# The Federal e-Health landscape

Peter Sprivulis

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Outline

- The challenges facing Australian healthcare
- Role of e-health in the reform response
- The federal e-health story until now
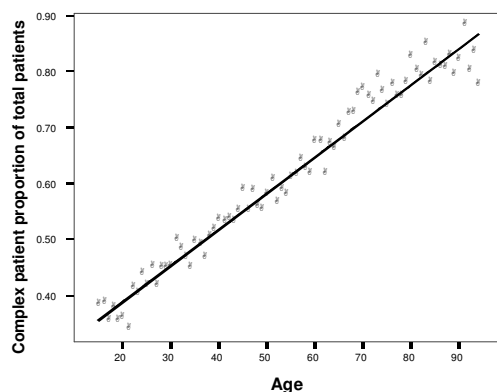- Current directions and (selected) issues

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The challenges faced by Australian Healthcare

- A demand tsunami
  - as workforce participation declines

- Disparities in healthcare access and appropriateness of use

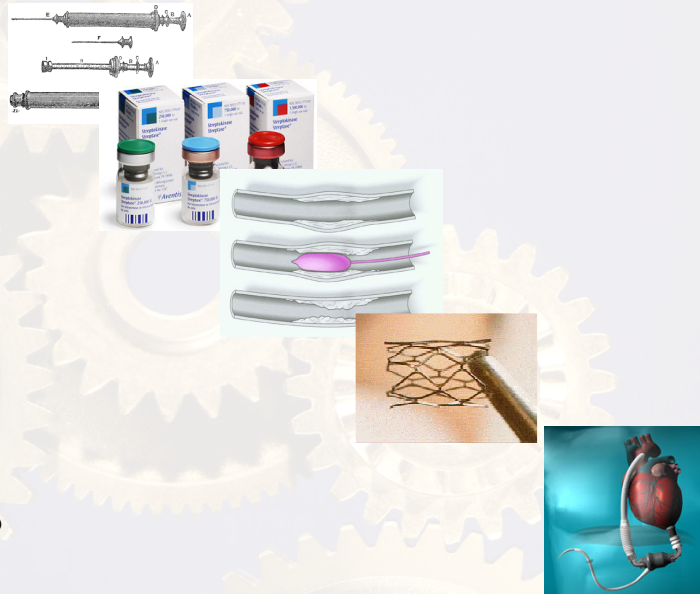- Inherent complexity
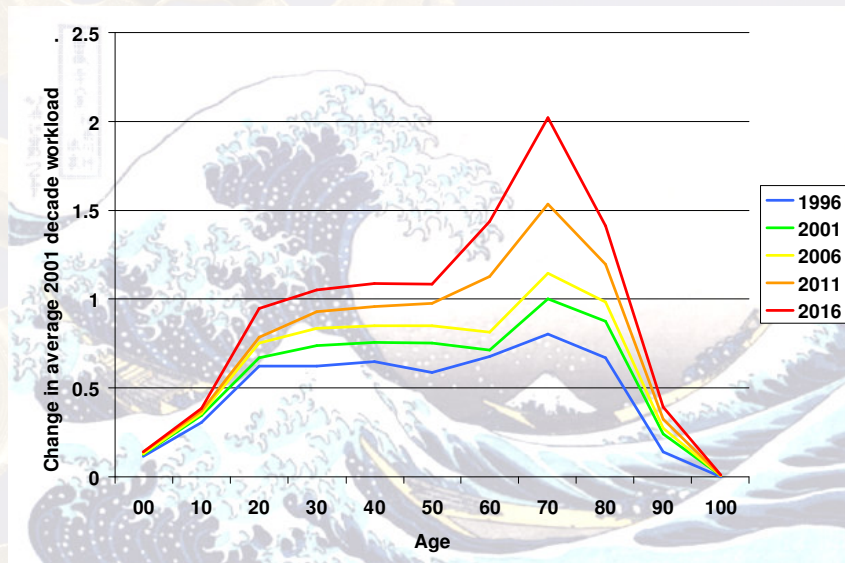 - Leading to 'fractured' healthcare
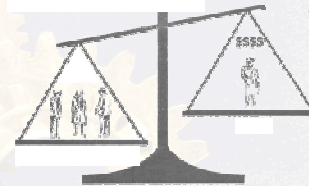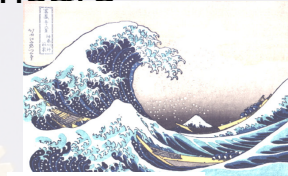
Age and healthcare resource use

