



DHS Victoria Better Care with E-health

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E-health's role in healthcare reform

- E-health has a pivotal role to play in
 - Improving demand management for healthcare services
 - Controlling the rate of increase in healthcare costs
 - Ensuring better safety and quality for participants
- Substantial reform is necessary to manage rising expenditure
 - Increasing costs of serving an ageing population
 - Consumer demand for new and costly healthcare technologies

National cooperation will accelerate progress

- **Coordinated national strategy and funding enables all governments to agree on**
 - Establishing the standards, specifications, terminologies and formats to enable information exchange
 - Creating the 'missing pieces' of infrastructure in healthcare - identifiers and clinical terminology
 - Developing the national policies required to protect privacy and patient consent
 - Establishing a basis for modelling benefits from e-health to assist in aligning investment priorities

NEHTA focuses on the key 'accelerators'

- Uniquely identifying individuals and healthcare providers
- Exchanging clinical information in a common language with consistent terms, descriptions and formats
- Building accurate national directories that identify medicines, medical products, devices and consumables
- Agreeing standards and protocols so that clinical providers can better communicate across the health sector
- Establishing confidence that consumers' clinical information is protected from unauthorised access
- Designing a national system of shared electronic health records for authorised practitioners and individuals

Exchanging clinical information

- Issue – how do we ensure that we are speaking the same language across the health sector?
- Initiative
 - Develop and use clinical information specifications
 - Use SNOMED CT as the standard clinical terminology
 - Adopt agreed national medical product directories

Accurate information enables better care

- Focus is on exchanging clinical information by electronic means, securely and reliably
- Computers require information in unambiguous, machine-readable form that can be consistently interpreted
- Consistently record information so that it can be used in:
 - Accurately recording events
 - Communicating between care providers
 - Enabling electronic decision support at point of care
 - Analysing and monitoring health outcomes

Priorities for improved clinical information

- Targeting high use and value clinical information (e.g. Problems; Medicines; Discharge Summary)
- Concentrating on frequently exchanged data – essential for clinical decision support (e.g. Referral)
- Building capacity in the sector to support the use of SNOMED CT through provision of tools, training and accreditation
- Mapping to other coding and classifications in clinical use

Providing a basis for global cooperation

- Agreement reached by nine countries to use SNOMED CT for recording and sharing health information
- International Health Terminology SDO (IHTSDO):
 - Established as a not-for-profit association
 - Charter members comprise Australia, New Zealand, Canada, UK, USA, Denmark, Lithuania, Sweden and The Netherlands
- Organisation now set up and SNOMED CT intellectual property being developed under clear governance structure

NEHTA's identification services

- Issue – how do we ensure the right information goes to the correct recipient?
- Initiative
 - Ensuring accurate identification of sender and receiver by:
 - Developing a national unique individual identifier
 - Creating a national unique clinical provider identifier
 - Enabling the establishment of a directory of organisations

National standards for exchanging messages

- Issue – how do we enable individuals and organisations to exchange clinical information in electronic form?
- Initiative
 - Defining standards to ensure systems can talk to each other
 - Encouraging use of those standards by system vendors
 - Defining the formats in which messages are exchanged
 - Ensuring that users of e-health systems are properly authenticated

Identifying priorities for investing in e-health

- Issue – how do we ensure that investment and effort are targeted to maximum effect in e-health?
- Initiative
 - Developing a study that models the benefits that can be realised in a very complex environment like health care
 - Modelling in particular those areas of e-health that promise the strongest potential return on investment
 - Seeking areas that result in improved health and safety and savings through better use of resources

