

# **Nurses and Pharmacists as Independent Prescribers: What is effective clinical supervision?**

**Rebecca Sian Bullingham**

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Cardiff School of Pharmacy and Pharmaceutical  
Sciences  
Cardiff University

## **Summary**

In the United Kingdom, pharmacists and nurses who have completed a university accredited course can independently prescribe medicines within their scope of practice. Independent Prescribers (IPs) have the same prescribing access to medicines as a doctor. However, after qualification, insufficient clinical supervision (CS) for IPs has been reported. CS has broadly been criticised in healthcare for not being adequately defined, resulting in 'pot-luck' CS experiences, usually driven by the supervisor.

In Phase 1, semi-structured interviews with nurse (n=6) and pharmacist (n=10) IPs working in primary care in Wales were conducted to explore IPs' perceptions of effective CS. Interview findings were used to develop a modified Delphi survey for a sample of IPs in Phase 2 to identify whether there was consensus amongst nurse and pharmacist IPs on what is required for effective clinical supervision.

In Phase 2, 22 IPs (n=7 nurses, n=15 pharmacists) responded to round one of the Delphi survey exploring the purpose, characteristics, and structure of CS. In round two, 16/22 (72.7%) responded to the Delphi survey exploring the structure and characteristics of CS. Nine statements met consensus in round one and four statements in round two. The consensus statements were used to create an Informed Model of Supportive Supervision (TIMSS) which was shown to key independent prescribing stakeholders in Wales in Phase 3 of the research.

For Phase 3, semi-structured individual (n=7) and group (n=2) interviews with independent prescribing key stakeholders in Wales were conducted to explore perceptions of TIMSS and the governance of IPs in primary care. Findings were used to amend the TIMSS model.

The three phases of research suggest that regulatory and professional bodies, policy-makers and IPs need to reflect on the governance arrangements for IPs and further develop the role of CS and the TIMSS model in supporting confident and competent clinical practice.

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## ***Glossary of Terms***

A&E:	Accident and Emergency
ANP:	Advanced Nurse Practitioner
CMP:	Clinical Management Plan
DN:	District Nurse
DOH:	Department of Health
GP:	General Practitioner
GPhC:	General Pharmaceutical Council
GMS:	General Medical Services
HV:	Health Visitor
IP:	Independent Prescriber
NHS:	National Health Service
NIH:	National Institutes of Health
NIP:	Nurse Independent Practitioner
NMC:	Nursing and Midwifery Council
NMP:	Non-medical Prescriber
NPF:	Nurse Prescribers Formulary
PIP:	Pharmacist Independent Prescriber
RCGP:	Royal College General Practitioners
RCN:	Royal College of Nursing
RPS:	Royal Pharmaceutical Society
TIMSS:	The Informed Model of Supportive Supervision
WG:	Welsh Government

# **1. Introduction**

## **1.1. Overview**

This thesis aims to explore the perceptions of effective supervision designed to support and build the confidence and competence of nurse and pharmacist prescribers in primary healthcare in Wales.

This chapter sets the scene for the thesis, discussing the background, and key policy issues affecting independent prescribing by nurses and pharmacists, and the history of independent prescribing. This is followed by a discussion of current prescribing numbers, the importance of the independent prescribing role in primary care, and the governance and support around the role. The chapter concludes with a discussion around the aims and ways of defining effective clinical supervision for nurse and pharmacist prescribers.

## **1.2. Independent Prescribers**

In this thesis, the term Independent Prescriber (IP) is used to describe a healthcare professional who is not a doctor but who prescribes medications. Professionals in the UK who are currently eligible to complete the relevant training to become an IP are paramedics, physiotherapists, therapeutic radiographers, podiatrists, opticians, pharmacists, and nurses (Pharmacy Services Negotiating Committee, 2018). Kroezen et al. (2011) pointed out in 2011 that the UK had a broader scope of professionals eligible for prescribing when compared to other countries that had introduced independent prescribing at the time, such as Canada and New Zealand. The UK thus appears to have pioneered the expansion of prescribing professionals.

Nurse IPs (NIPs) and pharmacist IPs (PIPs) are specially educated nurses and pharmacists allowed to prescribe any licensed or unlicensed drug within their area of clinical competence; they can also prescribe controlled drugs (Royal College of Nursing, 2014; Cope et al., 2016). To qualify as a NIP or PIP, delegates must complete a specific accredited prescribing programme through a UK university. Upon completion, the qualification must be registered with the Nursing & Midwifery Council (NMC) or the General Pharmaceutical Council (GPhC).

In 2006 in England and 2007 in Wales, NIPs and PIPs were given full access to the British National Formulary (BNF). As of April 2012, restrictions around Controlled Drug (CD) prescribing for nurses and pharmacists were lifted, enabling nurses and pharmacists to prescribe CDs except for cocaine, dipipanone, and diamorphine for the treatment of

addiction (The Home Office, 2012). This legislation gives NIPs and PIPs the same prescribing access as doctors and dentists.

### **1.3. History of Independent Prescribing**

The Medicines Act (1968) consolidated and formalised the regulations for medicines in the UK. The Medicines Act (1968) defined medicines into groups of general sales-listed (GSL) medicines, pharmacy (P) medicines, and prescription-only medicines (POMs) (Government, 1968). The only legal access to POMs was through accredited practitioners, which, at the time, were qualified doctors and dentists.

In 1986, the Department of Health and Social Security (1986) published the 'Cumberlege Report,' which recognised that nurses and health visitors involved in community or 'neighbourhood' nursing should be authorised to have some prescribing rights. As a result, an advisory group was established to investigate the potential of nurse prescribing. The first 'Crown Report' (Department of Health, 1989) then took the findings of the advisory group further by suggesting that nurse prescribing in primary care could resolve some inefficiencies that had been identified.

In 1994, the first nurse prescribers' formulary (NPF) (Nurse Prescribers Formulary, 1994) was created. It contained P, GSL and 13 POMs, including products such as catheters and dressings. In various areas of the UK where it was piloted, this meant that items from the NPF could be prescribed by district nurses and health visitors without the need for a doctor to authorise the prescription. From 1998, all appropriately trained health visitors and district nurses who completed a specialist course (V100 for a community practitioner nurse prescriber and later in 2010, the V150 for a community practitioner nurse prescriber without a specialist practitioner qualification) could prescribe from the NPF (Royal College of Nursing, 2018).

In 1999, the second Crown Report was published (Department of Health, 1999). This expanded the rights of nurse prescribers extensively and proposed pharmacists as prospective prescribers too. The report suggested expanding prescribing further to include a 'supplementary prescribing' role. Supplementary prescribing was intended 'to provide patients with quicker and more efficient access to medicines, and to make the best use of the skills of trained nurses and pharmacists' (Department of Health 2003, p.3). Legislation for supplementary prescribing came into place in 2003 (Department of Health, 2003). Following a clinical diagnosis from a doctor, a Clinical Management Plan (CMP) would be formulated with a three-way agreement between the doctor, patient, and nurse, or pharmacist, supplementary prescriber. Nurses and pharmacists with a supplementary prescribing qualification could prescribe medications in accordance with the CMP. The legislation was amended in 2005 and extended to allow supplementary prescribers,

including chiropodists, podiatrists, radiographers, physiotherapists, and optometrists, to prescribe controlled drugs in line with a CMP (Department of Health, 2005).

In parallel with the above developments under the CMP frameworks, in 2002 in England, community nurses were enabled to prescribe independently from a restricted list of products published in the NPF (Courtenay, 2018), and in 2006, legislation was passed allowing nurses and pharmacists to independently prescribe with full access to the BNF (Department of Health, 2006). Similar regulations were passed in Wales in 2007 (Welsh Assembly Government, 2011). Independent prescribing pharmacists and nurses are clinicians who have successfully completed an accredited independent prescribing programme through a UK university. The student is supported by a DSMP (designated supervising medical practitioner) in Wales or DMP (designated medical practitioner) in England. More recently, a DPP (Designated Prescribing Practitioner) has been introduced which enables prescribing practitioners who are not doctors to also support independent prescribing students (Royal Pharmaceutical Society, 2019). The course is taught at a minimum level equivalent to a bachelor's degree but more commonly to a master's degree level (level 7) (Nursing and Midwifery Council, 2018). Throughout the course the student is assessed in various areas which may include a pharmacology exam and a numeracy assessment related to the calculation of medicine doses (Nursing and Midwifery Council, 2018). Those completing the course are able to prescribe any medicine listed in the BNF and from 2009, they have also been able to prescribe unlicensed medicines (The Home Office, 2012). In 2012, this was extended to all CDs in schedules 2–5 (Royal College of Nursing, 2018). CDs in schedule 1, such as hallucinogens, are not traditionally used medicinally, so a Home Office licence is still required for their supply (NICE, 2018). Since 2009, IPs are also permitted to mix controlled drugs in schedules 2–5 with another medicine for patients who need drugs intravenously.

The development of IP has arguably been the most influential change in the history of the pharmacy and nursing professions. The legislation allows IP pharmacists and nurses the same prescribing rights as a doctor or dentist, as long as they are acting within their area of professional competence, also referred to as their scope of practice. A prescriber's scope of practice is a remit of prescribing where the prescriber is deemed competent to prescribe in (Royal Pharmaceutical Society, 2016). To successfully complete the accredited IP course, the prescriber's competency in their scope of practice is assessed and validated by the DSMP or DMP (Nursing and Midwifery Council, 2018). Once a prescriber is qualified, the responsibility of the assessment of competency lies with the prescriber themselves (Royal Pharmaceutical Society, 2016). More recently, independent prescribing has also been extended to physiotherapists, podiatrists, chiropodists, optometrists, radiographers, and paramedics with varying degrees of independence (Pharmacy Services Negotiating Committee, 2021). Allied health professionals (AHP) can

prescribe from a restricted list of CDs and optometrists can only prescribe licensed medicines for ocular conditions affecting the eye and surrounding tissue (Pharmacy Services Negotiating Committee, 2021). A summary of the development of non-medical prescribing is shown in Table 1.

*Table 1: The Development of Non-Medical-Prescribing*

1992	Primary legislation for independent nurse prescribing for district nurses (DNs) and healthcare visitors (HVs) (Department of Health and Social Security, 1992)
1994	First prescribing pilots by nurses and introduction of NPF
1998	National independent nurse prescribing possible for DN and HVs (with V100 training) from the revised NPF
2001	All nurses (with V100 qualification) able to prescribe from the NPF
2002	Community nurses enabled to prescribe from Nurse Prescribers' Extended Formulary including more POMs
2003	Legislation introduced enabling suitably trained nurses and pharmacists to practice as supplementary prescribers (Health and Social Care Act, 2001)
April 2005	Regulatory changes allowed nurse and pharmacist supplementary prescribers to prescribe all controlled drugs except those in schedule 1 and unlicensed medications (The Home Office, 2012)
May 2005	Suitably trained physiotherapists, chiropodists, podiatrists, radiographers, and optometrists able to practice as supplementary prescribers
May 2006	Legislation introduced enabling nurse independent prescribing (formerly extended formulary nurse prescribing) and independent prescribing for pharmacists in England
2007	Legislation introduced enabling nurse independent prescribing (formerly extended formulary nurse prescribing) and independent prescribing for pharmacists in Wales
2009	Introduction of the community practitioner nurse prescribers' (V150) training for community staff nurses without a specialist qualification in community nursing. Only entitled to prescribe from the Community Practitioner Formulary. (Nursing and Midwifery Council, 2009)
2009	Legislation introduced to enable IP nurses and pharmacists to prescribe unlicensed medicines and to mix medicines
2012	Prescribing rights for IP nurses and pharmacists extended to enable prescribing of all controlled drugs in schedules 2–5. Changes also allowed IPs to mix any controlled drugs listed in schedules 2–5 prior to administration to the patient with another medicine for patients who need drugs intravenously (The Home Office, 2012)

#### **1.4. Prescriber Characteristics**

Across the UK there were approximately 47,899 independent or supplementary nurse prescribers in March 2020, an increase from 34,265 in March 2016 (Nursing and Midwifery Council, 2020) and there were over 9,000 PIPs (Lim et al., 2020). It is difficult to report accurate figures as there is a regular flow of newly qualified IPs registering with their regulatory bodies, some prescribers are inactive and there will also be a cohort who never register their qualification. Courtenay et al. (2017) found that 27 (7.1%) out of 379 nurse and pharmacist IPs were not actively prescribing.

There is a wide range of clinical settings where IPs work across the UK. A questionnaire survey across all three NHS Trusts and seven Health Boards in Wales, by Courtenay et al. (2017), found that, in Wales, the majority of IPs work in secondary care in a specialist nursing role. There has been some movement to encourage more IPs into primary care in Wales to increase patient access to services and to alleviate issues with GP shortages. This will also increase the level of Welsh primary care IPs to match the rest of the UK, as the majority of IPs in the UK work in primary care (NHS Wales, 2015; Alghamdi et al., 2020). There has been a focus on improving Welsh primary care services since then (NHS Wales, 2015), including the development of primary care clusters, which started in 2015. Clusters are groups of adjacent general practices that are jointly working to provide an advanced level of local medical services to relieve the pressure on hospitals (Alghamdi et al., 2020). There are currently 64 primary care clusters in Wales that serve a population of between 30,000 to 50,000 patients per cluster (NHS Wales, 2015). To support these clusters, funding has been prioritised for the training of healthcare professionals, such as pharmacist and nurse IPs (NHS Wales, 2015). Consequently, the number of NMPs in primary care in Wales has increased in recent years and is expected to rise further (Alghamdi et al., 2020).

Courtenay et al. (2017) found that within Wales, over 50% of IPs (210/379) were qualified to at least Master's level, over 65% (243/379) had over five years of clinical experience prior to undertaking the prescribing qualification, and 50% (185/379) had been qualified as an IP for five years or more. These figures indicate that IP clinicians are generally highly experienced healthcare professionals. Recent research by Alghamdi et al., (2020) indicates that they are making an increasing contribution to primary-care prescribing with the total number of items prescribed by IPs between April 2011 and March 2018 being 5,088,405 (164,130 per 100 000 population).



## 1.5. Need for IPs in Primary Care

There are a considerable number of research and government policy documents in the literature supporting the necessity for NIPs and PIPs within the UK health system (National Health Service, 2015; Welsh Government, 2019). Due to advances in medicine, the proportion of older people in the UK is increasing and elderly people are living with increasingly complex health needs. IPs enable a growing population of patients to get faster access to medicines (Welsh Government, 2018). The Welsh Government (2019) reported that 5.5 million people are over the age of 75 in Great Britain; this is estimated to increase to more than 6.3 million in England alone by 2026 (Department of Health, 2014); this growing older population thus suggests an even greater number of complex health cases who are likely to need to access appropriate medication.

Over 90% of the population's contact with the NHS is through primary care. In comparison to the 23 million annual Accident and Emergency (A&E) consultations, General Practices (GPs) deliver over 300 million patient consultations annually in the UK (Welsh Assembly Government, 2015; NHS England, 2016). The financial benefits of managing patients in primary care, where possible, and keeping them out of secondary care are clear. NHS England (2016) argued that a whole year's worth of GP care for a patient costs less than two A&E visits. To enable the development of primary care to support growing demand, an investment of £2.4 billion has been promised by 2020/2021 (NHS England, 2016); this includes investing in advanced practices, such as independent prescribing.

Non-medical prescribing and extending the skills of experienced practitioners has been positively advocated in many recent strategic planning papers to cope with the increasing demand in primary care. In 2014–2015, the Welsh Government provided funding of £3.5 million to help start the process of transforming primary care in Wales. In 2015–2016, an additional £10 million was issued to further support primary care development. One of the areas of development specified for funding was independent prescribing for nurses and pharmacists (Welsh Assembly Government, 2015). Additional reports focusing on healthcare in England have also allocated extra funding to support primary care development. They similarly discuss the importance of extending professionals' skills and recognise that nurse and pharmacist prescribing is important in achieving this (Department of Health, 2014; National Health Service, 2014).

One of the primary aims of introducing independent prescribing into the UK health system was to enable patients to have more efficient access to medicines and to make better use of healthcare professionals' knowledge and skills (Department of Health, 2006; Welsh Assembly Government, 2011). With a growing UK population with increasing health complexities, the role of the IP is becoming increasingly important in helping to alleviate health service pressures (Weeks et al., 2016). It has also been suggested that the

development of IPs and advanced practitioner roles could help address the national doctor shortage (Kroezen et al., 2011). Already by 2010, Latter et al. (2010) were able to establish that nurses and pharmacists in England were contributing significantly to the total prescribing volume and, thus, facilitating patient access to medicines. A study by Courtenay et al. (2017) showed that over 35% of NIPs and 34% of PIPs in Wales prescribed between 20 and 50 or more items a week. A more recent study by Alghamdi et al. (2020) indicates that these figures have increased significantly, particularly in certain health boards such as Betsi Cadwaladr University Health Board which estimates that 34% of their prescribed items are being prescribed by IPs. These studies corroborate Latter et al.'s (2010) findings that IPs contribute significantly to patient access to medicines.

### **1.6. Clinical Supervision of IPs**

The role of IPs within the UK healthcare system is evidentially important in supporting the growing demands of patient care. The money invested in IPs and the anticipation of their potential to ease the increasing burden within services creates a need to ensure they are working to the best of their potential. In Wales, Courtenay et al. (2017) found that at least 7% of qualified prescribers were not using their IP qualification. Additional studies have provided evidence that a lack of supervision (or structured support) is a significant factor influencing an IP's reluctance to prescribe confidently (Smith et al., 2014; Maddox et al., 2016). This lack of support may contribute to IPs having a small prescribing remit (scope of practice) and a reluctance to expand their prescribing remit to include a wider range of medicines and clinical conditions.

The accredited prescribing course places great importance on the process of clinical supervision with the DMP or DSMP in Wales. This supervision is a requirement for the successful completion of the course (Welsh Assembly Government, 2017; Nursing and Midwifery Council, 2018). Recent changes have meant that these supervising individuals no longer need to be doctors (Royal Pharmaceutical Society, 2019). However, upon completion of the course, there is no statutory requirement for clinical supervision or support to continue and no official guidance for employers on how to effectively support IPs post-qualification. Early IP training research found that only approximately 50% of IPs continued to have reviews with medical prescribers after qualifying (Latter et al., 2010). While no recent research has explored this issue since, studies have shown that clinical supervision varies significantly between clinical settings. One UK study in 2011 found that prescribing leads acknowledged that over 18% (5/22) of IPs were not receiving any appropriate support or supervision in their prescribing role (Courtenay et al., 2011); a separate study also confirmed that 25% of NIPs were not receiving any supervision (Gumber et al., 2012). Latter et al. (2010) also found that prescribers in secondary care

were more likely to have appraisals and personal development plans (PDPs) than those working in primary care. While these studies indicate a paucity of supervision for IPs, they are all over ten years old, suggesting that up-to-date research is needed in this area.

In the 'Five Year Forward View' and its updated counterpart, informal peer support was acknowledged to be as beneficial as structured supervision/support (National Health Service, 2014; NHS England, 2017). These sources both make explicit reference to peer support amongst professionals as being 'essential' to the future of the NHS. Independent prescribing has received mixed views from medical colleagues and there is evidence some do not support it (Weiss et al., 2016). PIPs have conversely expressed concern over the lack of doctors' knowledge of the practicalities of prescribers (Weiss and Sutton, 2009). A study by Weiss (2011) found that medical colleagues expressed concerns about the diagnostic capabilities of both NIPs and PIPs and Weiss (2020) more recently found that doctors still retain an overarching cultural authority over prescribing in practice. With this perceived lack of understanding of each other's role, informal peer support is unlikely to evolve with doctors. NIPs and PIPs may feel more cautious in extending their scope of practice if they are working with colleagues who have concerns about their abilities, especially for prescribing areas recognised historically as the doctor's domain (Weiss and Sutton, 2009). This reluctance to extend their scope of practice may be especially the case for those NIPs and PIPs working without additional support or supervision, other than peer support.

The professional body for nursing is prescriptive about the frequency of continuing professional development (CPD) stating that five days every three years is an essential CPD requirement for nurses and midwives (Nursing and Midwifery Council, 2017). Early guidance, which was specific to prescribers, was published recommending that the CPD undertaken by prescribing clinicians should be in line with their role as a prescriber (Nursing and Midwifery Council, 2010). The new Nursing and Midwifery Council (2018) guidelines, similar to the previous guidelines (Nursing and Midwifery Council, 2010) are very explicit about prescribing course preparation and support during the course, but there is less information about supporting qualified prescribers and no information about specific post-qualification prescribing supervision. The guidance recommends employers ensure clinicians have access to CPD identified in staff appraisals as necessary for their competent prescribing.

The aims and guidance for the supervision of pharmacists is scarce. In November 2019, the GPhC updated its guidance for PIPs (General Pharmaceutical Council, 2019), but this lacked any reference to clinical supervision for prescribers in practice. The General Pharmaceutical Council (2018) revalidation requirements of four CPD records, one peer discussion record, and one reflective account record is for all pharmacists; there are no additional specific CPD requirements for prescribing pharmacists. Similar to the nursing

guidance, the GPhC (2019) standards for the education and training of PIPs is explicit about the prescribing course preparation and support during the prescribing course and mentions effective supervision. However, what is noticeably lacking is information about specific post-qualification prescribing supervision, including guidance on goals for clinical supervision. For example, Milne and Watkins (2014) suggest that clinical supervision can be normative: focusing on quality and case management, restorative: focusing on emotional and coping support, or formative: focusing on prescribing competence (Milne and Watkins, 2014). These three aspects to clinical supervision are very different, supporting very different clinical supervision outcomes. The General Pharmaceutical Council (2019) also offers no indication of clinical supervision time frames. The General Pharmaceutical Council (2019) guidance for PIPs specifies the need to sustain specific competencies for the prescriber's role and scope of practice. It advocates reflection on clinical practice and advises that PIPs can give support to and receive support from their peers, which involves maintaining a close working relationship with their medical supervisor from the prescribing training. The guidance also advocates a hierarchical peer review system involving another person regulating, auditing, and monitoring their prescribing. The guidance implies that supervisory sessions should be focused on competency, but without any reference to support. Interestingly, when the guidance discusses specific actions to ensure 'safe and effective practice,' there is no mention of clinical supervision or support in any of the 16 action points.

Supervision can be referred to as direct observation supervision in the workplace, particularly when it relates to the community pharmacy setting, for example where a community pharmacist observes the dispensing of medication by other, less qualified staff. This is not the context for supervision that is referred to in this thesis. Although it emerges from the above discussion that there is no universal understanding of supervision for IPs, supervision in this thesis is understood to be the professional and emotional support, and the reflective process implied in the guidance issued by professional and regulatory bodies (Royal College of Nursing, 2003; Royal Pharmaceutical Society, 2018). Reflection is a key aspect in the literature for both nursing and pharmacy (Royal College of Nursing, 2003; Royal Pharmaceutical Society, 2018; General Pharmaceutical Council, 2019). However, the specific aims and guidance for clinical supervision are absent from the literature. Due to the lack of definition and/or explicit literature examining the requirements or needs for clinical supervision, the following definition has been developed from the literature that has identified perceived issues with current clinical supervision practices (Pollock et al., 2017; Cutcliffe et al., 2018). For the purpose of this study, clinical supervision is defined as:

**'emotionally supportive supervision sessions that enable reflection and build professional confidence.'**

This supportive and reflective process may include a mutually agreed direct observation but monitoring and scrutinising the supervisee's practice is not the primary focus. The new requirement for revalidation by the GPhC has no explicit reference to clinical supervision, but it does briefly discuss the requirement for a 'peer discussion' stating: 'A conversation (online or in person) where you reflect on your practice. You will have to show how this conversation led to clear outcomes for your service users' (Royal Pharmaceutical Society, 2018). There is no further guidance on the aims of this peer discussion or on PIPs' CPD or supervision needs.

The aims of clinical supervision, as stated by professional and regulatory bodies, are also somewhat varied. The Royal College of Nursing (2003) states that 'Clinical supervision is an activity that brings skilled supervisors and practitioners together in order to reflect upon their practice.' This is a fairly broad statement from a document over 17 years old, with no updated review. The document was written before the practice of independent prescribing became as pervasive as it is today and, with the definition being so broad, it is debatable whether it could be applied to the specific clinical supervision of IPs today. The Care Quality Commission (2013) has a more recent and comprehensive document detailing the aims of supervision. They categorise supervision into three types: managerial, clinical, and professional supervision. Their document focuses on clinical supervision, with the main aim being to 'Reflect on and review their practice, discuss individual cases in depth and change or modify their practice, and identify training, and continuing development needs.' Although the CQC provides a more detailed aim of supervision, detailed guidance on how to achieve these aims is still missing. There is a clear need for more information on what clinical supervision for qualified prescribers should encompass, what it should look like, and how it should be implemented.

In the next chapter, a systematic search of the literature involving the clinical supervision of nurse and pharmacist prescribers will be conducted. This will include a wider discussion of clinical governance issues for prescribers and the general clinical supervision of healthcare professionals. These discussions will be used to inform the main research question. At the end of Chapter 2, the research question, aims and objectives for the thesis will be described.

## 2. Rapid systematic review

### 2.1. Introduction

The concept of clinical supervision and its delivery continues to stimulate debate among health professionals and governing bodies globally (Pollock et al., 2017). It remains a key topic and its importance in clinical governance and clinical practice is commonly acknowledged (Leggat et al., 2016; Cutcliffe et al., 2018; Kühne et al., 2019). Clinical governance is described by Scally and Donaldson (1998; p.62) as “a system through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish”. Interestingly, although clinical supervision is acknowledged as an important aspect of clinical governance in the literature, it does not officially feature under the seven pillars of clinical governance: clinical effectiveness, risk management, patient experience and involvement, communication, resource effectiveness, strategic effectiveness, and learning effectiveness (Gray, 2005). This literature review examines the professional literature around clinical supervision and clinical governance with a focus on NIPs and PIPs in primary care. The question that this rapid literature review aimed to address was:

“What empirical evidence is available of clinical supervision for Independent Prescribers in Primary Care”

The literature was searched in a four-stage approach, first using individual search words in two databases to refine the search terms used. The second stage was then conducted to identify an appropriate search strategy by exploring the pros and cons of different search approaches. With the lack of literature specifically relating to NIP and PIP prescribing and clinical supervision, stage three focused on research investigating NIP and PIP prescribing and wider clinical governance issues beyond clinical supervision. Stage four specifically searched for research which more generally focused on clinical supervision. This process is shown below as a four staged approach:

#### Stage One

Individual search terms and synonyms of the SPICE key words were trialed in two databases to refine the final search terms (found in Table 2).

#### Stage Two

A formal search of six databases was completed to identify any published and empirical research using the search terms found in Table 3 which **included** the ‘interest’ component of clinical supervision and clinical governance. This was then compared with a search

strategy which excluded the 'interest' component of clinical supervision and clinical governance. The latter was selected as the most appropriate search strategy with the most relevant studies filtered at the review stage.

### Stage Three

Using the search strategy identified in stage two, no studies were found looking at clinical supervision and non-medical prescribing specifically. The identified literature on NMP and the broader governance issues beyond clinical supervision were reviewed and critiqued (see Table 8).

### Stage Four

A separate rapid systematic literature search was conducted to explore clinical supervision more generally in nurses and pharmacists, with the resulting studies reviewed and critiqued.

In this chapter, the awareness and uptake of NMP is discussed and the importance of governance to prescribers, particularly focusing on the role of support, is also examined. With a lack of literature investigating clinical supervision and NIP and PIP prescribing, a consideration of the general issues relevant to the clinical supervision of health care professionals is mentioned. The identified lack of a definition for clinical supervision is discussed, and the broader evidence related to clinical supervision in practice is reviewed. Finally, this chapter uses the above literature to identify the study's main research question, overall research aims and the objectives for the three phases of the research undertaken as part of this thesis.

## **2.2. Rapid Systematic Literature Search**

### **Stage One of the literature search**

It is vital to use a structured method when reviewing the literature to ensure all pertinent studies and literature is identified (Jesson et al., 2011). A qualitative version of 'Setting, Perspective, Interest, Context, Evaluation' (SPICE) was used to identify criteria for the search process (Booth, 2004). Using the SPICE template, key words and their common synonyms associated with the topic were identified (Table 2). A structured approach was thus executed from the start of the search process, to ensure completeness. A subject librarian also assisted with the search.

Table 2: SPICE (Booth 2004) Template categories to identify key words

Setting	Perspective	Interest	Context	Evaluation
NHS primary health care settings	Nurse Independent Prescriber  Pharmacist Independent Prescriber	Perceptions of effective supervision and clinical governance	UK	Risk

Stage one of the process was to input the SPICE keywords in Table 2 in two databases, (Cinahl and Medline) to identify if the terms needed to be more inclusive and modified accordingly. For example, specifying the setting of 'primary' or 'community care' produced only a small number of studies and missed relevant literature. These search terms along with 'evaluation' were, therefore, omitted, but clinical settings were filtered out in the title and abstract review stage. The term 'prescrib\*', which produced many irrelevant results, was changed to 'prescriber' when used as a single search term; however, when specific roles were added to prescrib\* and it was used as a combined search, such as 'supplementary prescrib\*' the results were more relevant. The broader search term 'prescrib\*' was, therefore, only used for combined word searches. Cinahl and Medline were chosen as they contain large databases of literature.

### **Stage Two of the literature search**

Once the individual search terms had been informally trialled in the two databases, stage two of the process was initiated. The search was formalised and expanded by combining keywords using Boolean AND/OR operators (Gough et al., 2012) to capture peer-reviewed publications. The electronic databases used for the formal searches were:

- Embase
- Scopus
- Cinahl
- Medline
- Web of Science
- British Nursing Index (BNI)



To ensure the aims of the study had not been researched previously in another PhD, the EThOS database was also searched.

To find all the related articles and to ensure another study had not been published with the same focus as this study, the initial formal search strategy was developed from the key terms shown in Table 3.

*Table 3: Key Terms for Literature Search Including “Interest” Search Terms*

<b>SPICE Template Element</b>	<b>Terms used in search</b>
Setting	Not included in search terms
Population	<ul style="list-style-type: none"> <li>• Nurse</li> <li>• Pharmacist</li> <li>• Independent Prescriber</li> <li>• Supplementary prescriber</li> <li>• Non-Medical Prescriber</li> </ul>
Interest	<ul style="list-style-type: none"> <li>• Clinical supervision</li> <li>• Clinical governance</li> </ul>
Context	UK
Evaluation	N/A

The primary aim of the formal literature search was to search for the specified terms above to ensure all recent empirical research published on the thesis topic was found. An ‘over inclusive’ search strategy was used to ensure no pertinent literature was overlooked. This strategy is recommended when identifying qualitative data in literature searches (Gough et al., 2012). This over inclusive search strategy retrieved many articles, which were filtered in a multistage process using the inclusion and exclusion criteria shown in Table 4.

*Table 4: Inclusion and Exclusion Criteria*

<b>Inclusion Criteria</b>	<b>Exclusion Criteria</b>
All methods of primary and secondary research	Non-empirical research
Primary care, community care	Exclusively secondary care studies
Studies discussing clinical governance including clinical supervision issues for IPs in their findings	Studies not discussing clinical governance including clinical supervision in their findings
National Health Service staff/contractors	Private health care staff
UK studies	Studies outside the UK
Publications from 2006 onwards	Publications before 2006
Studies including NIPs and PIPs	AHP prescribers exclusively

The specific Boolean search terms and an example of the results returned from databases are shown in Appendix 1.

To determine the best approach to identifying relevant literature, the search results using the terms in Table 3 were compared with the findings using the key terms in Table 5.

*Table 5: Key Terms for Literature Search Omitting “Interest” Search Terms*

<b>SPICE Template Element</b>	<b>Terms used in search</b>
Setting	Not included in search terms
Population	<ul style="list-style-type: none"> <li>• Nurse</li> <li>• Pharmacist</li> <li>• Independent Prescriber</li> <li>• Supplementary prescriber</li> <li>• Non-Medical Prescriber</li> </ul>
Interest	Not included in search terms
Context	UK
Evaluation	N/A

The terms ‘clinical supervision’ and ‘clinical governance’ were omitted to adopt the ‘over inclusive’ search strategy and ensure no pertinent literature was being missed. An example of why this approach was executed in this literature review is demonstrated in Figure 1 below. When the terms ‘clinical governance’ or ‘clinical supervision’ were added to the Boolean terms, the results were significantly reduced (see line 13 in Figure 1). When comparing the literature identified using the terms in Table 3, containing the Boolean terms ‘clinical governance’ and ‘clinical supervision, significant literature was missed compared to those retrieved using the terms in Table 5.

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<input type="checkbox"/>	# ▲	Searches	Results	Type	Actions	Annotations
<input type="checkbox"/>	1	nurs*.mp.	852589	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	2	pharm*.mp.	3956123	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	3	"independent prescrib*".mp.	408	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	4	"non medical prescrib*".mp.	358	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	5	"supplementary prescrib*".mp.	227	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	6	prescriber.mp.	5417	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	7	1 or 2	4770291	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	8	3 or 4 or 5 or 6	6018	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	9	7 and 8	4013	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	10	uk.mp. or United Kingdom/	562096	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	11	9 and 10	566	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	12	"clinical governance".mp. or health care quality/	248672	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	13	11 and 12	32	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	14	"clinical supervision".mp.	3724	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>
<input type="checkbox"/>	15	11 and 14	4	Advanced	<a href="#">Display Results</a> <a href="#">More</a>	<input type="text"/>

Combine with:

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Figure 1: Phase Three Boolean Terms and Retrieved Result

The 'UK' remained an essential term for retrieving literature relevant to the roles of NIPs and PIPs in the UK, as opposed to across the world. The implementation of NMP across the world varies widely (Cope et al., 2016) with NIPs and PIPs working in the UK having one of the broadest prescribing rights of any country (Kroezen et al., 2011). With this variation in the role between countries, supervision needs may vary and may not be relevant to the UK situation.

Regarding currency, only articles published since 2006 (after the introduction of full independent prescribing in the UK) until the date of the search (2020) were retained. Prescribing from the Nurse Prescribers' Extended Formulary was permitted by V200-trained nurses from 2002 but was limited compared to the NIP and PIP role today. In 2006, the new legislation enabled full access to the BNF, excluding controlled drugs, which were later added in 2012; any studies prior to 2006 were, therefore, considered of less relevance to the study.

### **Stage Three of the literature search**

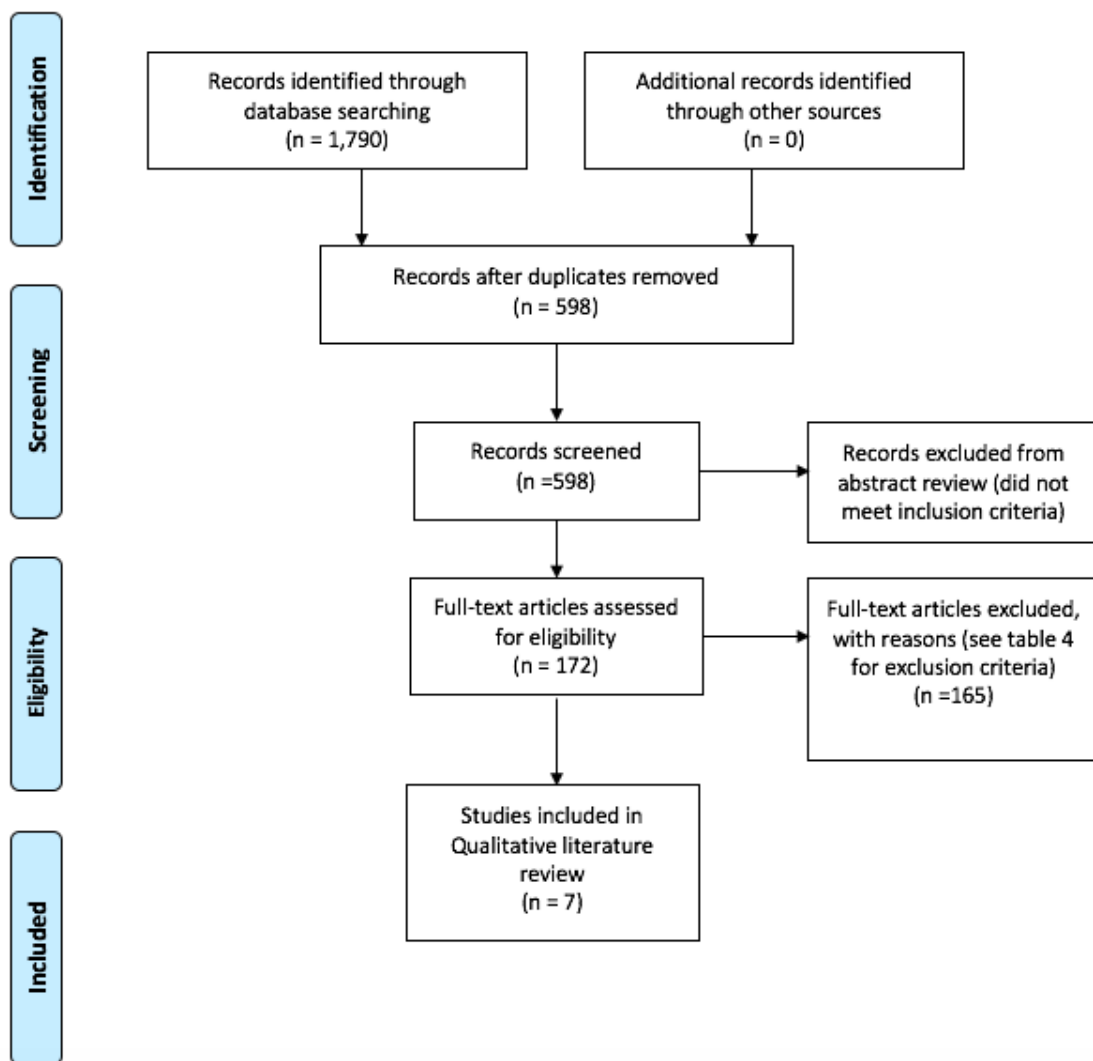
The Boolean terms listed in Table 6, based upon the search terms in Table 5, were used for all databases in the third stage search. As discussed above, the terms 'clinical supervision' and 'clinical governance' were omitted from the Boolean terms to enable an over inclusive search (see Figure 1). Articles not available as full-text were excluded, and further exclusions were based on the relevance of titles and abstracts. To enable a robust and systematic filtering process, strict inclusion and exclusion criteria were used (Jesson et al., 2011) (see Table 4).

Table 6: Phase Three Boolean Terms (S, Search)

Setting	Population	Interest	Context	Evaluation
N/A	S1) Nurs*	N/A	S10) UK	N/A
	S2) Pharm*			
	S3) Independent prescrib*			
	S4) Non-medical prescrib*			
	S5) Supplementary prescrib*			
	S6) Prescriber			
	S7) S1 OR S2			
	S8) S3 OR S4 OR S5 OR S6			
	S9) S7 AND S8			
S11) S9 AND S10 with date limits 2006–2020				

The PRISMA chart illustrated in Table 7 represents the process and findings.

Figure 2: PRISMA Chart of Formal Literature Review Showing Number of Articles Retrieved, Screened, and Retained



Relevant grey literature, such as unpublished empirical research and government documents are included in the numbers in Table 7 and excluded from the main review. No empirical research articles were retrieved specifically on NIPs' or PIPs' perspectives on effective clinical supervision in primary care. For this reason, the search for articles covering clinical supervision was broadened to include wider clinical governance issues which were filtered at the review stage.

Seven studies (Table 7) were identified once the inclusion and exclusion categories shown in Table 4 had been applied at the title, abstract, and full study review stage. These studies, which explore clinical governance issues for independent prescribers, are discussed in section 2.3.

#### **Stage Four of the literature search**

The seven studies identified in Table 8 included no empirical research discussing clinical supervision for NIPs and PIPs in primary care. It was therefore decided to undertake a review of systematic reviews exploring clinical supervision to broaden the knowledge to inform the research question. This is discussed in section 2.4.

### **2.3. Independent Prescribing and Clinical Governance**

The seven key studies retrieved and retained from the literature search in Stage Three are listed below in chronological order with their key findings (Table 7). The intent of the appraisal was to extract data and critique the studies, CASP (CASP Critical Appraisal Skills Programme, 2017) was used to assist with this process. The data study design, interventions and study outcomes were reported in a narrative format with the critique of the study, all significant outcomes relevant to the study were reported. The data were extracted by the researcher and checked by one of the supervisory team, This is a similar process to other rapid systematic reviews completed previously in healthcare studies (Fitzpatrick-Lewis *et al.*, 2011). These seven studies and the systematic reviews in section 2.4 were beneficial in informing the research question.

Table 7: Key Studies Retrieved and Retained in the Literature Search

Author, article, journal	Aim	Methods	Setting	Findings
<b>Courtenay, M. et al. (2017) 'Overview of the uptake and implementation of non-medical prescribing in Wales: a national survey,' <i>BMJ Open</i>.</b>	To identify the NMPs in Wales, the style of prescribing used, prescribing frequency, the different ways the prescribing qualification is used and the safety/clinical governance systems in place for these professionals.	A national questionnaire survey in Wales with 379 responses (60% response rate).	All three (NHS) Trusts and Seven Health Boards in Wales.	The uptake of non-medical prescribing has been inconsistent across services in Wales, particularly in primary care. The majority of NMPs are in secondary care whereas in the rest of the UK they are in primary care. Research proposed to explore the reasons why NMPs are not being fully utilised in primary care.
<p><i>Critique:</i> This is the first national survey of non-medical prescribing in Wales. The aims of this research are clear and the methods of using a survey enabled a large number of NMPs in different geographical locations across Wales to participate which is important when looking at styles, frequency and differentials in prescribing. Although the survey enabled some room for open-ended comments, further exploration in the format of one-to-one interviews or focus groups would have enabled deeper exploration of why particular styles of prescribing were used and if there were other factors affecting the frequency of prescribing that were not covered in the survey. The researchers reached out to numerous non-medical prescribing contacts within the health boards to identify a large number (806) of NMPs which is important when identifying trends in prescribing. 606 NMPs were successfully contacted with the emails confirmed as delivered and acknowledged, 200 NMPs were not contactable on email and they were removed from the sample. The researchers reached out to potential participants directly via email, this may have made some participants feel compelled to engage with the study than if the onus was on the potential participant to contact the researcher should they be interested in participating in the research. The survey had a good response of 379, which was over 60% of the NMPs contacted. However, the figure represented less than half of the estimated 806 of NMPs working in Wales at that time. The results were clear and informative and in line with previous research. It is important to recognise that these findings are for Wales only and, therefore, cannot be generalised across the UK.</p>				
<b>Maddox, C. et al.</b>	To explore the factors	Qualitative: 15 NIPs and	England –	'Cautiousness' and 'a perceived level of risk' were themes found as key



Author, article, journal	Aim	Methods	Setting	Findings
<b>(2016) 'Factors influencing nurse and pharmacist willingness to take or not take responsibility for non-medical prescribing,'</b> <i>Research in Social and Administrative Pharmacy.</i>	influencing prescribing by NIPs and PIPs in community and primary care.	5 PIPs were purposively selected and interviewed using the critical incident technique. Themes were then validated in three focus groups with a total of 10 NMPs.	Community and primary care.	factors influencing NMPs' decisions to take responsibility for prescribing. Clinical supervision and CPD need to be made more accessible to NMPs to enable them to review and improve their competencies. A better understanding of the NMP role is needed amongst colleagues and patients to enable an understanding of prescribing decisions.

*Critique:* This study states a clear aim exploring influencing factors to prescribing, interviews and focus groups were entirely appropriate to fulfil the aim. A purposeful recruitment strategy enables a diverse demographic of participants which is important when working with low numbers of participants as it aims to fulfil information power rather than information saturation. The research used a two-part qualitative approach which would have supported triangulation of the study, with prescribers from a mixed demographic. However, a disproportionate number of nurses, in comparison to pharmacists, were used in the study due to the low numbers of PIPs available at that time. The three focus groups comprised of ten nurses which is a small number for focus groups. Given the low number of pharmacists included in the study, it is unlikely the findings are generalisable to PIPs.

Author, article, journal	Aim	Methods	Setting	Findings
<b>Pearce and Winter (2014) 'Review of non-medical prescribing among acute and</b>	To demonstrate and support safe non-medical prescribing practice and to explore the CPD needs of individual	An online survey was sent to supplementary and independent prescribers in one trust	Great Western Hospital NHS	90% of respondents were actively prescribing, The number of prescriptions varied greatly from one to 100 prescriptions a week. Identified methods of keeping up-to-date with prescribing practice included reading journals, peer discussion and clinical supervision.

Author, article, journal	Aim	Methods	Setting	Findings
<b>community staff'</b> <b>Nursing Management.</b>	prescribers and to support safe NMP practice.	in England. It was sent to a total of 175 prescribers and had a response rate of 64%.	foundation trust in England.	Although the majority of participants had received an appraisal in the previous year prescribing was not discussed in approximately half of the appraisals.

*Critique:* The study aimed to demonstrate and support safe non-medical prescribing. The participants were not anonymised and were expected to share their responses with their line manager. Disclosing unsafe prescribing may be quite difficult due to potential repercussions and so there is a potential of bias in the responses of this survey. Had the survey been anonymous, they may have found different results. As this looks to have been an exploratory study, individual anonymised interviews not involving management of the participants may have explored the aims a little deeper. The study states that "All prescribers were contacted and were expected to respond and were process chased once the six-week deadline expired", this insinuates that there might have been some pressure to engage with the study as they were contacted directly through their work emails and then chased up if they had not responded. Due to this recruitment strategy, unsurprisingly they had a good response rate of 64%. The survey only covered one health trust in England and so the findings may not be transferred to other areas. The study does not state the profession of the NMPs involved in the survey, for example how many nurses and how many pharmacists. NMP covers a broad range of professions. This makes it difficult to assess if the findings are more relevant to a particular group of prescribers or if there was an even mix of NMPs.

Author, article, journal	Aim	Methods	Setting	Findings
<b>Smith et al. (2014)</b> <b>'Safety and quality of nurse independent prescribing: a national study of experiences of education, continuing</b>	To establish the adequacy of education for NIPs and to identify what clinical governance strategies and CPD is in place for non-medical prescribing.	National questionnaire surveys. Responses included – 976 NIPs (65% response rate) and 87 non-medical prescribing leaders (52% response rate).	England – primary and secondary care.	Nurse prescribing educational programmes were perceived to be 'fit for purpose.' Further research is needed to confirm prescribers can make effective decisions for safe prescribing. Disparities were found in support of community nurses. Most NHS Trusts had governance and management strategies for NMPs.

Author, article, journal	Aim	Methods	Setting	Findings
professional development and clinical governance,' <i>Journal of Advanced Nursing.</i>				
<p><i>Critique:</i> Participants included IPs and NMP leads which gives the study differing viewpoints to address their aim. The participants were selected randomly from the NMC register across a broad geographical area of 10 Health Authority areas in England which gives the responses of the participants some diversity and potentially makes the findings more transferable. It is unclear how the participants were contacted; however, the participants' responses were anonymous; they would not have felt obligated to participate in the study if their response was not being monitored. This was a large study of 976 NIPs in England with a good response rate of 65% (976/1,492). The results cannot be generalised to PIPs or prescribers working in Wales.</p>				
Author, article, journal	Aim	Methods	Setting	Findings
<b>Courtenay et al. (2012) 'An overview of non-medical prescribing across one strategic health authority: a questionnaire survey,' <i>BMC Health Services Research.</i></b>	To identify the NMPs' style of prescribing they use, frequency of prescribing, the different ways the prescribing qualification is used, and the safety/clinical governance systems in place for these professionals.	Questionnaire survey. Response number – 826 NIPs, 36 PIPs, and nine AHPs.	Essex, East of England majority primary care with some secondary care data.	Nurses in GPs prescribed the highest quantity of medicines. Community practitioners reported fewer clinical governance measures in place, in comparison to other areas such as secondary care. Key issues affecting prescribing include the existence of governance procedures and support for the prescribers. The researchers recommend support as essential to prescribers to enable them to fulfil their role.

Author, article, journal	Aim	Methods	Setting	Findings
<p><i>Critique:</i> The aim of the study was broad but also indicated an exploratory line of enquiry, this was a comprehensive aim for a survey alone to deliver. A comprehensive survey was used, perhaps the aim of the study would have been better addressed using an exploratory approach including or exclusively using interviews and/or focus groups. Using more of an exploratory approach may have reduced the participant numbers significantly and would not have given the wide-ranging view that the findings delivered. The potential participants were contacted directly via email and it would seem that the participants did not need to give any identifiable information in the survey and so it is assumed that the survey remained anonymous potentially enabling participants to be more open with their responses with no pressure of participation. Participants were predominantly nurses with 826 NIPs in comparison to 45 PIPs and AHPs. The study had a good number of participants (883) with a fair response rate of 55.7% including NIPs PIPs and AHPs. Demographic characteristics of participants were varied although from only one geographical area in England. This may mean that the results are not generalisable to other areas.</p>				
Author, article, journal	Aim	Methods	Setting	Findings
<p><b>Latter et al. (2010)</b> <b>'Evaluation of nurse and pharmacist independent prescribing,'</b></p>	<p>The overall aim was to evaluate nurse and pharmacist independent prescribing to advise on the development for current and future prescribers.</p>	<p>Three phase design: 1) National survey by questionnaire of NIPs and PIPs. Telephone survey of prescribing leads. Focus groups with higher education and prescribing program leads and DMPs. Analysis of safety incidents from national datasets.</p>	<p>England – primary and secondary care.</p>	<p>Approximately 2–3% of nurses and pharmacists were qualified prescribers; the majority of these worked in primary care. 93% of NIPs and 80% of PIPs had used their qualification however, only 86% of NIPs and 71% of PIPs were currently using their qualification. Only half of the trusts reported a plan to develop NMPs. Most patients did not have a preference to be treated by a medic or NMP – the acceptability of NMPs to patients is high. There is, therefore, potential to expand prescribing amongst NIPs and PIPs to include prescribing for co-morbidities.</p>

Author, article, journal	Aim	Methods	Setting	Findings
		2) Case studies and patient surveys. 3) Multi-stakeholder workshop.		

*Critique:* This study had a broad aim and appropriately used a three-phase design enlisting the perspectives of different participant groups: independent prescribers, prescribing leads, higher education programs and patients to address the aim. This was an extremely comprehensive study comprising three phases which looked at the viewpoints of IPs, educational programme providers and patients which gave a broad view of their findings as opposed to looking at only one of the participant groups. Although this study is now dated as it is 11 years old, more recent research has shown comparable findings.

Author, article, journal	Aim	Methods	Setting	Findings
<b>Latter et al. (2007)</b> <b>'Evaluating nurse prescribers' education and continuing professional development for independent prescribing practice: findings from a national survey in England,' <i>Nurse</i></b>	To evaluate the adequacy of nurses' educational preparation for independent prescribing and to describe nurses' experiences of their CPD as prescribers in practice.	Survey by postal questionnaire to 246 NIPs.	England – primary and secondary care.	62% reported they received supervision/ support for prescribing. 95% reported they engaged in self-directed CPD, compared to only half who had CPD opportunities formally provided by their employer.

