

2007 e-Health Research Colloquium

Australia's E- Health Initiatives

Dr Ian Reinecke, CEO

National E-Health Transition Authority Australia

Why seek to develop e-health on a national basis?

- Recognition that Australian e-health is fragmented:
 - Investments in health IT uncoordinated across the public hospital system operated by the states and private hospitals
 - High penetration of computers in general practice but limited desktop interoperability
 - Messages exchanged between clinical providers lack common formats, terminologies or directories
 - Multiple identifiers for patients and providers in use across the primary and secondary sectors

Areas on which national effort is focused

- Supporting a national approach that:
 - Develops the standards, specifications, terminologies and formats to enable interoperability
 - Funds the 'missing pieces' of infrastructure in healthcare identifiers and clinical terminology
 - Establishes the national policies required to protect privacy and patient consent
 - Builds a basis for modelling benefits from e-health to assist in assigning investment priorities

Central elements of the national program

- Benefits – Seeking to identify the greatest benefits for least cost, in the shortest time, with least risk
- Identifiers - Uniquely identifying individuals and healthcare providers across Australia
- Terminologies - Exchanging clinical information electronically, using a common language with consistent terms, descriptions and formats
- Shared EHR - Designing a national system of shared electronic health records for authorised practitioners and consumers

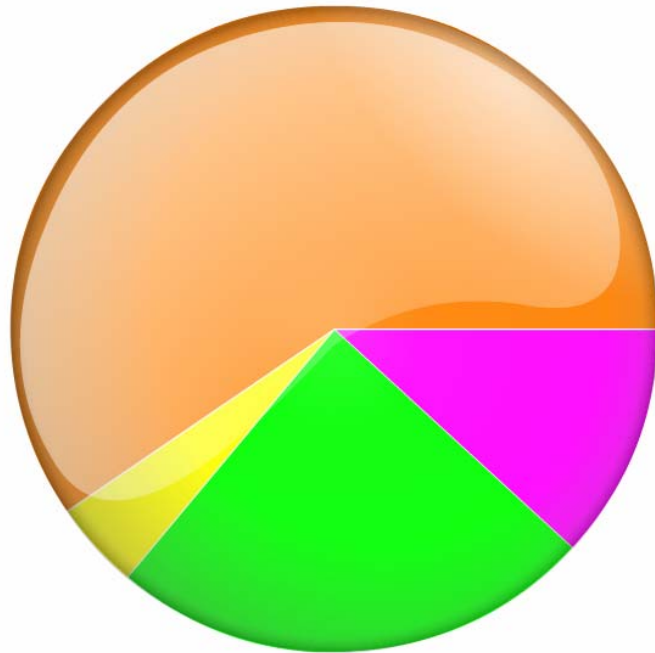
Benefits realisation - NEHTA's approach

- Seeking greatest benefit for least cost, in shortest timeframe, with least risk through improved:
 - Safety – reducing incidence and severity of injury
 - Effectiveness – avoiding under-use, misuse & over-use
 - Patient-centeredness - supporting continuity of care and patient self-management
 - Timelines – reducing queues, overcrowding, harmful delays
 - Efficiency – avoiding waste in equipment, supplies, resources
 - Equity – in location, socioeconomic status, ethnicity & gender

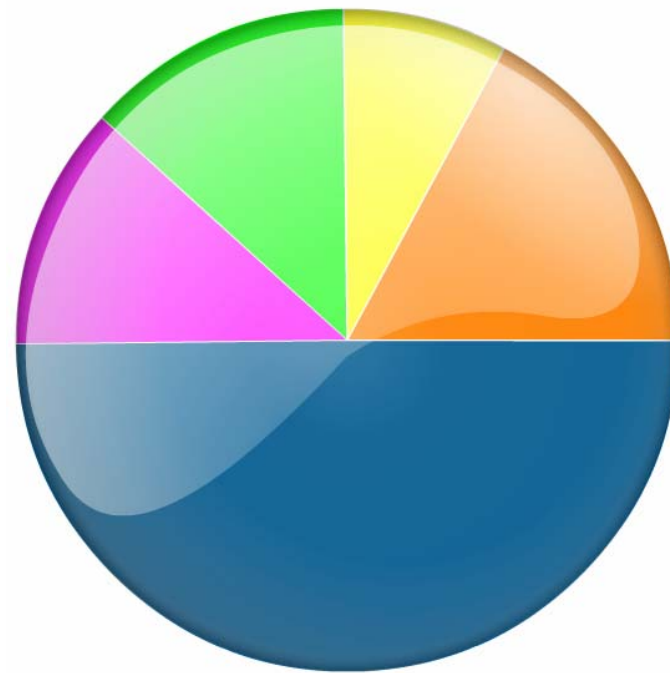
Major benefits being modelled

- 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
 - Reduced hospital costs
 - Community pharmacy processes
 - Improved medication adherence