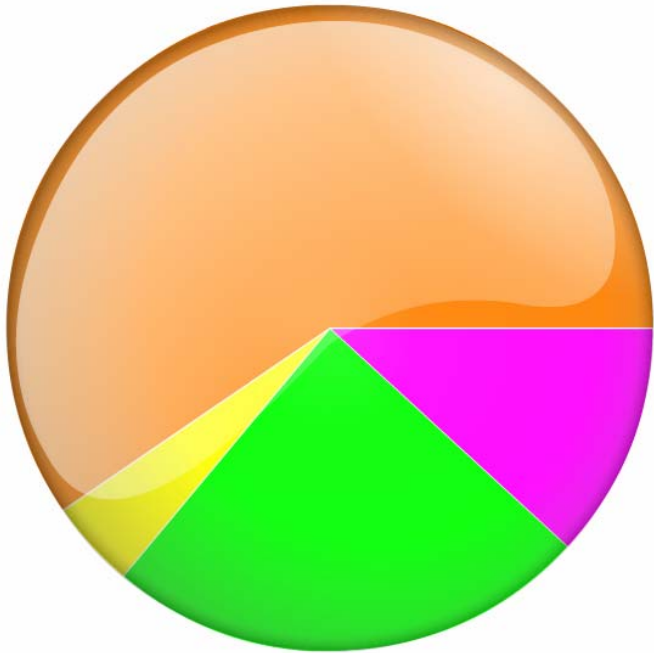
Modelling the benefits e-health

- Seeking the greatest benefit for least cost, in the shortest timeframe, with least risk through improvements in:
 - Safety – reducing incidence and severity of injury
 - Effectiveness – avoiding inappropriate levels of use
 - Patient-centeredness - supporting continuity of care and self-management
 - Timelines – reducing queues, overcrowding and harmful delays
 - Efficiency – avoiding waste in equipment, supplies and resources
 - Equity – promoting equitable services irrespective of location, ability to pay, ethnicity and gender

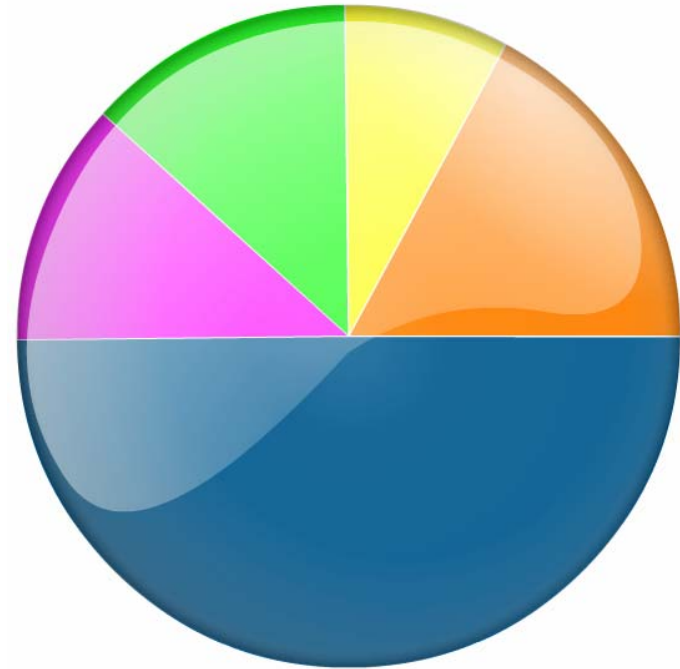
Major sources of benefits

- Benefits from appropriate use resulting in service substitution
 - Better clinical decision support in:
 - Prescribed medications
 - Referrals
 - Clinical ordering (pathology & imaging)
 - Electronic consultation substitution
 - Reduced rate of population chronic disease progression
 - More efficient community pharmacy processes
 - Improved medication adherence

Harvesting the benefits



Year 2



Year 10

- Clinical Decision Support
- Community Provider Processes
- Hospital Processes
- Pharmacy Processes
- Clinical Messaging Efficiencies

