

View from the frontline: The doctor as a knowledge worker

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A doctor should be considered as a knowledge worker – though that is not their primary role, it is a role that is core to their activities.

In the dim and distant past, doctors were highly revered by the population, their word was law and unquestioned, despite their limited (certainly by today's standards) diagnostic, interventional and therapeutic tools. Today (though maybe limited by future standards!), we have a huge array of clinical tools at our disposal and doctors are quite correctly questioned and held accountable. But we also have something else in our locker – knowledge. Knowledge and its management for the clinician is now, I would argue, a basic tool in front-line patient care and management.

Witness any clinical environment such as a GP surgery or a hospital department – the clicking noise of keyboards or the presence of a viewing screen is never far away. Keyboard and basic computer skills are now an essential part of many doctors' daily activities. However, that is the physical part of the job; it is how they assimilate the knowledge that is available, again often via a computer, that is now an integral part of their daily working activities.

Doctors should consider themselves as knowledge workers as well as clinicians. Both skills are inter-linked: better knowledge and, just as

nectivity that the internet offers, the vast and almost unlimited space to publish data and information, the ability to share and update and its relative cheapness as a publishing medium has propelled it to the forefront of the information revolution. Finding the data or information and appraising it does take some skill and time but it should not be beyond any doctor, or health professional for that matter, to be able to do this. Of course, the internet is not just a knowledge base, it also provides other ways of accessing information and opinions. Email, webcams, forums, blogs and mobile phones have all allowed access to expert opinion, advice and data which in the past may have been difficult to locate.

Of course, doctors and health professionals don't have it all their way. The liberation of all these data on the internet has allowed the general public to access it as well. Equally, they may have similar problems of finding relevant data, and spending time reading and appraising it. However, doctors by reason of their medical training and experience should at least be better skilled at assessing the quality of the information they have obtained. Even so, doctors and health

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There has been an explosion of knowledge within the last 30–40 years and, in the same way that the industrial revolution impacted on the social and economic development of a country, knowledge has done the same. We are now experiencing a knowledge revolution and the practice of medicine is right in the middle of that.

It is virtually impossible for any health professional to keep up to date and be aware of what is happening about everything in their field. However, just as the industrial revolution had machines and production lines, we too have tools to manage our product of knowledge. One important tool is a computer and that can be a mobile device or a desk-based device and an essential component of that is usually an input method such as a keyboard or a mouse. Data and information are still available in paper format but, slowly and surely, electronic information is becoming the normal means of creating, storing and transmitting this knowledge.

important, better access to knowledge may improve clinical outcomes. Being able to access these knowledge bases, understand how to use them and how to assimilate that information into basic patient care is what I consider to be now an essential skill that any doctor should have. Every doctor should have basic IT skills and, if not, they should start to find a way of acquiring those skills.

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Otherwise they are at risk of being left far behind and unable to utilise the vast array of knowledge that is out there. In turn that could mean that patient care may not be optimal. Of course it is important not to forget paper based sources of knowledge such as books and journals. They are still very much of use.

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professionals (quite rightly) have lost the monopoly on medical knowledge and this is the new environment we have to work in. A more informed patient and a more informed doctor may help to lead towards better medical care. Doctors should be able to cope with and respect patients who have access to high quality information.

So I would argue that a doctor should be considered as a knowledge

He@lth Information on the Internet

worker – though that is not their primary role, it is a role that is core to their activities. The phrase ‘knowledge worker’ was described as far back as 1959 by a management consultant http://en.wikipedia.org/wiki/Knowledge_workers. As knowledge workers, doctors should have, or aim

to acquire, informatics skills and basic IT skills, and be able to call upon other knowledge workers in their quest for information relevant to their work. For example, medical librarians are an excellent source of

turn, this will better inform their clinical practice and, hopefully, patient outcomes. It is incumbent on all doctors to learn more about being a knowledge worker; it is also important that medical education takes

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ways of tapping into knowledge and showing doctors and health professionals how to best access knowledge. Hospitals and Primary Care Trusts have IT departments and they are becoming an important part of the healthcare team.

However, it is the doctor who has to learn how to use all the facilities at his or her disposal, to access and utilise the vast amounts of knowledge and experience out there. In

account of these needs. Many doctors think they are too busy to be a knowledge worker, after all they are busy enough trying to keep up to date with clinical and political fashions that affect healthcare. However, being an informed knowledge worker will help improve a doctor's efficiency, make the job more enjoyable and help in the acquisition and integration of new skills into clinical care.

Greenhalgh T *et al.* *Summary Care Record Early adopter programme. An independent evaluation by University College London. University College London, 2008*

Executive summary:

www.ucl.ac.uk/openlearning/documents/scrsummary2008.pdf

Full report: www.ucl.ac.uk/openlearning/documents/scrie2008.pdf

BMJ article: www.bmj.com/cgi/content/abstract/336/7656/1290?etoc

‘The Summary Care Record (SCR) is a centrally stored health summary created (currently) from a person's general practitioner (GP) record ... accessible on a secured Extranet (to NHS staff) ... HealthSpace is a separate, internet-accessible technology that allows patients to record and organise their own health data, and via which they will be able to view their SCR.’ Members of the public have to opt out of the SCR and opt in to HealthSpace. The SCR and HealthSpace are being piloted in six Early Adopter sites across the UK. Greenhalgh and colleagues evaluated four of these pilots via ethnographic observations, interviews and focus groups with NHS staff, patients and carers and analysis of documentary evidence, surveys and statistics.

This topic is a complex one involving a range of stakeholders, not only the public and NHS staff but groups such as politicians and the media. The authors call for a ‘debate [which] must address what large-scale networked electronic records mean for each of us personally and for the National Health Service generally. This report does not seek to prejudge the outcome of that debate, but to illuminate the issues in a way that informs it.’