

Stronger Together: Health Information Systems and Strategic Purchasing

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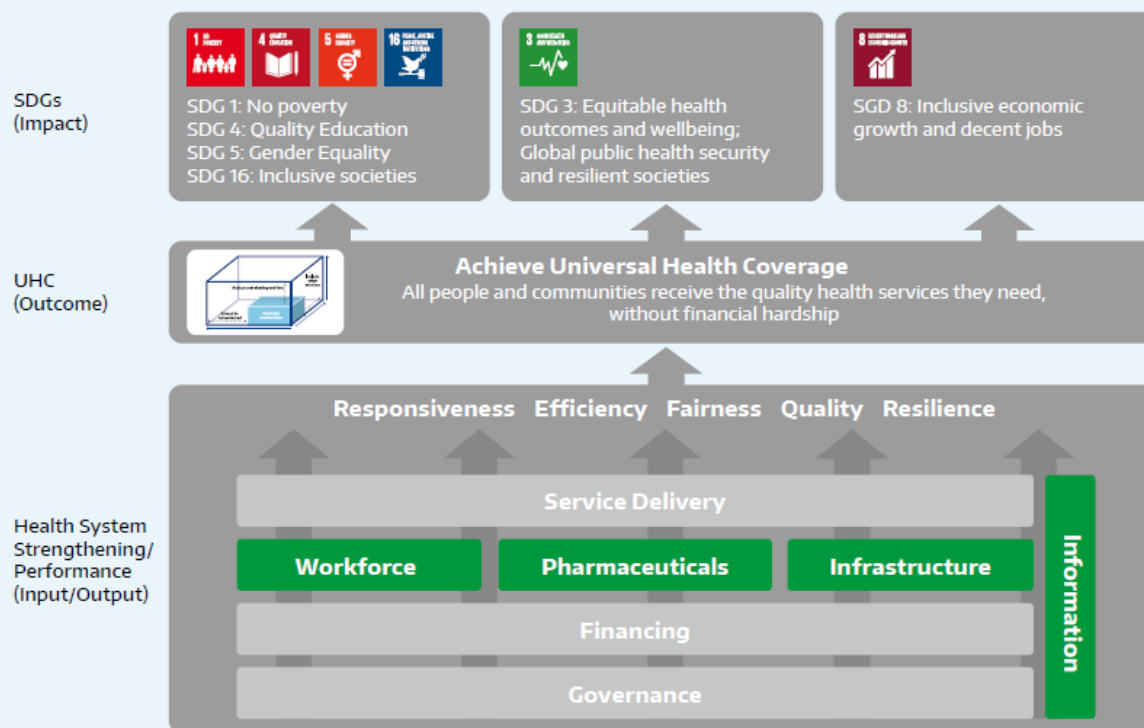
Information, Evidence, Research

World Health Organization

Why are health information systems so important?