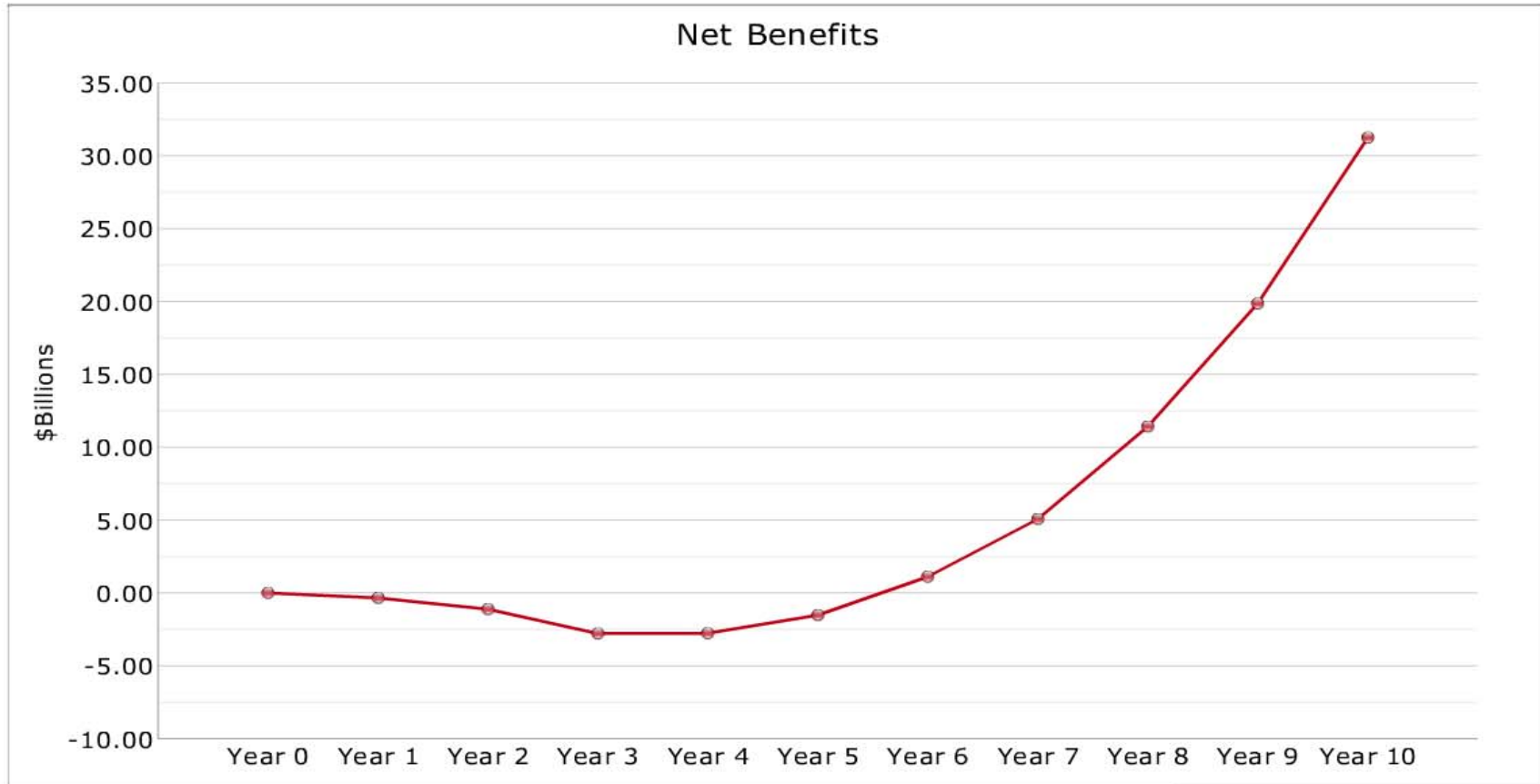
The Australian E-Health System Simulation Model

Net Benefits

Benefits & Costs

Total Benefits

Total Costs



Displayed Graph: Total

Cumulative Yearly

Pay Back Period:
(Years)

