

complete long term protection, we do not know the optimum maintenance treatment to prolong the response.

NEERAJ SHARMA
Registrar

STEPHEN PRESCOTT
Senior lecturer in urology

Department of Surgery/Urology,
Western General Hospital,
Edinburgh EH4 2XU

- 1 Morales A, Eidinger D, Bruce AW. Intracavitary bacillus Calmette Guerin in the treatment of superficial bladder tumours. *J Urol* 1976;116:180-3.
- 2 Herr HW, Laudone VP, Badalement RA, Oettgen HF, Sogani PC, Freedman BD, et al. Bacillus Calmette Guerin therapy alters the progression of superficial bladder cancer. *J Clin Oncol* 1988;6:1450-5.
- 3 Heney NM, Ahmed S, Flanagan MJ, Frable W, Corder MP, Hafermann MD, et al. Superficial bladder cancer: progression and recurrence. *J Urol* 1983;130:1083-6.

- 4 Utz DC, Hanash KA, Farrow GM. The plight of the patient with carcinoma in situ of the bladder. *J Urol* 1970;103:160-4.
- 5 Lamm DL. Carcinoma in situ. *Urol Clin North Am* 1992;19:499-508.
- 6 Talic RF, Hargreave TB, Bishop MC, Kirk D, Prescott S. Intravesical Evans strain BCG for carcinoma in situ of the urinary bladder. *Br J Urol* (in press).
- 7 Catalona WJ, Hudson MA, Gillen DP, Andriole GL, Ratliff TL. Risks and benefits of repeated courses of intravesical BCG therapy for superficial bladder cancer. *J Urol* 1987;137:220-4.
- 8 Schellhammer PF. BCG treatment of superficial transitional cell carcinoma. *Urology* 1991;37 (suppl 16):16-8.
- 9 Soloway MS, Perry A. Bacillus Calmette Guerin for treatment of superficial transitional cell carcinoma of the bladder in patients who have failed thiotepa and/or mitomycin C. *J Urol* 1987;137:871-3.
- 10 Birch BRP, Harland SJ. The pT1G3 bladder tumour. *Br J Urol* 1989;64:109-6.
- 11 Cookson MS, Sarosdy MF. Management of stage T1 superficial bladder cancer with intravesical bacillus Calmette Guerin therapy. *J Urol* 1992;148:797-801.
- 12 Lamm DL. Complications of bacillus Calmette-Guerin immunotherapy. *Urol Clin N Am* 1992;19:565-72.
- 13 Ratliff TL, Gillen D, Catalona WJ. Requirement of a thymus dependent immune response for BCG-mediated anti-tumour activity. *J Urol* 1987;137:155-8.
- 14 Prescott S, James K, Hargreave TB, Chisholm GD, Smyth JF. Intravesical Evans strain BCG therapy: quantitative immunohistochemical analysis of the immune response within the bladder wall. *J Urol* 1992;147:1636-42.

Making clinical informatics work

Don't forget the doctor is the customer

The introduction of new technology into medicine has been limited by cost and ethical considerations rather than doctors' resistance. Far from being Luddites, doctors have taken a lead in developments. Why then do recent initiatives in health service information systems leave them so cold? The short answer is that doctors regard the current systems, unlike technology that they have embraced, as offering no obvious benefits either for patient care or for their own working conditions.

The information management group of the NHS Management Executive has spent eight years, and about £250m, developing and implementing an information strategy for the NHS. Despite this a recent review commissioned by the information management group from CASPE Consulting found that no computing initiative in Britain had successfully married a hospital-wide range of clinical activity with electronic means of recording.

The group's hospital information support system project (HISS)¹ has led to systems that, according to the project's director, have "an administrative rather than a clinical bias."² These systems often do little to support patient care and are unpopular with doctors, who perceive their main function as providing activity data for managers and purchasers.

Exceptions to this gloomy picture are a few small scale, locally driven hospital and community systems, usually developed by doctors (occasionally with support from the information management group). Some primary care health centres, which are in effect small businesses run by doctors, also have systems that integrate clinical and business functions successfully.