Harvesting the benefits of e-health reform



Year 2



Year 10

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

Improved decision support in these clinical domains



Prescribing



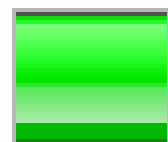
Elective procedures



Referrals



Acute care



Pathology



Imaging

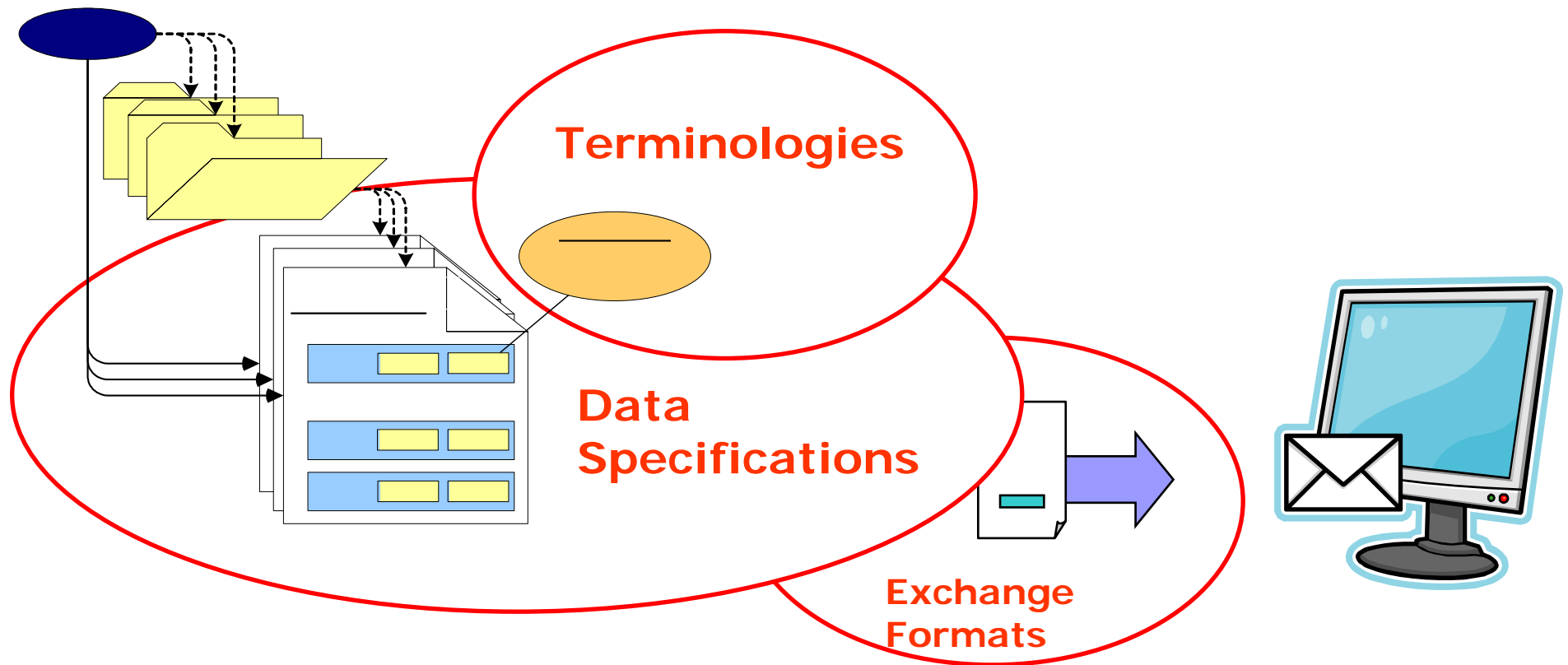
Accurately identifying healthcare participants

- Uniquely identifying individuals and healthcare providers is essential to enable the flow of clinical information
- Unique Healthcare Identifiers (UHI) program
 - Based on a national approach
 - Facilitates identification and communication across health
 - Provides primary identifier and basic demographic data
 - Applies to individuals, healthcare providers & healthcare organisations
 - Designed to reach into all services, processes and systems

