Sharing Personally Controlled eHealth Records

National Drivers

- Fragmentation of information spread across a vast number of different locations and systems
- Limited access to health information at the point of care can results in...
  - A greater risk to patient safety
  - Increased costs of care and time wasted in collecting or finding information
  - Unnecessary or duplicated treatment activities
  - Additional pressure on the health workforce
  - Reduced participation by consumers in their own healthcare information management
National PCEHR

- Personally Controlled Electronic Health Record (PCHER) provides:
  - Improved continuity of care for consumers accessing multiple providers
  - Access to consolidated information about a consumer’s medicines
  - Enabling consumers to participate more actively in their healthcare
  - Improved diagnostic and treatment capabilities through enhanced access to health information
- Supported by Legislation: PCHER Act

National PCEHR

- Consumer Oriented
  - Life-long Record
  - Privacy Controls
  - More informed
- Provider Oriented
  - Greater knowledge
  - Efficiencies
- Impact
  - Save Lives
- $500M Investment
- Live 1st July 2012
PCEHR Components

Designing PCEHR

Enterprise
- Concept of Operations
- High Level System Architecture
- Biz Scenarios and Use Cases
- Business Requirements
- Detailed Requirements
- Security & Access Requirements
- Data Quality Framework
- Legislation

Computational
- Record Access Service
- View Service
- Template Service
- Document eXch Service
- Basic Repo Interface
- Packaging

Behaviour
- Clinical Safety
- Privacy Assessment
- Threat & Risk Assessment
- Conformance Requirements

Engineering
- B2B Gateway Overview - CIS
- Vendor Imp Guide - CIS
- B2B Gateway Overview - Repository
- Vendor Imp Guide - Repository
Interactions

Provider Portal

National PCEHR System

Consumer Portal

Clinical Info System

Template Service

Repository

Healthcare Identifiers

National Authentication Service for Health

PCEHR Design

- **PC** = Personally Controlled
  - Consumer Opt-in
  - Focus on Consumer’s access control preferences
  - Portal Access (national + 3rd party)
- **EHR** = Electronic Health Record
  - Healthcare Provider’s Clinical Documents
  - Consumer Notes
  - Medicare Information
- Providers
  - Augment the Local Clinical Information System
  - Contracted Service Providers + Repository Vendors
**PCEHR Functions**

- Designed as a Document Sharing system
  - Treats originating source as the ‘source of truth’
  - Not a clinical data/patient service
  - Document Index Service
- Summary Views
  - SHS excerpts + latest changed docs
- Extensive Audit Logs
- Participation & Authorisation
  - Access Control Settings
  - Emergency Access
- Distributed operations
  - Repositories

**Backend: B2B Gateway**

- Record Access Service
  - Find and gain access to a PECHR
- Document Exchange Service
  - submit, retrieve, remove documents
- View Service
  - document list, views, audit logs
- Template Service
  - Clinical Documents specs, schemas, schematrons (per conformance level)
Healthcare Providers

- Authorised User Identifiers
  - HPI-O for Organisations
  - HPI-I for Individuals
- Authentication: NASH Certificates
- Register to Participate
- Conformant Software
- Organisation-based access
  - Documents authored by Org
  - Will always get access, despite Consumer settings or deletions

Clinical Documents

- New Documents (shared only)
  - Shared Health Summary (SHS)
    - Only on National Repository
  - Event Summary
- Existing CoC documents (copies sent to PCEHR)
  - Discharge, Referral, Specialist Letter, Prescription, Dispense Record
- Consumer Entered Information
  - Notes, Health Summary, ACD CR
- Terminology: SNOMED CT-AU & AMT
- HL7 CDA + Conformance Levels (1A,1B,2,3A,3B)
CIS Interactions

National PCEHR System

Clinical Info System

Patient Record (IHI)

PCEHR (IHI)

Consumer

Consumer must Opt-in (with default Consent)
- Individual Healthcare Identifier (IHI)
- Can withdraw anytime

Consumer Agents
- Authorised Representative (=access)
  - For minors
- Nominated Representative (read only)

Minors may “Take Control” of PCEHR at 14 years and must at 18 years

Pseudonyms allowed (eg famous people)
Access Control

- Do not Advertise PCEHR (disclosure indicator)
- Two access control models
  - Open Access (basic)
    - All registered healthcare orgs can read/write
  - Provider Access (advanced)
    - Must provide Passcode (PACC) at point-of-care
    - HPI-O added to Provider Access List
    - Can then set read/write per Provider
    - Can Revoke access and/or set end date
- Document Level Access settings
  - General Access
  - Limited Access - Another Passcode (PACCX)
  - May withdraw Consent per document at point-of-care

Advanced Access

Clinical Documents

- General Access
- Limited Access

Provider Access List

- Gladstone Surgery
- Mater Hospital
- Hyde Specialist Clinic
- Fairfield Psychology

PACC

PACCX

General Access

Limited Access

Clinical Documents

PACC

PACCX
Summary

- The National PCEHR System key principles
  - Consumer Controlled (designed for privacy)
  - Actively engaged key healthcare stakeholders in the design, delivery, operation and future
  - Delivers Value to all participants
  - Provides Trust and Confidence in quality and safety of the health information provided
  - Builds National Infrastructure (pragmatical and incremental)
- Long term health benefit to all Australians