

to complete a systematic review of risperidone's efficacy in schizophrenia for the same reason.<sup>3</sup> These studies show that we have to find better ways of identifying and tracking clinical trials.

The history of this effort shows much good intention but only limited progress. One attempt to link research to practice in the setting of an entire health service began in the United Kingdom in 1991 with the launch of the NHS research and development initiative.<sup>4</sup> That programme placed the systematic collection of data from randomised trials at its intellectual centre. The Cochrane Collaboration has been its most important and successful partner and has focused its work on published clinical trials. But this leaves untackled the large amount of unpublished trials.<sup>5</sup> Chalmers famously described this underreporting of research as scientific misconduct,<sup>6</sup> and publication bias remains a pervasive problem. The medical editors' trials amnesty tried to flush out that evidence, with only partial success.<sup>7</sup>

Rather than treat the problem of hidden research retrospectively, a more sensible approach might be to prevent it.<sup>1</sup> Based on their original investigations of publication bias, Dickersin and Min have argued that one "possibility is to require registration of all clinical trials prior to initiation. While this is widely agreed to be a good approach, widespread registration has not yet been effected....Who will take the lead?"<sup>8</sup>

Apart from the NHS national research register and the Cochrane controlled trials register, the most significant recent lead has been taken by the pharmaceutical industry. For example, Schering Health Care and GlaxoWellcome have committed themselves to registering information about their own trials. Richard Sykes (chairman of GlaxoWellcome) argued that he and his colleagues understood "the value of information, and we want to create a climate of openness where the evidence for prescribing our products is clear."<sup>9</sup> Not all in the pharmaceutical sector agree, and Sykes has been ridiculed by some who see his step as opening up a window of vulnerability in GlaxoWellcome's commercial armour. But how can this be so when all that GlaxoWellcome is doing is releasing administrative information about continuing work (objective of the trial, end points, numbers, groups, and expected data of closure), not the actual data?

Editors also have a part to play. During peer review, editors increasingly find themselves requesting copies of the original trial protocol to check against the final submitted report. That "protocol culture" has led one of us to begin (and the other to plan) a protocol registration scheme.<sup>10</sup> Editors are unwilling to fill their jour-

nals with promises of what might be, but they can publish these protocols on their web sites, perhaps linking them to a central registry.

Publishers could also help this process by collaborating with one another to construct such a free online database. The lead here has been taken by *Current Science*, which launched a metaregister of randomised controlled trials in October 1998. Trials depend on patient participation and are often funded with public money. Publishers make money from reprints of clinical trials, so it is reasonable to expect them to contribute to an initiative from which they ultimately benefit. A valuable partner might be PubMed Central, a project launched by director of the National Institutes of Health to create a free electronic archive of biomedical research.<sup>11</sup>

The pressure to register trials will rise when research ethics committees, medical research charities, and drug and device manufacturers start to encourage trialists to register, especially since the responsibility for not publishing trial results seems to rest more with investigators than editors.<sup>8</sup> A further challenge is to devise an internationally agreed method for assigning each trial a unique identifier. One such scheme is being piloted in cancer, with the help of the Cochrane cancer network.

Taken together, these efforts might bring shape to a presently formless clinical research enterprise. Such a structure should help to deliver high quality evidence to the clinical setting.

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Richard Smith *editor, BMJ*

A version of this editorial also appears in the *Lancet* this week.<sup>12</sup>

- 1 Simes RJ. Publication bias: the case for an international registry of clinical trials. *J Clin Oncol* 1986; 4:1529-41.
- 2 Tramer MR, Moore RA, Reynolds JM, McQuay HJ. A quantitative systematic review of ondansetron in treatment of established postoperative nausea and vomiting. *BMJ* 1997;314:1088-92.
- 3 Huston P, Moher D. Redundancy, disaggregation, and the integrity of medical research. *Lancet* 1996;347:1024-6.
- 4 Peckham M. Research and development for the National Health Service. *Lancet* 1991;338:367-71.
- 5 Easterbrook PJ, Berlin JA, Gopalan R, Matthews DR. Publication bias in clinical research. *Lancet* 1991;337:867-72.
- 6 Chalmers I. Underreporting research is scientific misconduct. *JAMA* 1990;263:1405-8.
- 7 Roberts I. An amnesty for unpublished trials. *BMJ* 1998;317:763-4.
- 8 Dickersin K, Min Y-I. Publication bias: the problem that won't go away. In: Warren KS, Mosteller F, eds. *Doing more good than harm: the evaluation of health care interventions*. New York: New York Academy of Sciences, 1993.
- 9 Sykes R. Being a modern pharmaceutical company. *BMJ* 1998;317:1172.
- 10 McNamee D. Protocol reviews at *The Lancet*. *Lancet* 1997;350:6.
- 11 Marshall E. NIH's online publishing venture ready for launch. *Science* 1999;285:1466.
- 12 Horton R, Smith R. Time to register randomised trials. *Lancet* 1999;354:1138-9.

## Improving access needs a whole systems approach

*And will be important in averting crises in the millennium winter*

A population that can do trivial things like shopping 24 hours a day in a variety of ways does not expect that doing serious things like accessing health care should be as difficult as it often is. Optimal access means providing the right service at the right time in the right place. Simplifying and

improving access according to need is evident in recent initiatives by the British government, such as NHS Direct. Good access arrangements in the NHS will be central to averting crises in the millennium winter. Access should therefore be treated as part of a whole system of formal and informal care,<sup>1</sup> ensuring that

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links are made within and between public services of all kinds. From this perspective there are many ways in which access can be improved.