Identifiers – implementing a national healthcare priority

- Funded by Council of Australian Governments (COAG) – about \$100M over three years
- National service due to be implemented by end of FY 2008-9
- Identifiers service takes a national 'centralised' approach that:
 - Creates and maintains one information record only for each participant and constitutes:
 - A unique identifier and personal information (**not** clinical)
 - A limited directory service for healthcare organisations

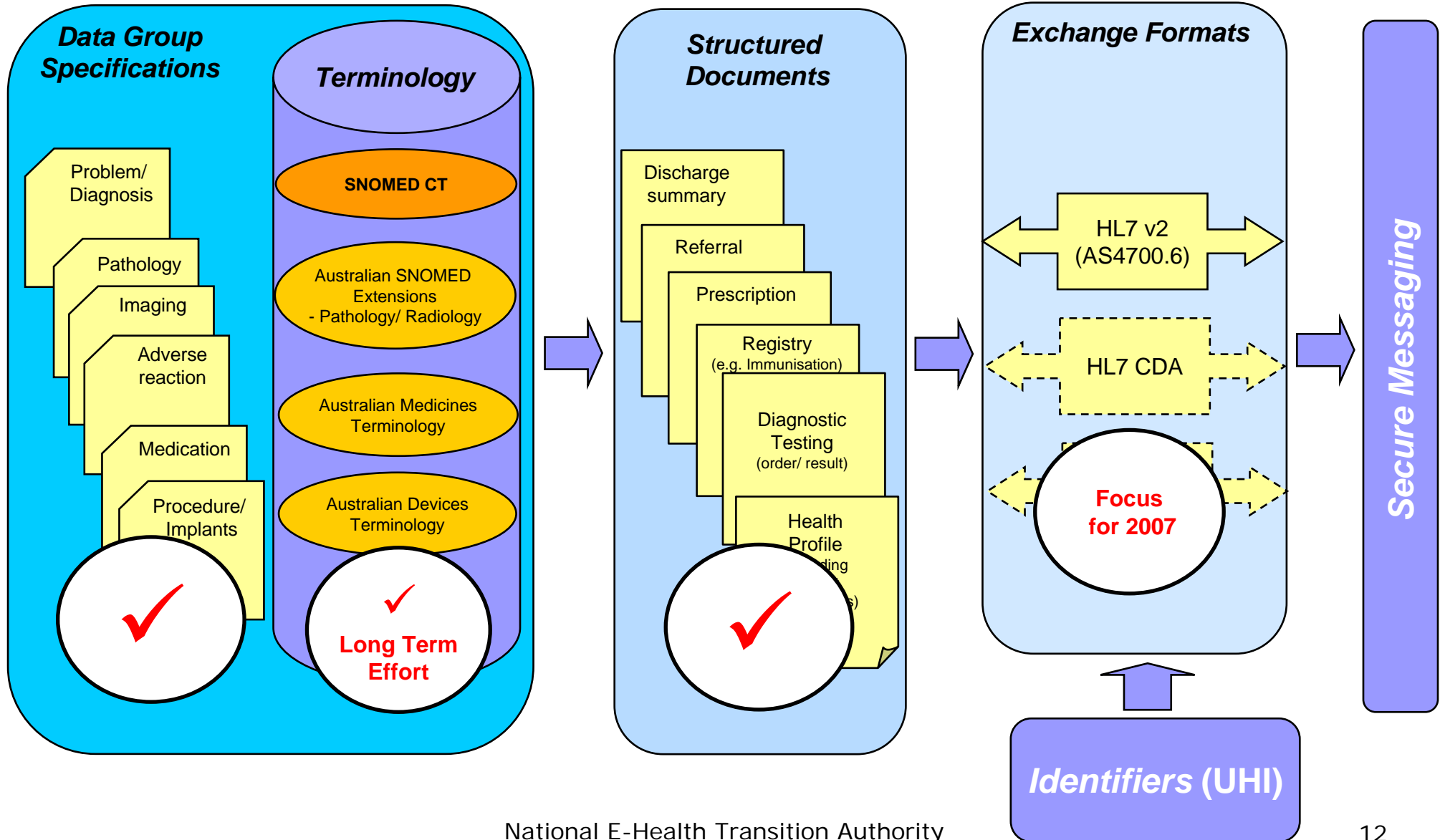
Terminologies – interoperability in clinical information



Terminologies requires a targeted approach

- Exchanging clinical information electronically, using a common language with consistent terms, descriptions and formats
- Targeting high use and high value clinical information and documents (e.g. Problems; Medicines; Discharge Summary)
- Concentrating on frequently exchanged data – essential for clinical decision support (e.g. Referral)
- Building capacity in the health sector to support terminologies through provision of tools, training and accreditation