Author, article, journal	Aim	Methods	Setting	Findings
<i>Education Today.</i>				
<p><i>Critique:</i> This is a fairly dated study but remains significant as it has been corroborated by more recent study findings and adds to a historical view of similar issues. The aim of the study was to evaluate the adequacy of nurses' educational preparation for Independent prescribers and for this, a survey is entirely appropriate. The second part of the aim was to describe the nurses' experience of their CPD, this potentially might have been more informative using an interview or focus group method. The participants were randomly selected from the NMC looking at nurse prescriber registrations for 2002/2003. It is important to note that during this time independent prescribing was in its infancy and so as a standalone study and without corroborative findings from more recent research, the findings may not be applicable to today's practice. The study only looked at NIPs as there were no PIPs at that time and, therefore, cannot be generalised to PIPs.</p>				

Two papers included in the key studies were written by the same author and have identical objectives (Courtenay et al., 2012; Courtenay et al., 2017). The reason they are both relevant in their own right is that they were conducted over two different geographical areas and they had similar findings, despite being completed five years apart. Some of the findings from the older studies (Courtenay et al., 2012) appear to be reflected in the more recent studies (Courtenay et al., 2017). Other findings, however, may have changed since older studies were completed.

After reviewing the seven studies shown in Table 7, two key themes arose from the studies. These themes included:

- Awareness and uptake of NMP prescribing support
- The importance of governance to support prescribers

These are presented below.

#### 2.3.1. Awareness and uptake of NMP prescribing support

Some of the key studies are now quite dated (Latter et al., 2007). However, the study by Latter et al. (2007) evaluating the adequacy of the educational program through a postal questionnaire to 246 NIPs found that only 62% received supervision/support for prescribing (Table 7). These findings by Latter et al. (2007) were part of a much larger study, a national survey and case studies of practice settings, it was the first ever study to look at independent nurse prescribing (Latter et al., 2005). These findings are compatible with a more recent, albeit still 11 years old, and larger study by the same author in a comparable area of research looking at independent prescribing nurses and pharmacists (Latter et al., 2010). Latter et al. (2010) found that only half of the trusts planned to develop their NIPs and PIPs. As these studies are 14 and 11 years ago respectively, there is the potential that things might have changed in that time frame. They do, however, still hold relevance as more recent smaller studies such as Maddox et al. (2016), who conducted a significantly smaller study consisting of interviews with 15 NIPs and five PIPs (see Table 7), found that only low numbers of these clinicians were offered supervision nine years later. This suggests that the importance of supervision and support to the development of non-medical prescribing was of continuing historical importance and may still be relevant now.

Although there is 11 years between the research of Latter et al. (2007) and Maddox et al. (2016), and participant numbers significantly varied between studies, with the study by

Latter et al. (2007) being on a much larger scale consisting of 246 NIPs in comparison to the Maddox et al. (2016) study of 15 NIPs and 5 PIPs (see 7), both studies concluded that supervision rates were low and that supervision needed to be more accessible to NMPs. Latter et al. (2007) conducted a large postal survey, across a number of case study sites across England. One of the areas they explored was nurses' educational preparation for independent prescribing and nurses' experiences of their CPD, as prescribers in practice in both primary and secondary care. They found 95% of NIPs and PIPs engaged in self-directed CPD, which is high, given that their face-to-face supervision and support rates with another professional were only 62%. This suggests there is self-motivation to develop and that engagement levels for supervision could be high, if offered.

Pearce and Winter (2014) looked at support for NMPs; they found that most prescribers in the study were managed by non-prescribing staff and that, in most supervision sessions, there was very little discussion about prescribing (Table 7). The study was relatively small, only covered one area of the UK, and no direct link was established between being managed by non-prescribing staff and the lack of discussion regarding prescribing. The study does, however, indicate that if supervision is not relevant, staff engagement in supervision is likely to be low.

Smith et al. (2014) conducted a large survey study (see Table 7 for full details) to explore the adequacy of independent prescribing education for nurses and to identify clinical governance strategies and continuing professional development for non-medical prescribing. They found a disparity between the support offered to prescribers in secondary care compared to those in community and primary care. They found that overall, 73% (609) reported having regular appraisals which included their prescribing role. When they looked at the responses specifically from those working in primary and community care, they found that the number who reported having regular appraisals were significantly lower than the cohort of participants as a whole. In comparison to the overall rate of 73%, only 52% (53) of the nurses in primary and community care reported having regular appraisals.

### 2.3.2. The importance of governance to support independent prescribers

Maddox et al. (2016) looked at what factors influenced NIPs and PIPs to take responsibility for prescribing in primary and community care (Table 7). They interviewed 15 NIPs and 5 PIPs and found low levels of confidence amongst these prescribers and, as a result, perceptions of their competency was lower, which influenced their decisions to



prescribe. The study concluded that NIPs and PIPs need better access to CPD and clinical support to enable them to review and improve their own competencies. In the study by Pearce and Winter (2014), clinical supervision was mostly found to be conducted or facilitated by a manager. Pearce and Winter (2014) conducted a survey aiming to support safe non-medical prescribing by looking at CPD needs for NMPs, although they did not specify the professional characteristics of the NMPs. The aim of the survey was to demonstrate and support safe non-medical prescribing practice and explore CPD needs of individual prescribers. It was a large study over one Health Trust in England; they contacted 64 acute and 111 community NMPs and had an overall response of 64%. They found that in the previous year, the majority of participants had received an appraisal. Prescribing, however, was not discussed in approximately half of these appraisals.

Courtenay et al. (2017) found that in Wales the majority of independent prescribers were working in secondary care settings. In England, the majority of independent prescribers worked in primary care (Courtenay et al., 2017). One of the recommendations that came out of the study by (Courtenay et al., 2017) was the need to support primary care in Wales to encourage independent prescribing in primary care settings. Across the UK, primary care NIPs and PIPs have been cited as the key contributors to NMP prescribing (Latter et al., 2010; Courtenay et al., 2017). Although CPD rates indicate motivation for professional development (Latter et al., 2007), it is widely documented that there are few clinical supervision and governance measures in place for primary care NIPs and PIPs (Courtenay et al., 2015). The disparity in governance and support measures between secondary and primary care is also supported by Smith et al. (2014) who found that generally, governance and support measures were in place for non-medical prescribers however, when they looked at the primary and community care participants specifically, they found a reduction in the number of participants reporting supportive measures in place. The increasing need for NIPs and PIPs in primary care has been made very clear by government bodies, but a lack of support and supervision has been found to be a key barrier in non-medical prescribing (Maddox et al., 2016).

#### **2.4. Clinical Supervision**

As stated previously, no empirical research was found during the systematic literature search investigating supervision for NIPs and PIPs in primary care. It was therefore decided to undertake a search of systematic reviews of clinical supervision to increase the knowledge in this area to better inform the research questions and objectives. Strict inclusion and exclusion criteria were used and are shown below in Table 8. Systematic

reviews were exclusively explored as they are referred to as the gold standard of research (MacLure et al., 2016) and summarise the breadth of research studies likely to be found in a broad research area, such as clinical supervision. The date range and the geographical area limit the search to when independent prescribing was permitted in the UK. The inclusion of studies involving non-specialist registered general nurses (RGN) and pharmacists was an important aspect when looking at clinical supervision because specialist areas of nursing such as mental health nursing may require a different structure of clinical supervision because of the potential secondary traumatic stress by patient experienced trauma (Bock et al., 2020).

*Table 8: Clinical supervision systematic review inclusion and exclusion criteria*

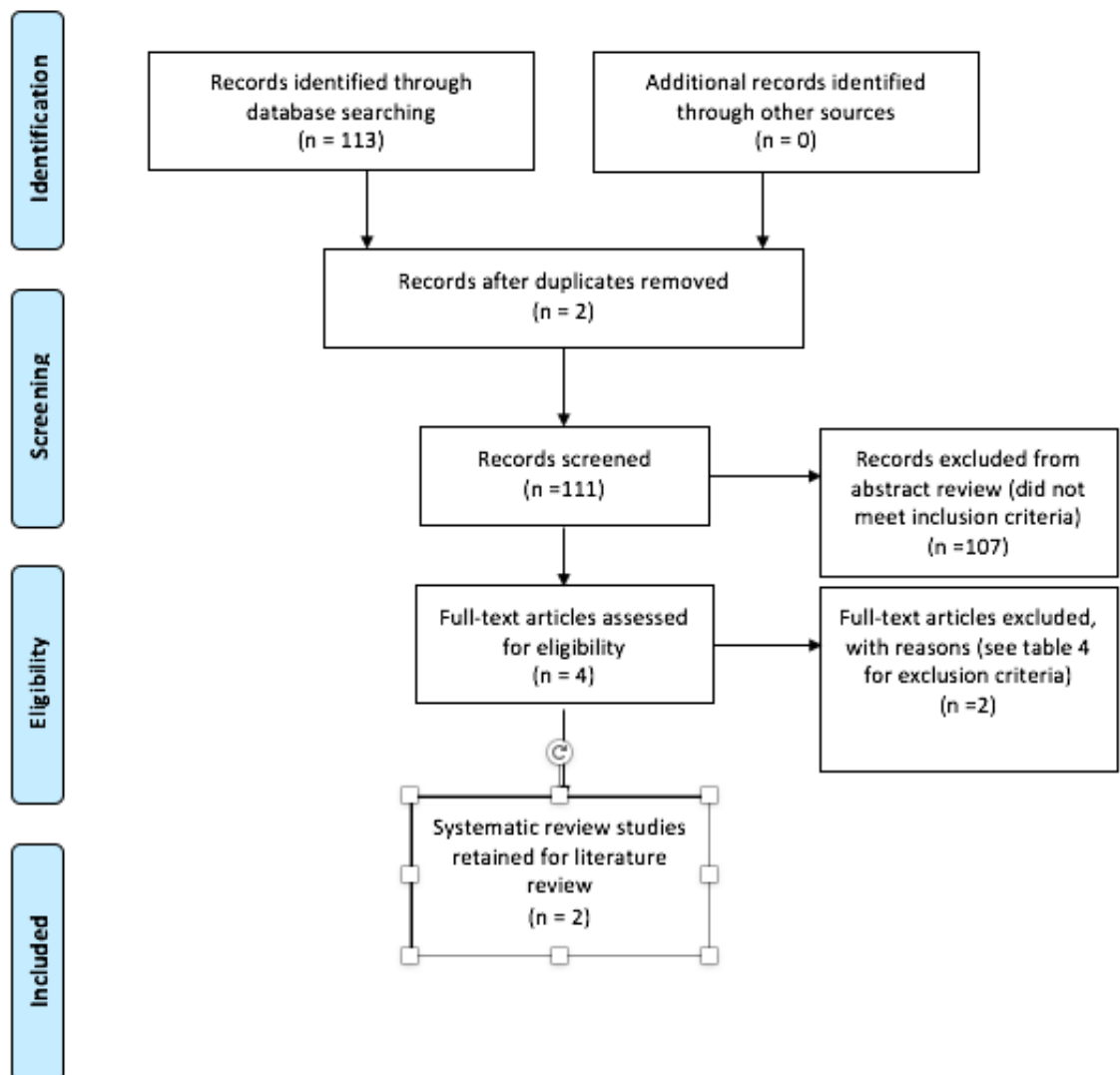
<b>Inclusion Criteria</b>	<b>Exclusion Criteria</b>
Systematic Reviews	Anything other than systematic reviews
Studies reviewing clinical supervision	Studies not discussing clinical supervision
Studies involving RGN (registered general nurses) nurses and pharmacists	Studies not involving RGN nurses or pharmacists
UK studies	Studies outside the UK
Publications from 2006 onwards	Publications before 2006

It was decided that the search should aim to be overly inclusive to ensure that no relevant systematic reviews were excluded: the search was intended to focus on systematic reviews exploring clinical supervision after 2006. All other areas of the inclusion criteria were applied during the screening stage displayed above in Table 8. For this reason, the setting, population and context were excluded from the Boolean terms shown below in Table 9.

*Table 9: Clinical supervision Boolean terms*

<b>Setting</b>	<b>Population</b>	<b>Interest</b>	<b>Context</b>	<b>Evaluation</b>
N/A	N/A	S1) "Clinical supervision"	N/A	S2) Review
S1 & S2 date range 2006 onwards				

Figure 3: PRISMA Table of Formal Literature Review Showing Number of Articles Retrieved, Screened, and Retained



The formal literature review was conducted in 2018, and two systematic literature reviews were identified (Pollock et al., 2017; Cutcliffe et al., 2018). A repeat of the search was completed in 2020 and a further literature review was found (Markey et al., 2020), this will also be discussed below. The three reviews retrieved looked at clinical supervision in nursing which, while not specifically discussing nurse and pharmacist prescribers, gave an overarching view of supervision in primary care for nurses. These three studies are discussed further below.

Pollock et al. (2017) completed a comprehensive systematic review of 29 studies exploring the evidence relating to clinical supervision for nurses, midwives, and AHPs. Synthesis one contained 10 reviews discussing an absence of convincing empirical research over the nature of clinical supervision. Synthesis two included 19 reviews

highlighting large variations between clinical supervision interventions. It is important to note that this systematic review had an international focus which included seven UK studies. Although the primary aim of the review was not met as it was not able to investigate implications for midwifery clinical supervision in the UK, the findings were relevant to this research as the majority of studies reviewed were nurse focused. The researchers surmised that there was a lack of empirical evidence and agreement over the nature of clinical supervision. They also found huge variations and a lack of consistency between clinical supervision techniques.

Cutcliffe et al., (2018) conducted a systematic review of 28 studies with an international focus including UK studies, the review exclusively looked at nursing supervision. They evaluated and scored all of the papers included based on the following domains: reporting bias, consistency, directness, precision and study limitations. It is important to note the limitations of this study, notably that their literature review had a very broad timeframe (1995-2015), the majority of which would not have included a time where independent prescribing was in existence. It is therefore difficult to conclude if the findings related to reflection on practice to support confident and competent practice is transferable to independent prescribers in clinical practice today. The main theme noted was the positive attitude towards clinical supervision from both supervisees and supervisors. Interestingly, training in clinical supervision and not having a managerial relationship between supervisors and supervisees were important findings.

A collective theme running through the findings of these studies indicates that clinical supervision in the UK, and globally, is extremely inconsistent due to the absence of a clear definition of what clinical supervision entails (Cutcliffe et al., 2018; Markey et al., 2020). The limitations of Markey et al. (2020) are acknowledged, notably the lack of a systematic process in their literature review. It is important to note however that this is the most up to date review of the literature looking at this area of research. There were varying perspectives of clinical supervision which led to vast differences in how it is practised. Both Cutcliffe et al. (2018) and Pollock et al. (2017) found variations in clinical supervision practices ranging from formal, work-focused processes intended to support and develop colleagues, to those advocating a hierarchical approach, facilitated by more senior colleagues, supporting junior members of the profession. There were variations found in the literature ranging from the type of clinical supervision offered (informal, formal, group, individual, face-to-face, telephone) (Pollock et al., 2017), frequency (Pollock et al., 2017; Cutcliffe et al., 2018), and who is delivering the supervision (peer, medical, or managerial) (Cutcliffe et al., 2018). A key issue that arises from these studies is summed up in the

systematic review by Cutcliffe et al., (2018): ‘what appears to be noticeably “thin on the ground” are empirical evaluations of CS [clinical supervision]’ (Cutcliffe et al., 2018; p. 1). It appears from the literature studied that there is no universal clinical supervision framework to guide and evaluate clinical supervision. The lack of research on the effectiveness of clinical supervision and its application highlight the need for its systematic evaluation (Cutcliffe et al., 2018).

Amongst the ambiguity in the definition and application of clinical supervision, and the clear need for its systematic evaluation, Cutcliffe et al. (2018) found in their systematic review that reflection on practice was evidenced in studies to support confidently competent practice. Although not a systematic review, a study with supportive findings by Markey et al. (2020) proposed that clinical supervision is underused in clinical practice and could be an intervention to help support nurses and nurture the positive working environment needed to reduce the incidence of missed care. These two reviews (Cutcliffe et al., 2018; Markey et al., 2020) suggest that clinical supervision may be important to supporting prescribers’ confidence and competence in practice. Pollock et al. (2017) and Markey et al. (2020) agree that clinical supervision positively affects staff turnover, burnout rates, and wellbeing; it seems logical, therefore, to assume it could also indirectly affect patient care.

## **2.5. Research Rationale**

The 2030 vision for Wales is clear about the level of importance placed on primary care NIPs and PIPs in supporting future health care needs. The aim to have at least one PIP in every community pharmacy is evidence of this (Welsh Pharmaceutical Committee, 2019). The Welsh Assembly Government (2015) and NHS England (2017) are also clear in their reports that NIPs and PIPs have important roles in the future of primary and community care. Effectively supporting NIPs and PIPs is vital to moving forward successfully with the intended future plans (Welsh Assembly Government, 2015; NHS England, 2017; Welsh Pharmaceutical Committee, 2019).

Primary care NIPs and PIPs are at the forefront of the increasing demands on healthcare services in the UK, but in Wales, the number of IPs in primary care are small (Courtenay et al., 2017). Doctors are struggling to cope with the prescribing demands of the growing population (NHS England, 2017) and NIPs and PIPs have been proposed as a safe and effective solution to alleviate these issues (NHS England, 2017). There are currently large numbers of NIPs and PIPs in UK healthcare services and there has been a steady stream

of funding with plans to enhance their effectiveness and presence within primary care (Welsh Assembly Government, 2005; NHS 2015). However, although almost 30% of pharmacists in Wales are qualified to prescribe, only 60% of them are regularly utilising their prescribing skills, often due to the structures not being in place to support them (Welsh Pharmaceutical Committee, 2019). One of the 2030 goals from Delivering a Healthy Wales (Welsh Pharmaceutical Committee, 2019) is to ensure there will be at least one IP in every community pharmacy in Wales, although this will help meet demand, it still fails to address the need for IP support and supervision.

Pinpointing what is specifically needed from clinical supervision sessions from a supervisee perspective is vital in formulating a practical, comprehensive, and universal definition. There is evidence that clinical supervision is a positive intervention and can support patient care and employee development (Cutcliffe et al., 2018). There is a lack of evidence suggesting what is needed from clinical supervision, specifically for prescribing from a supervisee perspective. It has been discussed that there is no agreed usable definition of clinical supervision and that empirical evidence for what constitutes ideal clinical supervision is lacking (Cutcliffe et al., 2018; Markey et al., 2020). Retrospective studies (Pollock et al., 2017; Cutcliffe et al., 2018) looking at the issues and barriers clinicians have faced with clinical supervision have been discussed, but there does not appear to be any proactive research looking at what is perceived to be ideal clinical supervision, particularly in reference to IPs.

Studies have shown that supervision and support for NIPs and PIPs are critical in supporting safe and effective practice (Smith et al., 2014; Maddox et al., 2016). Effectively supporting primary care NIPs and PIPs is essential to the development of the growing demands on primary care services. Without effective support, the money invested in the development of these roles could be wasted and patient care may be compromised (Smith et al., 2014). Varied levels of support have been identified across the UK health settings over a significant period of time (Latter et al., 2010; Courtenay et al., 2017), but it is still unknown whether the support is effective.

In the literature reviewed, findings related to the preferred style of supervision and resistance to supervision varied – some findings indicated that group supervision was beneficial, while others implied that it was an intrusion. It is unlikely that a model of clinical supervision can be designed to cater for all IPs in all clinical practice areas. For the purpose of this research, it was important to focus on clinical supervision for IPs in primary care as, to date, this area is lacking evidence and guidance. There is a gap in the

literature for what is perceived to be 'effective support' from the perspective of the NIPs and PIPs receiving the support.

## **2.6. Research Question, Aims and Objectives**

### **Research Question**

What is required for effective, emotionally supportive supervision to build confidence and competence in NIPs and PIPs in primary care?

### **Research Aims**

1. To identify the requirements for effective, emotionally supportive supervision to build confidence and competence in NIPs and PIPs in primary care.
2. To explore supervisees', supervisors' and stakeholders' views on how emotionally supportive supervision can be delivered in practice and the barriers to this.

### **Research Objectives**

#### **Phase 1**

1. To investigate supervisees' views of whether personal qualities, professional role, and qualifications of the supervisor influence supervision effectiveness.
2. To explore NIPs' and PIPs' perceptions of their own competence and confidence in prescribing and whether their performance is influenced by adequacy of supervision.
3. To identify whether adequate supervision supports and encourages an extended scope of practice.

#### **Phase 2**

4. To identify from Phase 1 findings whether there is consensus amongst NIPs and PIPs on what is required for effective clinical supervision and, if so, which parameters support effective supervision.
5. To develop a model of clinical supervision based on the findings of objective 4.

#### **Phase 3**

1. To explore stakeholders' views of a model of effective supervision for NIPs and PIPs.

2. To investigate stakeholders' views of the broader issues affecting effective support for NIPs and PIPs.

## **2.7. Thesis Organisation**

This thesis is comprised of seven chapters:

- In the first chapter, the background to the topic and history of IPs in the UK was introduced to include recent policy documents and the rationale for the definition of clinical supervision used in this thesis.
- In Chapter 2, the literature used to inform the research question was presented to include a systematic search of the literature exploring the relationship between NIP and PIP prescribing and wider clinical governance issues as well as a discussion of the key issues affecting the clinical supervision of nurses and pharmacists more generally.
- Chapter 3 details the methodology used for the three phases of research, addresses reflexivity and positionality of the researcher, ensuring research quality, the sampling strategy and broader ethical considerations.
- Chapter 4 reports in detail the qualitative methods used for the first phase with NIP and PIP supervisees and discusses the research findings. It also develops the rationale for the second research phase using the Delphi Technique.
- Chapter 5 reports the methods used in the second phase using the Delphi Technique and discusses the findings from this phase.
- Chapter 6 describes the qualitative methods used within the third phase with stakeholders involved with prescribers and then discusses the research findings.
- An overarching discussion of the research, its strengths, limitations, implications for practice, recommendations for future research, and final conclusions are then presented in Chapter 7.



## **3. Methodology and Research Methods**

### **3.1. Introduction**

This chapter discusses the research methodology used to investigate the research question: what is required for effective, emotionally supportive supervision to build confidence and competence in NIPs and PIPs in primary care? The aims of the study are presented in section 2.6 and the rationale for the research in section 2.5.

In this chapter, first, a brief review of quantitative and qualitative methodological approaches are presented, followed by the justification for the adoption of a mixed methods approach. Qualitative semi-structured interviews and the Delphi technique are then described and why these methods were selected is discussed. This then leads to a discussion of the data collection methods and the sampling strategy. The chapter then addresses aspects of rigour, including trustworthiness, transparency, transferability, and the use of triangulation in relation to the chosen research approaches used. Potential credibility of the research is thus discussed, together with reflexivity and positionality. Finally, the ethics and permissions relevant to the research design are considered. (Specific ethical issues relevant to the individual methods being used are discussed in more detail in the methods sections of chapters 4, 5 and 6.)

### **3.2. Research Designs**

#### **3.2.1. Overview**

There are three main methodological approaches to research: quantitative, qualitative, and mixed methods, the latter of which is a combination of the former two. The choice of methodology is influenced by the research question; appropriate research questions should provide the focus and direction of the data collection and the process of analysis (Creswell 2003). All three approaches are discussed in relation to their suitability for exploring what is required for effective, emotionally supportive supervision to build confidence and competence in NIPs and PIPs in primary care.

#### **3.2.2. Quantitative approaches**

A quantitative approach uses strategies such as experiments and surveys to collect measurable, statistical data, often using predetermined instruments (Creswell, 2003). Quantitative designs can be experimental or non-experimental. Experiments are usually

conducted in a laboratory and thus in controlled environments to reduce potential bias that might be introduced in a natural setting (Brown and Lord, 1999). While this removal of bias may seem preferable, experimental designs are also criticised because variables may react differently when removed from their natural settings (Brown and Lord, 1999).

Non-experimental design studies include surveys, observations, and other numerical data collecting methods outside of controlled settings. Collecting data in natural settings, for example by field surveys, increases the external validity of the results as they can be generalised to a larger population (Egan, 2005).

Statistical data gives a clear and measurable insight into a research question; however, to use a quantitative approach effectively, specific variables need to be identified prior to data collection for a statistical tool to be used (Creswell, 2003). As no previous research has explored prescribing pharmacists' and nurses' perceptions of effective clinical supervision, no such variables have been pre-determined to guide a quantitative data collection design. For this reason, a solely quantitative approach would not have been suitable for this research.

### 3.2.3. Qualitative approaches

Qualitative approaches have different rules and procedures to quantitative methodologies. With qualitative approaches, one phase of the research usually leads to the development and design of the next phase (Creswell, 2003). Qualitative methods allow the gathering of in-depth information on the personal experiences of individuals, thus providing rich data (Creswell 2003; Smith and Osborn, 2003; Tatterton, 2017). With quantitative designs, the collection of measurements of pre-determined variables allows hypotheses to be tested statistically; the level of certainty that the results represent the truth can be explored through statistical analyses of the data. There are no preconceived hypotheses with qualitative studies; the data categorisation is usually facilitated by the researcher observing the experience in a natural setting (Creswell, 2007). The data are further categorised by the researcher using critical judgement. As such, qualitative research approaches are commonly criticised for this interpretive approach, which introduces potential subjectivity and bias (Creswell and Miller, 2000). Qualitative data collection methods tend to be less structured, and it is therefore more difficult to distinguish between bias and fact (Allen and Austin, 2001).

#### 3.2.4. Mixed methods designs

A mixed methods approach collects quantitative and qualitative data in the same study with the aim of expanding and strengthening the study's conclusions (Ivankova et al., 2006; Schoonenboom and Johnson, 2017). It is a research design which combines quantitative- and qualitative-oriented philosophical assumptions and methods of enquiry (Creswell and Clark, 2007), to guide the collection and analysis of data (Creswell and Clark, 2007). The focus of a mixed methods approach is to collect, analyse and mix both quantitative and qualitative data in a single study or a sequence of studies (Creswell, 2003). When exploring a complex issue, using one method alone may provide an incomplete picture of the phenomenon (Ivankova et al., 2006). Using a mixed methods approach may provide findings at different levels, enhancing (or complementing) the results otherwise resulting from a single method. For example, qualitative methods may provide a rich understanding of the variables or main themes related to a phenomenon, that lead to a quantitative study to test those themes (Schoonenboom and Johnson, 2017). There are many positive aspects to using a mixed methods design. A widely discussed positive aspect is that although all research processes have underlying biases, using a mixed methodology can lessen the bias in a study; a weakness in one design, may be eliminated in the second design (Creswell and Clark, 2007; Schoonenboom and Johnson, 2017). Triangulation or the corroboration of findings between different research designs can strengthen the findings (Schoonenboom and Johnson, 2017), making them more transferable to prescribers and thus more useful (Greene et al., 1989). Triangulation and other aspects of rigour related to this study are discussed in detail in section 3.3.

Creswell describes six types of mixed methods designs (Creswell, 2003), three of which are sequential and three concurrent. The sequential designs are explanatory, exploratory, and transformative. The sequential explanatory strategy first collects and analyses quantitative data and then qualitative data. The sequential exploratory strategy first collects and analyses qualitative data for familiarisation with the phenomenon under study and to identify variables for the second quantitative stage. The sequential transformative strategy involves the collection and analysis of data from either quantitative or qualitative studies, before combining the data for interpretation.

Concurrent strategies include triangulation, nested and transformative. The concurrent triangulation strategy collects both quantitative and qualitative data simultaneously and aims to corroborate the findings within a single study. The concurrent nested strategy collects both quantitative and qualitative data simultaneously and uses one methodology as a prominent method for the study. Lastly, the concurrent transformative strategy

collects both quantitative and qualitative data simultaneously, and data are combined for analysis (Creswell, 2003).

A mixed methods methodology, more specifically a sequential exploratory strategy was used in this research to explore what is required for effective, emotionally supportive supervision to build confidence and competence in NIPs and PIPs in primary care.

The first phase required an exploratory design due to there being no previous research on the chosen topic. Supervisees' views and experiences of clinical supervision are lacking in the literature. The third phase of research also required an exploratory design due to there being no previous research on specifically exploring key stakeholders' perceptions of governance around independent prescribing nurses and pharmacists working in primary care in Wales. A qualitative design was therefore chosen for phases 1 and 3 of the research, to enable a deep exploration of the topic. Phase 2 of the research used the Delphi Method, a type of consensus method, which is described later in section 3.4.1.

A qualitative research design enables the researcher to focus on a specific area of interest to explore a rich understanding of the phenomenon (Creswell, 2007). Qualitative research enables theories and fundamental beliefs to be questioned and it systematically unravels how those beliefs are created (Creswell, 2007), which awards qualitative research a range of useful applications, particularly for research in applied health care and the wider healthcare organisation (Holloway, 2008). When using a qualitative research design, there are five commonly used approaches: narrative research, grounded theory, ethnography, case studies, and phenomenology. These approaches and their relevance to this study are discussed here.

### **3.3. Qualitative Methodologies**

#### **3.3.1. Narrative research**

Narrative research has an explicit focus on one or two individuals' stories. It involves the researcher spending significant time with the participant and actively involving them in the research. The stories can be gathered through multiple types of information, for example diaries, official correspondence documents and the researcher's observational field notes (Clandinin and Connelly, 2000). There is no fixed process for gathering information in narrative research; it can vary greatly between studies, depending on the information sources. The story is then analysed and 're-storied' into a usable framework such as a chronology, with ideas on causal links presented between the information gathered during

this process (Clandinin and Connelly, 2000). Both the researcher and the participant discuss meanings of the stories, and both validate the analysis (Creswell and Miller, 2000). This research aimed to collect a range of participants' views of a focused topic working in different environments. A narrative approach would not have been practical due to the narrow focus needed in a narrative approach and the potential number of participants. As discussed by Creswell (2007, p. 55) "Narrative research is best for capturing the detailed stories or life experiences of a single life or the lives of a small number of individuals."

### 3.3.2. Grounded theory

The primary focus of grounded theory is to generate a theory from the data collected from participants. There are two popular approaches to grounded theory, the original systematic approach of Corbin and Strauss (1990) and the more recent interpretive and flexible approach of Charmaz (2006). Practices of the original theory (Corbin and Strauss, 1990) are presented here.

Grounded theory is often used when there is no theory or an incomplete theory to explain a process. Engaging in up to 60 interviews, the researcher generates a theory of a specific action, interaction or process which is 'grounded' in the data (Corbin and Strauss, 1990). The data collection continues until data saturation has been reached. Data collection and analysis have several stages: the first focuses on the participant's individual experience of a process. From this first data collection, 'open coding' can be used to categorise information found about the phenomenon. The researcher then asks the participant more detailed questions at a second interview about the process, such as what influenced it or what the outcomes were, to help shape the 'axial coding' phase. These data are then used to inform and reassemble the data which was openly coded in the first stage. A visual model is usually constructed with fundamental categories about the phenomenon. Further exploration of the key influencers on the phenomenon and the conditions that affect them are detailed. Resulting interactions amongst categories are also included. The final stage of 'selective coding' is a process of connecting the categories in an understandable format, at times in the form of a 'storyline' (Corbin and Strauss, 1990). The result of this prescriptive process is a 'substantive-level theory' (Corbin and Strauss, 1990) to explain a specific problem.

Although the systematic approach is appealing, it was decided that grounded theory would not be the best methodology to use for this study due to its intent on forming a theory. There are some existing theories on supervision (Cutcliffe et al., 2018); although

not specific to independent prescribers, they may be useful to this study at the data analysis stage. This study aimed to inform a supervision guideline, so that a more descriptive methodology was better suited to analysing the data.

### 3.3.3. Ethnography

Ethnography focuses on specific cultural groups with shared patterns and behaviours; this is often a large group, such as a community, but it can be smaller groups such as a few nurses (Creswell, 2007). There are two widely used ethnographic approaches: realist ethnography and critical ethnography (Wolcott, 2008).

The traditional, realist approach aims to provide a factual and objective account of what has been seen at the research site, usually reported in third person narrative. The researcher often becomes immersed in the daily lives of the researched group and looks at the patterns, values, and behaviours of the group, and describes and interprets them. The researcher features in the background of the study as a well-informed reporter of the 'facts' which are uncorrupted by their own personal bias or judgement (Wolcott, 2008).

The critical approach has more of a societal advocacy outlook. The approach is often used by politically minded researchers, aiming to liberate marginalised societies or to speak out against inequality. A key feature of the critical approach is to empower people and to challenge the existing state of affairs (Creswell, 2007).

Although this study focused on a group of professionals with the shared characteristic of independent prescribing, the interest was on one aspect of the participants' working life rather than determining how their culture functioned (Creswell, 2007). Clinical supervision might not have been taking place or, in some cases, may never have taken place. For this reason, ethnography was not used as there was no 'research site' to observe.

### 3.3.4. Case studies

Case study research involves exploring an issue through one or more cases in a certain context (or setting). Once the researcher has identified their issue or concern, they choose one of three case study variants to explain it (Yin, 2012). The single instrument case focuses on an issue and uses one case to explain it. A collective case study focuses on one issue but uses several case studies to explain it. An intrinsic case study focuses on a case and uses no other cases to explain it – an evaluation of a programme would be an example of this (Creswell, 2007).

Case study research involves gathering multiple sources of information to inform the case. Yin (2012) recommends up to six different sources, such as interviews and direct observations, to get an in-depth view of the issue. Case study research was not used for this study because an exploratory approach was needed to identify the perceptions of clinical supervision; this phase of the research did not require multiple sources of evidence. No specific issue or concern has been identified other than a lack of evidence informing on clinical supervision for independent prescribing nurses and pharmacists.

### 3.3.5. Phenomenology

Phenomenology looks at several individuals who have experienced the same 'phenomenon' and seeks to develop a collective description of the essence of the experience (Creswell, 2007). The intention of phenomenology is to provide a description of the essence and not to explain or analyse the accounts (Moustakas, 1994). There are two common approaches to phenomenology: psychological phenomenology (Moustakas, 1994), and hermeneutic phenomenology (Van Manen, 1990).

Hermeneutic phenomenology does not have strict methods or rules; it has an inexplicit process, relying on self-motivation and intuition. For this to occur, the researcher needs to focus on a phenomenon that is of the utmost importance to them (Van Manen, 1990). Hermeneutic phenomenology is seen as an interpretive process. The researcher interprets the meaning of the lived experiences (Van Manen, 1990).

Psychological phenomenology focuses more on a descriptive process of participants' experiences and less on the researcher's interpretation (Moustakas, 1994). It follows a systematic process starting with 'bracketing' which requires the researcher to 'bracket' their own experiences to enable a clear perspective of the phenomenon (Moustakas, 1994). Data collection is focused on several individuals with a shared phenomenon, usually through interviews. The data are reduced to significant statements and themed appropriately. The essence of the phenomenon is described through a 'textural' and a 'structural' description, focusing specifically on what was experienced and how it was experienced (Creswell, 2007).

### **Rationale for using qualitative content analysis for Phases 1 and 3**

Qualitative content analysis has three approaches: summative, directed or conventional (Hsieh and Shannon, 2005). It is a widely used qualitative research technique and all

three approaches aim to interpret the meaning from the content of data which adheres to the naturalistic paradigm (Hsieh and Shannon, 2005). A conventional content analysis approach was used in phases one and three which coded categories derived directly from the data. Using conventional qualitative content analysis enabled the researcher to explore the multiple interpretations of reality of the participants (Given, 2008).

### **3.4. Consensus Methods**

Consensus methods are commonly used when published information is inadequate or non-existent (Jones and Hunter, 1995). The method provides a means of gaining insight on an issue from the appropriate experts (Jones and Hunter, 1995; Courtenay et al., 2018). Consensus methods aim to look at two types of agreement: firstly, the level of agreement the participant has with the specific issue under consideration (this is commonly rated on a numerical scale) and secondly, the level of agreement the participants have with each other, i.e., the consensus element of the study (Jones and Hunter, 1995). Using a consensus method avoids common disadvantages of group or focus interviews, e.g., the conversation being dominated by an individual or participants not giving their true opinion due to fear of being judged (Jones and Hunter, 1995).

The three most commonly used consensus methods are the Delphi technique, the nominal group technique, and the consensus development conference (Jones and Hunter, 1995). The nominal group technique tends to look at one issue and is less concerned with stimulating a range of ideas (Delbecq and Van de Ven, 1971). The consensus development conference is a complex model introduced to the United States by the National Institutes of Health (NIH) (McGlynn et al., 1990). There are huge variations in how it is conducted but generally, the consensus development conference panel members are chosen specifically based on qualifications and relevance to the topic being explored. The Delphi technique, which was used in Phase 2 of this research, is described further in the following section.

#### **3.4.1. Delphi method**

The Delphi method originated in the 1950s, when a military project "Project Delphi" sought to reach consensus amongst military experts on targets for attacks from Russia (Linstone and Turoff, 1975). Since its development, the method has been widely used in diverse fields of study including nursing and healthcare services (Hasson et al., 2000). The Delphi technique is a method that enables researchers to elicit the opinion of an expert panel on



a specific topic (Linstone and Turoff, 1975). The emphasis in a Delphi study is on the solidarity of a group opinion as opposed to the opinion of an individual (Ziglio, 1996). Building a consensus through the Delphi technique has been cited as a significant contributor to expanding knowledge and enabling effective decision-making in healthcare (Hasson et al., 2000; Keeney et al., 2010).

The original Delphi technique primarily involved the collection of quantitative data with an element of qualitative data collection in the form of some open text questions. The analysis of the quantitative and qualitative data is completed concurrently and informs subsequent stages of the Delphi study (Day and Bobeva, 2005).

Delphi participants are not selected randomly; purposeful sampling is used to ensure an expert panel for the selected topic is formed (Akins et al., 2005). There is a lack of clarity around a Delphi sample size as there are no established standards and no agreement on a definition of 'small' or 'large' sample sizes (Wilhelm, 2001). Hasson et al. (2000) recommend that the expert panel size should be defined by the researcher and what is appropriate for the study. Reid (1988) studied the application of Delphi studies in healthcare and found sample sizes ranging from ten to 1,685. Studies using a homogenous sample i.e., participants with a shared interest commonly have a sample size between 15 and 20 participants (Skulmoski and Hartman, 2007). Sampling for the Delphi study is discussed further in Chapter 5.

There are a number of recognised benefits to using the Delphi technique (Linstone and Turoff, 1975; Ziglio, 1996; Courtenay et al., 2018), which include:

- Its ability to access the opinions of large numbers of participants who are geographically dispersed
- The ability to discuss broad and complex problems
- The anonymity of participants gives them the opportunity to freely express opinions and positions
- The ability of a panel of experts potentially unknown to each other to communicate effectively to discuss a problem as a group.

### **Rationale for using the Delphi method**

Phase 1 was the initial exploratory phase to identify the perceptions of effective clinical supervision. Following the analysis of Phase 1, there were various possibilities for how to explore the phenomenon further in Phase 2. The second phase of the research addressed

whether there is consensus amongst NIPs and PIPs on what is required for effective clinical supervision and, if so, which parameters support effective supervision. This information was intended to help towards developing a model of clinical supervision. A consensus method is a way to determine the extent to which people agree about a given issue (Jones and Hunter, 1995).

Consensus methods have been successfully used in health research where there is a lack of research evidence and a need to reach consensus on a specific issue (Courtenay et al., 2018), which addressed the first objective in Phase 2 of this research. In addition, the Delphi technique is suitable for when several issues relating to the same topic need to be rated (Linstone and Turoff, 1975), which makes it ideal for the purpose of this research, where several issues identified in Phase 1 could be ranked in Phase 2. Further, the ability to include geographically diverse participants across Wales and to retain anonymity between participants to ensure there was no peer influence amongst the participants was deemed an important aspect to the research and was possible with the Delphi technique.

Using a consensus method for Phase 2 allowed triangulation with the findings from Phase 1 whilst also exploring the extent to which participants agreed on different aspects of clinical supervision (triangulation is detailed further in section 3.7.4). This method supported the gathering of data to give a deep insight into the phenomenon; participants could add additional issues in the free text whilst also ranking perceived importance of the key supervision issues identified from Phase 1. Exploring a consensus and rankings of importance of issues could then be used to inform a guideline for effective clinical supervision in practice (the second objective in Phase 2, see section 2.6).

### **3.5. Data collection methods**

#### **3.5.1. Phases 1 & 3: semi-structured interviews**

Semi-structured individual interviews were chosen as the preferred data collection method to ensure the data collected a personal perspective from individual participants. As it is known that clinical supervision varies in practice (Cutcliffe et al., 2018), it was important that the data collection was unique to each participant and participants were not influenced by other participants, which is why focus groups and group interviews were not the primary choice of data collection (Creswell, 2003).

Individual semi-structured interviews using open ended questions were chosen as the most appropriate data collection method as opposed to a more structured, closed interview process. The benefit of using open ended questions during the interviews is to obtain an impartial perspective giving the participant more options for responding and

providing more opportunity to gain a deeper insight into the phenomenon (Creswell, 2003). Using closed ended questions may force an uninformative prescribed answer (e.g., yes or no) (Creswell, 2003). Using semi-structured interviews to explore a phenomenon where there is a paucity of empirical research is a widely used method to gain an in-depth understanding of an unknown phenomena (Creswell, 2003). An example of using semi-structured interviews to explore a new area of research is Buus et al.'s (2017) work; these researchers conducted individual semi-structured interviews with 24 mental-health nursing staff to investigate resistance to clinical supervision. A further example is Maddox et al. (2016) (discussed in Chapter 2), who conducted individual semi-structured interviews with 20 nurse and five pharmacist NMPs to explore the factors influencing the willingness to take responsibility for prescribing. The studies by Buus et al. (2017) and Maddox et al. (2016) produced interesting perspectives, in some cases a difference of opinion between participants which may not have been achieved if the data collection was in a group setting. Individual semi-structured interviews were chosen as opposed to group interviews to ensure the data collected were specific to an individual's personal perspective, and that participants were not influenced by each other's views (Creswell, 2003).

### 3.5.2. Phase 2: Delphi technique and Likert scales

There are several ways to measure responses using the Delphi technique. There are four main data measurement scales used in statistics: ordinal, nominal, interval, and ratio (Salkind, 2010). Exploring participants' perceptions of the ideal purpose and content of clinical supervision required a data measurement scale that measured non-numeric concepts, for example: agreement. Out of the four data measurement scales, an ordinal measurement scale was the only suitable tool to measure non-numeric concepts. A key potential issue with using ordinal measurement scales is that the responses are not necessarily equal. For example, participants may find it difficult to differentiate between 'always' and 'often.' Two participants of the same view on an issue may choose two separate ratings due to their ambiguous labels (Sullivan and Artino, 2013).

Due to its prolific use in nursing and medical research (Courtenay et al., 2018), the Likert scale was chosen as an ordinal measurement scale for the Delphi study. The traditional Likert scale uses five scale points (Likert, 1932); however, different response scales have been commonly used in research (Carifio and Perla, 2007). The literature suggests that rating scales such as a Likert scale produce more accurate data if the scale points are between five and seven (Carifio and Perla, 2007). However, there is no guidance on whether a seven-point scale is superior. Using Likert's standard practice of including a

neutral midpoint avoids forcing participants into an agreement or disagreement category, when they may feel genuinely ambivalent (DeVellis, 2003).

### **3.6. Sampling Strategy**

Independent prescribers work in a variety of settings throughout healthcare services. A decision was made to focus on primary care due to the acknowledged isolated role of primary care independent prescribers (Anderson, 2017) and the increasing footfall of patient flow through primary care services (Welsh Assembly Government 2015). Recruitment aimed to include all seven health boards within Wales because of the diverse nature of the different areas. The seven health boards cater to very diverse communities within Wales. There is diversity in the geographical areas, for example inner-city and rural, diversity in the population density per square mile and diversity in the deprivation across Wales (Welsh Government, 2015).

A broad sample of independent prescribers within primary care was viewed as an important aspect of the study to enhance transferability of the findings (Creswell, 2007). Focusing on one region within Wales may not have given a true picture of the essence of the phenomenon. For example, prescribers working in areas with different levels of deprivation may experience different kinds of challenges, so that supervision requirements may vary. The foot flow of the work setting, or the caseload of the prescriber may also vary significantly between participants. Participants were therefore invited from all seven health boards to represent the diversity of independent prescribers working in Wales.

Purposive sampling was used for all three phases of research to enable rich and specific data collection of the phenomenon being studied (Holloway, 2008). Convenience sampling was an alternative option, but it is known to be a risk of producing a sample that lacks generalisability (Creswell and Clark, 2007). Purposive sampling is widely used in qualitative research to identify information-rich participants associated to the phenomenon being explored (Palinkas et al., 2015). It involves identifying individuals who are particularly knowledgeable or have experience with the phenomenon of interest (Creswell and Clark, 2007). In the case of this research, inclusion and exclusion criteria were formulated for each of the three research phases (which can be found in chapters 4, 5 and 6) and participant groups were identified based on these criteria. A disadvantage to using purposive sampling is potential bias in the selection of the participants and the potential influence of unknown confounders. Both of these disadvantages might, for example, have been avoided by using random sampling (Palinkas et al., 2015). However, the advantage

of using purposive sampling was to ensure that the most appropriate participants were used to explore the phenomenon.

Snowball sampling is commonly used in qualitative research and is generally considered to be a convenience sampling method (Naderifar et al., 2017). The method is often applied when it is difficult to access participants with the target characteristics needed for the research (Naderifar et al., 2017). Snowball sampling is when study participants share information about the research to further potential participants amongst their associates (Creswell and Clark, 2007), thus supporting participant recruitment (Naderifar et al., 2017). In this research, in all three phases, snowball sampling was used to help recruit participants. In phases 1 and 2 participants were encouraged to share information on the study with potential participants. In Phase 3 of the research, participants provided the researcher with information about potential participants for the researcher to approach directly with the participants consent.

The researcher's position as a primary care independent prescriber introduced some specific considerations for recruitment. Anonymising potential participants until they chose to participate alleviated the potential risk of a 'duty to participate,' if they were known to the researcher. All current working colleagues of the researcher were therefore excluded from the study.

As there is no list of NMIPs working in Wales, gatekeepers were needed to access the prescribers working in Wales. For each health board, a suitable gatekeeper was identified who was able to access the NIPs and PIPs. In health research, gatekeeping is a well-used practice (McFayden and Rankin, 2016). Gatekeepers can have a powerful impact on how successful a research study is as they have the power to control the researcher's access to suitable participants (McFayden and Rankin, 2016). In some cases, they decide whether to allow researcher access to suitable participants for the research (McFayden and Rankin, 2016). In Phase 1 of the research, the gatekeepers were carefully selected to ensure the most suitable person in each health board was approached to access the NIPs and PIPs. To identify this person, the researcher explored the independent prescribing set-up for each health board. The role of the gatekeeper differed in each health board between an admin clerk to the director of nursing, each health board had different structures in place for their NIPs and PIPs. Because of the potential impact the gatekeeper could have on the research, a good rapport between the researcher and the gatekeeper was established.

Recruitment for qualitative research commonly requires a small number of participants. This is to enable a rich and in-depth exploration of the research question or phenomenon

(Creswell, 2003). Transferability may be achieved through in-depth exploration and comparing and connecting existing work to the new study findings (Holloway, 2008). Holloway (2008) also indicates that when a diverse group is being explored, the sample size should be sufficiently large to include the breadth of diversity but still enable deep exploration and comprehensive description.

For the two qualitative phases, sampling until data saturation was imperative for study rigour (Ness and Fusch, 2015). Although originating in grounded theory, data saturation is now a commonly used principle across a range of qualitative research approaches. "Saturation means that no additional data are being found whereby the sociologist can develop properties of the category. As he [/she] sees similar instances over and over again, the researcher becomes empirically confident that a category is saturated" (Glaser and Strauss 1967, p. 61). This concept informed the sampling strategy for both of the qualitative phases of the research, ensuring a balance between the sample size and the breadth of data collected.

### **3.7. Ensuring Quality in Research**

#### **3.7.1. Rigour**

Rigour is regarded as an imperative part of credible research; research without rigour is deemed fictitious and meaningless (Morse et al., 2002). Undertaking a qualitative enquiry is regarded as more complex in terms of rigour than quantitative research (Rolfe, 2006; Cypress, 2017). The term rigour has been aligned with descriptors such as exact, strict, accurate and thorough (Oxford English Dictionary, 2013). As quantitative research is rigidly guided by a pre-defined study design, rigour is generally easier to apply (Cypress, 2017). For example, in using the Delphi technique, it is important to use a process which has been explicitly described and supported in previous Delphi technique studies (Courtenay et al., 2018). In Phase 2 of the research, an amended e-Delphi was used following the same principles as previous research using the Delphi technique (Courtenay et al., 2018).

In qualitative research, the research design can be emergent, the researcher needs to be flexible and has minimal control as the processes are often iterative (Creswell and Miller, 2000). There is constant reassessment, repetition, and various techniques are used for collecting data; as a result, it is imperative that rigour is reassessed throughout the research process for qualitative research (Lincoln and Guba, 1991; Morse et al., 2002).

The semi-structured interview process in Phase 1 and 3 enabled a balance between a focused yet flexible interview. The topic guide was iteratively developed between interviews and included prompts to allow for expansion of participants' answers, if required. Having this flexibility in the interview process minimises the risk of excluding any pertinent information not anticipated by the researcher (Forero et al., 2018). By having a strict, structured interview process, pertinent information may be lost as the participant may not have the opportunity to elaborate on a certain point (Forero et al., 2018).

### 3.7.2. Trustworthiness

Reliability and validity are widely cited as the two key essential features of all research (Tappen, 2011; Cypress, 2017). It is sometimes argued that reliability and validity of research pertain only to quantitative research because of its alignment with the positivist view (Agar, 1986). Positivism assumes that there is one truth, that is fixed and directly measurable, which is why it is often aligned with quantitative (observable and consistently measurable) research (Rubin and Rubin, 2012).

The Delphi consensus survey for Phase 2 of the research aligns with a positivist view as the findings are quantifiable. As qualitative research is largely a naturalistic enquiry, to ensure rigour, it relies on looking at reliability and validity in a different way (Agar, 1986; Krefting, 1991). A naturalistic viewpoint assumes that reality can only be known through the interpretations of people, that it constantly changes and that there are likely to be multiple versions of reality (Rubin and Rubin, 2012). The qualitative methods used in Phase 1 and three of the research align themselves with a naturalistic viewpoint given the intention to explore multiple participants' views on a certain phenomenon. Thus, the scientific aspect of reliability applied to qualitative research is a debated topic due to its alliance with replicability (Golafshani, 2003). Trustworthiness in qualitative research is a concept that Lincoln and Guba (1991) address in their model to appraise the rigour of qualitative research. Reliability and validity are replaced with the concept of trustworthiness, which refers to the truthfulness of findings, their quality and authenticity. Ultimately it refers to the confidence and trust people have in the results (Lincoln and Guba, 1991; Schmidt and Brown, 2015). Trustworthiness evolved from four major concerns in qualitative research: truth value, applicability, consistency, and neutrality (Lincoln and Guba, 1991). These replace the rationalistic terms: credibility, transferability, dependability, and confirmability, which are commonly used for quantitative research (Lincoln and Guba, 1991). The naturalistic terms are phases that need to be employed by the researcher to achieve trustworthiness in a study. Trustworthiness should be

considered at all stages of research: prior to starting a study, during the study and after the study has been conducted (Lincoln and Guba, 1991). Throughout the three phases of research, a field diary was kept and for phases 1 and 3, another member of the research team evaluated the coding to ensure transparency and consistency throughout the analysis.

