Department of Health and Ageing

National e-Health Conference Report

Summary of themes arising from National e-Health Conference workshops and stakeholder engagement during July to December 2010

March, 2011
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Executive summary

In the 2010 Budget, the Australian Government announced funding of $467 million over two years for the establishment of a personally controlled electronic health record (PCEHR) system to be available from 1 July 2012. This funding is expected to deliver the core national infrastructure elements, governance, standards and tools to provide all Australians who choose to participate with the ability to register for their PCEHR.

The PCEHR system will be designed to build on concurrent eHealth work programs being conducted by the National E-Health Transition Authority (NEHTA) and allow for external health information systems to connect when they are ready to do so.

As one of its responsibilities for the PCEHR Program, the Department of Health and Ageing has carriage of the stakeholder engagement and communications strategy for the PCEHR system implementation planning. The PCEHR Program’s engagement strategy focuses on consumers, healthcare providers, industry and government, with opportunities for cross sectoral consultation. Engagement is being conducted across four, six month phases from July 2010 to June 2012.

In the first Phase, from July to December 2010, engagement focused on targeted stakeholder groups to inform the foundations needed for the PCEHR system and to identify the key themes from those stakeholders. This activity was conducted by both the Department and, in partnership with NEHTA, with reference groups, governance bodies, and ‘tiger teams’. The strategy has been to widen the scope of engagement over time as aspects of the PCEHR Program are defined and ready for further release to the public.

In October and November 2010, NEHTA hosted a series of roundtable consultations with key stakeholder groups on behalf of the Department of Health and Ageing. Deloitte was engaged to facilitate these roundtable consultations. Additionally, the Department and NEHTA engaged directly with individuals and organisations within each of the stakeholder groups.

The National e-Health Conference was a key milestone of Phase One of the PCEHR Program’s engagement and communications strategy. Held in Melbourne between 30 November and 1 December 2010, the conference gave those with an interest in the field an opportunity to discuss and debate eHealth, and in particular the PCEHR Program, and telehealth opportunities.

Over 450 stakeholders spanning consumer, healthcare provider, industry and government stakeholder groups attended the conference. A range of local and international speakers presented throughout the conference, including keynote speeches from the Hon Nicola Roxon, Minister for Health and Ageing, and the Hon Stephen Conroy, Minister for Broadband, Communication and the Digital Economy. The conference also included stakeholder consultation workshops during which key challenges, barriers, risks and opportunities for the PCEHR Program were identified.

The plenary sessions and other key production material were streamed live to the public and are still available for viewing via the conference website: www.ehealthconference.gov.au.

This paper: the National e-Health Conference Report, while taking account of this broad engagement, primarily focuses on summarising the themes arising from the Deloitte-facilitated pre-conference roundtables and the National e-Health Conference workshops.
Summary of pre-conference roundtable consultations

The pre-conference roundtable consultations identified five priority areas for the successful implementation of the PCEHR system:

- **Privacy and Consent** – Balancing clinical information access, safety and risk with the need to protect individual privacy and security
- **Adoption** – Driving the consumer, healthcare provider and supplier-led adoption of the PCEHR system through the provision of target group appropriate resources and tools
- **Governance** – The effective governance of the PCEHR Program in order to deliver a safe, trusted and clinically relevant health record to support healthcare for Australians
- **Scope & Expectation Management** – Ensuring there exists a clear understanding and acceptance of what the PCEHR Program will deliver by 1 July 2012
- **Sustainability** – Achieving the long-term, sustained support of the PCEHR system by consumers, care providers, government and industry.

They also identified five broad implementation opportunities and quick wins for the PCEHR Program:

- **People / Forums** – The range of communities, bodies and forums across key stakeholder groups that could be leveraged to provide input and insight into the PCEHR Program
- **Data Sets** – Existing data or quality information assets within the health and broader public sector that could be leveraged to populate a consumer’s PCEHR
- **Technology** – Existing health information flows, eHealth systems and health sector technology infrastructure that could be leveraged to provide information to the PCEHR system
- **Knowledge / Learnings** – Knowledge and learnings from local and international jurisdictions that could be identified and leveraged by the PCEHR Program
- **Goodwill** – Ensuring the positive goodwill across the Australian health sector is harnessed towards action and is continued to be nurtured.

The roundtables provided a conceptual overview of the PCEHR system drawn from early planning work conducted by NEHTA and were conducted in single stakeholder streams. Participants provided feedback about their key concerns while several roundtable groups identified the need to hear the views of others.

The issue of most need for cross-sectoral understanding was ‘what is clinically relevant information to specific healthcare groups so that information sensitivity controls do not inadvertently affect health outcomes’. This was particularly evident in the consumer, nurses and allied health groups.

The findings of the pre-conference roundtable consultations formed a key input to the planning of the conference agenda and cross-sectoral stakeholder consultation workshops.

Conference workshops

Deloitte facilitated three cross-sectoral stakeholder consultation workshops during the conference:

- Workshop 1 – Key considerations for the implementation of the PCEHR system
- Workshop 2 – Implementation opportunities and quick wins
- Workshop 3 – Innovation sessions showcasing local eHealth projects.

The over 450 stakeholders attending the conference used the forum to raise and debate key challenges, barriers, risks and opportunities regarding the design and implementation planning of the PCEHR system.

Themes emerging from workshops 1 and 2

Figure 1 on the following page provides a concise summary of the primary themes that emerged across workshops 1 and 2.
What can we realistically achieve by July 2012?
- Basic patient information available through an individual's PCEHR (e.g. discharge summaries, GP health summaries, medications)
- Core foundation elements for the PCEHR system (e.g. healthcare identifiers, secure messaging)
- Basic patient health diary and tools to actively engage consumers
- Some integration with external systems and information stores
- Projects that demonstrate tangible benefits in priority areas

What existing assets could we leverage?
- Highly computerised parts of the health sector
- Medicare's national data registries (e.g. MBS, PBS, ACIR)
- Existing e-health projects, communities of practice, standards and knowledge
- Professional groups, associations and networks of practitioners
- Collective goodwill and desire for action amongst the sector

What barriers / constraints must be overcome?
- Tight timeframes and managing scope / dependencies
- Maturity and pervasiveness of health sector technology
- Quality of health information assets
- Level of consumer knowledge and awareness
- Scarcity of appropriately skilled workers
- Existing culture, mindsets and attitudes of care providers
- Funding for investment and operation of e-health

What must we focus on to be successful?
- Ensure the PCEHR system is usable and accessible
- Make the PCHER system meaningful, valued and trustworthy
- Build confidence around data privacy, security, controls and ownership
- Manage stakeholder expectations effectively

How do we drive consumer and care provider adoption?
- Build clarity of what will be delivered in July 2012 to enable stakeholder expectations to be managed effectively
- Ensure the PCEHR system is usable, meaningful and adds value
- Ensure initial PCEHR system interactions are positive / compelling
- Actively engage, educate and involve stakeholders throughout the implementation program
- Select the right consumer participation / consent model
While these workshop themes built on those raised in pre-conference consultations, they also incorporated the Minister for Health and Ageing’s speech which noted the paramount need for clinical safety and trust in any eHealth system designed for Australia. The Minister further noted the need for support for consumers to be actively engaged in their PCEHR and in the PCEHR Program planning.

Overall there was a high degree of alignment between the themes that emerged during the conference workshops, and themes that emerged through the pre-conference roundtable consultations. Strong relationships exist amongst a number of the workshop themes indicating that these themes cannot be addressed in isolation, but need to be addressed as a collective set of focus areas.

**Workshop 1 – Key considerations for the implementation of the PCEHR system**

Additional themes that emerged from this workshop in relation to priority success factors for the implementation of the PCEHR system included the need to:

- Apply a realistic, focused and incremental implementation approach
- Deliver equitable access to a PCEHR to disadvantaged consumers and care providers.

Other themes that emerged from pre-conference consultations and other stakeholder engagement forums but were less prominent during the conference workshop discussions include the need to:

- Develop and implement a clear and transparent governance model that incorporates key stakeholders in the implementation and ongoing operation of the PCEHR system
- Address concerns regarding clinical safety and risk for care providers and consumers, which is important to achieving strong adoption of the PCEHR system. This requires a pragmatic approach to balancing privacy, security and access to information within an individual’s PCEHR in order to achieve an acceptable level of clinical safety and quality
- Improve consumer understanding of the importance of information sharing amongst their care providers, along with their general health literacy. This will enable consumers to understand the information captured within their PCEHR, and through doing so, take an active role in the management of their own health and wellbeing.

**Workshop 2 – Implementation opportunities and quick wins**

Additional themes that emerged from this workshop in relation to implementation opportunities, quick wins and existing assets that could be leveraged by the PCEHR Program included:

- The close relationship between a care provider and their patient
- The potential to use social media and other online channels for engaging consumers.

**Themes emerging from workshop 3**

Day 2 of the conference focused on discussion regarding telehealth and the role of the National Broadband Network. As part of this, a number of sessions were held to showcase innovative Australian eHealth projects and provide an opportunity for attendees to ask questions of the project presenters. Deloitte facilitated the innovation sessions and Q&A sessions that followed each presentation.

Nine themes emerged across these Q&A sessions, including:

- The importance of stakeholder engagement and adoption
- The importance of addressing usability
- Ensuring a focused effort on change management
- Dedicating funding and resources towards the development of eHealth delivery models
- Applying ‘fit for purpose’ technology
- The need to provide funding to care providers for accessing and using eHealth services
- Using eHealth solutions as a way to transfer specialist skills and knowledge
- Delivering improved patient and care provider experience through telehealth
- The need to get the basic IT infrastructure right for eHealth.