Terminologies – Nehta’s work plan



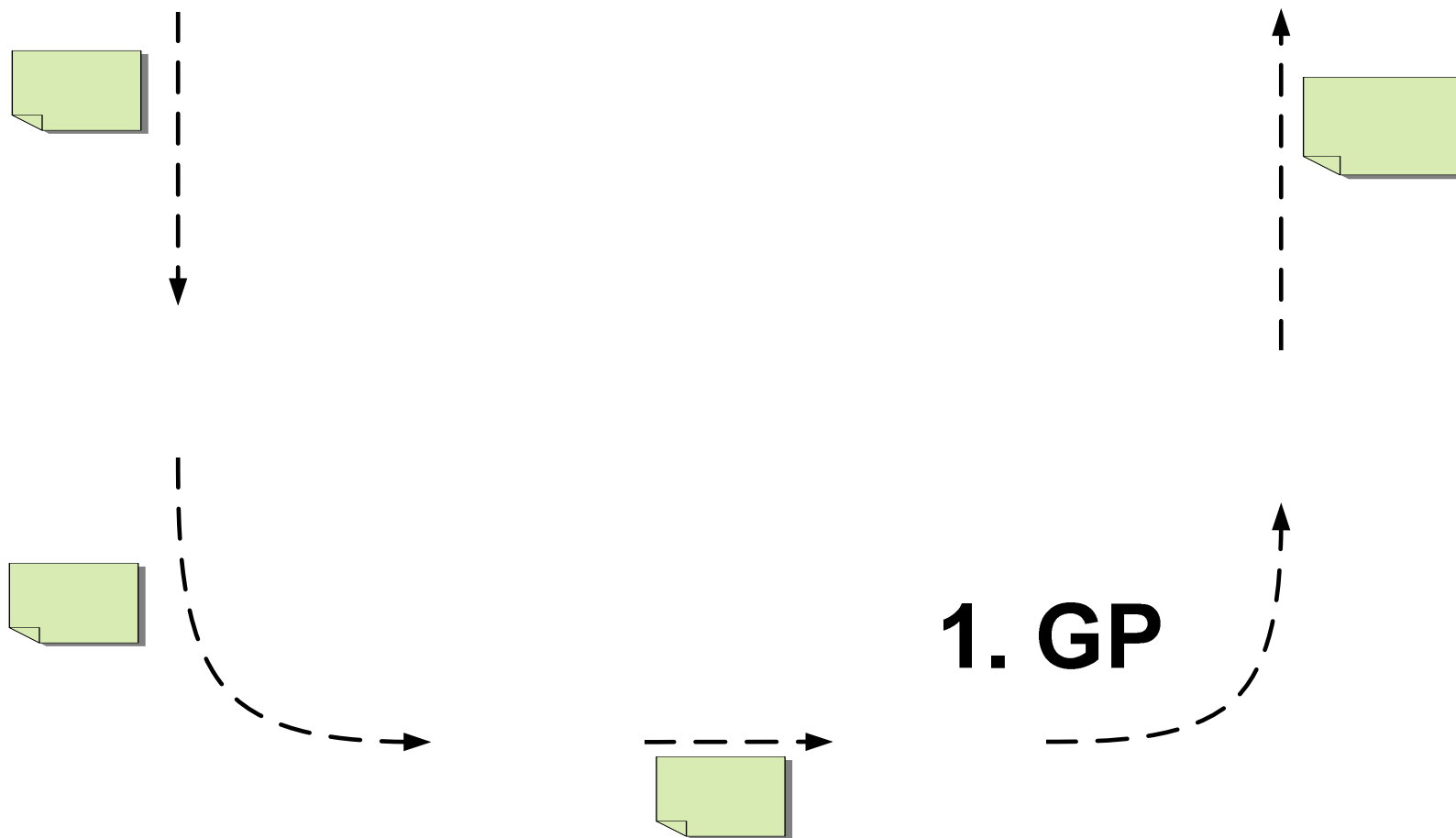
Terminologies benefit from international cooperation

- Clinical terminologies need strong governance to ensure:
 - Information specifications aligned for both point-of-care and statistical/secondary use
 - Minimal duplication in data collection, improving quality
 - Opportunities to leverage terminologies work internationally
- Formation of the Snomed CT international health terminology standards development organisation
- International cooperation will accelerate the development and adoption of a common global terminology

