A VISION OF THE FUTURE

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I joined the Dalton Square practice in 1994. It is an eight-partner, city centre practice operating from two sites, the main surgery being situated at Dalton Square with the branch surgery at St Martin's College. When I joined, the practice was partially computerised. The computer system held data on repeat prescriptions, health promotion and some medical summaries. Its main purpose, therefore, was for administration and there was very limited clinical application.

The then situation provided a networked system with a limited number of PCs, installed with standard software packages and particular clinical software specific to general practice needs. This allowed mail merges and administrative tasks such as word processing, and an additional advantage was that these programs were compatible with individuals' home computers.

A decision to upgrade the system had, in principle, already been made by the partners. They had decided that a fully networked system would be ideal. They hoped to extend the existing system with a PC on every desk, with appropriate clinical software, which would be capable of developing into a complete patient record. The question of cost was, inevitably, a major issue. Our existing suppliers, in common with many others, embedded some of the software costs into the hardware price, making any substantial expansion of the system expensive. Although historically this had been common practice, some suppliers were beginning to move towards a more realistic pricing structure, separating the hardware and software costs and thus exposing the true charges. Choices are then more easily made.

Practice partners' ownership of the decision-making process was considered to be of the utmost importance if the new system was to be fully accepted and used by everyone. A number of issues was considered, particularly the suppliers themselves. Were they financially secure, and committed to ongoing development? Could they offer a fast, efficient response to both major and minor problems, and to individual user requirements?

At this time only a relatively small number of suppliers was able to meet all these criteria. Indeed most systems ran on dumb terminals and there was no evidence of a general move away from this. The situation was further complicated by the advent of fundholding as a part of a multi-fund. The system to run this would be installed at the same time, which would of course have a direct impact on our own decision.

It was a daunting and, at times, lonely responsibility to analyse the merits of the various packages in relation to our criteria and then to make a recommendation to the other partners. Understandably, the partners varied greatly in their knowledge of, and enthusiasm for, information technology. Scepticism reigned and the information on which I had to make a decision was often not readily forthcoming. Visions of being run out of town for persuading them to buy a lemon ran before my eyes, with very faint hopes of winning praise or adulation! Needless to say, the reality has wobbled somewhere in the middle, depending on the tally of perceived successes and failures. Our final choice was a new system from Vamp (now Reuters) called 'Vision'. This is a Microsoft Windows-based system running on a Novell network platform. It was one of only two Windows-based systems for GPs on the market at that time. The major advantage of these operating systems is that they allow straightforward compatibility with other software such as word processing, spreadsheets and databases, which simplifies some office tasks and allows one to combine and manipulate data from the clinical system in other software packages more easily.

One gratifying and at the same time disturbing aspect of new software is its very rapid development, which leads to frequent major upgrades. These bring great enhancements to both usability and functionality, but involve the practice in extra work relating to installation, training and practical implementation. One advantage of this evolutionary process is that the practice has a direct and rapid influence on the features available within the software. Many of our suggestions have been included in subsequent upgrades.

Balancing the positive elements is the considerable cost of purchasing the hardware to run a network. A Pentium PC costs as much as a cheap second-hand car. Twenty-five or thirty of these plus printers, fileservers and all the other paraphernalia make a substantial hole in the bank balance and then, of course, the partners' pockets.

The management of a network is time-consuming. Many technical problems can be solved simply, but working out which lead is loose can take a while. Major problems have been rare and in the main resolved swiftly by the on-call engineers. System crashes occurred in the early days following installation and (touching wood and exorcising the building) have not happened since. This could be due to the garlic around the fileserver ...

The rapidly expanding use of the network has also resulted in a need to upgrade some of the hardware. The capacity to open several programs at once became more useful as all staff became more adept at using the software. This in turn demanded a number of upgrades. An advantage of reusing the PCs from our previous system was that the installation of any new more powerful workstation led to multiple upgrades across the practice. The replaced PC would be moved on to replace a less powerful PC and so on. A recent upgrade of two new PCs led to a total of six workstations being improved. This was achieved by reusing memory chips and hard drives from redundant machines as well as replacing the whole workstation.

Future development of the system must always be needs-

driven as it has been up to now. The present system copes adequately with our original stated needs viz; the ability to look easily at patient groups as well as individuals, control of prescribing, rapid access to records at both sites, and the potential to move a paperless record with its attendant advantages and savings (remote access, saving of storage space and a reduction in manual filing). Future needs are likely to be in the area of communications. Developments in this area would increase the quantity of electronic data flowing in and out of the practice, enhance electronic record-keeping and reduce the requirements for storage space.

The major advantage of the network is that most foreseeable things become possible. This does not guarantee that they will happen, but, given a combination of adequate financing, political desirability and practicality, much can be achieved. In particular, our secretaries will soon be able to append wordprocessed referral letters and other material from MS Word directly into the patient electronic record. In doing so it will allow further development of existing secretarial skills and expertise. This format also allows the simpler onward transmission of information by fax or e-mail without the intermediate step of producing a paper copy.

The greater advantages of a network will really become apparent when the infant NHS net starts to mature. The passing of clinical data across the primary/secondary care divide should be greatly simplified. Any move to larger commissioning groups which may be heralded by the government will demand considerable discussion and the sharing of morbidity statistics between GPs. The use of e-mail and of bulletin boards will reduce some of the time constraints imposed by meetings or telephone calls. The transition to this state will be easier on a PC-based network able to run standard software rather than bespoke software developed by a medical software house. This hardware can also adapt and grow to service these needs.

We chose a system with Windows-compatible software over a PC-based network. The supplier is financially robust and appears committed to development. By adopting this infrastructure the practice is placed in an advantageous position to embrace future development in the strategy of the NHS.