

While I had experience of running both therapeutic groups and training groups, focus group facilitation was new. This process of reflection was therefore important to help identify some of the subtle differences in moderating a group for research purposes, as opposed to teaching or other purposes. A key point of reflection was around the delicate balance between following the content of the discussion generated by the group, and steering the discussion more firmly to elicit what was required for the overall aims of the study. Given that the terrain sketched out in the topic guide was necessarily broad, and the process of this part of the study was largely exploratory, this tension was inevitable. Being aware of this helped me critically evaluate my facilitation and recognise "missed opportunities" where richer data could have been generated. This was particularly frustrating when transcribing the interviews and noticing key moments where I'd like to have known more about the point participants were making.

A number of different colleagues took the role of second facilitator and in each instance their role was slightly different. On two occasions the second facilitator took an observer role and did not contribute to the group discussion. In the remainder of the groups the second facilitator took a more active role, asking some probing questions at various junctures. On the whole this last approach worked better – I felt better supported and it gave me some space for reflection at critical moments of the group progression. The roles of the facilitators developed over time and has been summarised in table 1.

Table 10-1: Facilitator roles in focus group study

	PRIMARY FACILITATOR	SECOND FACILITATOR
Before the group	Recruitment and liaison Re-design topic guide Logistical set up - including testing recording equipment prior to the session, copying info packs and consent forms etc Brief co-facilitator - familiarity with the topic guide, clinical context and role division	Receive briefing for focus groups – familiarity with the topic guide, clinical context and role division
During the group	Set up equipment Engage with participants as they come in. Introduce study and group Facilitate group – sitting opposite and maintaining eye contact with co-facilitator Close group	Engage with participants and distribute info packs and consent forms Obtain consent Observe group process – sitting opposite primary facilitator, maintaining eye contact Actively contribute to group with sensitivity
After the group	Debrief with co-facilitator File all participant information according to data protection policy Transfer sound file Begin transcription within 72hrs Delete sound file from recording device Reflective log Send transcription to second facilitator for comments	Debrief – give comments about group content, process and facilitation verbally and, where possible, in writing. Review the transcript

10.7 Appendix C4-1: Modified Delphi round 1

Agenda setting and long term condition management

1. Agenda setting and long term condition management

Thank you for agreeing to take part in this study.

This is the first of three rounds where we will be asking for your opinion on various aspects of "agenda setting" in **long term condition management**.

What happens to my response?
Your response will help us develop a rating scale to be used in teaching "agenda setting" to health practitioners. The study is being conducted at Cardiff university where data will be stored confidentially. Your responses will be identifiable by the research team only.

How long does this take?
The questionnaire should take 15 to 20mins to complete.

Can I take a break?
Yes! If you want to take a break while doing this you may exit the survey at any time.
To **save** your work press the "next" key at the end of each page.
To **log back in** simply use your personal link to get back into the survey. You may also move forward and backward between the pages while completing this.

Click on the **next** button to start the survey

2. "Agenda setting" in the management of long term conditions - wha...

The term "agenda setting" means different things to different people. It may also "look" different in different circumstances.

How would you describe "agenda setting" as it is used in **consultations about long-term condition management** to someone who had never heard the term before?

3. "Agenda setting" in the management of long term conditions - a model

We see "agenda setting" as a **shared** process that occurs both:

a) **At the start of the consultation** where the practitioner and patient construct a broad overview of discussion topics before agreeing what to focus on in the session available.

b) **Throughout the consultation** – the shared agenda is used to structure the consultation and can be returned to at various stages in the consultation. New agenda items can be added to this broad overview at any stage as they emerge.

Agenda setting and long term condition management

What do you see as the **strengths** of the model?

What do you see as the **limitations** of this model?

4. "Agenda setting" in the management of long term conditions - core componen...

We have listed a number of items that we consider to be important components of "agenda setting".

If you agree that an item is important, please indicate **how important** you consider it to be on a scale of 1-7 where 1 is "somewhat important" and 7 is "extremely important".

If you do not think an item should be considered part of agenda setting please tick the "not important"/ "not applicable" - **N/A** - column on the far right hand side.

Please rate each of these items

	1=somewhat	2	3	4	5	6	7=extremely	**N/A**
1. A broad overview of potential discussion topics is constructed	○	○	○	○	○	○	○	○
2. Patients talk about their concerns, requests, wishes and/ or goals	○	○	○	○	○	○	○	○
3. Practitioners raise subjects they consider to be important	○	○	○	○	○	○	○	○
4. Conversations about behaviour change and self-management are initiated	○	○	○	○	○	○	○	○
5. Practitioners and patients agree shared priorities	○	○	○	○	○	○	○	○
6. A focus of what to talk about during the session is agreed	○	○	○	○	○	○	○	○
7. The conversation is a two-way collaborative process	○	○	○	○	○	○	○	○
8. Patients are involved and engaged in the conversation	○	○	○	○	○	○	○	○
9. The practitioner structures the consultation based on the shared agenda	○	○	○	○	○	○	○	○

Agenda setting and long term condition management

Please highlight any changes that you would recommend to the list above and/ or any general comments.

5. Agenda setting in the management of long-term conditions - measurement

In the next section (2 pages long) we are asking you to do two things:

(1) to consider a list of things that **practitioners** might do in a consultation and

(2) to indicate the extent to which you agree or disagree that these **practitioner** behaviours form part of agenda setting.

We are only focusing on the behaviour of practitioners here because we want to be able to use the tool we are developing to teach agenda setting to healthcare practitioners

6. Agenda setting in the management of long-term conditions - measurement 1

Consider this statement: "If we were to listen to a consultation where agenda setting is taking place **at the start of the consultation**, we should observe practitioners doing the following things while setting the agenda"

Please rate the **importance** of each of these items on the following scale 1-7. If you do not think an item is relevant please tick the "not applicable" - N/A - column on the far right hand side.

Note: this question has been broken up into 3 sections to make it easier to complete. Each section is asking you to do the same thing

Agenda setting and long term condition management

Please rate each of the following items

	1 = somewhat	2	3	4	5	6	7 = extremely	**N/A**
1. Practitioner explains the agenda setting process e.g. "Let's start by thinking about all the things we may want to cover today and then....."	○	○	○	○	○	○	○	○
2. Practitioner clarifies the purpose of agenda setting	○	○	○	○	○	○	○	○
3. Practitioner asks for the patient's agenda e.g. how can I help today?	○	○	○	○	○	○	○	○
4. Practitioner identifies the patient's agenda from the patient's story	○	○	○	○	○	○	○	○
5. Practitioner elicits the patients concerns	○	○	○	○	○	○	○	○
6. Practitioner elicits the patient's goals and aspirations - for the session	○	○	○	○	○	○	○	○
7. Practitioner elicits the patient's goals and aspirations - for the management of their condition	○	○	○	○	○	○	○	○
8. If the practitioner has seen this patient before, they refer to/ raise items discussed in previous sessions.	○	○	○	○	○	○	○	○

Agenda setting and long term condition management

Please rate each of the following items

	1 = somewhat	2	3	4	5	6	7 = extremely	**N/A**
9. Practitioner is responsive to emotional cues from the patient i.e. demonstrates sensitivity	○	○	○	○	○	○	○	○
10. Practitioner recognises and comments on the patient's strengths	○	○	○	○	○	○	○	○
11. Practitioner gives the patient time to talk	○	○	○	○	○	○	○	○
12. Practitioner asks for brief elaboration on each agenda item raised	○	○	○	○	○	○	○	○
13. Practitioner avoids going into too much detail on any one agenda item	○	○	○	○	○	○	○	○
14. Practitioner keeps asking about the patient's agenda until the patient indicates there is nothing more	○	○	○	○	○	○	○	○
15. Practitioner checks they have understood patient's agenda	○	○	○	○	○	○	○	○

Please rate each of the following items

	1 = somewhat	2	3	4	5	6	7 = extremely	**N/A**
16. Practitioner clarifies the patient's priorities	○	○	○	○	○	○	○	○
17. Practitioner raises things that they want to talk about	○	○	○	○	○	○	○	○
18. Practitioner gives the patient options	○	○	○	○	○	○	○	○
19. Practitioner links agenda topics e.g. So you'd like to have more energy to run uphill with your grandchildren but get out of breath easily… which may have to do with smoking"	○	○	○	○	○	○	○	○
20. Practitioner clarifies their own priorities e.g. states clinical priorities	○	○	○	○	○	○	○	○
21. Practitioner summarises shared agenda i.e. both patient and practitioner agendas	○	○	○	○	○	○	○	○
22. Practitioner checks there is nothing else the patient wants to add	○	○	○	○	○	○	○	○
23. Practitioner gives patient choice about where to start	○	○	○	○	○	○	○	○

Agenda setting and long term condition management

Please highlight any changes you would recommend to the list above and/ or any general comments.

7. Agenda setting in the management of long-term conditions - measurement 2

Consider this statement: "If we were to listen to a consultation where agenda setting has taken place at the start of the consultation, we should observe practitioners doing the following things **throughout the rest of the consultation**"

Please rate the **importance** of each item on a scale of 1-7. If you do not consider an item to be relevant, please tick the N/A column on the far right hand side.

Please rate each of the following items

	1 = somewhat	2	3	4	5	6	7 = extremely	**N/A**
1. Practitioner asks for the patient's agenda again at later stages in the consultation	○	○	○	○	○	○	○	○
2. Practitioner addresses each agreed topic on the shared agenda	○	○	○	○	○	○	○	○
3. Practitioner maintains focus on one topic at a time	○	○	○	○	○	○	○	○
4. Practitioner checks topic is addressed to patient's satisfaction before moving on	○	○	○	○	○	○	○	○
5. Practitioner refers back to shared agenda to decide on next topic	○	○	○	○	○	○	○	○
6. Practitioner uses the shared agenda to manage time e.g. "we've only got a few minutes left for the consultation today and I know we wanted to get to x and y. Which of these two would you like us to talk about today and which could keep for another time?"	○	○	○	○	○	○	○	○
7. Practitioner uses the shared agenda for goal setting/ follow up planning	○	○	○	○	○	○	○	○
8. Practitioner refers back to the shared agenda when concluding the session	○	○	○	○	○	○	○	○

Agenda setting and long term condition management

Please highlight any changes you would recommend to the list above and/ or any general comments.

8. Conclusions

Thank you for your time in completing this questionnaire. We will provide a short feedback summary at the start of the next round and would be grateful if you are able to contribute to this next round.

Please feel free to contact Nina Gobat directly at **GobatNH@cardiff.ac.uk** with any questions or suggestions using the comments box below.

Your survey response will be submitted when you press the **"done"** key below.

Optional comments box

10.8 Appendix C4-2: Modified Delphi round 2

1. Agenda setting and long term condition management

Thank you for taking part in round 1 of this study.

We have 2 aims with this study
1) to clarify a way of thinking about agenda setting - i.e. to "conceptual model" of agenda setting
2) to test some items that we may include in a rating scale to measure the competence of practitioners in agenda setting

We have based this second round on your responses from round 1.

How long does this take?
This round is likely to take the most time as we will be presenting the results of the first round before asking you a few more questions. It involves more reading than the previous round and should take 20 - 30minutes to complete.

Can I take a break?
As in the first round, if you want to take a break you may exit the survey at any time.
To **save** your work press the "next" key at the end of each page.
To **log back in** simply use your personal link to get back into the survey. You may also move forward and backward between the pages while completing this.

Click on the **next** button to start the survey

2. Developing a model: What is "agenda setting"?

Before trying to measure it, we wanted to try and clarify a helpful way of thinking about "agenda setting" i.e. suggest a model. In the previous round we asked you some open questions, and gave you a task to rate some of the work we had already done in thinking about this.

We have summarised the main themes in your answers, and have mapped these against the model we proposed. From these results we have suggested some changes to our model.

Please read through the next two pages and answer the questions on the page after.

Brief notes on terminology
1) Some participants pointed out the differences in terminology that are used in different parts of the world. To clarify, we have used the term ***"clinical encounter"*** instead of "consultation" or "session" and use this to refer to the time a health practitioner of any discipline (e.g. doctor, nurse, dietician) has a confidential meeting with a patient or client who has a long-term condition.

2) A more accurate term to describe what we are trying to define would be "***skilful, shared*** agenda setting" and this is what we really mean when using the term "agenda setting " throughout this survey.

3. Round 1 feedback: what is agenda setting? (1)

This page is mostly **READING** and gives a summary of the main themes in your answers to "what is agenda setting?"