Next steps

The level of discussion at the National e-Health Conference reflected the sophistication of stakeholders’ understanding and the growing maturity of debate around the eHealth agenda, and in particular the PCEHR system, that has emerged since the development of the National E-Health Strategy in 2008.

The conference workshops highlighted those challenges, ideas, barriers and opportunities stakeholders indicate require priority focus by the PCEHR implementation program. These themes will also help shape the development of stakeholder information and consultation material being released from February 2011.

Consistent with the directions of the Minister for Health and Ageing, the approach to stakeholder engagement positions the Department as the principal manager of stakeholder engagement strategy with delivery responsibilities within a cooperative partnership with NEHTA and later, the National Change and Adoption Partner. The Department will take lead responsibility for alignment between the PCEHR Program and broader health policy directions across stakeholder groups.

The stakeholder engagement focus from now to June 2011 will be to continue to listen to PCEHR Program reviews from all stakeholders. This will include the release of a series of public information documents and public consultations to seek comments on key planning documents.

These consultations, due to commence in March 2011, will inform the PCEHR system’s design and implementation planning.
1 Conference workshops

The Department of Health and Ageing has key responsibility for implementing the PCEHR system on behalf of the Australian Government. The PCEHR system is a key element of the National Health and Hospitals Network Reform agenda¹. The principles underlying the PCEHR Program align closely with those of the National E-Health Strategy which was endorsed by Health Ministers and released to the public in late 2008².

The National e-Health Conference was a key milestone in the PCEHR Program stakeholder engagement and communication strategy.

The conference, held in Melbourne between 30 November and 1 December 2010³, gave those with an interest in the field an opportunity to discuss and debate the evolution of eHealth, in particular the PCEHR Program.

A key part of the conference was the facilitation of three stakeholder consultation workshops:

- Workshop 1 – Key considerations for the implementation of the PCEHR system
- Workshop 2 – Implementation opportunities and quick wins
- Workshop 3 – Innovation sessions showcasing local eHealth projects.

These workshops provided the opportunity for the over 450 stakeholders in attendance to raise and debate key challenges, barriers, risks and opportunities in relation to the successful implementation of the PCEHR system, and the broader eHealth journey in Australia. This section summarises the objectives and key questions explored during each of these workshops.

1.1 Pre-conference roundtable consultations

In preparation for the conference workshops, NEHTA hosted a series of pre-conference roundtable consultations with key stakeholder groups on behalf of the Department of Health and Ageing. Deloitte was engaged to facilitate these roundtable consultations. The intent of these consultations was to form an early view of the key considerations, opportunities and quick wins for the PCEHR Program.

Roundtable consultations were conducted in October and November 2010 with five separate streams of stakeholder groups - Industry, Allied Health, Consumers, Nursing, and Medical Practitioners / Practice Managers.

A summary of these discussions are at Section 2 of this document.

¹ For further information about the National Health and Hospitals Network Reform agenda readers are encouraged to visit http://www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/Home.


³ For further information about the conference readers are encouraged to visit www.ehealthconference.gov.au.
1.2 Workshop 1 – Key considerations for the implementation of the PCEHR system

The objective of workshop 1 was to discuss and confirm key PCEHR system implementation considerations, barriers and constraints with stakeholders attending the conference.

Five parallel 75-minute workshops were facilitated by Deloitte. Each workshop consisted of a three-person expert panel and an audience of over 100 stakeholders spanning across consumer, care provider, government and industry groups. The Deloitte facilitation team structured this workshop around three questions:

1. What are the priority factors that we have to address if we are to successfully implement a national PCEHR system?
2. What are the key barriers that we have to overcome to implement a national PCEHR system?
3. What are the most critical real world constraints that we have to take into account as we move towards implementation of a national PCEHR system?

A summary of the key considerations that emerged from pre-conference roundtable consultations was provided at the start of the workshop. A summary of these key considerations is provided in Section 3 of this document.

1.3 Workshop 2 – Implementation opportunities and quick wins

The objective of workshop 2 was to discuss and identify priority PCEHR system focus areas, quick win opportunities and assets that could be leveraged to gain traction and build momentum.

Five parallel, 75-minute workshops were facilitated by Deloitte. Each workshop consisted of a three-person expert panel and an audience of over 100 stakeholders spanning consumers, care providers, government and industry groups. The Deloitte facilitation team structured this workshop around three questions:

1. What do you think we can realistically achieve by 1 July 2012 and where should we focus our efforts to deliver tangible outcomes by this date?
2. What are the key assets in situ today that we should focus on leveraging in the first instance?
3. What do we need to do to drive initial consumer and care provider adoption of the PCEHR system?

A summary of the implementation opportunities and quick wins that emerged from pre-conference roundtable consultations was provided at the start of the workshop. A summary of these key considerations is provided in Section 4 of this document.

1.4 Workshop 3 – Innovation sessions

The objective of workshop 3 was to showcase innovative Australian eHealth projects and demonstrate how technology is being harnessed to deliver improved healthcare across Australia.

Nine projects were selected by DoHA for presentation to conference attendees across three parallel innovation sessions. The featured projects were:

- Grampians Telehealth, Grampians Rural Health Alliance, Victoria
- Health Record Exchange, GP Partners, Queensland
• **Telegeriatics**, Centre for Online Health, The University of Queensland / Queensland Health, Queensland
• **Hunter New England TeleMental Health**, Hunter New England Health, New South Wales
• **RPH Plastic Surgery Telehealth (Clinical Pathways Project)**, Royal Perth Hospital Plastics Unit, Western Australia
• **Health-e-Towns**, NT Health, Northern Territory
• **WoundsWest Advisory Service (WWAS)**, WoundsWest (WA Health), Western Australia
• **Telederm**, Australian College of Rural and Remote Medicine (ACRRM), Queensland
• **Healthe Care Remote Patient Monitoring Service**, Healthe Group / Hunter Nursing, New South Wales.

Each innovation session presented three eHealth projects and provided the opportunity for stakeholders to ask questions of the presentation team. As such the innovation workshops contained significantly less discussion and debate than workshops 1 and 2. The Deloitte facilitation team monitored discussions to identify any key learnings of relevance to the implementation of the PCEHR system, or other eHealth initiatives in Australia. These are presented in Section 5 of this document.
2 Pre-conference roundtables summary

A summary of the key themes that emerged from roundtable consultations were presented at the beginning of each workshop to provide an initial framework for the ensuing discussion amongst the expert panel and stakeholders in the audience. The remainder of this section summarises these key themes.

2.1 Key considerations for the implementation of the PCEHR system

Pre-conference roundtable consultations identified five broad areas for consideration in relation to the successful implementation of the PCEHR system (Table 2-1).

Table 2-1: Key considerations for the implementation of the PCEHR system

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Privacy and consent</strong></td>
<td>Focused on the considerations around access to, and privacy and confidentiality of information stored within a consumer’s PCEHR, such as:</td>
</tr>
<tr>
<td></td>
<td>• What control consumers should have over who can access their record, and the visibility of the PCEHR information to care providers</td>
</tr>
<tr>
<td></td>
<td>• Safety and clinical risk associated with care providers not having access to, or visibility of all information in the record, as well as responsibility of care providers to access and use information</td>
</tr>
<tr>
<td></td>
<td>• Extension of consent to access an individual’s PCEHR to third parties such as carers, parents and guardians</td>
</tr>
<tr>
<td></td>
<td>• Requirements around security and audit trails to track access to a consumer’s record</td>
</tr>
<tr>
<td></td>
<td>• Impacts to care provider’s processes and practices, as well as education and training</td>
</tr>
<tr>
<td></td>
<td>• Ownership of the data stored within an individual’s PCEHR.</td>
</tr>
<tr>
<td><strong>Adoption</strong></td>
<td>Those considerations important to achieving strong consumer, care provider and industry adoption of the PCEHR, such as:</td>
</tr>
<tr>
<td></td>
<td>• The model of consent used (i.e. opt-in or opt-out)</td>
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<tr>
<td></td>
<td>• Consumer-led or care provider-led driven adoption</td>
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<tr>
<td></td>
<td>• Level of confidence in the information stored within an individual’s PCHER (e.g. provenance, accuracy, completeness), and the implications for clinical safety, quality and risk</td>
</tr>
<tr>
<td></td>
<td>• Role of education and communication in driving adoption</td>
</tr>
<tr>
<td></td>
<td>• Role of financial incentives / support in driving adoption.</td>
</tr>
</tbody>
</table>
Consideration | Description
--- | ---
**Governance** | The need for effective governance of the PCEHR Program in order to deliver a safe, trusted and clinically relevant electronic health record for Australian consumers and care providers, including the:
| Governance models and approach during the PCEHR system design and implementation phase
| Governance models and approach as the PCEHR system moves into the operational phase
| Need to ensure stakeholder groups have a clear understanding of their role in the PCEHR Program, and are involved at the right-time and in the right capacity.

**Scope & Expectation Management** | Focused on those considerations important to ensuring consumers and care providers are supportive of the PCEHR system through ensuring:
| There exists a clear understanding and acceptance of what the PCEHR Program will deliver by 1 July 2012
| Expectations are appropriately managed throughout the program to avoid disenfranchising stakeholder groups
| Clarity exists regarding the approach for evolving the capabilities of the PCEHR system post 1 July 2012.

**Sustainability** | Focused on those considerations critical to achieving long-term, sustained support of the PCEHR system by key stakeholders in order to make sure it becomes an essential tool to support care delivery and future health policy. Importantly, this consideration highlighted the need to consider sustainability in terms of:
| Sustained usage by consumers and care providers
| Sustained support from the Federal Government
| Sustained support from the marketplace (i.e. software vendors).

