Introduction

If the medical profession has a right to exist at all then what it does should, inevitably, be done for the sake of the patients who seek our guidance, and for their immediate family. Others will necessarily stand in the queue but their needs are of less importance and should be relegated accordingly, vital though some of them may be for control and overall regulation.

Having spent 40 years in rural general practice and been deeply involved with the introduction and use of information technology (IT) in one primary care trust, I am left with a deep suspicion that all is not well.

Looking at the world about me led to the question posed in the title of this paper; I freely admit that this is hardly academic in concept but it does, I believe, aptly sum up the potential problem. According to the Oxford Dictionary of Slang, the phrase ‘cut the mustard’ originated in America in 1902; however, I personally suspect an earlier Anglo–Irish ancestry. For those who have had a purely classical education the message is ‘is it fit for purpose?’ or ‘does it do what is necessary?’ The answer depends on whom you ask.

Given this dilemma, I undertook an analysis of the use, or otherwise, of IT methods in all the practices in my primary care trust (PCT) area and now present the findings as a subject for debate rather than censure; this might lead to some people questioning the road ahead as being unsuitable, or not cutting the mustard.

Method

Having obtained the overall approval of the PCT to undertake this study, a questionnaire was produced, torn up, modified and finally felt to be adequate, though it ran to five pages. As I loathe people who send out questionnaires and I assume that everyone else does too, the solution chosen was to interview personally whoever in each practice could be truly designated as ‘keeper of the computer’. In making that choice, officialdom usually chooses the senior partner, but they are often the last people to know what is going on in a world of computing that is far removed from that of their youth. Second choice is the practice manager,
who is frequently the unfortunate person who is in charge of the computer world – but not always, so I settled on whoever was responsible, day by day, for the administration and nurture of the practice computers. As one might guess, in no case was that one of the doctors.

Having been contacted by letter, each was then kind enough to give me almost an hour of their time to cover the questions posed and to add whatever thoughts were most important to them in their own particular situation.

Results

Table 1 shows the statistics for the East Cheshire PCT.

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<th>Table 1 East Cheshire PCT statistics</th>
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<td>Area covered</td>
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<td>No. of practices</td>
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<td>No. of GP registrars in training</td>
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<td>No. of patients per ancillary staff</td>
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<td>Current GP systems in use</td>
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<td>EMIS</td>
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<td>Torex/Meditel</td>
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<td>Microtest</td>
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<td>Vision</td>
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Practices

The practices in this study are located in the private premises of independent professional men and women. The buildings are a mixture of styles and ages, but their one unifying feature is that they are individual – not a popular concept these days when the central desire seems to be for uniformity. Uniformity has its good points, but so does individuality, and my belief is that such individuality is welcomed by most people – with safeguards. Prime amongst those safeguards must be that protocols are followed, that data is of a uniform quality and available to those who need to access it, that disease trends can be observed and that preventive health measures are carefully put into action.

Personnel

Eighteen of the computer wardens turned out to be practice managers. Of these, eight had taken the European Computer Driving Licence (ECDL), one of them at both levels; two had network management qualifications; one was taking an external MSc in computing. Of the four IT managers, one had an MSc in Computer Science, one had a Higher National Diploma (HND), one had A levels in computing and was following the Microsoft Certified Software Engineer (MCSE) course, and one was a retired software engineer. That left seven practice managers and one IT manager who had no formal qualification, or, as one of them put it, ‘I suppose my qualification was that I’m not very good at saying no’.

The average age of the minders was in the fifty-plus region, with one exception, and the gender spread was far from even, with only three being male; each of whom had some qualification in computing. I have no information on the age and qualification profile of those in other walks of IT life but I strongly suspect that primary care is unique in this respect. What these hard-working but unqualified staff members had in common was the enormous amount of work that they put into what they do, and just how much they have taught themselves – in the main because they had no option as, apart from each other, they have no support in most cases.

Each was asked what they would crave if given just one wish. Four asked for a deputy to share the load; two would like to have their own office instead of wandering about looking for a free flat surface; two craved more hours in the day or remote access so that they could continue working from home; four longed for an accessible IT advisor who would give practical help (an ‘IT fairy’ as one put it); one longed for her general practitioners (GPs) to enter accurate Read Code data; one wished to be able to scan letters; many longed for a much faster system and one just wanted to run away! They virtually all appeared overstressed.

Technical support

Following up the perceived lack of technical support, it was clear that none was available from the PCT, and the level of supplier support was much below what might be expected in most cases. Asked to characterise that support, six said ‘poor’, 14 said ‘only fair’, two said ‘good’ and one ‘excellent’. It is notable that the greatest praise went to one of the smallest suppliers, Microtest, and this finding was also noted in the survey carried out by GP magazine last autumn, when it had 319 replies to its detailed questionnaire.