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Technology – Heart Attack

- 1977

- 1987

- 1997

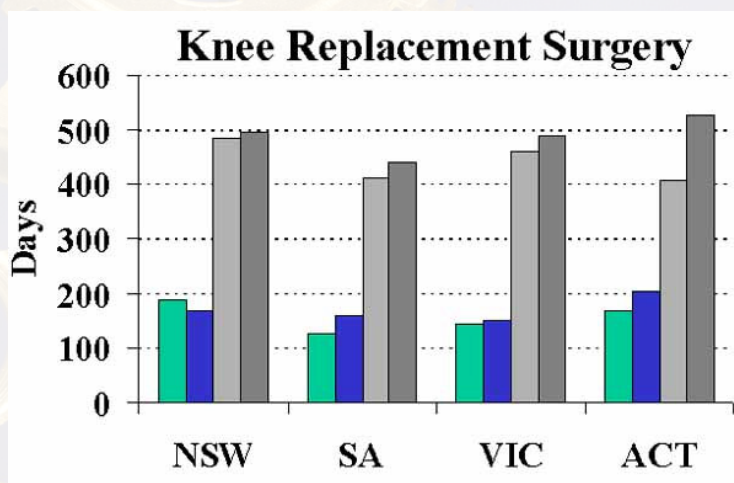- 2007

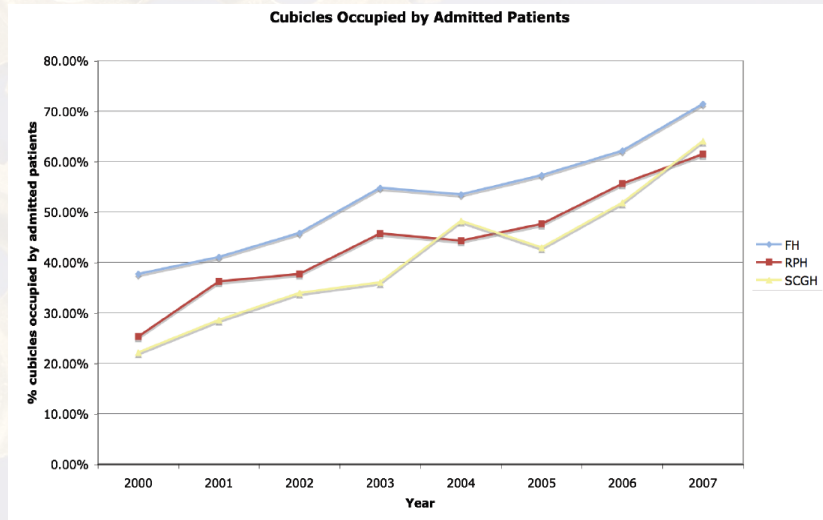- 2017 ?

The demand tsunami

Responding to the tsunami

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Waiting list queues

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The supply hose is being kinked at the level of the hospital bed

**Cubicles Occupied by Admitted Patients**

The ratio of free cubicles to occupied (blocked) cubicles has reversed from 3:1 to 1:3. We are trying to deal with a substantially higher workload in half the available space
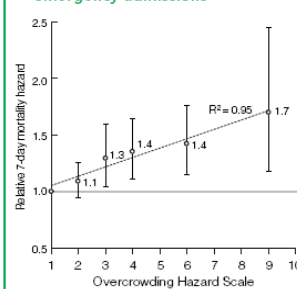
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Safety is being compromised