Lincoln and Guba's (1991) criteria have been fundamental to developing standards to evaluate qualitative research (Morse et al., 2002), but have also been criticised. Changing the concepts of reliability and validity and suggesting that these concepts are of no concern to qualitative research implies that qualitative research is not reliable and therefore invalid (Morse, 2015).

In this study, reliability was based on the consistent and transparent nature of the research practices, analysis, and conclusions throughout the three phases of research. All research procedures were explicitly described, and a transparent process of data analysis was used. Further, another member of the team reviewed the codes and the original source data and its analysis. Limitations of the research findings are acknowledged in Chapter 7.

### 3.7.3. Transparency

Transparency is required in both quantitative and qualitative research to support the credibility of findings (Silverman, 2001). In qualitative research transparency refers to the underlying philosophical assumptions and past experiences of the researcher and the explicitness of the research process (Silverman, 2001). The researcher's own philosophical assumptions and professional working experience are made explicit in the section discussing reflexivity and positionality (section 3.8), which is done to ensure transparency. Knowledge of the researcher's standpoint allows readers to understand and evaluate researcher interpretations (Creswell, 2007).

### 3.7.4. Triangulation

Triangulation is the use of more than one approach to researching a question (Creswell et al., 2003). The technique originated in the 1950s and was regularly used in qualitative research to avoid bias from a single methodology (Williamson, 2005). The aim of using triangulation in research is to increase the assurance of the findings by using two or more methods. Triangulation can be used in two ways, to establish the breadth of data and to



ratify suggested findings (Williamson, 2005). It may be used to collect two or more sets of data using the same methodology such as a qualitative methodology; it can also be used to collect data from qualitative and quantitative methods using a mixed methodology design (Creswell et al., 2003). Triangulation with a mixed methodology design has been cited as a way to reduce the limitations of using a single method by comparing findings from different viewpoints (Creswell et al., 2003).

Triangulation was used in this study in a mixed method design. Triangulation was used across phases to ratify findings and to offer a breadth of data by exploring differing perspectives of supervisees and supervisors (phases 1 and 3). In addition, a Delphi survey was used to both confirm and extend the findings from Phase 1 by gaining consensus on the statements created from the findings. Triangulation of the findings from different phases and also different methods (both a qualitative and quantitative perspective), increases the scope of research (Greene et al., 1989).

### **3.8. Reflexivity and Positionality**

A key principle of interpretive, qualitative research approaches is for the researcher to be central to all aspects of the research process (Marshall and Rossman, 2006; Creswell, 2007). Consequently, it is essential for the researcher to consider their impact on the research reflexively. Agger (1991) argues that writing cannot be fully understood without the author and their identity being put into context. Reflexivity is the researcher's acknowledgement and explanation of potential influences on the research process (Creswell, 2007). It requires the consideration of their potential impact on the research data and research design, and the influence of their prior assumptions, beliefs, and experiences (Creswell, 2007). The potential perception of a 'power relationship' between the researcher and the participant must also be considered.

Reflexively considering positionality, its impact on others, and the research process is vital. Positionality occurs when working with others; the researcher is perceived as an 'insider' or an 'outsider' by others when conducting the research (Brunero et al., 2015). As an independent prescribing nurse, the researcher expected to be seen as an 'insider' by most of the participants; however, Brunero et al. (2015) argue that clinicians in a research position often switch between being an 'insider' and an 'outsider' depending on context and the individual participant. Reflecting on the researcher's cultural background, identity and professional and socioeconomic status are all positionality factors that could influence the research process (Creswell, 2007). In this study, the potential researcher impact was

acknowledged by keeping a reflexive diary, which was shared and discussed with the main supervisor on a regular weekly basis during data collection and analysis stages. The purpose of this was to gain another perspective on the reflections to reduce the potential bias in the research.

The researcher's professional identity is as an independent prescribing advanced nurse practitioner, specialising in primary care. She has been a qualified nurse for 13 years and working in primary care for 12 years. She has been prescribing in primary care for eight years and has a broad scope of practice. She has varied experience of clinical supervision, but supervision in relation to prescribing has been sparse. These experiences and anecdotal experiences from colleagues have focused her interest in the phenomenon being studied. They have encouraged her to explore, understand, and represent the experiences of clinical supervision systematically. Searching for literature in this area also raised further awareness of issues with clinical supervision and prior assumptions were developed from this. Her pre-conceptions and past experiences of clinical supervision created a necessity to challenge her views critically and reflexively throughout the study, which is particularly important when generating and analysing data. Supervisory meetings to question the findings and to discuss the reflexive diary were therefore held to help minimise bias.

The researcher's professional experience has aided her to identify the key gatekeepers in the study; the use of gatekeepers was discussed in section 3.6. Her professional status was made known to the participants but, no active working colleagues were included as participants in the study. Holloway (2008) advises that thorough consideration of a phenomenon can be difficult if the researcher has a familiarity with similar contexts. This point has been considered and although the researcher has a familiarity with the primary care environment, the specific settings (most of the health boards and participants), were unfamiliar to her.

A further reflexive consideration considered for this research was that the researcher's clinical role was known by some of the participants. Therefore, if participants assumed a common understanding, such as by commenting, "You know how it is in practice," the researcher probed participants to explain exactly what they meant. This avoided any ambiguity over responses or assumptions that the participant's and researcher's views were aligned.

### **3.9. Ethics and Permissions**

All research that uses human participants needs ethical review (Medical Research Council, 2018): ethical practice is an important aspect in research and the consideration of ethics is a crucial part of the research process from start to finish (Bulmer, 2001). The moral integrity of the researcher is essential to confirming if the research process and the findings of the study are trustworthy and valid (Bulmer, 2001). Applications for ethical approval are reported here and specific issues relevant to safeguard participants of the research are detailed in chapters 4 through to 6 for the three research phases.

To determine what ethical approval was needed for the three phases of research, the online NHS Health research Authority (NHS Health Research Authority, 2021) decision tool was used as well as the NHS Research Authority website (NHS Health Research Authority, 2021). For Phase 1, the research was considered to be a service evaluation and so although NHS staff were participating, NHS ethical approval was not needed. Phase 1 of the research required ethical approval from the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee, as well as NHS permissions and Research and Development (R&D) permissions. NHS permissions are required prior to approaching R&D departments in the individual health boards when sourcing participants from the health boards in Wales. The R&D department are required to review the research plan to establish if they are able to facilitate the research with the staff needed and also the time and capacity that will be required. The integrated research application system (IRAS) was completed for NHS permissions. Once NHS permission was granted, research and development (R&D) approval was sought from the seven health boards in Wales. In conjunction with these applications, an application for ethical approval was submitted to Cardiff University Department of Pharmacy and Pharmaceutical Sciences School Research Ethics Committee. Further ethical considerations specifically related to Phase 1 of the research are presented in Chapter 4.

Phase 2 of the research did not require NHS approval, NHS permissions or R&D approval. Although some participants in Phase 2 worked in the NHS, the staff were not contacted directly through their work within the health boards in Wales and it was not thought that the research would interrupt their working schedule. The recruitment for Phase 2 participants was primarily through social media platforms and by contacting previous participants from Phase 1, who had expressed an interest in participating in further research in the study. The research itself was in the format of an online survey which was anticipated to be completed outside of the participants' working day. The research did however require Cardiff University School of Pharmacy and Pharmaceutical Sciences

ethical approval, an application was submitted to Cardiff University School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee for ethical approval. Further ethical considerations specifically related to Phase 2 of the research are presented in Chapter 5.

Phase 3 of the research did not require NHS ethical approval, NHS permissions or R&D permissions due to NHS staff not being contacted to participate in this phase of research. An application was submitted to Cardiff University School of Pharmacy and Pharmaceutical Sciences Ethics Committee for ethical approval. Further ethical considerations specifically related to Phase 3 of the research are presented in Chapter 6.

### **3.10. Summary**

In this chapter, the different methodological approaches used in the research have been discussed, including the rationale for using them and their relevance to the studies conducted. This chapter has also outlined the basic sampling strategy used throughout the research. Finally, important aspects of ensuring quality in the research have been reviewed, as have the key ethical approvals sought.

Descriptions of the processes of sampling, recruitment, in-depth ethical considerations, data collection and analysis for each phase of the research, are presented in detail in chapters 4, 5 and 6 for phases 1, 2, and 3, respectively. In the next chapter, the specific data collection methods and findings for Phase 1 are presented.

## **4. Phase 1 Methods and Results**

### **4.1. Introduction**

Chapter 3 discussed the philosophical purpose and rationale of a qualitative sequential exploration mixed methods study aiming to explore IPs' perceptions of effective clinical supervision. The present chapter outlines the methods used to explore such perceptions and presents the data analysis and the findings of Phase 1. The objectives of Phase 1 were:

1. To investigate supervisees' views of whether personal qualities, professional role, and qualifications of the supervisor influence supervision effectiveness.
2. To explore NIPs' and PIPs' perceptions of their own competence and confidence in prescribing and whether their performance is influenced by adequacy of supervision.
3. To identify whether adequate supervision supports and encourages an extended scope of practice.

### **4.2. Methods**

#### **4.2.1. Sample and Recruitment**

As already discussed in Chapter 3, this study used a geographically broad sample: all seven health boards within Wales were included to access potential NIP and PIP participants, and a variety of areas were sampled following the Welsh index of multiple deprivation (Welsh Government, 2015), which made a distinction between town, city and rural areas and enabled the recruitment of a broad sample of participants (on the advantages of a diverse sample, see Section 3.6).

The sampling technique used was purposeful sampling (see again Section 3.6 for the rationale behind this choice), with the identification of a strict inclusion criteria to ensure participants' suitability (see Table 10). Snowball sampling was then used as a secondary sampling technique, as explained in Section 3.6. The aim was to include a range of PIPs and NIPs, and a range in the length of time they had been qualified as an independent prescriber to give maximum exposure (Holloway, 2008).

Table 10: Essential participant criteria

Essential participant criteria
UK qualified NIP or PIP: no experience limitations
Currently employed in primary care in a prescribing role; not essential to be actively prescribing
NHS employed and NHS contracted staff
Working in Wales

As previously discussed, the potential gatekeepers were identified as the non-medical prescribing leads for each health board. These gatekeepers were contacted via the NHS Wales Global Email System to discuss the study aims and objectives and their anticipated role as gatekeepers. They were asked to email the recruitment advert (see Appendix 2) and the approved participant information sheet (see Appendix 3) to all known primary care NIPs and PIPs.<sup>1</sup> A range of primary care settings was purposefully selected to ensure inclusion of areas with varying levels of deprivation. In the case of snowball sampling, the formatted email could, in turn, be forwarded to other peers. The participant contacted the researchers directly, whereas gatekeepers only communicated the number of candidates initially contacted to the research team. If the response rate was low, gatekeepers were asked to send out a reminder to potential participants after 2 weeks.

The aim was to recruit 20 to 30 participants (Vasileiou et al., 2018). The aim of this study was to recruit until data saturation (on which, see Section 3.6).

#### 4.2.2. Data Collection

A sequential exploratory study was designed to aid a description of participants' experience of clinical supervision. Data generation focused on participants' experiences, and their ideal of clinical supervision that would support them in their prescribing role within primary care. The primary methods were individual, semi-structured interviews. This format enabled further questioning and probing of any issues highlighted by participants. This, in turn, facilitated further exploration of the topic and of related themes.

A pilot study was conducted with two participants. Conducting a pilot study has several advantages – including the identification of barriers to participant recruitment, reflection on the researcher's functions, and the modification of interview questions and/or topic guide

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<sup>1</sup> The ethics approval notice is included in Appendix 6. For a broader discussion on ethics permissions, see Section 3.9.

(Kim, 2011). As a result of the pilot, no changes were made to the interview questions or the topic guide.

Interviews were informed by a topic guide (see Appendix 4 which was developed from the existing literature (as discussed in Chapter 2) and the unmet questions around clinical supervision (as discussed in Section 2.6). This guide was developed iteratively throughout data collection; it was continually refined and informed by previous interviews, and the specific interview prompts were revised accordingly. Each participant was interviewed once, at a time and location of their choosing, and the interviews were recorded using an Olympus digital recorder.

#### 4.2.3. Ethical Considerations

Ethical approval was granted by Cardiff University Department of Pharmacy and Pharmaceutical Sciences School Research Ethics Committee on 2nd July 2018 (Appendix 5). NHS permission was granted on 2nd July 2018 (Appendix 6), and the individual research and development health board approvals were granted shortly after this date. Afterwards, amendments were made to the study to enable telephone interviews to accommodate Betsi Cadwaladr participants' requests, due to geographical distance. The amendments were approved by Cardiff University Department of Pharmacy and Pharmaceutical Sciences on 10th September 2018 (see Appendix 7) and by NHS permissions on 12th September 2018 (Appendix 8). All relevant study information (see Appendix 3) was emailed to potential participants by the gatekeepers. If those contacted were happy to participate in the study, they contacted the researcher directly. Until that time, their identity remained anonymous to the researcher. Once potential participants made contact, they were provided with the full study information, had the opportunity to ask further questions and were asked to sign a consent form which was countersigned by the researcher: participants' demographic details were only disclosed to researchers after this form was signed. Informed consent, with an option to withdraw from the study at any stage, is an imperative aspect to any study (Creswell 2007). The permission to withdraw from the study at any stage was also made clear to all participants. The discussion in the interviews was not anticipated to cause any distress or upset to the participant, since no intrusive or upsetting question was included in the topic guide (see Appendix 4).

Participants' details and the data collected from the interviews were stored separately, in password-protected files on a password-protected computer. All data were anonymised,

participants were identified by an interview number which did not correspond to their interview schedule, ensuring anonymity. During transcription of the interviews, all other identifiable information such as geographical areas, working colleagues and specific practices were also renamed. The transcripts were stored on a Cardiff University password-protected computer hard drive under a password-protected encrypted file. The consent forms were stored by Cardiff University in a locked cabinet under their General Data Protection Regulation (GDPR) policy which came into force on 25<sup>th</sup> May 2018. These identifiable forms will only be stored for fifteen years, in line with Cardiff University research governance guidelines (CU data retention policy). On the other hand, the names, address and personal contact details of participants (needed to contact them during the study), along with the recorded interviews, were stored for less than one year. Findings were anonymised by a coding system and stored on the Cardiff University intranet secure password-protected file, in line with research governance guidelines.

#### 4.2.4. Data Analysis

Framework analysis – which falls under the umbrella of analysis methods known as qualitative content analysis – was applied to the data collected from the semi-structured interviews. This method was developed by qualitative researchers (Ritchie and Spencer 1994) in the 1980s and is commonly used in social and health science research. It offers a structured way to systematically analyse and reduce data by creating codes and cases. The method enables the in-depth analysis of key themes and the comparison of data across all themes, which is crucial in qualitative research (Gale et al., 2013). The framework method, which is frequently used with semi-structured interview transcripts, is not linked to a particular theoretical approach. It is instead a tool that can be flexibly used and adapted to generate themes across many qualitative approaches.

The seven stages of the framework method, detailed by Gale et al. (2013), are the following:

Stage 1. Transcription: immersion in the data is an important first stage. Once the semi-structured interviews have been recorded, their transcription facilitates the researcher to become immersed in the data.

Stage 2. Familiarisation with the interview: all interviews were conducted by the researcher. First, the researcher listens to the interviews. Secondly, speech to text is used for the transcription. The third stage consists in proofreading and quality check, performed whilst re-listening to the recording.



Stage 3. Coding: the transcripts are read and broad labelling is used to describe what has been interpreted. The initial coding is done digitally using Computer-Assisted Qualitative Data Analysis Software (CAQDAS) by NVIVO to structure the coding process and to enable line by line coding. Line by line coding enables the researcher to identify codes which may have remained unseen due to it not fitting with the rest of the account. Afterwards, in order to minimise researcher bias during the coding process, another member of the research team checks the coded transcripts to ensure that the correct interpretation has been given.

Stage 4. Developing the analytical framework: after a few transcripts have been coded, these initial codes are compared, and clearly defined categories are formed from grouping the appropriate codes together. The final analytical framework is defined at the end of the transcription phase to ensure that no other emerging codes have been identified.

Stage 5. Applying the analytical framework: all transcripts are indexed using the defined categories and codes that were identified in stage 4. For this process, the researcher chose to use Microsoft Excel rather than CAQDAS due to personal preference of the software.

Stage 6. Charting data into the framework matrix: because of the large quantity of qualitative data, the ability to effectively summarise it is crucial: data must be reduced to a manageable size without losing the essence of the information. Hence, a matrix is developed using a spreadsheet, onto which the data are charted.

Stage 7. Interpretation of the data: initial interpretations and ideas about the data are noted separately to the transcriptions, which allows for further exploration of themes. Similarities and differences between the data are identified and, if appropriate, connections are established between the categories. After examination of the findings, potential reasons for the results obtained are identified.

The process of applying framework analysis to the interview data will be discussed further in Section 4.3.2.

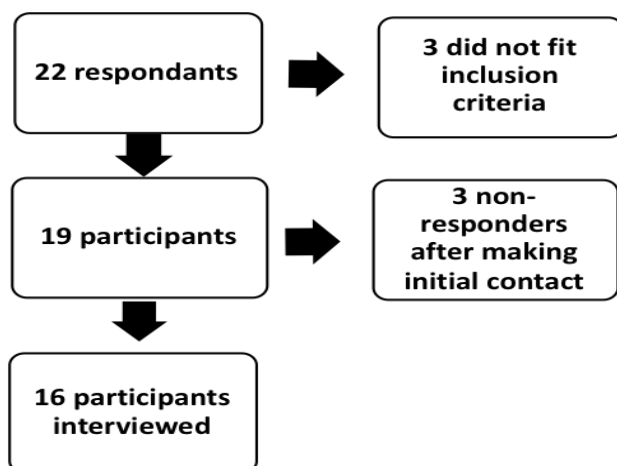
## **4.3. Results**

### **4.3.1. Participant Response**

Individual semi-structured interviews with NIPs and PIPs took place over the four-month data collection period from August to November 2018. Each interview lasted on average 30 minutes. Participants were recruited from five health boards out of the seven that had initially been invited to participate, since one health board did not respond and another

one received a single response from an IP in secondary care who did not meet the criteria. Participant Recruitment is shown below in Figure 4.

Figure 4: Participant Recruitment



As shown above, there was difficulty in identifying participants in some health boards and, for this reason, the participants' health boards and their demographic characteristics are presented separately (Tables 11 and 12) to ensure anonymity. The three non-responders were contacted on two further occasions; their lack of response was assumed to be a request to withdraw. All 16 participants interviewed were happy for their data to be used in the study findings.

Table 11: Health Board of participants: Phase 1

Health board	Number of participants
Cardiff and Vale	5
Cwm Taff	3
Aneurin Bevan	4
Hywel Dda	0
Powys	1
Swansea	0
Betsi Cadwallader	3

Table 12: Participant group profile

Participant ID	Profession	Town/city/rural	Deprivation status of practice locale	Years since qualifying as IP
Int1	Nurse	City	Low	11

Int2	Pharmacist	City	Low	1
Int3	Nurse	City	Medium	1.5
Int4	Pharmacist	Town	High	2.5
Int5	Nurse	City	Low	8
Int6	Pharmacist	Town	High	4
Int7	Pharmacist	Town	High	8
Int8	Nurse	Town	Medium	11
Int9	Pharmacist	Rural	Medium	7
Int10	Pharmacist	Rural	Medium	3
Int11	Pharmacist	City	High	5
Int12	Pharmacist	Town	High	1
Int13	Nurse	Rural	High	11
Int14	Pharmacist	Town	Medium	<1
Int15	Pharmacist	Rural	High	10
Int16	Nurse	Town	High	1

To ensure participant anonymity, several adjustments were made to the presentation of the data. For instance, in Table 12 the participant ID does not correlate with the order in which interviews took place.

Obtaining a diverse sample of participants was crucial to ensure the transferability of findings. Otherwise, if for instance the sample group displayed similar demographics and geographical origin, findings may only represent the opinions of a uniform group. As seen in Tables 11 and 12, participants displayed a diverse range of demographic characteristics and geographical origins across Wales. Although it was not possible to recruit from all seven health boards, the sample group contained participants from north, south and mid Wales.

#### 4.3.2. Data Analysis

As described in Section 4.2.4, framework analysis was used to analyse the data. This involved the following stages:

Transcription and familiarisation: data immersion was attained through a two-stage approach: first, a preliminary listening of the interviews gave a general sense of the meaning. Secondly, the interviews were listened to again and were transcribed by a speech to text program. Afterwards, transcriptions were proofread whilst re-listening to the recording. Lastly, interviews were listened to one more time whilst transcripts were checked for inaccuracies.

Coding: transcripts were read line by line and NVIVO was used to apply broad labels of interpretation. For example, the statement “I tend to prescribe for existing conditions that are already diagnosed because I’m not a doctor, I can’t diagnose a new

condition” (INT7) was broadly coded with the label ‘identification of competence and confidence’. At the end of this process, another member of the research team checked the broad coded transcripts and gave their opinions on the codes used. For the most part, there was agreement on the coding used; when opinions diverged, it was agreed to break the codes down into further subthemes.

*Developing the analytical framework:* After a few transcripts had been coded, the research team met to compare and discuss the provisional codes. Four major categories were identified by categorising the broad codes under appropriate groups. For example, the aforementioned broad code ‘identification of competence and confidence’ was classed, along with four other codes, under the category ‘professional identity and self-worth’.

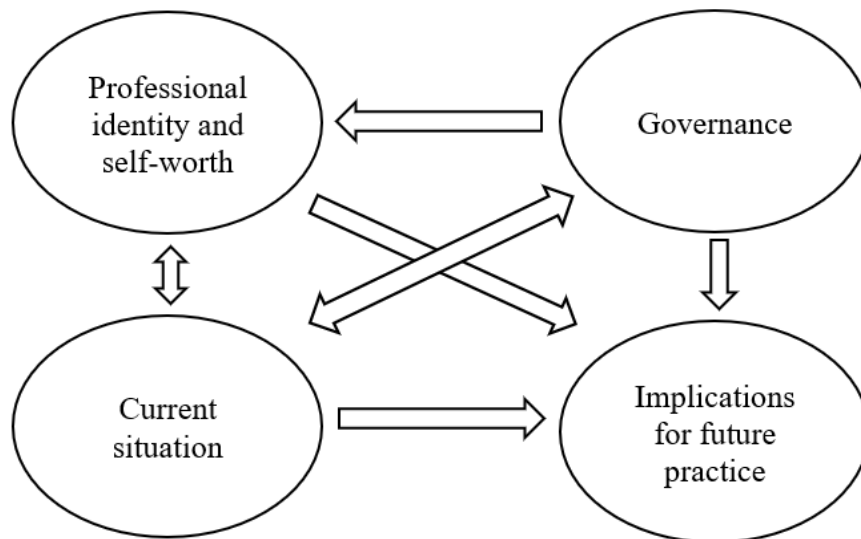
*Applying the analytical framework:* all transcripts were indexed using the four defined categories. The tool used was Microsoft Excel.

*Charting data into the framework matrix:* a matrix to summarise the data was developed using a Microsoft Excel spreadsheet. The matrix included categories (e.g., ‘professional identity and self-worth’), themes (e.g., ‘influence of others on prescribing’) and subthemes (e.g., ‘GP judging competence’). This permitted the reduction of data to a manageable size and gave an overview of the essence of the findings.

*Interpretation of the data:* throughout the analysis, interpretations, and ideas concerning similarities, differences, and connections between data were identified and noted separately.

The relationship between categories is best described by the diagram below, with arrows indicating the direction of influence (see Figure 5).

Figure 5: Connections between data



#### 4.3.3. Main Findings

The analysis of Phase 1 identified 13 themes and 101 subthemes, which are shown in Table 13. Themes are displayed according to the number of subthemes that are attached to them (from 1 to 13). Subthemes are detailed in the columns below each theme. The number in **bold** refers to the subtheme and ranges from 1:1 to 13:4. For instance, '1:5' would represent 'theme 1' and 'subtheme 5'. Two additional numbers, separated by a slash, are given before the subtheme reference, which respectively represent the number of times one particular subtheme was mentioned and the number of participants who mentioned it. For example, '4/1' would represent four quotes from one person. The number of participants who mentioned the subtheme was an important aspect to add to the framework because a subtheme may have been comprehensively discussed, but only by one or two participants. Without this information, the results might give the false perception that the subtheme had been largely discussed, even when it was in fact mentioned by few participants. Hence, the format 'number of quotes/by the number of participants' gives the reader a more comprehensive view of the most common findings in the study.

Once the findings had been displayed in order of subthemes, the themes were grouped under four macro-categories: Professional identity and Self-worth, Governance, Current Situation, and Implications for Future Practice, all will be discussed in more detail in the next section.

Table 13: Themes and subthemes

Current clinical supervision (1)	Ideals of clinical supervision (2)	Multi-disciplinary support (3)	Identification of competence and confidence (4)	Perceptions of IPs (5)	Perceived risks associated with independent prescribing (6)	Perception of governance of non-medical IPs (7)	Proof of competence (8)	Effect of support on prescribing (9)	What prescribing means to the practitioner (10)	Factors affecting a lack of clinical supervision (11)	Challenging decisions (12)	Influence of others on prescribing (13)
1/1 1:1	4/4 2:1	3/3 3:1	8/7 4:1	1/1 5:1	1/1 6:1	4/3 7:1	3/2 8:1	6/4 9:1	3/3 10:1	1/1 11:1	2/2 12:1	6/4 13:1
1/1 1:2	11/8 2:2	3/3 3:2	1/1 4:2	1/1 5:2	4/3 6:2	4/4 7:2	7/6 8:2	12/8 9:2	2/2 10:2	4/3 11:2	1/1 12:2	6/4 13:2
5/5 1:3	9/5 2:3	7/5 3:3	8/7 4:3	1/1 5:3	1/1 6:3	3/1 7:3	4/2 8:3	2/2 9:3	1/1 10:3	1/1 11:3	1/1 12:3	1/1 13:3
11/7 1:4	3/3 2:4	1/1 3:4	3/3 4:4	1/1 5:4	3/3 6:4	4/4 7:4	7/5 8:4	1/1 9:4	2/2 10:4	1/1 11:4	6/4 12:4	2/1 13:4
1/1 1:5	10/6 2:5	3/2 3:5	3/2 4:5	2/2 5:5	4/3 6:5	1/1 7:5	2/1 8:5	7/6 9:5	3/2 10:5	2/1 11:5		
1/1 1:6	8/5 2:6	3/3 3:6	1/1 4:6	1/1 5:6	3/3 6:6	5/4 7:6	2/2 8:6					
2/2 1:7	9/5 2:7	4/3 3:7	1/1 4:7	3/1 5:7	5/5 6:7							
3/1 1:8	9/6 2:8	4/3 3:8	3/2 4:8	1/1 5:8								
1/1 1:9	6/4 2:9	2/2 3:9	2/2 4:9									
2/2 1:10	3/3 2:10	2/2 3:10										
2/2 1:11	6/4 2:11											
4/1 1:12	1/1 2:12											
1/1 1:13	4/2 2:13											

Current clinical supervision (1)	Ideals of clinical supervision (2)	Multi-disciplinary support (3)	Identification of competence and confidence (4)	Perceptions of IPs (5)	Perceived risks associated with independent prescribing (6)	Perception of governance of non-medical IPs (7)	Proof of competence (8)	Effect of support on prescribing (9)	What prescribing means to the practitioner (10)	Factors affecting a lack of clinical supervision (11)	Challenging prescribing decisions (12)	Influence of others on prescribing (13)
3/2 1:14												
1/1 1:15												
1/1 1:16												
3/2 1:17												
3/3 1:18												
4/3 1:19												

#### 4.3.3.1 Professional Identity and Self-worth

This section focuses on the broad category of Professional identity and Self-worth, which includes five themes and 30 subthemes: an overview of these is displayed in Table 14 below.

Under the broad theme of Professional identity and Self-worth, there were five main discussion areas which are detailed below. Discussion started by exploring how participants viewed their own competence and confidence in prescribing, and how they perceived IPs in general. A related aim was to understand how participants, as IPs, believed to be perceived by others. The discussion shed light on the intrinsic meaning that independent prescribing had to participants, and on its impact on their clinical practice. Finally, the influence of others on their prescribing practice and the possibility of challenging GPs' prescribing decisions were discussed. The varied and conflicting findings led to further data analysis in the form of a deviant case analysis, illustrated below in Table 14.



Table 14: Professional identity and self-worth

<b>Identification of competence and confidence (4)</b>	<b>Perceptions of IPs (5)</b>	<b>What prescribing means to the practitioner (10)</b>	<b>Influence of others on prescribing (13)</b>	<b>Challenging prescribing decisions (12)</b>
Keeping the knowledge base up to date 8/7 <b>4:1</b>	Workload equal to GP 1/1 <b>5:1</b>	Ability to complete a consultation 3/3 <b>10:1</b>	GP superior influence on prescribing decisions 6/4 <b>13:1</b>	Ownership of patient care 2/2 <b>12:1</b>
Feeling pressured to prescribe 1/1 <b>4:2</b>	Perceptions of difference in pharmacist and nurse prescribing practice 1/1 <b>5:2</b>	Supporting struggling services 2/2 <b>10:2</b>	GP judging competence 6/4 <b>13:2</b>	Questioning prescribing decisions for further learning 1/1 <b>12:2</b>
Knowing your prescribing limitations 8/7 <b>4:3</b>	Patients' perceptions 1/1 <b>5:3</b>	Valued responsibility 1/1 <b>10:3</b>	Local enhanced service 1/1 <b>13:3</b>	Prescribing off guidelines 1/1 <b>12:3</b>
Diagnosis limitations 3/3 <b>4:4</b>	Positive support from GPs 1/1 <b>5:4</b>	Patient satisfaction 2/2 <b>10:4</b>	Historical prescribing hierarchy 2/1 <b>13:4</b>	GPs clinical decision being superior 6/4 <b>12:4</b>
GP validating competence 3/2 <b>4:5</b>	Perceived risks with IPs 2/2 <b>5:5</b>	Difference between GP prescribing and independent prescribing 3/2 <b>10:5</b>		
Pre-existing skills 1/1 <b>4:6</b>	Comparing primary care and secondary care IPs 1/1 <b>5:6</b>			
Reflection 1/1 <b>4:7</b>	Lack of understanding of the role in primary care 3/1 <b>5:7</b>			
Length of practice 3/2 <b>4:8</b>	IPs being vital to supporting primary care services 1/1 <b>5:8</b>			
Confidence in own ability 2/2 <b>4:9</b>				

### *Identification of competence and confidence*

The theme of identification of competence and confidence covered 10 subthemes. The central discussion throughout concerned the ways in which the practitioner could achieve and improve their competence and confidence in their area of practice, and how they could practice safely within their clinical role. The two key observations that emerged were the importance of keeping up to date and of knowing one's limitations. This was an interesting area of discussion due to its variety of viewpoints. Some participants emphasised the importance of formal courses for keeping up to date:

When I first started I said I could see the hypertensive patients so I went off to Birmingham to do a hypertension course and then I started seeing the hypertensives. (INT13)

As will be seen, this discussion is interlinked with views expressed under the broad theme of governance (section 4.3.3.2), where formal courses are widely discussed as a way of proving one's competence to others. Within the governance theme, there are also other areas of discussion where the identification and proof of competence lay with the practitioner themselves. Feeling both competent and confident in a particular area was enough for practitioners to deem themselves able to prescribe in that area:

It's my... it's me that's got to sit down, learn about them (medicines) so I feel confident. (INT5)

The notion of keeping up to date was complemented by another area of discussion in which views were similarly diverse: this concerned the need to be aware of one's own limitations. Sometimes, practitioners felt that some medications were outside of their prescribing scope because of a lack of confidence rather than a lack of formal proof:

It's kind of knowing where your competence ends. So I know what I'm happy to do and I know what I'm not happy to do, and to me it's quite clear, but what I'm happy to do is expand it over time with practice. (INT10)

Conversely, in other cases practitioners felt that medications were outside of their prescribing remit because of a lack of formal training, which made them concerned with potential repercussions:

Generally as an IP you have to be very self-aware of what you can do and what you can't do. I think there's a lot of onus on us, if the practice turned around and said "we want you to do this" but you're not competent or confident and you've not got the training, just filling in the form once a year doesn't protect you or add to your practice. (INT12)

The discussion around diagnostic limitations was also interesting due to some contradictory findings. This subtheme was discussed by three pharmacists, who were concerned about the ability to diagnose the condition for which they were prescribing medications. Interestingly, as detailed above, some participants felt that they needed to be competent and confident to prescribe in a certain area when the onus was on them to diagnose the condition. For others, being competent could include prescribing in areas in which they were not comfortable to diagnose, as shown below:

I tend to prescribe for existing conditions that are already diagnosed because I'm not a doctor, I can't diagnose a new condition. (INT7)

Hence, although some participants stated that they were unable to diagnose certain conditions and were not happy to initiate medication in this area, if the condition had been diagnosed by another clinician, they were happy to sign the prescription. This led to a further discussion around the perception of doctors as a superior prescribing entity, which will be further explored under the broad theme of governance. It is interesting that prescribers had so much confidence in another clinician's diagnostic skills that they would put their own signature on the prescription of a medication of which they were unable to assess the appropriateness, and for a condition that they were not able to diagnose. The quote above by participant INT12 illustrates the concern of potential repercussions of prescribing without competence, confidence, and specific training in the clinical area, in comparison to a doctor. While discussing repeat prescriptions, although not entirely happy with the situation, INT12 also stated:

I'm also aware I might be signing for osteoporosis or something else that I might not have a formal portfolio on and that in theory, technically to sign the prescriptions I should be able to diagnose, it is the diagnosis part of it that I feel is difficult. (INT12)

Therefore, although they were uncomfortable with the situation and recognised the potential risks, clinicians would sign prescriptions for conditions they were not able to diagnose, although this could potentially lead to an unconscious drug error. All three of

these participants discussed signing prescriptions for medications initiated by GPs and secondary care doctors, and an interesting question to investigate further would have been whether they would have signed a repeat prescription for a medication initiated by (and for a condition diagnosed by) another IP.

### *Perceptions of IPs*

Seven participants discussed how they viewed other IPs, and how they, as IPs, believed to be perceived by others. There were several similarities and overlaps with the findings related to governance of non-medical prescribers under the broad governance theme (Table 14). A mix of different perceptions emerged, ranging from the feeling of being deemed a valued part of the primary care team, as was the case for participant INT13, to being perceived as an inferior and risky prescriber, as discussed by participant INT15:

I feel very lucky that I'm in GP world as GPs are incredibly supportive they couldn't possibly run the service without us and we are treated with great respect. (INT13)

I think that perception is changing slowly now but, there is still that extra scrutiny on non-medical prescribers – nurses and pharmacists who prescribe compared to doctors GPs. (INT15)

Participants' ideas around perceived risks of independent prescribing overlapped with views discussed under the governance theme. This discussion focused on the perception of being viewed as riskier prescribers compared with GP colleagues:

People seem to assume that IPs are a bit gung-ho but we are very careful and we ask all the time, if we're unhappy with something we ask for second opinion. (INT13)

A comparable finding was obtained when exploring how participants viewed other professionals' understanding of primary care independent prescribing. There was a perception that independent prescribing in primary care is not fully understood by managing and governing bodies:

I don't think the health board have a true understanding of what we do in general practice, I don't think they do, I don't get that impression. (INT16)

The discussion also led to an exploration of the perceptions of independent prescribing in secondary care, especially in comparison with primary care:

In general practice, we could just flick through the BNF essentially and prescribe anything. There also didn't seem to be that understanding from the University about ANPs in general practice, how much we are prescribing, what we are going to be prescribing, the understanding of what an ANP does in general practice because they are all secondary care. (INT16)

A second quote expressed the participant's perspective:

Clinicians tend to be more isolated, more autonomous and they have to sort of er, yeah they are more autonomous in their prescribing whereas secondary care tends to be more hierarchical. (INT6)

Both views seem to suggest that independent prescribing in primary care is broader in scope and less understood and has less structure in comparison to independent prescribing in secondary care. This observation is in line with the wider findings, discussed under the broad theme of governance, that IPs in primary care feel unrecognised and under-supported by managing and governing bodies.

#### *What prescribing means to the practitioner*

Questions concerning this theme were followed by a discussion that revealed largely positive attitudes towards the value of IPs from a health care delivery perspective and from a patient satisfaction perspective. The exploration of the impact of independent prescribing on clinical practice was met with both an indication of pride in the participant's work, the perception of an increase in professional status, and a recognition of the importance from a service delivery perspective:

Independent prescribing really for me was the icing on the cake. I was a practice nurse with extended skills, not an advanced nurse practitioner, but just to have that patient you've assessed to go on the contraceptive pill, you were able to say – here is a prescription. It legitimises everything you are doing every day. (INT1)

Independent prescribing was consistently perceived as important in supporting primary care, although two slightly different views emerged. Some participants viewed IPs as an integral part of primary care:

I think primary care would be in a hell of a state without us now, I mean for us we only have two part-time GPs so when one is on holiday it's down to Advanced nurse practitioners and the GP left behind. (INT13)

On the other hand, other participants seemed to view IPs as a stop-gap for GPs, and to consider them necessary due to the primary care crisis:

Because of our crisis with GPs, it has become a necessity to train non-medical prescribers as generalists. (INT15)

Although both viewpoints emphasise the importance of IPs in supporting the primary care model, the second view seems to regard IPs as inferior to GPs, describing them as a second choice, albeit a necessary one. Conversely, according to INT13, IPs are equal players on the practice team.

The different role of doctors and IPs was further elaborated by some participants:

There should also be an understanding of that you are not a GP. You are a completely different prescribing entity. You do have different skills as opposed to the GP. (INT4)

These findings were interesting because they uncovered conflicting views: at times IPs were valued for their role as a replacement or stop-gap for GPs, whereas at other times (as suggested above by INT4 they were valued for the skills that set them apart from GPs. Significantly, all the participants who emphasised differences between GPs and other IPs were pharmacists: this is in line with the discussion on diagnostic limitations, which was similarly only raised by pharmacists.

#### *Influence of others on prescribing*

This subtheme concerns the view of GPs as a superior prescribing entity compared with IPs. It further complements the findings that emerged under the broad theme of governance:

I think a couple of times I've said, right okay. We can't agree on this. You're the GP here, let me pass the patient over to you. (INT10)

The suitability of other professionals to support an expanding scope of practice is discussed at length under the subtheme of multidisciplinary support (section 4.3.3.3). As will be further discussed, quite frequently the professional that was believed to be best in providing this type of support was not a doctor or a GP. However, the participants would still expect the GP to legitimise their competence in prescribing:

But you're working in their practice now and they've got to physically sign to say that they're happy for you to sign that prescription. (INT11)

A consistent trust in the GP's prescribing decisions and advice emerged clearly throughout these findings. If a participant was uncertain whether a medication fell within their remit, the common first line was to approach the GP to ask them what medication they would prescribe, and to follow their advice:

Because it doesn't sit nicely in my formulary, I just double check with the GP. (INT9)

Some participants indicated that they would go to the GP as a first line response. To follow another professional's opinion as a first line approach, instead of adhering to evidence-based guidelines in relation to the individual case, indicates a very high level of trust in the GP's prescribing decisions. As mentioned earlier, this trust is further demonstrated by IPs' belief that prescribing for conditions diagnosed by another clinician also fell within their practice scope. In these cases, the IP would be advised by the GP on the medication to prescribe:

The only time I would initiate medication is if the GP has reviewed them, diagnosed them and has asked me to put them on the right therapy. (INT7)

Hence, prescribers have trust in the GP's diagnostic skills and in their prescribing decisions. On the other hand, the length of independent prescribing experience appears to have no influence on their attitude: some participants who expressed these views had been qualified for over seven years.

To an extent, this strong trust in GPs' judging competence appears to arise from IPs' history, since GPs usually acted as DSMP/DMPs while nurses/pharmacists were completing their independent prescribing qualification in primary care. In some cases, this practice had continued after the prescriber was qualified and the role of the DSMP/DMP has continued into expanding the IPs scope of practice:

A lot of the physical examination skills I did during the qualification I haven't used since so, basically it's getting them signed off again so the GPs are happy and I'm confident that they are happy too. (INT12)

Once qualified, the IP still needs the GP to evaluate their competence before feeling confident to expand their prescribing remit:

What we've got in place is just sort of a review of clinical examination skills. It's just that they're there to sit in for me two or three patients or as long as it would take for me to show that I'm competent. (INT4)

It is difficult to establish the reason why participants are relying on others to validate their competence and, in particular, whether their trust in doctors' decisions is related to the fact that GPs were their former DSMP/DMPs, or is simply due to their professional role as doctors.

### *Challenging prescribing decisions*

The most discussed area under this theme was the perception that a GP's clinical decisions were inherently superior to an IP's. This lack of confidence to question a GP's decision has emerged as a common finding throughout the data. Some of the findings suggest this is due to the IP's lack of confidence in their own clinical position, or because the GP is perceived to be a superior prescriber and, therefore, their clinical diagnosis and decisions are not to be questioned:

It's just a matter of a clinical position, the GPs make that decision so I didn't question it. (INT9)



Interestingly, there were two participants who felt they would challenge a GP's prescribing decision if they felt that an error had been made. INT14, for instance, expressed the following view:

I would challenge it. I have seen that patient, my name is there so when I'm reviewing their medication you've got to challenge yes, they may not give the answer you like and you may not be able to do anything about it, but you have to do it. (INT14)

According to several participants, the ability to question a GP's prescribing decision or clinical diagnosis, if an error or concern arose, was crucial for a safe clinical practice. When this topic was raised, however, participants gave conflicting responses in terms of how willing they were to challenge a GP's clinical decision making. Interestingly, even in this case the length of experience as an IP did not appear to be a factor. Because of the variation detected and the relevance of this finding, a deviant case analysis was conducted by systematically reviewing all responses and demographic characteristics of participants.

The table below (Table 15) details the key demographic factors for those participants who discussed this theme, presenting both the views of those participants who would challenge a GP's decision, and of those who would not. The table also details the participant's current clinical supervision arrangements. The only key influencing factor appeared to be structured and regular clinical supervision being in place for those who would challenge a prescribing decision. This was true even for those participants who were supervised remotely (such as INT 6), provided that their clinical supervision was regularly diarised and that they had access to additional support when needed. Conversely, for participants who would not challenge a prescribing decision, there was no structured and regular supervision in place. It is however important to note that not all participants discussed challenging a GP's decision: therefore, what is described is a snapshot of those who discussed it, and it may be difficult to draw inferences from this limited number of examples.

Table 15: Deviant Case Analysis demographic details

Would not challenge prescribing decision	Would challenge a prescribing decision
<p>“Yes at the moment it’s hit and miss unless I have a problem. Sessions are quite short, it is not a general chat” INT9/7years PHARM Location A</p>	<p>“So in this practice it’s actually timetabled into the GP’s schedule so one GP is allocated to sit with me or once a day” INT14/1year PHARM Location A</p>
<p>“I’ve never had any. I’ve never had any clinical supervision in any practice I’ve been in. We would have nurses meetings, they were okay, there were only two of us in X practice so we didn’t need to have a formal meeting we could just have coffee after the baby clinic” INT16/6months NURSE Location B</p>	<p>“It’s clinically supervised remotely, you take a problem back to your ... Mrs X is my lead, she is an anaesthetist based up in Y area. She does the chronic pain so I’d take it back to her. If it was more of an addiction problem, I might go to the addiction consultant, we have two consultants who work with us” INT6/4years PHARM Location C</p>
<p>“So he supposedly comes once a month. He turns up once every 3 months if I’m honest, but he’s still very much on the end of an email when I need him” INT3/1year NURSE Location C</p>	
<p>“At present we tend to nip in and out of each other’s rooms and you can sometimes catch people on the hop and they’re not sure how they would approach something without a bit of thought” INT10/3years PHARM Location A</p>	

The issues that were raised under the broad themes of professional identity and governance arrangements were strikingly similar. In the next section, a more detailed discussion of the issues that emerged under the broad theme of governance will be presented.

#### 4.3.3.2 Governance

Under the broad theme of governance, there were three main themes and 19 subthemes, detailed below in Table 16. The discussion started by exploring the participants’ view of the risks associated with independent prescribing, the confounding issues which create these risks and the steps taken to mitigate them. This led to further exploration of the perception of governance and its impact on the perception of risk. Finally, the discussion focused on the necessity to prove one’s competence and explored how and with whom participants felt the need to validate their own expertise.

Table 16: Governance

<b>Perceived risks associated with independent prescribing (6)</b>	<b>Perception of governance of non-medical IPs (7)</b>	<b>Proof of competence (8)</b>
Lack of clarity about what can be prescribed 1/1 <b>6:1</b>	Lack of consistency 4/3 <b>7:1</b>	Keeping up to date with the broad scope of practice 3/2 <b>8:1</b>
Proving competence 4/3 <b>6:2</b>	Lack of guidelines and governance in primary care 4/4 <b>7:2</b>	Attending formal courses to prove competence 7/6 <b>8:2</b>
Patient safety 1/1 <b>6:3</b>	Health board policies 3/1 <b>7:3</b>	Proving competence with paperwork 4/2 <b>8:3</b>
Prescribing within a set scope of practice 3/3 <b>6:4</b>	Lack of contact from health board 4/4 <b>7:4</b>	Proving competence to others 7/5 <b>8:4</b>
Protecting self 4/3 <b>6:5</b>	Good support from health board 1/1 <b>7:5</b>	Proving competence with peer review 2/1 <b>8:5</b>
Justifying prescribing decisions 3/3 <b>6:6</b>	Perception of the health boards' knowledge of IPs in primary care 5/4 <b>7:6</b>	Proving competence to yourself 2/2 <b>8:6</b>
Greater consequences associated with an error in prescribing for IPs 5/5 <b>6:7</b>		

*Perceived risks associated with independent prescribing*

There was a strong suggestion running through the seven subthemes that the perceived risk of repercussions for IPs were higher than those experienced by their GP colleagues:

I think, we are every bit as safe if not safer because we have this fear “oh dear I’m only nurse, I’m going to be judged more harshly than the GPs”. (INT13)

Usually, participants could give no clear reason for their concerns about increased risk with independent prescribing. There was no discussion about GPs having more ability in prescribing. In fact, in some cases, as the one shown above, the participants felt that IPs were safer. Many of the participants, however, strongly believed that GPs were viewed by

governing bodies as a superior prescribing entity. As a result, doctors could take more risks with prescribing without the perceived consequences:

I'm not saying doctors aren't patient driven, they come from a completely different angle sometimes and they have more autonomy and a lot more clout than a nurse. If we do something wrong we're out on our ear. (INT1)

Although IPs working in the UK have the same legal prescribing rights as doctors, discussions across other subthemes support the finding that IPs were perceived as inferior clinical prescribers. In particular, participants seemed to acknowledge the existence of 'grey areas':

Sometimes you think, oh this is a grey area. Should I prescribe as an IP or should I not? (INT11)

The perceived risk associated with independent prescribing led to further discussion about risk minimisation and safeguarding against potential consequences. Participants emphasised the importance of working exclusively within their scope of practice or, if they wished to increase their scope of practice, the necessity to prove their competence through formal documentation. Thus, although these practices are not dictated within UK legislation, they appeared to be in place as a form of safeguarding from the potential repercussions of a prescribing error. An example of this is shown below:

I'm also very aware that essentially as an independent prescriber we're in the position where nobody really questions your competence until things go wrong and then you have to be in the position to prove it. (INT12)

These findings indicate that prescribing outside of one's scope of practice (whether it led to an error or not) was deemed as highly dangerous by IPs. Interestingly, only one comment referred to patient risk. In most cases, the risk identified concerned the prospect of being 'caught' prescribing out of the scope of practice and without formal proof of competence, rather than the possibility of an actual prescribing error occurring. The interviewee below, for instance, warned against signing a prescription for a medication that falls outside one's scope of practice:

So I think you could sign the prescription for anything... and I'm sure we both know nurses that have done that and fallen by the sword. (INT16)

### *Perception of governance of non-medical IPs*

Perception of governance of non-medical IPs covered six subthemes (see Table 14). A common thread in this theme was the general feeling that the role of IPs in primary care was not properly understood by the health boards and governing bodies:

I don't think the health board knows what I prescribe, I don't think they have a clue what the independent prescribers prescribe. (INT7)

This perceived lack of understanding led to further discussions about a lack of contact from some of the health boards which, according to some participants, translated into a lack of willingness on the part of the health boards to understand their role:

So I would not want to be involved with the health board and the nurse managers - they have no idea how we work in general practice, so I would much rather be judged by a GP. (INT13)

Participants pointed out that, due to this lack of understanding, many of the health boards provided very few guidelines and governance structures that were specific for independent prescribing. This feeling of isolation in some cases increased IPs' need to safeguard their practice and to formally prove their competence.

As a result, many participants were concerned about being monitored or 'judged' by these bodies. In particular, those participants who felt not understood and under-supported by the health boards expressed their preference to be monitored by GPs, who were believed to have a better understanding of their role. However, those few participants who felt well supported by their health board were happy to be directly monitored by them, as was the case for INT12:

So I do get a lot of support from my line manager in the health board. We have regular meetings as a group of practice pharmacists in the area. If we've got problems or issues he is always willing to help and point us in the right direction, and we have an annual PADR (personal annual development review) as well. (INT12)

These comments indicate that IPs were happy to be monitored by a governing body if the latter appeared to understand and support their role.

Concerns around a lack of consistency between the health boards in terms of policies and procedures also emerged in the interviews of several participants. Participants similarly expressed the need for uniform guidance for primary care IPs across the different health boards:

I would like to have some national, especially in Wales between the health boards, a national agreement of the process non-medical prescribers have because each health board has its own policies and procedures. (INT15)

Although the general consensus was that there was a lack of understanding and support on a governance level for IPs in primary care, three participants across two health boards expressed a different (and more positive) view. One participant, for example, described a tightly structured top-down process for controlling IPs in their health board:

I'm a health board employed pharmacist, there is a clear non-medical prescribing policy, there is a meds management nurse who keeps a list of the pharmacists and nurses who prescribe and part of the policy we have to... you send in a declaration of our competence to prescribe. We have to declare that we are keeping a portfolio and that portfolio is included, we have to have our line managers countersign it. (INT15)

There is therefore a lack of consistency between health boards in their governance and support structures for IPs in primary care.