### 2.2 Implementation opportunities and quick wins

Pre-conference roundtable consultations identified five broad areas of implementation opportunities and quick wins for the PCEHR Program (Table 2-2).

#### Table 2-2: Implementation opportunities and quick wins

<table>
<thead>
<tr>
<th>Opportunity / Quick Win</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>People / Forums</strong></td>
<td>The existence of a range of communities, bodies and forums across most of the key stakeholder groups, in particular highly fragmented parts of the health sector (such as allied health and nursing, for example), that could be leveraged to provide input and insight into the PCEHR Program</td>
</tr>
<tr>
<td><strong>Data sets</strong></td>
<td>The existence of data or information assets within the health and broader public sector that could be leveraged to populate a consumer’s PCEHR with clinically relevant and useful information. The Australian Childhood Immunisation Register (ACIR) and elements of the Medicare (MBS) and Pharmaceutical Benefits Scheme (PBS) are examples.</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>The existence of existing health information flows, eHealth solutions and technology infrastructure that could be leveraged to provide information to the PCEHR. Discharge summary information flows and existing EHR solutions in various jurisdictions and regional communities are examples.</td>
</tr>
<tr>
<td><strong>Knowledge / Learnings</strong></td>
<td>Knowledge and learnings from local and international jurisdictions that should be identified and leveraged by the PCEHR Program. The impact of using EHR-like solutions on care processes, new models of collaborative care, and key areas of consumer and care provider risk (e.g. breaches in privacy / security, clinical safety and quality) are examples.</td>
</tr>
<tr>
<td><strong>Goodwill</strong></td>
<td>Ensuring the positive goodwill across the Australian health sector is harnessed towards action and is continued to be nurtured throughout ongoing communication, engagement and education around the PCEHR Program.</td>
</tr>
</tbody>
</table>
3 Key considerations for the implementation of the PCEHR system

The primary objectives of the workshop was to gather responses to two critical questions:

1. What are the priority factors that we have to address if we are to successfully implement a national PCEHR system?
2. What are the key barriers and constraints that we have to take into account as we move towards implementation of a national PCEHR system?

This section summarises the key themes that emerged for each of these questions across the five workshops that Deloitte facilitated. Themes have been categorised into primary and secondary themes. Primary themes emerged consistently across a number of workshops; while secondary themes emerged less consistently though still warrant consideration in Deloitte’s view.

3.1 Priority factors for the successful implementation of a national PCEHR system

Nine themes emerged regarding the priority factors for successfully implementing a national PCEHR system:

- Ensuring the PCEHR system is useable and accessible
- Ensuring the PCEHR system is meaningful, valued and trustworthy
- Building confidence around data privacy, security, controls and ownership
- Effectively managing of stakeholder expectations
- Aligning funding and support models
- Taking a realistic, focused and incremental approach to implementation
- Delivering equitable access to the PCEHR system
- Constructing a sustainable model for the PCEHR system
- Delivering effective stakeholder engagement, participation and education

In addition to the primary factors above, two additional secondary themes were also identified:

- Active benefit management and realisation
- Clear and transparent governance model incorporating key stakeholders.

During face-to-face interviews held during the pre-conference roundtables and between sessions at the conference, stakeholders also identified the value in leveraging what lessons were learned from earlier implementations of e-health records systems both locally and worldwide.
It should also be noted, that while not specifically discussed in this conference workshop, possibly as a result of the Minister for Health and Ageing having acknowledged them as key issues in her conference opening speech, the need to drive change and adoption and to appropriately address privacy while not inadvertently raising clinical risks, remained as discussion topics in sessions including the PCEHR demonstrator.

3.1.1 Ensuring the PCEHR system is usable and accessible

The PCEHR system should be simple, intuitive and easy to use by both consumers and care providers. It was broadly acknowledged that the user interfaces to patient information contained within the PCEHR should be cognisant of the user’s role and the environment in which the information is being accessed and used.

The PCEHR system should minimise additional care provider effort and time in accessing patient information within the PCEHR, as well as contributing patient information into the PCEHR system. For care providers this requires that the user interface be designed to support the integration and use of the PCEHR system within existing care delivery processes. This means ensuring an accessible, easy to use system that improves their engagement with often many different healthcare institutions, providers and commercial entities.

This acknowledges the time poor nature of many care providers and existing mindsets / attitudes towards spending additional time away from patients searching for information within, or re-keying information into the individual’s PCEHR.

For consumers, the user interface to the PCEHR system needs to support individuals with accessibility challenges, including vision impairment, non-English speaking background and cognitive / mental disabilities. Information should be structured and presented in a manner that helps consumers understand their health information, and key functions (such as privacy and consent) should be intuitive and easy to operate. This acknowledges the varied levels of health and technical literacy of consumers.

It was acknowledged that the responsibility for usability and accessibility will largely be the responsibility of the vendor community, as the Government is establishing the core PCEHR system infrastructure that care provider systems will interact with. The Government and its partners will however, need to ensure that Government-funded access mechanisms (such as consumer and care provider portals) place appropriate focus on usability and accessibility.

3.1.2 Ensuring the PCEHR system is meaningful, valued and trustworthy

The successful adoption and usage of the PCEHR system will be driven largely by how meaningful, valued and trusted the information within an individual’s PCEHR is to consumers and care providers.

For care providers, an individual’s PCEHR should contain meaningful, summary-level information that can be interpreted quickly to add value to the delivery of care to their patients. An individual’s PCEHR should contain the essential subset of information that is relevant to the diagnosis and treatment of patients. Importantly, the PCEHR must avoid being a collation of vast amounts of medical information that have been contributed by various care providers. This will overload care providers and impair their ability to effectively and efficiently deliver care, and potentially result in lack of future usage of the PCEHR system as part of care delivery.

Care providers have also emphasised the need for the PCEHR system to be trustworthy in order to be used to inform care decision making and to address concerns regarding clinical safety and risk. Care providers require assurance regarding the provenance, accuracy, completeness and integrity of the information contained within the PCEHR. Of importance to this consideration is the concern that care providers have regarding the completeness of information within the PCEHR given the intent to allow consumers to control the visibility of certain information within their record (e.g. sensitive medical information that they don’t want other parties to view in their record).
The PCEHR system needs to be engaging, useful and helpful to consumers wanting to take an active role in the management of their health. The information that the PCEHR contains should be aligned to the needs of consumers, particularly priority cohorts, as a way of driving initial adoption and usage of the PCEHR system. Stakeholders also indicated that the provision of self-health management tools, such as a basic patient health diary for example, would provide the means to achieve greater engagement and active participation of consumers in the PCEHR system.

It is worth noting that in discussions held during July to December 2010, other “direct care” healthcare providers such as dentists, ophthalmologists, physiotherapists and pharmacists noted the need to be recognised in PCEHR planning including consideration of how their information will be recorded and shared.

### 3.1.3 Building confidence around data privacy, security, controls and ownership

A range of questions exist regarding data aspects of the PCEHR system, including privacy, security, control and ownership. It is critical that these questions be explored and answered clearly given their importance to building confidence in the PCEHR system, a pre-condition to achieving strong adoption by consumers and care providers.

Ensuring appropriate mechanisms to maintain the privacy of information within the PCEHR system, and the security around inattention to access to this information, is a critical driver to the uptake of the PCEHR system by consumers. These issues are likely to be one of the most significant barriers to adoption, addressing them will require robust education and communication with consumers.

Consumers will need to be assured that their personal information within the PCHER system can be protected, and that they can clearly track who has accessed their information. Consumers will also seek to understand what their personal health information can be used for, ranging from care delivery through to any proposed secondary usage (e.g. population health monitoring, policy and clinical research).

The question of who ‘owns’ information contributed to the PCEHR (i.e. consumer or the care provider) remains a key question for many stakeholders. Related to this question is uncertainty regarding the level of control that consumers will have over their PCEHR, in particular their ability to control which information within their PCEHR is visible to their care providers. This is also an important consideration as it has clinical safety, quality and medical-legal implications for care providers as they may be required to make care decisions using incomplete information.

### 3.1.4 Effectively managing of stakeholder expectations

Expectation management will play an important role in ensuring that users of the PCEHR system have a positive first experience. This will engender support for the PCEHR system and assist to prevent disengagement by those users whose expectations may not have been met by the reality of the system being provided.

At present there appears to be a lack of clarity amongst stakeholders regarding the scope of the PCEHR system that will be delivered by 1 July 2012. In particular there are a range of outstanding questions that stakeholders indicated as being front of mind including:

- What form the record will take?
- What level of information it will contain?
- Will it be safe enough to use to support care delivery and management?
- Who will be able to access it?
- What level of control will consumers have over information in their record?

There is a need to ensure that the initial scope of the PCEHR Program is clearly communicated to stakeholders from the outset of the program, and that transparency exists around those aspects of the
PCEHR system that are currently in development or yet to be defined. This contributes to the avoidance of perceptions that the PCEHR system is being developed in isolation without the involvement and input of stakeholders, which was another strong theme that emerged from the workshops.

There was also a need to effectively manage expectations that the PCEHR system is going to be a panacea for addressing all the issues that currently exist within the health sector. It is important that expectations be established regarding the outcomes and benefits that the initial release of the PCEHR system will enable and its role in the broader health reform agenda.

Stakeholders also need to understand that the PCEHR Program is a multi-year journey and will continue to evolve beyond 1 July 2012, with the initial focus being on a focused set of priority consumer and care provider needs. Stakeholders need to understand that it is not possible for the PCEHR system being delivered by 1 July 2012 to address the complete set of requirements that they may have. The challenge with managing this expectation is both reaching consensus on priority and the lack of committed funding beyond 1 July 2012 and clarity regarding how the PCEHR system will be evolved beyond this date.