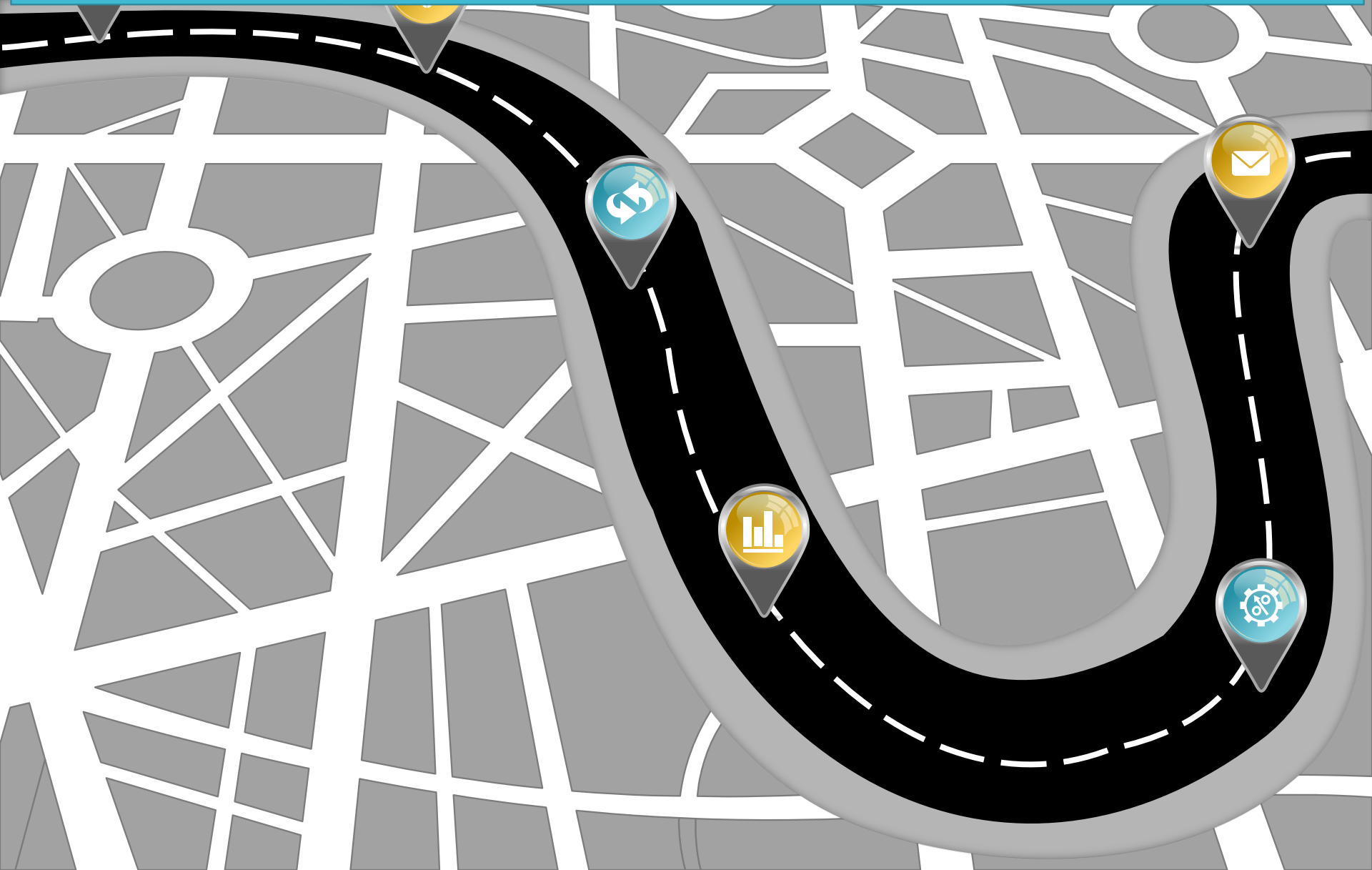
Health information systems are important to all aspects of health financing, and to broader health system strengthening:

Figure 1: Health financing, health systems strengthening, Universal Health Coverage and Sustainable Development Goals



‘There is no
strategic purchasing
without
information’

Growing Strategic Purchasing and Information Systems together: Its an evolutionary process



And also:
'...Financing
can work to
strengthen
data and
information
systems.'

There is **mutual benefit** between strategic purchasing and health information systems:

- Strategic purchasing puts emphasis on collecting data at a high level of quality to be used by payment systems
- There is a benefit for health information systems since these data can be used for a wide range of health system needs

What type of data is systematically needed?

- **Individual Data (patient information)** – routinely and consistently recorded in facilities, and across facilities and programs for all activities.
- **Service / Program Data** – collected from patient and other information, including utilization, volume, quality
- **Broader Health Information** - population health data, population risk factors, health system indicators and coverage, projections and targets

Conceptually
..... What
might it look
like?

Service/Program Data:

- Service utilization, access, availability
- Episodes of care
- Quality and safety

Individual data:

- Diagnoses
- Treatments
- Procedures...

