the condition it addressed. In such cases detailed investigation would lead to no recommendations for change. At the other end of this wide spectrum is the possibility of professional malfeasance (see the paper by Graham Neale on p 1483[7]), and even purposeful harmful acts are not impossible. Unlike the airline pilot, medical professionals do not share the fate of those in their care. Even if the patient dies because the hospital burns down in the middle of the operation this should still not be called an accident because buildings catch fire for reasons.

As the issues in the medical case are more complex than in the transport case the reasons for replacing the word accident by a more objective and crisp word are all the more compelling. While some might argue that this is a pedantic quibble to be dismissed by "What's in a name?", I think that the benefits of more precise terminology would be substantial. The central issue is that "accident" conveys a sense that bad outcomes are to be explained in terms of fate and luck rather than a set of understandable, and possibly changeable, antecedents. The opportunities to reduce harm will increase if we keep uppermost in our thinking that "The fault... is not in our stars, but in ourselves."

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Explaining referral variation

GPs cannot afford to be uninterested in the topic

Yet again, two papers on hospital referrals in this week's journal (p 1465,[1] p 1467[2]) show the complexity of the topic. If their findings are indicative of the rest of Britain, then general practices' referral rates would seem to vary by a factor of four. Despite new work on this topic[3,4] questions remain on what this variation means and how to influence it.

Much anecdotal support exists concerning the issue of "inappropriate" referrals to hospital. Fertig and colleagues have used the implicit criteria of hospital specialists to judge whether referrals received by them were inappropriate.[1] Except in orthopaedic cases, about 15% were judged to be so, with referrals between hospital specialists faring no differently than those from general practice. The authors calculate that reducing "inappropriate" referrals to zero would result in marginal overall reduction in referral rates. Moreover, using a set of local external clinical guidelines, Fertig and colleagues found evidence of underreferral. So the net result of ensuring that all referrals were appropriate would be to improve the effectiveness of the process rather than reduce numbers.

Importantly though, none of this work incorporates the views of patients; they may not share the definitions of general practitioners or hospital specialists. Like it or not, a person's right to hospital referral is enshrined in the general practice contract, an issue that is rarely debated in discussions on the gatekeeper role of the general practitioner.

Turning to ways of influencing doctors' behaviour, de Marco and colleagues sought general practitioners' views on which factors influenced their referral behaviour.[2] East Anglian doctors nominated four important factors: ease of access, interests and skills of the doctors, patient pressure or demand, and fear of litigation. Only obliquely do doctors seem to identify their personal traits as relevant.

Other studies have identified that a relative inability to tolerate uncertainty or a reduction in that tolerance in response to an unexpected event affects referral decision making.[5] Yet how often is the management of uncertainty discussed in undergraduate or vocational training curriculums? Perhaps it is not surprising, therefore, that the authors found it difficult to engage doctors in a discussion of their referral practice and the doctors from units with high rates were defensive. In the uncertain world of primary care it may be difficult for doctors to acknowledge their anxieties about decision making. It may well be in their patients' best interests for doctors to use the "when in doubt, refer" motto.

While studies have found that feedback on other aspects of clinical practice influences the process of care,[6] feedback on referral seems more problematic. In de Marco's study the feedback was treated with disdain, and a similar response greeted a feedback package in the north of England.[7] But this position is unsustainable. Despite the complexities surrounding referral and legitimate concerns about the quality of the techniques of providing feedback, general practitioners have to accept that information on referrals has a part to play in the effective use of resources. For every case referred without benefit to the patient's health there is an opportunity cost for others.

Does fundholding or health commissioning hold the answer? Both studies published in this week's journal were undertaken before fundholding became commonplace. Devolving responsibility for ensuring value for money to fundholders or to non-fundholding locality groups in association with commissioning agencies may be the missing element in the equation. But there is a need to recognise that the behaviour of individual doctors, and the factors underlying this, are key elements in the referral conundrum. Undergraduate and postgraduate education must pay more attention to this important aspect of medical decision making.

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