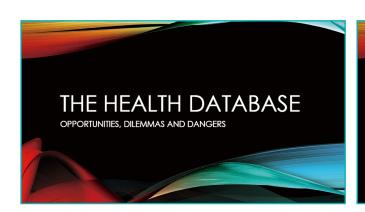
[Malaysia]

The Health Database*1

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WHAT IS A HEALTH DATABASE?

Any collection of electronically stored data relating to health and diseases, of individuals or populations.

THE INFORMATION AGE

- Became a reality in the 1960s and 1970s after miniaturization of transistors really took off
- Moore's Law doubling of speed, halving of cost every two years or so
- Ray Kurzweil and the Singularity

TYPES OF DATABASES

- National databases
- Institutional databases
- Individual databases

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NATIONAL DATABASES

- Usually contain large amounts of data, often disease specific
- Rarely contain any personal information
- Useful in health policy formulation and drawing up treatment guidelines
- Possible rationing of healthcare?

INSTITUTIONAL DATABASES

- By far the most vulnerable databases are the ones maintained by hospitals and clinics.
- They contain patient identities and information about their health
- Vulnerable to malicious attacks and careless handling of data

INSTITUTIONAL DATABASES

- Legislation addresses the vulnerability of these databases.
- The European Directive on Data Protection lays down guidelines on how data should be gathered, stored and disseminated
- The United States has no single Data Protection Act
- The United Kingdom has a Data Protection Act passed in 1998

INSTITUTIONAL DATABASES

- In the ASEAN region, Malaysia, Singapore and the Philippines are enacting Data Protection Acts
- The Singapore Act came into force in July this year, and the Malaysian Act is in the process of registering data users.
- Malaysian doctors feel that existing legislation and ethics relating to the handling of patients' data is sufficient

INSTITUTIONAL DATABASES

- Doctors in individual or group practices are also becoming increasingly dependent on computerized records.
- Their cybersecurity measures may be inadequate.
- In Malaysia, written permission needs to be given by the Ministry of Health if records are to be kept in purely electronic form.

INDIVIDUAL DATABASES

- In many countries, patients are increasingly becoming custodians, at least in part, of their medical records.
- Such data, in Malaysia at least, consists of cards or books with brief details of disease and treatment. They are often lost or forgotten, and are rarely integrated across various specialties.

INDIVIDUAL DATABASES

- As Gen X and Gen Y age, they will put their records on their own computers or the cloud.
- Recent news items remind us of the vulnerabilities of the cloud.
- Health records are unlikely to be as attractive as celebrity nudes, but caution should prevail

