Global standards and interoperability in Australian healthcare

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www.digitalhealth.gov.au

About Us

The Agency is a Corporate Commonwealth Entity funded by all Australian Governments. It designs and operates national digital health services and set data standards that:

o   Give **consumers more control of their health and care** when they wish it

o   **Connect and empower healthcare professionals**

o   Promote **Australia's global leadership in digital health and innovation**

The Agency reports to its Board, appointed by the Minister.

The Agency is the system operator for the My Health Record, and a number of other clinical information systems and standards, and commenced operations on 1 July 2016.

"
The digital health market will grow at over 25.9% compound annual growth rate to reach $379bn by 2024
"
Hendersen et al. (2016)

"
Australia is well placed globally to take advantage of this growth as a test bed for health innovation and research
"
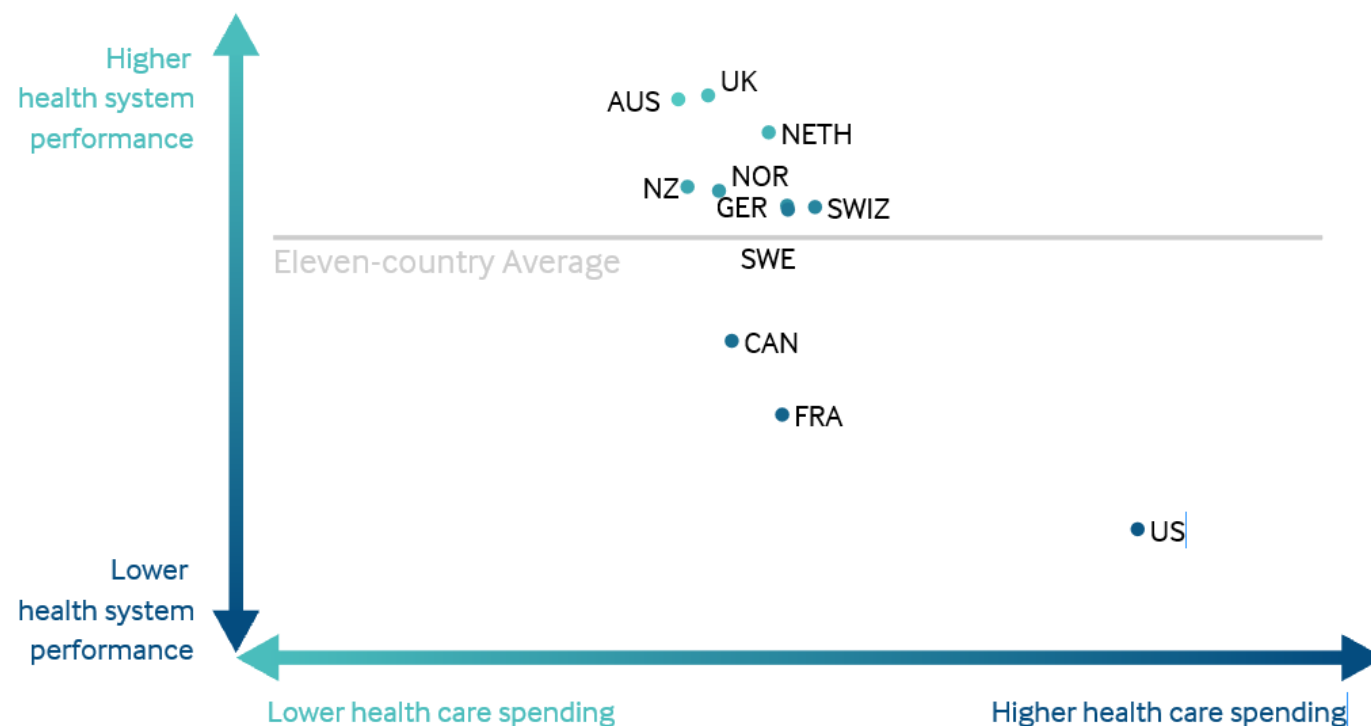Global Market Insights, Inc 23 Nov 2016