3 Seven-day survival* after emergency admission stratified by hospital occupancy on the day of admission

* Adjusted for age, mode of transport, diagnosis (ICD-10-CM), triage urgency, and referral source. ◆
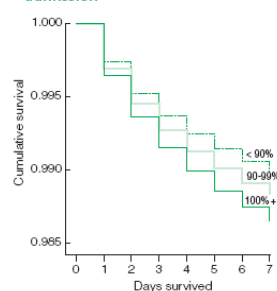
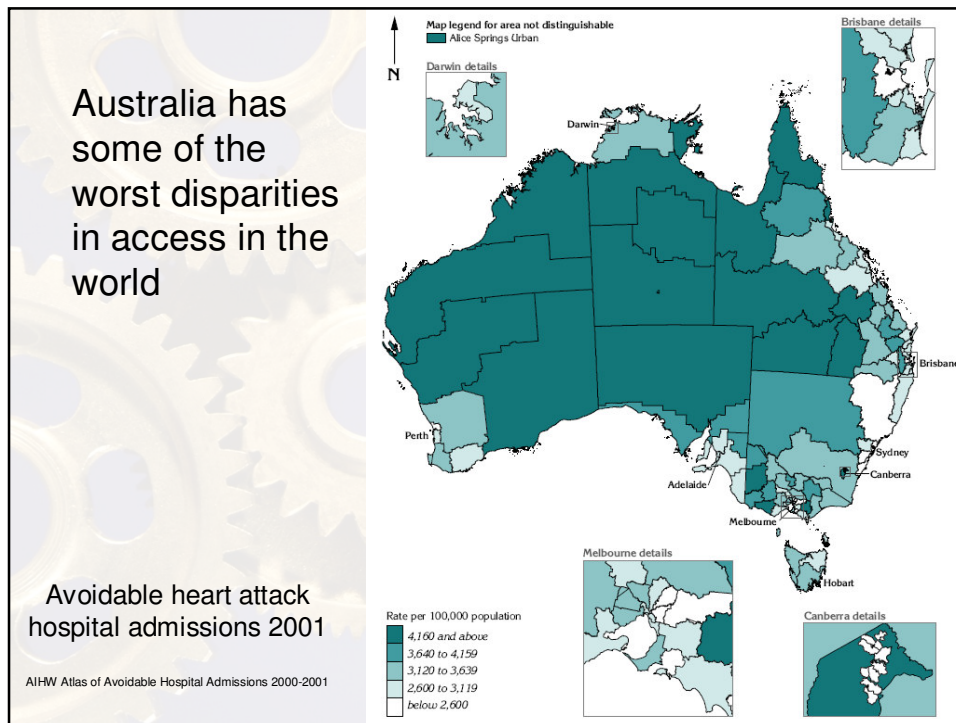4 Relationship between the Overcrowding Hazard Scale and the 7-day mortality hazard for emergency admissions

Increased mortality hazard of ≈ 30% operating at ≈ 100% occupancy cf 85%

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Sprivulis P, Da Silva J, Jacobs I, Frazer A, Jelinek GA.
The association between hospital overcrowding and mortality among patients admitted via Western Australian emergency departments. MJA 2006;184:208-212

Australia has some of the worst disparities in access in the world

Avoidable heart attack hospital admissions 2001

AIHW Atlas of Avoidable Hospital Admissions 2000-2001

Map legend for area not distinguishable
Alice Springs Urban

Darwin details

Brisbane details

N

Darwin

Brisbane

Perth

Sydney

Canberra

Adelaide

Melbourne

Hobart

Melbourne details

Canberra details

Rate per 100,000 population
4,160 and above
3,640 to 4,159
3,120 to 3,639
2,600 to 3,119
below 2,600