Health Information System:

- **Population Health Status:**
 - Fertility
 - Mortality
 - Morbidity
 - Incidence
 - Prevalence...
- **Population risk factors**
- **Equity Considerations**
- **Service coverage**
- **Health Systems information:** Quality and safety, access, workforce, security

Improving individual records – Content, standards, collection

Data Sharing, Linkage and Technology

Australian Example

Complex Financing System

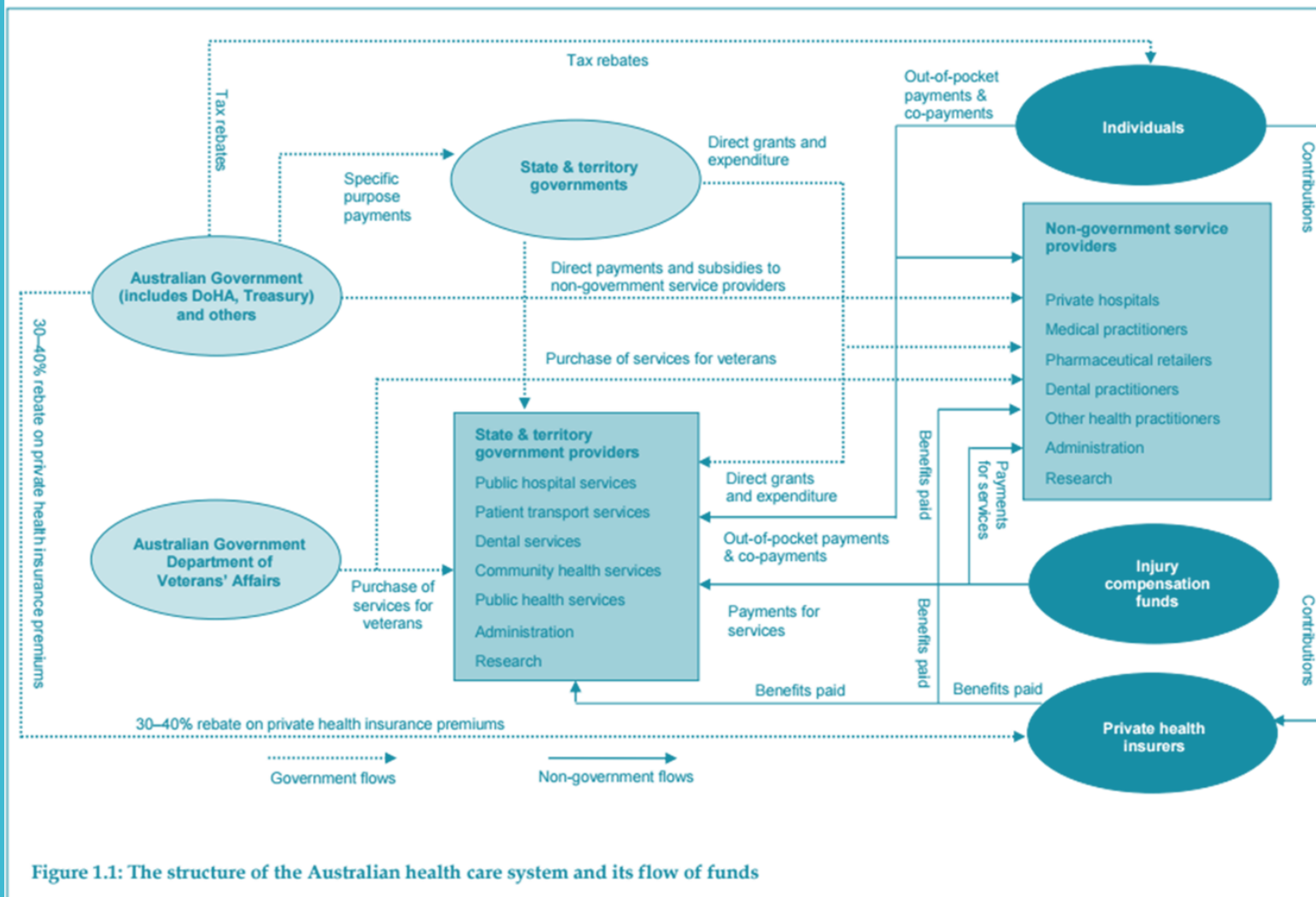
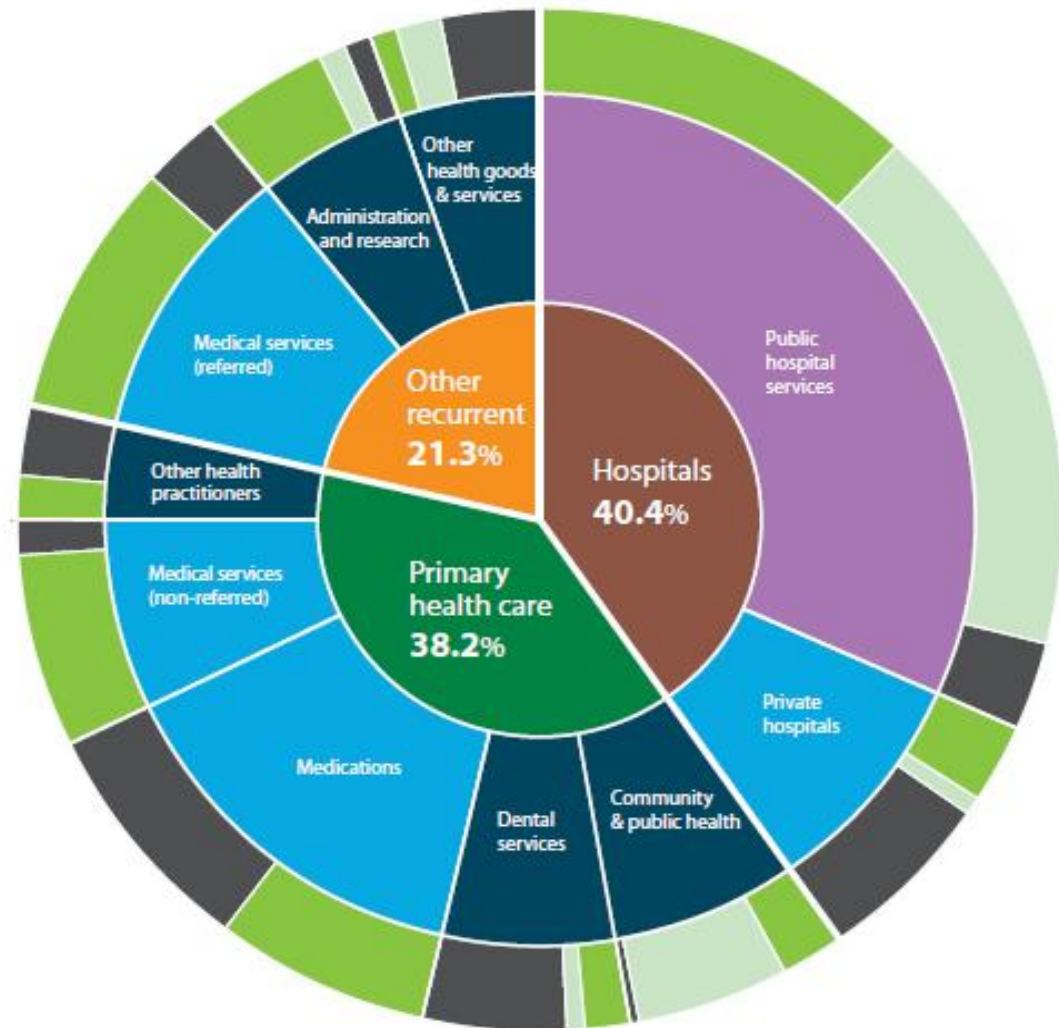