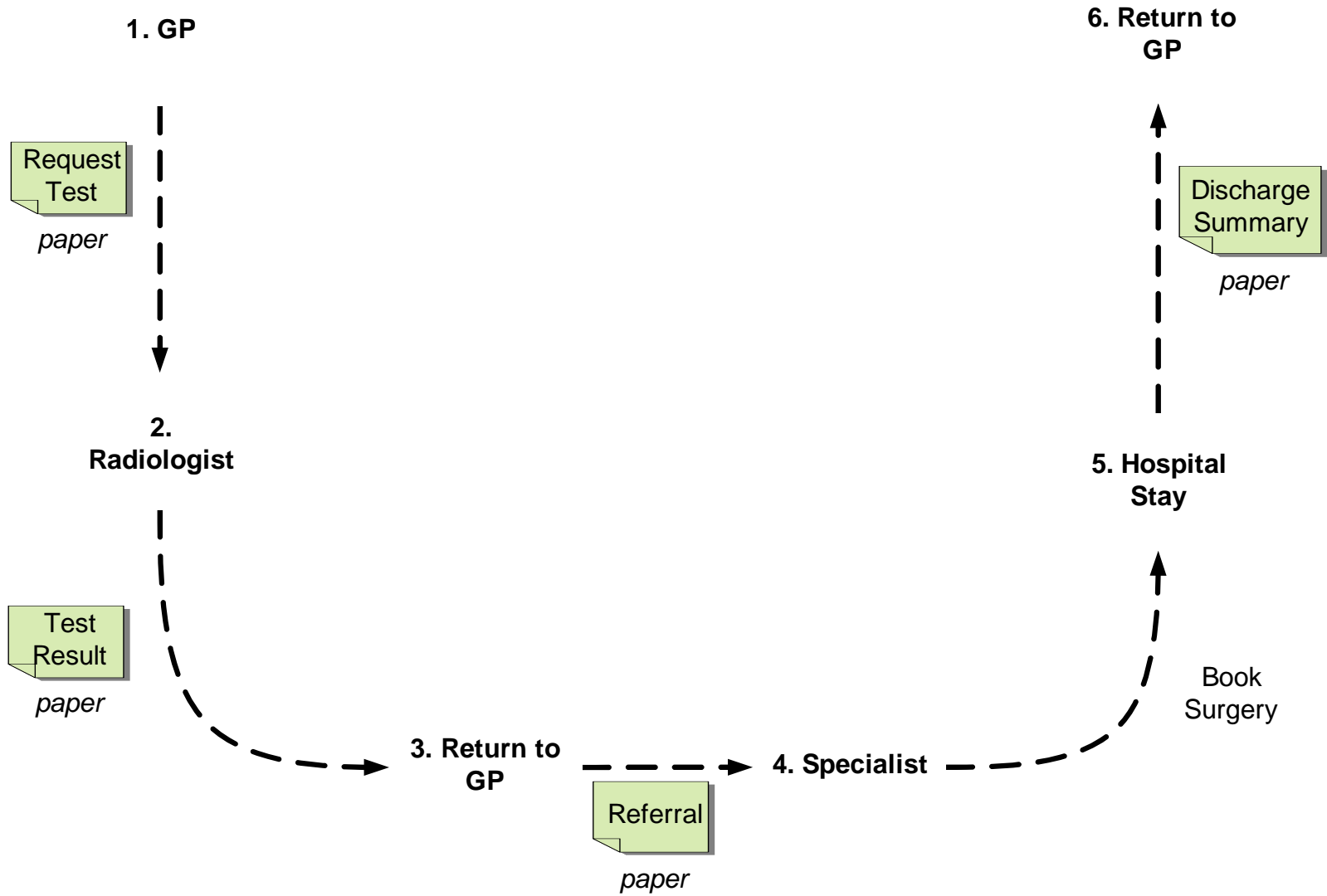
A national shared electronic health record (SEHR)

- The national shared EHR is an aggregator of relevant information drawn from a variety of services
- Implementing those services can precede the shared EHR, e.g. e-prescribing, discharge and referral
- All of these information services are necessary but not sufficient elements of a national SEHR system
- NEHTA's work creates the pre-requisites e.g. identifiers, terminologies, specifications and standards