1. Agenda setting is a process that allows practitioners and patients to **align** themselves in three areas:

1.1. On the ***content*** of what will be discussed in the session – e.g. clarifying both parties' concerns and/ or expectations

1.2. On the ***overall course*** of their work together i.e. what both parties hope to achieve as a consequence of their work together. This captures a broader purpose of "agenda setting" where the practitioner and patient work to define the "trajectory" of the clinical encounter or clinical encounters that may follow.

1.3. On the ***relational "ground rules"*** e.g. who will adopt what kind of role through the clinical encounter(s). For example, one practitioner said "it's about 'setting out your stall', in that it is beginning to show the patient what you are like to work with …"

2. Agenda setting involves a particular kind of **attitude**. At its heart this is about "being helpful". In practice this involves being open-minded, accepting of potential disagreement, willing to negotiate and collaborative.

3. Agenda setting provides a **"meta-perspective"** i.e. allows both parties to "step back" to consider a range of options before agreeing which to focus on.

4. Agenda setting involves a number of **tasks** that include:

4.1. Identifying, raising and/or clarifying individual agenda items (including "problem definition)

4.2. Discussion, negotiation and prioritising to reach agreement on a focus/ foci

4.3. Planning how the time will be used to address the agreed focus/ foci

5. Agenda setting is a **conversational** device or strategy. It involves the use of conversation structured in a particular kind of way to achieve a specific purpose.

6. The **purpose** of agenda setting is:

6.1. ***Time management*** – to structure a time efficient consultation

6.2. ***Engagement*** - to ensure meaningful active involvement of both parties

6.3. ***Focus*** – to agree a conversational focus for the work being done based on a collaborative attempt at considering a variety of options.

6.4. ***Adjustment*** and/or ***realignment*** – to "maintain a constructive alliance" This may involve "checking out" how things are progressing and a re-prioritisation or re-negotiation of the focus of the work being done.

7. **When** to use agenda setting:

7.1. Agenda setting is often used at the start of a clinical encounter, but can be used at any stage in a clinical encounter (e.g. for realignment).

7.2. It can also be used to shape a single clinical encounter, or a series of clinical encounters.

8. Agenda setting needs to be **flexible**. Unexpected items may arise in conversation and practitioners need to be responsive to these e.g. by re-visiting agenda setting.

9. Agenda setting looks different in different clinical encounters, and in **different settings** or contexts.

Thoughts, comments, reflections (optional)

4. Round 1 feedback: what is agenda setting? (2)

This page is **READ ONLY**. We present your feedback on the model of agenda setting we initially suggested.

We suggested that 9 components taken together, define agenda setting in consultations about long term condition management.

In analysing the results we looked at two kinds of agreement.
1) how much each individual agreed with each componenet
2) how much group members agreed with each other. Where the middle 50% of the group were within 1 point of each other, we considered that "higher consensus" had been reached in the group.

In general there was a high level of both kinds of agreement in this section. We expected this because we did a lot of developmental work to identify each of these components. We are still interested the items where there was even a small amount of variation in the group responses and have some questions about these.

Higher consensus was reached on theses items:

2. Patients talk about their concerns, requests, wishes and/ or goals
3. Practitioners raise subjects they consider to be important
5. Practitioners and patients agree shared priorities
6. A focus of what to talk about during the session is agreed
7. The conversation is a two-way collaborative process
8. Patients are involved and engaged in the conversation

NOTE: several of these items map onto the themes that were raised by the group and presented in the previous page.

Lower consensus was reached on these items:

1. A broad overview of potential discussion topics is constructed
4. Conversations about behaviour change and self-management are initiated
9. The practitioner structures the consultation based on the shared agenda

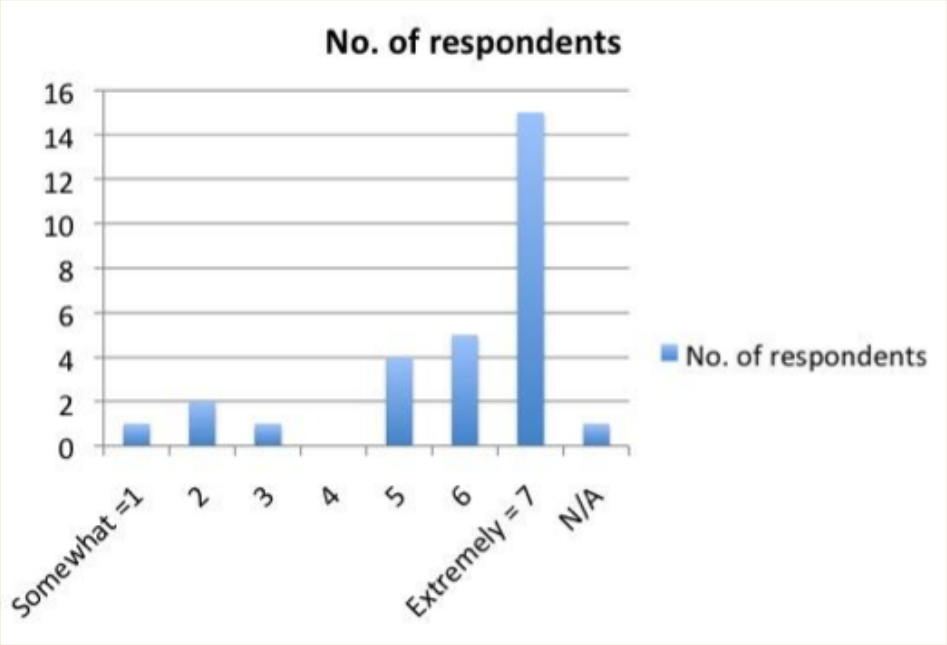
We will consider the lower consensus items in more detail on the next page.

5. Round 1 feedback: what is agenda setting? (3)

Please consider each of the lower consensus items, and the questions posed.

Please note: this is the longest page in the survey.

1. A broad overview of potential discussion topics is constructed



This quality of agenda setting involves "stepping back" to obtain a "meta-view" of the work to plan and organise the way forward together.

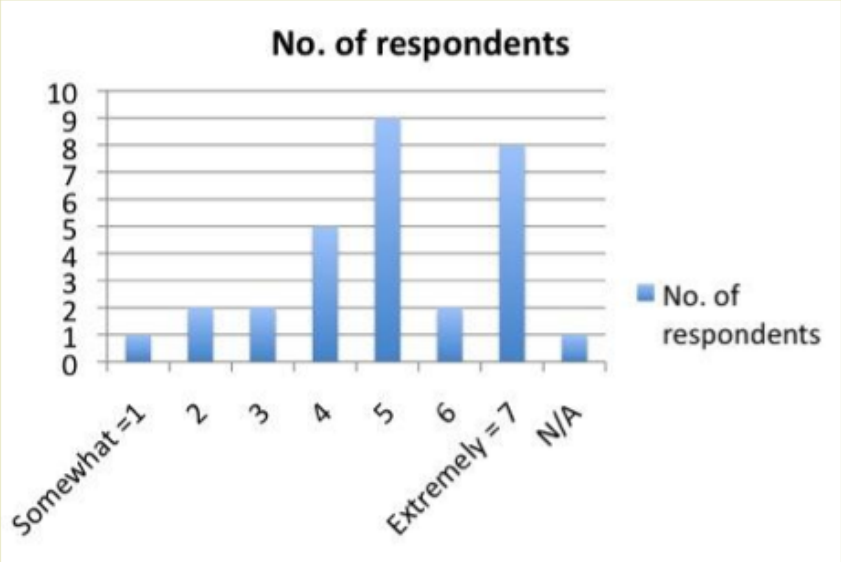
Participants used different terms to describe this e.g.

(a) "putting together a list of options"

(b) starting with a summary from previous session(s), then asking if "there is something special to talk about today".

There was greater variation within the group about how important this component is in defining agenda setting. Why do you think this might be? e.g. could this be more clearly worded, or is the thinking behind this idea faulty?

4. Conversations about behaviour change and self-management are initiated



We suggested that "self-management" is a feature of long-term condition management, and agenda setting can offer a way of initiating these. Due to the long term nature of these conditions that patients manage on a day to day basis, it becomes perhaps more important to structure a clinical encounter in a way that engages and actively involves patients.

However participants highlighted that not all clinical encounters about long-term conditions would include conversations about self-management. This component could therefore be less strongly worded to reflect this.
e.g. *Conversations about behaviour change and/or self management* ***may be raised***

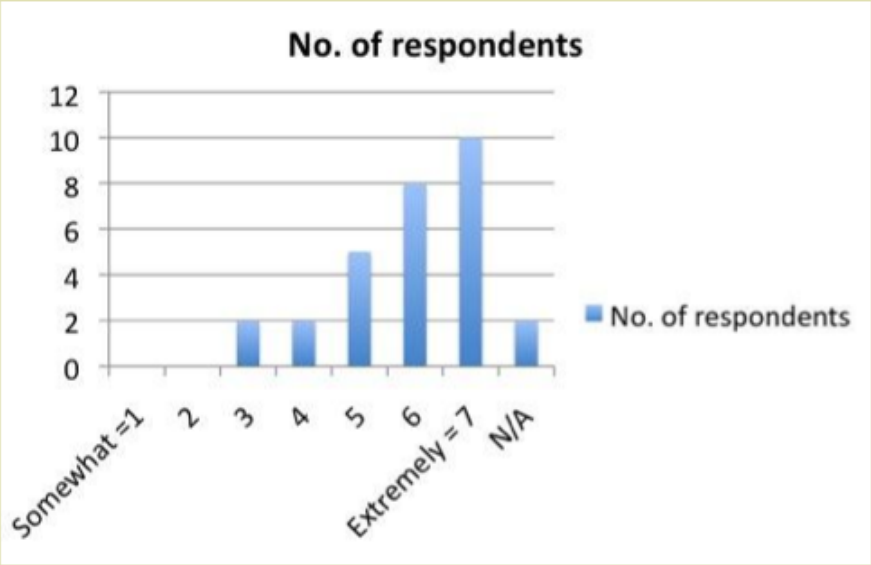
Please respond to the following 2 questions:

(1)There was the greatest within-group variation on this component. What are your thoughts on why this was? Feel free to add any suggestions about wording, or options to re-think this.

(2) To what extent is it useful make a distinction between "agenda setting" as a generic skill and "agenda setting" in the management of long term conditions?

Please note: we aren't suggesting that agenda setting is not useful in other settings, but rather that it has a different "flavour" in long term condition management.

9. The practitioner structures the consultation based on the shared agenda



This component considers what happens in the rest of the consultation between times of "agenda setting". If agenda setting involves collaborative planning in how the clinical encounter could most efficiently be used, then the consultation itself should reflect decisions that were taken during the agenda setting process.

Some suggestions included:

(a) there is a need for flexibility - at times things may come up that neither party could have expected, and that may be more important to address than what was planned. This may involve a revisiting of the agenda setting process.

(b)"structuring" is actually a different, though possibly related, task in the consultation.

(c) patients also have a role in structuring the consultation.

We have used the term "agenda navigation" as an attempt to capture the "structuring" process that best complements agenda setting."Navigation" implies responsiveness to a number of different elements, while at the same time attempting to follow the meta-structure or "map" generated during the agenda setting process. (At this stage we are not proposing to measure this process.)

What are your thoughts about the concept of "agenda navigation"?

6. Measuring agenda setting (1)

This page is **READ ONLY** and is about **MEASUREMENT**.

We are developing a teaching tool for practitioners, and are focused therefore on the practitioner's behaviour in this section.

In the previous round we gave you a list of 23 practitioner behaviours and asked you to rate these. We will first present the results and then ask you some questions on the next page.

We analysed the results using slightly different cutoff points than for the model presented earlier. While there was strong agreement on most of the individual items (see the average scores given in brackets), was lower *within group* agreement on certain items than on others.