Fixing the problems is not easy: Australian healthcare is a complex machine
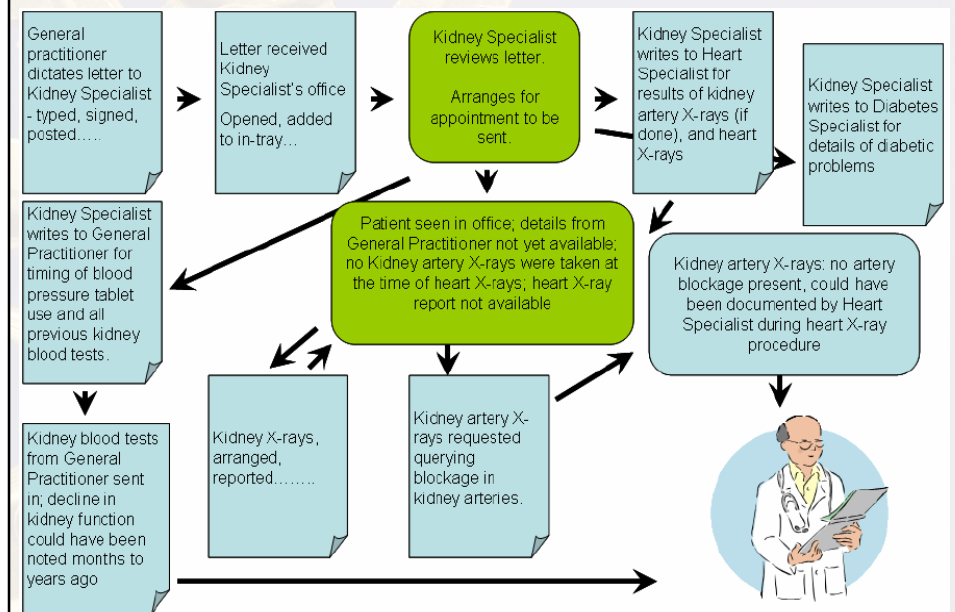
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Complex funding and delivery mechanisms
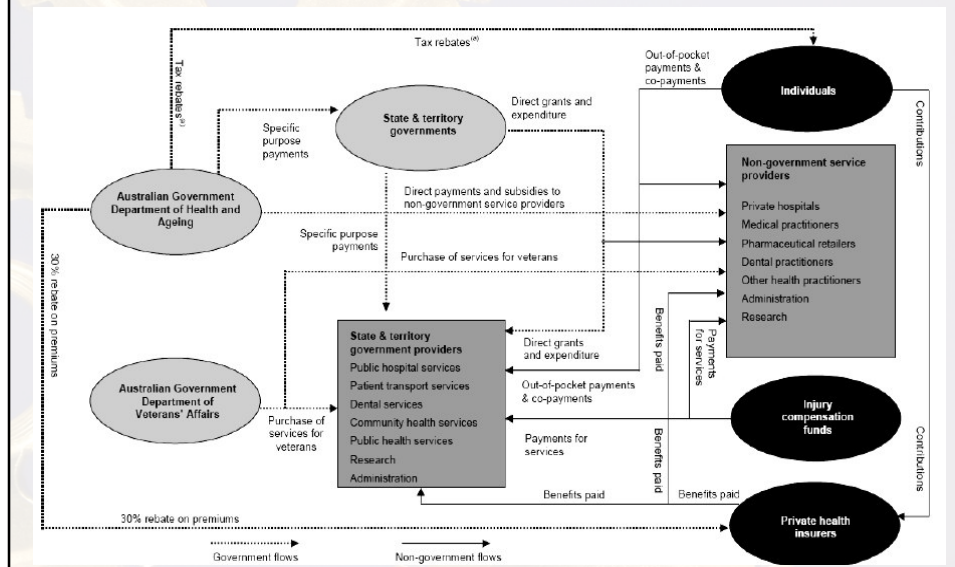
Complex information flows: eg referral