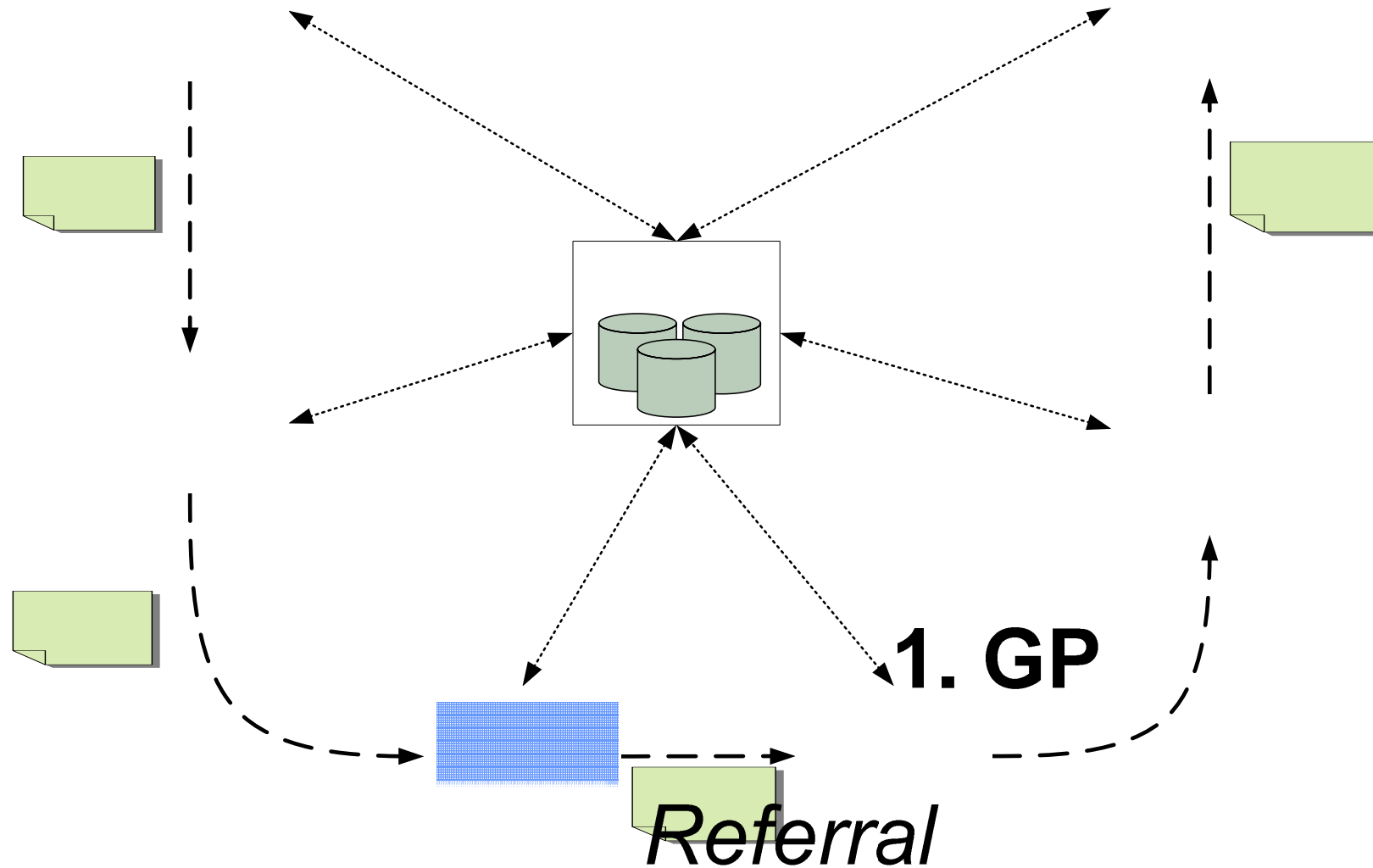
Shared electronic health records (SEHR)

- A national approach building on existing clinical processes
- 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

Processes as they are now



Proposed approach with a Shared EHR



E-health's role in accelerating healthcare reform

- National benefits of e-health investments can be quantified
- Foundations of common standards, identity services and terminologies remove investment road blocks
- A standards-based approach opens health to ICT mainstream
 - increasing opportunities for health IT vendors to build & deliver cross-sectoral e-health information services
- Improves the capacity of healthcare systems to successfully implement significant workflow change
- A rising tide - there is international support for accelerating e-health to support healthcare reform

nehta

Thank you

www.nehta.gov.au