Here are the results. Please note: average scores given on a scale of **0-7**

Higher consensus was reached on the following items:

1. Practitioner explains the agenda setting process e.g. "Let's start by thinking about all the things we may want to cover today and then….." (5.93)
3. Practitioner asks for the patient's agenda e.g. how can I help today? (6.26)
5. Practitioner elicits the patients concerns (5.89)
6. Practitioner elicits the patient's goals and aspirations - for the session (6.08)
7. Practitioner elicits the patient's goals and aspirations - for the management of their condition (5.70)
8. If the practitioner has seen this patient before, they refer to/ raise items discussed in previous sessions. (5.56)
9. Practitioner is responsive to emotional cues from the patient i.e. demonstrates sensitivity (6.26)
10. Practitioner recognises and comments on the patient's strengths (5.78)
11. Practitioner gives the patient time to talk (6.30)
12. Practitioner asks for brief elaboration on each agenda item raised (5.11)
15. Practitioner checks they have understood patient's agenda (6.52)
16. Practitioner clarifies the patient's priorities (6.19)
17. Practitioner raises things that they want to talk about (5.81)
18. Practitioner gives the patient options (6.37)
19. Practitioner links agenda topics e.g. So you'd like to have more energy to run uphill with your grandchildren but get out of breath easily… which may have to do with smoking"(6.00)
21. Practitioner summarises shared agenda i.e. both patient and practitioner agendas (6.22)
22. Practitioner checks there is nothing else the patient wants to add (6.26)
23. Practitioner gives patient choice about where to start (6.26)

Lower consensus was reached on the following items:

2. Practitioner clarifies the purpose of agenda setting 5.37)
4. Practitioner identifies the patient's agenda from the patient's story (5.26)
13. Practitioner avoids going into too much detail on any one agenda item (5.27)
14. Practitioner keeps asking about the patient's agenda until the patient indicates there is nothing more (5.11)
20. Practitioner clarifies their own priorities e.g. states clinical priorities (5.85)

Please note: We don't expect to see each one of these things in every clinical encounter where agenda setting is happening, but these items do give us an idea of what to look out for when trying to spot good agenda setting. Each item relates to a different part of the model, and maps onto a different part of the rating scale. We will use these items mainly in the rating manual for the scale.

7. Measuring agenda setting (2)

We propose to measure three aspects of agenda setting:

1) The conversation (quality)
2) The tasks
3) The skills

A note on "context"

Several participants pointed out that agenda setting may look different in different contexts. For example, a brief vs a more lengthy clinical encounter, or if the clinical encounter is an isolated event compared to one of a series of meetings. Agenda setting may also look different as part of a first meeting between a clinician and a patient, compared to a follow up visit.

In thinking about measurement, we are trying to identify the core aspects of agenda setting that we would need to see evidence of to a) say "agenda setting" is happening and b) decide whether or not it is happening skilfully, *regardless of differences in context*

Please bear this in mind as you consider each of these aspects in turn below, and answer the related questions. Where we have already reached acceptable consensus on an item, you are not asked to re-rate this item.

The conversation

This aspect of the scale aims to capture the quality of the conversation, and can be captured using global judgments.

The following qualities will be included:

Collaboration
Engagement

Please read through the list of qualities below and indicate to what extent you think each quality should be included in our measure

	strongly disagree	disagree	somewhat disagree	neutral	somewhat agree	agree	strongly agree
Respect	○	○	○	○	○	○	○
Sensitivity	○	○	○	○	○	○	○
Responsiveness	○	○	○	○	○	○	○
Ease	○	○	○	○	○	○	○

Comments, including additional qualities we should consider

The tasks

The following tasks will be included:

Elicits the patient's agenda
Raised their own agenda
Clarifies the shared agenda
Agrees a focus/ foci

Please consider this additional task and indicate to what extent you agree it should be included in our measure

	strongly disagree	disagree	somewhat disagree	neutral	somewhat agree	agree	strongly agree
Introduces "agenda setting"	○	○	○	○	○	○	○

Comments, including additional tasks we should consider

The skills

Please consider the following skills and indicate to what extent you agree that each of these should be included in our measure

	strongly disagree	disagree	somewhat disagree	neutral	somewhat agree	agree	strongly agree
Listening	○	○	○	○	○	○	○
Asking	○	○	○	○	○	○	○
Summarising	○	○	○	○	○	○	○
Checking understanding	○	○	○	○	○	○	○
Giving information	○	○	○	○	○	○	○

Comments, including additional skills we should consider

8. Final question and conclusions

In your view, when is the best time to teach "agenda setting" to practitioners?

Please tick as many as apply

- [ ] Earlier in basic training
- [ ] Later in basic training
- [ ] Post-qualification i.e. once they have received their basic training
- [ ] Once practitioners have had 5 years post-qualified clinical experience
- [ ] Once practitioners have had 10 years post-qualified clinical experience

What made you select the option(s) you did?

Thank you for your time in completing this questionnaire. We will provide a short feedback summary at the start of the final round.

Please feel free to contact Nina Gobat directly at **GobatNH@cardiff.ac.uk** with any questions or suggestions using the comments box below.

Your survey response will be submitted when you press the **"done"** key below.

Optional comments box

10.9 Appendix C4-3: Delphi participants

Name	Position or role	How they met Delphi criteria*
Michael Peltenburg	Professor at the Horten Centre for practice-orientated research, Zurich, Switzerland	Published work on the emerging agenda (Peltenburg, Fischer et al 2004)
Wolf Langewitz	Professor at Basel University Hospital, Switzerland	Published work on agenda setting in medical settings (Langewitz, Denz et al, 2002)
Jonathan Silverman	Professor at Cambridge University, England	Co-developed model of medical communication (Silverman, Kurtz et al, 2005)
Vaughn Keller	Communication skills consultant, director Keller and company, USA	Co-developed model of medical communication (Keller and Carroll, 1994)
Stephen Rollnick	Professor at Cardiff University, Wales	Co-founder of Motivational Interviewing
Adrian Edwards	Professor at Cardiff University, Wales	Clinical and research expertise, published extensively on shared decision making.
Glyn Elwyn	Professor at Cardiff University, Wales (now at Dartmouth Centre for Health Care Deliver Science, USA)	Clinical and research expertise, published extensively on shared decision making.
Grant Corbett	Communication skills consultant and MI trainer, Behaviour Change Solutions, Canada	Educational and research expertise, Member of Motivational Interviewing Network of Trainers (MINT)
Sue Channon	Clinical psychologist, School of Psychology, Cardiff University	Published work on agenda setting with young people and type 1 diabetes (Channon, Huws-Thomas et al 2005)
Claire Lane	Trainee psychologist (now qualified), University of Birmingham and Wolverhampton City Primary Care Trust, England	Developed Behaviour Change Counselling Index (BECCI), including agenda setting (Lane, Huws-Thomas et al 2005)
Judith Carpenter	Dietician and MI trainer, Derbyshire, UK	Clinical and educational expertise, Member of Motivational Interviewing Network of Trainers (MINT)
Kamila Hawthorne	Professor at Cardiff University, Wales	Clinical and educational expertise
Elspeth Webb	Paediatrician at Department of Child Health, Cardiff University, Wales	Clinical expertise
Larry Mauksch	Department of Family Medicine, University of Washington, USA	Published work on the establishing focus protocol (Mauksch, Hillenburg et al 2001)
Bob Mash	Professor of Family Medicine and Primary Care, Stellenbosch University, South Africa	Clinical, educational and research expertise, additional expertise in implementation in low resource settings

Cristiana Fortini	Psychologist, University Hospital of Lausanne, Switzerland	Clinical, educational and research expertise Member of Motivational Interviewing Network of Trainers (MINT)
Carl Ake Farbing	Psychologist at BSF institute, Sweden	Clinical, educational and research expertise, Member of Motivational Interviewing Network of Trainers (MINT)
Steven Cole	Professor of Psychiatry, Stony Brook University Medical Centre, USA	Co-developed model of medical communication (Cole and Bird, 2000)
Kathy Goumas	Head of Addictions and Quality Assurance and MI trainer, Northern Ireland	Clinical and educational expertise, Member of Motivational Interviewing Network of Trainers (MINT)
Kerry Hallam	Health Foundation Co-creating Health expert patient tutor - lead	Patient and patient tutor (i.e. educational) expertise
Dave Beck	Health Foundation Co-creating Health expert patient tutor	Patient and patient tutor (i.e. educational) expertise
Peter Stubbs	Health Foundation Co-creating Health expert patient tutor	Patient and patient tutor (i.e. educational) expertise
Joni Inniss	Health Foundation Co-creating Health expert patient tutor	Patient and patient tutor (i.e. educational) expertise
Trevor Critchley	Health Foundation Co-creating Health expert patient tutor	Patient and patient tutor (i.e. educational) expertise
John Gessler	Health Foundation Co-creating Health expert patient tutor	Patient and patient tutor (i.e. educational) expertise
Kevin Smith	Health Foundation Co-creating Health expert patient tutor	Patient and patient tutor (i.e. educational) expertise
Bindie Wood	Health Foundation Co-creating Health expert patient tutor	Patient and patient tutor (i.e. educational) expertise
Bill Miller	Emeritus professor at University of New Mexico (now retired)	Founder of Motivational Interviewing
Jeff Allison	MI trainer, director at Jeff Allison Training Ltd	Clinical and educational expertise, Member of Motivational Interviewing Network of Trainers (MINT)
Dave Rosengren	Clinical psychologist and consultant, Prevention Research Institute and University of Washington, USA	Clinical, educational and research expertise, Member of Motivational Interviewing Network of Trainers (MINT)

*Criteria were that the person had developed or expanded the agenda setting construct, evidenced through publication, and/or that they had clinical, educational and/ or research expertise in that area.

10.10 Appendix C6-1: Measures identified in search strategy 1 (n=8)

Measures identified in literature review (Chapter 2)		
Reference	**Measure**	**Inclusion or exclusion**
10. Del Piccolo, Putnam et al (2004)	Verona Medical Interview Classification Scheme (V-MICS)	Excluded – one aspect of agenda setting (responding to cues) – additional reference retrieved (Del Piccolo, Mazzi et al, 2008) through snowballing and included
11. Epstein, Shields et al (2006)	Measure of Patient Centred Communication	Excluded – original reference (Brown, Stewart et al 2001) retrieved through snowballing and included
12. Kravitz, Bell et al (1999)	Taxonomy of Requests by Patients (TORP)	Excluded – only one aspect of agenda setting (patient requests)
13. Krupat, Frankel et al (2006)	Four Habits Coding Scheme	Included
14. Lane, Huws-Thomas et al (2005)	Behaviour Change Counseling Index	Included
15. Lang, McCord et al (2004)	Common Ground Instrument	Included
16. Martin, DiMatteo et al (2001)	Facilitation of Patient Involvement Scale	Excluded – patient self-report measure
17. Richard, Lussier (2007)	MEDICODE	Excluded – one aspect of agenda setting (participation)
18. Robinson, Walley et al (2002)	LIV-MAAS	Duplication – Enzer, Robinson et al 2003 reference included

Measurement of agenda setting from papers used in literature review (Chapter 2)	
19. Beckman and Frankel (1984)	Included
20. Butler, Campion et al (1992)	Included
21. Dyche and Swiderski (2005)	Included
22. Haas, Houchins et al (2003)	Included
23. Marvel, Epstein et al (1999)	Included

10.11 Appendix C6-2: Items assessing agenda setting in measures

Table 10-2: Agenda setting subscales or items in identified measures

Name of measure, reference, country	Measurement of agenda setting - subscales and items summarised or presented verbatim, numbering as per original
Measures that assess tasks, phases or stages of the clinical encounter	
1. Behaviour Change Counselling Index (BECCI); (Lane et al 2005); UK	One of the four domains is "agenda setting and permission seeking". It is assessed with two items: • Invites the patient to talk about behaviour change • Demonstrates sensitivity to talking about other issues
2. Behaviour change skills rating sale (BCSRS) (Bonner et al 2008); UK	One of four items the in domain measuring "structure": • Agrees and uses agenda for session with the patient
3. Calgary-Cambridge Observation guide, (Kurtz et al 2003); Canada & UK	All four items related to the task of initiating the session, and identifying the reason for the consultation: (a) Identifies the patient's problems or the issues that the patient wishes to address with appropriate opening question (e.g. "What problems brought you to the hospital?" or "What would you like to discuss today?" or "What questions did you hope to get answered today?") (b) Listens attentively to the patient's opening statement, without interrupting or directing patient's response (c) Confirms list and screens for further problems (e.g. "so that's headaches and tiredness; anything else?") (d) Negotiates agenda taking both patient's and physician's needs into account
4. Common Ground Instrument; (Lang et al 2004); USA	"Agenda setting" is one of one of eight core content areas. Agenda setting – Items: (a) asks for patient's agenda, (b) elicits full agenda, (c) checks for additional agenda items Agenda Setting—Global Criteria 5. Explores complete agenda at the beginning until the point that the patient says, "Nothing else." If several agenda items, prioritizes amongst them. Explores for additional agenda at end. 4. Explores complete agenda but may not summarize or prioritize or may not explore for more agenda at end. 3. Explores for agenda partially with at least two efforts at agenda setting. One can be at beginning and one at end. 2. Asks only once at the beginning, eg, "What brings you in today?" or "How can I be of help?" or at the end, "Is there anything else?" 1. Doesn't explore for agenda at beginning but begins addressing an established problem. Doesn't return to agenda at any point.