Australia produces high quality health outcomes

"Australia ranks highest on Administrative Efficiency and Health Care Outcomes, and is among the top-ranked countries on Care Process and Access"

Commonwealth Fund (2017)

Exhibit 5. Health Care System Performance Compared to Spending

Higher health system performance

AUS   UK
NETH
NZ   NOR
GER   SWIZ
Eleven-country Average
SWE
CAN
FRA
US

Lower health system performance

Lower health care spending   Higher health care spending

Note: Health care spending as a percent of GDP.   Source: Commonwealth Fund, 2017

Australian Government
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Digital Health Supporting Clinicians

An average 13% of appointments in general practice need follow up because of missing information.

Content shared digitally between clinicians and patients means reduced risk of lost information.

223,000 patients admitted to hospital due to adverse drug events costing $1.2 billion – 2-3% of all hospital admissions.

Medicines information available securely online reduces safety risk.

14% of pathology tests are ordered due to lack of access to patient history.

People and clinicians will be able to see results of previous tests.

"

The use of digital technologies to deliver healthcare can be an enabler to support the delivery of better patient outcomes. Digital technology does hold great promise but the literature clearly indicates technology is not a solution on its own. Digital innovations must provide benefit and in most cases, complement existing proven models of care.

Royal Australian College of General Practitioners, submission to National Digital Health Strategy, 2017

"

Aligning a nation to one vision – co-producing a national strategy

Safe, seamless and secure:
evolving health and care to
meet the needs of modern
Australia.

Australia's National
Digital Health Strategy

National Digital Health Strategic Priorities: 2018 – 2022

MY HEALTH RECORD	Health information that is available whenever and wherever it is needed
SECURE MESSAGING	Health information that can be exchanged securely
INTEROPERABILITY AND DATA QUALITY	High-quality data with a commonly understood meaning that can be used with confidence
MEDICATION SAFETY	Better availability and access to prescriptions and medicines information
ENHANCED MODELS OF CARE	Digitally-enabled models of care that improve accessibility, quality, safety and efficiency
WORKFORCE EDUCATION	A workforce confidently using digital health technologies to deliver health and care
DRIVE INNOVATION	A thriving digital health industry delivering world-class innovation

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My Health Record

Priority 1 : My Health Record

An electronic summary of an individual's health information that **can be shared securely online** between the individual and registered healthcare providers involved in their care to support improved decision making and continuity of care.

The Government is expanding My Health Record for all Australians in 2018 - providing a choice to opt out altogether if they prefer.

> *My Health Record is the future of medicine.*
>
> Dr Michael Gannon, President, Australian Medical Association

> *Prioritise making the My Health Record shareable and used by all health professionals and in all health settings. This fundamental step will have massive benefits to consumers who will be able to trust that their information is being adequately communicated.*
>
> Consumers Health Forum of Australia

Key Facts

All Australians will be given control of their own health record, what it contains and how it is accessed.

It will form the cornerstone of a better health system and digital health innovations for Australia.

We will expand on an existing, proven system that is safe and secure.

Our vision is a world-leading national, digital health capability that improves the lives of all Australians by supporting the efficient delivery of healthcare.

Australian Government
Australian Digital Health Agency | My Health Record

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How does My Health Record work?

General Practice   Hospitals   Specialists   Pathology & DI   Allied Health   Pharmacist   Aged Care