### *Proof of competence*

Under the broad theme of governance, proving competence represented a significant part of the discussion. Interestingly, the concept of proving competence to oneself was not widely discussed. In fact, it was mentioned by only two participants:

It is part of the training, that we become self-aware of our role and competence and that we are working as a clinical practitioner and that we are responsible for proving our own competence to ourselves. (INT15)

Conversely, the need to prove one's competence to others was the object of much discussion, along with the necessity to validate it through paperwork and proof of courses attended. This need was very closely tied to the perception of risk for independent prescribing. Hence, IPs' need to prove their own competence was related to their concern about safeguarding themselves against scrutiny, rather than reflecting any doubt on their own abilities:

I feel that I am competent but that I'm also aware that I need to prove that competence as much as possible. (INT12)

From a legal standpoint, IPs do not need formal courses or proof of competence to extend their scope of practice. They also do not need external validation by another practitioner. The structures of independent prescribing varied greatly both between health boards and individual clinical settings within those health boards: some participants (e.g., INT9) felt the necessity to be formally validated by the health board to extend their scope of practice, while others (e.g., INT7) did not believe their managers or health boards even knew what their current scope of practice was.

Paperwork – whether the proof of formal training, or a document signed by another clinician – was very important to many of the participants: indeed, proof of training was at times deemed more important than the training itself, as was the case for INT12:

Just having a written record is more important of proving competence than just doing the training. (INT12)

Participants did not appear to be concerned about their own competence in the prescribing area. Paperwork and formal courses were deemed important since they would prove their competence to others:

I think I would need to do a formal course not necessarily for me well, yes for my benefit in part but not, more to just tick the box for the GPs. Look, you've done that course, they are all a bit course orientated, if you haven't done the course you can't do it even if you go on an informal study day they don't recognise that. (INT16)

Participants' desire for formal proof of competence was also frequently related to the need to protect themselves against the perceived risk of potential repercussions, as previously discussed:

Get that physical portfolio because that is important in terms of protecting yourself in terms of governance to be able to say look this is what I have done this is the proof that I am competent in these areas. (INT12)

Participants' certainty that a portfolio would protect them against errors made in clinical practice was interesting because, in reality, it is not at all clear whether presentation of such proof would protect them.

This section has shown that there was clearly a great degree of variation across the health boards and across the different practice of practitioners. The next section will present an overview of the diverse range of clinical situations in which participants worked.

#### 4.3.3.3 Current Situation

This broad theme, encompassing three themes and 34 subthemes, and summarised below in Table 17, explores participants' current clinical supervision arrangements and their opinion on their current situation. The discussion led to further explore the support received by IPs from other professionals, its perceived value, and the key problems that are encountered when accessing clinical supervision.



Table 17: Current situation

<b>Current clinical supervision (1)</b>	<b>Multidisciplinary support (3)</b>	<b>Factors affecting a lack of clinical supervision (11)</b>
Clinical supervision for learning 1/1 <b>1:1</b>	Working alongside multidisciplinary colleagues 3/3 <b>3:1</b>	Short-staffed 1/1 <b>11:1</b>
Enforced clinical supervision 1/1 <b>1:2</b>	Support by other IPs 3/3 <b>3:2</b>	Time constraints 4/3 <b>11:2</b>
Formal 5/5 <b>1:3</b>	Seeking advice from colleagues with a speciality 7/5 <b>3:3</b>	Health board employment 1/1 <b>11:3</b>
Informal 11/7 <b>1:4</b>	Feedback to a wider group from training days 1/1 <b>3:4</b>	Location of clinical supervisor 1/1 <b>11:4</b>
Positive clinical supervision 1/1 <b>1:5</b>	Discussing complex cases with colleagues 3/2 <b>3:5</b>	Fear of clinical supervision 2/1 <b>11:5</b>
Clinical supervision through peer discussion 1/1 <b>1:6</b>	Seeking advice from GPS 3/3 <b>3:6</b>	
A lack of consistency with clinical supervision between practices 2/2 <b>1:7</b>	Learning from other prescribers clinical cases 4/3 <b>3:7</b>	
Difference in the clinical supervision since qualifying as an IP 3/1 <b>1:8</b>	Acting as a clinical supervisor to peers 4/3 <b>3:8</b>	
Onus on the IP to seek clinical supervision 1/1 <b>1:9</b>	Open-door policy 2/2 <b>3:9</b>	
Ad hoc clinical supervision 2/2 <b>1:10</b>	E-advice 2/2 <b>3:10</b>	
A dedicated clinical supervisor 2/2 <b>1:11</b>		
Clinical observation as part of clinical supervision 4/1 <b>1:12</b>		
Reflection in clinical supervision 1/1 <b>1:13</b>		
No clinical supervision in place 3/2 <b>1:14</b>		
Group clinical supervision 1/1 <b>1:15</b>		
A perceived workplace understanding of clinical supervision 1/1 <b>1:16</b>		
Failed clinical supervision 3/2 <b>1:17</b>		
Remote clinical supervision 3/3 <b>1:18</b>		
Accessing supervision when needed 4/3 <b>1:19</b>		

### *Current clinical supervision*

The key finding throughout this theme was the existence of a high degree of variation in the level of clinical supervision currently received by participants. Clinical supervision widely differed in terms of formality, frequency and modality (i.e., whether it was conducted face-to-face or remotely). This variation did not depend on the health board or location, as it was frequently encountered between neighbouring GP practices, as was observed by participants with experience of different clinical settings:

I have to say that I worked in another general practice for 2 years and there was no supervision whatsoever there so, I think that every GP practice is very different. (INT13)

When it came to informal clinical supervision, most participants received it within their clinical settings and considered it a valuable form of support:

I need to remind myself I'm actually getting a bit of that clinical supervision process all of the time, almost on a daily basis. I go to a GP with the question or an outcome or for them to check something - that is informal ad hoc supervision and is very valuable, but I think that set aside sessions for more time is very important as well. (INT12)

Some participants, however, did not consider informal supervision as a real, standard form of clinical supervision practice, as was evident in the negative response given by INT5 when asked whether they received any form of standard supervision:

No we don't have any standard supervision. We have monthly meetings, clinical meetings, so that would be doctors and nurses and that's only once a month, and that would be to discuss any practice issues, clinical issues... So, I know there is also an open door even where the GPs are concerned, for anything that I feel I need to discuss. (INT5)

The participants who received formal clinical supervision valued its formal structure very positively:

It's that formal sitting down with somebody more experienced, it's really invaluable. (INT12)

Some participants criticised informal clinical supervision because its lack of structure meant that it could be easily postponed or cancelled. There were complaints about supervisors regularly cancelling or, in some cases, not turning up at all.

The ability to access a GP for clinical queries at the time of the consultation was perceived to be an important factor supporting participants' clinical supervision arrangements. This was true regardless of the degree of formality of the supervision in place:

I do my clinic on Thursday here and Dr Y is here, he is here all day, he is the lead GP and because on a Thursday it's triage appointments, it's great for me because I can nip in and out and I can have a chat with him if I have any problems or any queries. (INT7)

There were differing opinions on whether multidisciplinary support was offered as part of participants' current supervision arrangements. Some participants believed that multidisciplinary support was available in their workplace, but did not perceive it to be a part of their clinical supervision:

I've never had any (clinical supervision). I've never had any clinical supervision in any practice I've been in. We would have nurses' meetings, they were okay, there were only two of us in X practice so we didn't need to have a formal meeting, we could just have coffee after the baby clinic. (INT16)

On the other hand, another participant described multidisciplinary support as an integral part of their clinical supervision arrangements:

With this surgery we have meetings, clinical meetings once a week. So we bring up particularly difficult cases in these meetings and we can all reflect on them in a peer review with the other clinicians which is really beneficial. (INT14)

### *Multidisciplinary support*

This discussion explored the different types of multidisciplinary support to which participants had access. Although the GP unsurprisingly features throughout the discussion as an important figure behind multidisciplinary support, other disciplines were

also repeatedly mentioned as sources of additional support. For instance, INT11 (a nurse) found the exchange of knowledge with the cluster pharmacists particularly valuable.

Interestingly, clinical support from colleagues was frequently preferred to the support that could be given by GPs, especially when broadening a scope of practice in a specialist area: Two participants, INT15 and INT11, both identified the specialist nurse as the most appropriate source of support in the field of diabetes. INT15, in particular, discussed instances where the specialist nurse had been able to give valuable advice while the GP had not.

Participants INT11 and INT15 both recognised that the best person to support their prescribing issues in certain clinical areas may not be a GP. However, they still perceived the GPs to be the only professionals that could confirm their competence:

You're working in their practice now and they've got to physically sign to say that they're happy for you to sign that prescription. (INT11)

Informal, ad hoc multidisciplinary support when working in clinical practice appeared to be important for some participants. Most participants who discussed this aspect of support referred to various members of the multidisciplinary team and not to the GPs exclusively:

We've got a nurse independent prescriber who works in the practice as well, and she and I often talk things over, you know, if we've got a difficult decision to make we'll go and talk on a case by case basis and obviously the GP for here as well to support and pass things over to. (INT10)

Some participants also valued the multidisciplinary support received from colleagues who worked in the same clinical specialty in secondary care:

I work in stroke prevention, we have an 'e-advice', so you can send any sort of queries that you're not sure of on to them and then they would respond and then normally once you've had that you've got that information going forward so they're quite approachable for that. (INT2)

### *Factors affecting a lack of clinical supervision*

When discussing factors behind the absence of clinical supervision, or its frequent postponements or cancellations, the most common reason identified was a lack of time:

Sometimes in some practices they are pushed for time and they maybe not be in the same location as you. So it is difficult. I think that's where it falls down sometimes. (INT11)

This observation is tied to the degree of formality of the clinical supervision arrangements currently in place. As already discussed, informal and ad hoc supervision was the most common form of clinical supervision offered to participants. This type of undocumented, unstructured supervision, rather than being scheduled into a clinician's diary, often takes place when time allows it and when it is needed – most commonly in front of a difficult clinical consultation which requires additional support. It is possible that in those clinical settings where this is the only type of supervision offered, its informal and unstructured nature may lead clinical supervisors to perceive this form of support as relatively unimportant. If the clinical supervision were diarised and more formal attention were paid to it, the number of postponed/cancelled sessions may be reduced as a result. The findings strongly suggest that this might indeed be the case, since concerns around the absence or frequent cancellations of supervision arrangements were only raised by those participants who were not receiving any formal clinical supervision.

Further, the results of this study indicate that clinical supervision is vital to enable prescribers to expand their scope of practice and to support confident and competent prescribing practice, as expressed in clear terms by participant INT12:

Having clinical supervision is a valuable learning opportunity as well as confirming that you are competent, it helps you to identify areas which you need to do extra work or extra learning. (INT12)

Hence, although time constraints are a recognised issue in the current primary care climate, clinical supervision could enhance workforce performance and further support time-pressured services. A prescriber who greatly values clinical supervision but does not receive any may in fact feel unappreciated and could be less likely to broaden their scope of practice as a result. The same participant INT12 who had emphasised the value of clinical supervision (see quote above) admitted to feeling unimportant and unable to develop due to a lack of supervision:

None of the individual surgeries have taken responsibility for supervision and that development, developing me. (INT12)

These findings suggest that formal supervision arrangements are important in order to improve clinical practice and to support the workforce and its motivation. The next section will explore the potential effects of these issues and the ways to address them in future practice.

#### 4.3.3.4 Implications for Future Practice

This broad theme, consisting of two themes and 18 subthemes and summarised below in Table 18, focuses on participants' perceptions of what qualities an ideal clinical supervision arrangement should present. The discussion also explored the potential consequences of a clinical supervision that does not meet participants' individual needs, and the effects of a lack of clinical supervision on independent prescribing practice.

*Table 18: Implications for future practice*

<b>Ideals of clinical supervision (2)</b>	<b>Effect of support on prescribing (9)</b>
Informal 4/4 <b>2:1</b>	A lack of support resulting in a lack of prescribing 6/4 <b>9:1</b>
Formal 11/8 <b>2:2</b>	Support resulting in expanding scope of practice 12/8 <b>9:2</b>
Protected time 9/5 <b>2:3</b>	A lack of support resulting in a job change 2/2 <b>9:3</b>
Face to face clinical supervision 3/3 <b>2:4</b>	Acknowledging the need for support when prescribing 1/1 <b>9:4</b>
Reflection 10/6 <b>2:5</b>	Support resulting in more confident and competent practice 7/6 <b>9:5</b>
Frequency and duration of clinical supervision 8/5 <b>2:6</b>	
Preferred characteristics of the clinical supervisor 9/5 <b>2:7</b>	
Preferred profession of the clinical supervisor 9/6 <b>2:8</b>	
Positive clinical supervision 6/4 <b>2:9</b>	
Clinical supervision for reassurance 3/3 <b>2:10</b>	
Feedback on practice 6/4 <b>2:11</b>	
Numerous clinical supervisors 1/1 <b>2:12</b>	
Standardised clinical supervision 4/2 <b>2:13</b>	

### *Ideals of clinical supervision*

Both informal and formal clinical supervision were discussed at length. Informal clinical supervision was identified as an important support structure, but formal supervision consistently emerged as the ideal format throughout this study. An informal structure for clinical supervision was never preferred:

It's not done enough. Clinical supervision has to be formalised. (INT16)

The reasons given for this preference, however, were varied. Some participants believed that formal clinical supervision would better support governance around their prescribing:

Now I know what I know now about how important clinical governance is, it probably needs to be documented and a lot more formalised. (INT1)

Other participants felt that formalising clinical supervision would enable the formulation of an action plan which could provide them with an ongoing development opportunity in their prescribing practice:

Also that there is an action plan at the end on what to do next which I think is really important with GPs and it's so important to follow up on the action plan to make sure it's actually done and that it's followed through. (INT15)

There were differing opinions on the perceived purpose of clinical supervision. Reflection on practice, however, emerged throughout the discussion as one of most important aims. It was viewed as an important practice in developing as a clinician:

Reflection is essential: it helps us develop as a practitioner. (INT15)

I think reflecting on practice is a definite, what's the word... I think it's the minimum we should do, everything we do we should be reflecting on. (INT5)

Reflection was also viewed as a valuable process that would enable discussion of difficult clinical encounters, as mentioned for instance by INT4. Even when the notion of reflection was relatively new to participants, its importance was still recognised:

Reflection is very important and as a profession, in my experience as a pharmacist that has been qualified for 15 years, we are not very good at doing reflection in our day-to-day practice, it's not something that been ingrained into us really once we're qualified. (INT15)

Participants expressed differing views on how reflection should be undertaken. Some of them discussed the perceived benefits of practicing self-reflection prior to a clinical supervision session. In this sense, self-reflection was portrayed as protected time for the participant to reflect on their recent clinical cases and to consequently identify any further learning that would be beneficial. This discussion of the perceived benefits of self-reflection ahead of the supervision can be contextualised in the more general finding that preparation prior to a formal clinical supervision session was deemed beneficial:

We don't give ourselves any head-space, we don't give ourselves the opportunity to sit back at the end of morning clinic and think "right, how could I have done that differently" or "why did that go wrong, why were there so many pressures?" (INT1)

Reflecting on one's own practice with another professional – particularly one perceived to be clinically senior – was another common conceptualisation of reflection.

I think definitely reflection is important, so the independent prescribing course kind of brought that home really which is why these two-month catch up are good because we can reflect on those complex patients. (INT4)

Learning from another clinician's reflections appeared to help with breaking down any barriers associated with clinical supervision:

Also learning from supervisors' reflections: sometimes it's quite nice that they share things that have not gone so well for them. Then you feel that they're a real working person, that things don't go well for other people as well as yourself sometimes. (INT11)

Some participants felt that clinical supervision was primarily a learning opportunity and a process to identify areas of improvement:



Having clinical supervision is a valuable learning opportunity as well as confirming that you are competent, it helps you to identify areas which you need to do extra work or extra learning. (INT12)

Another key function of clinical supervision identified by some participants was that it enabled clinical supervisors to assess IPs, to confirm their competence and to validate their practice:

Being assessed by my supervisor and deemed that it's appropriate, I think it's definitely something that I found beneficial. (INT4)

In summary, it was felt that clinical supervision should have a formal structure, include a reflective element and aid future learning in a positive environment. As noted above under the theme of current clinical supervision (Section 4.3.3.3.), there was variation in supervision arrangements in place across Welsh primary care. Further discussions allowed an exploration of participants' views on what constituted an ideal or standardised clinical supervision session. This was described positively. One participant illustrated the benefits they associated with standardised clinical supervision, and the ways it would help homogenise clinical practice for prescribers in Wales:

I think that would be really useful to have competencies and to have those standardised documents to be able to build that portfolio so that everyone is working to the same standard. (INT12)

Another participant had varied experiences of clinical supervision both within the same health board and between two different health boards. This variation had led to feelings of anxiety around clinical supervision and confusion around what to expect and what was expected of participants. They felt that standardising clinical supervision sessions would clarify expectations and result in more productive sessions:

It's important that we have a formal process of what we should be doing and how often and what constitutes a good level of clinical supervision... it would be nice to have one accepted standardised way of undertaking clinical supervision. (INT15)

*Effect of support on prescribing*

When discussing the effect of support on prescribing, the most common finding was that lack of support resulted in a reduced prescribing capacity, whereas an increase in support generally led to an extension of the prescribing remit. This was evident in the experience of one participant who worked across different clinical sites, one of which had a clinical supervision structure in place, while the others did not. Although the participant's skill set and role were the same in all clinical practices, their prescribing was limited in the sites without clinical supervision in place:

The other two practices I work in, there is not that support offered, so my role is very limited there. (INT14)

Another participant who felt competent and confident when prescribing in a certain area did, however, refuse to continue to prescribe in that area because they were not offered ongoing support:

When we do minor ailments clinics it wasn't supported, so I said "I'm not doing it". (INT1)

When the effects of support on prescribing practice were explored, participants gave their perspectives both retrospectively (in relation to past experiences) and hypothetically (in relation to future possibilities). Interestingly, the findings were very similar in both cases, indicating that support had, and would, result in the prescriber expanding their scope of practice:

The supervision provided definitely helped to broaden the scope of practice. (INT4)

The prospect of expanding practice was viewed much more positively if within an environment with a clear support structure in place. INT14, for instance, discussed their willingness to extend their scope to reviews of antidepressants, provided that they felt supported in their clinical practice. Similarly, INT3, whose current confidence and competence restricted their prescribing practice in a certain area, stated that with adequate support they would be happy to expand their remit.

These findings have important implications for future practice, because they show that adequately supported prescribers can confidently expand their scope of practice, whereas

those without adequate support limit their prescribing practice and/or do not prescribe. These findings are particularly pertinent to the current primary care situation, indicating that, with the right support in place, existing prescribers could be utilised more effectively.

#### 4.3.4. Discussion

This study examined IPs' views on clinical supervision, the influences affecting these views and the context in which they worked in. Clinical supervision was valued by prescribers as an important support structure, but a number of issues emerged, including the need for additional support and the feeling that support was not universally offered. The findings indicate that some participants, although they were all qualified as IPs, did not perceive their prescribing practice to be very independent. Some participants turned to another professional for confirmation of their prescribing choices and validation of their competence. Very often, this professional figure was a GP. Interestingly, when discussing influences on prescribing, none of the participants even mentioned pathways of study and self-teaching; on the contrary, the GP appeared to be the go-to provider of clarification. This might be due to the GP's role as DSMP/DMP, which could have created and fostered IPs' strong reliance on doctors. It would be interesting to assess whether validation from doctors will continue to be sought to the same degree after the introduction of other IPs as DPPs (Designated Prescribing Practitioners) (Royal Pharmaceutical Society, 2019). This impression of practising as an inferior prescriber may be more easily understood if the participants had previously worked as supplementary prescribers, since in this case they would have become accustomed to the GP setting their prescribing boundaries (Robinson, 2009). However, only two participants had previously worked as supplementary prescribers.

The limitations of this study are acknowledged. Although all health boards were included in the participant recruitment process, two of the health boards had no respondents. Further, finding the appropriate gatekeepers across all health boards was a challenging task, and it is still unclear if the most appropriate gatekeeper was used in all cases, since gatekeepers identified across the health boards had a range of different roles, ranging from an administrative clerk to a Director of Nursing. The structures in place to identify IPs also varied greatly across health boards, and some health boards had no clear list of IPs working in primary care.

Although data saturation was reached, the participant group was admittedly small. However, efforts were made to recruit a heterogeneous sample of participants to enable diversity in the data collected. Nevertheless, although the diversity in the patient sample was generally achieved, it is still possible that not all viewpoints and opinions were included, so that the findings do not necessarily represent the majority views of primary care prescribers in Wales. This does not, however, detract from the significance of the findings. The results indicate that information power was reached, as the group of participants had much information to give: this means that a relatively low number of participants is likely to be sufficient (Malterud, Siersma and Guassora, 2016).

The insecurity surrounding prescribing in primary care was clearly felt by participants. These insecurities do not appear to be linked to a perceived lack of competence, but rather to a feeling of isolation and to the fear of unfair judgement. Such fear, in turn, seems to result from a perceived lack of recognition and understanding of IPs' prescribing role by managing bodies. Further, IPs felt that they were more heavily scrutinised than their medical colleagues. The GPs were viewed as superior prescribing entities in primary care, which is in line with the findings by Weiss et al. (2016). In some cases, the GPs dictated what IPs were permitted to prescribe, which is likely to enhance IPs' feelings of insecurity and inferiority. Since GPs were perceived to be less scrutinised by managing bodies, they were also perceived as able to take more 'risks' and confidently prescribe out of guideline. These results were similar to the findings by Weiss et al. (2016), who undertook an exploratory study of the practice of 21 GPs, NIPs and PIPs in primary care in England to explore the social identities of prescribers. Although not a directly comparable study due to its different focus – both thematically and geographically – their study found that, since the introduction of IPs, GPs have progressively taken on a prescribing identity which has been likened to risk taking. The results presented here indicate that there was a general perception that if a GP made a prescribing error, there would be fewer repercussions compared to an IP.

The need to prove one's competence was viewed as an important part of safeguarding against the insecurity of prescribing in primary care. Having physical proof was discussed as an important part of feeling confident in practice. Such proof could come in various formats including portfolios, certificates, and signed declarations of competence from other professionals – very often from GPs. Interestingly, participants felt that this physical proof would protect them in the case of an investigation of a prescribing incident. There was very little discussion about IPs defending their own level of competence. These

findings are interesting because, in fact, it is not at all clear if paperwork proving competence in a particular area of practice, signed by another clinician, would protect IPs if they were investigated for a potential error. In practice, the most effective way to demonstrate competence would be for the IP to discuss the rationale behind their decision-making. Paperwork proving competence, signed by another professional, does not feature among the 10 key competencies needed by all prescribers according to The Royal Pharmaceutical Society (2016).

In Wales, clinical supervision arrangements for IPs in primary care are varied. Most of the clinical supervision offered is informal in structure and, in some cases, ad hoc, as was found for other geographical areas in the UK (Pollock et al., 2017; Cutcliffe et al., 2018). In this study, the value of informal clinical supervision was acknowledged by participants, particularly when in need of immediate support in a difficult situation. However, formal clinical supervision was consistently preferred. Further, IPs in primary care expressed the need for a standardised and flexible clinical supervision guideline: they felt this would help with governance, learning and expanding the scope of practice. This type of supervision does not, however, appear to be readily available.

Given the strong indications of IPs' need of standardised and formal clinical supervision, this topic will be explored further in the next phase of this research (Phase 2) in Chapter 5. At this stage, from phase one findings, the definition of clinical supervision detailed in Chapter 1 does not appear to have been disputed by the participants. Clinical supervision is still seen as a supportive element to clinical practice:

**'emotionally supportive supervision sessions that enable reflection and build professional confidence.'**

Phase 2 will assess whether there is consensus amongst IPs on the requirements and qualities of effective clinical supervision. The aim of this exploration will be to develop a guideline that could help NIPs and PIPs in primary care to improve the quality of clinical supervision. A modified Delphi survey will be used to explore the views of an expert panel, with the methods and results of this next phase presented in Chapter 5.

## **5. Phase 2 Methods and Results**

### **5.1. Introduction**

The purpose and rationale for using consensus methods to explore Phase 2 of the perceptions of effective clinical supervision have been discussed in Chapter 3. The current chapter describes the specific methods used in Phase 2, how the survey data were analysed, and presents findings from Phase 2. Since Phase 2 used a two-round Delphi technique, the methods and results for both rounds are discussed together. The research objectives for Phase 2 were (section 2.6):

1. To identify from Phase 1 findings whether there is consensus amongst NIPs and PIPs on what is required for effective clinical supervision and, if so, which parameters support effective supervision.
2. To develop a model of clinical supervision based on the findings of objective 4.

### **5.2. Methods**

#### **5.2.1. Sample and recruitment**

Recruitment to the study used three approaches. First, the study was advertised on Facebook by the Royal Pharmaceutical Society Wales and the Association for Non-Medical Prescribers Wales (Appendix 9). Consent was obtained from the administrator of those organisations prior to advertising and posting information. Contact details for the researcher was advertised for interested parties who wanted to discuss participation in the study. Second, participants from the previous qualitative study, who had shown an interest in participating in subsequent studies, were contacted. These potential study participants provided the researcher with their personal email addresses to be informed of research opportunities. These participants were sent information about the survey prior to consenting to participate (Appendix 10). Finally, snowball sampling was used to identify participants who did not take part in the first study and did not have access to social media sites. Snowball sampling comes under the umbrella of the broad term 'link-tracing methodologies' (Spreen, 1992). The premise for snowball sampling is to advantageously use the social networks of identified participants to provide further potential participants (Thomson, 1997). Snowball sampling for this study involved participants sending the study

information to colleagues who they believed may have been interested in participating in the study. For those engaged in social media, the posts could be shared to other users who may have been interested in participating in the study. All interested parties were required to contact the researcher directly and their eligibility was assessed using the expert panel criteria (Table 19).

*Table 19: Expert panel criteria*

<b>Expert panel criteria</b>
A UK qualified independent prescribing nurse or pharmacist – no experience limitations
Currently employed in primary care in a prescribing role but not essential to be actively prescribing
NHS employed and NHS contracted staff
Working in Wales

If the criteria was met, participant information was sent to eligible participants via email with a link to the E-Delphi survey. Each participant was assigned a 20-digit personal identification number (PIN), to enable identification of their contributions whilst also keeping anonymity. The assignment of individual PINs resulted in the ability to compare the demographics which were recorded on the survey of the participants with their individual responses and evaluate the correlation between the responses and the profession and/or the length of time of prescribing. The participants had a three-week period to respond to the Delphi survey, a reminder email was sent at the end of the second week. As discussed in the methodology chapter (3), section 3.4.1, the ideal sample size for the Delphi survey was a homogenous group of 15 to 20 participants (Skulmoski and Hartman, 2007).

### **5.3. Ethical considerations**

This phase used a two-round Delphi technique using two survey instruments which were administered online (see section 5.2.3). Ethical approval for round one was granted by Cardiff University School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee on 5<sup>th</sup> April 2019 (Appendix 11). Minor amendments were submitted to the ethics committee for round two of the survey, which was informed by the responses from round one. There was no way of predetermining the content of round two when submitting the initial ethics application. The amendments were approved by Cardiff University School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee on 24<sup>th</sup> May 2019 (Appendix 12). All relevant study information, such as the recruitment advert and participant information sheet (Appendices 9 and 10), were sent by email to the previous

participants of the qualitative study who voiced an interest in participating in further studies and all others who had contacted the researcher via social media.

Informed consent with an option to withdraw from the study at any stage up to the submission of their survey was an imperative aspect to any study (Creswell, 2007). Consent was implied by the completion of the survey (Cole, 2012). The option to withdraw from the study at any time until the survey was completed was made clear to all participants. Since the survey was anonymous, there was no way of identifying the participants' individual survey. The content was not anticipated to cause any distress or upset to the participant, there were no intrusive or upsetting questions included. All participants were identified by a 20-digit PIN which was generated by the survey program used to ensure anonymity, participants' surveys were also anonymous to the researcher. The surveys were completed electronically using an online platform, which resulted in the surveys being stored electronically in a secure password protected program. The surveys contain no personal details or identifying information of the participants.

#### 5.3.1. Data collection

The Delphi technique uses a multistage data collection survey process, commonly two or three stages (Keeney et al., 2010). The first stage of a classic Delphi survey involves an open-ended questionnaire which informs the generation of the first descriptors, successive questionnaires are then developed (Day and Bobeva, 2005). Traditionally, participants would complete a hard copy of a questionnaire and post it back to the researcher. The researcher would then collate all the information from the participants and analyse the data. A common adaptation to this process is the E-Delphi which enables participants to complete the questionnaire online, this is also beneficial to the researcher due to the data being collated in one place (Courtenay et al., 2018).

The study used a modified E-Delphi technique where the traditional round comprising the collection of qualitative data was omitted. This has been cited as acceptable practice if there is pre-existing information available (Hsu and Sandford, 2007; Courtenay et al., 2018). Phase 1, as outlined in Chapter 4, assesses participants' perceptions of effective clinical supervision. This research resulted in findings grouped under four broad themes:

- Professional identity and self-worth
- Governance
- Current situation



- Implications for future practice

The final theme, implications for future practice, provided a clear and comprehensive description of the ideal characteristics and purpose of clinical supervision, which replaced the classic round one of the surveys. These themes were reviewed by the researcher and the supervisor and where robust findings were attained from numerous participants identified. Quotes from common themes were used to inform the descriptors for the two-round Delphi.

As discussed, the original round one was omitted and so 'round one' refers to the first round of this modified Delphi. In round one of this modified Delphi, the 16 descriptors in the survey were listed under three domains: purpose, characteristics, and structure of clinical supervision. These descriptors were derived from common findings from Phase 1 of the research. Similar and corresponding quotes by the participants in Phase 1 were reviewed by the researcher and the supervisor, then descriptors were created from these common findings. Participants were asked to rank their agreement with each descriptor using a 5-point Likert scale (see section 5.4) and given space to provide any further comments (Appendix 13 for round one survey).

A summary of round one was sent to all participants after reviewing the findings. The participants then had a two-week period when they could contact the researcher with any further comments or concerns about the summary. In round two, the five statements which did not meet consensus (see section 5.3.3), two re-worded descriptors, and one additional descriptor were sent to participants. In this second round, participants were again asked to rank their agreement with each of the eight descriptors using a 5-point Likert scale, and given space for any further comments (Appendix 14 for round two survey).

### 5.3.2. Data analysis

The two-round Delphi comprised both quantitative and qualitative data. The qualitative comments left by the participants were analysed using content analysis. Content analysis is a commonly used approach for analysing qualitative data and is particularly common in nursing research (Elo et al., 2014). It is used to analyse data and interpret its meaning by creating categories/concepts. Content analysis can be used in either a deductive or inductive manner employing the following three phases: preparation, organisation, and reporting of the results. In an inductive approach, the second phase of organisation

includes openly coding and creating categories (Elo et al., 2014). In a deductive approach, the organisation phase involves all of the data being reviewed for the codes which correspond to the identified categories (Elo et al., 2014). For this study, an mixture of an inductive and deductive approach was used, there were pre-set questions that aimed to be addressed however, the data was openly coded to create categories that may not have been envisaged in the pre-set questions. The content analysis was used to help inform round two of the survey by providing an in-depth analysis of the participants' ratings and further comments.

The survey also included quantitative data from the rankings of the individual descriptors. The 5-point Likert scale used a rating of '1' for Strongly Agree through to a rating of '5' for Strongly Disagree. For each descriptor, the mean, median, inter-quartile range (IQR) and standard deviation (SD) were calculated. The median scores and the IQR were used to identify consensus, as these are commonly used in relation to ordinal data and are a frequently used method to identify consensus in research (Boukdedid et al., 2011). The standard deviation and mean are also listed in the results to give a broader view of the statistics. Any descriptor with an IQR of greater than two was deemed as not meeting consensus and was included in round two. Descriptors with an IQR of less than one were deemed as having met consensus and were omitted from round two. Descriptors with an IQR between one and two were reviewed individually by the researcher and the supervisor with consideration for statistical factors, such as the variance, standard deviation, and the median.

## **5.4. Results**

In this section, the two rounds of the Delphi are discussed focusing on the quantitative findings for each descriptor. The discussion of each descriptor drew upon some of the qualitative data to inform the conclusions for each Delphi statement descriptor. The descriptors with no consensus are discussed in further detail, including quotes from the participants, which informed the rewording of some of the statements for round two. As such, this section is followed by an additional results section describing the broad qualitative findings using three categories: purpose, characteristics, and structure. This chapter concludes with a discussion and key findings of this study.

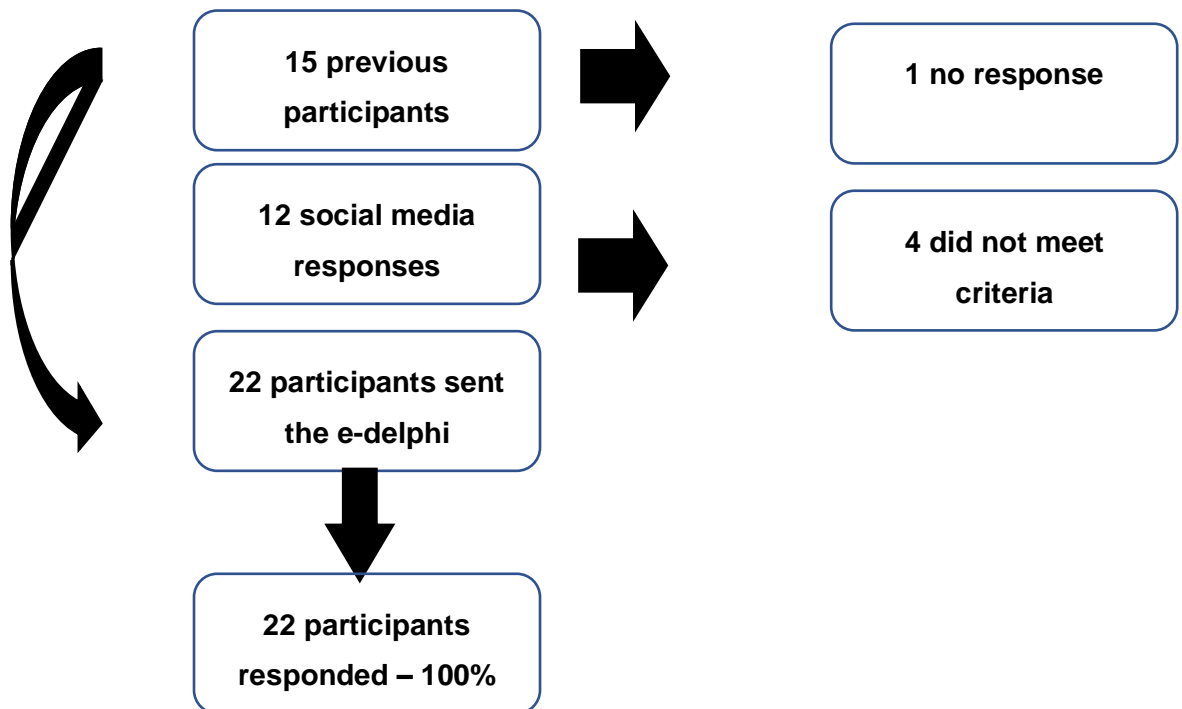
### **5.4.1. Participant response**

The response rate for the Delphi study is shown below. Twenty-two respondents participated in round one: 14 participants were recruited from Phase 1 (Chapter 4) and

eight participants from social media (Figure 6). Of these 22 respondents, 16 participated in round two (Figure 7). Participants' demographic characteristics are detailed in a non-identifiable format. As the participants were anonymised, the demographics of the participants from round one who completed round two are not known.

#### 5.4.2. Round 1 Participant Demographics

Figure 6: Round one participants



Diversity was sought and achieved for the expert panel. All seven health boards in Wales had a representative in the expert panel, there was a broad range of prescribing experience and a mix of nurses and pharmacist prescribers. The participant demographics are listed below in Tables 20 and 21, due to the low number of participants in some health boards, the health board demographics are displayed separately from the other demographic information to retain anonymity.

Table 20: Health Boards of participants

Cardiff and Vale	Aneurin Bevan	Cwm Taff	Powys	Swansea Bay	Hywel Dda	Betsi Cadwaladr
5	6	5	1	1	1	3

Table 21: Participants' profession and length of time prescribing

Nurse	Pharmacist	0-2 years	2-5 years	5-8 years	8-13 years
7	15	7	6	2	7

#### 5.4.3. 5.4.3 Round One Delphi Survey findings

The following section will discuss the survey findings from round one. The six descriptors that reached consensus are displayed with their statistical findings in Table 22. These are the statements that achieved an IQR of less than one. As these statements achieved consensus, they were omitted from round two. The number before the descriptor in the table is the question number for the survey.

Table 22: Round one, descriptors with an agreement of IQR <1

1 - "The purpose of clinical supervision is to support me in my clinical practice" To what extent do you agree with this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
4.73	0.74	0.86	5	5	5	0	Omit
2 - "The purpose of clinical supervision is to give me confidence in my clinical practice"							
4.45	1.61	1.27	5	5	5	0	Omit
6 - "Ad-hoc support and access to another prescriber for immediate support when I'm in a difficult clinical situation is important to me"							
4.86	0.12	0.34	5	5	5	0	Omit
3 - "Clinical supervision should be a positive learning experience"							
4.41	0.88	0.94	4	5	5	1	Omit
5 - "My supervisor's role is to support me to achieve my learning needs"							
4.27	0.65	0.81	4	5	4.5	1	Omit
12 - " Reflection on clinical practice should be a key part of clinical supervision"							
4.45	0.7	0.84	4	5	5	1	Omit

The remaining ten descriptors were reviewed and are discussed further to explain the decision to include, exclude, or re-word them in round two. As discussed in section 5.2.4, the descriptors that received an IQR of more than two were included in round two but reviewed by the research team (the researcher and supervisor) prior to this to establish if the question needed to be amended based on the comments left by the expert panel. The descriptors that received an IQR of greater than one but less than or equal to two were

reviewed and discussed through a discussion between the researcher and supervisor. All descriptors less than or equal to one were reviewed individually. A decision was made based on the combined assessment of the statistical findings for the descriptor and the comments left by the expert panel. All descriptors that received an IQR less than one were excluded, as a small IQR indicates more clustering/agreement.

The next section discusses the six descriptors which had an IQR greater than one but less than two. This is followed by a discussion of the four descriptors which had an IQR of two or greater. To enable transparency of process, each descriptor is discussed individually, with comments from participants informing the decision to: (a) keep the descriptor in round two, (b) omit the descriptor from round two, or (c) re-word the descriptor based on participants' comments and include them in round two. Qualitative comments from participants were also considered to determine if any additional descriptors needed to be devised.

The first descriptor with an IQR greater than one and less than two, was descriptor four. As shown in Table 23, all participants rated this descriptor as quite important (three or above).

*Table 23: Round one, descriptor four*

4 - "The clinical supervision agenda needs to be primarily led by me and my identified learning needs". How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
4.09	0.63	0.79	3.25	5	4	1.75	Reviewed – Omit

The descriptor had a low variance and high mean and median which indicates the majority rated the statement as important. Some of the comments left by the expert panel clarified that primarily led does not mean exclusively led:

The employer may have learning needs for the individual also.

There was an emphasis in the comments that the supervisor can also input into the supervisees identified learning needs and that the supervisee does not have to identify their needs independently as things may get missed, as one participant describes:

Although it is important for the learners' identified needs to be met there was times when the supervisor should lead the agenda and I use the principle of 'you don't know what you don't know' to qualify my view.

The general comments around this descriptor appeared to be clarifying the positive input that supervisors can have in identifying learning needs but also reiterating the need for it to be largely led by the supervisee:

Yes, if it is your clinical supervision session it should be guided by your agenda. this may differ if you are supervising others.

Based on the statistical findings and the comments left by the expert panel, the decision was made to omit this descriptor from round two.

*Table 24: Round one, descriptor 11*

11 - "Protected time should be given for clinical supervision" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
4.27	1.2	1.09	3.25	5	5	1.75	Reviewed - Omit

For statement 11 in Table 24 shown above, 21 participants ranked this descriptor three or above (95%), with 14 of these ranking this descriptor as Very Important (5). The median was five, with a high mean. A large majority ranked this descriptor as important. The main comments around this descriptor were consistent:

If formal supervision is to be undertaken then protected time is needed for this to be undertaken.

Otherwise, it often doesn't happen.

There was a comment about the reality of protected time being allocated:

In reality, this can be difficult to achieve.

Based on the statistical findings and the comments left by the expert panel, which primarily concerned the practicalities of having protected time, this descriptor was omitted from round two.

For statement nine (Table 25), this descriptor was near consensus: 18 respondents ranked it three or above (82%), the median was four. However, eight participants ranked it three or below.

Table 25: Round one, descriptor nine

9 - "Having an agenda and an action plan for clinical supervision sessions is important" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
3.64	1.5	1.23	3	4.75	4	1.75	Reviewed- Include

There were comments in support of this descriptor from a practical point of view in constructing the clinical supervision session:

Provides structure and guidance to prevent going off on a tangent when time is limited.

If clinical supervision is to take place, then having an agenda is useful to direct the session and action plans for further professional development are important.

There was a concern from one of the expert panels that an agenda and action plan for clinical supervision might indicate that the supervisee is incompetent:

This is sounding far too rigid and bureaucratic. I definitely do not need an action plan. This sounds like someone is concerned about my practice. In fact, I wonder if this will make IPs shy away from open discussions for fear of seeming incompetent.

The statistical findings discussed above, and the mixed comments left by the expert panel indicated that this was a descriptor that had not met consensus, it was therefore included in round two.

Table 26: Round one descriptor 10

10 - "Face-to-face clinical supervision is better than remote supervision (email, telephone etc)" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
3.68	1.13	1.06	3	4.75	4	1.75	Reviewed - Include

Table 26 shows that, for statement 10, this descriptor was near consensus. Although the majority ranked this statement as four or above (55%), eight participants (36%) rated this

statement as a three, indicating some ambiguity in how important this statement was. The comments left about the descriptor also indicate non-consensus with many of the expert panel stating that the format of clinical supervision should be based on personal preference:

I think remote supervision can work equally well as face-to-face session, but this is dependent on the individual and their like or dislike of technology.

Personal preference. Some students may have different learning needs.

There were also comments left about the feasibility of face-to-face clinical supervision:

Not always feasible.

Although telephone consultations can be helpful. not tried online but can see a place for it in our time pressured industry.

Another participant reiterated the important factor being clinical supervision and not necessarily the arrangements to receiving it:

I think what is important is to have someone to discuss issues with.

The statistics and the free text comments both indicate no consensus for this descriptor. The general view appears to be that the arrangement of clinical supervision should be down to personal preference and for that reason, the expert panel were unwilling to commit to this being an important factor. This descriptor was included in round two.

Table 27: Round one, descriptor 13

13 - "Clinical supervision needs to take place on a monthly basis as a minimum (pro-rata)" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
3.36	1.6	1.26	3	4.75	3	1.75	Reviewed - Include

Statement 13 (Table 27) suggests that this descriptor had a large variance and a median of three which indicates a clear lack of consensus. The comments around this descriptor were largely about the frequency of clinical supervision being based on an individual's need and experience of prescribing:



This may vary on individual needs and experience.

I think the frequency of clinical supervision may vary depending on the needs of the individual non-medical prescriber. Initially, they may need more frequent supervision, but then as they gain experience, this may need to be less often. Also, if the individual is expanding their scope of practice, they may need more supervision initially whilst undergoing this process. Minimum 6 monthly clinical supervision once experienced.

Far too often ...what is the IP doing to need all this supervision? Of course, if clinical 'support' is based in the practice then it may be innate in the system but as a specialist it needs to be when the independent prescriber needs it. It's all about supervision fitting the person and the context.

One of the participants commented that clinical supervision taking place on a monthly basis gives clinical supervision a 'kudos' but then commented on the practicalities of it:

It gives the kudos that clinical supervision is required but it's not practical.

Participants' emphasis on the frequency of clinical supervision being driven by the individual and the experience of the prescriber clarifies the non-consensus on this descriptor. The statistical findings also support no consensus on this descriptor, this descriptor was included in round two.

Table 28: Round one, descriptor 14

14 - "The clinical supervisor must be a GP" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
2.41	1.42	1.19	1.25	3	2	1.75	Reviewed – reword based on comments

Table 28 gives the detail for statement 14. Most expert panel members rated this descriptor as three or below (86%). The comments supporting the statistical findings would indicate the primary need is for the supervisor to be a prescriber:

Another prescriber in the same field e.g., respiratory nurse prescriber and pharmacist prescriber.

The comments that other prescribers might be better placed to perform clinical supervision was noted; however, doctors' input into clinical supervision was not disregarded:

Pharmacists can support the clinical supervision, but ultimately the GP has responsibility for the patients in their practice, hence they are the ones who need to be confident in an IP's abilities.

It depends on the area of practice, but I do think a doctor's input is extremely valuable. Clinical supervision could be provided by another experienced NMP and a GP.

I think a GP must be involved in clinical supervision at least twice per year. But in the meantime, supervision could be provided by others (e.g., suitably qualified and experienced nurse or pharmacist).

The focus of the comments appears to be about the primary need for the clinical supervisor to be a prescriber and not necessarily a GP. The statistical findings and the focus of the comments supported the decision that the descriptor would be reworded to "the clinical supervisor must be a prescriber" and was included in round two.

Having reviewed all the descriptors with IQR values greater than one and less than two, it was possible to consider those descriptors that had an IQR of two or greater. Table 29 shows the results for statement 7.

*Table 29: Round one, descriptor seven*

7 - "Informal and ad-hoc clinical supervision is not enough as the only form of supervision" How would you rate the importance of this							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
3.64	1.87	1.37	3	5	4	2	Reviewed - Omit

Although this descriptor had an IQR of two, it had a median of four and 17 participants rated this descriptor as three or above. Reviewing the descriptor by the statistics alone may have made the decision to include it in round two; however, the comments left by the participants provided a level of consensus on this descriptor:

For patient safety it is very important that non-medical prescribers have a formal clinical supervision process. For example, GPs in primary care have a very comprehensive revalidation and accreditation process. I would welcome something similar for nurses and pharmacists working in primary care.

informal supervision often takes place within the work setting but a formal more structured agenda is important otherwise supervision in some area may not happen.

Some participants questioned the descriptor’s context and indicated that they thought the descriptor was defining informal and ad hoc clinical supervision as unimportant:

Well, it could be enough, it depends on the context, otherwise it makes it sound like clinical supervision is becoming a very structured and formal event.

I quite like informal supervision.

For these reasons, it was decided to omit statement seven from round two, as it was considered that it had achieved consensus in valuing both formal and informal supervision.

*Table 30: Round one, descriptor eight*

8 - “All independent prescribers in primary care should have formal clinical supervision arrangements” How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
3.73	1.74	1.32	3	5	3.5	2	Include. Also add an additional question from comments (8A)

In Table 30, 19 participants rated this statement eight as three or above with eight of the 19 participants rating the descriptor as a three. The overall statistics for this descriptor indicated no consensus, the participants’ comments indicated the unwillingness to endorse the need for formal supervision for all prescribers:

I'm unsure if this is always needed. I guess there should be some formal supervision to ensure quality of practice.

Comments were left by participants who appeared to be unhappy with the rigid description that prescribers “should have formal clinical supervision arrangements”. Their comments indicated that it should be a choice, not a requirement, and that this factor can change depending on the needs of the prescriber:

I don't think formal arrangements are always productive or beneficial. As one develops within a role often the formal supervision relaxes into an informal

discussion with medical and non-medical health care professionals who are involved in patient care. To state all NMIPs should have formal clinical supervision is impractical in many areas.

I'm not sure I need 'supervision' but I may need peer support in my particular speciality and the ability to discuss the case. It also depends on the experience of the IP who may need more support in the early years.

Some participants commented positively on this descriptor and found it important for varying reasons:

Particularly if you are new to practice then more regular sessions would be beneficial but should ideally continue as your knowledge/ skill set improves.

It would help back up an IP with indemnity companies as well should a claim arise.

Due to the non-consensus around statement eight, and the varying comments left by the participants, it was decided to include this descriptor in round two. The participants' comments indicated that access to formal clinical supervision is important but, they did not agree with it being a requirement. For this reason, an additional descriptor was added to round two reflecting this: "All independent prescribers in primary care should have access to formal clinical supervision arrangements". This was added to differentiate between there being a requirement for clinical supervision or whether having access (without it being required) to clinical supervision is enough.

*Table 31: Round one, descriptor 15*

15 - "There needs to be clear guidance so clinical supervision is standardised so everybody is receiving the same support" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
3.45	2.25	1.5	3	5	3	2	Reword based on comments

In Table 31, the statistics for statement 15 indicated there was no consensus, with seven of the participants rating it as three and a total of 12 rating it three or below, giving the descriptor a median of three. The comments left by the participants indicated their unwillingness to agree to 'standardised' supervision as a requirement as it assumed everybody is required to always access the same level of support:

People are different and working in different areas. For example working as a specialist practitioner in diabetes or heart failure would require knowledge of a relatively narrow field of drugs in comparison to an individual working in general practice where, by the very nature of being a generalist, a wider drug formulary is necessary to function to the full capacity of the role.

But not everyone needs the same level of support.

There were, however, comments indicating that a structured and standardised format is a positive factor:

Essential to be on the 'same page.

Lack of policy / structure means supervision time may be wasted.

Due to statistical non-consensus and the mix of comments left by participants, the decision was made to amend the wording of this descriptor to reflect the comments. The rewording suggested there should be guidance for formal supervision so, if needed all prescribers can access the same level of support. However, there was no mandate for it to be a requirement. The re-worded statement was: "There needs to be guidance for clinical supervision sessions so everybody can access the same level of support".

The final table shows statement 16 which had an IQR >2 (Table 32).

*Table 32: Round one, descriptor 16*

16 - "All clinical supervision sessions should be documented in a written record" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
2.77	1.99	1.41	1.25	3.75	3	2.5	Include

There was a mixed view on this descriptor which is indicated in the variance: 16 participants ranked this descriptor as three or below, 13 participants ranked this descriptor as three or above. Some participants felt that this was an important element of clinical supervision:

A good idea within NMC (Nursing Midwifery Council) codes of being safe, reflective, evidence-based practitioners.

Document of time/date, key learning as well.

Others indicated that it might be a good idea, but should not be a mandatory part of clinical supervision:

Ideally for annual/6m CS (clinical supervision) sessions -it might be useful for NMC revalidation/scope of practice if the IP keeps a written record.

I think this would depend on the ground rules set by the supervisor and the student. From a reflective point of view they would be beneficial but I do not believe it should be mandatory.

Some participants disagreed with this descriptor indicating concern that it may put barriers to clinical supervision taking place:

This may distract from the sessions and take up too much time.

This would just lengthen the process and make it less likely to happen.

Due to the statistical variance, the high IQR and mix of comments left by the participants, this descriptor was added to round two with the same wording.

In conclusion, in round one, nine descriptors reached consensus (statements 1,2,3,4,5,6, 7,11,12) and two descriptors (statements 14 and 15) were reworded as shown in Table 33. One additional descriptor was added based on comments to statement eight as shown in Table 34 and five of the original descriptors were included in round two (statement 8,9,10,13,16). This gave a total of eight descriptors for round two. A copy of the Delphi survey used in round two is provided in Appendix 14.