Name of measure, reference, country	**Measurement of agenda setting - subscales and items summarised or presented verbatim, numbering as per original**
5. Communication skills scale, (Utting et al 2000); UK	Items relevant to agenda setting tasks: ▪ Explaining purpose of the interview ▪ Exploring the history of the presenting complaint ▪ Introducing new areas of enquiry Items relevant to agenda setting process: ▪ Use of open questions ▪ Use of direct questions ▪ Use of non verbal behaviour ▪ Checking patient understanding ▪ Use of summarisation ▪ Responding in a sensitive manner
6. Four Habits Coding Scheme; (Krupat et al 2006); USA	Habit 1: Invest in the beginning 5. The clinician tries to identify the problem(s) using primarily open-ended questions (asks questions in a way that allows patient to tell own story with minimum of interruptions or closed ended questions). 3. The clinician tries to identify the problem(s) using a combination of open and closed ended questions (possibly begins with open-ended but quickly reverts to closed ended). 1. The clinician tries to identify the problem(s) using primarily closed-ended questions (staccato style). 5. The clinician encourages the patient to expand in discussing his/her concerns (e.g., using various continuers such as Aha, Tell me more, Go on). 3. Clinician neither cuts the patient off nor expresses great interest in learning more (listens, but does not encourage expansion or further discussion) 1. The clinician interrupts or cuts the patient off in his/ her attempt to expand (is clearly not very interested) 5. The clinician attempts to elicit the full range of the patient's concerns by generating an agenda early in the visit (clinician does other than simply pursue first stated complaint). 3. The clinician makes some reference to other possible complaints, or asks briefly about them before pursuing the patient's first complaint, or generates an agenda as the visit progresses. 1. The clinician immediately pursues the patient's first concern without an attempt to discover other possible concerns of the patient's.
7. Interview tracking form, (Egnew et al 2004); USA	One of seven content areas is "opening the discussion – establishing focus". It includes four items: • Allows patient to complete opening statement • Elicits full patient agenda • Negotiates prioritised agenda • Establishes and maintains personal connection
8. Leicester assessment	One of the seven categories is "interview/ history taking" nine of the 12 items in the category are relevant

Name of measure, reference, country	**Measurement of agenda setting - subscales and items summarised or presented verbatim, numbering as per original**
package, (Fraser et al 1994); UK	Items relevant to agenda setting tasks: • Allows patient to elaborate presenting problems fully • Identifies patient's reasons for consultation Items relevant to agenda setting process: • Listens attentively • Puts patient at ease • Recognises verbal and nonverbal cues • Uses silences appropriately • Phrases questions simply and clearly • Seeks clarification
9. LIV-MAAS (UK); (Robinson et al 2002); UK	Subscale: exploration of reasons for the encounter • asks reason for the encounter • explores emotional impact of the complaint/ problem • asks patient to clarify why he is presenting with this problem at this particular moment • asks patient to give his opinion on what re the causes of the problem • asks how the complaint or problem is discussed within the family or primary group • asks patient to state what help he/ she desires • asks how the patient has tried to solve the problem by him/ herself • explores the influence of the complaint on daily life Subscale: Structuring the interview q*) Looks at the patient when asking reason for encounter 45) Offers an agenda for the consultation 46) Concludes the exploration of the reason for the encounter with a summary 48) Explores the reason for the encounter before history-taking 49) Completes the exploration for the reason for the encounter and the history taking sufficiently before presenting solutions Subscale: Interpersonal skills 52) Facilitates the communication 53) Reflects emotions properly 56) Makes, when necessary, meta-communicative comments
10. Macy model checklist, (Kalet et al 2004); USA	One of nine content domains is the "gathering information phase". Two tasks assessed by six and two items respectively, are relevant: (1) Survey patient's reasons for the visit • Start with open-ended nonfocused questions • Invite patient to tell story chronologically • Allow patient to talk without interrupting • Actively listen • Encourage completion of the statement of all of patient's concerns through verbal and nonverbal encouragement (e.g. what else?)

Name of measure, reference, country	Measurement of agenda setting - subscales and items summarised or presented verbatim, numbering as per original
	• Summarise what you have heard. Check for understanding. Invite more (2) Determine the patient's chief concerns • Ask closed-ended questions that are nonleading and one at a time • Define the symptom completely
11. Observer-rated sheet, (O'Neill et al 2003); UK	One of the 10 items relevant: • Agrees purpose of interview with patient
12. Paediatric Consultation Assessment Tool, (Howells et al 2010); UK	One of seven content areas is "initiating the session". Two of the three items rated here are: • Identifies reasons for the consultation – the doctors and family's • Screens for other problems and negotiates the consultation's agenda
13. SEGUE ; (Makoul 2001); USA	One of six content areas is "set the scene". Two of five items measure agenda setting: • Establish reason for the visit • Outline agenda for visit (e.g. anything else?, issues, sequence)
14. Verona Patient-centred communication evaluation scale (VR-COPE); (Del Piccolo et al 2008) Europe	The first of the nine items is "patient agenda" defined as all current complaints brought forward by the patient in the present consultation are explored and made explicit. Five clinician behaviours are included for rating: • The physician sets up a problem list • The physician checks if the list of symptoms/ problems is complete • The physician facilitates the patient to list al his/her current problems that brought him/her to the present consultation. • Tries to clarify and check all new information. • Tries to understand how relevant each reported symptom or problem is for the patient.
Measures that assess interaction at "micro" level (segments and utterances)	
15. Beckman and Frankel (1984); USA	Doctor's skills in the opening sequence coded to identify whether they asked for the patient's concerns Solicitation/ non-solicitation of patient concerns If solicitation, what followed • interruption = (a) closed questions, (b) recompleters (a restatement of the content of what the patient just said), (c) elaborators (request for more information about what has just been said) and (d) statements (a comment about what has just been said). • Impact of interruption Patient concerns • Total number of patient concerns expressed • Rated clinical importance of each concern
16. Butler et al (1992); UK	Doctor and patient speech classified in terms of content, process and procedure.:

Name of measure, reference, country	Measurement of agenda setting - subscales and items summarised or presented verbatim, numbering as per original
	The content of speech units is described as an "agenda" referring to implicit or explicit topics of concern. These agendas are classified into 10 categories e.g. physical, emotional, social etc. Agendas are linked with processes e.g. "giving or seeking information". Procedures = contextual and structural aspect of the encounter e.g. treatment, investigation Processes = information processing strategies e.g. giving or seeking information
17. Dyche et al (2005); USA	Doctor's skills in the opening sequence coded to identify whether they asked for the patient's concerns: Solicitation or non-solicitation of patient concerns (in first 5 mins) If solicitation, patient concerns completed or interrupted • Completed = (a) patient gave a negative response to solicitation; (b) patient made a statement of completion or indicated the same by a significant pause; or (c) patient stopped to address a health-related question to the physician. • Interrupted = prior to completion, the physician disrupted the patient's statement. • Time in seconds between the physician solicitation and the point of interruption.
18. Haas et al (2003); USA	Presence or absence of: ▪ "Agenda eliciting" i.e. asking the patient the reason(s) for the visit. ▪ "Agenda-setting" i.e. summary statements indicating which topics would be covered in the visit ▪ "Agenda negotiation" i.e discussions concerning which topics would be covered and in what order. Additional aspects: • Attempts to elicit additional concerns beyond the first one expressed, • Number of concerns expressed, • Any attempt to negotiate or structure the agenda, • Late-arising concerns
19. Henbest et al (1989); Canada & USA	Identify • Patient "offers" in terms of "symptoms, thoughts, feelings, expectations and prompts" (in patient's words) • Doctor's response as (0) ignores it (1) used a closed response (2) uses an open ended response or (3) facilitates expression of expectations, thoughts or feelings
20. Marvel et al (1999); USA	Doctor's skills in the opening sequence coded to identify whether they asked for the patient's concerns: Solicitation or non-solicitation of patient concerns • Placement coded as (1) opening of the visit i.e initial greeting through

Name of measure, reference, country	**Measurement of agenda setting - subscales and items summarised or presented verbatim, numbering as per original**
	pursuit of 1 specific concern or (2) later in the visit." If solicitation, patient's concerns completed or not completed • Completed = (a) patient made a statement of completion (b) a concern related question was asked; (c) negative response to query (e.g. anything else? No) • Non-completed = doctor disrupted the patient's statement or initiated discussion about a particular topic without determining if the patient's initial statements of concerns were indeed completed. • Reason for non-completion were coded as, "chest pain") or (4) (1) closed question (2) elaborator (tell me more about….) (3) re-completer (e.g. stroking beard statement (e.g. "that sounds serious") Also, time, number of concerns, number of solicitation sequences.
21. Measure of Patient Centred Communication (MPCC), (Brown et al 2001) USA	One of the three content areas is "exploring both the disease and the illness experience". • Patient statements that fall into one of six mutually exclusive subcomponents: (1) reason for visit (symptoms) e.g., "I've been having these headaches." (2) feelings e.g., "I'm really worried about this.", (3) ideas (e.g., "Could it be because I'm having allergies?" (4) effect of the symptoms on functioning e.g., "The headaches wake me up at night" (5) expectations (e.g., "I just wanted to see if some medication might help.") (6) prompts (any concern that was repeated to prompt the physician to respond). • For each stated concern, the rater determines whether it is (a) "cutoff", (b)"preliminary exploration" of the concern, (c) "further exploration" (more than one physician question about the concern), or (d) "validation" (physician expression of understanding or empathy).
22. Medical interaction process system (MIPS), (Ford et al 2000); UK	MIPS content codes – "agendas" – paired with MIPS dependent modes • Asks questions: open question; closed question leading question, multiple question; focused open question • Checks: information; understanding; summarises • Gives: information (neutral; positive; negative); reassurance; false/prem reassurance; orientation • Seeks Information • Directs/Advises

10.12 Appendix C7-1: Internal consistency analyses

Table 10-3 summarises how the G-coefficients change under different conditions. These include:

1. When individual items were removed from this subscale? (pilot 3_4 to pilot 3_9) (table 6)
2. When the last 3 items were merged into a single "agenda mapping process" score? (pilot 3_10)
3. When the last 3 items are merged into a single "agenda mapping process" score, and the first two items are merged into a "identify talk topics" score? (pilot 3_11)
4. When only the first two items in the competence subscale are retained (pilot3_18)
5. When only the last three items in the competence subscale are retained (pilot 3_19)
6. When only the first three items in the competence subscale are retained (pilot 3_20

From these investigations it appears that:

- The G coefficients do not change substantially (range from Φ=0.652 to Φ=0.681)
- Inter-rater reliability also does not change substantially
- The last three items on the competence subscale (Eng, Collab, Structure) are very highly correlated (Ep^2 ave inter-item correlation = 0.967) suggesting that these items could be collapsed into a single "agenda mapping process" item (AMP)
- The first two items (patient agenda and clinical agenda) are highly correlated (Ep^2 ave inter-item correlation = 0.891) and there would be high internal consistency on a scale incorporating these items only (Ep^2=0.924). However this is the lowest internal consistency score when compared to the others in this exercise.