Efforts to reform the information flows
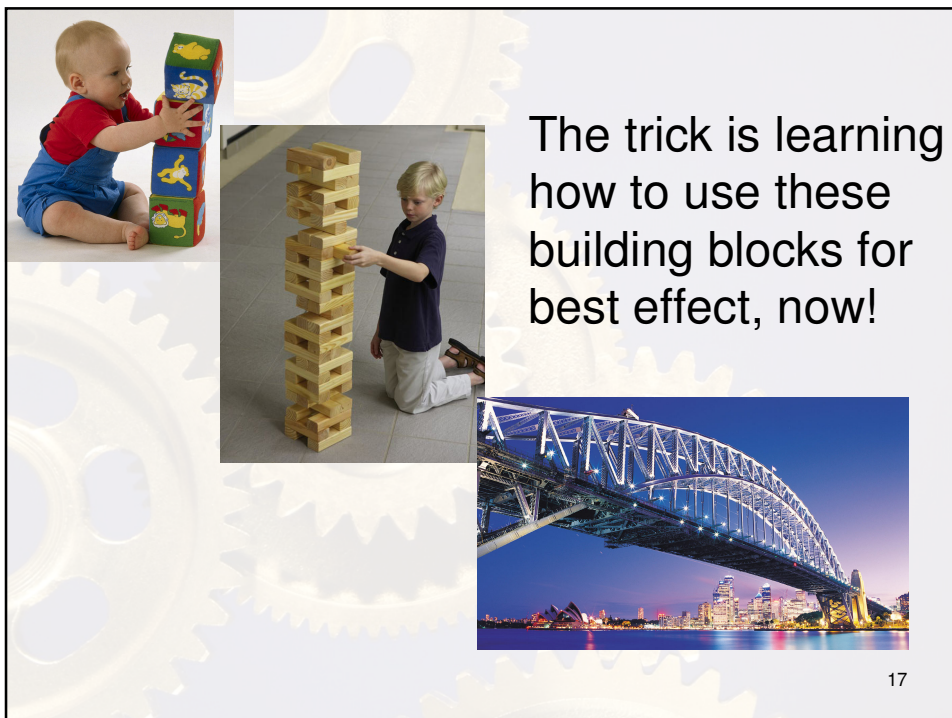have not always been successful

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NEHTA was formed to develop the building blocks
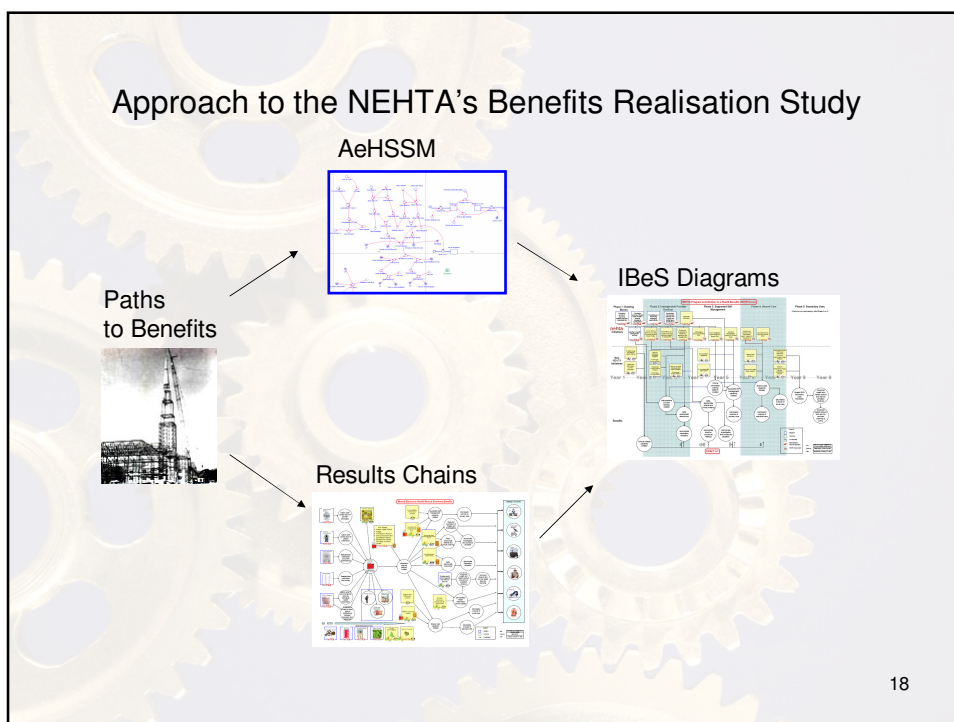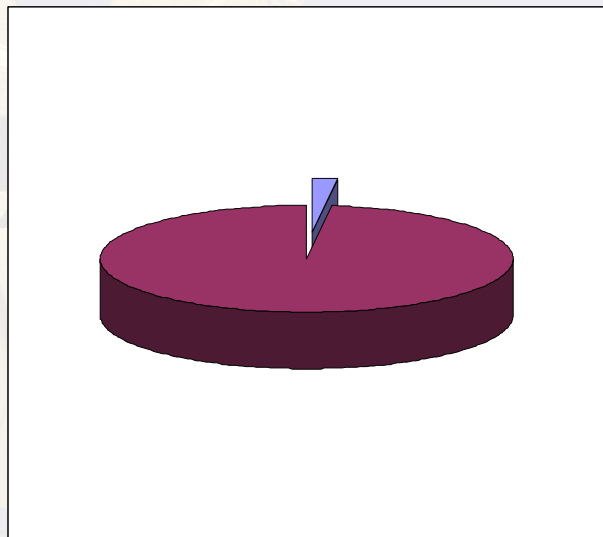needed for high quality information sharing

