- Total population: **20,530,000**
- Gross national income per capita (PPP international $): **34,060**
- Life expectancy at birth m/f (years): **79/84**
- Healthy life expectancy at birth m/f (years, 2003): **71/74**
- Total expenditure on health per capita (Intl $, 2005): **3,001**
- Total expenditure on health as % of GDP (2005): **8.8**

Figures are for 2006 unless indicated. Source: World Health Statistics 2008
We treat a lot of people

- 6.7 million people received accident and emergency services in public hospitals in 05-06

We spend a lot of money. In 2005–06:

- $86.9 billion was spent on health in Australia
- 755 public hospitals with 54,601 beds,
- 284 private hospitals with 25,252 beds
- ~18,000 full time equivalent General Practitioners

We get excellent results

- Australians enjoy one of the highest life expectancies in the world at 80.62 years
Chronic disease is on the rise

Our ageing population is increasing demand for healthcare services

Treating complex healthcare problems is expensive

The healthcare workforce has not kept pace with the growing demand for services

Our health system is better equipped to treat your heart attack than preventing it from happening in the first place
Despite current successes, there are opportunities to improve through the use of technology

IT expenditure in Healthcare is 1.4% compared with the finance sector which reaches 7-9%

Source – Deloitte e-health strategy 2008 and Gartner
NEHTA was established out of recognition that only a national approach will work.

- Representing 6 States, 2 Territories and the Commonwealth in delivering eHealth reform

Our vision is to:

- Develop better ways of electronically collecting and securely exchanging health information, and
- Facilitate e-health systems that unlock quality, safety and efficiency benefits
Getting it Right: Key Building Blocks

- **Right Patient**: Individual health Identifier (IHI)
- **Right Provider**: Health Provider Identifier (HPI-I and HPI-O)
- **Right Information**: Clinical Models and Terminologies (SNOMED CT)
  - International Health Terminology Standards Development Organisation (IHTSDO)
  - Australian Medicines Terminology
- **Right Product**: National Product Catalogue (NPC) and National eProcurement solution
- **Consistent Messaging protocols and processes**
  - HL7 and IT-14 (ISO standards)
- **Sent Securely**: Core Connectivity / National Authentication Service for health (NASH) / Service Instance Locator (SIL)
NPC – Data Synchronisation

National Product Catalogue (GS1net)

Hospital

Health Department

Other Data Recipients

Supplier 1
Supplier 2
Supplier 3
Supplier 4
Supplier 5

NPC – Data Synchronisation is a process that involves the integration of data from multiple sources to ensure consistency and accuracy. The National Product Catalogue (GS1net) acts as a central hub, facilitating the sharing of information with various hospitals, health departments, and suppliers. This system ensures that all data is synchronized and up-to-date, improving efficiency and reducing errors in the health sector.
Data Synchronisation – It is Central

- Bedside Scanning / Theatre Management
- Barcoding & Data Capture
- Item registry and synchronisations
- Common data standards

Patient safety / Quality
- Efficient process
- Lower catalogue maintenance
Cost of Bad data

- One supplier –
  - 47% of all pricing errors in purchase orders result from public hospital data errors at a cost of $40K p.a.

- A typical tender submission requires more than 50 fields per item -
  - Up to 60 days preparation. Inconsistency in data formats used in tender responses were found to have caused delays to tender evaluation timing by approximately 4 weeks, whilst the tender responses were returned to their original (and requested) format.

- One health jurisdiction has estimated that the cost of cataloguing a new item in a hospital system –
  - $47 at an hour per record => 10,000 items (a standard health catalogue) = cost $470,000 and take over 10,000 hours of effort (1 person full time for 5 years), excluding data maintenance time.

- Australian estimates indicate that nationally in the areas of outpatient and community dispensing –
  - 1/100 prescriptions are dispensed incorrectly, equating to 1-2 million events per annum; 36% lead to incorrect medication being dispensed, 35% the correct medication at an incorrect strength and 21% the incorrect dose form.
Challenges

Bedside scanning

Benefits Gained

- Clean, standardised data
- Basis for AIDC
- Basis for clinical systems
- Basis for procurement solutions

Importance Given

- Resource intensive
- Slow
- Hard to sell

Data synch.
Data Synchronisation is core to improvements in eHealth.

Data Synchronisation is often difficult to get going.

Lack of Data Synchronisation leads to unnecessary replication of effort and errors leading to quality and cost issues in healthcare.

Data Synchronisation forms a solid base from which technologies can derive significant benefits.
Questions