Conclusion:
The competence subscale could contain 2 items (PA, CA), or 3 items (PA, CA, ESF) or 4 items (PA, CA, ESF, AMP). The last alternative is to have (PA+CA), ESF, AMP. However before changing items, it is necessary to look at the way in which the internal consistency of the overall measure is changed with these changes made to the competence subscale (see next exercise)

Table 10-3: Internal consistency analyses

	Pilot 3_3	*Pilot3_4*	*Pilot3_5*	*Pilot3_6*	*Pilot3_7*	*Pilot3_8*	*Pilot3_9*	*Pilot 3_10*	*Pilot 3_11*	*Pilot 3_18*	*Pilot 3_19*	*Pilot 3_20*
	Comp S scale	*No struct*	*No collab*	*No eng*	*No ESF*	*No CA*	*No PA*	*mergeAMP*	*ID talk topics, AMP*	*PA and CA only*	*Eng, coll, strc only*	*PA, CA, ESF only*
G study coefficient	0.675 (0.728)	0.664 (0.716)	0.666 (0.711)	0.681 (0.740)	0.679 (0.737)	0.679 (0.740)	0.652 (0.700)	0.671 (0.722)	0.671 (0.738)	0.663 (0.719)	0.665 (0.728)	0.654 (0.701)
IRR 1 item	0.846 (0.874)	0.845 (0.872)	0.846 (0.869)	0.854 (0.882)	0.851 (0.880)	0.844 (0.874)	0.839 (0.865)	0.856 (0.882)	0.862 (0.887)	0.866 (0.891)	0.839 (0.871)	0.855 (0.877)
IRR 1 item – 1 rater	0.648 (0.698)	0.645 (0.694)	0.646 (0.689)	0.661 (0.714)	0.655 (0.709)	0.644 (0.698)	0.634 (0.681)	0.665 (0.713)	0.675 (0.724)	0.683 (0.732)	0.634 (0.692)	0.663 (0.704)
IRR ave	0.866 (0.892)	0.863 (0.888)	0.863 (0.886)	0.873 (0.900)	0.868 (0.898)	0.868 (0.895)	0.855 (0.880)	0.870 (0.894)	0.870 (0.894)	0.876 (0.902)	0.858 (0.890)	0.870 (0.890)
IRR ave – 1 rater	0.683 (0.734)	0.677 (0.726)	0.678 (0.721)	0.696 (0.750)	0.687 (0.745)	0.686 (0.740)	0.662 (0.709)	0.690 (0.737)	0.691 (0.738)	0.703 (0.753)	0.668 (0.729)	0.690 (0.729)
Internal consis	0.982 (0.987)	0.974 (0.992)	0.974 (0.982)	0.978 (0.984)	0.985 (0.988)	0.981 (0.989)	0.978 (0.983)	0.965 (0.975)	0.962 (0.978)	0.927 (0.948)	0.984 (0.989)	0.933 (0.953)
Int consist – 1 rater	0.975 (0.981)	0.967 (0.974)	0.967 (0.975)	0.969 (0.976)	0.977 (0.980)	0.971 (0.980)	0.971 (0.977)	0.958 (0.968)	0.956 (0.972)	0.908 (0.924)	0.967 (0.973)	0.921 (0.941)
Ave inter-item corr	0.901 (0.928)	0.967 (0.974)	0.883 (0.916)	0.898 (0.924)	0.929 (0.943)	0.912 (0.946)	0.899 (0.920)	0.873 (0.907)	0.893 (0.937)	0.863 (0.891)	0.953 (0.967)	0.823 (0.871)
Ave inter-item corr – 1 rater	0.868 (0.895)	0.853 (0.884)	0.854 (0.886)	0.863 (0.890)	0.894 (0.909)	0.872 (0.905)	0.870 (0.893)	0.850 (0.884)	0.878 (0.921)	0.832 (0.859)	0.908 (0.924)	0.796 (0.843)

10.13 Appendix C7-2: EAGL-I coding manual

Evaluation of AGenda mapping skilL - Instrument (EAGL-I)

Coding manual

Evaluation of AGenda mapping skilL – Instrument (EAGL-I)

"Agenda setting", "mapping" and "navigation"

The term agenda setting has been used across the healthcare literature to mean different things. In essence agenda setting describes a process through which healthcare clinicians and patients establish the conversational focus of the clinical encounter. The origins of agenda setting lie in the Patient Centred Clinical Method and in Motivational Interviewing. As a result agenda setting is understood to be a shared process with mutual engagement and collaboration at its heart.

Agenda setting may occur as an implicit process in which the conversational focus is established by the first topic that is raised. This focus then shifts at a number of junctures as new topics are raised. Someone observing the conversation may notice that the topic has shifted for example but have heard someone "signpost" that e.g. by saying something like "Could we also talk about xyz?"

In contrast, agenda setting has also been described as an explicit process – a structured conversation in which a number of discussion topics are identified before a conversational focus is agreed. Where agenda setting is described in this way, it is a separate from the phase of the clinical encounter where one particular subject is discussed in detail. There are a number of advantages to this approach. Firstly it allows for a collaborative process of identifying the focus of the conversation. Secondly it avoids a premature focus on the first topic raised when this may not in fact be the most important. Thirdly it enhances the efficiency of the clinical encounter.

Nautical metaphors are used here to distinguish between these two types of agenda setting. "Agenda mapping" describes the explicit process of establishing – or re-establishing – the conversational focus. "Agenda navigation" describes the implicit process of moving flexibly across a number of conversational foci. Both agenda mapping and agenda navigation can occur with different degrees of skill.

This measure is designed to help learners acquire skill in agreeing the focus of the clinical encounter explicitly with their patients when *agenda mapping*.

A note on terminology

This measure has been developed in the healthcare context. As a result the term "patient" is used throughout the manual to refer to the person receiving a clinical service. It can be read as a synonym for "client" or "service user". Likewise the term "clinician" that is used here can be read as a synonym for "practitioner" and refers to the person providing a clinical service.

Aim of EAGL-I

The aim of EAGL-I is to help clinicians and/or students acquire skilfulness in agenda *mapping* in clinical encounters when talking with patients about the management or prevention of long-term conditions.

Two features characterise these encounters: (a) there are frequently multiple interrelated priorities to talk about, and (b) talk about a variety of lifestyle choices is common.

Aim of the coding manual

The aim of this coding manual is to explain the inner workings of EAGL-I. It is designed primarily for raters i.e. people who will be listening to segments of clinical interaction and using this measure to rate them.

It includes

- Background on how agenda mapping has been conceptualised
- Information about how the rating scale has been developed
- Information on identifying the segment to be rated
- Components of the rating scale and how to rate these
- Guidance on how to score learner or clinician competence in each of the individual aspects of the rating scale

A scoring sheet is included at the back of this manual.

EAGL-I is designed for:

Audio-recordings

- Coding is done directly from audio recordings or in vivo.
- It is not recommended to code from transcripts as no assessment of tonal quality can be made using only the written word.
- The scale may also be used with video recordings; however it is recommended that this be considered when comparing clinician ratings. In other words raters should be cautious when attempting to compare a score assigned from a video recording with one assigned from an audio recording.

Dyadic interviews

- The scale measures agenda mapping in dyadic interviews.
- This measure may be also used in clinical encounters with triadic interviews e.g. a clinician, patient and significant other. Some developmental work has been done using the measure in these instances although it has been less robust than the development in dyadic clinical encounters and has not as yet been validated for use in these settings.

Development of EAGL-I

The content of this rating scale was identified from review of the published literature and refined through a consensus study among patients, clinicians, educators and researchers. A model of agenda mapping was proposed through this work.

Six content domains of agenda mapping form the basis of the scale design. These domains describe elements that must be present for agenda mapping to be occurring. They are:

- Patients talk about their concerns, requests, wishes and/ or goals
- Clinicians raise subjects they consider to be important
- Clinicians and patients agree shared priorities
- A focus of what to talk about in the session is agreed
- The conversation is collaborative
- Patients are involved and engaged in the conversation

Core skills used in agenda mapping are: (a) active listening (b) asking; and (c) summarising.

The design of the measure is influenced by existing measures of patent centeredness and Motivational Interviewing.

Design of EAGL-I – 2 parts – fidelity and competence

Agenda mapping is a clearly identifiable skill. It occurs as a collection of tasks and skills taken together for a specific purpose (to agree shared focus). So before we can determine whether a clinician is "agenda mapping" skillfully, we first have to agree that the clinician is "agenda mapping" (and not doing something else such as establishing rapport or establishing a diagnosis). If we determine that agenda mapping is not happening, then the second question *("is it happening skillfully"*) makes no sense. The way the measure is used reflects this logic.

As a result EAGL-I is made up of two parts:

- A "fidelity subscale" that answers the question *"is agenda mapping happening?"*
- A "competence subscale" that answers the question *"is agenda mapping happening skilfully?"*

EAGL-I - Instructions for use:

Step 1: Which part of the audio do you rate?

Raters need a clear consistent strategy for identifying the part of the audio to be listened to. There are two decisions to be made here: (1) where in the audio might you identify agenda mapping, (2) how long should agenda mapping be occurring for?

In many clinical contexts agenda mapping occurs at the start of the clinical encounter which makes this decision clear – raters should listen from the start of the audio.

Raters are then advised to listen for a proportion of the overall clinical encounter time (20%) to determine if agenda mapping is occurring (using the fidelity subscale).

NOTE: In training environments this step is more easily controlled when rating audio from other contexts raters may choose to adjust this strategy. Provided there is consistency in how the audio segment is identified the reliability of the measure should not be too greatly compromised. Again, this has not as yet been tested empirically.

Step 2: Is agenda mapping happening?

Raters listen to the pre-identified segment and consider the two items on the fidelity subscale.

These two items capture actions from those present in the encounter that suggest there is (a) some attempt at considering a number of topics before (b) prioritising and agreeing a focus.

If the rater allocates a score of 3 or above on either of the two items, then they will go on to complete the competence subscale. If however both items on the fidelity subscale are 1, the rater scores each item on the competence subscale a 1.

Step 3: If agenda mapping is happening, is it happening skilfully?
If the clinician scores greater than 3 on either of the items on the fidelity subscale, they then go on to rate the competence subscale.

From initial testing of this measure, raters may choose to complete both subscales simultaneously and adjust the scoring in retrospect.

More detailed guidance on scoring each subscale is provided overleaf and a summary score sheet is provided at the end of the manual.

Note: As the rating scale was developed for use in teaching environments anchors of skilful clinician behaviour are provided. In this way students and clinicians can be provided with qualitative feedback on how to improve their skill.

FIDELITY SUBSCALE – is agenda mapping happening?

(1) To what extent did the clinician attempt to identify all possible talk topics upfront?

1	3	5
One talk topics is raised and provides the sole focus of the interaction	More than one talk topic is raised – from the patient, family members or clinician (An agenda chart may be used)	A number of talk topics are raised – clinician actively elicits a full agenda from all present

Talk topics are specific requests, concerns, symptoms, expectations or behaviours that suggest the need for a focused discussion.

You're looking for evidence of talk topics coming from a number of different sources: the patient, family members, previously identified topics, and/ or the clinician. These may have been identified outside the session time e.g. use of a chart/ list or through a triage system. They may also arise out of talking about the first talk topic raised e.g. a lifestyle topic (smoking, alcohol use) linked with the patients presenting concern.

You should hear: (a) patients/ significant others identifying their concerns, requests, wishes and/ or goals and/ or (b) clinicians raising subjects they consider to be important

Some clinician behaviours you may notice as evidence of this task:

- Clinician asks for ideas, concerns, and talk topics e.g. how can I help today?
- Clinician asks for additional talk topics e.g. what else would you like us to cover?
- Clinician asks about goals or aspirations for the session and/ or in general
- Clinician checks they have understood e.g. by demonstrating listening
- Clinician asks for brief elaboration on each agenda item raised
- Clinician raises things that they want to talk about
- If the clinician has seen this patient before, they raise items discussed in previous sessions.
- Clinicians state the session's context e.g. "this is your review", followed by questions about that

(2) To what extent did the clinician attempt to prioritise and agree a shared focus?

1	3	5
No evidence of explicit prioritising or agreement, or no need for it –one item takes focus	Some attempt to explicitly prioritise or agree a focus e.g. a focus may be suggested with agreement assumed e.g. "let's start here"	Explicit attempt at agreeing priority focus e.g. "what's most important?" and/ or agreeing a talk topic focus e.g. "where should we start?"

You are listening for efforts to identify a priority talk topic or to jointly agree the conversational focus e.g. summarising, suggesting a priority or asking a "focusing" question e.g. "where should we start?"

You should hear: (a) discussion about shared priorities, and (b) a focus of what to talk about during the session being agreed

Some clinician behaviours you may notice as evidence of this task:

- Clinician summarises all talk topics raised
- Clinician clarifies the patient's priorities
- Clinician gives the patient options
- Clinician gives patient choice about where to start

COMPETENCE SUBSCALE: i.e. is agenda mapping happening skillfully?

(1) Eliciting the patient's agenda i.e. how well the clinician attempts to identify and understand the patient's primary concerns, requests or expectations for the clinical encounter. It captures the process of both eliciting new content areas for discussion and reflecting understanding of those topics already raised.

1	2	3	4	5
Clinician makes little effort to engage with patient's agenda, or appears dismissive of it.	Some attempt to elicit agenda. Clinician does not consider additional agenda items. May respond inflexibly when patient initiates several talk topics.	Clinician engages with the patient's agenda. Clinician may attempt to elicit full agenda items but this seems formulaic.	Clinician gives patient time to talk. Makes a clear effort to elicit or respond to agenda. Considers that there may be more than 1 topic to discuss.	Clinician demonstrates excellent listening skills, is responsive, respectful and sensitive. Considers full agenda.

Higher skilfulness: Clinician demonstrates that they have listened, attempts to understand e.g. gives space for reflection, probes for more information, is responsive to patient cues. Clinician checks they have gathered all the patients concerns.

Lower skilfulness: Clinician may get "lost" in a single agenda item and fail to exert any influence on shaping this task. Questions may be closed and may inhibit patient speech. There is little evidence of listening. Clinician may respond inflexibly when patient initiates a number of talk topics.

Note: Once a clinician starts considering more than 1 agenda item they are at a 3 or above. This is because they are immediately starting to engage with a fuller agenda.