3.1.5 Aligning funding and support models

There is a perceived mismatch between those who will need to make investments to make the PCEHR system and eHealth a reality and those who will reap the benefits of this investment. As such, participants indicated funding and support structures will be required to compensate for this mismatch and promote the perceptions of eHealth’s economic viability for each of the stakeholders that need to participate, thereby ensuring benefit for all Australians.

A perception also exists that there is little incentive for care providers to invest additional money, effort and time in sharing patient information in support of improved continuity of care across the health sector. This is particularly relevant given the view expressed that many care providers have limited financial resources for investment in eHealth, are time poor, and do not want to spend additional effort away from patients undertaking documentation. Appropriate funding and support models including incentives may need to be considered to encourage care providers to adopt and use the PCEHR system and other eHealth solutions in support of improved continuity of care and collaborative care partnerships.

In other forums, during Phase One consultations, there has been discussion about support also being directed to consumers with high healthcare needs.

3.1.6 Taking a realistic, focused and incremental approach to implementation

There was a general acknowledgement amongst stakeholders that the 19 month timeframe from December 2010 to 1 July 2012 is extremely tight and that attempting to address too broad a scope would likely result in a failure to deliver tangible outcomes and benefits. It is therefore essential that the PCEHR Program achieve the right balance of delivering tangible, useful outcomes by 1 July 2012, against what can practically and realistically be delivered by this date.

A number of themes emerged from across the workshops regarding how this balance could be achieved:

- Define and maintain a narrow, focused scope to ensure it remains manageable
- Pursue small, well-defined pieces of work and ensure that there is clear communication and education around each of these pieces in support of managing expectations
- Prioritise to achieve the greatest amount of value to consumers and care providers, and pick off ‘low hanging fruit’ that demonstrates tangible benefits in a short-timeframe
• Build upon the foundation and learnings of lead eHealth implementation sites
• Embrace an incremental and iterative approach to delivering capabilities at a local, regional, jurisdictional and national level
• Ensure that bottom-up ‘grass roots’ eHealth initiatives and projects are aligned with broader top-down national program goals and priorities
• Leverage existing information investments and programs, including assets, technology infrastructure and standards wherever possible (i.e. we are not starting from scratch).

There was also recognition that the implementation approach needs to place appropriate focus on change management efforts at a local provider level (within a national framework), including:

• The cultural changes that will be required to promote a culture that embraces technology
• Embedding the use of technology as a ‘normal’ part of clinical practice, which may require clinical process and workflow re-design and transformation
• Workforce management activities that need to be undertaken to support workers whose way of performing work is changing (e.g. education, training, support) and minimise the impact of the introduction of PCEHR-compliant systems. It is however recognised that health has already undergone much change so that people should be more open to change today than they were historically
• Addressing upfront effort, cost and time of preparing for the PCEHR system in areas such as data cleansing, training, computer system designs to enforce codified data entry, and other quality initiatives required to support the sharing of relevant and trusted information.

3.1.7 Delivering equitable access to the PCEHR system

The introduction of the PCEHR system must not widen the gap between advantaged and disadvantaged parts of the health sector, both from a consumer and care provider perspective.

From a consumer perspective it is important that the implementation and deployment of the PCEHR system focuses on ensuring accessibility to socially and economically disadvantaged consumer cohorts. Many of those that will benefit most from a PCEHR originate from these disadvantaged parts of the community and as such the PCEHR system must be accessible and useable to them, their carers and care providers. This encompasses considerations such as the health and technology literacy of these consumer cohorts, as well as their ability to access appropriate technology infrastructure so they can access their PCEHR.

From a care provider perspective, it is important that the market-driven approach to the development of Australia’s eHealth system does not favour those parts of the sector that have the financial resources to invest in technology.

To deliver benefits, the PCEHR system must achieve broad penetration and usage across the health sector, not just within specific segments or ‘fragments’ of the sector. The PCEHR Program must determine how best to support these disadvantaged care providers in achieving readiness for the PCEHR system. Examples of disadvantaged segments mentioned across the workshops included allied health and the community health sector, both of which are playing an increasingly important role in collaborative care partnerships and continuity of patient care.

3.1.8 Constructing a sustainable model for the PCEHR system

There was recognition that addressing concerns around the long-term sustainability of the PCEHR system was an important consideration for achieving investment in, and adoption of the PCEHR system towards 1 July 2012 by care providers and industry. In particular, there is a need to develop confidence that sustainable commercial and business models exist for both care providers and industry.
From a care provider perspective, it is important to demonstrate that business models can support the investment in, and usage of eHealth systems as part of day-to-day care delivery. This includes ensuring that business models support care providers in accessing and contributing patient information to an individual’s PCEHR as part of day-to-day care delivery, as well as supporting any new IT capabilities that are required. This is important for achieving sustained levels of usage of the PCEHR system and demonstrating tangible benefits from the introduction of the system.

From an industry perspective it is important to demonstrate that there is a viable commercial model for vendors to justify investment in their products to achieve interoperability with the PCEHR system, and to continue to support these on an ongoing basis. This involves not only being able to demonstrate that this creates potential opportunities for competitive differentiation and advantage, but that appropriate revenue potential exists for vendors to justify investment in their products to support the PCEHR system.

From a consumer perspective it is important that the national PCEHR system be useable, meaningful and supported with appropriate literacy and IT access education and training to ensure sustained usage.

One of the key challenges in addressing the issues of sustainability is the lack of long-term funding commitment across governments. At present two years of funding has been committed by the Federal Government, which has created uncertainty amongst care providers and vendors regarding availability of funding beyond this formal commitment (i.e. beyond 1 July 2012). If these longer term funding issues are not addressed by governments, this has potential to act as a deterrent against investment and adoption in eHealth by care providers and industry.

3.1.9 Delivering effective stakeholder engagement, participation and education

There was recognition that a key factor in achieving the successful implementation and adoption of the PCEHR system by 1 July 2012 was the early and ongoing engagement, participation and education of stakeholders.

Consumers, care providers, industry and government stakeholders must be continually engaged and provided opportunities to participate in the design, implementation and deployment of the PCEHR system. This creates an environment in which stakeholders feel they are part of a collaborative effort towards the implementation of the PCEHR system, rather than having change thrust upon them.

Early engagement with stakeholders should focus on considering each of the major stakeholder groups and the benefits which will make a PCEHR system successful from their perspective. This will provide essential input into the design of the PCEHR system, but will also ensure that effective change, education and communication strategies can be developed and tailored to the needs of each stakeholder group. This will also play an important role in effectively managing the expectations of each of the stakeholder groups regarding what the PCEHR system will deliver by 1 July 2012.

There was also broad acknowledgment that consumers will play a key and ongoing role in the adoption of eHealth in Australia and therefore require stronger engagement, participation and education. Consumers should be engaged from the outset and have input to the PCEHR Program during all stages of its development, with that education and awareness building starting now. Consumers need to be educated regarding the role and benefits of a PCEHR for their health, rather than developing a perception that it is about achieving broader system efficiencies. Education should also seek to address potential concerns around issues such as privacy, security and confidentiality of their personal health information. Consumers also strongly expressed the need for ongoing participation in the PCEHR system’s governance arrangements.

For the PCEHR system to be useful to consumers they will need to be able to navigate and interpret what is contained within their PCEHR, and to make use of any consumer-focused tools that the PCEHR system provides. This will require both technical and health literacy, which may require focused education campaigns to ensure that the full consumer value of the PCEHR system is realised.
3.1.10 Active benefit management and realisation

A number of stakeholders across the workshops highlighted benefit management and realisation as an important consideration for the PCEHR Program. There is a need to focus on how the benefits and outcomes of the PCEHR Program will be measured and evaluated, thereby enabling the achievements of the program to be demonstrated. This is of particular importance given that the demonstration of benefits realised from the program will be a key input to the case for securing additional government funding beyond 1 July 2012.

Benefit management and realisation tools, frameworks and approaches need to be developed to allow benefits to be measured for eHealth projects at local care provider, regional, jurisdictional and national levels. This will allow demonstration of individual successes with eHealth as well as the broader system benefits.

Given the pivotal foundational role that eHealth has been given in health reform there was also recognition that the broader benefits and outcomes of the PCEHR system need to be tracked as part of health reform targets. This is important to demonstrating the value of the investment in terms of its contribution to the overall health reform agenda in Australia.

3.1.11 Clear and transparent governance model incorporating key stakeholders

There was recognition by stakeholders that governance was an important aspect of the PCEHR Program, however at present there was a lack of clarity around the current governance model for the PCEHR implementation program.

Stakeholders indicated that the PCEHR implementation program required clear and transparent governance model, in which the roles and responsibilities of stakeholders are clearly defined and understood. There needs to be clarity regarding who is driving the program and the various elements of the program given that the implementation of a PCEHR system is a collaborative effort amongst the Australian health community. There is also the need to ensure that the operational governance of the PCEHR system is clearly defined, although this is secondary to the immediate need for governance of the PCEHR implementation program.

It is likely that the underlying message stakeholders were expressing through this consideration was their concerns regarding their current lack of involvement in the PCEHR Program, and whether this will continue going forward. There is a belief that clarifying the governance model and how that relates to stakeholders will assist in addressing this concern.

3.2 Key barriers and constraints to the implementation of a national PCEHR system

Seven themes emerged in relation to the key barriers and constraints to the implementation of a national PCEHR system:

- Tight implementation timeframes and ability to manage scope / dependencies
- Maturity and pervasiveness of health sector technology infrastructure
- Quality of health information assets
- Current level of consumer knowledge and awareness
- Scarcity of appropriately skilled workers
- Existing culture, mindsets and attitudes of care providers
- Funding for investment and operation of eHealth.