The simple message seems to be that, when clinical workers see a need for and a benefit from an information system and are allowed to take a lead, useful clinical tools result. Furthermore, these clinical tools can also fulfil a business role.

Remedying the situation in hospital and community services needs more than just action, leadership, and commitment from the information management group. It requires a fundamental shift in attitude and emphasis from those with control and influence: from the NHS Management Executive and Department of Health; from purchasers and providers, who need to plan services and monitor contracts; and from the information managers of provider units, who purchase information systems.

Priority must be given to meeting the information needs of clinical workers. These workers must become the "customers" of the information strategy, whose success must be judged by how well the customers' needs are met. This approach would require doctors to involve themselves actively in the development and implementation of information strategies at all levels of the NHS. Only such partnerships can overcome the daunting obstacles to the development of successful clinical informatics.

The information management group's information management and technology strategy,³ launched 18 months ago, is encouraging. One of its key principles is that "information will be derived from operational systems—data will be obtained from systems used by healthcare professionals in their day-to-day work. There should be little need for different systems to capture information specifically for management purposes."

Three current initiatives of the information group have clinical relevance and substantial involvement by clinicians. Firstly, the clinical terms project commissioned more than 50 working groups, all with clinical input, to develop a thesaurus of terms used in clinical practice.⁴ Each of these terms will be assigned a unique Read code.⁵ It is hoped that Read will become the standard coding system throughout the NHS and will provide the common clinical language for future clinical information systems.

Secondly, the integrated clinical workstation project⁶ has consulted widely with doctors and collaborated with the conference of colleges' information group to "capture the [information] requirements of medical doctors who provide direct clinical care in acute hospitals."⁷ Similar user requirements are being drawn up for nursing and professions allied to medicine. Perhaps for the first time the information management group has access to a description of the complexity of the clinical process and a document that will facilitate dialogue with clinical workers. The integrated clinical workstation project will develop demonstrators to model aspects of the clinical process thereby illustrating how work stations can support and enhance clinical care. The first demonstration will focus on the capture and collation of information on hospital discharge and its transmission to general practitioners.

The electronic patient record project is a longer term

initiative to specify the technology required to capture and use patients' clinical records electronically.

The existence of these initiatives is due largely to persistent pressure from clinical workers involved with the information management group. Although these links are encouraging, two measures of the group's commitment are less so: firstly, funding of these initiatives seems to be only about £4m, or 2% of the group's total spending to date (though a higher proportion of recent spending). And, secondly, the membership of a panel appointed by the NHS Management Executive to undertake a substantial review of staffing in the information management group does not include a single doctor.

Only if the information management group is itself convinced of the importance of a clinical focus will it be able to convince doctors that it will promote the development of systems that meet their needs and help them to care for patients. Achieving this holds the promise of better care

for patients and—for managers, purchasers, the NHS Management Executive, and the Department of Health—accurate and timely data captured as a byproduct of the collection of good quality clinical data.

PAUL LELLIOTT
Deputy director

Research Unit,
Royal College of Psychiatrists,
London SW1X 7EE

- 1 Cross M. Hospital information systems. *Health Services Journal* 1993;June 17:39-47.
- 2 CASPE Consulting. *ICWS programme: strand 2 scoping study*. London: CASPE Consulting, 1993.
- 3 Information Management Group of NHS Management Executive. *An information management and technology strategy for the NHS in England: IM & T strategy overview*. London: HMSO, 1992.
- 4 Buckland R. The language of health. *BMJ* 1993;306:287-8.
- 5 Information Management Group of NHS Management Executive. *An information management and technology strategy for the NHS in England: what are the Read codes?* London: HMSO, 1993.
- 6 Orr JS. Clinical computing: alone on a wide sea. *British Journal of Healthcare Computing and Information Management* 1993;10:14-5.
- 7 Information Management Group of NHS Management Executive. *Integrated clinical workstation: user requirements (acute hospitals)*. Loughborough: NHS Centre for Coding and Classification, 1993.