Some clinician behaviours you may notice suggesting higher skilfulness:

- Clinician checks they have understood the talk topics raised by the patient e.g. by listening
- Clinician asks for brief elaboration on each agenda item raised, but does not go into too much detail on each item and retains a sense of considering options
- Clinician is responsive to emotional cues from patient – i.e. demonstrates sensitivity
- Clinician gives patient time to talk

- Clinician makes several attempts to elicit patient agenda e.g. by asking in different ways
- Clinician values patient's contributions and allow them to shape the clinical interaction.

(2) Raising the clinician/ service agenda i.e. approach to raising new topics for discussion that are not directly on the patient's agenda but could be linked to it. e.g. lifestyle choices (alcohol, smoking, diet etc.). Captures respect for patient autonomy and clinician sensitivity to timing and phrasing of their agenda. Also captures skill in raising a service agenda e.g. use of an agenda chart

1	2	3	4	5
Clinician assumes their agenda takes the focus. If there is an agenda chart, clinician makes no reference to it.	Clinician suggests agenda then purses it without seeking patient views. May acknowledge agenda chart.	Clinician raises agenda explicitly, acknowledges agenda as their own. Makes reference to chart if applicable. Identifies own agenda in it.	Clinician raises agenda with sensitivity e.g. to timing and phrasing. May link their agenda to patients. Refers to agenda chart to consider options.	Introduction of clinician agenda is respectful, notably skilful and seamless. Clinician actively supports patient autonomy, Uses agenda chart strategically with patient to consider options

NOTE: There is a "not applicable" category under this subscale. N/A is used where the clinician raises no new content. Note: unspoken clinician agendas are not considered under this category.

Higher skilfulness: Clinician reinforces patient's autonomy when presenting their agenda – e.g. through asking permission, providing options, clarifying their own preferences or priorities. Clinicians may raise their agenda by linking it with previously raised content from the patient and this can appear seamless.

Lower skilfulness: Raises their own agenda without sensitivity to patient choice, assumes their agenda provides the focus e.g. by proceeding with a line of questioning without clarifying their agenda.

Some clinician behaviours you may notice suggesting higher skilfulness:

- Clinician asks for permission to raise a topic not on the patient's agenda
- Clinician may raise a number of agenda items thereby giving patients options of what to choose
- If clinicians identify their own priorities, they state they are doing so
- Clinicians may provide a rationale for raising their agenda item – and then invite the patient's response to that which they have raised.
- Clinicians ask for patient's ideas in response to agenda items raised
- Clinicians demonstrate sensitivity to timing and phrasing of their agenda items.
- Clinician links their agenda to the patient's expressed concern

(3) Establishing shared focus i.e. the extent to which the clinician structures the agenda mapping task to establish focus. Considers the skills the clinician uses e.g. summaries, asking for a priority. Also includes degree of collaboration and effort at agreement.

1	2	3	4	5
Clinician exerts too much (e.g. assuming a focus) or too little (e.g. through non-directive listening) control in determining the focus.	Clinician provides little structure to establishing focus, No consideration of priorities.	Clinician structures conversation to establish focus. May clarify purpose of session and/ or suggest a focus. May be weak efforts to prioritise.	Clinician follows a clear structure is establishing focus. May attempt to consider priorities and engage patient in talk about these. Good use of skill, e.g. summarising	Clinician explicitly considers options *with* the patient, actively structures the interaction for collaboration and engagement. Is explicit about the process of establishing focus. Excellent use of skill.

Higher skilfulness: The clinician deliberately attends to establishing the conversational focus by asking specific questions to do so, providing summary statements of options for discussion or highlighting the need to agree a focus. Prioritising and efforts to agree a focus are made explicit. The clinician exerts influence over the shape of the conversation e.g. making statements that orientate the patient to the agenda mapping task. Where patients are quieter, clinician structures the interaction to encourage involvement. Where patients are active the clinician engages actively with the patients ideas.

Lower skilfulness: Clinician does not provide structure to allow the conversational focus to be established e.g. by following the patient's talk without summarising or clarifying the focusing task. No discussion of priorities. The clinician may start to elicit the patients concerns for example and then get lost in following the patient narrative without asking questions or demonstrating listening. The interaction sounds as though the participants are checking off a list.

Note: If the clinician makes a statement that describes the context e.g. "this is your diabetes review" they're already at a 3 as they're clarifying clearly the context/ purpose of the session.

Some clinician behaviours you may notice suggesting higher skilfulness:

- Clinician uses summary statements to capture both the patient and clinician's agendas
- Clinician links agenda topics e.g. "so you'd like to have more energy to run after your grandchildren but you're getting out of breath easily … which may have to do with smoking"
- Clinician considers priorities – asks about these or suggests some
- Clinician gives the patient choices

EAGL-1 v1.5.2		
Tape identifier:	Rater:	Date:

<u>Listen from the start of the audio recording for 20% of the overall clinical encounter time</u>
Overall clinical encounter time: **……**Time rated: ……
First sentence coded: ……
Last sentence coded: ……

***FIDELITY SUBSCALE – is agenda mapping happening?* -- Complete first**				
	1	**3**	**5**	**score**
Identifying talk topics	One talk topics is raised and provides the sole focus of the interaction	More than one talk topic is raised – from the patient, family members or clinician. (An agenda chart may be used.)	A number of talk topics are raised – clinician actively elicits a full agenda from all present	
Agreeing a focus	No evidence of explicit prioritising or agreement, or no need for it –one item takes focus	Some attempt to <u>explicitly</u> prioritise or agree a focus e.g. a focus may be suggested with agreement assumed e.g. "let's start here"	Explicit attempt at agreeing priority focus e.g. "what's most important?" and/ or agreeing a talk topic focus e.g. "where should we start?"	

COMPETENCE SUBSCALE – is agenda mapping happening skilfully? **Only complete if the clinician has scored >3 on either of the above items, if not mark all items 1**						
	1	**2**	**3**	**4**	**5**	score
Eliciting the patient's agenda-	Clinician makes little effort to engage with patient's agenda or appears dismissive of it.	Some attempt to elicit agenda. Clinician does not consider additional agenda items. May respond inflexibly when patient initiates several talk topics.	Clinician engages with the patient's agenda. Clinician may attempt to elicit full agenda items but this seems formulaic.	Clinician gives patient time to talk. Makes a clear effort to elicit or respond to agenda. Considers that there may be more than 1 topic to discuss.	Clinician demonstrates excellent listening skills, is responsive, respectful and sensitive. Considers full agenda.	
Raising the clinician/ service agenda - *mark N/A if there is no new content raised by the clinician.*	Clinician assumes their agenda takes the focus. If there is an agenda chart, clinician makes no reference to it.	Clinician suggests agenda then purses it without seeking patient's views. May acknowledge agenda chart.	Clinician raises agenda explicitly, acknowledges agenda as their own. Makes reference to chart if applicable. Identifies own agenda in it.	Clinician raises agenda with sensitivity e.g. to timing and phrasing. May link their agenda to patient's. Refers to agenda chart to consider options.	Introduction of clinician agenda is respectful, notably skillful and seamless. Clinician actively supports patient autonomy, Uses agenda chart strategically with patient to consider options	
Establishing shared focus	Clinician exerts too much or too little control in determining the focus.	Clinician provides little structure to establishing focus, No consideration of priorities.	Clinician clarifies purpose of session. May suggest a focus. May be weak efforts to prioritise.	Clinician follows a clear structure is establishing focus. May attempt to consider priorities and engage patient in talk about these. Good use of skill, e.g. summarising	Clinician explicitly considers options *with* the patient, actively structures the interaction for collaboration and engagement. Is explicit about the process of establishing focus. Excellent use of skill.	

10.14 Appendix C8-1 – Workshop materials

Teaching schedule: agenda mapping workshop

13h15-13h25: registration, consent, participant briefing

A: INTRODUCTIONS AND SCENE SETTING

- Order of afternoon: (a) recording 1 (b) teaching (c) recording 2&3
- How recordings work, patient scenario allocation etc
- Practicalities (toilets, phones, etc) and lunch
- Timings

Aim of workshop: finding focus collaboratively in the opening moments of a consultation with a patient who has a long-term condition.

13h30-14h25: recording round 1

B: BASELINE ASSESSMENT

Thinking back to the recordings you've just done:

a) How did you agree what to focus on?
b) Scale of 1 – 10, how collaborative was it?

14h30 – 15h45: teaching slot (75mins)

C: TEACHING 1: STARTING A CONSULTATION

Case scenario: Marie

51-year-old bookkeeper. Diagnosed with asthma is early adulthood. For many years she was not troubled much by symptoms except during the weeks following a cold. She leads a sedentary lifestyle and lives at home with her mother and 2 cats. She smokes an average of 10 cigarettes daily.

Recently Marie's symptoms have started getting worse and she is using increasing amounts of her blue inhaler (Salbutamol). She has not been prescribed any other medication. She has come to see you for a review of her Asthma.

a) How would you start this consultation?
b) What makes the start of the consultation so important?

Discussion:

- What makes opening a consultation challenging/ complex?
- Why is "getting it right" important?
- Differences between acute and long term condition – why?
- What is best way of starting?

D: TEACHING 2: AGENDA MAPPING

Aim of agenda mapping: to (rapidly) find focus of what to talk about

Background:

- Most patients bring an average of 3 concerns to consultation
- First concern not necessarily the most important
- Premature focus on the first concern raised can cause problems with time management
- With long-term conditions particularly important to engage patients – they are "self managers" outside the consultation.

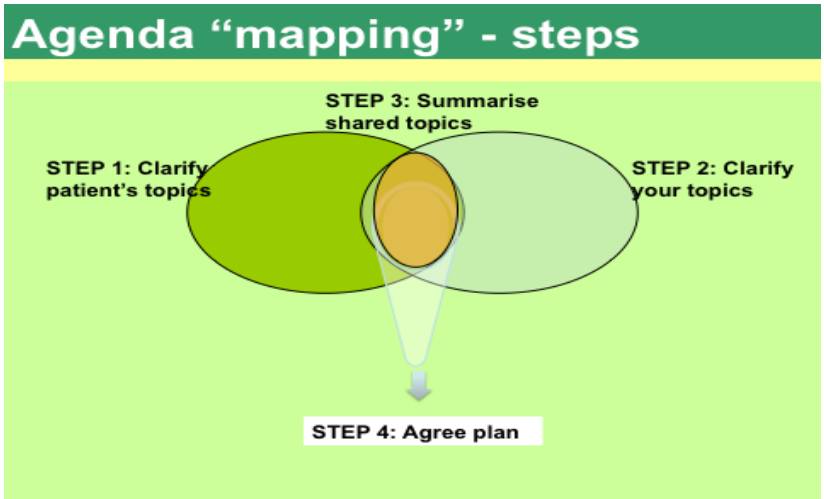
Skills:

- Agenda mapping = combination of familiar communication skills
- Recap – open vs closed questions, listening (short summaries), longer summary

Steps:

Discuss steps – use visual aid (see figure 10-1) and memory hooks

Figure 10-1: Agenda mapping teaching aid



1 – Clarify patient's topics = Ask – listen – log

- i.e. ask open question-- listening (e.g. short summary), -- log the request – repeat
- NOTE: tolerate uncertainty – won't have to deal with everything

2 – Clarify your topics = Ask permission – raise

- Identify your priorities (beforehand) – ask permission – raise your concern
- NOTE: quality of "brainstorming" i.e. putting it on the table

3 – Summarise shared topics = Summarise – identify priorities

- Collect together – i.e. what have you "logged" (or put in the bubbles/ hooked in your mind) – summarise and hand back

4 – Agree plan

Revisit case (Marie, 51 yr old bookkeeper)– work through each of these steps with case. Prepare for demo: i.e. (a) identify practitioner priorities, (b) call in actor (briefed to play Marie) (c) NG demo.

Discussion:

- What did you notice about the agenda mapping steps?
- What skills were NG using?
- How did the patient respond?
- If time allows, brief actor to change presentation e.g. be more passive or more active, repeat demo. Can also repeat demo in line with student "what if" questions e.g. "what is the patient only did have one concern".

Clarify any questions about practicalities of recording rounds etc, then opportunity for practice.

15h45 – 17h15: recording rounds 2 & 3

E: PRACTICE WITH ACTORS

Practice debrief:

a) How did you agree what to focus on? Scale of 1 – 10, how collaborative? What went well in using agenda mapping?
b) What did you struggle with in using agenda mapping?