Shared health summaries   Event summaries   Discharge summaries   Specialist letters   Pathology & diagnostic imaging reports   Prescription & dispense records   eReferrals
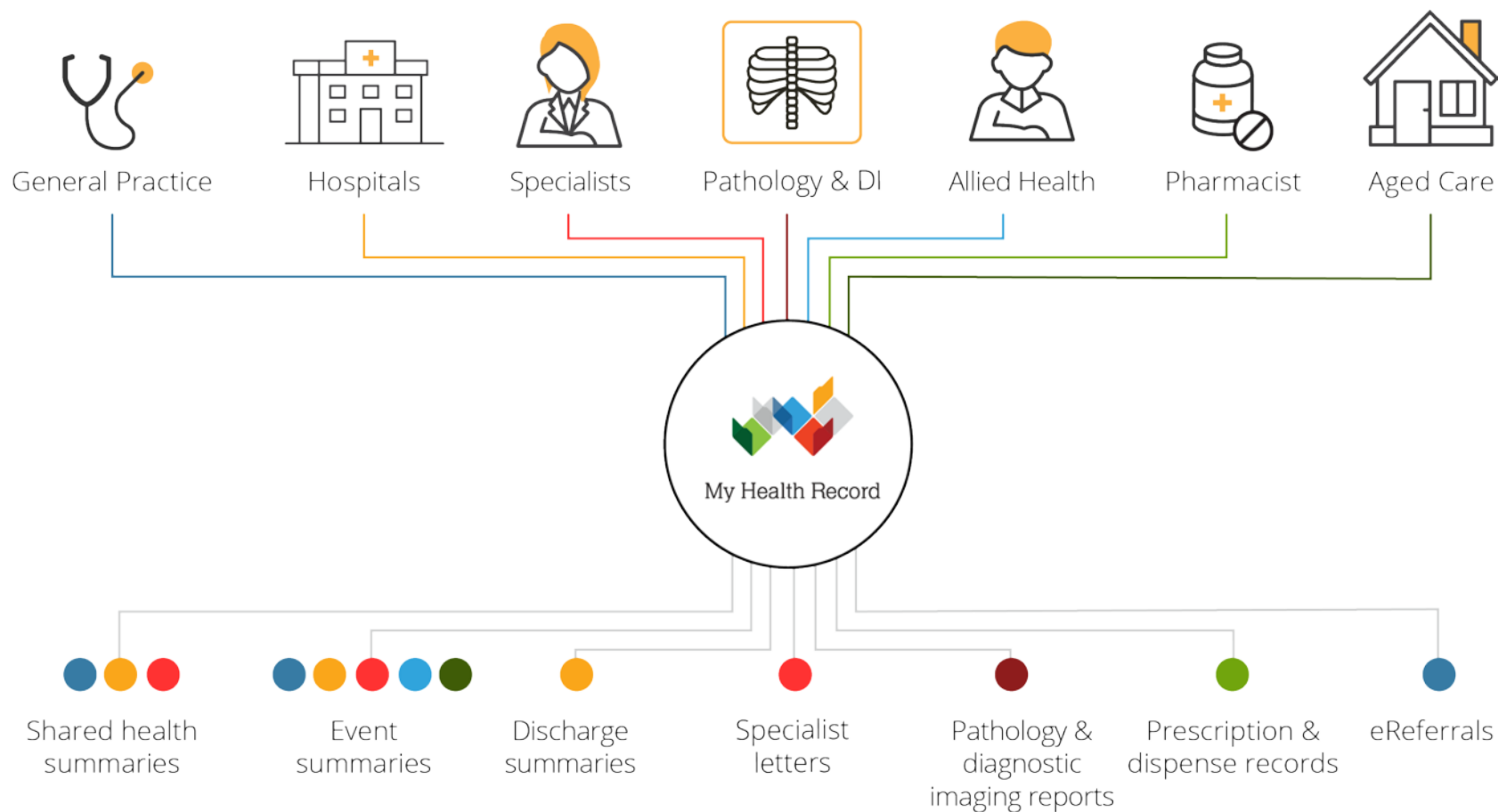
Recent milestones – My Health Record

More than 95 per cent of Australian diagnostic imaging practices can now connect to the My Health Record system with 16 new software companies having service agreements with the Australian Digital Health Agency.