Table 33: Re-worded statements

Round one	Round two
14 - "The clinical supervisor must be a GP" How would you rate the importance of this statement?	6 - "The clinical supervisor must be a prescriber" How would you rate the importance of this statement?
15 - "There needs to be clear guidance so clinical supervision is standardised so everybody is receiving the same support" How would you rate the importance of this statement?	7 - "There needs to be flexible guidance for clinical supervision sessions so independent prescribers can access appropriate support for their needs" How would you rate the importance of this statement?

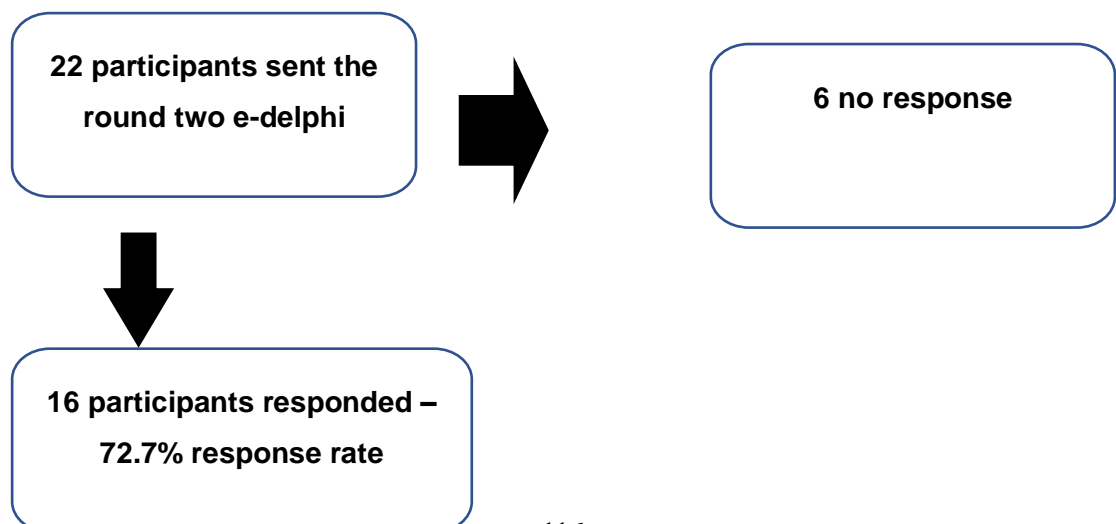
Table 34: Additional descriptor

Round one	Round two
8 - "All independent prescribers in primary care should have formal clinical supervision arrangements" How would you rate the importance of this statement?	1 - "All independent prescribers in primary care should have formal clinical supervision arrangements" How would you rate the importance of this statement?  2 - "All independent prescribers in primary care should have the option to access formal clinical supervision arrangements" How would you rate the importance of this statement?

#### 5.4.4. Round Two Delphi Survey Findings

As shown in Figure 7, 16 respondents (out of the original 22 who participated in round one) participated in round two of the Delphi.

Figure 7: Round two participants



This section will describe the findings for round two including both the statistical analysis and the comments left by the participants. As in the previous section, the findings are presented in ascending order of their IQR beginning with those statements that achieved consensus with an IQR of less than one.

Table 35: Round two, descriptor six

6 - "The clinical supervisor must be a prescriber"							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
5.0	0.0	0.0	5	5	5	0	Consensus

As shown in Table 35, statement six achieved a high level of consensus. The descriptor was added to round two based on the comments left in round one for question 14 which stated, "The clinical supervisor must be a GP". The related question reflected the comments left by the participants and resulted in 100% agreement amongst respondents. The requirement for a clinical supervisor to be a prescriber appears to be an imperative factor in clinical supervision, this was clarified by comments left by participants:

Yes, essential; how could someone with no experience of prescribing 'oversee' a prescriber.

Should be someone doing a similar role, and with a longer more varied experience as a prescriber, so a GP for primary care or a senior experienced ANP. I don't think non-prescribing nurse managers should be involved.

Table 36 displays the new descriptor based on the comments left in round one, question eight: "All independent prescribers in primary care should have formal clinical supervision arrangements".

Table 36: Round two, descriptor two

2 - "All independent prescribers in primary care should have the option to access formal clinical supervision arrangements" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
4.56	0.75	0.86	4.75	5	5	0.25	Consensus

This additional descriptor appeared to reach consensus with a low IQR due to the emphasis on the option to access rather than it being a requirement. This was reflected in the comments left by the participants:



It needs to be tailored to the individual. It (clinical supervision) needs to be flexible so the IP can increase support when they feel it is needed e.g., if they were taking on a new area of prescribing.

Table 37 displays the descriptor which was a reworded version of round one, question 15: "There needs to be clear guidance so clinical supervision is standardised, so everybody is receiving the same support".

*Table 37: Round two, descriptor seven*

7 - "There needs to be flexible guidance for clinical supervision sessions so independent prescribers can access appropriate support for their needs" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
4.5	0.63	0.79	4	5	5	1	Consensus

The comments left by the participants and the statistical analysis of the findings in round one indicated mixed views with a lack of consensus on the implied requirement to access standardised clinical supervision. The reworded version appears to have met consensus with a low IQR and supportive comments:

Yes, agree with flexible and appropriate for their needs.

*Table 38: Round two, descriptor five*

5 - "Clinical supervision needs to take place on a monthly basis as a minimum (pro-rata)" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
3.38	1.48	1.22	2.75	4.25	4.5	1.5	Reviewed and no consensus met

Table 38 displays the round two descriptor that reached an IQR greater than one but less than two. The descriptor that was deemed to not meet consensus due to the statistical variance and the comments left by the participants. Four participants rated this descriptor as two or below and seven participants rated this descriptor as four and above, this is illustrated in the variance. The comments left by the participants further clarified the need for the frequency of clinical supervision to be individually decided between the supervisee and supervisor instead of a prescribed frequency:

Not sure if it necessarily needs to be this often - may vary from person to person.

I guess it depends on the clinical situation and what is being prescribed I think monthly is over the top for established IPs. Maybe new IPs would value this but still feel it's too often -IPs tend to be nurses (or AHPs) working at an advanced level and more confident in their ability.

Frequency will depend on level of experience, if developing competencies/scope of practice in a new area.

The following four tables (41, 42, 43, 44) below display the round two descriptors that reached an IQR greater than two.

*Table 39: Round two, descriptor four*

4 - "Having an agenda and an action plan for clinical supervision sessions is important" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
4.0	1.75	1.32	3	5	5	2	Non-consensus

Table 39 displays the descriptor that received a slightly higher IQR in round two (IQR=2) compared to round one (IQR=1.75) but overall, the descriptor had very similar ratings in both round one and round two. The comments left by participants were equally varied, with some in favour of this descriptor:

Enables forward momentum and hopefully prevents unnecessary nit picking which can destroy confidence.

Structured questions on the day for time efficiency. Or if specific subject. Time to prepare/ research.

And some participants had negative views of the descriptor:

IP should be able to act with more freedom than this. How can you have an action plan (in this context) for prescribing decisions. may as well have a PGD to follow.

This descriptor has stimulated mixed responses from the participants over the two rounds. The comments regarding this descriptor elicited strong agreement and strong

disagreement with very few appearing to have a neutral opinion on this descriptor. This would indicate that the option of having an agenda and an action plan for clinical supervision would be an important aspect of a clinical supervision model, but not a requirement for all clinical supervision sessions in practice.

*Table 40: Round two descriptor one*

1 - "All independent prescribers in primary care should have formal clinical supervision arrangements" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
4.06	1.18	1.09	3	5	4.5	2	Non-consensus

Table 40 displays the descriptor included from round one where it did not meet consensus. The IQR remains the same but the other indicators such as the median, the mean and the variance are closer to meeting consensus. The additional descriptor that was created based on the comments from this descriptor: "All independent prescribers in primary care should have the option to access to formal clinical supervision arrangements" in round one met consensus with a low IQR and supportive comments. Many of the comments left by the participants highlighted the importance of formality in clinical supervision:

I feel that this is essential for ongoing development as an IP.

It should be a requirement for prescribing within primary care - both parties learn - the prescriber plus the supervisor - builds a relationship too.

Provides backup for the IP when there are queries or concerns.

The lack of agreement appeared to be about the perception that the descriptor indicated a 'dictation' that clinical supervision must be conducted in a uniform way. It appears that the existence of formal clinical supervision is important but, the element of choice for the independent prescriber to access it and to tailor it to their needs is vital.

Mutual agreement rather than dictated, should vary with level of experience and role.

Although this descriptor was closer to meeting consensus in round two, the comments left by the participants indicated that the additional descriptor is a more accurate description of what the participants want.

Table 41: Round two, descriptor two

3 - "Face-to-face clinical supervision is better than remote supervision (email, telephone etc)" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
4.0	1.25	1.12	3	5	4	2	Non-consensus

Table 41 displays descriptor three from round one where it did not meet consensus. Although 15 participants rated this descriptor as 3 or above, it gained a higher IQR in round two than round one. The comments left by the participants indicated a preference for face-to-face clinical supervision:

Personal interaction and body language will alert you if you feel someone is not as confident as they may appear on paper /email.

There was however a concern about this being realistic:

Depends on the individual. Time restraints may make telephone easier.

The comments and statistical findings indicate no consensus on this descriptor. It does however indicate that face-to-face clinical supervision may be preferred but, the key importance is that clinical supervision occurs whether this be face-to-face or remotely.

Table 42: Round two, descriptor eight

8 - "All clinical supervision sessions should be documented in a written record" How would you rate the importance of this statement?							
Mean	Variance	Standard deviation	Lower quartile	Upper quartile	Median	IQR	Outcome
3.94	1.68	1.3	3	5	4.5	2	Consensus met

Table 42 displays descriptor eight which did not meet consensus. The descriptor's statistical findings in round two are closer to consensus than in round one. Eleven participants rated this descriptor as four or above whereas only three rated the descriptor

as two or below. Although the statistical findings indicated a near consensus decision on this descriptor, the comments left by the participants clarified the decision that consensus had been met. Most of the comments left are in support of clinical supervision sessions being documented for varying reasons:

Use for revalidation/ reflection later.

If it ain't documented it ain't happened(!) needed for revalidation and UHB requirements.

I keep a notebook and date of each meeting with brief notes. Ad hoc discussions during clinics about a specific patient and medication is documented in patient notes at the time, and if needed further discussion would be brought to next clinical meeting with supervisor.

There was a comment indicating that the documentation would need to be brief for practicality purposes:

Important, but not time-consuming forms – brief.

The comments indicate support for clinical supervision documentation but that it needs to be flexible to suit the needs and situation of the independent prescriber. In some cases, the sessions could be heavily documented to support governance such as revalidation. In other cases, documentation could be used to make brief notes to guide discussion in the clinical supervision session. A model with the flexibility to suit all situations would appear to be beneficial.

In summary, there were 13 descriptors that met consensus—nine plus four over the two rounds. These are shown in Table 43. Four descriptors did not achieve consensus. Those four descriptors were about the flexibility needed in the supervision arrangements. In addition to the comments discussed, respondents also included other broader comments on the structure, content, and process of clinical supervision. These additional qualitative findings are discussed in the next section.

Table 43: Consensus statements

Round One
R1 - 1 "The purpose of clinical supervision is to support me in my clinical practice"
R1 - 2 "The purpose of clinical supervision is to give me confidence in my clinical practice"
R1 - 6 "Ad -hoc support and access to another prescriber for immediate support when I'm in a difficult clinical situation is important to me"
R1 - 3 "Clinical supervision should be a positive learning experience"
R1 - 7 - "Informal and ad-hoc clinical supervision is not enough as the only form of supervision" How would you rate the importance of this
R1 - 5 "My supervisor's role is to support me to achieve my learning needs"
R1 - 12 "Reflection on clinical practice should be a key part of clinical supervision"
R1 - 4 "The clinical supervision agenda needs to be primarily led by me and my identified learning needs"
R1 - 11 "Protected time should be given for clinical supervision"
Round Two
R2 - 2 "All independent prescribers in primary care should have the option to access to formal clinical supervision arrangements"
R2 - 8 "All clinical supervision sessions should be documented in a written record"
R2 - 6 "The clinical supervisor must be a prescriber"
R2 - 7 "There needs to be flexible guidance for clinical supervision sessions so independent prescribers can access appropriate support for their needs"

The descriptors in round one explored the purpose, characteristics, and structure of clinical supervision. The descriptors in round two explored the structure and characteristics of clinical supervision. Participant comments were extremely informative, adding depth to the data collected. At a broader level, the findings from round one and round two have identified perceptions of the ideal purpose, characteristics, and structure of clinical supervision. These three aspects identified in the findings of this Delphi study were discussed.

#### 5.4.5 Other qualitative findings

The three descriptors exploring the purpose of clinical supervision reached consensus in round one with all three descriptors having an IQR of less than one. These were statements 1, 2 and 3 in the round one survey (Table 24). The purpose of clinical supervision, agreed by the respondents, was that clinical supervision should support them in their clinical practice, should give them confidence and be a positive learning experience. These views are supported with the following quotes:

Yes - I am looking for reassurance that my actions are correct.

It's about supporting and mentoring when a colleague needs it, not constantly looking over their shoulder.

Unfortunately, through perhaps bad management it is feared by many as a way of reprimanding individuals which was not its original purpose. Clinical supervision is an essential part of being a safe practitioner regardless of the area in which one works and should be seen as a positive addition to practice and not feared.

Amongst the comments there was a feeling that the participants were trying to communicate the need for clinical supervision sessions to be empowering rather than oppressive. Although there is a clear need for criticism of practice at times, this needs to be delivered positively for clinical supervision sessions to be embraced and effective:

I also require constructive criticism so that I may improve.

Open positive culture rather than that of blame should be encouraged.

There were five descriptors that reached consensus exploring the characteristics of the session of clinical supervision—statements 4,5,11,12, round one; statement 6, round two (Table 45). These descriptors identified the following issues as being important characteristics of a clinical supervision session: the supervisor should be a prescriber, protected time should be given for supervision, reflection was a key part of supervision, the supervisor's role was to support the supervisee's learning needs, and the agenda for the clinical supervision session needs to be led by the supervisee.

The descriptor that reached the highest consensus (100%) is the amended statement that the clinical supervisor must be a prescriber. This appears to be an important feature of the clinical supervisor. Participants were clear that a prescriber could be an independent prescriber or a doctor prescriber:

Should be someone doing similar role, and with longer more varied experience as a prescriber, so GP for primary care or senior experienced ANP, I don't think non-prescriber nurse managers should be involved.

The five descriptors reaching consensus exploring the characteristics of clinical supervision appear to represent an impression that a joint approach, instead of a hierarchically superior supervisor approach, with the agenda primarily being led by the independent prescriber was an important aspect:

The person who requires the supervision is best placed to decide which areas they need support in, they know their strengths and limitations.

If it is your clinical supervision session it should be guided by your agenda. this may differ if you are supervising others.

It was determined that the agenda and content of the session should be primarily, but not exclusively, led by independent prescribers' own identified learning needs due to the recognised importance of reflection on practice:

Reflection is now an integral part of practice and goes toward revalidation. Getting one's thoughts on paper is essential; to learn from experiences.

Reflection is how we improve and should happen naturally.

There was also an acknowledgement that there is merit in the supervisor also bringing identified learning needs to the session:

Whilst clinical supervision needs to relate to identified needs there are also times when feedback (both positive and negative) from other clinician may need to be raised and discussed.

My supervisor may identify learning needs which I have not identified which may be more relevant than the ones I have chosen.

The idea of a joint approach to clinical supervision sessions, with the ethos of open and equal conversation, appears to be an important feature of the content of clinical supervision. An agenda exclusively driven by either the supervisor or the supervisee has been identified as an inadequate aspect of clinical supervision. Allowing protected time to facilitate clinical supervision is also seen as important. Without allocated protected time, clinical supervision is ad-hoc and often gets overlooked:

protected time, otherwise it often doesn't happen.

Findings from the survey suggested that, in terms of structure, the supervision sessions should have flexible guidance to support prescribers; that all prescribers should have the



option of accessing formal supervision arrangements; and that ad-hoc support should be available if the prescriber finds themselves in a difficult clinical situation (statements 6 and 7, round one; statements 2 and 7, round two). The general ethos around the structure of clinical supervision appeared to be about having a model which could support formal, flexible, and non-compulsory sessions. The re-wording of the two descriptors to reflect an optional and flexible guidance were key in achieving consensus amongst the participants. It was clear that mandatory, uniform, and predetermined clinical supervision sessions were not desired. However, uniform standards and guidelines which the prescriber could have the option of utilising, would be helpful. Formal clinical supervision has been identified as an important factor in safe and supported independent prescribing:

CS needs to be formalised to support the importance of the nurse's value in prescribing.

For patient safety it is very important that non-medical prescribers have a formal clinical supervision process.

Formal clinical supervision is wanted; however, mandatory and uniform clinical supervision sessions were not favoured. The content, frequency and level of support might vary with the individual depending on experience.

This may vary on individual needs and experience.

It depends on the experience of the IP who may need more support in the early years.

Many IPs work at different levels.

The participants indicated a preference for guidelines that structure clinical supervision that can be utilised at any stage of a prescribing career:

A formal more structured guideline is important otherwise supervision in some area may not happen.

It also provides structure and guidance to prevent going off on a tangent when time is limited.

A lack of policy / structure means supervision time may be wasted.

However, the guidelines need to be flexible to be utilised as much or as little as needed on a case-by-case basis; dependent on the perceived support required for the independent prescriber. In some cases, the supervision sessions may be quite detailed if extra support is needed, in other cases the sessions may be quite brief:

Amount of supervision needed varies with experience in role.

People are different and working in different areas. For example, working as a specialist practitioner in diabetes or heart failure would require knowledge of a relatively narrow field of drugs in comparison to an individual working in general practice where a wider drug formulary is necessary to function at full capacity.

Yes agree, flexible and appropriate for their needs.

While formal supervision played a key role, the importance of ad hoc informal clinical supervision was not disputed and in some cases was preferred:

Sometimes the informal sessions are more productive and can give a greater depth to learning than the formal ones.

Ad hoc clinical supervision, however, may not fulfil all the needs of an independent prescriber:

Learning needs may not be fulfilled purely by ad hoc supervision.

With both formal and informal supervision, there was a concern about this being realistic in practical terms:

It depends on the individual and how easy it is to meet up - not all clinicians cross over however I would favour face to face.

Depends on the individual. Time restraints may make telephone easier.

The comments presented here indicate that while face-to-face clinical supervision may be preferred, the key feature is that clinical supervision occurs, whether this be face-to-face or remotely. A feature of the clinical supervision session that reached consensus (round two, descriptor eight) was that the session should be documented.

#### 5.4.6 Discussion

The descriptors of this Delphi survey were informed by the wider qualitative study in Phase 1. The findings of the Delphi survey have provided evidence for what is needed in clinical supervision sessions. There appears to be strong support that clinical supervision should be accessible at whatever level the supervisee feels is appropriate for them. Some findings from the Delphi indicate that this level of support is not dependent on the amount of time the clinician has been prescribing and is in fact, an individual need specific to the clinician. The valuable input and opinion of the supervisor was acknowledged but, it was clear that the purpose, content, and structure of clinical supervision should not be dictated by a hierarchical structure. There have been strong indications that a hierarchically superior supervisor arrangement is not desired.

The findings of the Delphi suggest that a model of clinical supervision should reflect these ideals to support inclusive and supportive clinical supervision. The findings also advocate that this model of clinical supervision needs to be flexible and user-friendly due to the inevitable time constraints and diversity of independent prescribers in primary care. The findings suggest there is a widespread view that the ideal purpose of clinical supervision should be a positive learning experience aimed to support confidence and clinical practice and should in no way become part of an appraisal or hierarchical appraisal process. Issues around competence and clinical governance have been raised and are included in TIMSS. The focus was still very much on confidence but the issues perceived to be related to competence and clinical governance were also included in the model as participants identified and linked them with confidence. It is possible that participants' understanding of clinical governance may not be the same as those working in clinical governance. The core definition of what the participants felt clinical supervision should reflect did not change:

**'emotionally supportive supervision sessions that enable reflection and build professional confidence.'**

The findings from this Delphi study indicate that clinical supervision should not be used as a management or appraisal tool, and the focus should be on support and reflection. These findings are similar to a study by Pearce and Winter (2014) who found that clinicians are not comfortable merging discussions about management issues when reflecting on clinical practice. Though, it is important to note that the study by Pearce and Winter (2014) was undertaken with mental health nurses and not independent prescribers. Although Pearce and Winter (2014) and Cutcliffe et al. (2018) did not evaluate independent prescribing, both found that most clinical supervision sessions were undertaken by the manager of the supervisee. The findings indicate that the supervisor must be a prescriber and that management and appraisal issues have no place on clinical supervision sessions. The findings are clear that the session should be primarily led by the supervisee and that hierarchically superior supervisor arrangement is not desired.

The findings suggest that clinical supervision needs to be tailored to the needs of the supervisee rather than a one size fits all ethos. Puffett and Perkins (2017), when looking at palliative care nurses' decisions to engage with or decline clinical supervision, found clinical supervision should be tailored to meet the preferences of staff to limit resistance to clinical supervision and anxiety. There are key differences between the study by Puffett and Perkins (2017) and this study. Namely their study used focus groups instead of individual interviews, which may have influenced some of the participant's views, and that the participants were exclusively palliative care nurses. It could be argued the palliative care nurses may require a different type of clinical supervision tailored to their needs due to their highly emotional work environment. Their study does, however, highlight the importance of choice for support instead of it being a requirement to engage in rigid uniformity, which shares similarities to the Phase 2 findings.

Individualised clinical supervision is a well-documented factor for resistance to clinical supervision in the literature. Buus et al. (2017) explored 24 Danish mental-health nurses' views on group clinical supervision who were not participating in supervision. There are key differences between their study and the Phase 2 research. Notably, the participants were not from the UK and may work in a different health environment, and their participants were mental-health nurses who may require a specific type of clinical supervision due to the potentially intense workplace. In addition to these differences in the characteristics of the participants, this study only chose to examine the findings of those nurses who were not engaging with clinical supervision, which may give a distorted view of the findings. Although there are notable differences between the study by Buus et al.

(2017) and Phase 2, they also found importance in the style of clinical supervision for the supervisee and that the primary reason for resistance to clinical supervision is the manner in which it was conducted. Although Puffett and Perkins (2017) found a conflicting view in their study in that group clinical supervision was a preferred method, it illustrates the point that clinical supervision needs to be tailored to the supervisees' needs.

There are various comprehensive competency frameworks for advanced clinical practice (National Leadership Innovation Agency, 2014) and prescribing practice (National Prescribing Centre, 2012) to assess and monitor professionals' competency in practice. However, what is missing is the optimal format for clinical supervision to achieve these competencies. Although the importance of clinical supervision is widely documented, there are currently no models or guidance for clinical supervision. An empirical model of clinical supervision was created from the findings and entitled, *The Informed Model of Supportive Supervision (TIMSS)* (see section 5.4). This model of clinical supervision can be used to support clinicians to achieve competencies in the relevant competency frameworks but still very much focuses on the ethos of clinical supervision being about support and confidence rather than primarily aimed at competence. It may help to support effective clinical supervision sessions which give a forum to discuss any issues and barriers in achieving supervisees' maximum potential in their clinical excellence.

Independent prescribing could be described as a complex intervention. Complex interventions have several interacting components, and evaluating these can be challenging if the process of the complex intervention hasn't been fully defined (Medical Research Council, 2006). The MRC (Medical Research Council) has guidance on developing and evaluating complex interventions which helps researchers identify the stage they are at with the research process and ensures progress is being made to developing the complex intervention (Medical Research Council, 2006). The frameworks' four stages are: developing an intervention, conducting feasibility or pilot studies, evaluating the intervention and implementation of the intervention. This research did not set out to develop an intervention, however, the TIMSS model of clinical supervision could be utilised as a theoretical basis to understand what an intervention may look like to support independent prescribers. Complex interventions have been successfully used to promote safety in prescribing in primary care (Grant, Guthrie and Dreischulte, 2014; Murphy et al., 2017). To date, a complex intervention has not been developed to improve support of independent prescribers in primary care. The findings of the two phases of research indicates that behaviour needs to change towards independent prescribers to

support them in a more effective way. Following the MRC framework may be an effective way to do this, using TIMSS to develop the intervention and then test its feasibility in practice may be an option for future work.

It is hoped the TIMSS model will lead to a future study that will test its effectiveness in practice, as discussed above, potentially following the MRC framework for a systematic approach to the next phase. Phase 3 of this research focused on exploring key stakeholders' views of TIMSS and their perceptions of the current governance structures around independent prescribers in primary care. These issues are discussed in Chapter 6.

## **5.5 The TIMSS Model of Clinical Supervision**

### **The Informed Model of Supportive Supervision (TIMSS)**

TIMSS is an empirically designed clinical supervision model aimed to support and enhance clinical supervision sessions for independent prescribers.

#### *How to use TIMSS*

TIMSS is best used in clinical supervision sessions between a prescribing supervisee and a prescribing supervisor to guide and structure an informative discussion that aims to build confidence and competence in clinical practice:

- It can be used by all independent prescribers working in primary care.
- The model is designed to be flexible, aspects listed can be discussed or omitted from the session depending on the need of the supervisee.
- TIMSS can be used in face-to-face or remote sessions.
- TIMSS can be used as formally or informally as the attendees feel the need, it is designed to *guide not dictate* sessions.
- TIMSS can be used as a general tool to guide reflection on practice, it can also be used to guide a more structured session resulting in an action plan. The use of this tool may vary between sessions and can be iterative within a session. The format in which the tool is used is to be primarily informed by the supervisee.

#### *Why TIMSS was developed*

Clinical supervision and support for independent prescribers are critical components in supporting safe and effective practice. There are various competency frameworks to

assess the competency of prescribers (National Prescribing Centre, 2012; Postgraduate Education Centre for Pharmacy, 2018; Royal Pharmaceutical Society, 2016) but there are no models or guidelines of clinical supervision for prescribers in primary care. Effectively supporting primary care independent prescribers is essential to meet the growing demands on primary care services but, the challenge is cultivating effective supervision. Reflection is a key aspect of the literature for both nursing and pharmacy. Still, the specific aims and guidance of clinical supervision are absent. It is vital that clinical supervision is effective for supervisees if it is to contribute to the development of their clinical practice. If clinical supervision is perceived to be ineffective or irrelevant, the sessions can become overlooked resulting in under supported independent prescribers. TIMSS is designed to be used to:

- Guide and structure supportive clinical supervision sessions
- Facilitate reflection within these clinical supervision sessions
- Stimulate discussion about clinical practice
- Identify and discuss potential learning opportunities
- Support prescribing competency frameworks

TIMSS is NOT a competency framework for a performance management or assessment tool.

#### *How the dimensions were developed*

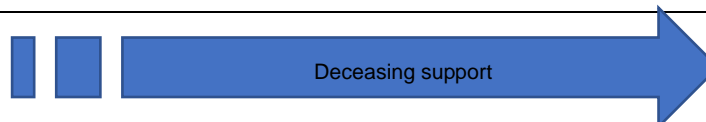
The dimensions emerged following:

- A literature review designed to explore clinical supervision.
- Semi-structured interviews with non-medical prescribers exploring their perceptions of effective clinical supervision.
- Consensus surveys identifying consensus amongst independent prescribers on what is required for effective clinical supervision and on what parameters of effective supervision is there agreement.

The Informed Model of Supportive Supervision (TIMSS)

Continuum of Requirement

**Examples of reflection in all continuums:** Supervisee to reflect on recent pertinent clinical cases, Have there been any significant positive clinical experiences? Any clinical cases which need further discussion/ advice? Reflect on any clinical cases that have highlighted a need for further learning, Supervisor to reflect on any of their own relevant clinical cases that the supervisee might benefit from.



<u>Domains</u>	<b>A</b>	<b>B</b>	<b>C</b>
<b>3. Examples of supervisees</b>	<p>New prescribers</p> <p>Prescriber wishing to extend their scope of practice to a new drug group/drug</p> <p>New setting - secondary to primary care/ specialist to general prescribing</p>	<p>More experienced prescriber new to role</p> <p>Experienced prescriber extending scope of practice</p> <p>High risk patient group/high risk prescribing (addiction, mental health, safeguarding, challenging patient group.)</p>	<p>- Experienced prescriber with experience in scope of practice needing occasional supervision sessions to support practice</p>
<b>4. Structure</b>	<p>A scheduled session pre-agreed between supervisee and supervisor, ideally face to face. Sessions usually held <b>weekly/fortnightly sessions (assuming access to ad-hoc support when needed).</b></p> <p><b>Documentation (inputs/outputs of the session)</b></p> <p>A clear written agenda agreed before the start of each session and key points to action documented afterwards</p>	<p>A scheduled session pre-agreed between supervisee and supervisor, ideally face to face. Sessions are scheduled flexibly <b>fortnightly/monthly (assuming access to ad-hoc support when needed).</b></p> <p><b>Documentation (inputs/outputs of the session)</b></p> <p>An agenda may be verbally agreed beforehand, with possible actions points verbally agreed afterwards</p>	<p>Scheduled occasional meetings either face to face or less formally on email/Skype or on the phone. Meetings occur <b>monthly/bimonthly (assuming access to ad-hoc support when needed).</b></p> <p><b>Documentation (inputs/outputs of the session)</b></p> <p>Agenda/action points not specified</p>



<p><b>5. Content</b></p>	<p><b>Reflection on practice</b></p> <ul style="list-style-type: none"> <li>- Specific case study discussion</li> <li>- Discuss scope of practice -adequate support in place?</li> <li>- Aware/discuss guidelines (NICE/local guidelines) in prescribing remit?</li> <li>- Action plan in place to support new scope of practice</li> </ul> <p><b>Learning</b></p> <ul style="list-style-type: none"> <li>- Clinical updates</li> <li>- Additional training needs to support new scope of practice?</li> <li>- Are the systems in place for prescribing and prescribing support adequate?</li> </ul> <p><b>Notes:</b></p>	<p><b>Reflection on practice</b></p> <ul style="list-style-type: none"> <li>- Aware of prescribing policies/guidelines in area of prescribing?</li> <li>- Adequate support in new area? Points of contact</li> <li>- Discuss pertinent cases, emotionally strained consultations/cases. Any extra support needed?</li> </ul> <p><b>Learning</b></p> <ul style="list-style-type: none"> <li>- Clinical updates</li> <li>- Plan to extend scope of practice</li> <li>- Training needs to facilitate extended scope of practice</li> </ul> <p><b>Notes:</b></p>	<p><b>Reflection on practice</b></p> <ul style="list-style-type: none"> <li>- Any clinical cases that need further advice?</li> <li>- Interesting cases that instigate further thinking/learning?</li> </ul> <p><b>Learning</b></p> <ul style="list-style-type: none"> <li>- Clinical updates</li> <li>- Discuss any need/desire to extend scope of practice?</li> <li>- Further learning/updates requested?</li> </ul> <p><b>Notes:</b></p>
<p>Supervisee:</p> <p>Supervisor:</p>			

## 6. Phase 3 Methods and Results

### 6.1. Introduction

The previous chapter presented the findings from Phase 2 of the research. In this chapter Phase 3 builds upon these findings by exploring key stakeholders' perceptions of the informed model of supportive supervision (TIMSS) and their perceptions of the governance of independent prescribers in primary care. This chapter describes the specific methods to be used to explore the phenomenon, the methods of data analysis, and Phase 3 findings. The objectives for Phase 3 were:

1. To explore stakeholders' views of a model of effective supervision for NIPs and PIPs.
2. To investigate stakeholders' views of the broader issues affecting effective support for NIPs and PIPs.

### 6.2. Methods

#### 6.2.1. Sample and recruitment

Phase 3 used a similar approach to Phase 1 and the full details of the sample and recruitment methodology can be found in Chapter 3. Purposeful sampling was used to ensure a suitable sample of participants were selected. Participant inclusion criteria are detailed below (Table 44).

*Table 44: Essential participant criteria*

Key stakeholder in the policy and governance of clinical supervision of independent prescribers in primary care; individuals involved in developing policy or governance criteria for independent prescribers in primary care, and/or individuals involved in implementing policies and those involved at a more strategic level (at different levels in the governance hierarchy).
Individuals from a range of professions (medicine, nursing, pharmacy) across Wales
Currently employed in a role involving direct clinical supervision of independent prescribers in Wales.

A scoping exercise between the researcher and the supervisory team to establish to the key stakeholders involved in independent prescribing was conducted to create the original

contact list for potential participants of key influencers involved in non-medical prescribing in primary care in Wales. This list included representatives from the Welsh Assembly Government, pharmacist and nursing professional bodies, pharmacy and nursing governing bodies, senior influencers in educational establishments, a combination of pharmacist and nurse representatives, supervisors in practice, and those involved in providing indemnity services for independent prescribers. Specific participants who did not work directly for the NHS and gave their consent to be contacted from Phase 1 of the research project were contacted with the study information and were given the option to disseminate it to their clinical supervisors. The researcher contacted the identified key stakeholders directly via email and shared the participant information sheet that was approved by Cardiff University School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee (Appendix 15) via email. No participants directly employed by the NHS Health Boards were included as participants in Phase 3 and thus Research and Development approval was not requested for this study.

Snowball sampling was used as a secondary sampling method to opportunistically draw on the networks of identified participants to provide further participants (Spren, 1992; Thomson, 1997). Snowball sampling involved two options for participants. The first was the participant sending the study information and a contact for the researcher to other colleagues who met the inclusion criteria, and they believed the colleague may be interested in joining the study. The second option was participants giving suggestions of potential participants to the researcher for direct contact to provide the study information. The contact details for these participants were obtained via a Google search of their workplace contact. In developing the sample group, the aim was to include a broad range of key stakeholders involved in the policy and governance of clinical supervision of independent prescribers in primary care, as well as those involved in the direct clinical supervision of independent prescribers. A broad geographical sample, as well as a range of professional groups, was used to involve stakeholders across Wales.

#### 6.2.2. Data collection

The primary method of data collection was through semi-structured interviews within individual and group settings. Group interviews and focus groups are, at times, seen as synonymous due to the propensity of both techniques to explore the perceptions and values of participants (Parker and Tritter, 2006), however, they are quite different, with

distinctive methods. The fundamental difference between the two techniques is the role of the researcher and the relationship the researcher has with the participants (Smithson, 2000). Group interviews involve the researcher adopting the role of an 'investigator' to lead an in-depth qualitative discussion, taking a central role rather than a peripheral facilitating role (Bloor et al., 2001). The researcher largely controls the dynamics of the discussion and can engage in conversation with specific individuals in the group at their discretion. In contrast to this, in a focus group setting the researcher takes on the role of a 'facilitator' (Parker and Tritter, 2006). The researcher facilitates discussion between the group and not between the participants and the researcher directly.

Group interviews were chosen over focus groups to minimise other perspectives influencing participant views given that the aim of the research was to explore individual perspectives (Bloor et al., 2001). The semi-structured design of the interview methods is more difficult to achieve in a focus group setting as conversation and topics discussed in this form of setting are more fluid and less controlled (Bloor et al., 2001). Group interviews were undertaken at the participant's request; however, individual semi-structured interviews were preferred to reduce strong personalities dominating the discussion and other perspectives influencing participant views (Creswell, 2003). It was clear that some participants from the same organisation preferred to be interviewed with a colleague. Participants in the group interviews worked in the same organisation to minimise the influence of other organisation's perceptions on the phenomenon being explored. Field notes were kept during interviews to record the researcher's perceptions about the interviewee, and the impressions of the interview process overall.

A topic guide, approved by Cardiff University School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee, was used to inform the interviews (Appendix 16). The topic guide became an active document, revised and informed throughout the interview process, and developed iteratively. A pilot study was undertaken with the first two participants. These data were included in the final report (see Table 50 for data reference) as no changes were made to the topic guide as a result of the pilot.

The interviews explored the participants' views of the Informed Model of Supportive Supervision (TIMSS) and their perception of clinical governance in relation to independent prescribers in primary care in Wales. A copy of the model was sent to the participants prior

to the interview, a hard copy was also given to the participants at the start of the interview. The project aimed to continue recruitment until data saturation when no new topics were arising from the interviews. To support emerging themes and further reflection, a semi-structured interview technique facilitated further probing of any issues that the participants highlighted. The researcher recorded all interviews with an Olympus digital recorder. The individual participants were interviewed once and had the choice of a face-to-face or telephone interview. The group interviews were conducted in a face-to-face setting, although participants had the option for the interview to be conducted via conference call. The interviews were arranged to take place at a time and location convenient to the participant.

### 6.2.3. Ethical considerations

Ethical approval for this study was granted by Cardiff University School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee on 21 November 2019 (Appendix 17). Some participants requested to have the interview conducted over the phone due to their geographical location. Another participant group refused to be interviewed individually and requested to be interviewed as a group. The potential issues associated with group interviews were acknowledged and discussed in Chapter 3, notably peer influence, however, it was decided between the researcher and their supervisor that a group interview from this particular participant group, as it was a key stakeholder involved in Independent Prescribing in Wales, was preferable rather than no interview. Amendments were made to the agreed study protocol to enable telephone interviews and group interviews to take place at the participant's request. The amendments were approved by Cardiff University School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee on 11 December 2019 (Appendix 18). All of the relevant study information as above, including recruitment email and patient information sheet, were sent by email to the potential participants by the researcher. If the participants were happy to participate in the study, they contacted the researcher to let them know. If the participants declined to participate in the study, no further contact was made by the researcher, and the respective contact details were deleted from the researcher's records. The researcher sent two reminder emails at two-week intervals to potential participants who had not responded. If there was no response after the second reminder email, it was assumed that the potential participants did not want to participate in the study.

An important aspect to any study involving human participants is the requirement for participants to give informed consent, and also an option to withdraw from the study at any stage until data anonymity is completed (Creswell and Miller, 2000). All participants were given the full study information and had the opportunity to ask the researcher any questions about the study. If participants agreed to take part, they were required to sign a consent form which was countersigned by the researcher. It was made clear to all participants that they had the option to withdraw from the study at any time before the data collected was anonymised. To ensure anonymity, all identifiable information such as the name of their specific workplace, colleagues, and area of work, were anonymised during transcription of the interviews. A participant number was allocated to the participants that had no direct link to the interview schedule to further ensure anonymity. There were no intrusive or upsetting questions in the topic guide (Appendix 16) which was also reviewed by the ethics committee and the interview discussion was not expected to cause any distress to the participant. The transcripts were stored on a Cardiff University password-protected computer hard drive, within a password protected encrypted file. The consent forms were stored by the researcher on Cardiff University premises in a locked cabinet under their data protection policy. Identifiable data in the form of consent forms will be stored for fifteen years in line with the Cardiff University research governance guidelines. The names, address and personal contact details of the participants needed for contact during the study was stored for less than one year. The recorded interviews were kept for less than one year and findings anonymised with a coding system and kept on a Cardiff University secure password-protected file in line with the research governance guidelines (Cardiff University, 2019).

#### 6.2.4. Data analysis

Framework analysis was used to analyse the data from the group and individual semi-structured interviews. Both forms of interviews used the same iterative topic guide and so the findings from both types of interviews can be analysed using the same method. No changes were made to the topic guide following the pilot study, and so these two interviews were used as data.

Framework analysis is not affiliated with a particular methodology and is used widely in social and health science research, commonly with individual and group semi-structured interview transcripts (Ritchie and Spencer, 1994). This framework method facilitates a

structured and systematic process to intensely analyse data across all themes: this is vital in qualitative research (Creswell and Miller, 2000).

There are variations of how framework analysis has been incorporated into research methodologies. This study follows the seven stages of framework analysis used in the multidisciplinary health research conducted by Gale et al. in 2013. The seven stages of the framework analysis used in Phase 3 are: transcription, familiarisation with the interview, coding, developing the analytical framework, applying the analytical framework, charting the data into the framework matrix, and interpreting the data. Framework analysis was also used in Phase 1 one of the research project. A full description of framework analysis and the detail of the seven stages involved are explained in section 4.2.4. The stages are discussed in relation to these data in section 6.3.2.

### **6.3. Results**

In this section, the process of participant identification, recruitment, and the response rate are discussed. The details of the participants' demographics are also incorporated in different formats to achieve a non-identifiable description of the participants and preserve their anonymity. This section then explores the findings of the study which has been analysed using the framework methodology, and the framework methods drawn upon are discussed explicitly. The section concludes with a discussion of the limitations and key points from the study.

#### **6.3.1. Participant Response**

Two group semi-structured interviews and seven individual semi-structured interviews took place over the five-month data collection period from November 2019 - March 2020 with key stakeholders involved in prescribing policy and supervision of independent prescribing nurses and pharmacists working in primary care in Wales. The group and individual interviews lasted on average 30 minutes (minimum 15 minutes and maximum 55 minutes). Participants were recruited from the five key bodies involved in oversight, policy development, education or with a wider role in influencing independent prescribers in Wales, and supervisors of independent prescribers in primary care.

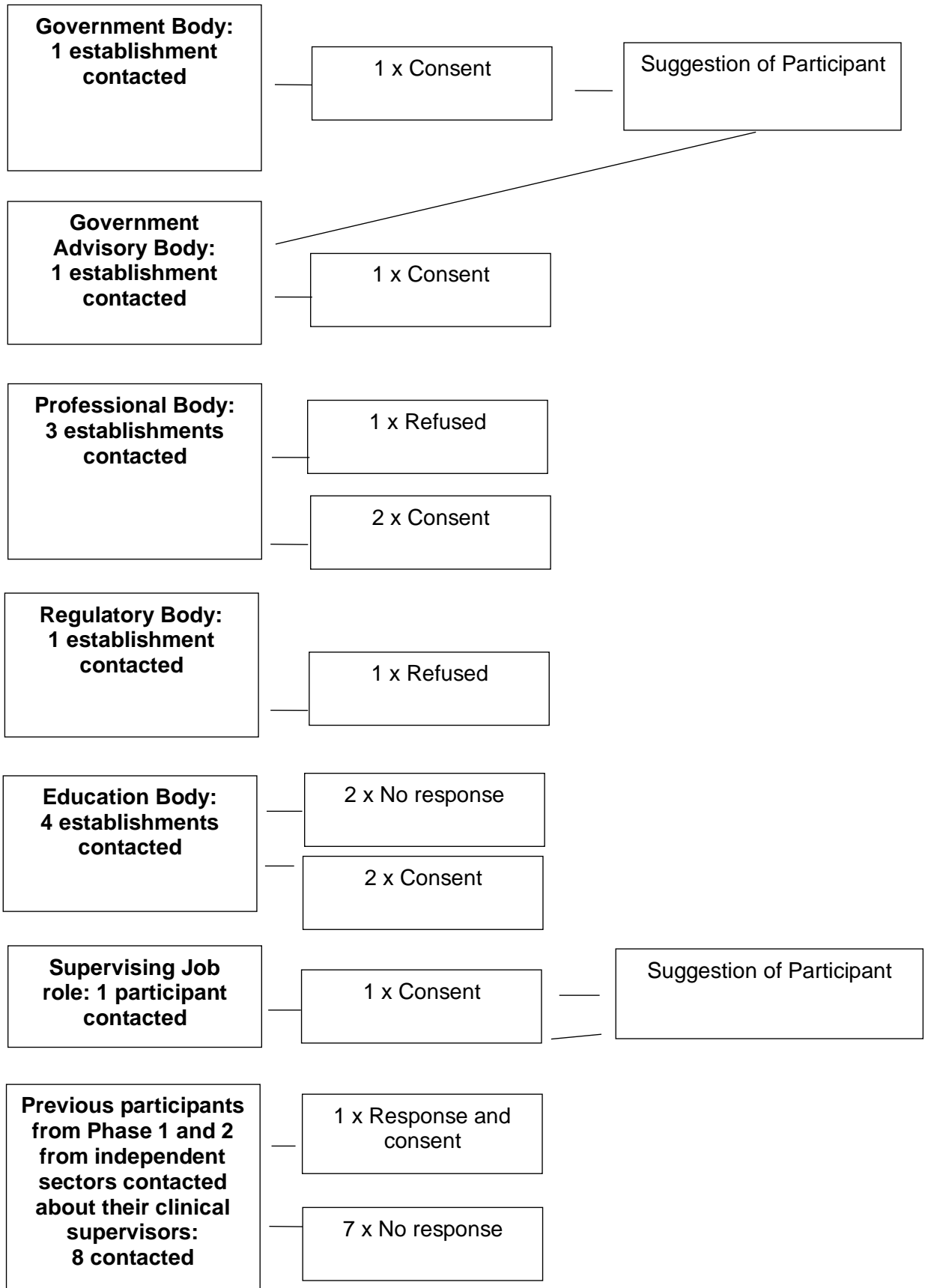
Participant recruitment

Figure 8 below illustrates the identification and recruitment process of the participants. As noted in section 6.2.2., the nine non-responders were contacted on a further two occasions. This lack of response was assumed as indicative refusal to engage with this study. All seven individuals and two groups (22 participants) interviewed consented to their responses to be used in the study findings.



Figure 8: Participant identification and response flow chart

Participant recruitment process:



Two identified key stakeholders refused to engage with the study. The professional body that refused to take part gave no explanation for the refusal. The regulatory body that refused to engage did, however, provide a formal written response, which they gave consent to present in this thesis:

Unfortunately our involvement in the practical aspects of the supervision of prescribing practice once a \*\*\* has qualified as a prescriber is extremely limited. We set the standards for the further post-graduate education programmes that must be undertaken in order to become a qualified prescriber, and we have adopted the Royal Pharmaceutical Society's Competency Framework for all Prescribers as our benchmark standards for prescribing proficiency and safe and effective prescribing practice. That is effectively the entire extent of our involvement in setting standards for prescribing. The clinical supervision models that are used to ensure that all prescribers are suitably line managed and supervised in their prescribing practice are a matter for local decision and management and are not something we are involved in. As such, we would not be able to comment on any model of clinical supervision or local governance arrangements for independent prescribers, in Wales or anywhere else in the UK.

They further discussed:

It might be helpful for us to flesh out what we stated in the original response. As a regulator, it is not within our remit to comment or advise on local policies which may be within the gift of employers who are also placement providers. We expect placement partners to work in partnership with \*\*\* approved education providers to plan the delivery of education programmes in a way that they meet our education standards. For prescribing proficiencies, we've adopted the RPS competency framework for prescribers and in terms of the education programmes for prescribing, we would expect \*\*\* approved education providers to meet the \*\*\* education standards. These standards are more outcomes focused with the aim of enabling education providers to think flexibly and innovatively. We would seek assurance from AEs (Approved Education Institutions) that they can ensure safe and effective learning for students. This might mean that there are different clinical supervision models in practice that are designed to meet the local resource requirements and priorities, however the broader standards we set continue to be met.

The response expressed their limited involvement in the practicalities of supervision of prescribing practice once a person is qualified as a prescriber. This regulatory body further explains that although they set the standards for postgraduate prescribing education, once a student is qualified, the body is no longer involved in clinical supervision standards and therefore suggest that clinical supervision is a matter for local decision and management.

The participants' areas of work, professions and job roles are presented separately to protect participant anonymity. The details of the areas of work/organisation, and the job roles in Tables 45 and 46, do not correspond on each line as some of the participants

have dual roles. Job roles are listed separately to ensure the participants remain non-identifiable. The professions of the participants are shown in Table 47.

*Table 45: Supervising participants (2 interviews)*

<b>Organisations</b>	<b>Job roles of participants</b>
<p><b>Cwm Taff Health Board</b></p> <p>1 Establishment</p> <p>1 Individual interview</p>	<ul style="list-style-type: none"> <li>• Advanced Nurse Practitioner Nurse Supervisor</li> <li>• Cluster Lead Pharmacist</li> </ul>
<p><b>Aneurin Bevan Health Board</b></p> <p>1 Establishment</p> <p>1 Individual interview</p>	

*Table 46: Policy participants (5 interviews and 2 group interviews)*

<b>Organisations</b>	<b>Job roles of participants</b>
<p><b>Government Body</b></p> <p>1 Establishment</p> <p>1 Individual Interview</p>	<ul style="list-style-type: none"> <li>• Policy and Engagement Lead</li> <li>• Associate Pharmacy Dean</li> <li>• Nursing Officer</li> <li>• Head of Programme development and advanced practice</li> <li>• Welsh clinical leadership fellow</li> <li>• Associate director of professional practice</li> <li>• Programme manager non-medical prescribing</li> <li>• NMC quality reviewer v300</li> <li>• Director MSC in Clinical Pharmacy and Pharmacist Independent Prescribing Programmes</li> <li>• Head of Safety and Learning</li> <li>• Clinical Assessor &amp; Safety &amp; Learning Advisor</li> </ul>
<p><b>Government advisory body</b></p> <p>1 Establishment</p> <p>1 Group Interview, 15 participants</p>	
<p><b>Educational Body</b></p> <p>2 Establishments</p> <p>2 Individual interviews,</p> <p>1 Group interview, 2 participants</p>	
<p><b>Professional Body</b></p> <p>2 Establishments</p> <p>2 Individual interviews</p>	

Table 47: Phase 3 Participants' Professions

<b>Pharmacist</b>	4
<b>Nurse</b>	8
<b>Paramedic</b>	2
<b>Lawyer</b>	1
<b>Doctor</b>	2
<b>Administration and Clerical</b>	5

As shown in tables 45, 46 and 47, the study incorporated a diverse range of participants. Of the five key bodies involved, there is at least one establishment in each category which has an all-Wales responsibility. A diverse sample and representation from both policy informants and participants with supervisory roles is an important aspect to support the transferability of the findings.

### 6.3.2. Data Analysis

Framework analysis was conducted to analyse the findings in Phase 3. The seven-stage process by (Gale et al., 2013) was followed:

#### **Transcription and Familiarisation**

The data review was undertaken via a two-stage immersion approach. Firstly, the researcher listened to each interview to get a general sense of meaning. The interviews were then reviewed again by the researcher, and a speech-to-text program was used to transcribe the interviews. The transcriptions from the interviews were proofread whilst re-listening to the recording. Lastly, the researcher listened to each interview whilst reading through the accompanying transcript to check for inaccuracies in transcription.

#### **Coding**

The transcripts were read line by line, and NVIVO was used to apply broad labels to describe what had been interpreted. For example, the statement: "We don't have the governance to provide the confidence" (INT2) was broadly coded as institutional governance. The researcher's supervisor reviewed the broad coded transcripts to reduce researcher bias.

### **Developing the analytical framework**

After a random sample group of the transcripts had been coded, the research team met to compare and discuss the initial codes. Clearly defined categories were formed from grouping the broad codes into appropriate groups. For example, the category 'Governance and Standards' was formed from the broad code discussed above ('institutional governance'), with two other codes under the category.

### **Applying the analytical framework**

Once the three defined categories had been formed, all transcripts were indexed using the agreed categories. This was completed with a spreadsheet via Microsoft Excel.