F: CLOSURE

- Thanks and next steps

SCENARIO 1: Hypertension – Patient briefing sheet

Personal background
You are Frank, a 45-year-old man, married with 2 children who are in their late teens. You work in a middle management position for the local council. There are lots of changes happening at work and this is creating additional stress for you. Your wife is very supportive but she is also busy and is a teacher at a local school. Children are at school and mostly focussed on their friends, spending little time with you. You drink alcohol regularly several times a week but don't consider this to be a problem. You're an ex-smoker and know you're carrying too much weight since quitting smoking.

How you feel about your condition
You've had high blood pressure diagnosed 3 months ago but were reluctant to take medication for it, wanting to try and control it with lifestyle changes. You are worried about complications, particularly of having a stroke. Your father had a stroke and you witnessed his disability before he died.

How you feel about making any changes
You do see the importance of making a change, particularly in losing some weight, but lack confidence to be able to do anything about it right now. You tried getting back to gym recently as you thought this might help weight loss.

How you are in the session
You are quite passive in session – you will respond to prompts, and give non-verbal cues that you are worried about your condition but don't initiate much information unless prompted..

Reason for coming to the consultation
The last time you saw your doctor he said to come for a check in 3 months time. You would like to find out about your risk of having a stroke, particularly with the stress you have at work right now. The doctor you usually see is not in.

SCENARIO 1: Hypertension - Practitioner briefing sheet

Patient background
Frank is a 45-year-old man, married with 2 children in their late teens. He works in a middle management position for the local council. He is well known to the surgery and his wife and their children come to this surgery too. His wife is a teacher at a local school and very supportive of her husband.

Frank was diagnosed with hypertension 3 months ago. His last blood pressure reading was 174/107 – a high blood pressure reading that needs intervention.

Previous blood tests: U+Es – normal; HbA1C – normal; Total cholesterol 5.0 (normal)

Medication: none, patient wanted to try and manage by making lifestyle changes first

Reason for consultation:
Frank has been asked to come in for a blood pressure check. Your agenda is that you want to monitor blood pressure and discuss lifestyle issues if appropriate.

Clinical notes on Hypertension

Description	Hypertension i.e. high blood pressure is a chronic condition involving elevated systolic blood pressure. It can be classified as either primary or secondary. Primary hypertension occurs in 90-95% of cases and refers to high blood pressure where no underlying medical cause can be found. It is usually asymptomatic in mild to moderate cases. Runs in families.
Clinical management	▪ Lifestyle modification – smoking, low fat, low salt diet, normal weight, moderate alcohol consumption ▪ Medication (once lifestyle modification has been tried).

SCENARIO 2: Rheumatoid arthritis – Patient briefing sheet

Personal background
You are Leila, a 33-year-old woman who lives alone. You find it difficult to form close personal relationships and you feel socially isolated. You try to be as active as possible in everyday life and don't like to accept help. At times you have periods of crippling pain in your shoulders and hands. You are not working and receiving benefits due to your condition. You drink alcohol (wine) daily, starting early evening until past midnight. Mostly drinking alone, sometimes pass out from alcohol – which you consider a blessing.

How you feel about your condition
You were diagnosed with RA at age 23yrs. You have lived with condition for many years now and see the best approach to managing it is to "fight back at life". This masks an underlying anger about your condition.

How you feel about making any changes
You are willing to consider making a change but not sure what. Would definitely not want to change alcohol use.

How you are in the session
You are actively engaged in the session and can be quite controlling at times. You have lots of ideas about what you want to happen and you sometimes talk over the practitioner.

Reason for coming to the consultations
You are tired of the pain associated with RA and want to talk with the doctor about getting some strong painkillers (at the moment you use paracetamol for pain). Your regular doctor is not in and you will be seeing a new doctor for the first time.

SCENARIO 2: Rheumatoid arthritis– Practitioner briefing sheet

Patient background
Leila is a33year old woman with Rheumatoid arthritis. She has had this condition for many years (diagnosed age 23 yrs). Leila is known to the surgery. In her notes you see that in previous consultations the clinician has noticed an odour of alcohol and the patient has admitted before that alcohol is her "best friend". Patient is of normal weight and is a non-smoker.

Medication: uses paracetamol for pain

Reason for consultation
The patient initiated the consultation. You suspect she will want to talk about pain management. You would be willing to consider a medication review. You are concerned about alcohol misuse.

You are aware that high alcohol intake can affect the quality of sleep and make pain management more complex to manage. You also have some concerns about the interaction of her medication with alcohol.

Clinical notes on Rheumatoid Arthritis.

Description	RA is a chronic systemic inflammatory disorder. Mainly attacks joints. Symptoms include inflammation, pain, restricted movement
Clinical management	Activity – e.g. swimming Medication (disease modifying treatment) Analgesics

SCENARIO 3: Type 2 diabetes – Patient briefing sheet

Personal background
You are Vanessa, a 45-year-old mother of 3 with type 2 diabetes. You smoke about 5 cigarettes daily and are overweight. You do some part time administration work for a local school. Your relationship with your husband is pretty strained and you are fearful that he may ask for a separation. You haven't spoken to anyone about this but would like to be able to talk about it if the right opportunity arose. You want some sleeping tablets to help you through wakeful nights. You take Metformin 500mg twice daily and adhere to your medication.

How you feel about your condition
You were diagnosed with diabetes shortly after the birth of your youngest child, 9 years ago. You feel weary about the condition and have tried all kinds of changes, particularly around losing weight, with little success.

How you feel about making any changes
You're ambivalent. You'd be willing to consider making a change but life feels too stressful right now.

How you are in the session
You're engaged in the consultation and take initiative in raising things but you do need some prompting to bring up personal issues. You are looking for an opportunity to do so though, and will do if the space is provided.

Reason for coming to the consultations
You were asked to come in for a review of your diabetes. You want to use this time to ask for sleeping tablets and (if opportunity presents) to raise marital difficulties and stress. Your regular doctor is not in and you will be seeing a new doctor for the first time.

SCENARIO 3: Type 2 diabetes – Practitioner briefing sheet

Patient background
Vanessa is a 45-year-old mother of 3 with type 2 diabetes. She is a smoker and is overweight. She was diagnosed with type 2 diabetes 9 years ago shortly after the birth of her youngest child.

Medication: Metformin 500mg twice daily

Reason for consultation
You have asked Vanessa to come in for a review of her medication and diabetes. From her records you are concerned her diabetes is poorly controlled (Last HBA1C 8.3%) and would like to discuss lifestyle issues with her, particularly about her smoking and weight. You're not sure how much physical activity she does.

Clinical notes on dype 2 diabetes

Description	Type 2 diabetes is adult onset diabetes. It is a metabolic disorder characterised by high glucose.
Clinical management	Lifestyle modification – smoking, low fat, low salt diet, normal weight, moderate alcohol consumption Medication

SCENARIO 4: Type 2 diabetes – Patient briefing sheet

Personal background
You are Jason, a 40-year-old recent divorcee. You have no children and live alone. You used to be active, particularly in playing team sports like football, but you are no longer part of any team and don't do much physical activity. You work for a computer firm and your work is a sedentary desk job. You are a non-smoker and drink alcohol socially at a moderate level. You have been feeling low in mood over the past months and attribute that to your divorce. You've also had a low sex drive and have some erectile problems. This is a concern for you right now as you have recently started dating someone.

How you feel about your condition
You were diagnosed with diabetes 2yrs ago and are still adjusting to the implications of having the condition. Basically having diabetes is an inconvenience to you. You have made some changes to your diet after the diagnosis and lost a stone in weight by reducing your sugar intake. You do adhere to your medication and take Metformin 500mg twice a day.

How you feel about making any changes
You would definitely make a change if it would help with erectile dysfunction.

How you are in the session
You are relatively passive in the session and are anxious and embarrassed about stating your main reason for coming to the session. You will respond to prompts and give lots of non-verbal cues that there is something you want to talk about but find it difficult.

Reason for coming to the consultations
You asked for an appointment to talk about your concerns about erectile dysfunction and low sex drive. You find it difficult to raise this and start by raising some vague concerns about your diabetes and lack of energy. Your regular doctor is not in and you will be seeing a new doctor for the first time.

SCENARIO 4: Type 2 diabetes – Practitioner briefing sheet

Patient background
Jason is a 40-year-old man, recently divorced. He has type 2 diabetes and was diagnosed 2 years ago. After diagnosis he lost a stone in weight by changing his diet. His diabetes is relatively well controlled (Last HBA1C 7.1%) and he is a non-smoker and a moderate social drinker.

Medication: Metformin 500mg twice daily

Reason for consultation
Jason initiated the consultation saying he wanted to talk about his diabetes. You have some concerns about Jason's mood and general lack of physical activity.

Clinical notes on type 2 diabetes

Description	Type 2 diabetes is adult onset diabetes. It is a metabolic disorder characterised by high glucose.
Clinical management	Lifestyle modification – smoking, low fat, low salt diet, normal weight, moderate alcohol consumption

SCENARIO 5: COPD – Patient briefing sheet

Personal background
You are Rose, a 60-year-old grandmother to 2 little boys (aged 3 and 5). You are widowed but live close to your daughter, son-in-law, and the boys. Your daughter works part-time and you look after the boys while she is at work. You used to work in a textile factory for 30 years but retired a few years ago after being diagnosed with COPD. You're a smoker and have been smoking an average of 10 cigarettes a day for many years. You used to be very active and are finding it increasingly difficult to do all the things you used to due to shortness of breath. You have been prescribed a Salmeterol inhaler and take 2 puffs twice a day.

How you feel about your condition
You're still trying to come to terms with the diagnosis of COPD. You have a pragmatic attitude to the condition and are determined "not to let it beat" you. At the same time you are becoming increasingly restricted by shortness of breath.

How you feel about making any changes
You're ambivalent to make a change. You do want to do something to improve the shortness of breath but there is part of you that believes you just have to get on with it and not focus on the difficulties.

How you are in the session
You're engaged in the consultation and take initiative in raising things but you do need some prompting to bring up personal issues. You are looking for an opportunity to do so though, and will do if the space is provided.

Reason for coming to the consultations
You have been asked to come in for a review of your COPD. You're not expecting to be asked about your own concerns and are reluctant to appear "complaining". At the same time it is becoming increasingly difficult to look after your grandkids and this is worrying you. Your role in looking after the grandkids helps your daughter out & is very important to you. Your regular doctor is not in.

SCENARIO 5: COPD – Practitioner briefing sheet

Patient background
Rose is a 60-year-old woman. She is widowed but lives close to her daughter, son-in-law and 2 grandchildren. She used to work in a textile factory for many years and was diagnosed with COPD a few years ago. This led to her taking early retirement. Rose is a smoker, smoking an average of 10 cigarettes a day. The risks of smoking with COPD have been raised before but Rose has been reluctant to make any changes thus far.

Medication: Salmeterol inhaler – 2 puffs twice a day

Reason for consultation
You have initiated the consultation as a routine review of COPD. You want to raise smoking with Rose again.

Clinical notes on COPD

Description	COPD is a chronic respiratory disease in which the airways become narrowed causing shortness of breath.
Clinical management	Smoking cessation is an important factor in slowing down the progression of COPD Medication

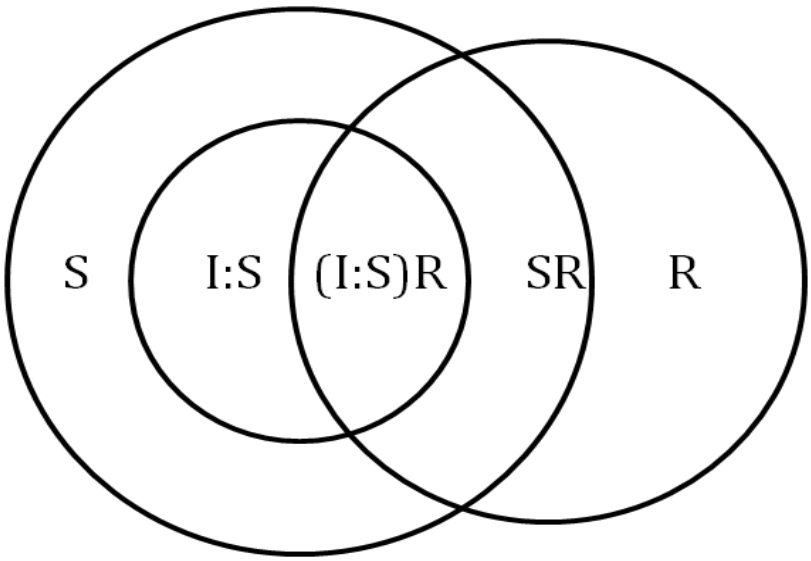
10.15 Appendix C8-2 – Variance partition diagrams

Variance partition diagram - G study investigating EAGL-I reliability

Sources of variance are termed "facets" and are represented by circles (Cardinet, Johnson et al. 2010). Where each level of each facet intersects with another facet the facet is "crossed" with the other. For example where all three raters use every item of a rating measure the facet rater (R) is crossed with the facet item (I). Their point of interaction in the variance partition diagram is noted by simply placing the two descriptors side by side e.g. RI. Where only some of the facet levels intersect with levels of a different facet the facets is said to be nested e.g. items (I) that relate only to particular subscale (S) are nested within them. In a variance partition diagram concentric circles (circles that share the same axis) represent nested facets. Notation used places the nested descriptor first separated by a colon e.g. I:S. Interaction effects are depicted where the circles overlap.

