National E-Health Strategy AND THE INDIVIDUAL

Background

Australia has one of the best health systems in the world based on the health outcomes of its citizens. However, maintaining or improving the health outcomes of Australians will require a fundamental change in the way healthcare is delivered.

The health system is straining to deal with increasing cost and demand pressures and a shortage of skilled healthcare workers. Given this reality, we need to move to a system where every interaction between consumers and care providers achieves maximum impact on health outcomes, and where scarce financial and human resources are deployed as effectively as possible.

A significant shift in the way information is collected, communicated and used across the health system is required. We have to move away from a reliance on tools such as pen, paper and human memory to an environment where consumers, care providers and healthcare managers can reliably and securely access and share health information in real time across geographic and health sector boundaries. The only way this can be achieved is through the implementation of world class E-Health capability.

In early 2008 Australian Health Ministers commissioned the development of a National E-Health Strategy to support health reform.

As part of this, a series of national consultations were conducted which included Commonwealth, State and Territory Governments, consumers, general practitioners, medical specialists, nursing and allied health, pathology, radiology and pharmacy sectors, health information specialists, health service managers, researchers and academics. An electronic submission process was also used to facilitate wider community input. The input of a diverse group of stakeholders has been critical to informing the strategy and its priorities for E-Health in Australia over the next decade.

The National E-Health Strategy was endorsed by Health Ministers in December 2008 as a guide to further development of E-Health in Australia.

The Strategy adopts a staged approach to developing E-Health capabilities to:

- build on what currently exists in the Australian E-Health landscape;
- manage the underlying variation in capacity across the health sector and States and Territories; and
- allow scope for change as lessons are learned and technology is developed further.

The National E-Health Strategy provides a vision, set of priorities and implementation roadmap aimed at delivering a safer, better connected and more sustainable healthcare system over the next decade.

National Vision for E-Health

"E-Health will enable a safer, higher quality, more equitable and sustainable health system for all Australians by transforming the way information is used to plan, manage and deliver healthcare services."

This means that E-Health will:

- Provide individuals with electronic access to the information they need to better manage and control their personal health outcomes
- Ensure the right individual's health information is electronically made available to the right person at the right place and time to enable informed care and treatment decisions
- Enable the Australian health sector to operate as a 'joined up' system overcoming the current fragmentation in service delivery
- Enable healthcare teams to electronically communicate and exchange information across hospital and community settings to facilitate coordination of care
- Provide individuals with confidence that their personal health information is managed in a secure, confidential and tightly controlled manner
- Enable electronic access to appropriate healthcare services for individuals in remote, rural and disadvantaged communities
- Improve the quality, safety and efficiency of clinical practices by giving care providers better access to patient health information, clinical evidence and decision support tools
- Facilitate continuous improvement of the health system through better monitoring and sharing of health outcome information

The vision can also be expressed in terms of what it might mean for individuals who receive Australian healthcare services and the friends, family and carers who are involved in their care.

Individuals will receive safer, better coordinated and more accessible care as a result of the improved accuracy, completeness and accessibility of personal health information and the ability to gain remote access to care delivery services. They will also be supported to stay healthy through access to reliable health information sources, tailored care plans and automated care provider monitoring of personal health status.

Current State	Vision
• Largely responsible for coordinating their own care delivery and acting as the integrator of healthcare information across the health system • Spend time repeating the same information to multiple care providers and/or receiving duplicate treatment activities • Poor, and in most cases zero, access to personal health information which is stored in multiple, fragmented silos across the health system • Limited security of personal health information or ability to control who accesses it • Heavily reliant on individual care providers for access to reliable health information • Unequal access to healthcare services, particularly in remote and rural communities	• *When interacting with the system,* ***care providers will know who they are*** and have access to relevant health information • Will rely on the ***health system to effectively coordinate*** their treatment and care • Will have an ability to ***access their own health records*** and maintain a personal health diary • Will have confidence that their ***health information is managed securely and confidentially*** • Will have the ability to ***better manage their own health*** through access to reliable and accredited sources of health information • Will have technology enabled ***access to a greater range of health services from within rural and remote communities*** • Will be supported to manage their care through ***automated monitoring and tailored risk/care plans***

The following scenarios illustrate the difference that E-Health can make to the delivery of care and the improvement in healthcare outcomes:

Young Child Scenario	Chronic Disease Scenario
Seven year old Tom injured his arm in a Saturday afternoon game of football and was in pain. His mother took him to the emergency department of the local hospital, where the doctor arranged for an X-ray in the radiology department. The X-ray was made available electronically to the doctor who was promptly able to diagnose the injury as a fracture. The doctor applied a cast to the broken limb, and prescribed medication to assist with the management of Tom's pain. When Tom was discharged, an electronic discharge summary was sent to his regular GP with information about when Tom was admitted and discharged, the nature and treatment of the injury, and the recommended follow-up. This allowed Tom's GP to see when the injury needed to be re-assessed and an appointment was made accordingly. This meant that Tom and his family did not need to return to the hospital for additional injury assessment, only for the removal of the cast. It also informed the GP of which medications had been prescribed, reducing Tom's risk of receiving additional medications or medicines which might have an adverse reaction when used in combination.	Mrs Jones is a 68 year old who has been diagnosed with a chronic illness. Her GP determines that Mrs Jones would benefit from attending sessions with allied health professionals and educators who are able to assist with her condition. Mrs Jones' GP uses an electronic care planning system which assists in development of a team care plan tailored to her specific needs. Through the care planning system, the GP has access to a registry of care providers and can search for suitable health professionals. During a consultation, Mrs Jones and her GP identify and discuss which care providers she would prefer to meet, taking into account geographic location. A printed map of each relevant location is then generated to assist Mrs Jones attend appointments. The GP sends an electronic notice inviting each healthcare provider to participate in Mrs Jones' care. On acceptance of this invitation, and with Mrs Jones' permission, the GP sends relevant information from her electronic health record to each team member. When Mrs Jones arrives for her appointments she is not required to relay her medical history, provide paper documents or remember test results. For Mrs Jones, this may reduce unnecessary visits to healthcare providers and improve the effectiveness and timeliness of her care.

Aged Care Scenario	Indigenous Scenario
Mr Egan is a resident in a Residential Aged Care Facility that has been equipped with software enabling the electronic transfer of prescriptions. As part of this system, Mr Egan's GP also has access to electronic decision support regarding the medicines prescribed. This alerts the GP to any potential adverse reactions between the multiple medications that may be prescribed. Since the introduction of the software, Mr Egan is no longer required to travel from his residence to the pharmacy to collect his prescription medications, nor is he required to send a paper prescription with a resident carer. His prescriptions are sent electronically to the pharmacy, reducing possible errors caused by mis-reading handwriting or the re-keying of information. Mr Egan's carers and nurses also have real-time access to the status of his prescriptions, ensuring that they are aware of which medications have been ordered or dispatched.	An indigenous resident of a remote area of Northern South Australia, English is Sally's third language and she finds it difficult provide a full medical history when attending unfamiliar healthcare facilities. Recently Sally had taken a trip from her home to a ceremony taking place 150 km away in the Northern Territory. While there, she was involved in an accident and badly sprained her ankle. Sally attended the local medical centre for assistance but had difficulty communicating to the attending healthcare provider that she had allergies to certain medications. Sally was registered with the Northern Territory Electronic Health Record program, and her medical history was available immediately. The doctor was able to see that she suffered from an allergy to a common anti-inflammatory drug. Once this allergy was identified, her treatment was determined accordingly and Sally was able to avoid a potentially harmful administration of a routinely prescribed drug.

Strategic Principles

There are several key principles that underpin and inform the National E-Health Strategy:

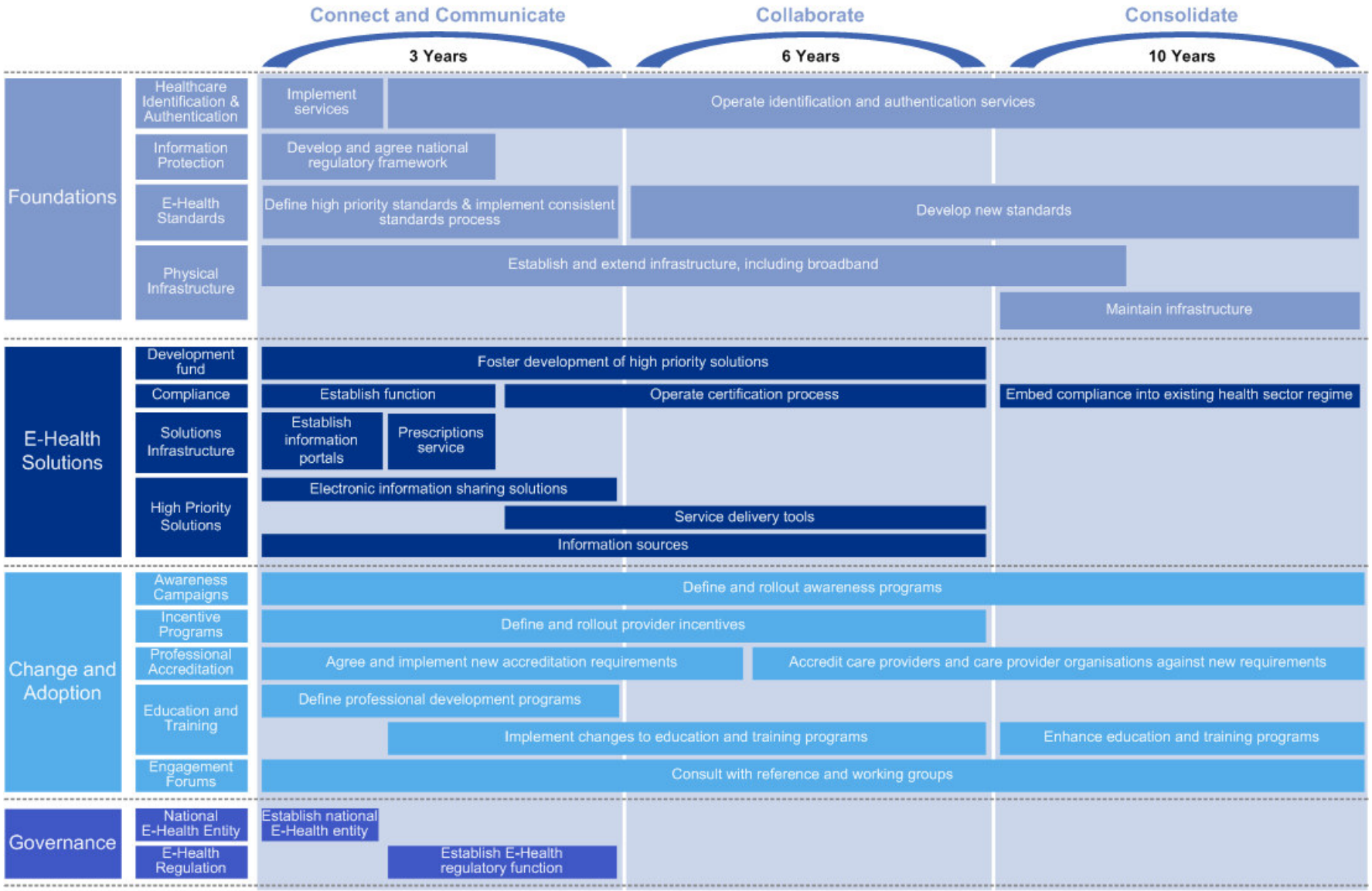
- **National infrastructure** - Deliver core elements of enabling national E-Health infrastructure once, rather than duplicating development costs and effort and increasing the likelihood of rework;
- **Stakeholder engagement** - Actively engage key healthcare stakeholders in the design and delivery of E-Health solutions;
- **Incremental approach** - Build long term national E-Health capability in an incremental and pragmatic way, focusing initial investment in those areas that deliver the greatest benefits for consumers, care providers and healthcare managers;
- **Recognising different starting points** - Provide active support for those with less developed E-Health capability, while not constraining the progress of others who are more advanced;
- **Leverage** - More effectively build on and extend E-Health activity across the country;
- **Balancing alignment and independence** - Drive alignment of national E-Health activities whilst not unnecessarily limiting the ability of healthcare participants and vendors to implement locally relevant solutions; and
- **Relevant skills -** Ensure sufficient numbers of skilled practitioners are available to support delivery of the National E-Health Strategy.

Implementation Roadmap

International experience consistently points to a journey of 10 years or more to deliver a National E-Health Strategy. However, breaking the journey down into 3, 6, and 10 year planning horizons keeps the work program focused by progressively delivering blocks of capability along the way.

Figure 1 summarises the National E-Health strategy work program over these 3, 6 and 10 year planning horizons.

Figure 1 - E-Health Implementation Roadmap



Implementation Targets

The National E-Health Strategy identifies indicative targets for the advancement of E-Health adoption over the next 10 years. In 10 years time, these targets would allow us to measure the success of the National E-Health Strategy from the perspective of individuals as follows.

Individuals

- Online interaction with the health sector has become commonplace. Rollout out of individual identifiers is complete and high speed broadband connectivity is available to 98% of Australian consumers.
- Adoption of Individual Electronic Health Records has been driven to a tipping point, particularly among high priority groups such as mothers and infants, those with chronic disease and the elderly. Over 90% of individuals, or their carers, have access to an individual electronic health record and over 50% actively access and use these records to manage their health and interact with the health system.
- Individuals increasingly find their interactions with care providers are supported by E-Health. Electronic communication of health information is commonplace with over 80% of prescriptions, test orders/results and referrals being performed electronically.
- Up to 20% of consultations use electronic consultation or telehealth capabilities.
- The National Consumer Portal is viewed as a world class source of comprehensive and up to date health information.

Further information

The Commonwealth, State and Territory Governments are continuing to work together, in consultation with key stakeholders, to progress the national E-Health work program.

You may contact your local Health Department or check its website for further information about the National E-Health Strategy and opportunities to be involved in E-Health activities.

Further information about the National E-Health Transition Authority's work program can be found at: http://www.nehta.gov.au