In addition to the primary barriers and constraints above, two secondary themes were also identified:
• Uncertainty regarding medical-legal responsibilities and risks
• Complexity of the stakeholder landscape.

3.2.1 Tight implementation timeframes and ability to manage scope / dependencies

The implementation timeframe of 1 July 2012 is extremely tight and will act as a constraint to what can be practically delivered, and what tangible benefits can be demonstrated. This was a concern for many stakeholders given that securing additional funding beyond 1 July 2012 will be driven by progress of the PCEHR Program, including outcomes and benefits that can be demonstrated within this timeframe.

The ability to manage scope within this timeframe was also seen as a potential barrier given the broad range of stakeholders who are potential users of the system and their potentially differing views on what the PCEHR system should deliver. There is a significant risk of disengagement from key participants such as the consumers or providers if expectations of the PCEHR system are not met. Scope and expectations will need to be effectively managed to ensure tangible outcomes can be delivered within the timeframe and that stakeholders are not disenfranchised with the PCEHR system that is delivered.

A range of dependencies also exist between various parts of the program, in particular around elements such as national infrastructure and standards. Delays in the delivery of these elements will have a flow-on time and cost impact to care providers and vendors whom are trying to develop, test and deploy systems that can interoperate with the national PCEHR service infrastructure.

Of specific concern to a number of stakeholders was the ability for industry vendors to adequately add support for the PCEHR system within the 1 July 2012 implementation timeframe. The concern was that many vendors are likely to have already defined their product development pipeline, which may limit their capacity to add support for PCEHR system. As such there is a need to ensure a strong focus on the early definition of standards and other interoperability requirements, and to engage with vendors around understanding their ability to address PCEHR system requirements within the remaining timeframe.

3.2.2 Maturity and pervasiveness of health sector technology infrastructure

There was broad recognition across the workshops that the maturity and pervasiveness of health sector technology infrastructure will be a key barrier to the implementation of the PCEHR system. A traditionally low level of ICT investment in some parts of the healthcare sector means that it is likely that large capital investment in ICT will be required, particularly in the first years, to develop the infrastructure and connectivity requirements to make a national PCEHR system work.

Allied health, community health and specialists were commonly identified as having low maturity and pervasiveness of technology infrastructure, yet understood to play an important role in collaborative care partnerships and continuity of patient care across Australia’s healthcare system.

Regional and remote care providers were also identified as having limited telecommunications infrastructure, particularly high-speed internet for eHealth applications such as telehealth and remote consultations. There was however recognition that the NBN should play a major role in addressing the issue of access to high-speed telecommunications amongst regional and remote care providers.

3.2.3 Quality of health information assets

The quality of data within current care provider IT systems will pose a challenge to its usage as part of the PCEHR system. Many care provider IT systems do not store structured information and do not
comply with standard terminologies and codesets, which increases the complexity of achieving interoperability with the PCEHR system. This will act as a barrier to the amount of information from the PCEHR system that can be consumed by care provider IT systems, as well as what information care provider IT systems can contribute to the PCEHR system.

The quality of existing health information assets will require additional upfront effort, cost and time in areas such as data cleansing, training, computer system designs to enforce codified data entry, and other quality initiatives that are required to support the sharing of relevant and trusted information through the PCEHR system.

The other challenge that the PCEHR Program faces is the siloed nature of existing health information assets within the health sector, both within individual care provider organisations and across the broader sector. This has been driven by the lack of mechanisms for sharing information between health information silos. The siloed nature of information assets in the health sector will mean increased complexity of achieving integration with the PCEHR system.

3.2.4 Current level of consumer knowledge and awareness

The PCEHR system will not succeed without the active engagement and support of consumers. At present consumers have a relatively low level of knowledge and understanding of the PCEHR Program and broader eHealth agenda, which increases their susceptibility to misinformation and negative media publicity. Without a clear understanding of the PCEHR Program and benefits it provides to consumers, it is unlikely that strong consumer demand and adoption of the PCEHR system will be achieved.

While not as prominent during the conference workshops, pre-conference stakeholder consultations and other engagement forums have demonstrated that consumers have a sophisticated understanding of the need for balancing clinical risk and personal privacy of information withholding. Consumers expressed, in these and other early research forums, they want their healthcare providers to have the right information about them when it is needed, and that they are impatient for the PCEHR system to be in place.

3.2.5 Scarcity of appropriately skilled workers

Various stakeholders highlighted the availability of appropriately skilled personnel as a barrier to the successful implementation and usage of the PCEHR system.

From an implementation perspective there are concerns regarding the availability of resources with the necessary skills to design, construct and implement the PCEHR system, and to manage and deliver the engagement, consultation, education and training that the PCEHR Program will require. This relates to resources involved in the implementation of national PCEHR infrastructure and services, but also local, regional and jurisdictional PCEHR-related projects.

There are also concerns regarding the availability of resources with the appropriate skills and knowledge to effectively operate and leverage the PCEHR and other eHealth systems within the care delivery environment. The use of these systems represent a shift in the way that clinical care is supported and as such there needs to be sufficient local skills and knowledge to support this transition as well as maximise the value of the PCEHR system in the local environment (e.g. health informaticians).

3.2.6 Existing culture, mindsets and attitudes of care providers

The views expressed by a range of stakeholders supported the view that the existing culture, mindsets and attitudes of care providers will be a barrier to the implementation of the PCEHR system.

There is a need for various stakeholder groups to shift their mindset from operating in a silo view of care and information, to one that embraces and practices the sharing of information and putting the patient at the centre. This is a fundamental shift for many care providers. This barrier is closely related
to the need for appropriate funding / support models and sustainable business models that make information sharing a part of day-to-day operation and health practice.

There is also a mindset and attitude that the PCEHR system must be introduced without impacting the care delivery process, which is unrealistic. Like the introduction of any new IT system in any industry, the introduction of the PCEHR system will bring with it some initial inefficiencies and challenges for users. While efforts would be made to minimise these, there is a need to shift thinking that the only way the PCEHR system can be deployed is if its introduction is painless. Some stakeholders did express a view that the PCEHR system could assist in realising efficiency gains through increasing the ease of access to pertinent patient information at the point of care.

Many care providers also expressed a resistance to being required to make clinical decisions based on incomplete information. These concerns focused on the patient’s ability to hide ‘sensitive’ parts of their record, or another care provider making the decision not to include certain medical information in their health summary. There is a need to shift care provider thinking away from the PCEHR system being the one-and-only source of truth, towards it being a supporting tool that will assist care providers along with other traditional mechanisms in the short to medium term.

Consumers involved in roundtables and interviewed in the conference lead up expressed strongly that the historical ‘medical centric’ model of information ownership needs to be challenged as part of the PCEHR system design and implementation planning.

3.2.7 Funding for investment and operation of eHealth

Funding barriers focused on ensuring that funding was available to those care providers that really require it and that funding models encouraged the right behaviours in terms of investment in, and the usage of, eHealth systems:

- The perceived mismatch between those stakeholders who are required to invest in eHealth versus those who will receive the benefits of eHealth, and the lack of viable funding and commercial models that encourage both parties to invest
- The capacity of some care providers within the health sector to implement the changes necessary to use and benefit from the PCEHR system. For example, aged care, community care and other not-for-profit organisations typically have limited financial resources for funding the implementation of new IT systems and associated change management activities
- The sustainability of the PCEHR Program beyond 1 July 2012 given the lack of committed funding to national eHealth programs beyond this date, which in turn may lead care providers to approach investment cautiously given the lack of certainty around the long-term future of the program
- Funding and business models which continue to encourage non-collaborative and siloed care, and a lack of confidence that the Government will be able to change these models. There was a sense that the commercial environment in health delivery at present does not support the sharing of information between providers, and that at times, encourages the reverse to occur yet this is contrary to the goals of the PCEHR system.

Additionally in other consultations in lead up to the conference, consumers have raised the need for consideration of direct funding or rebate for adoption, especially for those who have complex and/or chronic healthcare needs.

3.2.8 Uncertainty regarding medical-legal responsibilities and risks

A number of stakeholders indicated that there is still a lack of clarity regarding the clinical safety / risks and medical-legal aspects of using a PCEHR to support care delivery. There is a risk that failing to adequately address these uncertainties will result in care providers not adopting and using a PCEHR to support the delivery of care to their patients.
In particular, care providers indicated that they require clarity on their responsibilities in regard to the use of a PCEHR in delivering care to patients, and resolution of concerns regarding the completeness of information within a PCEHR. This is particularly relevant given the potential for consumers to hide ‘sensitive’ information in their PCEHR from carers and care providers.

3.2.9 Complexity of the stakeholder landscape

The complexity of the stakeholder landscape that will be impacted by the PCEHR system was highlighted by some stakeholders as a barrier to implementation. Australia’s healthcare system is complex with a broad range of public and private stakeholders, supported by varying policy, governance and funding mechanisms. There is a concern that the complexity involved in effectively engaging with all of these stakeholders will be too great to achieve a successful outcome. There was also a concern that some stakeholders may not collaborate at the level required to achieve the desired outcomes and timeframes.
3.3 Comparison to pre-conference themes regarding priority factors for implementation of the PCEHR system

A mapping of the key themes that emerged from the workshops in relation to the priority factors for the implementation of the PCEHR system against the pre-conference themes is shown in Table 3-1 below.