Paperless or paperlight?

One of the great myths of the computer age is that having a computer means that you can dispense with...
paper. In reality the amount of paper consumed has increased markedly, which is excellent news for the paper suppliers but rather a nuisance for the rest of us. Asking whether practices considered themselves to be ‘paperless’ revealed a truly messy state of affairs.

First, it should be said that no practice can possibly be paperless as secondary care produces masses of paper that is carefully placed in envelopes and delivered by some form of road transport. Once opened and probably scanned, it then awaits its fate, which can be to be shredded on site or by a secure operator after further road transport, or filed, either in the paper patient records or in large document boxes, in date order ready for retrieval if and when that should be necessary. It transpired that nine practices scan and shred, the latter after an interval of between one day and a month; seven practices scan and file; and a further seven just file the stuff as they always have.

The choice between shredding or not is determined by each practice on the advice they have received, which at worst says you should keep letters for 11 years and at best says ‘on your own head be it’. With no clear and unequivocal advice having been received, it is hardly surprising that practices are confused and often running out of storage space. Of those who shredded, most called themselves paperless though they still stored insurance and other medical reports, while the scan-and-fillers decided they fitted the description of ‘paperlight’. Both seemed optimistic descriptions.

Helplines

Helpline access was a thorny subject. Three described it as ‘hopeless’, one as ‘useless’, and the remainder had mixed views, with access times of two to 20 minutes and resolution times for their problems varying from ten minutes to three weeks. Torex and EMIS were most criticised here, but then they had the most systems in place. Telephone access had been abandoned in many cases with messages being sent by email, but that left any timescale-to-resolution unknown until someone answered back. Also, if one compares it with having to leave a message on an answerphone when you have a sick child in the family and need medical advice, it is plainly not a best solution for the customer, however convenient it may be for the supplier.

Only one supplier (Microtest) had an 0845 number to give local rates for the helpline, whereas everyone else would happily use such a system in preference to words in action, but all without exception said they didn’t enforce regular password change, two offered it as an option, but 19 forced the change, usually quarterly. This is a tiresome business, especially as the workforce gets older, for there are so many passwords and personal identification numbers (PINs) to remember these days. Happily, in almost all cases they had decided that it was a simple matter to defeat the system by adding a single digit to the password: ‘Alice1’ in January, ‘Alice2’ in February, ‘Alice3’ in March and so on. This is effective in practice in that it gets rid of the hassle, but does precious little for true security. Only two practices had seen biometric passwords in action, but all without exception said they would happily use such a system in preference to alphanumericics ‘if the cost could be justified’.

Therein lies the key to so many problems with the use of IT in primary care: ‘Who are we doing this for?’ I doubt if dentists, veterinarians or accountants would go to the expense of biometric passwords unless they felt that they had a good business case for doing so. GPs have always closely guarded patients’ records and I know of no incident where harm has occurred. However, the State has now forced its way into the picture and is obsessed with security. It makes system suppliers jump through the Requirements for Accreditation:  

System users

The GPs all used the system, and it was good to discover that in nearly every case the nurses used it also; midwives mostly did, health visitors less so and community psychiatric nurses much less (see Figure 1). To some degree I suspect that may reflect a concern that sensitive patient data was felt to be insecure on a GP system. That it would be any better on a mental health system seems to me unlikely, but I suppose there would be fewer people in that environment who could have the opportunity to look at it.

Security and confidentiality

It was gratifying that without exception nightly back-ups were carried out and the level of viral protection was good. On the subject of passwords, two systems didn’t enforce regular password change, two offered it as an option, but 19 forced the change, usually quarterly. This is a tiresome business, especially as the workforce gets older, for there are so many passwords and personal identification numbers (PINs) to remember these days. Happily, in almost all cases they had decided that it was a simple matter to defeat the system by adding a single digit to the password: ‘Alice1’ in January, ‘Alice2’ in February, ‘Alice3’ in March and so on. This is effective in practice in that it gets rid of the hassle, but does precious little for true security. Only two practices had seen biometric passwords in action, but all without exception said they would happily use such a system in preference to alphanumericics ‘if the cost could be justified’.

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(RFA) hoops but will not bring in an acceptable level of security unless it is to do with remote connections – though even there the standards are dubious. Having perfected the secure collection of out-of-hours information for my own patients via the NHSnet and straight into the electronic record, we were told that this must cease forthwith since the data were not encrypted to the official standard. Instead it has to arrive by fax, where communication has been known to arrive at the offices of our local agricultural market in the past due to the ‘wandering dialing digit phenomenon’.

