

## Volume 3 / Issue 3 / 2008 - Management

### GPs and IT

---

#### Author

##### **Chris O’Riordan**

*is Head of the Centre for Management Research in*

*Healthcare and Healthcare economics,*

*Waterford Institute of Technology, and*

##### **Mark Rowe**

*is Managing Director, Rowe Creavin Practice, Waterford.*

**If those of us of a certain age (in other words, no longer in their teens!) think back to our childhoods and the occasional visit to our local GP (General Practitioner), many of us will remember how the doctor handwrote our details onto cards or files as the consultation was ongoing. At the end, we were handed a handwritten prescription that we possibly couldn’t read but that our local pharmacist would interpret. For most of us today, this experience is but a memory – the GP practice of 2008 is a much more technologically-equipped establishment.**

#### IT, GPs and Patients From Paper to Real Time

According to research by the GPIT (General Practice Information Technology) Group in 2003, 83% of Irish GPs have a PC in their practice, while 88% have one in the consulting room. This is clear evidence of the embracing of modern IT by Irish general practice, recognising the positive impact that this can have for themselves, their patients and their staff – though, rather surprisingly, the GPIT survey found that 57% of patients are not in any way influenced in their choice of GP by whether the practice was computerised or not.

Most practices avail of the generic administrative applications of IT – using the PC for billing and accounting purposes and for scheduling appointments, for example. These applications are common to the majority of businesses in all sectors. However, the more advanced and astute GP sees further opportunity here.

#### Electronic Records

One of the most noteworthy and time saving uses is to maintain the patient’s details in an Electronic Health Record (EHR). This replaces the traditional paper system, whereby details of the consultation, such as ailments, allergies, medications used and medications prescribed, are recorded in real-time as the GP and patient converse – 30% of patients surveyed by GPIT felt that the personal quality of the consultation was very much improved by the use of a computer. Benefits of this for the GP include increased efficiency and a reduction in filing errors, but this is only the tip of the iceberg.

#### EHRs and EBM: Injecting Efficiency into Healthcare

With the move to Primary Care Teams in Ireland, patients’ records will (with the consent of patients) be shared amongst appropriate personnel, such as dieticians and physiotherapists, to provide the patient with an improved and all encompassing service.

Team members will be able to search the record in a more efficient and exacting manner, allowing them to focus in on their area of expertise and the issues of greatest concern. In time, there is the possibility of bringing this even further along by issuing patients with ‘smart cards’ that act as a portable health record – wherever they go, they will carry their essential details with them, which could prove particularly relevant if they are travelling internationally.

EHRs also allow GPs themselves to conduct their own clinical audits, to facilitate quality assurance. For example, the GP may wish to know what percentage of patients over 65 years of age have received their flu immunisation jabs and whether this is showing any specific trend, given the extensive media advertising taking place in Ireland about its importance. As primary care is seen as the ‘gatekeeper’ to a secondary care system

that is under extreme pressure, any efforts at enhancing quality of service by the GP has considerable knock on benefits – in order to do this, reliable and accessible data is essential. This is particularly important in the context of chronic disease management, where the application of clinical protocols and Evidence Based Management (EBM) is facilitated by IT.

#### **The UK Experience**

In the UK, some practices are using the power of IT to action the electronic transmission of prescriptions. This facility has a benefit that is immediately apparent – eliminating fully the risk of misreading. The prescription is transmitted to the pharmacy as nominated by the patient or, if they have not selected one, is downloaded onto an ePrescription token, which has a barcode on it.

There is no doubt that the whole issue of repeat prescribing in general practice has been greatly enhanced by modern IT and communications technologies. The process is safer, more efficient and allows for drug interactions and allergies to be more easily spotted, while also facilitating rational prescribing and the application of EBM.