This convention is followed in the variance partition diagram for this aspect of the analysis (fig 10-2). Three sources of variance are considered here, namely subscales, items and raters. Items are nested within subscales (I:S) and raters are crossed with both subscales (SR) and items ((I:S)R).

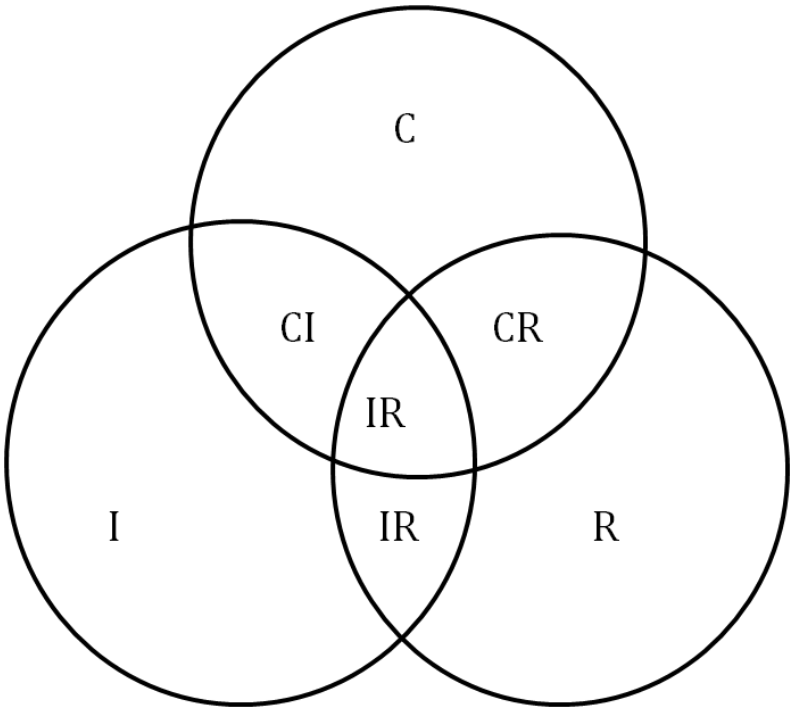
Figure 10-2: Variance partition diagram for EAGL-I v1.5.1 reliability analyses



Variance partition diagram - G study investigating EAGL-I responsiveness to change in student skill

The G study was designed as follows. The G study was designed as follows. The facet of differentiation for this study was "occasion" as this is where variance is anticipated and desirable. Three facets of generalisation were considered: candidates (C), raters (R) and items (I) (figure 10-3).

Figure 10-3: Variance partition diagram identifying sources of variance in analysis of EAGL-I scores across occasion of measurement



10.16 Appendix C8-3 - Additional investigations of internal consistency

As a point of comparison, Cronbach's alpha was calculated and compared to the G coefficient obtained using the G theory analysis. Inter-item correlations and item-total statistics were also calculated, as these calculations cannot be done using G theory.

Cronbach's alpha, a measure of internal consistency, is frequently used to assess the reliability of an instrument. The statistic is essentially an intra class coefficient presenting the ratio of error variance compared with true variance (Streiner and Norman 2003).Values above 0.7 are considered acceptable while those above 0.8 are preferable (Streiner and Norman 2003, Pallant 2010). Alpha values of >0.9 may suggest item redundancy. Despite its popularity, Cronbach's alpha "covers only a small perspective of the range of measurement uses for which reliability information is needed and should be viewed within a much larger system of reliability analysis" (Cronbach and Shavelson 2004, p.391). It was calculated here as a point of comparison to the findings obtained using G theory.

Table 10-4: Cronbach's alpha for EAGL-I and each subscale

EAGL-I	0.828
Fidelity subscale only	0.539
Competence subscale only	0.771

Table 10-4 presents Cronbach alpha calculated for EAGL-I as a whole and for the individual subscales. Alpha for the fidelity subscale in particular is low (0.539). This is expected, as there are just two items in this subscale. A better measure of the relationship between these items may be the inter-item correlation shown in table 10-5 below. Here the degree to which each item correlates with the other is given. Items are expected to be "moderately" correlated with each other (Streiner and Norman 2003). A range of 0.3 to 0.7 is considered acceptable evidence of a "moderate" correlation (Pallant 2010). All items are correlated within this range.

Table 10-5: Inter-item correlation matrix

	F2	C1	C2	C3
F1	0.372	0.560	0.477	0.584
F2	-	0.389	0.332	0.646
C1	-	-	0.544	0.502
C2	-	-	-	0.550

Cronbach's alpha was also calculated for EAGL-I as a whole with individual items deleted (table 10-6). That the alpha value does not change much when each item is deleted in turn provides further evidence of item homogeneity.

Table 10-6: Item-total statistics

	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Squared multiple correlation	Cronbach's Alpha if item deleted
F1	10.542	10.990	0.629	0.444	0.793
F2	12.260	10.801	0.542	0.427	0.822
C1	10.773	10.877	0.627	0.433	0.794
C2	11.205	11.589	0.595	0.408	0.803
C3	11.611	10.150	0.751	0.606	0.757

10.17 Appendix C8-4 – Workshop evaluation

Students were asked to complete a brief online evaluation designed using SurveyMonkey software. Of the 26 students who participated in the workshop, 22 completed the survey yielding an 85% response rate.

Of the respondents, 17 (77.3%) said agenda mapping should be provided to all third year medical students, while 5 (22.7%) were undecided. Perceived benefits from the respondents in being taught this skill included:

- *"Good to teach early in the medical course so that we can adapt to this approach so that it becomes second nature to us" (AS04M)*
- *"Increases confidence"(AS07F)*
- *"Allows for a much calmer consultation with aims to achieve"(AS03F)*
- *"Gives good structure to the consultation so you can be more confident when seeing patients" (AS13F)*

One student felt it was *"slightly too advanced for what the third years have been discussing" (AS05M).*

Students were asked to identify what stood out for them personally as a "learning point". Responses included:

- Importance of eliciting the full patient agenda – *"always find out what they have come in for before commencing the consultation" (AS17F), "take more time" (AS03F) "important to elicit main concerns as early as possible" (AS09M)*
- Engagement – *"establishing rapport quickly" (AS05F)*
- How to bring up sensitive issues – *"tread carefully, ask permission to talk about more sensitive issues" (AS08M); "strategy to broach subjects (such as lifestyle changes) that patients may feel sensitive about" (AS06F)*
- Working collaboratively – *"allow the patient to play more of a part in the direction of the consultation" (AS02F); "coming to an agreement about what to discuss in the consultation" (AS09F); "making clear what the patient wants… and juxtaposing this against what I want .. with a view to coming to consensus" (AS10M)*

- Structuring – *"giving a framework … to start a consultation" (AS05M), "effective ways of structuring the consultation" (AS06M), "having a structure to talk through"(AS12F)*
- Prioritising –*"prioritising worries" (AS05F)*

Feedback about the workshop itself was positive and all respondents found the opportunity to practice with simulated patients useful (13.6%) or extremely useful (86.4%). All students also found having three opportunities for practice either useful (18.2%) or extremely useful (81.8%).

10.18 Appendix C9-1: Updated literature review

Table 10-7: Updated review of agenda setting literature (Sept 2009-July 2013)

Reference, name of study	Setting	Study details	Inclusion of "agenda setting"	Outcome of study	Outcome of agenda setting
(Arnold, Coran et al. 2012)	Faculty physicians at University of Florida College of Medicine, USA	Survey to assess physician perceptions of content to be included in a patient communication training programme.	Scenarios presented to physicians for comment included "patient does not make their agenda … clear", and "patient leaves difficult or sensitive questions for the end…"	Physicians identified key areas to include in a patient communication programme. AGENDA model created from this that includes agenda setting as one of six modules.	Identified for inclusion in a patient communication training programme.
(Brock, Mauksch et al. 2011)	Primary care clinics, USA	Post-only randomised controlled trial to investigate the effect of upfront agenda setting on within consultation indicators, patient and physician satisfaction, trust and functional status.	Upfront agenda setting was the main intervention. Physicians were trained in "micro skills and cognitive cues to elicit the full patient agenda at the outset of the clinical encounter, in line with the Establishing Focus protocol.	Upfront agenda setting did not increase visit length or number of problems addressed per visit, but may reduce likelihood of late arising concerns. No effect on patient or physician satisfaction, trust or functional status.	As per main study outcome.
(Frankel, Salyers et al. 2013)	Community mental health centres, USA	A cross sectional secondary analysis of psychiatric visits to examine agenda setting practices of clinicians with consumers who had mental health difficulties.	Agenda setting assessed using a modified version of Braddock's shared decision-making coding system.	The rating system was judged reliable, and its application suggests that essential elements of agenda setting are not being practiced.	As per main study outcome.
(Jansink,	Primary care	A cluster randomised	Agenda setting based on MI	No effect on clinical	No evidence that nurses in

Reference, name of study	**Setting**	**Study details**	**Inclusion of "agenda setting"**	**Outcome of study**	**Outcome of agenda setting**
Braspenning et al. 2013) MILD	diabetes management, Netherlands	controlled trial to investigated the effectiveness of a diabetes training programme with nurses in general practice, when working with patients who had type 2 diabetes	formed part of a complex intervention.	indicators (HbA1c) or patient self-reported lifestyle change.	the intervention group differed to those of the control group in terms of baseline agenda setting skill, or skill acquisition post-training – assessed using the Behaviour Change Counselling Index (BECCI) (Jansink, Braspenning et al. 2013)
(Kuhle, Truitt et al. 2013)	Occupational health, USA	Quasi-experimental study to investigate the effect of agenda setting on patient satisfaction	Agenda setting conceptualised as a pre-consultation form for patients to complete and hand to the doctor at the start of the clinical encounter.	No effect on patient or clinician satisfaction. Patients reported positive experience of having used the form.	As per main study outcome.
(Robling, McNamara et al. 2012) DEPICTED	Paediatric diabetes teams, UK	A cluster randomised controlled trial evaluating the effectiveness of a communication skills training programme with paediatric diabetes teams working with young people who had type 1 diabetes	Agenda setting, based on MI, developed through consultation with a stakeholder group into a pre-consultation tool called TimeToTalk (3T), to be completed by patients. Clinicians also trained in agenda setting, among other skills, and to communicate in a guiding style to support behaviour change.	No impact on clinical indicators (HbA1c). Training programme did result in change in clinician behaviour – in articular agenda setting and communicating in a guiding style. Some increase in short term ability to cope with diabetes in intervention group.	Good uptake of agenda setting by trained clinicians. Agenda setting part of a complex intervention. Not possible top link impact of agenda setting to specific study outcomes.

Reference, name of study	**Setting**	**Study details**	**Inclusion of "agenda setting"**	**Outcome of study**	**Outcome of agenda setting**
(Wallace, Turner et al. 2012)	Primary and secondary care sites, NHS, UK	Independent evaluation of the Health Foundation's Co-creating Health (CCH) programme. CCH was aimed at integrating self management support into mainstream healthcare provision.	Agenda setting was one of three key enablers in the management of long term conditions. It was embedded in an advanced development programme for clinicians, a self management programme for patients and a service improvement programme focusing on system change.	Improved activation and use of self management, some improvement in condition specific clinical outcomes. Improved use of enablers. Recommendations proposed.	Good uptake of agenda setting, among other skills. Co-delivery of training well received.
(Wissow, Gadomski et al. 2011)	Paediatric primary care, USA	Cluster randomised controlled trial evaluating the impact of a communication skills training programme with clinicians, on parent and child mental health outcomes.	Agenda setting was one of seven core content areas in the training programme, and was defined as an approach to "elicit concerns, engage child and parent, (and) promote turn taking"	Clinicians receiving training demonstrated increased skilfulness in taught components, and patient centeredness, in particular with simulated patient parents. This predicted improvement in parent-rated child symptoms and functioning, and child-rated symptoms.	Good uptake by trained clinicians. No impact on parent or child reported outcomes

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