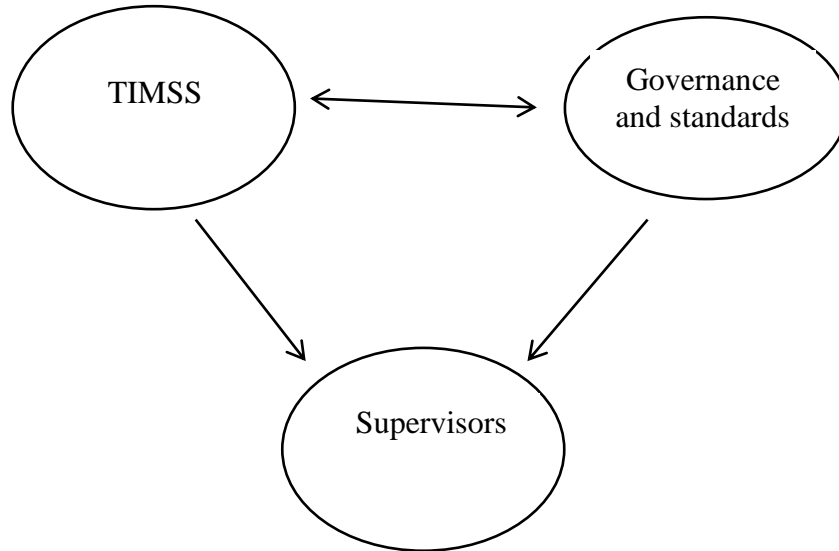
### **Charting data into the framework matrix**

A matrix to summarise the data was developed using a Microsoft Excel spreadsheet. The categories were added to this matrix (for example: TIMMS, Governance and Standards, and Supervisors). The themes were then entered into the matrix (for example: suggestions of change/additions to the model), and then sub themes were added (for example: frequency of supervision effectively summarising the data), thereby reducing the matrix to a manageable size to develop an overview of the essence of the findings.

### **Interpreting the data**

Throughout the data analysis, interpretations and ideas about the similarities, differences and connections between the data were identified and noted separately to the transcriptions and coding process. The three categories below in Figure 9 give a visual description of the relationship between categories. The TIMSS model is affected by governance arrangements: if clinical supervision is unsupported, it will affect the use of the model. Conversely, as the model develops it may positively affect governance arrangements by supporting independent prescribers. The category of supervisors encompasses the role of peer support, the primary supervisor themselves, and discussion of the supervisor training programme. The category of supervisors can support governance and standards of independent prescribing by supporting independent prescribing and providing IPs with an opportunity to discuss clinical practice challenges. The relationship between these categories is best illustrated through a diagram of connections demonstrated below with arrows indicating the direction of influence:

Figure 9: Interpretation of connections between the data



### 6.3.3. Main findings

Table 48 below is the framework table of the three broad categories, nine themes, and 49 sub-themes. The themes are displayed and grouped under their corresponding broad category. The sub-themes attached to the themes are detailed in the columns below with the **numbers in bold** referring to the sub-theme identifier ranging from **1:1 to 9:3**. The additional number before the sub-theme identifier is the number of quotes associated with that sub-theme/the number of participants who have quoted in that sub-theme. For example, 4/2 would represent 4 quotes from 2 participants and **7:2** would represent theme seven and sub-theme two. This was an important aspect to add to the framework to make the theming process entirely transparent. A sub-theme may appear to be comprehensively quoted when, in reality, it was discussed in detail by only one or two participants. Specifying the number of quotes/ the number of participants gives the reader a more comprehensive view of the most common findings in study.

Table 48: Phase 3 findings

TIMSS			Governance and Standards			Supervisors		
Suggestions of change/additions to the model	Positive model feedback	Barriers to the model being used	Institutional governance	Competence	Clinical supervision and independent prescribing	Peer support	Supervisor	Training supervisors
Frequency of supervision 1/1 <b>1:1</b>	General positive comments 11/8 <b>2:1</b>	Time 9/4 <b>3:1</b>	Structural governance 12/6 <b>4:1</b>	Ongoing competence 17/6 <b>5:1</b>	Perceptions of clinical supervision 3/1 <b>6:1</b>	Barriers to peer support 6/4 <b>7:1</b>	Negative aspects of doctor involvement 2/1 <b>8:1</b>	Supervisor's skillset 3/2 <b>9:1</b>
Peer supervision 1/1 <b>1:2</b>	Provides a structure and expectation to supervision 13/6 <b>2:2</b>	Prescribers not employed by General Practice organisation 3/1 <b>3:2</b>	Inconsistency of policy 15/5 <b>4:2</b>	Unconscious incompetence 2/1 <b>5:2</b>	Opinion of independent prescribing 8/4 <b>6:2</b>	Peer reflection of case reviews 5/3 <b>7:2</b>	Positive aspects of doctor involvement 3/2 <b>8:2</b>	Supervision training program 3/3 <b>9:2</b>
Defining clinical supervision 4/1 <b>1:3</b>	Evidence for CPD/Portfolio and professional bodies 4/3 <b>2:3</b>	Payments for supervisors 11/4 <b>3:3</b>	New prescribers getting started 1/1 <b>4:3</b>	Isolated practitioners 5/2 <b>5:3</b>		Multi-professional peer support 3/2 <b>7:3</b>	Numerous supervisors 2/2 <b>8:3</b>	Awkward questions and challenging feedback 3/1 <b>9:3</b>
Remote/electronic session 4/3 <b>1:4</b>	Enables flexibility to adapt supervision 10/5 <b>2:4</b>	Supervisors willing to supervise and supervisees willing to engage 6/3 <b>3:4</b>	List of prescribers 12/4 <b>4:4</b>	Safety of independent prescribing 14/5 <b>5:4</b>		Peer group program 2/2 <b>7:4</b>	Continuation of DSMP 1/1 <b>8:4</b>	
Mandatory minimum 7/4 <b>1:5</b>	Informed and evidence based 2/2 <b>2:5</b>	Logistics of meeting 4/1 <b>3:5</b>	Self-governance 11/4 <b>4:5</b>	Extending scope of practice 9/4 <b>5:5</b>		Negative aspects to peer support 2/1 <b>7:5</b>	Supervision by line manager 1/1 <b>8:5</b>	

Table 48: Phase 3 findings

Table 48: Phase 3 findings								
TIMSS			Governance and Standards			Supervisors		
Suggestions of change/additions to the model	Positive model feedback	Barriers to the model being used	Institutional governance	Competence	Clinical supervision and independent prescribing	Peer support	Supervisor	Training supervisors
Re-wording and clarification 9/2 1:6	Supports reflection 4/3 2:6	Enforcement of supervision 2/1 3:6	Access to patient records 1/1 4:6	Portfolio 2/2 5:6		Peer hierarchy 2/1 7:6		
Supervision by observation 2/2 1:7	Endorsing the model 5/3 2:7							
More structure 3/2 1:8								



The findings of the three broad categories: TIMSS, Governance and Standards, and Supervisors, and their corresponding themes and sub-themes, are discussed in detail in the next section.

#### 6.3.3.1 TIMSS Themes

Under the TIMSS broad theme there are three main discussion areas detailing the feedback about the TIMSS supervision model (see Table 49 below). The discussion started with the participant's suggestions of changes and additions to the model to alleviate any ambiguity of the model and to enhance its usability. The discussion continued with general positive model feedback from the participants, and then continued on to explore how the model can support CPD and other important aspects of professional practice, such as reflection. The final discussion in this section explores the potential barriers to the model being used. These conversations explored both pre-empted issues and long-standing issues which currently pose barriers to clinical supervision in practice.

Table 49: Themes related to TIMSS

<b>TIMSS</b>		
<b>Suggestions of change/additions to the model</b>	<b>Positive model feedback</b>	<b>Barriers to the model being used</b>
Frequency of supervision 1/1 <b>1:1</b>	General positive comments 11/8 <b>2:1</b>	Time 9/4 <b>3:1</b>
Peer supervision 1/1 <b>1:2</b>	Provides a structure and expectation to supervision 13/6 <b>2:2</b>	Prescribers not employed by General Practice organisations 3/1 <b>3:2</b>
Defining clinical supervision 4/1 <b>1:3</b>	Evidence for CPD/Portfolio and professional bodies 4/3 <b>2:3</b>	Payments for supervisors 11/4 <b>3:3</b>
Remote/electronic session 4/3 <b>1:4</b>	Enables flexibility to adapt supervision 10/5 <b>2:4</b>	Supervisors willing to supervise and supervisees willing to engage 6/3 <b>3:4</b>
Mandatory minimum 7/4 <b>1:5</b>	Informed and evidence based 2/2 <b>2:5</b>	Logistics of meeting 4/1 <b>3:5</b>
Re-wording and clarification 9/2 <b>1:6</b>	Supports reflection 4/3 <b>2:6</b>	Enforcement of supervision 2/1 <b>3:6</b>
Supervision by observation 2/2 <b>1:7</b>	Endorsing the model 5/3 <b>2:7</b>	
More structure 3/2 <b>1:8</b>		

*Suggestions of change/additions to the model*

Suggestions of change/ additions to the model covers eight sub-themes. Throughout these themes the discussion was largely positive with the suggestion of changes/additions being made to enhance what was largely seen as a constructive model. Participants gave suggestions to encourage the model to have more flexibility. One suggestion of increasing the flexibility was enabling remote clinical supervision in all domains:

I read on there somewhere about Skype, email? I mean, this might be necessary in the other ones [domains]. Just again looking at the fact that I'm coming from general practice, and you might not necessarily work with the other prescriber. You might not be working alongside. You might be working different hours and what you don't want is to make the workload a bit more onerous. So having access to email, an email support might well be something that is beneficial, because you can still explain everything. (INT6)

Other participants continued to point out that, in some areas of Wales, remote working is a regular occurrence. Therefore, the option of the model being used in an electronic format was suggested:

Something like an electronic way of doing this. I was just thinking of your comments about the North Wales practices, and I know, I know there's at least two practices where there are no GPs, except for two days. If there could be some electronic. You've got Skype for the experienced people, but would it be an electronic sort of roll out as well? (INT9)

Bear in mind, we've got to have remote support because as we're building up our Independent Prescribers, they're very sporadic where they are. So the Health Boards have chosen to shove them into areas but they're not together. (INT2)

Another suggestion to increase the flexibility of the model included introducing the option of supervision by observation. This could be an option that supervisees could request, and use as the basis for discussion or, it could be on the action plan as an outcome of a discussion:

Is there any point within here that they are actually sitting in a clinic situation with them so that they are observing the supervisor? I think just sitting in and if they can get over the fear of somebody sitting in with them, you know, the sort of discussions we've had afterwards have been really super? Even just observing you for one or two patients to reinforce the things that you're doing well. As well as being able to have a very specific conversation. So not necessarily film it. Maybe just sit in. (INT1)

So it might be yes, you sit in with another clinician or you get supervised practice which fits in very much how they'll want to be doing with these academies that they're setting up. You might be drawn into it twice a year. You come in. You go and practice and somebody else is sitting there and commenting. You feed it back and do it that way. I think that's going to have to become the norm. (INT2)

Supervising by observation may be a good option for some supervisees as a complementary way to facilitate supervision, however, it is important that this is

recognised as an option for the supervisee, and not a mandatory format. A further suggestion to increase the flexibility of the format of the model is to include the option of using this concept for peer supervision:

I think the biggest value is the reflection on case studies and one thing which I don't think is really in here is that. This seems to be on a one-to-one basis with their supervisor and I think there's a lot of value in talking case studies with peers as well as supervisors. (INT2)

This participant suggested adding the option of peer supervision to the format of the model. Different aspects of peer supervision are further discussed in section 6.3.3.3. Alongside the discussion of increasing the flexibility of the model to make the format more usable for all supervisees, INT9 discussed the importance of increasing the rigidity of the model to ensure that the model was utilised effectively, and by supervisees who potentially would not voluntarily attend clinical supervision. INT3 and INT5 further the discussion of clinical supervision as a mandatory requirement while commenting that there should be a mandatory minimum amount of clinical supervision stipulated which is uniform across all health boards:

So when we have our one-to-ones I have monthly one-to-ones with all the staff and I need to have five a year from our policy on our system. So I think, I'm not saying that's the pinnacle, but I think that's quite a good system as in there's a minimum threshold there that you need to have. Does that make sense? (INT5)

In addition to the supervisee committing to a minimum amount of clinical supervision, it was seen as an important aspect that the supervisor should also mandate a minimum commitment to clinical supervision to ensure that the supervisees are not let down:

Maybe you could look at maybe getting it as part of the IP role with DSMPs that they also commit to doing one day a year or something like that. If you had some kind of written down commitment that they should commit one day. Something like that would be really useful. (INT8)

Participants recognised that stipulating a mandatory minimum of clinical supervision and a commitment from both the supervisee and supervisor is an important factor in achieving successful clinical supervision sessions. There was, however, further discussion exploring how these mandatory minimum criterion and commitments should be set given the diversity of the needs of IPs and how this could be monitored going forward:

I don't know if twelve would be too much. It probably would. Or if you said six because my worry would be that even though it says fortnightly or weekly or fortnightly or monthly or whatever it will just be put in a drawer somewhere, and if you're going to do it then for me everyone should be doing it and if it's got a number on it, six times a year, then at least it's being done six times a year, but whether there's a way to police that I don't know. (INT5)

I think it is a good guide and if you can do that perfect, but whether you do make it as stipulated as you have where you've got weekly or fortnightly or whether you put it as something... I know it's difficult because you could put more frequent, or you could ask how frequent. It's one of those catch 22, isn't it? (INT2)

In addition to the dialogue about mandating the time between clinical supervision sessions, the discussion of ambiguity continued, with INT7 discussing the structure of the model. They offered the suggestion that an overview about how the model is intended for use would be a welcome addition to the start of the model. Continuing the discussion about the structure of the model, INT7 requested the option of the model being used with more structure. This included more structured documentation:

I wondered, did you have a request for any sort of a template for people to fill in as part of the supervision session? (INT7)

This discussion continued with INT3, who also suggested more structure to the model in the form of a more well-defined action plan noting the inputs and outputs of the clinical supervision session. However, they did recognise that this was their own opinion, and may not be preferable to all in the field, and that people will use the guidance with their own methods:

Inputs and outputs of the session and things like that. So that's another thing, but I know everyone does it kind of however they want to really. (INT3)

This particular topic within the discussion about the structure of the model and the option of more structured paperwork initiated a further conversation with two participants in particular. This was in relation to the clarity and language used in the model. For example, a discussion about the term 'clinical supervision' explored the ambiguity about the term in practice:

I can understand why some of the supervisees would say that because you'd be like, "oh we're going to have a supervision session" or something else like that and I wouldn't really know what that would mean in our professional practice or you're supervising me. That means that you don't think I'm doing it right. That I need to be under supervision. (INT1)

The suggestion made to overcome this was to define clinical supervision in respect to what it means to this model:

Whilst the NMC and everything they do use the word clinical supervision in the context of what we're talking about here and maybe have that definition just to make it a bit clearer? Could you have a footnote on it about a definition of supervision with respect to this document? (INT1)

INT7 had further recommendations to increase the general clarity of the model, which included some minor word changes such as clarifying whether the document is a framework or a model and suggesting that a continuum of requirements should not be in the title of the document. They also had some suggestions of amendments to the diagram in the document: they felt that instead of using the wording of 'continuum of requirements', a simpler wording of 'decreasing support' with the arrow being enhanced to give a visual impact of the decreasing support. Highlighting the domains of A, B, and C more clearly was proposed so that users of the document could go straight to the sections which are relevant for them. Another suggestion was to be explicit in the wording of the document, for example:

So the example of reflection in all continuums I get that for any level of prescriber. I'm just not sure if that makes sense. So "example of what you would reflect on within supervision sessions". Is that what you mean? (INT7)

Explicitly reflecting upon cases in all domains was discussed by participants, and the importance of including the reflection on positive experiences was further deemed an important aspect to highlight in the document:

Then with examples, it says "supervisee to reflect on recent cases". They don't have to though. Can reflect on cases... Can consider positive experience? So they're just examples of what a supervision session can be used for. (INT7)

I know I said an example of bad consultations but actually having a good consultation, and I think maybe that's one of the things it is equally valid to talk about. Why was it good? What were they doing? (INT1)

The discussions of the suggested changes and additions to the model were extremely constructive and were taken into consideration when amending the model. This consideration of changes to the model was based on the number of participants who commented on the area of change, teamed with the magnitude of the change suggested. For example, if one participant had suggested a complete restructure to the model when the majority of participants had commented on the positive usability of the structure, that change would not be implemented. Further consideration to the changes made were based on Phase 2 findings, which the model was created from. A suggestion of change which was taken forward was that of enabling the model to be in both hard copy and electronic format to facilitate remote clinical supervision. It was considered preferable that domains 'A' and 'B' be facilitated in a face-to-face format. However, the practicalities of some working practices in Wales, such as the geographical locations discussed earlier, suggested that face-to-face clinical supervision is not always possible.

There were no major substantive suggestions of change or additions to the model, but there were aspects which were not taken forward, such as more structured paperwork attached to the model. It was decided that if a supervisee believes that more structure is needed for the efficacy of the model, individual users of the model can create or refine the documentation they feel is needed to support them further. This model is intended to be a guide for clinical supervision and not a protocol. There was a comprehensive discussion about a stipulated mandatory minimum requirement of clinical supervision in the model, and then the further conversation about the practicalities of enforcing it. It was decided that continuing with a recommended frequency would be preferable for this model. A stipulated mandatory minimum requirement would need to be specified by either a professional body, government advisory body, government body, or a regulatory body.

The next section details the reformed TIMMS model based on the suggestions of the participants:

- The aim of the model, how it aims to achieve supportive supervision, and its interpretation of clinical supervision has been made explicit.
- The arrow 'continuum of decreasing support' has been made clear.
- The word 'examples' has been added to reflection on practice.

- 'Clinical observation sessions if preferred' has been added to domain A and B under 'structure'.
- 'Actions' has been added to notes section.



### **The Informed Model of Supportive Supervision (TIMSS)**

**TIMSS is an empirically designed clinical supervision model aimed to support and enhance clinical supervision sessions for independent prescribers.**

How to use TIMSS:

TIMSS is best used in clinical supervision sessions between a prescribing supervisee and a prescribing supervisor. **It aims to guide and structure an informative discussion to support emotionally supportive supervision that builds confidence and competence in clinical practice:**

1. It can be used by all independent prescribers working in primary care.
2. The model is designed to be flexible: aspects listed can be discussed or omitted from the session depending on the need of the supervisee.
3. TIMSS can be used in face-to-face or remote sessions.
4. TIMSS can be used as formally or informally as the attendees feel the need, it is designed to **guide, not dictate**, sessions.
5. TIMSS can be used as a general tool to guide reflection on practice, and it can also be used to guide a more structured session, resulting in an action plan. The use of this tool may vary between sessions and can be iterative within a session. The format in which the tool is used is to be primarily informed by the supervisee.

Why TIMSS was developed:

Clinical supervision and support for independent prescribers are critical components in supporting safe and effective practice. There are various competency frameworks to assess the competency of prescribers (National Prescribing Centre, 2012; Royal Pharmaceutical Society, 2016; Postgraduate Education Centre For Pharmacy, 2018), but there are currently no models or guidelines of clinical supervision for prescribers in primary care. Effectively supporting primary care independent prescribers is essential to meet the growing demands on primary care services, but what is deemed effective supervision? Reflection is a key aspect of the literature for both nursing and pharmacy, however, the specific aims and guidance of clinical supervision is absent. It is vital that clinical supervision is effective for supervisees if it is to contribute to the development of their clinical practice. If clinical supervision is perceived to be ineffective or irrelevant, the sessions can become overlooked, resulting in under-supported independent prescribers.

TIMSS is designed to be used to:

- Guide and structure supportive clinical supervision sessions

- Facilitate reflection within these clinical supervision sessions
- Stimulate discussion about clinical practice
- Identify and discuss potential learning opportunities
- Support prescribing competency frameworks

TIMSS is **NOT** a competency framework for a performance management or assessment tool.

How the dimensions were developed:

The dimensions emerged following:

- A literature review designed to explore clinical supervision
- Semi-structured interviews with non-medical prescribers exploring their perceptions of effective clinical supervision
- Surveys identifying a current consensus amongst independent prescribers of what is required for effective clinical supervision, and which parameters of effective supervision is there an agreement within the surveyed group.

## The Informed Model of Supportive Supervision (TIMSS)

Decreasing Support 

**Examples of reflection in all continuums:** Supervisee to reflect on recent pertinent clinical cases, Has there been any significant positive clinical experiences? Any clinical cases which need further discussion/ advice? Reflect on any clinical cases that have highlighted a need for further learning, Supervisor to reflect on any of their own relevant clinical cases that the supervisee might benefit from.

<u>Domains</u>	A	B	C
<b>Examples of supervisees</b>	<ul style="list-style-type: none"> <li>• <b>New prescribers</b></li> <li>• <b>Prescriber wishing to extend their scope of practice to a new drug group/drug</b></li> <li>• <b>New setting</b> – secondary to primary care/ specialist to general prescribing</li> </ul>	<ul style="list-style-type: none"> <li>• <b>More experienced prescriber new to role</b></li> <li>• <b>Experienced prescriber extending scope of practice</b></li> <li>• <b>High risk patient group/high risk prescribing</b> (addiction, mental health, safeguarding, challenging patient group.)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Experienced prescriber with experience in scope of practice needing occasional supervision sessions to support practice</b></li> </ul>
<b>Structure</b>	<ul style="list-style-type: none"> <li>- <b>A scheduled session pre-agreed</b> between supervisee and supervisor, clinical observation sessions if preferred.</li> <li>- <b>Ideally face-to-face</b> but electronically/remotely if required.</li> <li>- <b>Sessions usually held weekly/fortnightly</b> (assuming access to ad-hoc support when needed).</li> <li>- <b>Documentation (inputs/outputs of the session):</b> a clear written agenda agreed before the start of each session and key points to action documented afterwards.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>A scheduled session pre-agreed</b> between supervisee and supervisor, clinical observation sessions if preferred.</li> <li>- <b>Ideally face-to-face</b> but electronically/remotely if required.</li> <li>- <b>Sessions are scheduled flexibly fortnightly/monthly</b> (assuming access to ad-hoc support when needed).</li> <li>- <b>Documentation (inputs/outputs of the session):</b> an agenda may be verbally agreed beforehand, with possible actions points verbally agreed afterwards.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Scheduled occasional meetings</b></li> <li>- <b>Either face-to-face or less formally</b> on email/Skype or on the phone.</li> <li>- <b>Peer discussion/reviews</b></li> <li>- <b>Meetings occur monthly/bi-monthly</b> (assuming access to ad-hoc support when needed).</li> <li>- <b>Documentation (inputs/outputs of the session):</b> agenda/action points not specified</li> </ul>

<p><b>Content</b></p>	<p><b>Reflection on practice (examples)</b></p> <ul style="list-style-type: none"> <li>- Specific case study discussion</li> <li>- Discuss scope of practice -adequate support in place?</li> <li>- Aware/discuss guidelines (NICE/local guidelines) in prescribing remit?</li> <li>- An action plan is in place to support new scope of practice?</li> </ul> <p><b>Learning</b></p> <ul style="list-style-type: none"> <li>- Clinical updates</li> <li>- Additional training needs to support new scope of practice?</li> <li>- Are the systems in place for prescribing and prescribing support adequate?</li> </ul>	<p><b>Reflection on practice (examples)</b></p> <ul style="list-style-type: none"> <li>- Aware of prescribing policies/guidelines in area of prescribing?</li> <li>- Adequate support in new area? Points of contact</li> <li>- Discuss pertinent cases, emotionally strained consultations/cases. Any extra support needed?</li> </ul> <p><b>Learning</b></p> <ul style="list-style-type: none"> <li>- Clinical updates</li> <li>- A plan to extend scope of practice?</li> <li>- Training needs to facilitate extended scope of practice?</li> </ul>	<p><b>Reflection on practice (examples)</b></p> <ul style="list-style-type: none"> <li>- Any clinical cases that need further advice?</li> <li>- Interesting cases that instigate further thinking/learning?</li> </ul> <p><b>Learning</b></p> <ul style="list-style-type: none"> <li>- Clinical updates</li> <li>- Discuss any need/desire to extend scope of practice?</li> <li>- Further learning/updates requested?</li> </ul>
<p><b>Notes/Actions:</b></p> <p>Supervisee:</p> <p>Supervisor:</p> <p>Date:</p>			

### *Positive model feedback*

Positive model feedback covered seven sub-themes and gained the most comments in this phase of research. Amongst the specific and detailed positive feedback there were encouraging comments made by the participants:

I see where it comes from and I think it kind of makes sense, I think the model is good. (INT1)

I think it's good to have a model. I think even if you have a model that raises the issue of clinical supervision and people think about it and have a plan it will have achieved a great deal. (INT3)

This is an obvious... I mean, it's clearly not obvious with the amount of work that's gone into producing it, but nobody would realistically say it's wrong. (INT9)

Further discussion explored constructive feedback detailing the specific comments of how this model has the potential to make a positive impact. A well-covered topic was the flexibility the model offered for clinical supervision sessions: in particular the domains appear to be a positive aspect due to the different levels of support needed for independent prescribers in practice:

I think it's good to have different domains, really good because there are different levels completely. So when we get new prescribers in they've got no clue at all, but then within a year their needs have changed, and then they might be looking to expand. (INT3)

I think [Domain] 'A' fits the bill perfectly. Especially with the new prescriber. 'B' again it's more formal with 'C' being less formal. (INT6)

So looking at the model I really like the way you've organised it into new prescribers, more experienced and experienced. So I think that really works well. (INT7)

INT5 specifically discussed the positive aspect of the ability within the model to switch between the three domains, depending on the individual need for structure and content, that may not be driven by the amount of time the individual has been prescribing. A further positive aspect recognised by the same participant was that the model is focused on the needs of the supervisee:

The supervisee, if that's the right phrase. That's who it should be bundled around and the package of clinical supervision should fit them. So it's whatever their needs are there should be a logical approach to what they have. So I think it's good from that perspective. (INT5)

Another aspect that formed part of the discussion with the participants was about the focus of clinical supervision being dependent on the supervisee's needs and clinical cases at the time. It may be that a general catch-up will suffice at one time, while another occasion may require an in-depth discussion about a particular clinical case.

If you had a particular case which kept you awake at night or something else like that and you might need to really dissect that one case and that might be the whole hour that you're having clinical supervision, but that's what's needed at that moment in time. Whereas another time you might just want more of a general discussion about how it's going and everything else like this. I think one of the things is for people to understand is the fluidity of the model really and doing it in that way. (INT1)

In addition to the model supporting flexibility to suit the needs of the supervisee throughout all stages of their prescribing career, the structure and expectation the model provides for clinical supervision sessions was positively received and commented upon. INT3 noted that the document supplies strength to clinical supervision as there is some expectation of what is expected from sessions. INT2 commented on the abundance of competency frameworks for prescribers but a lack of guidance around clinical supervision. They felt that this model covered the main issues that regularly arise with clinical supervision sessions. Further commentary about the structure the model lends to clinical supervision sessions was notably positive:

I really like the structure again. You know, scheduled session. I like that you build and you're using the same language, I think that fits really well and I like the structure around each one is you're just building on it. (INT7)

I think it's nice to have it there so that you know. You've got kind of a background of what you think you're going to do when you get there. It's all very individual the sort of catch-up. It's nice to have some kind of guidance. (INT8)

The ability of the model to fit in with CPD appeared to be an important aspect. Allocating time to both CPD and clinical supervision is difficult, so having the clinical supervision to link with CPD was seen as a beneficial aspect:

I don't know about the NMC, but for our Royal Pharmaceutical Society you can do an advanced practice portfolio which is available on it and then you can have like case-based discussions and you can put them straight into the RPS. So if this model could be related to their CPD or advanced practice portfolio, do you see what I mean, it might sell it a bit more as well. It's like killing two birds with one stone. (INT1)

This (TIMMS document) is giving you evidence. Keep that, there you are, pop that in your portfolio. That's very easy. So come along to this, do that, participate comment reflect finish your thing. These [TIMSS] are saying you've got something. We've got to make it that we support the process and then it becomes easier. (INT2)

Participants also commented that the model supports new and emerging guidance:

I think what's going to enhance it [TIMSS model] more as well is the new standards from the NMC where they say you have to have a practice supervisor and a practice assessor. (INT4)

So what the RPS competencies are basically suggesting is that you carry out the supervision really with a key supervisor, rather than having an assessor involved in that part which makes sense really. Because you could have another colleague potentially, such as another nurse or another physio, whatever it is, actually taking on that supervisor role. So it's like a buddy type system really. So I'm hoping that this model really would fit quite nicely into the new guidelines and the new standards and things. (INT5)

The findings in all three phases of the research indicated that reflection was an integral part of clinical supervision. A positive aspect of the model is that it both structures and supports reflection on clinical supervision:

The model provides a sort of reflective type sort of structure, doesn't it really? (INT4)

So it's almost as if reflection is kind of between them? Because I think reflecting on your own, you can do that to a certain extent. Don't get me wrong, but I think for clinical skills and updates and things like that it's very hard to reflect on your own. Also if you reflect on your own and it's not really in-depth or whatever then it doesn't achieve anything. (INT3)

The positive feedback discussion concluded with the confidence that the participants had with the model. The model being informed by both supervisees and supervisors, and being evidence-based was an important feature, particularly for INT4 and INT7, who felt

that the document could be used to enable and support whatever clinical supervision was needed by independent prescribers. The participants' confidence in the model was clear as evidenced by the general comments in support of its implementation, including some participants' plans to have the model implemented into their organisations:

It needs to be implemented, this must be done. It's clinical supervision. I've spoken to some of the other guys in the **organisation** and things and going forward this would be something that we'd be quite interested in using within the programme as well, because it would be quite good introducing it before they qualify. So then later then it's just like, oh well we'll just follow that process. (INT6)

So the model of clinical supervision we want to move it to a mandatory footing. I know you've had conversations with 'X' organisation and "X' organisation. So what's your plan moving forward about getting this as an expectation? (INT9)

I think uniformly even we could look on our programme at introducing this type of model. Doing supervision sessions for when we do the training sessions for supervisors. This is something we could actually bring up within the actual training itself, because we will be saying to them "look there's different ways people mentor. There's different ways people supervise. These are some examples of models you could use". I mean, at that point this (TIMSS) is something that would be quite useful to bring this up. (INT4)

#### *Barriers to the model being used*

The theme covering the barriers to the model being used included six sub-themes. Under the broad theme of TIMSS there was an overwhelming positive and constructive response from the participants about the potential amendments and positive aspects of the model. Amongst these discussions, the realistic barriers to the model being used were also explored. These barriers ranged from existing impediments in current practice to anticipated issues associated with the TIMSS model. A common issue discussed was the responsibility to supervise an individual. A regular issue that came up in the interviews was whose responsibility it was to supervise an independent prescriber. For example, is it the ongoing responsibility of the DSMP? A regular theme in the interviews on this subject appeared to be trying to find somebody "willing" to facilitate clinical supervision:

The other thing is with the expansion of the IPs is getting supervisors who are willing to supervise. (INT2)



A further complication to finding a willing clinical supervisor involved the logistics of working conditions and employers. For example, if independent prescribers were employed by the Health Board (not by the general practice) or working in an isolated role, finding an agreeable supervisor may be difficult. An example of this may be a cluster pharmacist who supports general practice but does not have a direct employment contract with them. Another example is an independent prescriber in community pharmacy:

If we look specifically around pharmacy and say community pharmacy where we want to expand independent prescribing. They are sole practitioners in essence and this is what we're having difficulty working out. How we do that and still give them that level of support when they are working alone? (INT2)

Participants felt that if an independent prescriber was directly employed by a general practice then this barrier would not be present as an issue as the general practice would take responsibility for clinical supervision:

I suppose they're invested slightly differently if they're a member of their staff. So I think it may be more difficult for cluster pharmacists. (INT3)

If you're employed by the surgery and they're a member of the staff...I think it might depend upon the relationship, the working relationship as in whether or not they're employed by that practice or whether or not they're employed by the Health Board going into GP practices. It may alter whether or not they want to be paid. (INT1)

In some areas DSMPs are paid for their role due to the poor uptake of GPs willing to undertake the role on an unpaid basis. The general practice may be significantly benefiting from the role of an independent prescriber, however, as they are not directly employed by the general practice, payments for the DSMP role have become expected in some areas:

When we tried to get the undergraduates out into practice so that they can have experience with the GPs and everything, [they] always want payment because it's not part of their...because we're outside of the advanced nurse practitioners [role]. It's different. (INT1)

I spoke to the GPs. No, no they won't do it. So they had to pay them so they'd take them on and when they did that I said to the Health Board, you have now set a precedent. So going forward they will never do it again now for free. (INT3)

Receiving payment for the DSMP role appears to have affected the willingness of GPs to continue clinical supervision once the IP has qualified:

The community pharmacists, especially the ones where they've had to pay for the DSMP. That is then not an ongoing paid arrangement. So they're isolated where they are. (INT2)

I think the problem is would they want some kind of funding to do those clinical supervision meetings with us, because it's really out of their own spare time. (INT8)

Some establishments have accepted that the only way to enforce clinical supervision is for the supervisor to receive payments:

From our point [of view] and in reality if you put a minimum and the model was accepted then there's an onus on funding that minimum. (INT2)

It's optional at the moment (supervision). We're trying to make that mandatory. So anybody new to going into General Practice, they're supporting them for a year and we're giving them...we're paying for twenty-four clinical days. (INT5)

Until recently in Wales, only doctors can be DSMPs. With the new legislation, other independent prescribers can now take on the mentoring role of training IPs (General Pharmaceutical Council, 2019). There was further discussion with participants about this issue and how the introduction of alternative mentors other than doctors may alleviate the situation:

I think with the new standards coming in where another nurse can actually be a supervisor, I think some of this issue will be broken down. So hopefully we'll see more people being sort of brought into primary care and saying, well we'll support you. (INT4)

It is imperative to recognise the time constraints on all staff, including doctors, in primary care, which is very likely linked to the request to be paid for both the DSMP role and ongoing supervision of staff not directly employed by them. Very closely linked with time constraints is the logistics of the two parties meeting in some cases. At times clinics run over, and supervisors and supervisees may be in different locations. Having the time to

complete clinical supervision and the logistical challenges that may act as a barrier to the model were issues raised by participants:

The only issue with every supervision type model is time really and practitioners are busy people. When you're in clinical practice it's finding the time to actually go through this. (INT4)

The only thing that I was looking at and I think might be a problem is the timing. So you've got weekly, fortnightly for the first one. Fortnightly or monthly for the second and bi-monthly for the other and I think that's perfect, but practically probably a bit difficult to achieve. (INT2)

My concern is the time. And it's not negative because I think it's great. It's just that they've not really got the time to do it and it's not what their priority is. (INT1)

Due to the recognised time constraints in clinical practice, participants acknowledged the need for recognition of protected time for clinical supervision to support the safety of clinical practice and patient care:

There will be a community of primary care practitioners that say, I haven't got time to do this, but that for me highlights the safety risk by not recognising that you need to allocate time for this. (INT9)

It's really crucial that they're spending time together, that is quite a major issue for us. (INT1)

Although barriers to clinical supervision are recognised, there was still an overwhelming theme throughout the responses that clinical supervision needs to be prioritised. Some participants felt that until clinical supervision is enforced, it is likely to be overlooked amongst the sheer workload in primary care:

The only thing I worry about with a model like this because it is still going to be informal because we can't put it into people's contracts that they do supervision. Is it going to get, sort of, overlooked? That's my only issue really. (INT4)

The findings in this section are important when considering the potential implementation of the TIMSS model in practice. The general feedback of the model was constructive, positive, and informative. It has led to the model being amended based on the findings.

The final version of the TIMSS is evidence-based and informed by supervisees, supervisors, and policy informants in Wales. Although every effort has been made to include key informants to create the ideal model of clinical supervision, the potential barriers to its use are key factors when considering its use logistically in practice. The next section will discuss the broad theme of governance and standards which links with, and expands upon, the barriers discussed in this section.

#### 6.3.3.2 Governance and Standards

Under the governance and standards broad theme there were three main discussion areas illustrated in Table 50 below. The discussion started by exploring the perceptions and understanding of the established governance and policy around independent prescribers in Wales, and how it affects clinical practice. Competence was then broadly explored with considerations of monitoring ongoing competence and the safety of independent prescribing in Wales. This discussion concluded with the participants' perceptions of what clinical supervision means to them, and their opinions of independent prescribing in Wales.

Table 50: Governance and Standards

<b>Governance and Standards</b>		
<b>Institutional governance</b>	<b>Competence</b>	<b>Clinical supervision and independent prescribing</b>
Structural governance 12/6 <b>4:1</b>	Ongoing competence 17/6 <b>5:1</b>	Perceptions of clinical supervision 3/1 <b>6:1</b>
Inconsistency of policy 15/5 <b>4:2</b>	Unconscious incompetence 2/1 <b>5:2</b>	Opinion of Independent prescribing 8/4 <b>6:2</b>
New prescribers getting started 1/1 <b>4:3</b>	Isolated practitioners 5/2 <b>5:3</b>	
List of prescribers 12/4 <b>4:4</b>	Safety of independent prescribing 14/5 <b>5:4</b>	
Self-governance 11/4 <b>4:5</b>	Extending scope of practice 9/4 <b>5:5</b>	
Access to patient records 1/1 <b>4:6</b>	Portfolio 2/2 <b>5:6</b>	

*Institutional governance*

Institutional governance covers six sub-themes. Within this theme, the participants discussed their knowledge and perceptions of the current governance and policies in place. The specific issues linked to areas lacking in governance and the reality of self-governance in clinical practice were explored, and INT2 suggested that a lack of confidence amongst some independent prescribers was directly linked to a lack of governance to support them. Generally, the perception of the current governance in place regarding independent prescribers in primary care was considered inadequate.

I think the governance across the board really in Wales have been sort of lax in the last few years. Not to say the least, monitoring people's scopes of practice, personal drug formularies, what they're using and things. You know, up until this year really that simply hasn't been done across Health Boards in Wales. (INT4)

Even though again, there's no structure to it, and also there's nothing about what is competent. (INT3)

One participant commented about a process in place for independent prescribers in their area that consisted of supplying a list of medications that the individual is prescribing. This was described as a procedural process with no governance or support framing it, as there is no follow-up or need to give evidence of the prescribed medication to the overseer:

All they want really when you send it in it's not really for governance purposes because they're not with you day-to-day in the practice or seeing what you're doing anyway. That's the trouble. There isn't really a governance process. (INT3)

Other participants felt that the only time clinical practice was monitored, and support was put in place, was in the case of a 'near-miss', or an actual incident:

The only time that governance comes up is when something goes wrong and that's normally a patient has complained or been harmed or something like that. Apart from that there isn't. (INT3)

We spent I think eighteen months trying to influence practice in one particular Health Board about supervision of advanced nurse practitioners, if I remember rightly, and it wasn't until the threat of losing a million and a half pounds in non-reimbursement of claims that there was a change. (INT9)

Interestingly, one of the participants felt that the governance around independent prescribing was structured and clear in Wales:

With regards to the governance around I think there's a really clear structure. There's a really clear process for prescribing. So I think it's pretty tight and pretty clear. (INT7)

The participant then expanded upon this comment, accepting that although they perceive there to be national guidance, there is indeed the potential for that guidance to be interpreted differently in local areas:

In relation to other procedures or governance around a set of treatment or care, I am aware that national guidance can be interpreted differently into local policy. So I'm aware of how the guidance has been interpreted locally is different. However, the legal and professional liability is consistent I would hope. Certainly from Nursing Midwifery Council regulator perspective. (INT7)

All but one of the participants perceived the governance arrangements around IPs in Wales to be inadequate. The conflicting opinions about the governance arrangements support the findings from Phase 1 of the research. Specifically, some participants felt that having IPs within primary care was a 'knee-jerk' reaction to declining numbers of GPs and that there was inadequate governance support from the beginning:

I think that comes down to government has got the idea, great we've got to get all IPs and yes there are some plus points in that, but there's no thought behind what they're going to be doing or how they're going to do it in practice. (INT2)

They haven't really thought about where we want to go with IP and what they're doing. So it's a gut reaction. There's a shortage of doctors. We need other people? Oh, who can we get to do that? Right, we'll put these people in, etc. but there's nothing supporting it. (INT3)

INT4 suggested a substantial variation in policy amongst Health Boards, while more broadly participants discussed the lack of consistency in the policy in place in primary care. The perceived lack of policy and structure around independent prescribing starts immediately post-qualification. The lack of policy supporting independent prescribing delays, and in some cases, prevents, new independent prescribers commencing in practice:

We are training a lot of prescribers but for a lot of them there isn't the service available in the community pharmacy for them to do it anyway. So it's about getting the Health Boards to actually provide the policy and services to make sure the facilities are available for these prescribers to actually use their qualifications. What we're going to get is new prescribers coming out of university and they have their qualification and not using it for a long of period of time and then maybe being thrust back in and expected to be an experienced prescriber. (INT4)

Participants further explored the policy in place once clinicians had qualified as an IP:

The Health Boards I don't think they have really. I think everyone has just got them through to be a prescriber and then afterwards it's very inconsistent across the board. Across the Health Boards across Wales the policies of different Health Boards seems to be inconsistent. Some don't have policies. Some do have policies. Some are really out of date and everything. Some people are required to audit their practice for the first 100 prescriptions or whatever. Some are required to

audit their practice for a period of time every month, and others don't have any requirement to do so. (INT1)

Even within the Health Boards there are very different systems. If you go on to expand your scope of practice, there is not a consistent way of demonstrating competence to expand your scope of practice within Health Boards. Within GP practices, if they're employed by a GP practice it's up to the GP on what governance structure they've got. So it could be however many GP practices you've got and they'd all have different structures. So I would say it's inconsistent. (INT3)

One participant commented on the possibility of there being a policy in place in relation to independent prescribing in primary care, but it not being implemented or enforced:

If you looked at the policies they probably are there but whether they're being implemented is another thing. (INT4)

A concern from the participants in all three phases of this research was the absence of a definitive list of IPs in primary care across Wales:

So there is no All Wales list of independent prescribers and it's really difficult because unless the Health Boards in secondary care keep a list (which they should do) they would have it, but it's not easy to hand. (INT1)

I wouldn't say they're robust. So the difficulty is that we probably don't really have a good idea of who is actually a prescriber in primary care at the moment for nursing and pharmacy. (INT2)

In fact, one of the key stakeholders involved in policy development was unaware that there was no definitive list of IPs:

Well potentially I would have presumed there was a list and if there's not there should be. (INT5)

It does raise the question that until health boards have a definitive list identifying the IPs within their health board, how can they adequately support them? It was clear from many of the participants that self-governance was a crucial part of practice due to the feeling of isolation and invisibility to the Health Board:



I think as far as I'm concerned the governance around independent prescribing is self-governance. (INT6)

I would say there's very little governance. Everybody has taken on their own self-governance. (INT3)

### *Competence*

The perceptions of contributing factors to the competence of independent prescribers were examined with the participants. One of the key discussion areas when exploring competence was the issue of the ongoing or continuing competence of independent prescribers:

So I think it's really good (independent prescribing), but the problem is that you need the supervision and you need ongoing competency assessment. (INT2)

It depends on the practice. Probably there's not enough supervision. I think practices are quite good at saying "oh just get on with that" and as long as there's no problem it seems to tick along. I don't think they're good at ongoing competency. (INT3)

A contributing factor to the lack of monitoring of IPs' ongoing competence is the fact there is no formal requirement to do so. Once a clinician has passed the independent prescribing qualification, there is no further monitoring required as it currently stands:

How do we get an overall list of assurance or competence from the individual's prescribing? It's the same as pharmacists working in a GP practice. It's the same then if they work directly for that surgery who are independent contractors. Then again, there is no need or requirement for them to prove their competence in any way. Other than they have passed a course and they're on the register as an Independent Prescriber. (INT4)

The problem is that they do it on the IP course and they get their twelve days of supervision and then that's it, then they're done, and then there's nothing then about anything to do with ongoing competency expanding scope of practice. (INT3)

One participant gave a personal account of the ongoing competence monitoring they had received during the 10 years they have been prescribing:

Nobody has questioned in all the time that I've been prescribing, and originally I started prescribing in 2010. Nobody has questioned a prescription. Nobody has rang me up to say can I see the list of drugs that you are... Your GP has agreed that you can prescribe. (INT6)

It was clear that participants felt that ongoing competence of independent prescribers was an important factor in clinical safety. The lack of an ongoing competency requirement also applies to those independent prescribers who cease to prescribe for a length of time, and then return to prescribing practice. One participant gave an equivalent example in their previous clinical practice where the application of previous skills which had lapsed needed to be reassessed:

I used to suture. I used to suture faces at one time. Would I want to suture faces now? Those skills need to be kept up-to-date. (INT5)

Another participant provided their opinion as to how ongoing competence should be measured:

You either need the number of years which is not very good. I think it's the number of cases you see, that should be the measure of how you progress. Whether you progress from Stage A to Stage B. (INT9)

In many cases, the longer a practitioner has been prescribing the more the scope of practice has been extended. Along with a lack of assurance for ongoing competence, there is also no set format or assessment for extending a scope of practice.

There is no guidance and people are expanding their scope of practice really still are consciously incompetent because they don't know what they need to know and there is no guidance. (INT2)

So if you're doing a completely new topic, where is the governance to prove that the work that you've done to be able to provide that topic is enough? So if something was to go wrong, you've then got the evidence to support the fact that you were competent to do it. (INT8)

As a consequence of an absence of governance or assurance for ongoing competence, participants gave concerning accounts of an extension of scope of practice:

So to me, the need for support is really important. I think the difference between new prescribers and extending your scope is important. Expanding the scope I think is an area that is currently being done really badly and very sporadically and differently throughout the whole of Wales. (INT2)

Increasingly now they're starting to do minor ailments within the GP practice. So if you think about that... my worry is that I don't think the GPs assess them competently enough. They just think, "oh an independent prescriber, they can do it. (INT1)

A further concern about the lack of governance or assurance for ongoing competence and extending scope of practice is the issue of unconscious incompetence.

So the problem is with our current system is it's based on people assessing their own competence which would be great if people could do that properly. I can prescribe anything I want as long as I can show competence, but the key thing for us in GPs, the problem is that people often don't know that they're not competent. (INT3)

A particular concern for some participants was the unconscious incompetence of isolated practitioners, who may not have peers to support them with their learning needs:

Are they even doing things correctly because they're in a setting and they're on their own, but what happens if they mess up? So that's the thing for me in the fact that they have no clinical supervision then. They are completely isolated. (INT3)

They could be in a practice in the middle of nowhere or in a community pharmacy in the middle of nowhere, and how do you ensure that they're up-to-date, competent, etc? I think the community pharmacy...I think GP and community pharmacists are the bigger issue because with both of those are independent contractors. (INT2)

The final discussion point while exploring competence was from a safety standpoint. Some of the participants had concerns about the safety of independent prescribing, many linked to the lack of governance and assurance around ongoing competence:

Do you get any support? No. Do I think somebody should come out and check you? Yeah I think we probably should to be perfectly honest and maybe they are. This is part of my paranoia with my documentation. (INT6)

If I was a prescriber I'd be scared if I'm being quite honest because it's so huge. (INT5)

Another concern from participants was the reliance on the independent prescribing course to deliver all the information needed to be a prescriber in primary care:

I have some reservations generally about independent prescribers because I think the NMC and the GPhC whilst they've got their criteria for the courses is open to interpretation. If you look at patient assessment skills, we cover everything here for the pharmacist independent prescribers and in another school they do just respiratory and then they go out to be an independent prescriber. So that worries me considering the expectations especially within primary care of what independent prescribers can and will eventually be doing. (INT1)

So they rely on the IP qualification. A number of them have then gone on to do minor ailments, patient assessment courses and then they've done it, but in reality they're signed off against a generic patient. Patients don't come out like that and actually as their sort of trainee you've seen well people and practised on model patients. You haven't practised on the person that's got this, this, that and the other. (INT2)

One participant questioned whether independent prescribing is right for the pharmacy profession, or whether their primary skills are more suited to a supplementary prescribing-type role:

So there is always that risk associated that we might miss that because we're only giving them a very short amount of training in order to be able to prescribe. Or actually, should we be concentrating more on managing the chronic conditions where the condition has been diagnosed? Actually we should be able to manage that medication and we should be able to recognise the deterioration. (INT2)

### *Clinical supervision and independent prescribing*

The safety of independent prescribing was discussed in the context of competence and the wider issues of governance surrounding it. The conversation then developed into a

broader discussion about the participant's personal opinion about independent prescribing and clinical supervision in primary care. One participant reiterated their opinion from the previous discussion when talking about the safety of independence prescribing, that many of the independent prescribing roles may be better suited to supplementary prescribing or supplying medicines through a non-prescribing route such as via a PGD:

What I mean by PGDs.. because a lot of them are doing minor illnesses within very strict criteria. So like UTIs between the ages of sixteen and sixty-five, female non- pregnant which lends itself to a PGD, and yes if you're a prescriber you do have the additional clinical skills and knowledge then to be able to deal with it more appropriately, but if you're trained in that area anyway, a PGD would suffice for that. The same with sore throat. (INT2)

The majority of the participants gave a positive opinion about independent prescribing in primary care. Some gave also accounts of GPs having a favourable view of IPs once they've been on a DSMP training day and after they've had experience of an IP:

If you meet the GPs when they come back on the DSMP training day and stuff and they rave about the pharmacist prescribers. People once they've had a prescriber and they see what that prescriber can do, the majority of them I would say are very, very positive and they see it and they wish they could have more. (INT1)

Participants specifically mentioned the positive impact it has on the high demand in primary care by increasing patient access to primary care services:

I'd say logically it's a good thing. I know there's a number of reasons is if they're going to be reviewed by the...assuming they are being reviewed, assessed properly by the nurse or pharmacists let's say then nobody can get an appointment with a GP at the moment can they. That's the number one problem. So I think for access and speed then it's a no brainer to me that you need to be having somebody who can prescribe. I think it's a no brainer that they should definitely be prescribing. (INT5)

One participant discussed in detail their opinion on how clinical supervision should look to support IPs in primary care. They emphasise the difference between an appraisal and clinical supervision and the importance that the focus of clinical supervision should be on the needs of the supervisee:

Because there's different things. There is an appraisal that you should as a Line Manager appraise when someone is doing their work to the appropriate level. We've got performance development reviews and whatever way you're assessing

their performance and you're also talking about their development. But that's totally different than actually having somebody where you can talk about the work that you are doing, having that sound check. (INT1)

A difficult consultation or a difficult person coming in or just reassurance of actually there's some new guidance coming out. Could we just have a chat about how we're going to implement this in practice? That isn't about performance. That's about personal development and it's about being with peers and talking through about how you are going to put it in practice, and giving yourself a sound check of where you are and what you need to do next which is totally different than somebody assessing your performance as a Line Manager. (INT1)

This account of how clinical supervision should look in primary care is reflected within the TIMSS model. It is vital to establish the key differences between line management, appraisal and clinical supervision. One of the key influencing factors to differentiate these processes is the clinical supervisor. The next section will discuss the broad theme of supervisors.

