

## Editorial: Everyone's an expert!

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The central issue for **information** technology (IT) and its management is information itself, for without it; decision making and policy formation would have followed a different process. However, with the advancement in technology and the development of social, health and political models, we appear to have committed more resources on the relationship between technology and access to information than on how information and technology is utilised to inform the process of decision making more effectively and efficiently.

In the health service sector, IT management is focused on using the technology to manage clinical data primarily to develop **information** systems that cater for the storage of data without hindering access. In general, within the health service, this line of approach is limiting due to the assumption that the development of an information system is specific to the task. By allowing market forces to dictate the management of the health service sector, there will be competing models of IT management which in turn leads to different IT models operating different sections of the same organisation, for example, variations in IT models between GPs, hospitals, and private health service providers.

In recent decades we have witnessed rapid advancements in technology which have contributed to improvements in **ICT** (information and communication technology) such as faster communication and data transfer devices, smaller but faster storage devices with large storage space, e.g. hard disks, and database software. However, to some extent the advancement in **ICT** should have encouraged a move to develop models to improve inter-agency access to data. It is possible, using the latest database package and appropriate hardware technology, to upload data from various sources, to store and retrieve centrally.

Although IT management involves adopting models that utilise various tools including hardware and software to improve the collection, storage and access/retrieval of data, too much emphasis on the technology and access to data may have helped to shift the focus away from the actual data itself. The health service sector generates huge volumes of data, including morbidity and mortality outcomes. However, social and lifestyle information is often collected separately as part of projects with specific aims and objectives. In the UK, hospital records were expanded to include the routine collection of data on social class. In the early 1990s attempts to utilise these pieces of **information** with other health outcomes proved ineffective as social class had only been collected in a handful of patients' records.

Indeed, in order to include socio-economic data in the analysis of health outcomes, the Analysis Unit in the former Yorkshire Regional Health Authority (UK) using a multi-method approach, utilised a mix of databases from various sources (Bensley et al 1994, also see Shahtahmasebi 1997, 1999, 2001). The process of preparing, analysing and presenting the **information** involved extracting health and census data from various sources into a readable format and preparing and matching census based socio-economic data with health records for use with statistical, graphics and mapping packages. The project design appeared fairly routine because theoretically all the necessary data was available, the only main issue was to match data from various sources. Dealing with different types of data from different sources is not always straightforward. By using today's technology, parts of the project may be

considered routine as most statistical packages, in addition to statistical analysis, are capable of sophisticated graphics and mapping analysis.

One way of improving access to 'information' is to look beyond creating minimum clinical databases. For example, more recently, millions in funding has been dedicated to creating patients' records, however, these records give clinicians access to patients' clinical data anywhere in their respective countries. But, such data is already available and accessible, what is needed is more access to 'real' information. Although, the issue of information can be addressed through the development of a unified database (Shahtahmasebi & Millar, 2013), the Internet provides real access to information. Firstly, it is possible to access sources of health and social data online, secondly, internet technology can be utilised to create and populate a 'unified' style database.

Nevertheless, the internet is viewed as a major source of information, often referred to as the information superhighway. The internet has removed the monopoly by 'experts' and placed information in the public domain. On the other hand, widespread access to the internet has substantially increased the volume of information through varying degrees of reliability. Therefore, improved access to 'information' does not equate to increased knowledge. Uncritical use of the internet has created a generation, while information technology savvy, they lack the skills to critically evaluate the information found on the internet, and distinguish it from random red herrings. As a result, human behaviour, health and social outcomes are changing, e.g. self-diagnosis and self-medication are common within the population.

For professionals to disseminate reliable and appropriate information for public consumption the main concern must be the nature and type of information. Currently, routine health/demographic/epidemiological data collection appears to be resource management oriented. It is absolutely essential to investigate trends in mortality and morbidity by cause, age and sex, just as it is also necessary to understand the underlying and causal relationships between the various processes and health outcomes. Furthermore, both public and professionals must adopt a more critical approach in distinguishing information that increases insight, rather than random noise that leads to mis-information.

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