Clinical communication skills are at the heart of medical practice, and poor performance is an important factor in the origins of complaints and litigation. A recent study from Canada shows that poorly performing doctors can be identified early in their careers and possibly given targeted support and appropriate further training.

Tamblyn and colleagues followed up a cohort of newly qualified doctors in Ontario and Quebec for two to 12 years. They found a link between both communication and quality of care scores on the clinical skills examination of the Medical Council of Canada (taken shortly after graduation) and subsequent complaints registered with the medical regulatory authorities. A decrease of two standard deviations in communication score on the examination was associated with one additional complaint per 100 years of practice. People whose scores of communication skills were in the bottom quartile had a significantly increased risk of subsequent complaints from patients (excess complaint rate 2.15 per 100 practice years compared with the three other quartiles).

Although the rate of complaints per 100 years might seem low, complaints were made against 17% of doctors at least once during the average 10 year follow-up period. Factors that were significantly associated with increased numbers of complaints were the clinician being male and working in family practice or surgery (rather than general medicine). Most of these doctors would have received training in communication skills during their medical school training, although this may have been of variable quality, and they were well aware of the content of the clinical skills examination.

Considerable resources are currently devoted to teaching and assessing the communication skills of medical students. The Calgary Cambridge guide is well established as a generic guide to consultations and the skills needed for effective communication. Students are often tested for communication skills—for example, taking a history; exploring the patient’s perspective, concerns, and expectations; explaining diagnoses and treatment; and discussing options for treatment or care. Students also cover specific tasks such as breaking bad news.

Tamblyn and colleagues’ results suggest that doctors whose communication skills need to be improved could be identified before problems are encountered in clinical practice. Stricter thresholds for passing graduate medical examinations or postgraduate qualifications could be enforced. However, as these researchers point out, the reliability of many assessments of communication skills is low (and lower than assessments of clinical skills, for example), especially if relatively few (four or five) objective structured clinical examination stations are used.

More could be done with the data already being collected during medical training. Firstly, examinations commonly test a range of knowledge, skills, and attitudes to produce an overall mark, and poor performance in one area can often be compensated for by good performance in another. To combat this we may need to make examinations more modular and make it mandatory for students to pass the communication skills component. Secondly, more could be done with data from examinations. Students who only just pass or who fail at their first attempt and pass subsequently are at high risk of complaints in the future. Proactive efforts may be able to rectify their deficiencies and reduce the risk of subsequent poor performance or complaints.

The assessment of doctors already in practice presents greater challenges. Both individual and contextual factors must be considered, with a clear focus on how the clinician is functioning at work. Four frames of assessment of competence are described—performance in assessments before practice; participation in continuing medical education and training programmes; performance in work processes such as review of medical records and peer appraisal; and assessment of outcomes of work, which should include complaints and litigation.

How the doctor functions within the team is also important. Three levels of assessing performance have been described—screening of entire populations or random samples thought to be at low risk; targeting of those thought to be at risk (for example, doctors who are professionally isolated); and assessing those about whom there are specific concerns. These assessments could be used to scrutinise the performance of doctors on a regular basis after completing postgraduate training.

Providing support to poorly performing doctors is as complex as the methods of assessment, and it is difficult to achieve improvements. A systematic review found that only two of seven trials of interventions to enhance patient centred behaviour improved patients’ assessments of interpersonal care skills. Experienced clinicians may have developed ingrained patterns of behaviour. Lack of insight may prevent doctors from remedying their weaknesses, even when they are accurately identified. Additional training in communication skills can be provided, however, and it may benefit some groups.

Poor communication that triggers complaints may indicate global deficits rather than a simple lack of skill in talking to patients, and it may be an indicator of poor health, poor decision making, or other cognitive...
In the accompanying paper, McCallum and colleagues report a systematic review of the effects of different surgical techniques for treating pilonidal sinus. Pilonidal disease is an infection in a “ditch” that results from mechanical stretch, which causes enlargement and rupture of hair follicles in the natal cleft. The disease is confined to skin and fat, can be acute or chronic, minor or major, and can range from an asymptomatic pinhole in skin to an abscess the size of an orange.

The disease affects mainly young men aged 15-30. McCallum and colleagues report an incidence of 26/100,000, but it varies by population—from 0.11% in women at college to 8.8% in Turkish soldiers. One large series reported that 78,924 US servicemen in the second world war were in hospital for an average of 55 days each with pilonidal problems, chiefly because of complications of wide excision. As a result, wide excision was banned by the surgeon general—a ban that was subsequently ignored. Pilonidal disease is often treated by removing the diseased skin and subcutaneous tissue completely. The surgical wound is either closed with sutures (for healing by primary intention) or packed open (to heal by second intention). Both treatments can lead to recurrences and unhealed wounds. So many clinical trials have compared whether it is better to pack the wound open or to close it.