#### **Strengthening Links Between Primary and Secondary Care**

Similarly, improved linkages with secondary care are facilitated through the use of IT. GPs who have availed of a 'Lab Links' facility, whereby they are able to download the results of blood tests directly from the laboratory, speak of the improved speed of response that this leads to – particularly when time-pressured interventions are required.

A further facility that could be considered is the electronic transmission of radiology results from the hospital to the practice. Indeed, practices themselves are seeing the merits of scanning documents into soft copy versions, which frees up more space in the practice building as well as providing a safer means of storage.

#### **The Real Killer Application: The Internet**

The massive knowledge base, which the Internet is today, may yet prove to be the real 'killer app' for GPs and their patients. For those who know how (and nearly 50% of Irish households in 2006 had Internet access), the web can provide the answers to a multitude of health related issues, from new products to new techniques.

Many of the key health journals, such as the British Medical Journal, are available online, meaning that up to date information is a mere click away. However, the dark side of all of this is that the less informed user – in many cases, the patient – may be ill equipped to determine fact from fiction.

#### **Jekyll and Hyde: The Internet's Other Face**

One of the great features of the Internet is the fact that information is not controlled this is also one of its worst failings, particularly when patients attempt to self-diagnose without knowing the full information or consequences of their actions.

The majority of GPs believe that their patients use this source before visits, though GPIT's research found that less than a third actually did. A possible solution to this problem is for GPs to produce lists of recommended or approved sites for patients, having already consulted the sites themselves – perhaps even putting links on their own websites.

Indeed, the increasing use of general practice based websites, focussing on service provision as well as relevant health information, is a real step forward in the development of patient partnership in healthcare. In the near future, it is hoped that these websites can become interactive in real time, allowing patients to not just make appointments, but to also access relevant results from their patient record.

#### **Day-to-Day Challenges**

There are other issues that GPs must also deal with in the use of IT.

Many of these are faced on a daily basis by all businesses – systems breaking down, security and data protection concerns, and the need for staff training would be some of these issues. In general, such questions can be resolved with external assistance that is readily available from trusted local suppliers.

#### **The GP as an SME**

However, another problem faced by Irish GPs is funding the ongoing computerisation of their practices. While their UK equivalent is, in most cases, a salaried employee of the NHS and receives capital funding for IT purposes from Primary Care Organisations (PCO's), Irish GPs receive

very limited contributions from either the HSE (Health Service Executive) or Department of Health and Children in this regard, such as savings on drug budgeting.

Going forward, this could create a problem, particularly for the smaller and single-handed practices – the GP in Ireland is an SME operator and is subject to the same financial strains and stresses as so many others.

#### **Spending on IT – Cost or Investment?**

It is clear that the impact of IT on GP practices in Ireland has been mostly positive, certainly for those who have willingly embraced it. Ireland's health service is under considerable pressure and primary care is seen by many as the 'valve' that can ease this.

Thus, efficient, well-run and technologically astute practices are the order of the day. Certainly, there are some issues to be dealt with but these are mostly solvable. One area where help is needed is in the area of capital funding for practice improvement – those who control the purse strings need to view such spending as an investment for the future in a resource that can generate a much needed return on same, in both tangible and intangible terms.

Whether such forward thinking exists remains to be seen. As the old saying goes, a stitch in time saves nine!

#### **Definitions**

GPs (and physicians in general) have hardly been early adopters of IT. Indeed, in the 1990s, while much attention was focused on making computers user friendly, several studies sought to find ways to make doctors more computerfriendly. Two of these had medically -suggestive titles:

Ó An Approach to Physician Computer Exposure [Springer-Verlag New York]

Ó Dissemination of Computer Skills Among Physicians: The Infectious Process Model [Springer Netherlands]

Little, however, comes close to a 1994 study by Emory University School of Medicine in the US, which sought to measure «changes in physicians' computer anxiety». This was a period before psychotropic drugs went around in search of new indications, or we might well have ended up seeing doctors prescribing themselves medication against Computer Anxiety Disorder.

Published on : Mon, 3 Mar 2008