huge opportunity cost in terms of management time and effort. It indirectly prepared the ground for a more considered review of the way NHS pay and conditions of employment are determined. The Agenda for Change has the potential to take this considered approach.

Conclusions

The rapid change in many aspects of the nursing profession, and the changing boundaries of work between doctors and nurses, has produced a challenge that the NHS has not met fast enough and which it must now address. The variable and often poor quality of workforce planning, its lack of coherence or relation to other plans, the failure to consider the private sector, and changes in workload have been contributory factors. A further problem is that the NHS has a tendency to focus on the costs of training and education, without considering the costs associated with staffing shortages. Perhaps of greatest concern is the requirement for year on year efficiency gains. This

has led to a cycle of increasing pressure, often in the form of unpaid and unrecognised overtime. Workload has increased and skill mix has been diluted as the search for efficiency has turned into simple cost cutting. Evidence is emerging that a dilution in skill mix, level of workload, and other aspects of the work environment have important implications for quality. Developing a systematic and integrated approach to workforce planning can deliver improvements in the mid to long term, but some urgent and concerted action is also required in the short term.

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For and against

Doctors and nurses should monitor each other's performance

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FOR

"You used to work on ward 3. Do you remember me? I was on nights." The nurse approached me at the end of year house officers' party; it was 1981.

"I used to hate you," she added. She poured a pint of beer over me. I was too startled by this informal appraisal method to reply suitably. Later, I learnt I had incurred her wrath by reacting to the incessant inhuman bleep by arrogantly snapping at her part in my misery.

Only the minds, not the hearts, of the professions are behind being appraised. I am a general practitioner, and most of us cling on to "independent status," best viewed as a kind of complex performance related pay, with certain small freedoms and certain obligations. Senior hospital doctors have different obligations and less freedom but still have the privileges of rank. Not, perhaps, a free car parking space but certainly team leadership, care of employees, and involvement in hospital developments.

This aloof position that we hold permits serious appraisals to be seen as something to be done to others, not oneself. Indeed, status is a barrier behind which we cower.

That the threat is perceived so deeply shows how unconfident we are as doctors. Yet what aspects of our work are important to appraise? We leap to thinking of technical skills, diagnostic ability, prescribing effectiveness, and manual wizardry, and how could anyone but peers test that? (Actually, anyone with an objective testing tool could—a nurse, for example, or perhaps a

manager.) But what of communication skills and team-work attitudes, those education-speak phrases of the 1980s and 1990s?

Doctors can be evil, incompetent rogues and yet charm their way up the ladder to invincibility. So can nurses. Away from the Shipmans and the Allitts, we all know of generally well meaning and competent clinicians facing complaints in which a failure to communicate with patients and each other is a factor. The other clinicians, be they the same profession or not, will have valid experience and views on what might have gone better. But in our culture blame is passed around until the music stops and someone has to face it. Maybe feedback from a different profession would feel a bit less like criticism.

To expect a peer, a person of equal standing who purportedly knows what is involved in the job, to be the only source of feedback is like asking for forgiveness. As if my rudeness at dawn to the nurse whose name, if I ever knew it, I have forgotten is allowable because I was soaked in fatigue. It isn't—and neither was her lack of knowledge of my circumstances.

The roles of doctor and nurse are blurring. My practice nurse gave the doctors a tutorial on asthma last week, and is our team's expert. I fancy I might be skilled at serious mental illness, but we all do hypertension, immunisations, listening, terminal care, and much else. The nurse's view on me is as important as my partner's view on me, and mine on her. The issue is whether any of this will result in change. Let's hope so.

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AGAINST It is undesirable and impractical for doctors and nurses to monitor each other's performance. It would undermine effective team working, leading to mistrust and animosity, without any gain for patients.

The recent high profile cases involving doctors—the Bristol case, where nurses felt unable to voice their concerns, and the Shipman case, where suspicions were aroused by a relative—have very little to do with the need for nurses to assume responsibility for monitoring medical practice. The problem lies with professional socialisation and the belief that whistleblowers will be treated unfairly, particularly when they challenge the professional practice of someone who holds a position of authority.

Current changes in nursing and medical education reflect the need to train a workforce that is able to meet the demands of the modern NHS. For example, the mentoring of nurse practitioners by doctors, to facilitate the acquisition of physical examination skills, enables these nurses to extend their practice to benefit patients. However, this does not change their fundamental nursing role. The mentoring doctors have a very different educational background, and this background does not equip them to monitor or assess nursing practice, except within the scope of taught skills such as physical examination.