Australia's largest pathology labs have signed up to My Health Record
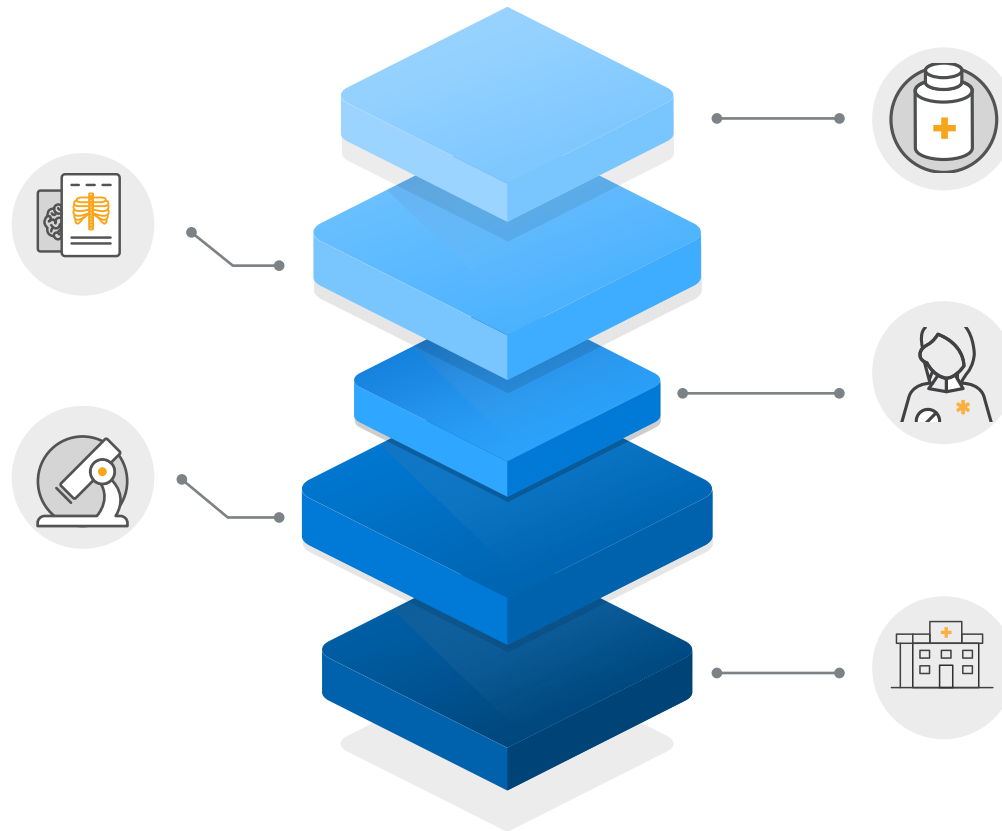
Partnership with the peak national body representing pharmacists, the Pharmaceutical Society of Australia (PSA) to increase the number of pharmacists using My Health Record.

Pharmacists can now upload dispense records and view hospital discharge summaries, shared health summaries, and allergy information to My Health Record using enhanced

Chemist Warehouse, representing 30 per cent of the community pharmacy market, and Corum representing 1,000 pharmacies are also connecting to My Health Record system in 2018

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My Health Record

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My Health Record statistics - 11 February 2018

Consumer Statistics

5,553,019 Consumers registered

Demographic Breakdown: 54% are female | 46% are male

Age Range	Aged 19 or less	Aged 20-39	Aged 40-64	Aged 65 or higher
% of total registrations	36%	25%	25%	14%

State	ACT	TAS	SA	NT	NSW	VIC	QLD	WA
% of population	26%	22%	21%	23%	23%	18%	30%	19%

Approximately 23% of Australia's population is registered for a My Health Record

Provider Registrations

10,716 Healthcare providers registered

Organisation Type*	Count
General Practices	6,306
Public Hospitals and Health Services	793
Private Hospitals and Clinics	174
Retail Pharmacies	1,467
Aged Care Residential Services	185
Pathology and Diagnostic Imaging Services	31
Other categories of healthcare providers including Allied Health	1,453
Organisations with a cancelled registration	307

*Organisation type based on Healthcare Provider Organisation (HPI-O) data, except for Hospital provider data which is based on jurisdictional reported facilities that are connected to the My Health Record system.