Table 3-1: Mapping of pre-conference and workshop themes

<table>
<thead>
<tr>
<th>Workshop themes</th>
<th>Theme type</th>
<th>Privacy and Consent</th>
<th>Adoption</th>
<th>Governance</th>
<th>Scope &amp; Expectation Management</th>
<th>Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensuring the PCEHR system is usable and accessible</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensuring the PCEHR system is meaningful, valued and trustworthy</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build confidence around data privacy, security, controls and ownership</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective management of stakeholder expectations</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aligning funding and support models</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking a realistic, focused and incremental approach to implementation</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivering equitable access to the PCEHR system</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieving a sustainable model for the PCEHR</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective stakeholder engagement, participation and education</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active benefit management and realisation</td>
<td>Secondary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear and transparent governance model incorporating key stakeholders</td>
<td>Secondary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: ● Denotes where a workshop theme aligns with a pre-conference theme

Table 3-1 shows a high degree of alignment between the workshop themes and those that emerged through the pre-conference roundtable consultations. Additional themes that emerged from the workshops included the need to:

- Pursue a realistic, focused and incremental approach to implementation
• Deliver equitable access to the PCEHR system to disadvantaged consumers and care providers.

Other themes that have emerged from pre-conference consultations and related stakeholder engagement forums but were less prominent during the conference workshop discussions include the need to:

• Develop and implement a clear and transparent governance model that incorporates key stakeholders in the implementation and operation of the PCEHR system

• Address concerns regarding clinical safety and risk for care providers and consumers, which is important to achieving strong adoption of the PCEHR system. This requires a pragmatic approach to balancing privacy, security and access to information within an individual’s PCEHR in order to achieve an acceptable level of clinical safety and quality

• Improve consumer understanding of the importance of information sharing amongst their care providers, along with their general health literacy. This will enable consumers to understand the information captured within their PCEHR, and through doing so take an active role in the management of their own health and wellbeing.

• Acknowledge consumers frustration that eHealth planning has taken too long and that the PCEHR needs to be available to those with chronic and complex care needs as soon as possible.
4 Implementation opportunities and quick wins

The second workshop was able to explore each of the three original questions with the panellists and stakeholders in the audience. This section summarises the key themes that emerged for each of the three questions posed across the five parallel workshops that Deloitte facilitated.

4.1 Realistic outcomes and focus for July 2012

Five themes emerged around the realistic outcomes and focus for 1 July 2012:

- Basic patient information available through an individual’s PCEHR, including discharge summaries, GP health summaries and diagnostic test results
- Implementation of core foundation elements for the PCEHR system (e.g. healthcare identifiers, secure messaging)
- Basic patient health diary and other tools to actively engage consumers
- Some integration with or linkage to external systems and information stores (e.g. Medicare PBS, diagnostic service providers)
- Focused projects that demonstrate tangible benefits in priority areas.

In addition to the primary themes above, two secondary themes were also identified:

- Agreed data security, access and consent model
- Critical mass of supporters that will continue to carry the PCEHR and eHealth programs forward.

4.1.1 Basic patient information available through an individual’s PCEHR

The workshops highlighted that it should be possible for the PCEHR system to deliver a basic foundational set of summary patient information by 1 July 2012.

Discharge summaries and health summaries were identified as initial content that the PCEHR system should provide, along with basic patient demographics. These summaries should also provide information regarding the patient’s:

- Diagnosis or current health conditions
- Current medications. A record of dispensed medications potentially could also be considered however it was acknowledged that, given the short timeframes, it may be challenging for this functionality to be delivered.

Through leveraging the highly computerised diagnostic services sector, it may also be possible to link diagnostic test results to a consumer’s PCEHR. It was acknowledged however that this would likely be approached opportunistically depending on the capabilities of diagnostic service providers operating within the Australian healthcare system.

As discussed at 4.1.4, opportunistic leveraging of existing information assets and links to national registers may also be possible by 1 July 2012.
4.1.2 Implementation of core foundation elements for the PCEHR system

The workshops highlighted that various foundational elements could be addressed within the 1 July 2012 timeframe, including:

- The broad implementation of health identifiers (e.g. IHI) into existing care provider IT systems within the health sector, which would be supported by the appropriate conformance, compliance and accreditation functions to ensure conformance of vendor and care provider solutions
- The broad implementation and adoption of secure messaging within the Australian health sector, which is simple to use and has low transaction costs associated with it.

4.1.3 Basic patient health diary and other tools to actively engage consumers

Stakeholders indicated that it is realistic to expect that some basic functions or tools for consumers could be delivered through the PCEHR system as a means to gaining closer engagement and involvement of this important user group.

One particular example that was raised was the possibility of incorporating a patient health diary, which would be a first, albeit basic step, towards encouraging and assisting consumers to take a more active role in the management of their health through online / electronic means. There may also be leverage opportunities within existing government funded programs (such as the National Health Call Centre Network health information website) and market innovation opportunities that could be explored.

4.1.4 Some integration with or linkage to external systems and information stores

Stakeholders indicated that it is realistic to expect the PCEHR system to be integrated with an initial set of key health systems and information stores, in particular those that offer well structured and high quality patient information. This is an important step towards demonstrating the ability to build and deliver a connected health system, rather than implementing yet another silo of health information.

Notable examples identified across a number of the workshops included:

- Medicare’s data assets, such as the Medicare Benefits Schedule (MBS) and the Pharmaceutical Benefits Schedule (PBS)
- Electronic prescription exchange services
- Diagnostic service providers (e.g. pathology, imaging, radiology)
- Pharmacy systems.

Other engagement forums have also identified the Australian Childhood Immunisation Register (ACIR) and the Australian Organ Donor Register as assets that could also be leveraged.
4.1.5 Focused projects that demonstrate tangible benefits in priority areas

Stakeholders indicated that it should be possible by 1 July 2012 to have implemented a number of focused eHealth projects that demonstrate measurable benefits of using a PCEHR system. Such projects should focus on demonstrating the applications and benefits of a PCEHR system in:

- Priority healthcare areas where sharing of information is of significant benefit, such as chronic condition management and aged care.
- Well organised communities-of-practice and/or local care networks already in existence
- Highly computerised segments of the Australian health sector.

The Australian Government’s related investments in telehealth and video-conferencing discussed on Day 2 of the conference also present opportunities for leverage. Similarly, related investments in programs, such as supporting after hours information availability through the National Health Call Centre Network (NHCCN) present coordinated policy leverage opportunities.

An important part of these projects will be the benefits management and realisation approach, which will be essential to measuring and demonstrating the outcomes and benefits of investing in and using PCEHR-compliant systems in the care delivery process. The collation of this information will form an important input into securing additional government funding beyond 1 July 2012 as well as encourage other care providers to adopt the PCEHR system. Accordingly, it is reasonable to expect that a proven approach to the management and realisation of benefits will exist by 1 July 2012.

Another outcome of undertaking a variety of focused eHealth projects is the collective knowledge, learnings and lessons gained through the introduction of the PCEHR system to a particular care environment or network. Such knowledge should be captured and made accessible so it can be applied to future projects, and through doing so, reduce implementation risk, costs and time. Accordingly, it is reasonable to expect that by 1 July 2012 that mechanisms will exist for capturing and accessing this knowledge, and that initial knowledge from lead eHealth sites has been captured and made available to subsequent projects.

4.1.6 Agreed data security, access and consent model

Various stakeholders highlighted the need for the data security, access and consent model for the PCEHR system to have been defined and agreed by 1 July 2012. Achieving clarity on these aspects of the PCEHR system will enable building of support for adoption amongst consumers and care providers. It will also be critical for vendors as they will need to build the appropriate mechanisms into their products to support the model. For this reason it is likely that the data security, access and consent model will need to be defined and agreed well in advance of 1 July 2012.

Lead eHealth sites would provide an opportunity for the PCEHR Program to test and demonstrate the PCEHR data security, access and consent model in action. This would enable knowledge and learnings to be gathered that will assist in refining the model, and the subsequent education of consumers and care providers as part of the broader deployment of the PCEHR system from 1 July 2012.

4.1.7 Critical mass of supporters that will continue to carry the PCEHR and eHealth program forward

Stakeholders indicated that it should be possible to create an eHealth community ‘nucleus’, which will continue to drive and sustain the PCEHR system and eHealth journey beyond 1 July 2012. This community would consist of a broad set of champions and advocates for the PCEHR system and eHealth, who would continue to drive change in their respective parts of the health sector.
The PCEHR Program should take active steps to identify how this community can be created and nurtured towards and sustained beyond 1 July 2012. The focused eHealth projects discussed in Section 4.1.5 above would be likely candidates for the foundation of this community.

4.2 Existing assets that could be leveraged

Five primary themes emerged in relation to the existing assets that the PCEHR Program could leverage. These include:

- Highly computerised segments of the health sector
- National data registries operated by Medicare
- Existing eHealth projects, communities of practice, standards and knowledge
- Professional groups, associations and networks of practitioners
- Collective goodwill and desire for action

In addition to the primary themes above, two secondary themes were also identified:

- The close relationship between a care provider and their patient
- Social media and other online channels for engaging consumers.

Note that in addition to the above, while not specifically discussed during the workshops, pre-conference discussions with key Australian Government stakeholders have identified additional leverage opportunities relating to registration and online access, as well as health literacy programs.

4.2.1 Highly computerised segments of the health sector

Various parts of the Australian health sector have been strong adopters of technology and as such have achieved high-levels of computerisation, including:

- Primary care / general practice
- Pharmacies
- Diagnostic service providers (e.g. imaging, radiology, pathology, etc)
- Increasingly, segments of acute health services in the public and private sector

These segments are highly computerised and have various information / data assets (albeit to varying levels of quality) that could potentially be integrated with the PCEHR system.