Figure 1.1: The structure of the Australian health care system and its flow of funds

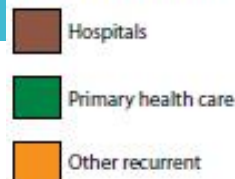
Health expenditure Australia 2011-12

Figure 2.1: Health services-funding and responsibility

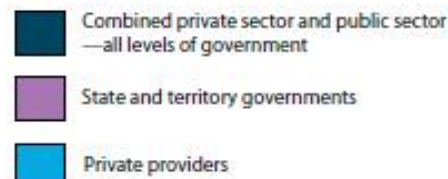
Using data, in part from the purchasing system, to understand service and financing composition



Share of expenditure



Responsibility for services



Funding



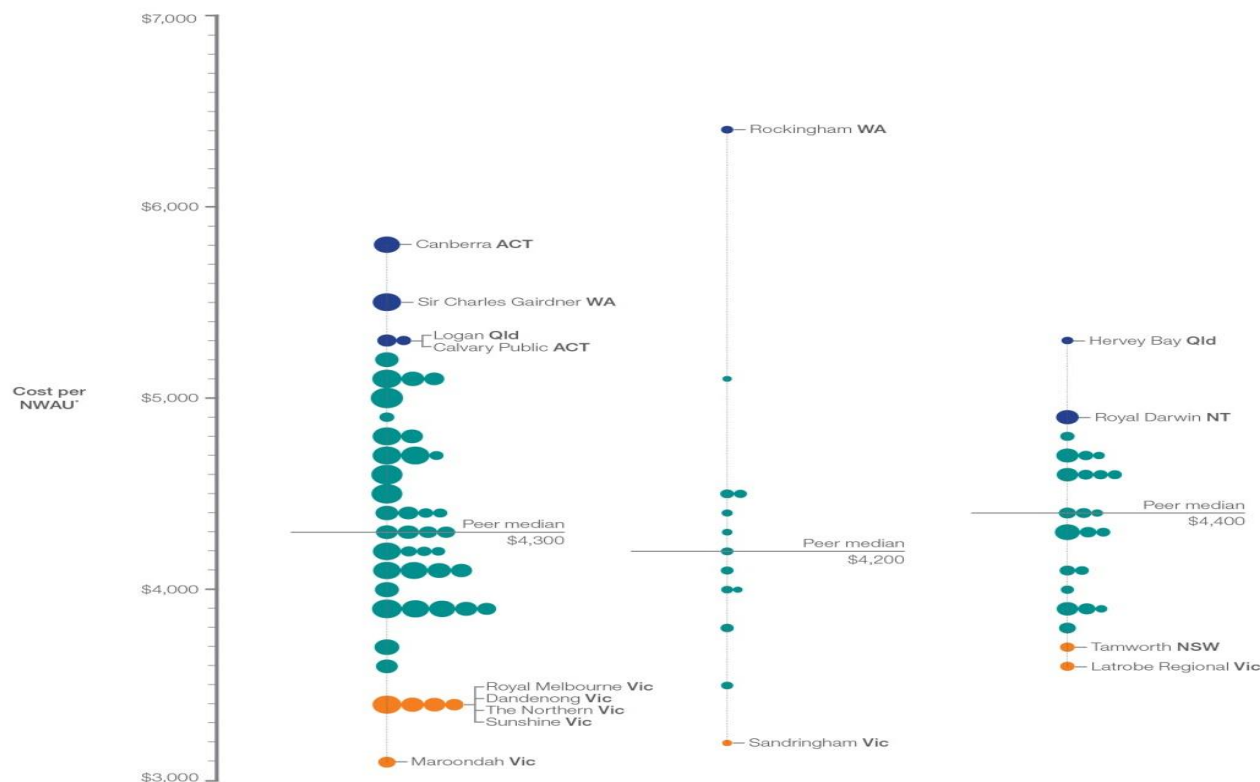
Source: Australian Institute of Health and Welfare 2015

At a systems level.... Use of costs per patient

Hospital Performance: Costs of acute admitted patients in public hospitals in 2011–12

Cost per NWAU* for acute admitted patients in public hospitals, 2011–12

	Major metropolitan	Large metropolitan	Major regional
Total peer group costs†	\$9,879,651,800	\$698,317,500	\$2,673,544,400
Total peer group NWAU‡	2,253,383	161,626	614,003
Peer average Cost per NWAU	\$4,400	\$4,300	\$4,400



Each circle represents a hospital and the size represents the NWAU for each hospital.