My Health Record Usage

Clinical Document Uploads	4,523,920
Shared Health Summary	1,460,371
Discharge Summary	1,585,259
Event Summary	467,550
Specialist Letter	70,167
eReferral Note	48
Pathology Reports	858,574
Diagnostic Imaging Report	81,951

Prescription and Dispense Uploads	16,709,478
Prescription Documents	13,131,152
Dispense Documents	3,578,326

Consumer Documents	160,912
Consumer Entered Health Summary	101,421
Consumer Entered Notes	42,034
Advanced Care Directive Custodian Report	15,801
Advance Care Planning Document	1,656

Medicare Documents	636,946,640
Australian Immunisation Register	1,821,509
Australian Organ Donor Register	571,798
Medicare/DVA Benefits Report	373,915,460
Pharmaceutical Benefits Report	260,637,873

Key My Health Record system benefits

Avoid adverse drug events

Improved systems through secondary use of data

Enhanced patient self-management

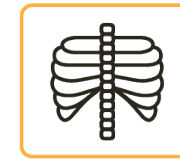Improvements in patient outcomes

Reduced time gathering information

Avoided duplication services

Other National Priorities

2. Health information that can be exchanged securely

WHAT WILL BE DELIVERED BY 2022?

- Every healthcare provider will have the ability to communicate with other professionals and their patients via secure digital channels if they so choose. This will end dependence on paper-based correspondence and the fax machine or post.

- From within their chosen system healthcare providers will be able to search for other healthcare providers in a single directory, and easily and securely share clinical correspondence.

- Patients will be able to communicate with their healthcare providers using these digital channels.

- Patients' health data will be safeguarded and able to be shared securely at their discretion. They will spend less time having to retell their story, and their healthcare providers will be able to work together more effectively to provide coordinated care.

3. High-quality data with a commonly understood meaning that can be used with confidence

WHAT WILL BE DELIVERED BY 2022?

- A public consultation on draft interoperability standards, leading to an agreed vision and roadmap for implementation of interoperability between all public and private health and care services in Australia will be completed in 2018.

- Base-level requirements for using digital technology when providing care in Australia agreed with governments, peak clinical bodies and other key stakeholders.

- Health services will be able to assess their level of digital maturity (the extent to which they are supported by the effective use of digital technology) and be supported in improving their level of digital maturity.

- Improvements in data quality and interoperability through the adoption of clinical terminologies, unique identifiers and data standards.

- By 2022, the first regions in Australia will showcase comprehensive interoperability across health service provision, community and hospital sectors, public and private.

- The safety and the quality of patient care will be improved by ensuring we have a connected health system that seamlessly shares high-quality data with the right people at the right time.

Priority 4 : Medication Safety

4. Better availability and access to prescriptions and medicines information

WHAT WILL BE DELIVERED BY 2022?

- By the end of 2018, all consumers and their healthcare providers will have access to comprehensive views of their prescribed and dispensed medications through the My Health Record system, irrespective of who prescribed and dispensed the medicine.

- By 2022, there will be digitally enabled paper-free options for all medication management in Australia. People will be able to digitally request their medications online, and all prescribers and pharmacists will have access to electronic prescribing and dispensing, increasing convenience for people filling prescriptions and improving overall safety.

GS1 &
Australian Digital Health Agency

Transformation in Australian Healthcare relies on partnerships based on shared purpose

Others starting to be used include

- Unique Identification & Data Capture for Patients and Care Providers within a Hospital setting
- Unique identification of Surgical Instruments, Assets, Documents

GS1 standards already recognised in this area in Australia

- Unique identification of products
- Unique identification of locations
- Data Capture (Barcoding and RFID)
- eProcurement/EDI

A core need for a national 'digital' health solution are data standards called out in the Strategy – Priority 3

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Ongoing partnership to provide industry based solutions to healthcare to support improvements to processes