McCallum and colleagues’ study is a systematic review of such trials. It assesses the effects of open healing versus closed surgical treatment and the optimal method of closure (midline versus off-midline) for pilonidal disease. The outcomes were time to healing, surgical site infection, and recurrence rate. The review found no significant difference between open and closed healing in the rates of surgical site infection, and recurrence was significantly less likely after open healing (relative risk 0.42, 95% confidence interval 0.26 to 0.66). Data were insufficient to make conclusions about time to wound healing. Compared with off-midline surgical closure, midline closure significantly increased healing time, recurrence, and infection of the surgical site.

The authors conclude that based on current evidence, off-midline closure should become standard management of pilonidal sinus. The saying, “stay out of the ditch,” repeats the sense of their words, and these conclusions are supported by other reports.

However, the review does not explore the more fundamental question of whether extensive excision is even necessary. The included trials analysed different methods of excising diseased tissue, but these methods were developed before our current understanding of pilonidal disease.

Two options are available for the treatment of pilonidal disease. Surgeons can remove tissue thickened by bacterial invasion or reshape the contours that fostered that invasion. Widely removing a pilonidal abscess treats pilonidal disease as if it were a malignancy. Reshaping it treats it as an infection, with the guiding principles being to drain abscesses and protect tissue from bacteria.

So what should be considered best practice for the treatment of pilonidal sinus? For early primary disease collected hair and keratin can simply be removed from the pits of origin. In my opinion, Armstrong and Barcia describe this conservative management well and establish its desirable results, although they did not conduct a double-blind study to prove that their approach is superior to all other approaches to early primary pilonidal disease. For more advanced primary disease the tiny midline pits of origin can be excised and the abscess cavities cleaned out through off-midline incisions.
advanced disease involving deep clefts, multiple sinus tracts, and failure of previous surgery, the depth of the cleft should be reduced and use made of flaps and off-midline closure of the wound.1,8

Patients and clinicians can access the principles of off-midline care through a website operated by the Pilonidal Support Foundation (www.pilonidal.org). The site maintains a fully accessible registry of surgeons familiar with off-midline repairs, which lists 58 surgeons worldwide including eight in the United Kingdom. As with laparoscopic gallbladder surgery, patients may become advocates of off-midline closure.

Future research should try to define why midline wounds are problematic. Is it unusual bacteria, low ambient oxygen in the cleft, or high pressures that trap pus? The surgical community is a tough nut to crack, but hopefully surgeons will take up these improved methods in the years to come. After all, it took nearly a century for the disproved theory of the congenital origin of pilonidal sinuses to die out.

1 McCallum ID, King PM, Bruce J. Healing by primary closure versus open healing after surgery for pilonidal sinus: systematic review and meta-analysis. BMJ 2008; doi: 10.1136/bmj.39517.808160.BE.
6 Senapati A. Failed pilonidal surgery: new paradigm and new operation leading to cures. Tech Coloproctol 2003;7:211; discussion 211.

Intergenerational recurrence of breech delivery
Maternal and paternal history of breech increase risk equally

Much attention has been focused on the consequences of breech presentation and on strategies to minimise risk for both the fetus and the mother. Studies, including the landmark term breech trial, have had a positive effect on clinical practice and set a standard in developed countries of caesarean delivery for persisting breech presentation.1-3 Less attention, however, has been focused on why some fetuses deliver in breech position. In the accompanying paper, Nordtveit and colleagues investigate whether the risk of breech delivery can be passed on through generations via both men and women.4

The prevalence of breech presentation decreases through gestation as fetuses mature, and most fetuses move into cephalic position before delivery. The prevalence of breech presentation is 25% at 28 weeks' gestation and 3-4% at term.2 Risk factors include maternal characteristics (primiparity, contracted pelvis, high maternal age, and uterine abnormality); characteristics of the pregnancy (multifetal gestation and placental implantation site); and fetal factors (preterm birth, growth retardation, neuromuscular dysfunction, and malformations).4-10

The high recurrence of breech presentation between siblings may largely be attributable to the maternal uterine environment.11 However, recurrence between generations suggests that one or more genetic factors may be passed from the parent to the developing fetus. Nordtveit and colleagues investigated this possibility by using the medical birth registry of Norway.4 This registry is a population based compulsory registry of all live births and still births of 16 weeks' or more gestation.4 It contains the records of more than 2 million births in Norway since 1967 and is a respected resource for medical and public health research. Using registry data, the authors linked mothers' and fathers' birth records (1967-86) to the records of their offspring (1987-2004). First born singleton offspring with a birth weight of 500 g or more and their parents were included in the study. To investigate paternal effects, paternal half sibling births were also examined. The authors evaluated multiple factors in the parental histories in relation to breech delivery in the offspring.