#### 6.3.3.3. Supervisors

Under the supervisor's broad theme there were three main discussion areas, displayed in Table 51. Peer support was explored in relation to how peers are being used as support currently, and the potential role this has in clinical supervision. The role of the supervisor was then discussed with a particular emphasis on medical supervisors. The discussion concluded with the participant's thoughts on training supervisors, including an exploration of key skill sets for supervisors and the need for a training program.

*Table 51: Supervisors*

<b>Peer support</b>	<b>Supervisor</b>	<b>Training supervisors</b>
Barriers to peer support 6/4 <b>7:1</b>	Negative aspects of doctor involvement 2/1 <b>8:1</b>	Supervisor's skillset 3/2 <b>9:1</b>
Peer reflection of case reviews 5/3 <b>7:2</b>	Positive aspects of doctor involvement 3/2 <b>8:2</b>	Supervision training program 3/3 <b>9:2</b>
Multi-professional peer support 3/2 <b>7:3</b>	Numerous supervisors 2/2 <b>8:3</b>	Awkward questions and challenging feedback 3/1 <b>9:3</b>
Peer group program 2/2 <b>7:4</b>	Continuation of DSMP 1/1 <b>8:4</b>	
Negative aspects to peer support 2/1 <b>7:5</b>	Supervision by line manager 1/1 <b>8:5</b>	
Peer hierarchy 2/1 <b>7:6</b>		

### *Peer support*

Peer support was discussed throughout the three broad themes as an important aspect of prescribing support. Participants discussed the importance of peer support within a group in terms of the contribution it can have towards clinical supervision:

I think the specific case studies might be something that will be useful to do in a bigger group. Then you can maybe say well actually we'll have a case study once a month which is a group of prescribers coming together once a month and do that. (INT2)

So we've kind of done a peer to peer reflection group which we obviously thought was important. (INT8)

Some participants then expanded the discussion about positive peer influence to include multi-disciplinary peer support. Some felt that it was important to have support from multi-disciplinary prescribing colleagues, not just colleagues from their own profession:

Multi-professional as well is something that I would say it should be. So not just...because we tend to do that, probably the same with the nurses as well. You go to the pharmacist who will meet and have their little peer review and there are a group of nurses who meet or GPs, etc. But you don't get anyone sort of sharing it across the profession. So I think that would be useful as well. (INT2)

One participant noted concerns about potentially conflicting hierarchies with one-to-one peer supervision:

Supervision, then is somebody is a supervisor? If you think... in a factory there's a hierarchy. Whereas actually from my understanding and thinking about it if I was in practice, I wouldn't want that hierarchical. I actually want that peer and that peer could be another prescriber or it could be the GP. (INT1)

The participant expanded on their concerns about peer supervision, and although they recognised the supportive element of peer support, their perception was that peer support alone was not enough:

There's one thing talking, isn't there to somebody in a peer capacity but that doesn't necessarily mean that it improves your area of practice. They need to feel comfortable enough to be able to challenge which is quite difficult when you're

doing peer to peer. It's difficult anyway, but if you're doing peer to peer, some people find that really difficult. (INT1)

Participants discussed the need and desire for a peer group 'programme' to be developed to ensure peer support was available for all:

The norm should be once every two months, all the Independent Prescribers in that area are meeting for a peer review session. You've got a programme throughout the year and you've got to attend four of them in a year. Choose which ones you want. That's your business. That's where we're trying to get to. (INT2)

One participant gave an account of how they had tried to set up a programme and it was viewed by line managers as non-essential:

I've tried getting an ANP Group together. Trying to get an hour out to go and have 'a natter to your mates' is how it is perceived. Even setting up like a Book Club. You know, where one person reads an article, brings in it and you have a good old natter about it. I've never been able to set it up and maintain it or sustain it. (INT6)

The barriers to accessing peer support was also a well-discussed area among participants. One of the most common issues when discussing barriers was the isolation of practitioners that do not work alongside their peers:

It's difficult to run into another room to check advice, like you would do in the GP surgery. So I think the peer support is probably the one downfall of community pharmacy set up. (INT8)

A further issue the participants explored was having peer support from prescribers who work within the same scope of practice. A prescriber may work alongside peers, but participants questioned how much support they could give if they were not familiar with the area of practice:

I know there's somebody there doing chemotherapy treatments and there was another prescriber trying to do...what was it? Schizophrenia drugs and stuff. I wonder how useful it would be for them to turn up to a peer to peer with another community pharmacy prescriber? I think you'd struggle to find someone else doing something similar to yourself who's a peer. So I think for some people it's going to be really helpful. For others it might not be as helpful as getting in touch with maybe a doctor or someone else on your ward or even a nurse. (INT8)



### *Supervisor*

The need for a variety of supervisory support was explored. It was highlighted that even general practitioners who are generalist prescribers may not always be the best prescribing supervisor, especially when the independent prescriber is expanding their scope of practice to a specialist area:

So if you're a respiratory clinician, you'll be able to do the respiratory exam. Will you able to do a GI exam? Probably not. It's the same if your DSMP is one of the doctors. They're not doing that (GI) and it still needs somebody to do some other areas of the skillset. So you need input from a lot of different prescribers. So we have a variety. (INT2)

One participant felt that doctors may not be the 'gold standard' for prescribing support due to the fact that learning to prescribe was not historically part of medical training:

Making sure that you really and truly have proper guidelines and proper practice. Gold standard practice is achieved. Rather than, it sounds negative, but having just pure doctor training because I don't think doctors are taught how to prescribe. I think more junior doctors do, but if you go back to the older doctors they weren't taught how to prescribe. They were like, you have your GMC and off you go. (INT6)

It was, however, made very clear by some participants that the involvement of a doctor in clinical supervision was deemed essential:

They look at clinical decision making differently and they look at patient assessment differently than other healthcare professionals. So it's a different dimension which actually challenges the way that you practice as a prescriber. So therefore I think there's value in having peer to peer support, but I think you also need to have a medic involved in it at some point. (INT1)

There will always be a medic included in it. So one of the key things that most or all of the training programmes in Wales were quite keen to find out ... they wanted them to say "put this much time with the medic. (INT2)

### *Training supervisors*

For doctors and prescribing clinicians to become a DSMP and DPP, they have to attend a training course. The need for supervisors to be adequately trained was a well-covered area of discussion also:

If you're going to be a supervisor then I believe you need some development in order to do that effectively, because it's not about filling in a form. It's about the kind of social contact with the person and the supervisee and understanding that actually the relationship is driven by the supervisee. That can't come from a piece of paper. So they definitely need some training. (INT9)

Postgraduate independent prescribing supervision has historically been undertaken by doctors in the workplace. In some instances, clinical supervision is facilitated by the DSMP of the supervisee, as a continuation of the mentor relationship during independent prescribing training. In these cases, the supervisor would have had some supervisory training from their previous DSMP role:

You would normally have that DSMP in the same practice that you worked in and that's the constant supervision relationship. (INT2)

In a similar requirement to become a DSMP, doctors are required to undertake a training programme to be able to supervise their medical colleagues:

With the case of medics in order for them to supervise any of their colleagues, they have to undergo a supervisory training programme which constitutes at least six days out and they have to demonstrate they can teach and how to supervise. They are following a very specific training programme. (INT2)

Currently, there is no requirement, and no supervision training programme, for supervisors of IP's clinical supervision after they have qualified. Clinical supervision is commonly facilitated by doctors, but the criteria of being a doctor was not enough for some participants:

So one of the things we stipulate is that you need to be able to teach and provide feedback. Whilst you might be able to do the job (prescribe), that doesn't necessarily matter. (INT2)

Another participant discussed the emerging reality that clinical supervision will commonly be facilitated by prescribing peers in the same profession due to the introduction of the DPP. The conundrum about required skillsets to clinically supervise IPs continues:

Clinical supervision is great and obviously absolutely needed. Now they are saying that obviously pharmacists can be...it doesn't need to be a medic because we are signed off for independent prescribing. You can have a pharmacist tutor but, nobody has agreed what that means. What level of expertise and things like that? (INT3)

One of the key areas that was identified as a needed skill as part of training supervisors was asking awkward questions and giving constructive feedback:

To get the most out of supportive supervision you need to train the supervisors because you need them to ask those awkward questions sometimes. (INT1)

Continuing on from this statement, the participant suggested a piece of work to define best practice in facilitating supervision:

One of the things that we quite often need to do is about how to give feedback. How to ask those questions in a non-intimidating way? So you might need a piece of work, I don't know, about best practice in how to supervise someone. (INT1)

#### 6.3.4. Discussion

This study explored key stakeholders' perceptions of The Informed Model of Supportive Supervision (TIMSS), clinical supervision, and the governance of independent prescribers in primary care. Participants included representatives from key policy organisations with an all-Wales remit, and supervisors of clinical supervision. As a group, the participants had a variety of professions. Limitations of this study include the low number of supervisors, although many were approached, there was a poor response rate. Findings of the study may not reflect the views of all policy organisations and/or supervisors, especially outside of Wales and particularly in other countries.

The findings of this study were analysed and discussed under three broad themes. The TIMSS broad theme discussed model feedback and suggestions of changes and additions to the model. The model feedback was largely positive, with suggestions enabling the TIMSS model to be revised and now reflect the ideals of clinical supervision from the perspective of both the supervisee and the supervisor. The historical lack of guidance and continuity in clinical supervision is well-documented, and this lack of guidance has led to significant variations of clinical supervision (Pollock et al., 2017;

Cutcliffe et al., 2018). It is unsurprising that the term clinical supervision faces ambiguity in practice given that the regulatory bodies acknowledge their practical involvement in clinical supervision is extremely limited and consider it a matter for local decision-makers and management. There may be a role for professional bodies to define this clearly, so IPs understand that CS is meant to help support their development, not pursue them for making errors. Conversely, the importance of clinical supervision for professional practice and patient safety is widely recognised throughout both this research and the published literature (Pollock et al., 2017; Cutcliffe et al., 2018). The style and content of clinical supervision has historically been instigated by the supervisor; however, this can result in the supervisee becoming unenthusiastic and discouraged by the clinical supervisor (Gumber et al., 2012; Puffett and Perkins, 2017). These findings suggest that the development of the TIMSS model of clinical supervision has taken the first steps in being able to guide supportive supervision sessions whilst maintaining the flexibility needed to satisfy the diverse population of IPs in Wales.

The general consensus from the participants indicated that there is a lack of governance around IPs in primary care. However, it is possible that policy guidance exists, but it is not known and/or implemented into practice. There was a big policy drive to implement Independent Prescribing (National Health Service, 2015) however, the supportive structures once IPs were in place weren't ever elaborated. (Graham-Clarke et al., 2018) Conducted a Systematic review exploring the facilitators and barriers to non-medical prescribing with papers published between 2006 and 2017. They identified 42 papers for inclusion, although the majority of these papers were focused around the nursing profession (30/42), pharmacy papers were included. They found policy issues, namely a lack of, or restrictive policy hindering non-medical prescribers was an issue and one of the suggestions coming from the systematic review was a need for clear policy supporting non-medical prescribers which also acts as a safeguard. Courtenay et al. (2017) also found that both governance and policy varies between health boards for primary care IPs in Wales. Similar findings were identified in Phase 1 of the research from the perspective of the supervisee. This perceived lack of governance and policy may be exacerbating prescribers' concerns about ongoing competence and their fears about extending their scope of practice. As a result, this may be forcing IPs to practice what has been referred to in these findings as 'self-governance' which was not found in the wider literature as part of the literature review. An interesting point from one of the participants was the suggestion that doctors are not specifically taught to prescribe: instead, it is an evolving learning process once they qualify as a doctor. There is an emphasis on IPs needing to

prove competence but is there the same emphasis on doctors to prove their competence in prescribing?

Peer support was considered an important part of clinical supervision, although it was predominantly discussed as an addition to clinical supervision rather than an alternative. The involvement of the doctor in clinical supervision was deemed important but with the caveat that anybody undertaking clinical supervision should have appropriate training to do so, as there are skills that need to be learned, and which are not necessarily part of a clinician's everyday clinical practice. A training programme for supervisors was discussed to complement the TIMSS model, although further work and research is required to identify the exact skillset and standards that need to be achieved for any such training programme.

This concludes the third, and final, data collection chapter. In the next chapter the key findings from the thesis will be reviewed, the contribution of the work to original knowledge, the limitations of the studies conducted, areas for potential future research and the implications for practice, policy, and the professions.

## **7. Discussion**

### **7.1. Overview**

This study set out to address a gap in the literature by exploring the ideas and influences in relation to the provision of ideal clinical supervision for PIPs and NIPs in primary care and how they can be supported effectively. The study explored what comprises ideal clinical supervision from the perception of the supervisees; considered if clinical supervision affects competence and confidence; and if clinical supervision contributes to an extended scope of practice. This led to the development of a model of clinical supervision called TIMSS. The study then explored supervisor and stakeholder views of the TIMSS model and their perceptions of the broader issues impacting effective support for NIPs and PIPs working in primary care in Wales. This research makes an important contribution to an area where research is lacking – gaining the perspective of IPs, supervisors, and stakeholders regarding clinical supervision in primary care.

The research was situated within the context of primary care in Wales. This is an integral area of research as national policy continues to acknowledge primary care being the first point of contact for the majority of healthcare interactions (Welsh Government, 2018). The promotion of PIPs in primary care in Wales has increased since 2015 with the introduction of primary-care clusters (NHS, 2015). In fact, one of the goals from the Delivering a Healthy Wales document (Welsh Pharmaceutical Committee, 2019) is to ensure within every community pharmacy in Wales there is at least one IP by 2030. It is also recognised that there are significant pressures on primary care services, exacerbated by the declining number of GPs and an increasing number of patients accessing healthcare services — particularly pertinent in certain areas of Wales such as North Wales where there is rising demand (Welsh Government, 2019). IPs are recognised within national policy as a significant contributor to supporting primary-care services in Wales (Welsh Assembly Government, 2015, 2016; Welsh Pharmaceutical Committee, 2019).

The research objectives were met from all three phases:

#### Phase 1

- To investigate supervisee views of whether personal qualities, professional role, and qualifications of the supervisor influence supervision effectiveness.

- To explore NIPs' and PIPs' perceptions of their own competence and confidence in prescribing, and whether their performance is influenced by adequacy of supervision.
- To identify whether adequate supervision supports and encourages an extended scope of practice.

#### Phase 2

- To identify from Phase 1 findings whether there is consensus amongst NIPs and PIPs on what is required for effective clinical supervision and, if so, which parameters support effective supervision.
- To develop a model of clinical supervision based on the findings Phase 2.

#### Phase 3

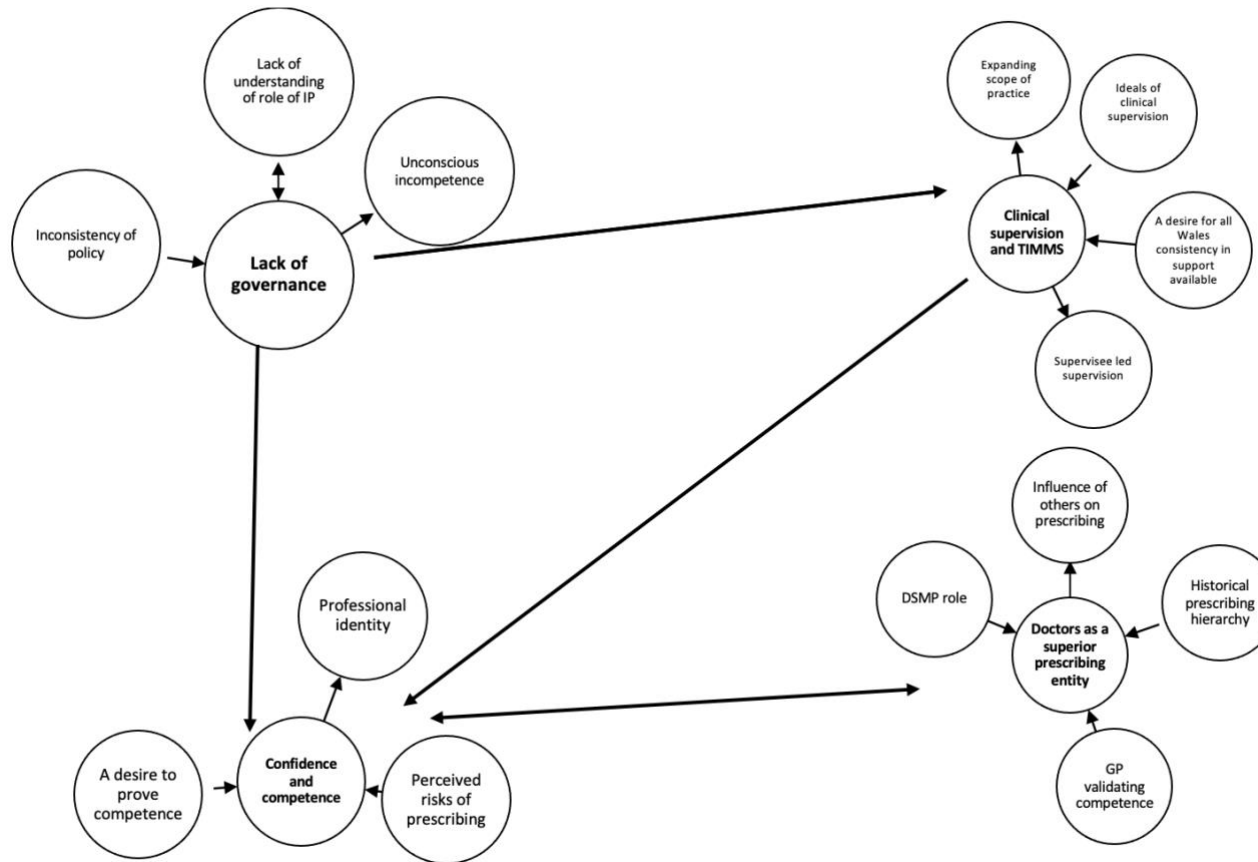
- To explore stakeholders' views of a model for effective supervision of NIPs and PIPs.
- To investigate stakeholders' views of the broader issues impacting effective support for NIPs and PIPs.

This chapter will discuss the key findings from all three phases of research under four major themes and the limitations of the research. The contribution this research has made to clinical practice, the profession and policy, recommendations to practitioners, supervisors, management, policy makers and potential areas for future exploration that the research has highlighted, will conclude this chapter.

## **7.2. Key findings**

This section discusses the key findings from the three phases of research. Figure 10 below provides a visual description of the key findings along with the contributing findings and how these link together. Each of the four major themes are discussed in turn in the following section.

Figure 10: Relationship between themes





### 7.2.1. Clinical supervision and the TIMSS model

A historical lack of guidance and continuity in clinical supervision has been shaped by the lack of a clear definition of what clinical supervision entails. This correlates with findings from Cutcliffe et al. (2018) whose systematic review of 28 studies between 1995 and 2015 found that the most significant barrier to determining the effect of clinical supervision is the absence of an agreed definition that clarifies its purpose. Phase 1 found that current clinical supervision arrangements are varied and often informal and ad hoc. This finding concurs with Cutcliffe et al. (2018) who, although had a very different research focus and didn't look at clinical supervision for IPs, conducted a substantial systematic review of clinical supervision. The issue with having varied clinical supervision arrangements is that clinical supervision becomes a "pot-luck" experience. Previously this has been largely driven by the supervisor rather than the supervisee, which then depends on the supervisor's style of clinical supervision. If there is a lack of support, this can affect the confidence of the supervisee. Adequate support for IPs, for example, which includes supportive clinical supervision sessions that are informed by supervisees, may help the practice team understand and appreciate the role of the IP. Although other issues have been raised through the three phases of research surrounding independent prescribing, notably governance and proving competence, the definition and aim of clinical supervision was not changed from chapter 1:

**'emotionally supportive supervision sessions that enable reflection and build professional confidence.'**

A running key theme throughout the phases of research suggested that supervisees should be driving the clinical supervision sessions in an individualised style that suits them and identifying what level of clinical supervision is appropriate for them. The research indicates that ideal clinical supervision should be a supportive learning opportunity that focuses on the needs of the supervisee. To support a supervisee in this context, it was deemed an essential characteristic that the clinical supervisor was also a prescriber; preferably an experienced prescriber where an aspect of the supervision process could incorporate learning from the supervisor's reflections. In addition to this being a learning opportunity, clinical supervision was also a forum for the supervisee's competency to be validated by their supervisor. For this "validation", an experienced prescriber was, again,

an important aspect. A characteristic unrelated to the profession and qualifications of the supervisor was that the supervisor had a supervisee-focused attitude. Although the experience of the prescriber and their profession were widely discussed and rated as important prerequisites, the concept of a “good supervisor” appeared to be more than these aspects alone. A facilitator of clinical supervision must also know how to supervise in a demonstratively supportive manner and focus on the needs of the supervisee. The notion of developing a supervisor training programme was widely discussed in Phase 3 of the research. Although the participants were clear that a doctor should be involved with clinical supervision at some point, the feature of being a doctor was not enough to fulfil the ideals of clinical supervisor. The new legislation enabling IPs who are not doctors Designated Prescribing Practitioner (DPPs) to supervise training IPs identifies the need for supervisors to have a range of competencies and knowledge separate to being a doctor (Royal Pharmaceutical Society, 2019). The new guidance relating to the DPP competency framework (Royal Pharmaceutical Society, 2019) interestingly has an additional list, separate to professional skills and knowledge of personal characteristics required when taking on the DPP role. Amongst this list of personal characteristics, a positive, approachable and open attitude is encouraged which promotes the support of the IP in training.

While the level of clinical supervision that a supervisee may choose to engage with did not appear to be dependent on the amount of time prescribing, the confidence of the supervisee was a factor. Supervisees receiving clinical supervision in a mutually agreed manner that considers the supervision methods that best suit the supervisee has been found to be an important aspect in encouraging supervisees to engage with the clinical supervision. Buus et al. (2017) conducted 24 semi-structured interviews with mental-health nurses exploring resistance to clinical supervision by supervisees. They found that the manner in which clinical supervision was conducted was a key contributor to their willingness to engage with clinical supervision. Although this research focuses on a different participant group, notably non-prescribing mental-health nurses as opposed to NIPs and PIPs in primary care, the wider literature in the field supports this notion that if clinical supervision is perceived to be irrelevant to a supervisee, there is likely to be low engagement levels (Cutcliffe et al., 2011; Puffett and Perkins, 2017). Developing and providing a guidance document detailing a range of support options that supervisees can draw upon in a supervisee-led clinical supervision session may encourage more IPs to engage with clinical supervision.

Throughout the three phases of research the findings were consistent on the point that, if there was perceived adequate supervision in place, as well as it being a great support in clinical practice, participants were willing to extend their scope of practice. An IP's scope of practice is not managed after prescribers have qualified, it is down to the individual to manage their scope of practice and to ensure they have competency when prescribing in their defined scope of practice (Royal Pharmaceutical Society, 2016). These findings included views from participants where such support was not currently in place, but should such options be put in place, they would consider extending their scope of practice. The findings also included retrospective accounts of participants who had what they perceived to be adequate supervision in place, and as a result, felt supported enough to extend their scope of practice. Finally, the findings also included retrospective accounts of IPs who did not have what they perceived to be adequate supervision, and so these individuals intentionally restricted their scope of practice.

Perhaps one of the most interesting findings that supports the concept that adequate supervision encourages an extended scope of practice is the following example of the participant who worked in two different GP practices within the same Health Board. The participant gave an account of the two different supervision arrangements in each practice. In the practice that provided clinical supervision, the participant practiced a broader scope of prescribing than the other practice where they did not receive any clinical supervision. This example of a clinician practicing different scopes of prescribing in different workplaces suggests that adequate support affects a clinician's scope of practice in terms of competence. It also influences the scope of practice in terms of the prescriber's willingness to practice in new clinical areas. If IPs do not perceive there to be adequate supervision or support in place, they will not extend the scope of practice, even if they feel competent in doing so, as a result.

The participants felt that there should be a specific training programme for clinical supervisors, regardless of their profession. This would enable supervisors to have the skills to facilitate their role supported by a standardised approach to clinical supervision sessions. A standardised approach to clinical supervision sessions may reduce the possibility of a "potluck" experience of clinical supervision. GPs are given specific training for facilitating GP registrar training and feedback sessions by Health Education and Improvement Wales (HEIW). (HEIW, 2021a) run a specific course which is monitored and

ensures GMC standards for training are met, there is a local point of contact for each Health Board in Wales (HEIW, 2021a). For example, they specifically learn how to give constructive feedback without offending the supervisee. In the training, they are taught how to give constructive feedback to GP registrars, using feedback models, such as the Pendleton rules (Pendleton et al., 1984) or other similar models, which are taught in these training sessions. The participants discussed the challenges that clinical supervision can pose for supervisors, for example, the challenging discussions that may arise between supervisee and supervisor about clinical practice. The supervisor needs to have the clinical knowledge and communication skills necessary to facilitate these discussions effectively, similar to the GP registrar feedback sessions. Further exploratory research would be beneficial in establishing the ideal content of a clinical supervisor training programme. This research is likely to focus on the core skills a clinical supervisor requires to facilitate an effective and supportive clinical supervision session, and a supervisee and supervisor perspective would be beneficial. The training programme is likely to be akin to that of the training programme to support GP registrars in practice which runs annually and takes place over one and a half days (HEIW, 2021). Indeed, GP models of supervision may serve as a useful starting point, however, this cannot be assumed given that the role of a GP registrar and an IP are different, and although they share similarities, each have their own unique challenges.

Independent prescribing clinical practice in Wales is delivered in a variety of settings by a range of practitioners. One source of variety in these settings is geographical diversity: large inner-city general practice settings, to small rural general practice settings, where solo working for IPs is commonplace (Courtenay et al., 2017). Another source of diversity is the experience of the IP and, as explored earlier, the confidence of the IP, which may not correlate with the amount of experience they hold. Participants in this research wanted a clinical supervision guideline which encompassed a standardised all-Wales approach. Regardless of the geographical and experience variations between IPs, the guideline needs to cater for all to ensure consistency in the support available to them. Furthermore, the clinical supervision guideline needs to be acknowledged as an important part of clinical practice by managing bodies of IPs. The participants placed importance on the guideline being endorsed by stakeholders, and that clinical supervision should be available for all. They also felt that clinical supervision should be a voluntary exercise that IPs can choose to engage with, rather than it being a mandatory enforced exercise. Based on the findings of the three phases of research, the TIMSS model was created to address

the needs and wants of the participants. It must, however, be recognised that there are currently no clinical supervision guidelines and further testing of the TIMSS model is needed, including its use in a variety of settings to identify best practice of how TIMSS could be used. The creation of a model to support clinical supervision was seen as a positive addition to clinical practice in all three phases of research. These phases of research shaped and informed the initial framework to enable the creation of a model of clinical supervision informed by supervisees, supervisors, and key stakeholders involved in independent prescribing in primary care in Wales.

#### 7.2.2. Lack of governance

Throughout all three phases of research, clinical governance was a key discussion point. The supervisees, supervisors, and key policy informants involved with IPs felt that there was not enough clinical governance supporting independent prescribing in Wales. Clinical governance is described by Scally and Donaldson (1998) as “a system through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish” pp61 . Clinical governance is often considered under seven separate arms, often referred to as the “seven pillars of clinical governance”: clinical effectiveness and research, risk management, patient experience and involvement, using information and IT, audit, staffing and staff management, and education and training (Gray, 2005). Clinical supervision is not specifically listed under any of these seven pillars. It could be argued that it is inferred under education and training, but the literature would suggest that this particular category is aimed more at staff competence (Gray, 2005), rather than the broader aim of supporting the clinician. This is likely to include perceptions of competence, as suggested in the TIMSS model. The description and application of clinical governance when reviewing the associated seven pillars have been criticised on the basis of focusing on clearly defined and measurable care interventions, and are primarily patient care focused (Bishop, 2008). Although clinical supervision has been cited as a positive feature in patient care (Cutcliffe et al., 2018), it is not a measurable tool with a direct outcome of patient care: the focus is on supporting the clinician. It is however important to note that Cutcliffe et al. (2018) did not review any independent prescribing research when conducting his systematic review. Therefore, a conclusion that clinical

supervision is not a measurable tool with the direct outcome of patient care cannot definitively be extended to the practice of IPs.

It was clear throughout the three phases of research that participants felt that clinical supervision should not be mandatory, nor directly linked to performance management. Another one of the seven pillars that infers clinical supervision is that of staffing and staff management, again this pillar is largely concerned with reviewing the performance of staff. It is unsurprising that clinical supervision has been used as a performance management and/or an appraisal tool from the experiences of the participants within the research. Similar findings were found in previous systematic reviews by Pollock et al. (2017), and Cutcliffe et al. (2018), who although did not review any research pertinent to IPs or pharmacists, the findings of a similar nature would indicate that clinical supervision being used as a performance management tool is a broader issue across healthcare. Participants were quite clear about the distinction between clinical supervision and performance management and that though they both may fall under clinical governance; they remain very separate entities. Clinical supervision facilitates a supportive environment which assists in competence in clinical practice, however, it is not the aim of clinical supervision to identify if a prescriber is competent in practice. In contrast, performance management and audits monitor practice, with the aim to judge if a prescriber is competent or not. One of the key differences between clinical supervision and performance management is that clinical supervision remains a voluntary exercise whereas performance management is mandatory (Care Quality Commission, 2013). The participants did not discuss the seven pillars of clinical governance; however, they did give a clear indication that sitting under the clinical governance umbrella were two separate arms with performance management and staff support as distinctly different. Figure 11 below is a visual description of how the participants described the two differing aspects of support: performance management and staff monitoring. Although both aspects were seen to fall under the umbrella of clinical governance, the purpose and application were very different.

Figure 11: Description of clinical governance



The perceived lack of clinical governance was widely discussed in Phases 1 and 3. A key underlying theme from Phase 1, when talking about clinical governance, was the perception that Health Boards do not have a clear understanding of the role of the IP in primary care. A lack of contact from the Health Board was often perceived as an unwillingness to understand the role. Further, participants felt that the Health Board only became involved for disciplinary matters should an error occur and have no agenda in supporting IPs. This feeling of isolation and the harsh repercussions should an error occur has led to some IPs over-compensating to prove their competence in prescribing to others even when they felt competent in their practice themselves. (Woit et al., 2019) conducted a scoping review of 33 articles from inception to October 2018 looking at competence or confidence of physicians, pharmacist or student prescribers. Although it is recognised that the majority of articles reviewed were about physicians rather than pharmacists, their findings indicated that pharmacists felt competent to prescribe but lacked confidence as opposed to physicians who when entering practice had a higher perceived confidence than their assessed competence. Conversely, another factor contributing to the notion of a lack of understanding of the independent prescribing role were cases of inappropriate management of prescribing practice (being micro-managed) by non-prescribing staff members. Participants discussed a lack of specific standard operating procedures supporting IPs in practice. For example, findings from Phase 1 indicated that obtaining a prescription pad and registering as an IP remained an issue for new prescribers in 2018 –

over ten years after independent prescribing was established in primary care. Courtenay et al. (2012) conducted a questionnaire survey across one Health Authority which reported similar issues with standard operating procedures supporting IPs in the community, and obtaining prescription pads was discussed as a specific issue in their findings. These findings of Courtenay et al. (2012) are reinforced with the findings from this research.

Due to there being no guidelines on extending the scope of practice, there was great variation on how this was reportedly done between the participants in Phase 1. For many, self-governance was reported as a key feature of the role, and so over-compensation to prove competence was, again, a consequence. This lack of guidance contributed to the varied support that IPs receive. A perceived lack of governance for independent prescribing has been well-documented for nearly a decade. Courtenay et al. (2012) conducted their research in the East of England, as opposed to Wales, and also found that the existing governance procedures and the lack of support for IPs were key issues affecting prescribing. Smith et al. (2014) found a disparity between support for IPs in the community compared to secondary care, where they appeared to be more supported, although these findings are not transferable to PIPs as there were no pharmacists included in this study. Courtenay et al. (2017) conducted a study more recently and found that, within Wales, the majority of independent prescribing is in secondary care as opposed to the rest of the UK where independent prescribers predominantly work in primary care. It is a benefit that the data in this study is from participants working in Wales. As a result, the findings can be deemed transferable. It is, however, important to recognise that these figures indicate that the majority of IPs in Wales work in secondary care are from a study that represents less than half of the estimated NMPs working in Wales at that time. Without a comprehensive list of IPs and where they are working, the working locations of IPs is an estimation rather than definitive. Courtenay et al. (2017) also found that nearly 20% of the participants did not receive appropriate support from their employer and almost 22% did not receive support from a medical practitioner or any other clinician. As evidenced in the literature, the issue of the lack of governance and support around IPs appears to be an ongoing issue since the implementation of independent prescribing over a decade ago.



When considering the above description by Scally and Donaldson (1998) at the beginning of section 7.2.2, NHS organisations are unable to be accountable for improving the quality of their services, safeguarding the care they provide and enabling clinical care to flourish, if they are not identifying, recognising the role, and supporting IPs in primary care. By leaving IPs isolated in primary care, without a support structure to call upon, their confidence and competence will be unknown. This is a particularly important issue for PIPs working in community pharmacy as they are often sole workers and therefore supervision and support is particularly essential in these cases. Endorsing and implementing the TIMMS model of clinical supervision across Wales would be a first step in enabling IPs to access an all-Wales guidance document detailing a range of support that they can draw upon, when needed.

The current gap in monitoring and lack of clear governance structures in place for IPs means that it is entirely possible that an IP's practice may not be monitored. However, this is also the same for general practitioners working in primary care, apart from an annual appraisal stipulated by their regulatory body (Royal College of General Practitioners, 2021): there is no mandatory monitoring of general practitioners working within Health Boards. It begs the question, do IPs who are nurses and pharmacists require extra monitoring and governance around their prescribing clinical practice, beyond what is mandated by their respective regulatory bodies, the NMC and GPhC? There are currently no extra monitoring requirements specific for prescribers, the NMC and GPhC have annual CPD requirements, for example the GPhC require four CPD records, one peer discussion record and one reflective account record (GPhC, 2021). Interestingly, although the standards for the education and training of pharmacists independent prescribers was updated in 2019, there is still no mention in the document of ongoing governance, support or CPD requirements for qualified IPs (GPhC, 2019b). Weeks et al. (2016) conducted a systematic review in 2016 exploring non-medical prescribing vs. medical prescribing in primary and secondary care which included 46 papers, six of which were based in the UK. Although many of these papers were not based in the UK, the systematic review was substantial, and the findings indicated that IPs are safe prescribers. and clinical and patient reported outcomes are comparable with doctors. If the evidence suggests that IPs are equally as safe as doctors in their ability to prescribe, are there other factors influencing the perception that IPs need additional monitoring in their clinical practice? Is this because IPs are viewed as less-safe prescribers, and therefore need closer monitoring? With the implied concern of needing to monitor IPs prescribing practice, this

then suggests that the perception that doctors are better prescribers extends past the clinical setting, and into policy informants for healthcare in Wales.

The findings from three studies (Smith et al., 2014; Weeks et al., 2014; Courtenay et al., 2017) indicate that support and performance management/appraisals of IPs, although both under clinical governance, need to be kept separate. The key difference is that performance management is mandatory for IPs, while engaging with support is not. Although performance management has been touched on in this research, it was not a specific focus. The findings do not indicate what the ideal performance management system for IPs in Wales should look like. IPs working in primary care have the same prescribing rights to the British National Formulary as GPs. From a performance management perspective, it would seem reasonable for IPs to be part of the same good practice critical incident reporting procedures, multi-disciplinary case reviews, and patient surveys as the GPs within their area – for example the quality improvement reports for primary care (Royal Collage of General Practitioners, 2015). The question then arises whether the GPs should be involved with this performance management of independent prescribers or, whether independent prescribers should be “judged” by the same panel as the GPs as equal prescribers to the GPs.

Phase 3 explored supervisors' and key stakeholders' views of effective clinical supervision and the issues surrounding it. There were similarities in the views between key stakeholders, supervisors, and nurse and pharmacist IPs on certain issues. One of the key concerns noted by the majority of participants throughout all three phases of the research was the lack of, and inconsistency, in governance surrounding IPs in primary care in Wales. Some areas had adapted local policies to include some governance structures around their IPs. In the areas which had implemented a local policy, there were varying views from the IPs working in the areas. Some felt that they were being micro-managed and that the governance around them was extremely restrictive. Often these restrictions were viewed by the participants as unhelpful and not relevant to the safety of their prescribing. For example, the IP who shared their experience explained that they were to send a list of the medication they prescribe to the Health Board annually, but that this list did not give any indication of competence or ability. Others felt that their local policy suited their needs as an IP, and they did feel supported: an example of this was regular supportive contact from a dedicated person within the Health Board sharing information of relevant training courses and updates. Many of the discussions about

governance by IPs in primary care sparked a consistent finding: that effective clinical supervision was considered imperative in both supporting IPs and in strengthening the governance around them.

The only consistency between Health Boards appears to be the lack of a list of IPs working in primary care across Wales. Many of the participants in Phase 3 had concerns about the absence of a definitive list of IPs in primary care, resulting in an issue of identifying who was prescribing within the Health Board. Without the ability to identify IPs, there are no processes to ensure they were supported within their practice, they were effectively invisible to managing bodies within their Health Boards. These anxieties mirrored the concerns found in Phase 1, in which the IPs discussed feeling invisible and unknown, which then led to them feeling unsupported and over-cautious in their practice. Due to the inconsistencies between Health Boards, as well as the lack of a definitive list of IPs, an all-Wales guidance document is required, detailing a range of support that prescribers can draw upon, and this is seen as an important tool which encompasses all of Wales, rather than local areas creating their own individualised local guidance documents. It was clear that the participants wanted consistency in what could be accessed in terms of the support and guidance available to them to support and inform their roles, regardless of where they were practicing geographically within Wales. The importance of robust governance arrangements around IPs is a finding Jebara et al. (2020) encountered when exploring the prospect of introducing IPs in Qatar. Jebara et al. (2020) conducted a modified Delphi with 33 key stakeholders regarding a framework for the potential implementation of pharmacist prescribing in Qatar. Consensus was achieved 38/47 statements in support for a collaborative prescribing model. Robust governance around IPs was viewed as an important aspect around the implementation or pharmacist prescribing.

Clinical governance has been a well-described issue for independent prescribing throughout this research and a number of studies preceding it (Courtenay et al., 2012; Smith et al., 2014; Maddox et al., 2016). The TIMSS model of clinical supervision is a first step in supporting IPs in their practice. The evidence from both this research and preceding studies suggests that IPs would welcome more clinical governance arrangements around their practice. The wider clinical governance agenda would benefit from further research involving IPs and stakeholders to identify what the broader clinical

governance arrangements should look like to aid and enhance the safe prescribing practice of IPs. This could be achieved by using a traditional Delphi Survey method to initially create statements and to then assess the level of consensus on what broader clinical governance arrangements should look like.

### 7.2.3. Confidence and competence

A widely discussed issue in Phase 1 was that of the confidence and competence of non-medical prescribers. It is agreed that both are important in prescribing practice however, competence and confidence are very different entities and having disproportionate levels of one or the other can significantly affect prescribing practice (Woit et al., 2019). Competence is the possession of the required skills all qualifications and the ability to do something well whereas confidence is the belief that one can do something well (Woit et al., 2019). Brinkman et al (2015) investigated the relationship between self-reported confidence and objectively assessed competence in prescribing of 403 fourth year medical students in the Netherlands. Although it is accepted the research was not UK based, they found a weak correlation between reported confidence and actual confidence. They concluded that students lack insight into their own prescribing strengths and weaknesses.

It is evident that confidence in prescribing is a complex issue amongst nurse and pharmacist prescribers which incorporates a range of factors. There appeared to be a fear of consequences if a prescribing error should occur, and in many cases, participants perceived that the ramifications would be worse than if a doctor were to make a similar prescribing error. The feared consequences and lack of support affecting independent prescribers is linked to the perception of a lack of governance around prescribers in primary care. In many cases, this also resulted in low confidence levels and a reluctance to expand to a new area of prescribing. Throughout the three phases of research, participants were not aware of a clinical governance policy on a national or local level for IPs in primary care. Indeed, if these policies are not in place, it would be advisable for a national policy encompassing all health boards in Wales to be implemented. If a clinical governance policy is in existence, it would be beneficial if the clinical governance arrangements around IPs are developed to a practice level and made clear and explicit to the IPs in practice. Specifically, about what is expected of IPs to prove or demonstrate

'competence' in practice. The notion of having competence signed off by others as an IP is counterproductive as independent prescribing is an independent act and so can't be 'safeguarded' by another clinician once qualified.

Low confidence may be a factor in IPs seeking GPs to endorse their clinical practice. The findings in Phase 1 indicated that the issues related to confidence in independent prescribing were linked to feelings of invisibility and a lack of recognition for the independent prescribing role in primary care. Many of the participants felt that their GP peers, direct line management, and senior bodies within the Health Board do not have a clear appreciation for the role of an independent prescriber. Although the differences between the studies are recognised, notably the focus of the research and the geographical area where the research has taken place, the findings of this research were supported in the findings of the study by Anderson (2017) who conducted an ethnographic study of two general practices in England exploring the professional identity of advanced nurse practitioner practice within general practice. Anderson (2017) suggested that a contributing factor to nurses avoiding the path of development into advanced practice/independent prescribing was a lack of support and understanding of the advanced practice role in general practice.

In many cases, the confidence of independent prescribers appeared to be influenced by external factors such as the support they received, perceived role appreciation and understanding from managing bodies, as well as clear, stable governance structures in place (these links are all detailed in Figure 8). The vast majority of the participants felt that they were competent in their prescribing practice, that they were capable of self-governance, and they were confident that they were up to date with current knowledge in their area of prescribing. Although they had no competence concerns, due to their apprehension of the general lack of understanding of their independent prescribing role, they felt the need to prove their competence to others. Participants felt that doctors, line managers and, in some cases, even the universities, did not fully understand the role of the independent prescriber in primary care. There were discussions about the perception of independent prescribers encompassing two extremes. These extremes ranged from a perception of "they're independent prescribers, they can prescribe everything" which could lead to risky prescribing if this expectation were fulfilled, to "they are not doctors, they must be watched carefully and micro-managed". Similar findings were documented by

Cooper et al. (2008) who reviewed literature in nursing and pharmacy supplementary prescribing between 1997 and 2007, exploring stakeholders views of nurse and pharmacy supplementary prescribers. They found when reviewing associated literature over a ten-year period that there was evidence of a lack of understanding of non-medical prescribing by doctors. However, it is noted that this review was undertaken over thirteen years ago and looked at only at supplementary prescribing, which is notably different to independent prescribing, and so attitudes may have changed. A lack of understanding of independent prescribing amongst multidisciplinary groups such as doctors is likely to become more of an issue in the future as there is an aim to train more IPs, especially within primary care (Welsh Pharmaceutical Committee, 2019). In addition to the Welsh Pharmaceutical Committee, (2019) aim of having a PIP In every community pharmacy, there is a move within pharmacy to start teaching pre-prescribing skills to undergraduate prescribing courses in preparation to train registered pharmacist as IPs sooner (GPhC, 2019). With more IPs on the prescribing workforce, it is crucial that other multidisciplinary professions, particularly other prescribers are aware of the role of IPs to enable an effective multidisciplinary prescribing workforce. One way of increasing the awareness of IPs to other prescribers would be to incorporate this in to the undergraduate teaching of the other multidisciplinary professions, for example undergraduate medical degree students spending time with an IP in practice.

In Phase 1 of the research, the lack of confidence led many independent prescribers to have their competence in prescribing validated, often by a general practitioner. A general practitioner validating their practice acted as a “safety net” should their practice be scrutinised and, given the lack of clarity in governance arrangements, independent prescribers never know when this increased level of scrutiny might occur. Cooper et al. (2011) conducted ten case studies exploring the introduction of supplementary prescribing with the aim to explore whether it represented a challenge to medical authority. They found that medical authority was supported by the supplementary prescribers as there was the perception of the doctors being superior prescribers. It could be argued that this mindset has continued throughout the development of independent prescribing and that the role of the DSMP “signing off” competence of the IP continues to reaffirm that medical authority. Similar to the current study, the concern of increased scrutiny and more severe repercussions should an error occur in prescribing practice for independent prescribers, has been noted in a study by Maddox et al. (2016). They found IPs had concerns about the perceptions of their role and the risk of repercussions should an error occur in

practice. These concerns led to reluctance to accept responsibility for prescribing, and instead the IP may either delay a prescribing decision or refer the patient to a doctor to prescribe.

Clinical supervision appeared to be a mitigating factor which could build confidence in prescribing and compensate for the feeling that their role as an IP was unknown. Participants who had what they perceived to be adequate supervision in place felt respected and valued in their role as an IP. An interesting finding in Phase 1 was the link between support and confidence, with greater support creating more confidence in IPs. Participants who received structured support appeared to be more confident in their practice and were also willing to question colleagues' clinical practice when they felt it was needed. The prescribing experience of the supervisee did not appear to be a necessary factor in this finding from Phase 1. Phase 3 found consensus from stakeholders on the purpose of clinical supervision being to support clinical practice and give confidence in clinical practice. These findings indicate that there is a direct link between adequate clinical supervision and IPs confidence and competence in clinical practice. Further research could be carried out to explore this finding further, a Likert survey of IPs exploring their perception of their current clinical supervision and how they would rate their confidence and competence in clinical practice.

Competence in prescribing appears to be less complex based on the study, competence appears to be less of an issue for the participants as generally they felt competent in their practice. Generally, the participants perceived themselves to be competent in prescribing. As noted above, due to their lack of confidence in the governance and support around them, there appeared to be a perceived need to prove their competence to others even though they felt competent themselves.

Interestingly, there is no evidence that an IPs prescribing practice being validated and/or endorsed by another prescribing clinician acts as a "safety net" to protect them, for example, from litigation. A competency framework for all prescribers (Royal Pharmaceutical Society, 2016) suggests that the IP should take full responsibility for their own prescribing competence and actions. There is no indication in the framework that this should be validated by anyone other than the IP themselves. Additionally, there is no suggestion of the superiority of doctor prescribing, or that an IPs practice should be governed and/or dictated by a doctor. This does raise concerns that if IPs are relying on

doctors to validate their practice, are they taking responsibility for their own prescribing competence? Or are they relying on the validating doctor to “vouch for them” should an incident arise? The competency framework indicates that the doctor’s opinion of the IPs practice would hold no relevance in defending a prescribing error.

It has been discussed in this section that confidence of IPs is influenced by external factors. It is therefore not surprising that clinical supervision is viewed by participants as a means of support, and an important method for building confidence in IP. All four of the participants who declared that they would not challenge a prescribing decision by a general practitioner had informal ad hoc clinical supervision in place. The two participants who declared that they would challenge a prescribing decision by a GP had formal regular clinical supervision as support. To have the confidence to challenge a prescribing decision by any prescriber, regardless of profession, is vital for patient safety. *Woit et al. (2019)* found that many studies demonstrated that junior doctors are not competent in prescribing and that their confidence is often higher than their competence. Pharmacists, on the other hand, were described as competent to prescribe but lacked confidence. If an IP views the doctor as a superior prescriber, they may not challenge a prescribing decision. It is clearly stated in *A Competency Framework for all prescribers* that part of the responsibility of being an IP is to question and act upon unsafe prescribing “using appropriate mechanisms” (*Royal Pharmaceutical Society, 2016*).

#### 7.2.4. Doctors as a superior prescribing entity

As noted above, an additional theme running through this research is how doctors can limit the extent of IPs scope of practice and are viewed as superior prescribers. These prescribing constraints would express a clear message of control and reinforce a general practitioner’s dominant position in the prescribing hierarchy. Medical dominance in prescribing is well-documented: there is a long history of medical dominance and subservience of the nursing profession to doctors (*Cooper et al., 2008; Carey et al., 2010*). *Cooper et al. (2012)* reported that the introduction of supplementary prescribing was largely tolerated by medical colleagues as they still had an element of control over supplementary prescribing practice. The diagnosis and clinical management plan (CMP) were all sanctioned by the doctor and, only if the doctor felt it was appropriate, was the patient then referred to the supplementary prescriber. In some cases, there were reports



that the doctor would give the patient the choice to return back to them if they felt that the care they were being provided by the supplementary prescriber was not appropriate. It was anticipated that there would be further challenges to medical dominance with the introduction of independent prescribing, where non-medical prescribers had the ability to diagnose and prescribe “independently” without the involvement of a doctor. However, researchers have found that the introduction of independent prescribing has not seriously challenged the dominance of medicine (Nancarrow and Borthwick, 2005; Allsop, 2006; Weiss and Sutton, 2009). All three phases of this research would support the notion that despite over a decade of independent prescribing in practice, doctors are generally still regarded as superior prescribers.

A study conducted by Weiss et al. (2016) interviewed 21 general practitioners, nurse prescribers, and pharmacist prescribers in primary care. They investigated their social identities as prescribers and the influence of social structure in general practice. They had similar findings to this research in that they described social structures in general practice as reinforcing the view that ‘the doctor is king’ with the doctors imposing prescribing constraints on IPs in their practice. A further finding from Phase 1 which supports this notion of general practitioners being a superior prescribing entity are the accounts of subservient clinical practice. Participants described clinical cases of IPs feeling competent working within their scope of practice but, when disputed by a GP, they would relinquish responsibility of the clinical case to the general practitioner without question. Subservient clinical practice was also noted in the study by Maddox et al. (2016), who found that some participants were cautious to accept responsibility for prescribing and so referred patients to the doctor to prescribe, as they were considered a superior prescriber within the practice.

The position of the DSMP is that of a superior prescribing clinician to “mentor” a clinician through their prescribing qualification, and this has perhaps also impacted on the perceived ‘prescribing hierarchy’. It would be interesting to explore the perceived prescribing hierarchy once the DPPs are embedded in prescribing education to see if they still have a superior prescribing status. Phase 3 found that it was important for the doctor to be involved in clinical supervision with an IP. The benefits of peer support were noted and considered an important addition to clinical supervision. Peer support from fellow IPs was not deemed to be enough without a doctor being involved at some point. There are IP support networks in existence for example Pharmacy in Practice, Community of Practice

(PIPCOP) in Wales who are mainly based on Twitter and Association for Prescribers who are UK based. Neither of these organisations were discussed in any of the three phases of research and so perhaps they could be better utilised amongst IPs. These findings indicate that over a decade since independent prescribing has been introduced into primary care, there is still evidence of medical dominance regarding independent prescribing practice in primary care. Doctors are still generally seen as superior prescribers: doctors can limit an IPs scope of practice, and IPs still look to doctors to confirm their competency. This thesis predominantly refers to the practice of nurse and pharmacist independent prescribing as “independent prescribing”. Independent prescribing has historically been referred to as non-medical prescribing. It has been argued that this term underscores the difference between doctor-prescribing and prescribing by other healthcare professionals (Nancarrow and Borthwick, 2005). The term non-medical prescribing itself emphasises the inferiority of independent prescribing from the prescribing by doctors. This use of inferiority labelling, and the lack of financial reward in comparison to doctor prescribers, is recognised in the wider literature as further reasons highlighting the role of doctors as a superior prescribing entity (Nancarrow and Borthwick, 2005; Weiss and Sutton, 2009; Cooper et al., 2012). Although the term independent prescribing is now appropriately used to describe what IPs do, it could be argued that they are not yet fully independent from doctors given the subtle workplace practices that reinforce the superior prescribing role of doctors.