6,000 100,000

● In highest 10% of peer group hospitals nationally

● Other hospitals (see results on pages 32–33)

● In lowest 10% of peer group hospitals nationally

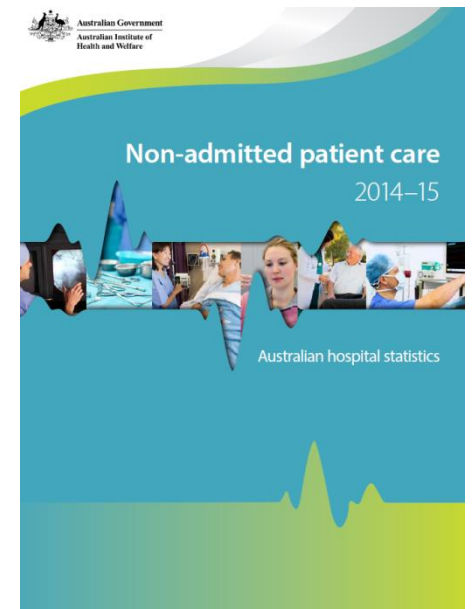
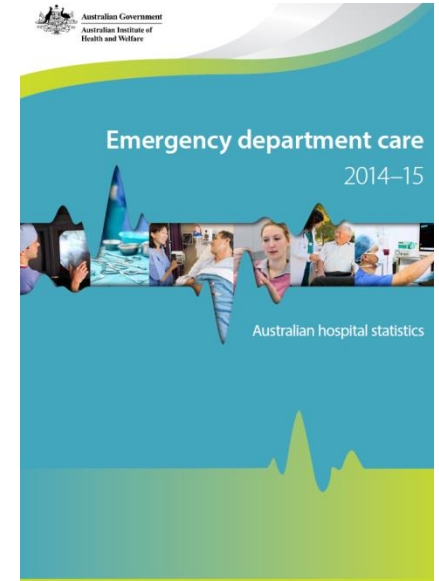
* Cost per National Weighted Activity Unit (NWAU) is a measure used by most governments to manage their largest public hospitals, focusing on acute admitted patients (excluding emergency department and property, plant and equipment costs). It includes the costs, types of patients and activity as defined by the National Efficient Price Determination 2014–15.

† Includes the costs as defined by the National Efficient Price Determination 2014–15.

‡ A measure of a common unit of activity calculated using the National Efficient Price Determination 2014–15.

Sources: National Health Performance Authority analysis of results calculated using the National Hospital Cost Data Collection 2011–12 and Admitted Patient Care National Minimum Dataset 2011–12.

Data and
financing
systems
working
together
can be
Information
Rich....



'How to move to a more strategic system?'

What are the data challenges ?

What are the challenges?

- **Entry Points:** where to start? How to evolve health information and financing systems together?
- **Unifying Systems:** How to overcome fragmentation and incorporate existing parallel or vertical systems in an evolutionary system?
- **Sustainability:** How to ensure mutual benefit between purchasing and information systems for long term gain?
- **Accountability:** How can data be used to encourage accountability? Can recipients be held responsible for delivering the activities for which funds were received?
- **Capacity in data and purchasing systems** – how to develop, how to maintain

Open Questions:

- **Analysis:** What baseline analysis is needed? How can this be developed? What capacity exists to analyse data for strategic purchasing and health financing generally?
- **Equity and Quality:** How can health information systems and strategic purchasing be used together to address equity aims and quality concerns?
- **Private Sector Providers:** How can this be systematically incorporated into health information systems ? Is strategic purchasing the incentive to collect private market data? What data should be collected?

How to evolve to a
coherent, strategic
system?

What is the way
forward?

Key areas for technical development

Design: What is the right framework to suit strategic purchasing needs and health information needs, accounting for the need for systems to evolve?

Including:

- **Entry points and scaling** approaches
- **Classification and grouping systems** to support strategic purchasing systems, and entry points
- How to **address equity and quality** challenges
- **Unique patient identifiers** – linking all patient information including services to each patient record
- **Models for data linkage, sharing, and system interoperability**, respecting patient confidentiality and the need for data security
- **Integration** of vertical or stand-alone program systems

'Thank you!'