The authors' main conclusion was that an increased risk of breech delivery in first born offspring was associated with both a maternal and a paternal history of breech delivery at term. The paternal effect was as strong as the maternal effect (odds ratio maternal 2.2, 95% confidence interval 1.9 to 2.5; paternal 2.2, 1.8 to 2.7).4 These findings are novel and intriguing, but are they robust?

Overall, the authors' results seem plausible. However, further discussion of missing data, possibly inaccurate or inconsistently recorded data, and of potential misclassification would have been helpful. For example, an improved data collection tool with a checkbox for breech delivery was introduced in 1999, and breech delivery may have been misclassified in both parents and offspring before this date. It would have been informative to discuss how this could have influenced the results, especially as the prevalence of breech presentation increased over the study period.

Interestingly, some of their results on maternal and paternal birth order might suggest less of a genetic trait for breech presentation than an environmental factor or interaction. A breech trait is unlikely to be preferentially passed to offspring from first born rather than second born parents. Future research looking at the offspring's uterine environment and specific characteristics (for example, specific major malformations) in the context of parental birth factors may provide some insight into the authors' reported maternal and paternal effects.

Members of Nordtveit's team have published other articles on breech presentation and have used the Norwegian registry for generating and testing hypotheses.4,10,12 These
and other observational studies that use large linked population databases, such as the medical birth registry of Norway, are of value and are especially useful for research questions that need large study samples. Multiple biological mechanisms probably contribute to the risk of breech presentation—some genetic (maternal or paternal, or both), some related to the uterine environment, and some a combination of both. Nordtveit and colleagues’ findings are novel, but strength of evidence will come from consistent conclusions across multiple epidemiological and laboratory investigations.

So what should clinicians do in the meantime? It is premature to advise mothers of a higher risk of a breech delivery if their parents had a breech delivery. However, clinicians should continue to gather information during early prenatal care on maternal and paternal birth presentation and other potential risk factors for breech delivery. This combined information may serve to alert the clinician and patient to the possibility of breech presentation and that they should discuss planned external cephalic version or caesarean section delivery (or both).


**Darzi’s review of quality of care in the NHS**

Should focus on how to motivate institutions as much as what good quality care looks like

In 2002, a bitter argument raged in the letters pages of the BMJ. It followed the publication of a study by Feachem and colleagues comparing an American managed care organisation, Kaiser Permanente (North California), and the NHS.1 The NHS fared less well on several indicators of effectiveness and efficiency of care. Feachem and colleagues (and others) concluded that a combination of competition, better information systems, and other incentives—not just level of funding—explained Kaiser’s better performance.1 The study was quickly attacked on methodological and ideological grounds.2

Intrigued like many others, a group at the King’s Fund looked more closely at the care provided for people with long term conditions at Kaiser and four other top performing managed care organisations in the United States. We found systematic highly proactive and personalised care—nothing in theory that could not be provided in the NHS, although it frequently is not. Our conclusion was that the Department of Health should focus as much on the “how” of care (how to motivate institutions to provide good quality care)—as much as the “what” (what good quality care looks like).3 Incentives are crucially important. The non-financial incentives arising from professionalism and peer review, central directive, regulation and public reporting of performance, and local accountability are not enough; and more controversially, there is a role for competition between institutions for resources to motivate the people within them, even doctors.

This conclusion is hardly new as it has guided NHS policy since the early 1990s, except for an interlude between 1997 and 2001. For some, it is flatly unacceptable on grounds of ideology or plain self interest, but for others—in the United Kingdom and internationally—the question is not whether incentives such as competition have a role but what is the right blend of them to achieve an effective efficient, responsive, and equitable health system. This question is squarely on the plate of Lord Darzi in his major review of NHS policy, which reports this June. His team is focusing on three broad areas: what world class quality of care looks like in a range of clinical areas; enablers and barriers to achieving world class care such as leadership and workforce; and “other,” which includes work on informatics, examining the case for an NHS constitution, and looking at “system incentives.” It is this last area that is key to success or failure of the review, not the construction of more up to date evidence based clinical pathways (important though these are).

The slate is clearly not blank. The set of reforms designed by the Blairites to increase competition and choice, and enhance regulation, is still under construction and barely implemented. The record so far of the recent reforms is mixed and weak. Payment by results is not having as much effect as hoped.3 Practice based
Leaving it local

More controversial decisions, such as the extent to which integrated care could be progressed through joint management of a capitated budget by hospitals and practices,\(^1\) the extent that competition for resources between providers should be enhanced, or whether individualised budgets should be given to patients could be the subject of a set of carefully crafted pilots evaluated “in real time” (not three years after the event) genuinely to inform ongoing policy on incentives. It is not possible to settle ideological disputes about the role of competition or other incentives using evidence, but it helps, and there is no excuse for not improving the evidence base to policy making.