### **7.3. Methodological issues, strengths, and limitations**

This project demonstrated the strength of using a sequential exploration mixed methods study design to gain a micro-level understanding of a previously unexplored phenomenon (Mayoh and Onwuegbuzie, 2015); in this case the perceptions, influencing drivers, barriers, and ideals of clinical supervision. The exploration of clinical supervision was the broad focus of the study. There was, however, a flexible approach used for emerging concepts and themes, which went beyond exploring the perceptions of ideal clinical supervision. In this sense, the exploration of clinical supervision was predominantly inductive. This inductive approach resulted in identifying wider issues around clinical supervision including the barriers, the drivers, and the infrastructure where clinical supervision sits. The inductive nature of this research was important to establish the links to these wider issues to enable a deeper understanding of clinical supervision. Although

both clinical supervision and independent prescribing have been in healthcare systems for a significant period, there has been no previous published research specifically within this area.

This research comprised qualitative studies which cannot be generalised in a quantitative sense, producing generalisable findings (unlike quantitative research) was not the purpose of this research (Morse, 2015). The findings may not be generalisable to areas outside of Wales. The three studies contained a small number of participants, which could be viewed as a limitation to the theoretical generalisability of the findings (Creswell and Miller, 2000). The participants were, however, a diverse group of independent prescribers with a wide range of geographical diversity, length of prescribing experience, and a good mix of both pharmacists and nurses. It could be argued that the diversity within the participants and the relevance of the participants for the studies would give the three phases of research information power (Malterud et al., 2016). Information power is a concept to guide sample sizes for qualitative studies. It indicates that the more relevance for the study and the more information that the sample holds will result in the study having more information power rather than being based on the just the sample size (Malterud et al., 2016).

If qualitative research is conducted well, the findings should be theoretically generalisable (Green, 1999). Theoretical generalisability refers to ideas that have been developed through research that should be relevant beyond the studies conducted. The theories that have been developed are relevant, could be tested in further research and used for future studies. The researchers acknowledge that the findings from these studies would benefit from further research on a wider scale. Analysis at this level in a qualitative study allows identification of individual perceptions and attitudes, which leads to further analysis of patterns identified within the findings. The appraisal of qualitative research can be assessed by the recognisability of the findings to the reader, determining consistency between the findings of the study and wider knowledge, and how relevant the findings of the study are to those in similar settings (Mays and Pope, 2000; Hammersley, 2007). The findings in this research demonstrated triangulation between the three phases and are comparable to findings in wider research: therefore, these factors contribute to the validity of the findings of this research. The clear documentation and explanation of the three phases of research and analysis, and the transparent reflexivity throughout, allows a judgement of credibility.

Bias has been considered carefully throughout the three phases of research. Bias has been described as any influence which could distort the results of a study (Polit and Beck, 2004). The Critical Appraisal Skills Programme (CASP) qualitative checklist (CASP Critical Appraisal Skills Programme, 2017) was reviewed regularly to identify potential bias including the review of the researcher's own role within the study which was discussed under reflexivity on positionality in Chapter 3. The participants were purposefully selected, which is a common sampling technique used in qualitative research to enable the researcher to understand the problem and the research question (Creswell, 2003). Purposeful sampling does, however, introduce a potential bias in the data due to sampling bias (Palinkas et al., 2015), how this potential bias was reduced is also discussed in Chapter 3.

#### **7.4. Recommendations and implications for policy and practice**

The recommendations and implications for policy and practice will be discussed separately under the separate headings: policy, practice and individual to ensure clarity in these areas.

##### **7.4.1. Policy level**

In order to address governance and support issues around independent prescribing practice in primary care, it is necessary to:

- Develop an all-Wales policy to directly address the issues of clinical governance and support of independent prescribing in the NHS. For example, an all-Wales policy detailing the clinical governance structures, standard operating procedures, key contacts, and examples of support structures that could be used. The indication from the three phases of research is that the all Wales policy would be a universal policy focused on supporting the needs of the IP to encourage competent and confident prescribing practice. As discussed below in section 7.5, this area needs further research to clarify exactly what this all-Wales policy would look like.

- Encourage regulatory and professional bodies such as the NMC, GPhC, GMC, RCN, RPS and RCGP to have an active influence on clinical supervision. Guidance on clinical supervision for IPs and supervisors helps to support prescribers in practice. Regulatory and professional bodies influencing and endorsing clinical supervision can highlight its importance in clinical practice and encourage managers to prioritise it.
- Develop an educational understanding for students at both undergraduate and postgraduate level of the role of the IP across multi-disciplinary groups including medical and dentistry courses. This is particularly important in the coming years where prescribing is anticipated to be taught as part of the undergraduate pharmacy course. This would aim to avoid misunderstandings of the role and perhaps challenge the stereotype that there is a prescribing hierarchy.

#### 7.4.2. Practice Level

- Allocate protected time for clinical supervision. This will aid in clearly identifying clinical supervision as an activity that is important.
- Identify the multi-disciplinary support for IPs in practice. This is particularly important for IPs who work on their own. Who is in their support bubble? There should be named individuals to ensure that no-one is left isolated.
- Be mindful of professional identities and general practice hierarchies. For example, when a general practice is looking at prescribing initiatives or specific prescribing changes, all prescribers should be included in those discussions, not just GPs. Another example would be to represent IPs equally on GP surgery websites - explain the qualifications and special interests of the IPs in the same way as the general practitioner specialties are highlighted. The concept of hierarchies creates subordinates, and this impacts professionals' roles and their clinical practice.

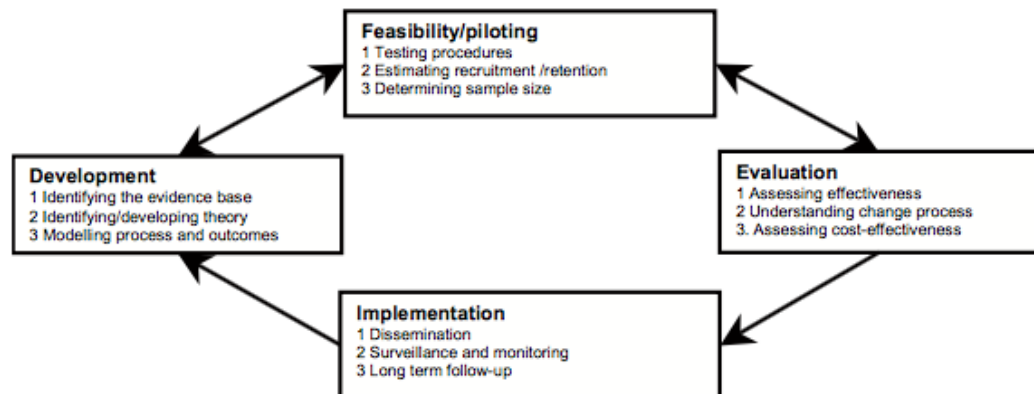
#### 7.4.3. Practitioner level

- Individuals should prioritise clinical supervision and take ownership of it. If the support is not in place, reach out and ask for it.
- Take ownership of your own prescribing. Do not rely on other prescribers to deem you as competent. Prescribe competently within your scope of practice.
- Address perceived inequalities and differential treatment in the workplace with good communication systems for staff to converse openly. Reflect on your own behaviour and ensure you are not displaying any inequalities to other professionals.
- Identify the IPs in your area. Engage with and support other IPs, even on an informal basis and/or a remote (electronic) format. Although there are various National IP networks such as Association for Prescribers, there is a need to establish or enable greater use of local supportive IP networks, which individual IPs can engage with and gain support from.

## **7.5. Future research**

This research raises issues which would benefit from further exploration. It has demonstrated that a model of clinical supervision is desired, and that TIMSS was perceived to be a useful clinical supervision framework to support IPs in primary care. Following the MRC framework to develop complex interventions would be a systematic and effective way to develop the framework around supporting IPs in practice. The MRC framework has four stages shown below in figure 12:

Figure 12: MRC Framework 4 stages adapted from (Medical Research Council, 2006)



Phases 2 and 3 of this research links to the development stage of the complex intervention. The TIMSS model is currently being used in some practice areas, it can be piloted, tested for feasibility and evaluated leading to a more robust intervention being developed.

Further testing of the TIMSS model is needed, and further exploratory research of its use in practice would be beneficial. A two-phase mixed methods design would be valuable in establishing qualitative and quantitative model feedback. Once participants had used the TIMSS model for at least two clinical supervision sessions (to enable participants to use the model for an action plan, and a review of the action plan), semi-structured interviews with both the supervisee and supervisor would be informative and useful for further assessment. Phase 2 could be in the format of a Delphi survey to see if consensus is met on the model feedback. If Phase 1 appears to indicate consensus amongst the opinions of the participants, statements could be created from the findings of Phase 1. If there does not appear to be consensus, a traditional Delphi survey could be used.

Clinical governance was a frequently discussed issue throughout the research. Indeed, it was a contributing factor to the need for a model of clinical supervision. Although a lack of clinical governance of IPs was perceived, further research is needed to explore what the ideal clinical governance of IPs in primary care would take the form of. Ideally, the perceptions of both IPs and key stakeholders would be engaged for this research. This could be investigated using phenomenological methodology or a sequential explorational study as this phenomenon does not appear to have been widely explored. Semi-structured individual interviews would be an important aspect of the exploration to ensure

the research is exploring individuals' perceptions rather than organisational perceptions which can occur with group interviewing.

A consistent theme through the three phases of research was the notion that doctors were perceived to be a superior prescribing entity. A contributing factor to this perceived superior status could be the mentoring role of the DSMP as part of IP training which then continues in post-qualification practice. Future research is needed to identify if the same status is given to the newly introduced DPP role which does not need to be a doctor. This may identify if the mentoring role, regardless of the profession, carries superior prescribing status, or if it is the status of the doctor regardless of their mentoring position. This could be investigated using a survey to facilitate a widespread exploration and large numbers of IP participants, potentially with a qualitative first stage such as semi-structured individual or group interviews to develop the survey. Using a small number of participants when looking at perceptions of prescribing status/hierarchy may not give a theoretical generalisable findings as it may be a snapshot of the perceptions of the minority. Throughout this research the perceptions of doctors being a superior prescribing entity was identified in those of the participants in all three phases, from those with a clinical or non-clinical background. It would be interesting to explore the perceptions of those in both non-prescribing and non-clinical managerial roles within the health boards separate to the exploration discussed above looking at the significance of the DSMP role in prescribing hierarchy. For example, a qualitative study could explore their views on the prescribing hierarchy, and whose prescribing needs to be monitored (and why). This could help inform the policy to support clinical governance of IPs in practice.

Even with doctors seen as a superior prescriber, the status of being a doctor alone was not seen as adequate to facilitate clinical supervision. Clinical supervisor training was desired, and further exploratory research would be beneficial in establishing the ideal content of the clinical supervisor training programme. A survey with the ability for participants to free text could be useful to explore the perceptions of both clinical supervisor and supervisee of what they perceive is needed in a clinical supervisor training programme.

## **7.6. Conclusion**














This study set out to explore the ideas and influences on the provision of ideal clinical supervision for PIPs and NIPs in primary care and how they can be supported effectively. It found that clinical supervision in primary care varied in style, frequency, and structure. Clinical supervision influenced IPs clinical practice, and if it was received well, it could encourage a confident and expanding clinical practice. Clinical supervision that was not received well by the supervisees could conversely affect the confidence of the IPs and restrict their clinical practice. Due to the variance in clinical supervision, and the importance placed on it by independent prescribers, a model of clinical supervision was desired. The TIMSS model was created based on the findings of the three phases of research influenced by supervisees, supervisors, and key stakeholders involved with independent prescribing in primary care.

A perceived lack of governance around IPs was a further contributing factor to IPs confidence in practice. This encouraged IPs to prove their competence to others with a desire to be deemed competent by perceived superior prescribers. Throughout the three phases of research, doctors were generally deemed to be superior prescribers. This perception encouraged IPs to be declared as competent prescribers by doctors. A key concern with this arrangement is the reliance on another person to deem the individual as competent, despite the competency frameworks making it clear that the assurance in their competence needs to come from within the individual. The TIMSS model is designed to be driven primarily by the supervisee. It is hoped that the ownership over clinical supervision may encourage independent prescribers to have the confidence to manage the assurance of their own competence in clinical practice.

By raising the awareness of clinical supervision for IPs, it is expected that this research will contribute to the further development of clinical supervision of IPs. It is anticipated that this research will encourage regulatory and professional bodies, policy-makers, and IPs themselves, to reflect on the perceived governance arrangements in relation IPs, and the role that clinical supervision plays in influencing confident and competent clinical practice.

## 8. Appendices

### Appendix 1: Boolean search terms

<input type="checkbox"/>	S11	 S9 AND S10	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (338)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S10	 "uk"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (1,039,728)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S9	 S7 AND S8	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (2,226)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S8	 S3 OR S4 OR S5 OR S6	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (3,371)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S7	 S1 OR S2	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (5,302,659)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S6	 "prescriber"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (2,729)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S5	 ""supplementary prescrib****"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (125)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S4	 ""non medical prescrib****"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (256)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S3	 ""independent prescrib****"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (492)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S2	 "pharm**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (4,479,376)   <a href="#">View Details</a>   <a href="#">Edit</a>
<input type="checkbox"/>	S1	 "nurs**"	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	<a href="#">View Results</a> (859,150)   <a href="#">View Details</a>   <a href="#">Edit</a>

Appendix 2: Phase 1 recruitment email

**Email to be sent by gatekeepers with participant information attached**

This will be emailed to the participants from the gatekeepers in each 7 health boards. :

My name is Rebecca Bullingham, I am an RGN and a PhD pharmacy student currently studying at the Cardiff School of Pharmacy and Pharmaceutical Sciences (Cardiff University). For my PhD, I am investigating the views of pharmacist and nurse independent prescribers working in primary care of effective clinical supervision. Before making a decision whether to be involved in the study or not it is vital that you understand what the study is concerning and also the responsibilities associated with taking part. Therefore it is important that you read the information provided carefully, and then make your voluntary decision. If you do require further information on anything regarding the research or, have any unanswered questions then please do not hesitate to contact me.

Rebecca Bullingham RGN, MSc  
PhD student

School of Pharmacy and Pharmaceutical Sciences  
College of Biomedical and Life Sciences

Cardiff University  
Redwood Building  
King Edward VII Avenue  
Cardiff CF10 3NB  
United Kingdom

E-mail: [craneR@cardiff.ac.uk](mailto:craneR@cardiff.ac.uk)

The University welcomes correspondence in Welsh and English

Rebecca Bullingham RGN, MSc  
Myfyriwr PhD

Ysgol Fferylliaeth a Gwyddorau Fferyllol  
Coleg y Gwyddorau Biofeddygol a Gwyddorau Bywyd

Prifysgol Caerdydd  
Adeilad Redwood  
Rhodfa'r Brenin Edward VII  
Caerdydd CF10 3NB  
Y Deyrnas Unedig

E-Bôst: [craneR@cardiff.ac.uk](mailto:craneR@cardiff.ac.uk)

Mae'r Brifysgol yn croesawu gohebiaeth yn Gymraeg neu'n Saesneg



## **Participant Information Sheet**

### **Title of research project:**

“Pharmacists and Nurses as Prescribers across a cross-section of primary care providers: what is effective supervision?”

### **Invitation**

My name is Rebecca Bullingham, I am an RGN and a PhD pharmacy student currently studying at the Cardiff School of Pharmacy and Pharmaceutical Sciences (Cardiff University). For my PhD, I am investigating the views of pharmacist and nurse independent prescribers working in primary care of effective clinical supervision. Before making a decision whether to be involved in the study or not it is vital that you understand what the study is concerning and also the responsibilities associated with taking part. Therefore it is important that you read the information provided carefully, and then make your voluntary decision. If you do require further information on anything regarding the research or, have any unanswered questions then please do not hesitate to contact me.

### **Brief summary**

You are invited to join a study where we aim to explore your views of what is required for a successful, emotionally supportive supervision session, that builds confidence for Nurse and Pharmacy independent prescribers in Primary Care

### **What is the purpose of the study?**

Existing literature would indicate that the delivery of clinical supervision in the UK has significant variations. The absence of a clear definition contributes towards a lack of consistency of both style and occurrence of supervision in the UK. The importance of clinical supervision is widely documented, it contributes to improved patient care and improved staff morale. We aim to explore the views of supervisees of what is required for a successful, emotionally supportive supervision session that builds confidence for nurse and pharmacist independent prescribers in Primary Care. We are looking to interview nurses and pharmacist independent prescribers working in primary care in a prescribing role in Wales.

### **Why have I been invited to take part?**

You have been invited to take part as you are a qualified nurse or pharmacist prescriber working in a prescribing role. Therefore, you are in a position to provide your views and experiences of supervision.

**Do I have to take part?**

No, participation in the study is entirely voluntary. All participants who choose to enter the study must give informed written consent and be freely willing to participate, you can withdraw from the study at any point.. Until you choose to contact the researcher for more details, your details are kept anonymous from the researcher.

**What will happen to me if I take part?**

You will need to contact the researcher directly to take part in the study. The researcher will discuss the information you have been given to ensure you are fully informed in the study aims and objectives. If you are happy to proceed, you will need to sign a consent form and the researcher will arrange a suitable time and place to conduct an interview with you which will last approximately 1 hour. The data will be collected in the form of semi-structured interviews in a location of your choice (within reason). It can be arranged for the interview to take place via SKYPE calling, telephone or WhatsApp if this is more convenient for you.

**Will my taking part be kept confidential?**

Personal identifiable information such as name and age will not be used. Only your professional demographic information will be used in the data.

**What will happen to my Personal Data?**

Cardiff University is the sponsor for this study based in the United Kingdom. Cardiff University will be using information from you in order to undertake this study and will act as the data controller for this study. This means that the University is responsible for looking after your information and using it properly. Cardiff University will keep identifiable information about you for 15 years after the study has finished (namely your consent form). As noted above, transcripts from the audio-recorded interviews will be anonymised to remove identifiable information and the audio-recordings destroyed within 1 year of study completion.

Under data protection law, the University has to specify the legal basis that we are relying on to process your personal data. In providing your personal data for this research we will process it on the basis that doing so is necessary for our public task for scientific and historical research purposes in accordance with the necessary safeguards, and is in the public interest. The University is a public research institution established by royal charter to advance knowledge and education through its teaching and research activities. The charter can be found on the Cardiff University website.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

Cardiff University has a Data Protection Officer who can be contacted at [inforequest@cardiff.ac.uk](mailto:inforequest@cardiff.ac.uk). Further information about Data Protection, including your rights and details about how to contact the Information Commissioner's Office should you wish to complain about how your personal data has been handled, can be found at <https://www.cardiff.ac.uk/public-information/policies-and-procedures/data-protection>

### **What will happen to the results?**

The interviews will be recorded, transcribed and coded. The researcher will look for themes running through the interviews and they will be discussed in publications such as research papers, conference publications as well as the PhD thesis. Individual quotes may be used to demonstrate a point but, no personal identifiable details will be attached to the quotes.

### **Who should I contact for further information?**

Please contact Rebecca Bullingham post graduate researcher on:  
[craner@cardiff.ac.uk](mailto:craner@cardiff.ac.uk)  
07930686557

### **What if there is a problem?**

If you have any concerns or complaints during the course of this research project, please contact [Professor Marjorie Weiss [WeissM1@cardiff.ac.uk](mailto:WeissM1@cardiff.ac.uk)] who will address the issue. If you remain unhappy and wish to complain formally, you can do this by contacting Professor Andrew Westwell, Director of Research, Cardiff School of Pharmacy and Pharmaceutical Sciences, Redwood Building, King Edward VII Avenue, Cardiff CF10 3NB, [westwella@cardiff.ac.uk](mailto:westwella@cardiff.ac.uk).

### **Who is organising and funding the research?**

Cardiff University School of Pharmacy and pharmaceutical sciences

### **Who has reviewed the study?**

Cardiff University School of Pharmacy and pharmaceutical sciences  
Ethics committee, Health and Care Research Wales and the NHS R&D office.

**Thank you for reading this information sheet and for your consideration in taking part in this research.**

Appendix 4: Phase 1 topic guide

**Topic Guide**

**Staff interviews - views of supervisees of what is required for successful, emotionally supportive supervision, that builds confidence**

**Demographic information from questionnaire:**

- Nurse or pharmacist
- Male or Female
- Length of post qualification as nurse or pharmacists

**1. Welcome**

Introduce self and study – aims and objectives

Confirm consent, stop at any time

Happy to proceed

**2. Demographic information from verbal discussion**

- Could you tell me about your current place of work – area and type of service?
- How long have you been qualified as an independent prescriber?
- How long have you worked in primary care?
- Could you tell me about your previous prescribing roles if any?

**3. Personal views and experience of supervision**

*Participants personal views*

- Can you describe what the purpose of clinical supervision is to you?
- Can you describe any positive or negative experiences of supervision?

Consider the ideal supervision, discuss your views on:

**Probes:**



- Topics to be discussed – management/reflections of practice/CPD/staffing concerns
- Formal or informal supervision
- Preferred frequency and duration
- Preferred location
- Ideas of preferred supervision styles including those not encountered
- Previous roles requiring more support

#### **4. Preferred facilitator of supervision**

*Consider the ideal person conducting the supervision*

##### **Probes:**

- Personal qualities
- Qualifications
- Peers/manager
- Prescriber/non-prescriber

#### **5. Perceived competence and confidence**

*Consider your own confidence and competence and factors affecting them*

- Could you describe how you view your own confidence in prescribing?
- Could you describe how you view your own competence in prescribing?
- How does supervision affect competence and confidence if at all?
- What is your current scope of practice?
- Does supervision affect your scope of practice? Why?

**Further comments or issues they'd like to raise?**

**Explain participant validation 30% of interviews– would they like to be considered?**

**Thank you for your time**

<b>Cardiff School of Pharmacy and Pharmaceutical Sciences, Research Ethics Approval</b>
---

This form has been signed by the School Research Ethics Officer as evidence that approval has been granted by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee for the following study:

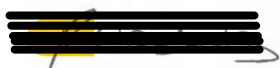
Project title:	Pharmacists and Nurses as Prescribers across a cross-section of primary care providers: what is effective supervision?
----------------	--

This is a/an:	Undergraduate project	
	ERASMUS project	
	Postgraduate project	X
	Staff project	

Name of researcher: (PG/Staff projects only)	Rebecca Bullingham
Name of supervisor(s):	Prof Marjorie Weiss, Dr Rhian Deslandes

<b>STATEMENT OF ETHICS APPROVAL</b>
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**This project has been considered and has been approved by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee**

Signed  Name R Deslandes Date 02/07/18  
(Chair, School Research Ethics Committee)

Appendix 6: Phase 1 NHS permissions 2nd of July 2018 (IRAS)

Professor Weiss  
Professor Pharmacy Practice  
Redwood Building  
King Edward VII Avenue  
Cardiff  
CF10 3NB

Email: [hra.approval@nhs.net](mailto:hra.approval@nhs.net)  
[Research-permissions@wales.nhs.uk](mailto:Research-permissions@wales.nhs.uk)

02 July 2018

Dear Professor Weiss,

**HRA and Health and Care Research Wales**  
**(HCRW) Approval Letter**

**Study title:** What is effective supervision  
**IRAS project ID:** 248979  
**Sponsor:** Cardiff University School of Pharmacy and Pharmaceutical Science

I am pleased to confirm that [HRA and Health and Care Research Wales \(HCRW\) Approval](#) has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications received. You should not expect to receive anything further relating to this application.

**How should I continue to work with participating NHS organisations in England and Wales?**  
You should now provide a copy of this letter to all participating NHS organisations in England and Wales, as well as any documentation that has been updated as a result of the assessment.

Participating NHS organisations in England and Wales **will not** be required to formally confirm capacity and capability before you may commence research activity at site. As such, you may commence the research at each organisation immediately following sponsor provision to the site of the local information pack, so long as:

- You have contacted participating NHS organisations (see below for details)
- The NHS organisation has not provided a reason as to why they cannot participate
- The NHS organisation has not requested additional time to confirm.

You may start the research prior to the above deadline if the site positively confirms that the research may proceed.

If not already done so, you should now provide the [local information pack](#) for your study to your participating NHS organisations. A current list of R&D contacts is accessible at the [NHS RD Forum website](#) and these contacts MUST be used for this purpose. After entering your IRAS ID you will be able to access a password protected document (password: **Summer14**). The password

is updated on a monthly basis so please obtain the relevant contact information as soon as possible; please do not hesitate to contact me should you encounter any issues.

Commencing research activities at any NHS organisation before providing them with the full local information pack and allowing them the agreed duration to opt-out, or to request additional time (unless you have received from their R&D department notification that you may commence), is a breach of the terms of HRA/HCRW Approval. Further information is provided in the “*summary of assessment*” section towards the end of this document.

It is important that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details of the research management function for each organisation can be accessed [here](#).

### **How should I work with participating NHS/HSC organisations in Northern Ireland and Scotland?**

HRA/HCRW Approval does not apply to NHS/HSC organisations within the devolved administrations of Northern Ireland and Scotland.

If you indicated in your IRAS form that you do have participating organisations in either of these devolved administrations, the final document set and the study wide governance report (including this letter) has been sent to the coordinating centre of each participating nation. You should work with the relevant national coordinating functions to ensure any nation specific checks are complete, and with each site so that they are able to give management permission for the study to begin.

Please see [IRAS Help](#) for information on working with NHS/HSC organisations in Northern Ireland and Scotland.

### **How should I work with participating non-NHS organisations?**

HRA/HCRW Approval does not apply to non-NHS organisations. You should work with your non-NHS organisations to [obtain local agreement](#) in accordance with their procedures.

### **What are my notification responsibilities during the study?**

The attached document “*After HRA Approval – guidance for sponsors and investigators*” gives detailed guidance on reporting expectations for studies with HRA/HCRW Approval, including:

- Registration of Research
- Notifying amendments
- Notifying the end of the study

The [HRA website](#) also provides guidance on these topics and is updated in the light of changes in reporting expectations or procedures.

### **I am a participating NHS organisation in England or Wales. What should I do once I receive this letter?**

You should work with the applicant and sponsor to complete any outstanding arrangements so you are able to confirm capacity and capability in line with the information provided in this letter.

The sponsor contact for this application is as follows:

Name: [Chris Shaw](#)  
Tel: 02920 875800  
Email: [resgov@cardiff.ac.uk](mailto:resgov@cardiff.ac.uk)

**Who should I contact for further information?**

Please do not hesitate to contact me for assistance with this application. My contact details are below.

Your IRAS project ID is **248979**. Please quote this on all correspondence.

Yours sincerely

[Anne Gell \(Health and Care Research Wales\)](#)  
[Permissions Co-ordinator](#)

Email: [Research-permissions@wales.nhs.uk](mailto:Research-permissions@wales.nhs.uk)

*Copy to: Chris Shaw, Cardiff University  
Jane Jones, Cardiff and Vale UHB  
Rebecca Bullingham*

## List of Documents

The final document set assessed and approved by HRA/HCRW Approval is listed below.

<b>Document:</b>	<b>Subtitle:</b>	<b>Version:</b>
Evidence of insurance or indemnity (non-NHS sponsors only)	Insurance Cert	15 Jul 2017
Interview schedules or topic guides for participants	Topic Guide version 1 29518	V1, 29 May 2018
IRAS checklist	IRAS Checklist	
IRAS form	IRASForm_ReadyForSubmission-3	01 Jun 2018
Other (please specify)	Email to be sent by gatekeepers Version 1- 29518	V1, 29 May 2018
Research participant consent form	Consent Form version 1 29518	V1, 29 May 2018
Research participant information sheet (PIS)	Participant Information Sheet version 1 29518	V1, 29 May 2018
Research protocol	Research Protocol version 1 29518	V1, 29 May 2018
Schedule of Events	IRAS 248979 Schedule of Events Validated	V1, 18 Jun 2018
Statement of Activities	IRAS 248979 Statement of Activities Validated	V1, 18 Jun 2018
Summary CV for Chief Investigator (CI)	CV for Prof Weiss IRAS 2018	05 Jun 2018
Summary CV for student(signed/authorised copy)	Curriculum Vitae Rebecca IRAS 2018	08 Jun 2018
University Ethics Committee Correspondence	Approval	02 Jul 2018
Written final confirmation from the organisation(s) acting as sponsor	Sponsor Acceptance Letter	01 Jun 2018

### Summary of assessment

The following information provides assurance to you, the sponsor and the NHS in England and Wales that the study, as assessed for HRA/HCRW Approval, is compliant with relevant standards. It also provides information and clarification, where appropriate, to participating NHS organisations in England and Wales to assist in assessing, arranging and confirming capacity and capability.

### Assessment criteria

Section	Assessment Criteria	Compliant with Standards	Comments
1.1	IRAS application completed correctly	Yes	No comments
2.1	Participant information/consent documents and consent process	Yes	No comments
3.1	Protocol assessment	Yes	No comments
4.1	Allocation of responsibilities and rights are agreed and documented	Yes	<p>The sponsor intends to use the Schedule of Events and Statement of activities as the agreement between the sites.</p> <p>Although formal confirmation of capacity and capability is not expected of all or some organisations participating in this study, and such organisations would therefore be assumed to have confirmed their capacity and capability should they not respond to the contrary, we would ask that these organisations pro-actively engage with the sponsor in order to confirm at as early a date as possible. Confirmation in such cases should be by email to the CI and Sponsor confirming</p>

Section	Assessment Criteria	Compliant with Standards	Comments
			participation based on the relevant Statement of Activities and information within this letter.
4.2	Insurance/indemnity arrangements assessed	Yes	No comments
4.3	Financial arrangements assessed	Yes	No application for external funding will be made
5.1	Compliance with the Data Protection Act and data security issues assessed	Yes	No comments
5.2	CTIMPS – Arrangements for compliance with the Clinical Trials Regulations assessed	Not Applicable	No comments
5.3	Compliance with any applicable laws or regulations	Yes	No comments
6.1	NHS Research Ethics Committee favourable opinion received for applicable studies	Not Applicable	No comments
6.2	CTIMPS – Clinical Trials Authorisation (CTA) letter received	Not Applicable	No comments
6.3	Devices – MHRA notice of no objection received	Not Applicable	No comments
6.4	Other regulatory approvals and authorisations received	Not Applicable	No comments

### **Participating NHS Organisations in England and Wales**

*This provides detail on the types of participating NHS organisations in the study and a statement as to whether the activities at all organisations are the same or different.*



Interviews will be conducted at participating sites.

If chief investigators, sponsors or principal investigators are asked to complete site level forms for participating NHS organisations in England and Wales which are not provided in IRAS, the HRA or the HCRW websites, the chief investigator, sponsor or principal investigator should notify the HRA immediately at [hra.approval@nhs.net](mailto:hra.approval@nhs.net), or HCRW at [Research-permissions@wales.nhs.uk](mailto:Research-permissions@wales.nhs.uk). We will work with these organisations to achieve a consistent approach to information provision.

### **Principal Investigator Suitability**

*This confirms whether the sponsor position on whether a PI, LC or neither should be in place is correct for each type of participating NHS organisation in England and Wales, and the minimum expectations for education, training and experience that PIs should meet (where applicable).*

A Local Collaborator is required.

GCP training is not a generic training expectation, in line with the [HRA/HCRW/MHRA statement on training expectations](#).

### **HR Good Practice Resource Pack Expectations**

*This confirms the HR Good Practice Resource Pack expectations for the study and the pre-engagement checks that should and should not be undertaken*

A letter of access may be required.

### **Other Information to Aid Study Set-up**

*This details any other information that may be helpful to sponsors and participating NHS organisations in England and Wales to aid study set-up.*

The applicant has indicated that they do not intend to apply for inclusion on the NIHR CRN Portfolio.

Appendix 7: Phase 1 amendments Cardiff University 10<sup>th</sup> of September 2018

SPPS Amendment Approval Notification (AAN)

11/10/14 v1

**Cardiff School of Pharmacy and Pharmaceutical Sciences,  
Research Ethics Approval**

**AMENDMENT APPROVAL**

This form has been signed by the School Research Ethics Officer as evidence that approval has been granted by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee for amendment(s) to the following study:

Project ref and title:	1718-24 "Pharmacists and Nurses as Prescribers across a cross-section of primary care providers: what is effective supervision?"
------------------------	--


Name of researcher: (PG/Staff projects only)	Rebecca Bullingham
Name of supervisor(s):	Prof Marjorie Weiss, Dr Rhian Deslandes

The amendment(s) dated 4<sup>th</sup> September 2018 have been reviewed and approved.

Any further amendments will require approval.

**STATEMENT OF ETHICS APPROVAL**

**The proposed amendment(s) have been considered and approved by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee**

Signed  Name M Ivory Date 10/09/18  
(Deputy Chair, School Research Ethics Committee)

Appendix 8: Phase 1 NHS permissions amendment 12<sup>th</sup> of September 2018

Dear Rebecca

<b>IRAS Project ID:</b>	248979
<b>Short Study Title:</b>	What is effective supervision?
<b>Amendment No./Sponsor Ref.:</b>	
<b>Amendment Date:</b>	05 Sep 2018
<b>Amendment Type:</b>	Non-substantial

I am pleased to confirm **HRA and HCRW Approval** for the above referenced amendment.

You should implement this amendment at NHS organisations in England and Wales, in line with the conditions outlined in your categorisation email.

### **User Feedback**

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: <http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/>.

Please contact [research-permissions@wales.nhs.uk](mailto:research-permissions@wales.nhs.uk) for any queries relating to the assessment of this amendment.

Kind regards



## “What is the ideal purpose and content of clinical supervision”

The aim of the project is to develop a guideline that could be used by independent prescribing nurses and pharmacists in primary care to help them improve the quality of clinical supervision.

For the purpose of this study clinical supervision is defined as:  
Emotionally supportive supervision sessions that enable reflection and build professional confidence

We are looking to recruit an expert panel of nurse and pharmacist independent prescribers in primary care to complete a survey to identify a consensus on key aspects of the **purpose** and **content** of clinical supervision.

If you are interested in participating in the study please contact  
Rebecca Bullingham post graduate researcher on:  
[craner@cardiff.ac.uk](mailto:craner@cardiff.ac.uk)  
07930686557



## **Participant Information Sheet**

### **Title of research project:**

“The ideal purpose and content of clinical supervision”

### **Invitation**

My name is Rebecca Bullingham, I am an RGN and a PhD pharmacy student currently studying at the Cardiff School of Pharmacy and Pharmaceutical Sciences (Cardiff University). For my PhD, I am investigating the views of pharmacist and nurse independent prescribers working in primary care of effective clinical supervision. Before making a decision whether to be involved in the study or not it is vital that you understand what the study is relating to and also the responsibilities associated with taking part. Therefore it is important that you read the information provided carefully, and then make your voluntary decision. If you do require further information on anything regarding the research or, have any unanswered questions then please do not hesitate to contact me.

### **Brief summary**

You are invited to join a study where we aim to explore your views of the ideal purpose and content of clinical supervision for Nurse and Pharmacy independent prescribers in Primary Care

### **What is the purpose of the study?**

One of the aims this project is to develop a guideline that could be used by independent prescribing nurses and pharmacists in primary care to help them improve the quality of clinical supervision. The emphasis is to support prescribing pharmacists and nurses in their clinical roles, the clinical supervision tool is not intended to be used for blame or punishment. The aim is to provide a supportive and flexible tool which will support a positive clinical supervision session. To do this, we need to identify a consensus on key aspects of the purpose and content of clinical supervision

### **Why have I been invited to take part?**

You have been invited to take part as you have been identified as suitable to join an expert panel of nurse and pharmacist independent prescribers in primary care. Therefore, you are in a position to provide your views and experiences of supervision.

**Do I have to take part?**

No, participation in the study is entirely voluntary. Consent will be assumed by participants who complete and return the survey, you can withdraw from the study at any point. Until you choose to contact the researcher for more details, you are kept anonymous from the researcher.

**What will happen to me if I take part?**

You will need to contact the researcher directly to take part in the study. The researcher will discuss the information you have been given to ensure you are fully informed in the study aims and objectives. If you are happy to proceed, the researcher will send you a link to Online Surveys via email. This is the first round of the Survey, the responses will be analysed and then a summary of the results will be sent out to all participants. All participants who complete round one of the survey, will be invited to engage in round two. Round two of the survey will include statements for which there was a lack of agreement and statements that were amended or added to the questionnaire as a result of the qualitative feedback. We welcome any feedback on that report. All participants who complete round one of the survey, will be invited to engage in round two.

**Will my taking part be kept confidential?**

Personal identifiable information such as name and age will not be used. Only your professional demographic information will be used in the data.

**What will happen to my Personal Data?**

Cardiff University is the sponsor for this study based in the United Kingdom. Cardiff University will be using information from you in order to undertake this study and will act as the data controller for this study. This means that the University is responsible for looking after your information and using it properly. Cardiff University will keep identifiable information about you for 15 years after the study has finished.

Under data protection law, the University has to specify the legal basis that we are relying on to process your personal data. In providing your personal data for this research we will process it on the basis that doing so is necessary for our public task for scientific and historical research purposes in accordance with the necessary safeguards, and is in the public interest. The University is a public research institution established by royal charter to advance knowledge and education through its teaching and research activities. The charter can be found on the Cardiff University website.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

Cardiff University has a Data Protection Officer who can be contacted at [inforequest@cardiff.ac.uk](mailto:inforequest@cardiff.ac.uk). Further information about Data Protection, including your rights and details about how to contact the Information Commissioner's Office should you wish to complain about how your personal data has been handled, can be found at <https://www.cardiff.ac.uk/public-information/policies-and-procedures/data-protection>

**What will happen to the results?**

The responses will be analysed and then a summary of the results will be sent out to all participants. It is the intention to publish the findings from this study and present the findings at conferences. The results will be used to inform a clinical supervision guideline.

**Who should I contact for further information?**

Please contact Rebecca Bullingham post graduate researcher on:

[craner@cardiff.ac.uk](mailto:craner@cardiff.ac.uk)

07930686557

**What if there is a problem?**

If you have any concerns or complaints during the course of this research project, please contact [Professor Marjorie Weiss [WeissM1@cardiff.ac.uk](mailto:WeissM1@cardiff.ac.uk)] who will address the issue. If you remain unhappy and wish to complain formally, you can do this by contacting Professor Andrew Westwell, Director of Research, Cardiff School of Pharmacy and Pharmaceutical Sciences, Redwood Building, King Edward VII Avenue, Cardiff CF10 3NB, [westwella@cardiff.ac.uk](mailto:westwella@cardiff.ac.uk).

**Who is organising and funding the research?**

Cardiff University School of Pharmacy and pharmaceutical sciences

**Who has reviewed the study?**

Cardiff University School of Pharmacy and pharmaceutical sciences

Ethics committee, Health and Care Research Wales and the NHS R&D office.

**Thank you for reading this information sheet and for your consideration in taking part in this research.**

Appendix 11: Cardiff University ethical approval 5th of April 2019

SPPS Ethics Approval Notification (EAN)

8/9/14 v12

**Cardiff School of Pharmacy and Pharmaceutical Sciences,  
Research Ethics Approval**

This form has been signed by the School Research Ethics Officer as evidence that approval has been granted by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee for the following study:

Project title: 1819-13: The ideal purpose and content of clinical supervision

This is a/an:	Undergraduate project	
	ERASMUS project	
	Postgraduate project	X
	Staff project	

Name of researcher: (PG/Staff projects only)	<u>Rebecca Bullingham</u>
Name of supervisor(s):	<u>Professor Marjorie Weiss &amp; Dr Rhian Deslandes</u>

**STATEMENT OF ETHICS APPROVAL**

**This project has been considered and has been approved by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee**

Signed [Redacted Signature] Name M Ivory Date 05/04/19  
(Deputy Chair, School Research Ethics Committee)



Appendix 12: Cardiff University ethics and amendments 24<sup>th</sup> of May 2019

SPPS Amendment Approval Notification (AAN)

11/10/14 v1

**Cardiff School of Pharmacy and Pharmaceutical Sciences,  
Research Ethics Approval**

**AMENDMENT APPROVAL**

This form has been signed by the School Research Ethics Officer as evidence that approval has been granted by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee for amendment(s) to the following study:

Project ref and title:	1819-13: The ideal purpose and content of clinical supervision
------------------------	--

Name of researcher: (PG/Staff projects only)	<u>Rebecca Bullingham</u>
Name of supervisor(s):	<u>Marjorie Weiss and Rhian Deslandes</u>

The amendment(s) dated 17 May 2019 have been reviewed and approved.

Any further amendments will require approval.

**STATEMENT OF ETHICS APPROVAL**

**The proposed amendment(s) have been considered and approved by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee**

Signed [Redacted Signature] Name M Ivory Date 24/05/2019  
(Deputy Chair, School Research Ethics Committee)

## Appendix 13: Delphi round one survey

### **E-Delphi statements round one**

#### **Purpose of clinical supervision**

- 1) "The purpose of clinical supervision is to support me and give me confidence in my clinical practice"
- 2) "Clinical supervision should be a positive learning experience"

#### **Content of Clinical supervision**

- 3) "The clinical supervision agenda needs to be primarily led by me and my identified learning needs. My supervisors role is to support me to achieve my learning needs"
- 4) "Ad -hoc support and access to another clinician for immediate support when I'm in a difficult clinical situation is important to me"
- 5) "Informal and ad-hoc clinical supervision is not enough as the only form of supervision"
- 6) "It is important for independent prescribers in primary care to have formal clinical supervision arrangements"
- 7) "Having an agenda and an action plan for clinical supervision sessions is useful"
- 8) "Protected time for clinical supervision is important"
- 9) "Face-to-face clinical supervision is better than remote supervision (email, telephone ect)"
- 10) "Reflecting on clinical practice is an important part of clinical supervision"
- 11) "Clinical supervision needs to take place on a monthly basis as a minimum (pro-rata)"
- 12) "The clinical supervisor must be an independent prescriber or a GP"
- 13) "There needs to be clear guidance so clinical is standardised so everybody is receiving the same support"
- 14) "Documenting and having a written record of clinical supervision is important"

#### **Outcomes of clinical supervision**

- 15) "Effective formal supervision would encourage me to stay in a workplace"
- 16) "Clinical supervision supports governance around independent prescribers"

Appendix 14: Delphi round two survey

**Descriptor**

9 - "Having an agenda and an action plan for clinical supervision sessions is important" How would you rate the importance of this statement?

10 - "Face-to-face clinical supervision is better than remote supervision (email, telephone etc)" How would you rate the importance of this statement?

13 - "Clinical supervision needs to take place on a monthly basis as a minimum (pro-rata)" How would you rate the importance of this statement?

14 - "The clinical supervisor must be a GP" How would you rate the importance of this statement?

8 - "All independent prescribers in primary care should have formal clinical supervision arrangements" How would you rate the importance of this statement?

16 - "All clinical supervision sessions should be documented in a written record" How would you rate the importance of this statement?

7 - "Informal and ad-hoc clinical supervision is not enough as the only form of supervision" How would you rate the importance of this statement?

15 - "There needs to be clear guidance so clinical supervision is standardised so everybody is receiving the same support" How would you rate the importance of this statement?



## **Participant Information Sheet Template**

### **Title of research project:**

What are the key stakeholders views of The Informed Model of Supportive Supervision (TIMSS) and the governance around independent prescribers in primary care?

### **Invitation**

My name is Rebecca Bullingham, I am an RGN and a PhD pharmacy student currently studying at the Cardiff School of Pharmacy and Pharmaceutical Sciences (Cardiff University). For my PhD, I have been investigating primary care pharmacist and nurse independent prescribers views of effective clinical supervision. The findings from the first two studies have been used to inform an empirical model of clinical supervision to be used in practice to guide and support effective clinical supervision sessions between a supervisor and a supervisee. For the third and final phase of research I am looking to interview key stakeholders involved with independent prescribing in Wales. Before making a decision whether to be involved in the study or not it is vital that you understand what the study is concerning and also the responsibilities associated with taking part. Therefore it is important that you read the information provided carefully, and then make your voluntary decision. If you do require further information on anything regarding the research or, have any unanswered questions then please do not hesitate to contact me.

### **Brief summary**

You are invited to join a study where we aim to explore your views of an empirical model of clinical supervision 'The Informed Model of Supportive Supervision (TIMSS)' and the governance around independent prescribers in primary care.

### **What is the purpose of the study?**

Existing literature would indicate that the delivery of clinical supervision in the UK has significant variations. The absence of a clear definition contributes towards a lack of consistency of both style and occurrence of supervision in the UK. The importance of clinical supervision is widely documented, it contributes to improved patient care and improved staff morale. Phase 1 and 2 of this research has explored the 'ideal supervision' from the perspective of the supervisees. A model of clinical supervision has been created from the findings and the next step will be exploring the perceptions of key stakeholders of this model, as well as their views on the governance arrangements around independent prescribers.

### **Why have I been invited to take part?**

You have been invited to take part as you are a key stakeholder in independent prescribing in Wales. Therefore, you are in a position to provide your views and experiences of supervision.

**Do I have to take part?**

No, participation in the study is entirely voluntary. All participants who choose to enter the study must give informed written consent and be freely willing to participate, you can withdraw from the study at any point.

**What will happen to me if I take part?**

You will need to contact the researcher directly to take part in the study. The researcher will discuss the information you have been given to ensure you are fully informed in the study aims and objectives. If you are happy to proceed, you will need to sign a consent form and the researcher will arrange a suitable time and place to conduct an interview with you which will last approximately 1 hour. The data will be collected in the form of semi-structured interviews in a location of your choice (within reason).

**Will my taking part be kept confidential?**

Personal identifiable information such as name and age will not be used. Non-identifiable professional demographic information will be used in the data.

**What will happen to the results?**

The interviews will be recorded, transcribed and coded. The researcher will look for themes running through the interviews and they will be discussed in publications such as research papers, conference publications as well as the PhD thesis. Individual quotes may be used to demonstrate a point but, no personal identifiable details will be attached to the quotes.

**Who should I contact for further information?**

Please contact Rebecca Bullingham post graduate researcher on:  
[craner@cardiff.ac.uk](mailto:craner@cardiff.ac.uk)  
07930686557

**What if there is a problem?**

If you have any concerns or complaints during the course of this research project, please contact [Professor Marjorie WeissWeissM1@cardiff.ac.uk] who will address the issue. If you remain unhappy and wish to complain formally, you can do this by contacting Professor Andrew Westwell, Director of Research, Cardiff School of Pharmacy and Pharmaceutical Sciences, Redwood Building, King Edward VII Avenue, Cardiff CF10 3NB, [westwella@cardiff.ac.uk](mailto:westwella@cardiff.ac.uk).

**Who is organising and funding the research?**

Cardiff University School of Pharmacy and pharmaceutical sciences

**Who has reviewed the study?**

**Cardiff University School of Pharmacy and Pharmaceutical Sciences ethics committee.**

**Thank you for reading this information sheet and for your consideration in taking part in this research.**

## Topic Guide

### **Stakeholder interviews - views of governance of independent prescribers and feedback on The Informed Model of Supportive Supervision (TIMSS)**

#### **6. Welcome**

Introduce self and study – aims and objectives

Confirm consent, stop at any time

Happy to proceed

#### **1) The Informed Model of Supportive Supervision (TIMSS) Received the model and had time to look at it?**

Feedback on the model

Anything not relevant/achievable?

Anything to add?

Would it be used/helpful?

#### **7. Views on Ip's and safety**

*Participants personal views*

- “Independent prescribing has developed over the years to the stage we are at today. Do you have any safety concerns of independent prescribers in primary care?”
- “what are your views on independent prescribers in primary care?”  
(prompts if needed) effective? Ineffective? Unsafe? Safe?
- “In your view, what are the key facilitators and barriers keeping Ip's prescribing safely in primary care?”

#### **8. Governance**

- “How do independent prescribers become known to the health board?”  
Probes - Any issue with this? Are they all known?
- “Could you tell me about the governance structures around independent prescribers in primary care?”  
Probes - Support – what support? mandatory or offered? Any policy or guidance?



- “Are independent prescribers working in GMS services included in the governance structures in place?”

Probes – who’s responsibility are they?

**Probes:**

- Governance/concerns different to medical prescribing
- More punishment for Ip’s compared to Drs who make prescribing errors?
- Is clinical supervision important? Why/why not?
- Preferred frequency and duration
- Preferred location
- Ideas of preferred supervision styles including those not encountered
- Previous roles requiring more support

**Further comments or issues they’d like to raise?**

**Explain participant validation 30% of interviews– would they like to be considered?**

**Thank you for your time**

**Cardiff School of Pharmacy and Pharmaceutical Sciences,  
Research Ethics Approval**

This form has been signed by the School Research Ethics Officer as evidence that approval has been granted by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee for the following study:

Project title:	<u>1920-06: What are supervisors' views of The Informed Model of Supportive Supervision (TIMSS) and the governance around independent prescribers in primary care?</u>
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This is a/an:	Undergraduate project	<input type="checkbox"/>
	ERASMUS project	<input type="checkbox"/>
	Postgraduate project	<input checked="" type="checkbox"/>
	Staff project	<input type="checkbox"/>

Name of researcher: (PG/Staff projects only)	<u>Rebecca Bullingham</u>
Name of supervisor(s):	<u>Marjorie Weiss &amp; Rhian Deslandes</u>

**STATEMENT OF ETHICS APPROVAL**

**This project has been considered and has been approved by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee**

Signed [Redacted Signature] Name M Ivory Date 21/11/2019  
(Deputy Chair, School Research Ethics Committee)

Appendix 18: Phase 3 Cardiff University ethics and amendments 11th of December 2019

SPPS Amendment Approval Notification (AAN)

11/10/14 v1

**Cardiff School of Pharmacy and Pharmaceutical Sciences,  
Research Ethics Approval**

**AMENDMENT APPROVAL**

This form has been signed by the School Research Ethics Officer as evidence that approval has been granted by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee for amendment(s) to the following study:

Project ref and title:	<u>1920-06: What are supervisors' views of The Informed Model of Supportive Supervision (TIMSS) and the governance around independent prescribers in primary care?</u>
------------------------	--

Name of researcher: (PG/Staff projects only)	<u>Rebecca Bullingham</u>
Name of supervisor(s):	<u>Marjorie Weiss &amp; Rhian Deslandes</u>

The amendment(s) dated 9 December 2019 have been reviewed and approved.

Any further amendments will require approval.

**STATEMENT OF ETHICS APPROVAL**

**The proposed amendment(s) have been considered and approved by the Cardiff School of Pharmacy and Pharmaceutical Sciences Research Ethics Committee**

Signed [Redacted Signature] Name M Ivory Date 11/12/2019  
(Deputy Chair, School Research Ethics Committee)

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