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The trick is learning how to use these building blocks for best effect, now!

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Approach to the NEHTA's Benefits Realisation Study

AeHSSM

Paths to Benefits
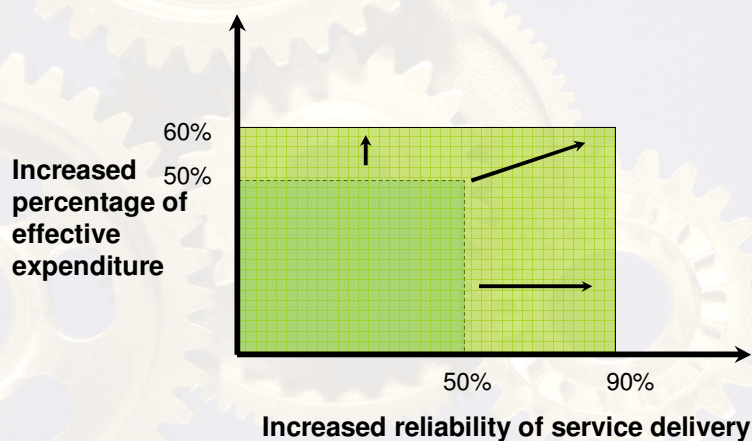
IBeS Diagrams

Results Chains

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The investment required is 'non-trivial' yet 'near-trivial' in comparison to total healthcare expenditure

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Finding: The major quantifiable benefit is improved effective, reliable utilisation, largely due to better consumer and clinician decision making
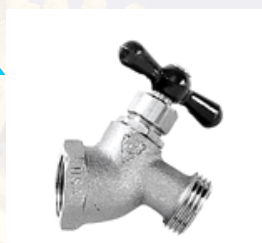
Increased percentage of effective expenditure

60%

50%

50%   90%

Increased reliability of service delivery

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So what are the key e-health enablers of reform?

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E-Referral

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E-Prescribing and medication management

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Supported self managed care

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Shared care of complex disease

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An information sharing platform is required to support 'all this'

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So what is an electronic health record?

From a benefits realisation perspective, an EHR is really a *compendium* of information services for which a range of views are provided, according to specific needs and permissions, having due regard to health consumer privacy.

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The information can and should be used to support system surveillance and learning

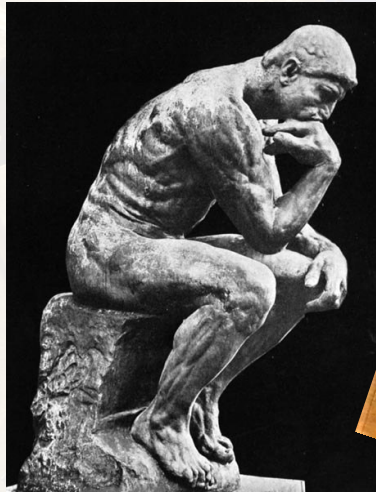28

So, what is Australia doing about it?