Quality indicators

With the new GMS Contract in mind the ready availability of quality indicators is a necessity – if only for being paid – these days, and 14 practices claimed no difficulty here. However, six said that their system could not produce them, two said it did but was full of errors, and one said it could, in theory, but actually it didn’t.

Electronic communications

I looked at the use of email, which was used in over half the practices (see Figure 2).

![Figure 2 Email usage](chart)

The internet was less popular, with only six practices claiming widespread use, and eight reporting this as minimal. The users seemed to be confined to GPs and nurses.

Outside communication was a rarity, though all practices could and did receive their laboratory results electronically daily, when the system was working. No hospital letters or reports were available electronically but half the practices were connected for direct booking. Of the deficient half, this was because either the funding had run out or they were not allowed to use it until all their staff had been trained by the hospital, and that had proved impossible. Even worse, in the connected practices the use of direct booking was in the order of only 5%. The reasons for such low uptake were that very few outpatient clinics are open to such a system of booking, it takes more time, and a private room is needed to discuss with the patient when they are free to go; in any urgent case a call to the appropriate hospital secretary will be more effective and quicker. Certainly in this region direct booking is something of a potential solution looking for a not very clear problem.

Twelve practices had a web page. However, none favoured patients being able to use them interactively, so they were really only a fancy way of looking at a practice leaflet, and in several I looked at they were merely in the scaffold stage. Practice pamphlets are of far more use, readily accessible, demonstrating individuality and requiring no infrastructure on the part of the patient to make use of them.

Patient facilities

It was interesting to discover that very few practices allowed the ordering of repeat medication by telephone, which is somewhat hard on patients who either have to use the postal service or appear (twice) in person – first to order and then to collect. The electronic transmission of prescriptions directly to the local pharmacist has not yet caught on either.

Patients wait – often for quite a long time – in the waiting room, and aggravating as that may well be for them, it is an opportunity to gain their attention for health promotion purposes or even to advertise a village social evening, but one which seems sadly underused. It is true that there are notice-boards, probably too many of them, but even if they are regularly pruned the typefaces are too small to read from one’s seat and most people seem unwilling to stand and read them.

Using a wall-mounted television to show suitable video, or better still PowerPoint, presentations is a powerful tool but sadly underused. One practice overlaid the display with a computer-driven patient call system as an effort in economy, but the only comparable use I saw in my travels was a Jayex board in three surgeries that could show very basic messages between calling in patients. Adding an inductive loop system for the hearing impaired amongst us would be the final touch.

Training

As with any system, training people on how to use it to the greatest effectiveness has to be the key to success. I enquired about the training given when the system was originally installed (often many years ago) and the norm appeared to be about one day, usually as a group, and often a selected group, who then were charged with cascading that training – often, it seemed,
with only limited success. Ongoing training was looked upon as a dangerous luxury, currently costing around £600 per day. There is of course some element of training funding in the payments to practices, but in actuality this always seems to be used up in paying for the courses needed by practice nurses who are taking on a greater responsibility each year. The net result is that virtually everyone uses the parts of the system they have mastered and bypasses the rest. I asked the practices what they thought of the level of staff competence (GPs included) and one said ‘inadequate’, one reported ‘poor’, one claimed ‘good’ and the remaining 19 said ‘just basic’.

This plainly is important and, if we are to make the most of what for most practices is a considerable investment in both money and time, it has to be addressed. Training is a skill that is not possessed by everyone. It requires time and a protected environment free of telephones and outside stresses, which is not something one is likely to find in any busy practice. It requires someone else to do the routine work whilst one is being trained and that calls for more staff and, unfortunately, funding over and above the cost of the trainer.

The ECDL\(^1\) was introduced to promote computer literacy and several of the practices had staff who had obtained the qualification. However, it proved very difficult to promote the course to ancillary staff as most were part-time and there is no financial incentive to be so qualified: not only that but the training usually obtained the qualification. However, it proved very difficult to promote the course to ancillary staff as most were part-time and there is no financial incentive to be so qualified: not only that but the training usually had to be done in their own time, unpaid.

**Suggested improvements**

Towards the end of each interview I asked for a suggestion for one single improvement to the current system that would be most useful. Most wanted two! The commonest suggestion was a faster, graphic user interface system. Also suggested were the ability to monitor the progress of patients who had been referred on to secondary care; remote access; and more rigid levels of access to patient records so that ancillary staff looking up, say, details of repeat prescriptions should not at the same time have access to the patient’s clinical notes. Print-outs of patient data to pass on to a subsequent practice were generally thought to be very primitive and electronic GP–GP record transfer is much overdue.