Deaths in custody

The risk factors are known, but public policy is lagging behind

The excess risk of death for offenders is a public health concern. International comparisons of deaths in penal institutions published by the Council of Europe show wide variability in rates of overall mortality and suicide, sentencing policy, and rates of incarceration between countries.\(^1\) However, rates of suicide are significantly higher in prison populations than in free living populations worldwide.\(^2,5\) These findings suggest that referral to prison may not be appropriate for some people and identify gaps in knowledge for healthcare professionals and policy makers.

The recent increase in suicide (registered as self inflicted death) rates in prisoners in England and Wales comes against a background of a steady and downward trend since the turn of the century (table), despite increases in the prison population from around 60000 in the late 1990s to just over 80000 by the end of 2007. Deaths from natural causes have risen during this period and at 11.3 per 10000 have now reached the level seen for self inflicted death.
Routine statistics are not collected on prisoners after release, but studies have found that the risk of death is three to five times higher in adult men recently released from custody, compared with the normal population, and even higher for younger age groups.\textsuperscript{6,7} Large scale studies of deaths in custody and national commissions of enquiry point to some of the causes of this high risk of death among offenders.\textsuperscript{4,5,8} Some excess deaths, both during and immediately after custody, are caused by addiction to drugs or alcohol. More timely intervention by drug and alcohol rehabilitation services is needed, as are better facilities to prevent overdoses, particularly overdose arising from reduced resistance to toxicity on release.\textsuperscript{3} People with serious mental illness—who account for about 6-25% of the prison population—are especially vulnerable, and alternatives to prison are needed.\textsuperscript{2,4,5}

Problems arise when prison staff misinterpret the behaviour of offenders with psychiatric problems or physical illness. Epileptic seizures have been interpreted as resisting restraint and diabetic ketoacidosis has been mistaken for drunkenness or “acting up.”\textsuperscript{2,4,8} Studies often highlight lack of training in resuscitation,\textsuperscript{8} and improved training overall could help reduce deaths from suicide and from natural causes.

Comparative studies have thrown light on the complex reasons for suicide in prison. Preventive strategies should be tailored to meet the needs of individuals, particularly with respect to characteristics identified before imprisonment, such as drug use and mental illness.\textsuperscript{9} Most studies comment on the importance of better access to psychological support for people at risk of suicide and for preventive strategies in the wider prison environment, such as safer cell design, removal of ligature points, and improved access to meaningful activity and support networks. Clear evidence points to the vulnerability of younger people to the risk of suicide, and on the importance of measures to prevent suicide during the period immediately after being taken into custody.\textsuperscript{4,5,10}

So what needs to be done? An integrated cross-governmental strategy between prison authorities, health services, and other agencies is needed.\textsuperscript{11} Preventive strategies based on the dynamics of prison suicide have been introduced. These include a more progressive drug policy, improvements in the reception and first night process, access to the Samaritans and trained listeners, and increased monitoring of prisoners through the “assessment, care in custody, and teamwork” system.

Factors affecting premature death from natural causes are being investigated. The prison and probation ombudsman reviews all deaths in prison, although to date detailed scrutiny through methods such as confidential enquiry has been confined to suicides and homicides. The coroner’s office and voluntary sector organisations have highlighted failures in care in individual cases. The recently established forum for preventing deaths in custody is pressing the government to introduce powers to make public bodies act on the recommendations of coroner’s reports.\textsuperscript{12}

The transfer of responsibility for medical care in prison to the NHS was widely expected to raise standards of health care by improving accountability and transparency,\textsuperscript{11} although private prisons are still allowed to provide care directly. Primary care in prisons is still in the early stages of development and differs in several important ways to that available in the community. General practitioners are contracted only on a sessional basis, prisoners are not registered with them, prison populations are not yet included in the quality and outcomes framework, and advocacy is limited.

Further research will provide data to refine decisions about the appropriateness of interventions and best practice. However, this is currently limited by the lack of routine information across the prison system and record linkage into the community. Prisons are not currently linked by a national database, no routine national surveys look at the health of prisoners, and few properly conducted studies have evaluated the effectiveness of control measures. Estimates of relative mortality have been published, but more precise measures of the effect of exposure to prison and its consequences are needed.\textsuperscript{2,4,5}

Competing interests: AF has worked as an independent consultant on prison health for the Department of Health and the NHS.

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*Personal communication (M Keane, 2008)*