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Addressing governance

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Considering health record structures, funding & policy

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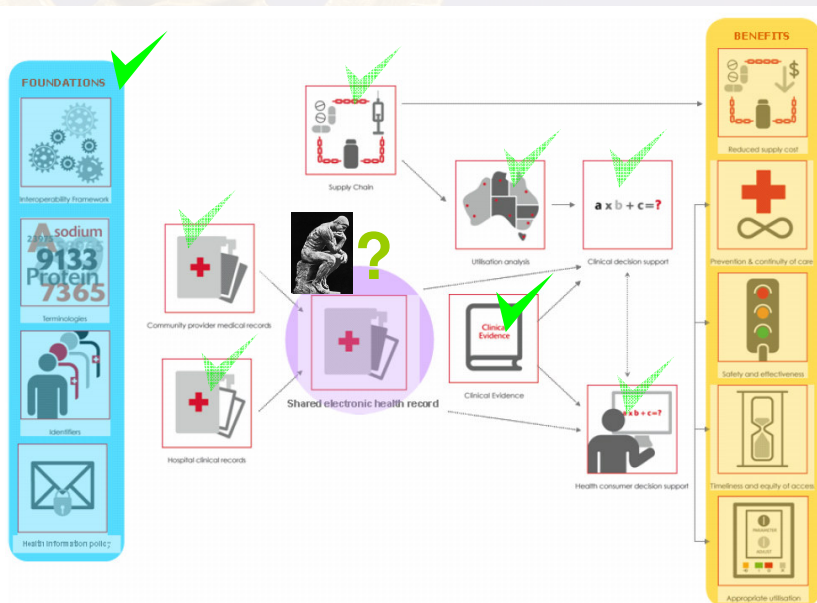'Packaging' national e-health services and specifications

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Building critical infrastructure

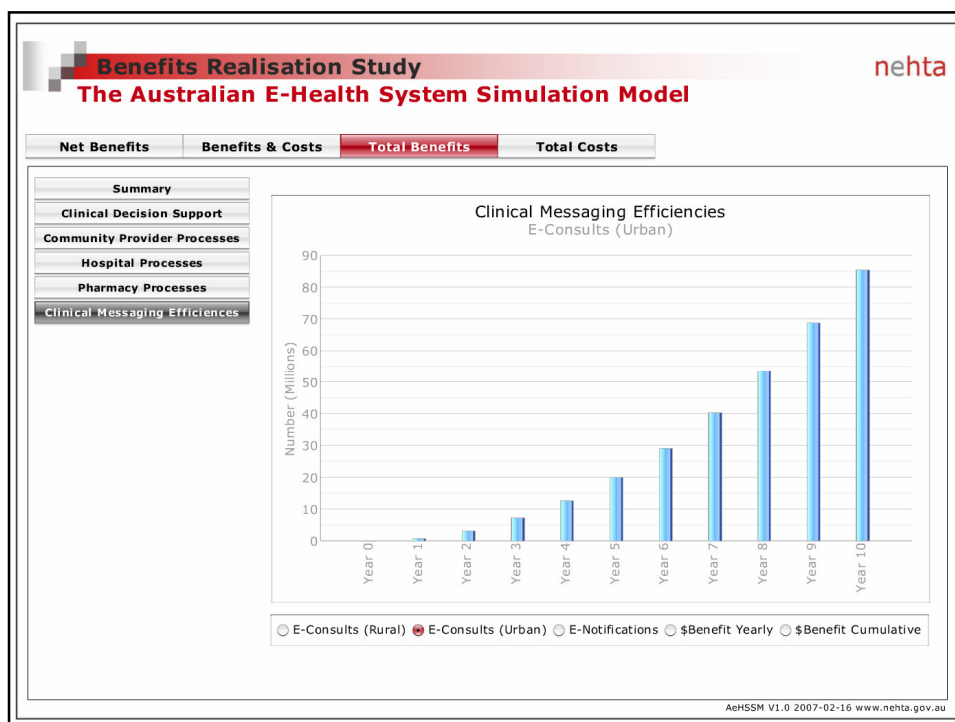A summary of progress so far

Issues: Primary care connectivity

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A genuine business driver that enables supported self managed care is needed