National Product Catalogue
- Shares unique identification of products plus industry defined set of master data needed in procurement, support and clinical systems with data Synchronisation environment to automate the ability to share/source required data eliminating duplication of process and issues with errors

Locatenet
- Stores and shares unique identification of locations (physical and virtual) needed to support processes of physical movement and traceability

Recall Health
- Supports systemised recall communication and management processes

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Specific partnership activities in progress/set to commence

01 ADHA Draft Framework for Action

Some GS1 standards & Services reflected in section 3.3 Promoting data quality
Feedback to be provided during consultation

02 ADHA Supply Chain Advisory Group participation

Assisting team in drafting a series of 'position papers' related to the need for unique identification, data capture, eProcurement and National Product Catalogue

03 Other Meds Initiatives

AMT/GTIN project – matching medicinal concept to physical product
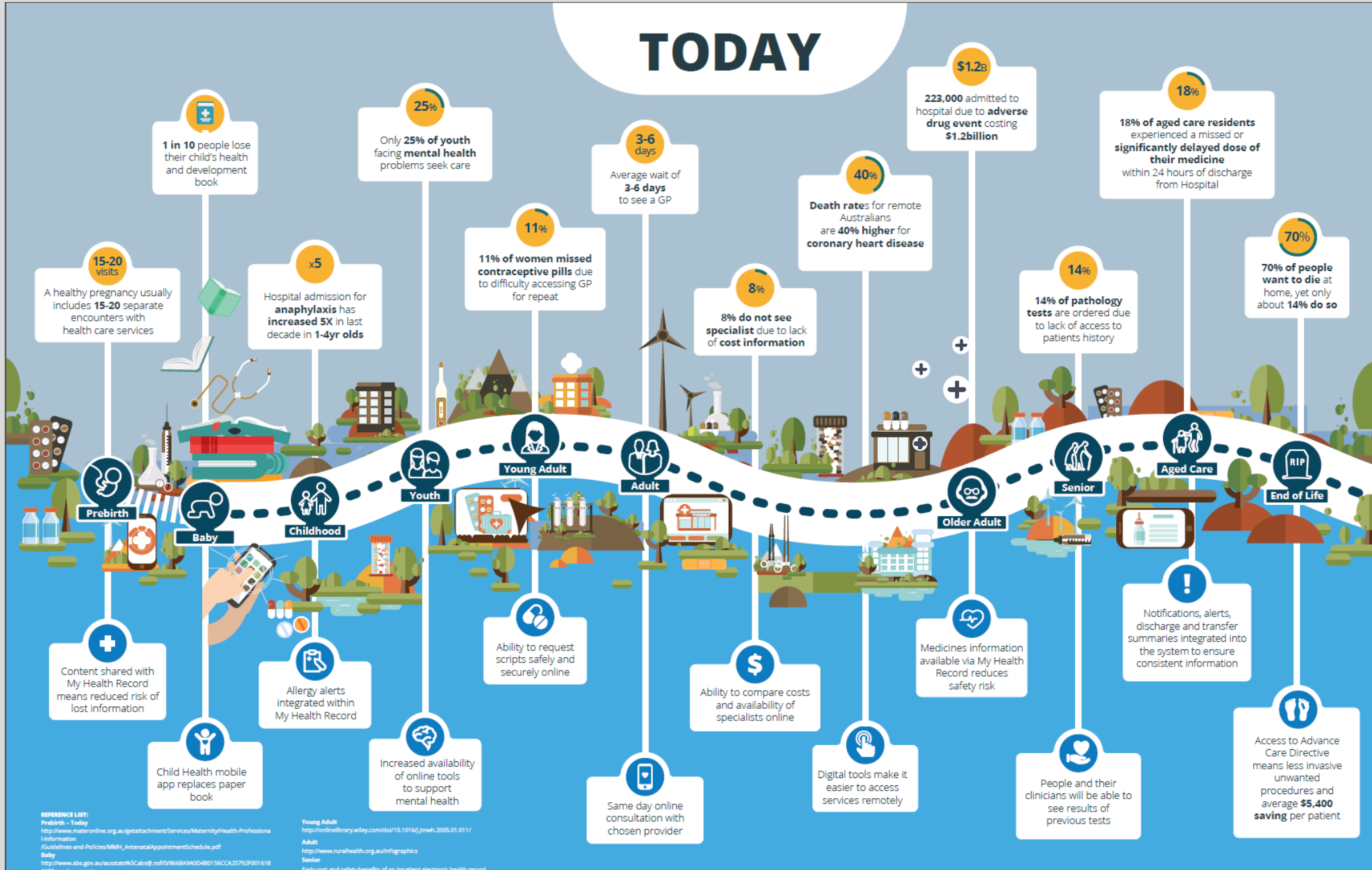Interoperability Framework (WIP/involvement in consultation)
Medication 'Unit Dose' (Proposed discussion for Medicine Safety