**Shortcomings**

Lack of staff training leading to them ‘fiddling with things like printer settings’ occupied more time than it should in correcting the subsequent faults. Bad GP data input and a lack of reporting features were also mentioned. It was apparent that many different versions of Windows were in use in most practices and the failure of that operating system to shut down cleanly in many cases was of no help to the keeper’s blood pressure.

Despite the grumbles it was fascinating that almost universally the practices did not wish to change from their own system. As one practice manager put it, ‘It is rather like one’s own children; they may have their shortcomings, but they are your own and a lot of work has been put into getting them where they are today’.

**The future**

I found only two practices where it was felt that having just one GP system across the board would be a good thing, and they only saw it as a solution to the electronic GP–GP transfer of patient records. The remainder were strongly against a monopoly system where they felt there would be even less innovation than we have now and certainly, by definition, no competition. As to central record storage in a data warehouse, the negative thoughts by far outweighed any theoretical advantage that might be claimed. Rather to my surprise none of their patients had expressed any concerns about this to the practices so far as anyone knew, but then patients might not yet be fully aware of the brave new world that is promised by the political visionaries.

General conversation after the questions revealed several interesting lines of thought. The place of smart cards was felt to be much overlooked. Their use would both engage the patient, give them their medical records virtually, and save a great deal of expense and anguish in setting up nationwide data transfer systems. Given the record of such computing mammoths in the past, few people had much confidence in the proposed new systems actually working.

The loss of fund-holding was felt to be regrettable. Under that system, practices were encouraged to be efficient and behave like a business, with benefit both to themselves if they were efficient and to the patients in the form of increased facilities and leverage over secondary care.

**Summary**

The smaller suppliers reportedly gave a far better service than the ‘big boys’, who were often administering a collection of different systems that had been acquired by various mergers. A move to a universal data standard was thought reasonable enough, but that by so doing the smaller suppliers should be effectively denied the market place was not thought to be in any
way beneficial. ‘Throwing away the baby with the bathwater’ was a phrase often used.

I did find a strong desire for the present system suppliers to improve their systems where necessary and continue to provide service as they have done for a long time. There was general acceptance that clinical computing in the secondary care field was almost non-existent and that the same was felt true for mental health and social care systems. By contrast, IT in primary care was felt to be light-years ahead and the prospect of throwing away what we presently have for an untried new system to be bordering on the insane.

Almost universally there was perceived a great need for regular ongoing training for all practice members to make the fullest use of the many good primary care systems in place. Just how this should be provided, and by whom, and with whose funding was not a matter of consensus. Again it comes down to ‘who are we doing this for?’ If GPs would awake fully to the fact that they really are independent contractors then, for the sake of their own businesses, they would bring it in as a matter of good administration that would help them prosper.

Clearly the individual system suppliers could do much more, and quite cheaply, by producing training material on CD or DVD media. However, given that their future looks bleak with the advent of the new local service provider contracts, where I understand the future regional providers will only receive their full award if they make all practices migrate to their new system, whatever its quality, such innovation is unlikely unless we, the consumers, demand it.

For the average patient attending hospital and, to a lesser extent, a general practice, the greatest void is in the realm of communication. It is worth reflecting that the one thing all humanity has in common is that we are all potential patients and one day will be. We need to be recognised, not ignored. We need to know what delay is expected, and if possible why. We need to be made comfortable, where possible, both physically and emotionally. Sit in any accident and emergency department, outpatients or waiting room that is not your own domain and the flaws are easily seen. They are easily explained too – the result of overwork and understaffing – but again, sometimes it is because we don’t always think about our own environment. Let a disgruntled clinic attender know by a simple on-screen message that there is a 30-minute delay in seeing patients and they can go to the canteen for a drink and they become happier. Let them watch a well-made health education programme instead of commercial television and we may well achieve greater understanding and co-operation.

Allow patients to sign in to surgery or clinic using a touch screen and you save clerical time and strain as well as treating the patient as an intelligent human being.

IT can ‘cut the mustard’ if we use it wisely. The problem I see is that it is being used mainly as an administrative, central tool to produce vast quantities of data and that it has little prospect of actually doing any good to individual patients, however many departments and statisticians it might support. What is worse is a nagging feeling that whatever coding system is used, the quality of the coding cannot be assumed to be perfect – and if it is not, all the analysis in the world is worthless.

The computer technology that we have available to us today should be used to help the patient, to aid the clinicians and their helpers, and only when all that is achieved satisfactorily, to build databanks on which the world may speculate. We have a sound IT base in primary care, albeit in need of facilitation and upgrade, but not, by any means, in need of replacement with all the upheaval and retraining that will entail.

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CONFLICTS OF INTEREST

None.

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