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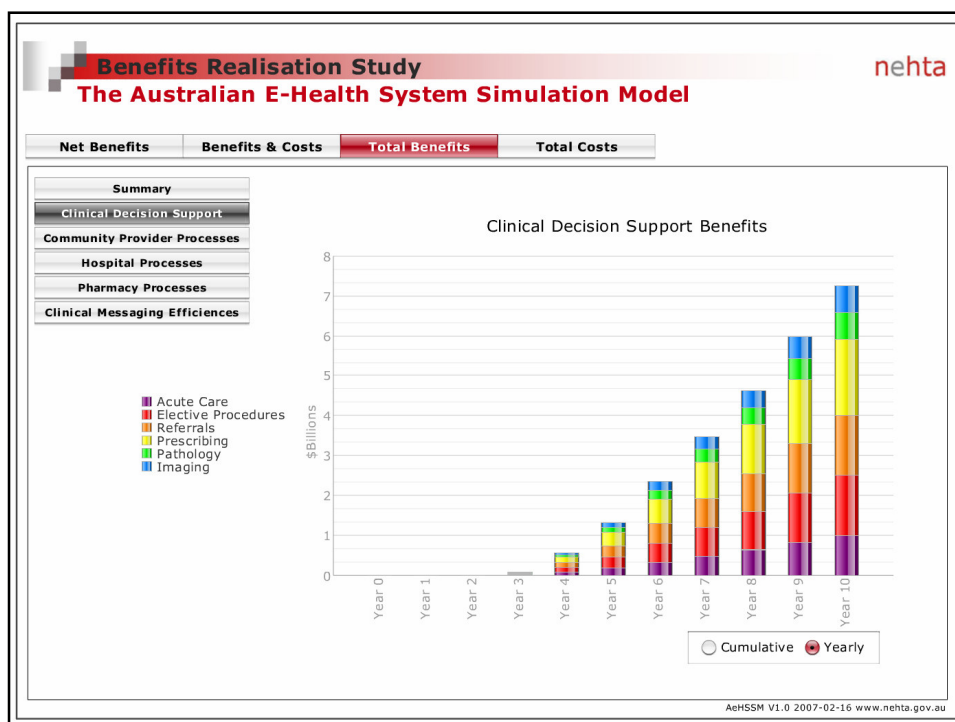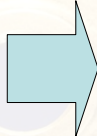## Issues: The Great Funding Divide

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Contributes to State/Territory Health 'distraction'

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Issues: A national approach to reducing the change management risks

nehta e-Health Services

Effective,
Reliable
Healthcare

New...
Edit...
Delete
Make Default

☑ Enable Automatic Sign-in

OK

- One of e-Health's greatest benefits is in 'hard wiring' the *desired* clinical decision or action as the DEFAULT decision or action

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Examples of where 'defining the default' is needed:

- Inpatient prescribing

- Inpatient dispensing

- Inpatient and outpatient referral, consultation and response

- Clinical handover

Patient : Product Authentication

Referral

Hospital Discharge summary
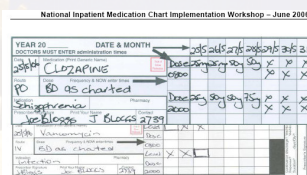
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Conclusions

- Australian healthcare is under stress
- Several reforms are needed to improve this situation
- A coherent E-Health path forward that supports the reform agenda has been identified
- The path mandates investment in national e-health infrastructure, including EHRs
- Coordination of E-Health investment with broader policy & change management initiatives will be critical to success

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