4.2.2 National data registries operated by Medicare

Medicare offers some of the most comprehensive health information assets available in Australia today, including the:

- Medicare Benefits Scheme (MBS)
- Pharmaceutical Benefits Scheme (PBS)
- Australian Childhood Immunisation Register (ACIR)
- Australian Organ Donor Register.

Given that Medicare is also the designated operator for the healthcare identifiers (HI) service for Australia, Stakeholders indicated there appears to be a unique opportunity to link the information sources outlined above into a consumer’s PCEHR. This would enable a basic set of information to be delivered for each consumer including medical activities (MBS), dispensed medications (PBS), immunisations (ACIR) and other basic patient demographic information that Medicare maintains.
There was general recognition that to leverage the above data assets that legislative requirements and privacy protections will need to be explored and considered as part of the PCEHR Program planning and implementation.

4.2.3 Existing eHealth projects, communities of practice, standards and knowledge

There is broad recognition that there are a range of eHealth projects already underway within Australia. These projects present opportunities to leverage local knowledge regarding the implementation of successful eHealth solutions. Potentially some of these projects may also be scalable and interoperable with the PCEHR system, and thus should be candidates for additional support to provide greater coverage of consumers and care providers.

A broad range of well organised communities-of-practice and/or local care networks already exist across the health sector. Often these are established around a particular consumer cohort (e.g. a particular chronic disease) or a regional need (e.g. local care network spanning care providers from different segments of the health sector within a particular geographic location). In addition, the Australian Government noted that some are already planned at the national level, e.g. the after hours contacts database which is to be provided through the NHCCN.

Many of these communities and networks would potentially benefit from improved sharing of information, and as such, present opportunities for demonstrating the benefits of the PCEHR system within relatively short implementation timeframes. Such communities and networks also present a mechanism for engaging, educating and communicating with specific stakeholder groups regarding the role, benefits and other aspects of the PCEHR system. It is expected that as part of the second wave eHealth sites program, some of these networks may be funded as early implementation opportunities for the PCEHR Program.

There are also knowledge and learning opportunities from other international eHealth programs, which should be identified and leveraged where applicable to the Australian healthcare environment. Notable areas include lessons and knowledge around engagement, adoption and consent models. This also extends to standards that have been developed in overseas jurisdictions that can be used to augment the standards development work that NEHTA is undertaking.

4.2.4 Professional groups, associations and networks of practitioners

The Australian healthcare sector has a strong legacy of professional groups, associations and networks of practitioners, often organised around crafts, disciplines and specialties. Such organisations provide mechanisms through which the PCEHR Program can undertake targeted engagement, involvement and education of stakeholders across Australia’s fragmented health sector. It is also worth noting that these groups provide the launch pad for understanding change requirements for specific groups as well as for understanding cross-sectoral requirements. Similarly, consumers have established forums which are both health condition specific and social issue focused, that offer a starting point for testing the PCEHR system’s design and implementation planning as well as for disseminating information.

4.2.5 Collective goodwill and desire for action

The conference highlighted that there is now a strong sense of goodwill and desire for action amongst the Australian health sector and consumers, which has been focused through the Government funding for the implementation of the PCEHR system. The discussions held during the conference and in particular the workshops was of a level of maturity and sophistication commensurate with a focus on understanding ‘how we can make this work?’ rather than ‘do we need to make this work?’ This collective goodwill and desire for action needs to be harnessed effectively by the PCEHR Program and nurtured in the interests of maintaining momentum towards 1 July 2012 and beyond.
4.2.6 The close relationship between a care provider and their patient

The trusted and personal relationship between a patient and their care provider was identified by various stakeholders as a potential consumer engagement channel. This channel could be used to educate and build awareness of the PCEHR system with consumers, and to drive the adoption of the record by consumers. Importantly the personal nature of the relationship would potentially allow more focused targeting of consumers belonging to priority cohorts, such as those with chronic conditions or residing within a particular geographic area.

It is important to note that consistently in both the consumer and care provider pre-conference roundtables, that one of the concerns expressed was that introduction of the PCEHR system maintained the integrity of these relationships, so that clinical safety and confidence were not inadvertently compromised. Consumers also noted that increasing community awareness about PCEHR benefits, will stimulate consumers to lead discussions about the PCEHR system with their care providers.

4.2.7 Social media and other online channels for engaging consumers

Recent years have seen the emergence of social media and other forms of online channels for engaging with consumers in a targeted and personalised way. Social media is now being used to engage, educate and build awareness of particular issues with consumers, as evidenced in recent political campaigns in Australia and overseas.

Such mediums should be leveraged as a way to engage, educate and build awareness of the PCEHR system and broader eHealth agenda in Australia. Such mediums can utilise compelling visual media to provide real-life stories and information on the use of the PCEHR by consumers, and information about successful eHealth projects in Australia from a consumer perspective. These channels also provide for interactive and continued feedback loops, which are difficult to achieve with traditional public submission processes. Their use as part of transparent, ongoing stakeholder consultation will be important given the tight timeframes and complex issues requiring discussion during the PCEHR system planning period.

Whilst social media and other online channels are often associated with younger individuals, it is also broadly acknowledged that increasing numbers of younger Australians have chronic conditions and health issues that would benefit from a PCEHR. More broadly these channels can be used to reach and educate younger Australians on the role of a PCEHR and how they can use a PCEHR to take a more active role in the management of their own health from an early age.

4.3 Focus for driving initial consumer and care provider adoption of the PCEHR system

Five themes were identified in relation to the key focus areas for driving initial consumer and care provider adoption of the PCEHR system:

- Build a clear understanding of what will be delivered by 1 July 2012 to enable stakeholder expectations to be managed effectively
- Ensure the PCEHR system is usable, meaningful and adds value to both consumers and care providers
- Ensure initial user interactions with the PCEHR system are positive and compelling
- Actively engage, educate and involve stakeholders throughout the PCEHR Program
- Ensure the right consumer consent model is selected for the PCEHR system.
4.3.1 Build a clear understanding of what will be delivered in July 2012

The implementation of the PCEHR system will be a complex practical and strategic undertaking. Within the conference there was recognition that a critical first step towards achieving strong adoption is to build a clear understanding of what will and will not be delivered by 1 July 2012. Building this understanding will play a critical role in managing the expectations of stakeholders around the PCEHR Program and will minimise the opportunity for stakeholders to be disenfranchised should the PCEHR system not deliver the breadth or depth of information and functions that they were expecting.

Stakeholders indicated that building an understanding of what will be delivered should address what a PCEHR will mean for each user group, such as consumers and care providers. It should not simply be a description of the technical capabilities of the PCEHR system but should articulate how it will benefit and add value for each stakeholder group.

4.3.2 Ensure the PCEHR system is usable, meaningful and adds value

Stakeholders reinforced the theme of usability, meaningfulness and the need to add value as one of the critical factors to achieving strong take-up and usage of the PCEHR system by consumers and care providers. This theme also emerged earlier in workshop 1 and means that the PCEHR system should:

- Be simple, intuitive, and easy to access; requiring a minimal amount of education and training required to use the system
- Enhance the delivery of care by care providers through providing focused and meaningful patient information
- Encourage consumers in taking an active interest and role in the management of their own health, such as the provision of patient self-care tools
- Minimise negative impacts to the efficiency and complexity of existing care processes
- Ensure information is orientated to the specific needs and communication styles of primary user groups, be that a consumer or care provider (i.e. patient centric)
- Maintain and/or build clinical safety and trust.

4.3.3 Ensure initial interactions with the PCEHR system are positive and compelling

Initial impressions and experiences have a powerful and lasting effect on users of new technology and systems. Accordingly it is important to ensure that initial stakeholder interactions with the PCEHR system are positive and compelling, thereby encouraging stakeholders to continue to use the system. This includes ensuring meaningful information is available from the PCEHR system from day 1, but also simple processes exist by which consumers and care providers can register for access to the system.

Stakeholders highlighted the need to develop simple and consistent processes for registration, particularly for consumers. Registration and consent processes should be simple and easy to understand by consumers, particularly those with disabilities and accessibility challenges. Consumers must be able to carry out these processes quickly, efficiently and with a minimum of stress. They should build on the lessons from similar “look and feel” registration processes now in operation across other industries.

There is also a strong need to ensure that the PCEHR system is able to deliver accurate, reliable and meaningful information from 1 July 2012. To ensure ongoing usage, consumers and care providers need to find useful information within the PCEHR the first time they access the system. The information needs to be accurate and reliable otherwise it will undermine confidence in the PCEHR system. This further highlights the importance of the PCEHR Program being able to leverage existing information assets within the Australian health sector, such as Medicare’s national data registries (e.g. MBS, PBS, ACIR, etc).
4.3.4 Actively engage, educate and involve stakeholders throughout the PCEHR Program

Achieving adoption of the PCEHR system will be driven by the level of understanding and support for the PCEHR system by key stakeholder groups. A key mechanism for achieving this adoption, is ensuring key stakeholder groups are actively engaged and involved throughout the PCEHR Program from the outset. This includes consumers and care providers, but also importantly industry and Government stakeholders as well.

Stakeholders need to understand the vision for the role of the PCEHR system and eHealth, and the intended scope of the system that will be delivered by 1 July 2012. Stakeholders also need to be educated regarding what the PCEHR system is seeking to deliver in terms of outcomes and benefits for their particular stakeholder group.