15-20 visits
A healthy pregnancy usually includes **15-20 separate encounters** with health care services

1 in 10 people lose their child's health and development book

x5
Hospital admission for **anaphylaxis** has **increased 5X** in last decade in **1-4yr olds**

25%
Only **25% of youth** facing **mental health** problems seek care

11%
11% of women missed contraceptive pills due to difficulty accessing GP for repeat

3-6 days
Average wait of **3-6 days** to see a GP

8%
8% do not see specialist due to lack of **cost information**

40%
Death rates for remote Australians are **40% higher** for **coronary heart disease**

$1.2B
223,000 admitted to hospital due to **adverse drug event** costing **$1.2billion**

14%
14% of pathology tests are ordered due to lack of access to patients history

18%
18% of aged care residents experienced a missed or **significantly delayed dose** of their medicine within 24 hours of discharge from Hospital

70%
70% of people want to die at home, yet only about **14% do so**

Prebirth

Baby

Childhood

Youth

Young Adult

Adult

Older Adult

Senior

Aged Care

End of Life

Content shared with My Health Record means reduced risk of lost information

Child Health mobile app replaces paper book

Allergy alerts integrated within My Health Record

Increased availability of online tools to support mental health

Ability to request scripts safely and securely online

Same day online consultation with chosen provider

Ability to compare costs and availability of specialists online

Digital tools make it easier to access services remotely

Medicines information available via My Health Record reduces safety risk

People and their clinicians will be able to see results of previous tests

Notifications, alerts, discharge and transfer summaries integrated into the system to ensure consistent information

Access to Advance Care Directive means less invasive unwanted procedures and average **$5,400 saving** per patient

REFERENCE LIST:
Prebirth – Today
http://www.materonline.org.au/getattachment/Services/Maternity/Health-Professional-Information
/Guidelines-and-Policies/MMH_AntenatalAppointmentSchedule.pdf
Baby
http://www.abs.gov.au/ausstats%5Cabs@.nsf/0/8668A9A0D4B0156CCA25792F001618
6A?Opendocument
https://www.medicalsearch.com.au/nsw-health-seeks-opinions-for-its-latest-blue-book
-review/f/19016y
Childhood
http://www.jaclonline.org/article/S0091-6749(15)00702-2/fulltext
Youth
http://www.mindframe-media.info/for-media/reporting-mental-illness/facts-and-stats
#C&Y

Young Adult
http://onlinelibrary.wiley.com/doi/10.1016/j.jmwh.2005.01.011/
Adult
http://www.ruralhealth.org.au/infographics
Senior
Early cost and safety benefits of an inpatient electronic health record
Zlabek et al
J Am Med Inform Assoc (2011) 18 (2): 169-172
Aged Care
Does facilitated Advance Care Planning reduce the costs of care near the end of life?
Systematic review and ethical considerations
Corinna Klingler1, Jürgen in der Schmitten2 and Georg Marckmann1
End of Life / Palliative
https://grattan.edu.au/wp-content/uploads/2014/09/815-dying-well.pdf

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Contact Us and Questions

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