

Healthcare Must Ride the Wave

7 September 2006

Colin Jervis

Director and Healthcare Consultant

Kinetic Consulting Ltd

<http://www.kineticconsulting.co.uk>

Though information is its basic currency, healthcare has been remarkably slow to embrace Information and Communications Technology (ICT). It has mostly been applied piecemeal to automate existing practice rather than transform it. As a consequence, ICT implementation has rarely dramatically improved care or the patient's experience of it.

That is about to change. While healthcare in the 20th Century was centralised and founded on disease management, in the 21st it will be devolved and founded on prophylaxis.

In the West, increasingly aged and obese populations presage more chronic illness such as asthma, diabetes and heart disease. These are better and more economically managed close to the patient's home rather than in hospital.

Fortunately, remote monitoring will make that more practicable. It is already possible to monitor basic indicators such as weight, blood pressure, pulse rate and blood sugar. But devices are becoming more sophisticated and cheaper and can be worn as armbands or less obtrusively in clothing.

Combine remote monitoring with developments in genetic testing and healthcare becomes even more proactive. DNA testing will allow us to predict propensity to disease enabling it to be prevented or at least mitigated.

Wireless applications are fundamental to this vision. Paradoxically, they will allow care to both centralise and devolve. Specialists can be centralised in monitoring and diagnostic centres, which will be invaluable to developing nations, where distances are often large and healthcare resource small. On the other hand, Generalists can be devolved and mobile. For example, in the UK the city of Norwich is experimenting with widespread free WiFi. Using this, district and community nurses can easily access and record patient information immediately before and after home visits.

Another important factor—also helped by wireless links—is greater public access to medical information on the Internet. My wife is a Physiotherapist and often spends evenings scouring medical databases to find reliable published support for her practice—a habit hammered into her by university tutors. Regrettably, only about 30 percent of medical practice is supported by hard evidence.

This shortcoming will also be helped by integrated ICT. Researchers will be able to infer best practice based on the analysis of huge populations of data about the entire process of care. Such evidence will also be available to patients on the Internet, which will alter irrevocably the clinician-patient relationship.

Propelled by a wireless wave, ICT is becoming pervasive and integrated, rather than narrow and standalone. This will give 21st Century healthcare a more solid foundation with fewer specialisms. Medical practitioners must also ride the wave or risk being swept aside.