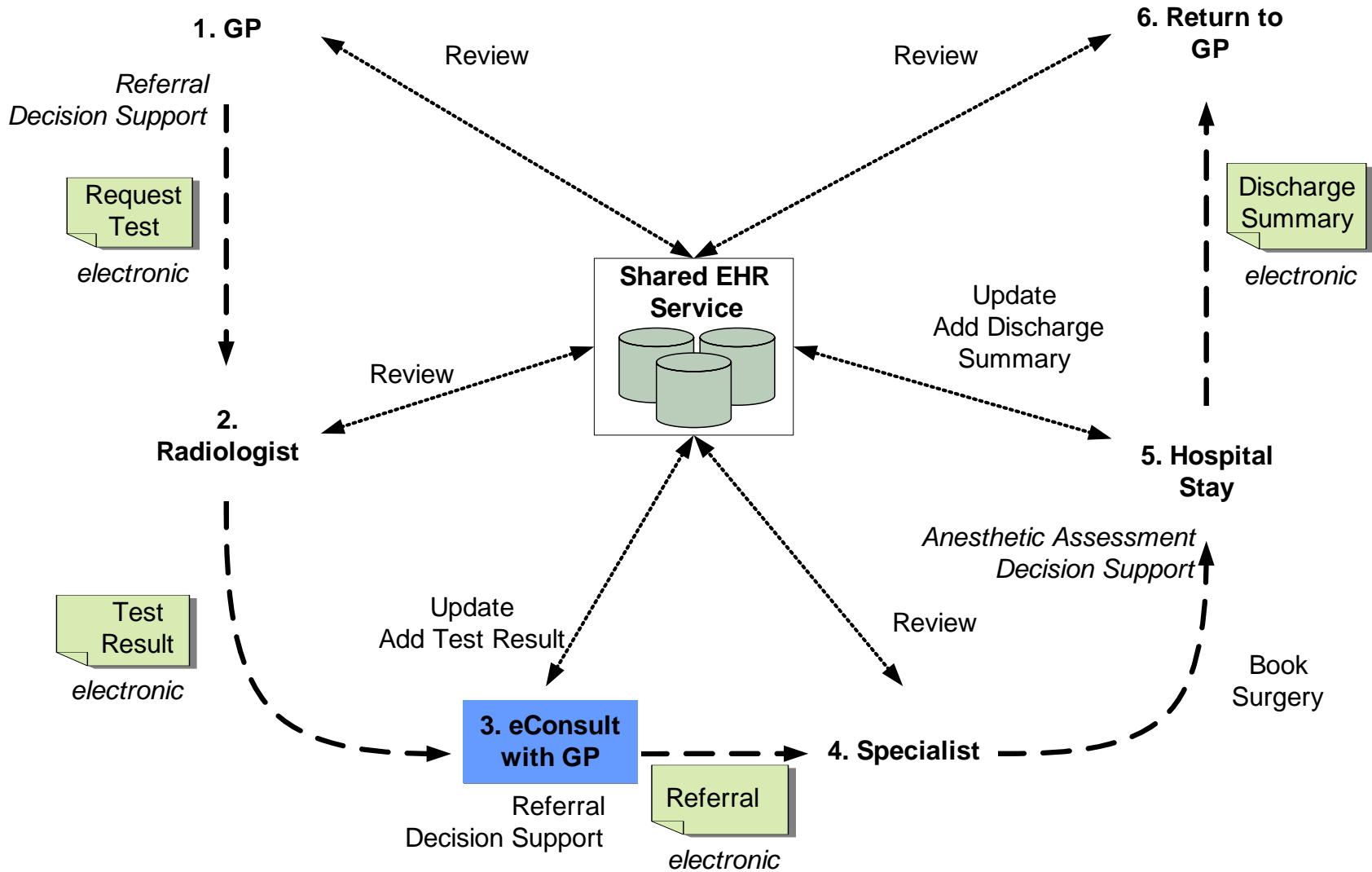
How the SEHR accelerates e-health

- Improves availability of selected health information about individuals while providing effective privacy protection
- Provides information for public health and policy planning, safety initiatives, disease detection, research & education
- Supports a more mobile population while saving clinicians time in seeking information and repeating tests
- Better planning and demand management, improved epidemiology and public health
- A national approach building on existing clinical processes

Existing clinical processes



Proposed approach with a Shared EHR



Protecting patient privacy

- Issue – how do we encourage consumers to accept e-health by ensuring their consent and protecting their privacy?
- Initiative
 - Developing a consultative process that engages stakeholders
 - Supporting development of enabling legislation
 - Ensuring all aspects of the work program are compliant with an agreed approach to privacy and consent

Implementing e-health

- Incremental and continuous process
 - Initial focus on referral and discharge summaries between primary and acute care
 - Later extensions for self-managed care, shared care, secondary uses
 - Incremental enhancement program taking account of existing investments
- Strong focus on change management
 - Embed adoption of Shared EHR within existing clinical redesign programs to enhance safety and quality
 - Coordination with future investment programs to ensure new systems are compatible
 - Linkage to existing primary care incentives

Accelerating healthcare reform

- Quantifiable benefits of e-health investments
- Adoption of common standards, identity services and terminologies remove investment road blocks
- Standards-based approach encourages health IT vendors to develop interoperability in e-health
- Increases the capacity of healthcare systems to successfully implement significant workflow change
- There is international momentum in accelerating e-health to support healthcare reform



Thank you

www.nehta.gov.au