Firstly, ways of providing easier and more appropriate access to and between public services should be explored. Good access arrangements are vital at the interfaces of self and formal care and between primary and secondary care. Adoption of a whole systems approach in the winter of 1998-99 (involving better coordination between general practice, accident and emergency departments and admission units, and discharge from hospital) might have ameliorated the winter "crisis." During that winter, pressure to meet demand for care was probably compounded by the lack of arrangements for managing predictable peaks in demand, such as promotion of self care, telephone access, and better cover arrangements for nursing and residential homes. Patients may have bypassed general practices and cooperatives as phone lines became overwhelmed; and accident and emergency staff often had no other options but to admit a patient. Recent initiatives (on managing winter pressures and health improvement programmes) have encouraged health and local authorities to collaborate in providing appropriate services as part of a whole system of care. This means changes in institutional rules and arrangements. Joint funding of initiatives such as social services in admission units and jointly funded discharge systems and posts (such as directors of social services being jointly appointed by social services and the NHS) should be encouraged and evaluated. The strategies that primary care groups develop will be crucial in addressing system wide access to health and social care.

Secondly, a knowledgeable, informed public may be better able to improve its own health and manage its progress through the whole system without necessarily overwhelming the system. The NHS could do much more to support individuals in making informed decisions and choices about when and how to use the NHS. This could be by ensuring information and advice is easily available and harnessing the potential of information technology, of which NHS Direct is the most obvious example. Self care initiatives, including the actions that lay people take in managing illness, such as use of alternative practitioners, self help groups, information from a range of sources, and use of community pharmacies, need to be recognised and taken account of in strategies to maximise and enhance existing resources. These have the potential to improve health outcomes and enhance the appropriateness of demand for health care.<sup>2</sup>

Thirdly, professionals are in a powerful position to shape need and demand for health care and therefore access.<sup>3</sup> Traditional models of professional behaviour do not always promote high quality user led access to a complex system of health care. Professional changes which would enhance access to care include a consistent and seamless approach to advice, a multiskilled workforce (allowing greater access to knowledge and assistance), and a culture in which interprofessional rivalry is minimised and where real communication happens. Additionally, authorities and primary care groups need to target health services and improve access in areas with high deprivation and high morbidity rates.<sup>4</sup> Socioeconomically disadvantaged groups not

only have greater needs<sup>5-7</sup> but also have less access to help, demonstrating the persistence of the inverse care law.<sup>8</sup>

So how can matters be improved this millennium winter and beyond? In preparing for winter each primary care group could consider methods of access to advice and care as an important tool in shaping demand. By concentrating only on the possible increased demand from the small number of "worried well," we may lose sight of improving matters for the vast majority of the population through implementing a wider access strategy.

We should consider explicitly how people access care. Starting with public involvement and working across the whole system, a coordinated strategy should include joint working arrangements with social services, education, NHS ambulance trusts, and pharmacists. There is room for promoting self care advice and information about services in the form of posters, booklets, recorded phone messages, and newspaper adverts, and making greater use of Teletext and the internet. These arrangements need to be patient centred and avoid inducing fear or blame.<sup>9</sup> Equally important is the need to develop a range of options, such as nurse led schemes to prevent hospital admissions by providing emergency services in the community.<sup>10</sup> Actions at a national level include getting extra cash into the system early so that such changes can be in place to cope with changes in demand.

An enduring and highly valued aspect of the NHS is its availability free at the point of need, but the NHS's assumptions and arrangements about accessing services require modernising. Health policymakers, practitioners, and the public need to put access centre stage in health and social care arrangements.

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- 1 Rogers A, Entwistle V, Pencheon D. A patient led NHS: managing demand at the interface between lay and primary care. *BMJ* 1998;316:1816-9.
- 2 Gibson PG, Coughlan J, Wilson AJ, Abramson M, Bauman M, Henshey MJ, Walters EH et al. Self-management education and regular practitioner review for adults with asthma (Cochrane Review). In: *Cochrane Library*. Oxford: Update Software, 1999;
- 3 Armstrong D, Glanville T, Bailey E, O'Keefe G. Doctor-initiated consultations: a study of communication between general practitioners and patients about the need for reattendance. *Br J Gen Pract* 1990;40:241-2.
- 4 Andrulis DP. Access to care is the centerpiece in the elimination of socioeconomic disparities in health. *Ann Intern Med* 1998;129:412-6.
- 5 Webb E. Children and the inverse care law. *BMJ* 1998;316:1588-91.
- 6 Black N, Langham S, Petticrew M. Coronary revascularisation: why do rates vary geographically in the UK? *J Epidemiol Community Health* 1995;49:408-12.
- 7 Payne N, Saul C. Variations in use of cardiology services in a health authority: comparison of coronary artery revascularisation rates with prevalence of angina and coronary mortality. *BMJ* 1997;314:257-61.
- 8 Hart JT. The inverse care law. *Lancet* 1971;i:405-12.
- 9 Rogers A, Hassell K, Nicolaas G. *Demanding patients? Analysing the use of primary care*. Buckingham: Open University Press, 1999.
- 10 Croxson B. Home Service. *Health Serv J* 1999;28 Jan:26-7.