Similarly, nurses who mentor doctors—for example, newly qualified doctors acquiring clinical skills in a ward setting or doctors undertaking multidisciplinary advanced educational courses such as an MSc in pain management—do not have the training to monitor doctors' performance except within the limits of the course. Registering bodies and employers require doctors and nurses to be monitored. How, and by whom, is a matter for the professions.

The apparent inability of the medical profession to regulate themselves has resulted in the introduction of reaccreditation. The demise of the current system means that doctors will be expected to produce documentary evidence of how their learning has changed their practice; doctors' performance will be subject to peer review, and poorly performing doctors will be brought into a system of support and educational updating. This has caused some discontent among the medical profession, but it would be totally unacceptable for both doctors and nurses if nurses were involved in the process.

The nursing profession has successfully maintained self regulation. The protection of the public is central to the process, as is evident when nurses who are subjected to disciplinary hearings by the United Kingdom Central Council for Nursing, Midwifery, and Health Visiting are removed from the register, but doctors disciplined in similar incidents are reprimanded and left to practice. Clearly there is a need for equity, and both professions need to audit their regulations. Both professions are accountable for their actions, by act or omission. Both are required to recognise limitations in knowledge and skills when treating patients and to seek advice and support. Both doctors and nurses are required to undertake training to fill gaps in knowledge and skills and to be lifelong learners.

Although it is necessary and desirable for any failure of nursing or medical care to be brought to the attention of staff and management, it is the responsibility of each profession to monitor its own members.

Patients will be best served by teams of doctors and nurses with the necessary skills and training to provide the relevant care at the point of contact. They need to have full confidence that the practice of these doctors and nurses has been subject to scrutiny, measured against best practice within their individual professions.

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When I use a word ...

Monthly injections

If you want to extend the duration of action of a drug you can give it in a so called modified release formulation, from which it will slowly enter the blood and find its way to the site of action. The modern term *modified release* was first used, as a blanket term for all such formulations, in 1982, as far as I can discover. And before it came into currency in the 1990s (it was first used in the *British National Formulary* in the 22nd issue, September 1991), formulations of this kind were described as *extended release* (1982), *delayed release* (1970), *prolonged release* (1965), *timed release* (1964), *controlled release* (1963), *long release* (1962), *slow release* (1961), or *sustained release* (1956). The MESH heading "Delayed action preparations" did not enter Index Medicus until 1963. But the concept dates back at least to the 1940s, when the term *menstruum* was coined to describe a matrix on which such formulations could be based.

Because vaginal discharge of blood occurs monthly, the Romans called the discharge itself the *menstrua* (Latin *mensis*, a month, see *BMJ* 1997; 314:973). *Menstrua* was the plural of *menstruum*, which meant a monthly payment or term of office—nothing to do with your monthlies. Now medieval alchemists thought that the fetus was compounded of two parts, the spermat and the menstrual, and they compared the base metal that they intended to transmute into gold to the spermat part, and the solvent with which they would bring this miracle about to the menstrual. And so, forgetting their classical Latin,

they called the solvent the *menstruum*. A *menstruum* thus became any liquid that would dissolve a solid, including drugs. The word was also used figuratively: "Death," wrote Richard Whitlock in his *Zootomia* (1654), "is a preparing Deliquium, or melting us down into a *Menstruum*, fit for the Chymistry of the Resurrection to work on."

Later the word was turned upside down, when in the 1940s Dr George P Pitkin created a solid formulation that would act as a vehicle for a solution of a water soluble drug. And, forgetting his alchemy, he called it a *menstruum*, Pitkin's *menstruum* to be exact. The idea was that after intramuscular or subcutaneous administration the *menstruum* would retard the rate of absorption of the drug and thus prolong its duration of action. It was used, for instance, for the subcutaneous administration of heparin (*Am J Med Sci* 1944; 208:54-63).

Pitkin's *menstruum* took about six days to make, from gelatin, dextrose, and acetic acid. The viscosity of the *menstruum* depended on the amounts of gelatin and dextrose it contained, and the more viscous it was the slower the rate of drug absorption. The effect of a single injection of heparin would last 24 to 72 hours or even longer. Unfortunately, not long enough for a monthly injection, which would perhaps have justified the use of the term *menstruum*.

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