Dr Rabelais's 500 year old prescription

Laughter really is the best medicine

Next month France begins year long celebrations of the 500th anniversary of the birth of François Rabelais. To readers of the *BMJ* he is probably best known as a rumbustious writer of ribald tales during which whole armies are drowned in urine issuing from one of his giant heroes, ingenious but coarse solutions are found to intimate problems (for example, the use of a gosling's neck as an arsewipe in *Pantagruel* (chapter 28),¹ and "Gargantuan" feasts take place, marked by gluttony and bawdy jokes. (*Gargantua* (chapter 13)).¹ This vulgar Rabelais, in all senses of the word, can indeed be found in his works; but there is another, wise, medical, and Christian Rabelais who is found there too.

Born in the Loire valley in 1483 or 1494, Rabelais completed his medical training at the celebrated school of Montpellier, taking his MB in 1530 and his doctorate seven years later. But before settling on medicine as a career he had been successively a Franciscan friar, possibly a law student, a Benedictine monk, and a secular priest.^{2,3} He was thus unusually erudite, even for his day, with a strong enthusiasm for the new learning of the Renaissance and a foot in all three senior university faculties: medicine, law, and theology.

In true humanist spirit he published critical editions of some texts by Hippocrates and Galen⁴ and wrote an introduction to the medical letters of Giovanni Manardo, a much respected Ferrarese doctor of the older generation who was known for his readiness to criticise traditional learned medicine.⁵ Like many doctors of his generation, Rabelais published annual prognostications (which read rather like moralised versions of *Old Moore's Almanac*), but he was more than just an academic. He also practised, first in the public hospital in Lyons, then as the personal physician of senior French diplomats on missions abroad.

For all this activity he no doubt deserves a small place in the history of medicine; but his greatest contribution to his own day and to posterity are the four books of the adventures of the giants Gargantua and Pantagruel, published between 1532 and 1552. These immensely enjoyable narratives were not, as it may seem to modern eyes, written for a popular audience; they are brimful of erudite allusions and learned references to theology, law, and medicine, and they comment from the point of view of an insider on royal policy

towards Germany, the Holy Roman Empire, and the papacy.

Fleeting but incisive commentary on the bitter religious disputes of his day which divided Roman Catholics, Lutherans, and Calvinists can be found in the giant tales; Rabelais's own position seems to have been that of a moderate, deeply saddened by the prospect of schism but none the less fiercely attached to French interests when these touched on religion.³ This moderation is apparent also in the views he expresses about medical matters. From the first he referred to issues concerning his own profession in his tales, sometimes to show off his anatomical knowledge for comic effect and sometimes to air current disputes, such as the medicolegal question of the maximum length of a pregnancy—crucial in determining whether children were legitimate or not (*Gargantua* (chapters 3, 6, 27)).¹

From the third book onwards, however, he abandoned the pseudonym under which he wrote and signed his books "François Rabelais, docteur en médecine," giving his text the authority of his medical learning. Among all the weird and wonderful characters who inhabit his narrative he chose to portray some doctors, notably one called Rondibilis, who is consulted by another character, Panurge, on the delicate issue of sexuality and who duly produces the best available advice about marriage and about women, describing them as lustful, inconstant, irrational creatures, who are driven by their nature to seek constant sexual gratification; in this advice, Rabelais can help remind us that the notion of female frigidity is a recent one and that all "scientific" ideas about sexual differences have strong cultural and ideological elements lurking in them (*Third Book* (chapters 31-4)).^{1,6}

Rabelais also commented directly on his profession. In a letter to one of his patrons, which prefaces his fourth book, he sets down a Hippocratic ideal of good bedside practice, which is still relevant today. When doctors present themselves to their patients they should be well dressed, with beards trimmed and hands and finger nails clean. But, above all else, they should be cheerful and serene because a gloomy doctor makes a patient fear a poor prognosis and may even help to cause it, whereas cheerful and serene humours communicate themselves to the sufferer.

But the most important medical point he has to make