Stakeholders should be provided opportunities to test ideas and concepts, and have input into the development of the PCEHR system thereby ensuring they feel involved in delivering the change, rather than having the change forced upon them. Each stakeholder group will have particular questions and concerns that they will seek the opportunity to explore, such as:

- **Consumers** - Privacy, security, accuracy, confidentiality of and access to personal information
- **Care providers** – Impacts to care delivery processes of introducing the PCEHR system, such as additional care provider workload, clinical safety and medical-legal responsibilities / risks
- **Industry** – Ability to implement and sustain commercial / business models around the PCEHR system beyond 1 July 2012
- **Government** – Legislative, policy and funding implications of the PCEHR Program.

While all stakeholder groups are critical, the workshops highlighted the need to ensure that appropriate focus is given across consumers and industry, in addition to healthcare providers.

Consumers will be a primary source of demand for the PCEHR system, and will play a key role in driving their care providers to adopt and use the PCEHR system. Accordingly it is important that consumers be engaged and educated from the outset of the PCEHR Program. This may be achieved through various community and health consumer forums and representative bodies, but also in a more personal manner through leveraging the close, trusted relationship between a consumer and their care provider. Over time the relationship between a consumer and their care provider may become a key channel for driving adoption of the PCEHR amongst consumers. The role of the PCEHR system in promoting and maintaining good health will also need discussion and promotion through broader policies and communication channels.

Industry will be the primary source of supply for the PCEHR system. Care providers will only be able to adopt the PCEHR system if their IT systems are able to be upgraded to have the capability to interact with the PCEHR system. Accordingly it is critical that vendors be engaged and encouraged to invest in adding these capabilities within their products, and to continue to support these over time.

Over time the vendor community may become a key channel for driving adoption of the PCEHR system amongst care providers (i.e. their customer base).

4.3.5 Ensure the right consumer consent model is selected

While there has been a clear statement that the PCEHR system will be based on an ‘opt in’ (i.e. voluntary) participation model, some stakeholders across the workshops questioned whether this was the most appropriate model. These stakeholders highlighted examples where an ‘opt out’ model had been applied to a large population and had resulted in extremely high rates of adoption (e.g. Auckland EHR system). As such the concern regarding the right consumer consent model for Australia should be explored further. This engagement with stakeholders would be focused on deepening the understanding of issues and perspectives around the current ‘opt in’ participation model for the PCEHR system.
Note, a shift in thinking compared to the currently agreed position supported by the Australian Health Ministers’ Conference (AHMC), would need significant testing in broader stakeholder forums. In the meantime, the opt-in position will continue to guide the PCEHR Program’s planning.

### 4.4 Comparison to pre-conference themes regarding existing assets that could be leveraged by the PCEHR Program

A mapping of the key themes that emerged from the workshop in relation to the assets that could be leveraged by the PCEHR Program against the pre-conference themes is shown in Table 4-1 below.

**Table 4-1: Mapping of pre-conference and workshop themes**

<table>
<thead>
<tr>
<th>Workshop themes</th>
<th>Theme type</th>
<th>People/</th>
<th>Forums</th>
<th>Data Sets</th>
<th>Technology</th>
<th>Knowledge/</th>
<th>Learnings</th>
<th>Goodwill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly computerised segments of the health sector</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>National data registries operated by Medicare</td>
<td>Primary</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Existing eHealth projects, communities of practice, standards and knowledge</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Professional groups, associations and networks of practitioners</td>
<td>Primary</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collective goodwill and desire for action</td>
<td>Primary</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>The close relationship between a care provider and their patient</td>
<td>Secondary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social media and other online channels for engaging consumers</td>
<td>Secondary</td>
<td></td>
<td></td>
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</tbody>
</table>

**Key:** • Denotes where a workshop theme aligns with a pre-conference theme

Table 4-1 shows a high degree of alignment between the workshop themes and those that emerged through the pre-conference roundtable consultations. Additional asset themes that emerged from the workshops included:

- The close relationship between a care provider and their patient
- Social media and other online channels for engaging consumers.
5 Innovation sessions

The innovation sessions focused on showcasing innovative Australian eHealth projects and providing an opportunity for attendees to ask questions of the project presenters. Deloitte facilitated the innovation sessions and Q&A sessions that followed each presentation.

Nine themes emerged across the Q&A sessions, including:

- The importance of stakeholder engagement and adoption
- The importance of addressing usability
- Ensuring a focused effort on change management
- Dedicating funding and resources towards the development of e-Healthcare delivery models
- Applying ‘fit for purpose’ technology
- The need to provide funding to care providers for accessing and using eHealth services
- Using eHealth solutions as a way to transfer specialist skills and knowledge
- Delivering improved patient and care provider experience through telehealth
- The need to get the basic IT infrastructure right for eHealth.

5.1 Stakeholder engagement and adoption

The importance of early and ongoing stakeholder engagement and adoption was evident by the number of questions that were asked in that area. The key lesson from the panel was that technology is simply an enabler for the clinical program that it supports. As such it is more important to recruit participants by selling the benefits of the clinical program than the technology. Adoption of the technology supporting a clinical program follows naturally from a desire to achieve the clinical benefits of the program.

5.2 Usability

Ease of use was the most critical aspect for eHealth solutions and technology. This in turn makes it easy for the eHealth solutions and technology to be used as a natural part of clinical processes, which in turn drives adoption and sustained usage. Ensuring that telehealth solutions were integrated with stores of high quality patient information emerged as a key factor in usability, since it creates a highly efficient remote working environment for clinicians.

5.3 Change Management

In terms of change management, clinicians discussed the need to realise that the way they currently do things cannot continue with simply a computer alongside. This mindset will not deliver efficiencies and benefits. Instead, clinicians need to look at new ways of working that leverage eHealth solutions and incorporate technology inherently. Significant investment in training and education, and the use of quality improved processes to continuously refine work practices were other notable change management themes that emerged. Over time e-Health and telehealth solutions will become normalised within health practice and business.
5.4 Funding and resources to develop e-Health delivery models

A key barrier to the adoption of eHealth solutions and technology was that new ways of working where technology is inherent in the process cannot be developed ‘on the side’ to a clinician’s regular day-to-day responsibilities. Instead, dedicated funding and project time should be set aside to develop these new ways of delivering care so that the clinicians who need to develop these new clinical practices can set aside time that would otherwise be easily consumed by the already high demand for their skills.

5.5 Fit for purpose technology

Technology and solutions should be selected to address the need at hand, which does not always require the most advanced technology that is available. For example, solutions based on digital image 'store and forward’ approaches (e.g. submission of a high-quality digital image of a skin lesion for diagnosis) may be suitable for a variety of care delivery applications whereas real-time video consultation would not be pragmatic given the lack of on-demand availability of specialists.

5.6 Funding for access and use of eHealth

A number of comments were made regarding the need to develop and align funding mechanisms to support clinical and non-clinical personnel in gaining access to, and using eHealth solutions, such as telehealth and other online eHealth services. Failing to design and embed appropriate funding mechanisms may undermine the initial investment in eHealth solutions and technology, particularly if care providers believe that they, or their patients, do not have the financial resources to use such solutions. Notable examples included the lack of an MBS item number for remote consultations and no provision being made for reimbursement of allied health workers.

5.7 Opportunities to transfer specialist skills and knowledge

While telehealth and remote consultation services will create new access channels to specialist clinicians, the availability of these specialists will remain constrained by specialist workloads and workforce availability. It may be possible to enable other clinicians and care providers to join telehealth and remote consultations being conducted by specialists as a mechanism for transferring knowledge and skills to a broader section of the health sector. This may be of particular use in increasing the knowledge of local care providers in regional and rural locations.

5.8 Improved patient and care provider experience from telehealth

In some instances, telehealth and remote consultation services have delivered a better consumer and care provider experience in the care setting compared to in-person, face-to-face consultations. The primary reason given was that it creates a dedicated focus and engagement between the patient and care provider, and avoids other distractions typical to care settings such as hospital wards etc. Telehealth and remote consultation services also create an environment that focuses the intellectual exercise of diagnosis for the care provider.
5.9 Getting the basic IT infrastructure right

Many of the innovation sessions showcased eHealth services operating in regional and remote locations of Australia. The lack of IT and telecommunications infrastructure was frequently identified as a barrier to the use of high resolution video and images. Accordingly embedding telehealth and remote consultation services in these locations requires a focus on ensuring that adequate IT and telecommunications infrastructure was in place first and that this was accompanied by quality IT support.
6 Next steps

The National e-Health Conference was the key milestone of Phase One (July to December 2010) of the PCEHR stakeholder engagement program. The conference demonstrated that the level of the discussion being held around the eHealth agenda, and in particular the PCEHR system, has matured and become far more sophisticated than during consultations undertaken in 2008 as part of the development of the National E-Health Strategy.

The themes that emerged during the conference workshops have highlighted those considerations, barriers and opportunities that stakeholders have indicated require priority focus by the PCEHR Program. These themes will also form an important input into the development of stakeholder education and awareness material, and other material being developed to support the public consultation process that will take place during 2011.

In Phase Two (January to June 2011), further documents will be released to support the public consultation process. The first will provide an overview of the PCEHR system and its benefits and challenges that have been identified as requiring action. Further information guides tailored to key stakeholders such as consumers, healthcare providers and industry may also be provided as part of this process.

A public consultation process will be initiated in April through the Department’s yourhealth.gov.au website and subsequent targeted discussion forums. A range of meetings will provide additional opportunities for stakeholders to learn about the PCEHR system and contribute their views to the system’s design and implementation planning.

A draft Concept of Operations document, which will outline draft PCEHR high level business requirements, is currently being drafted through NEHTA, and is expected to be available for public comment in upcoming months. A public discussion paper is also expected to be released for comment ahead of the legislation exposure draft due in August 2011.

In Phases Three (July to December 2011) and Four (January to June 2012) the focus will be on change management and adoption, public education and social marketing campaigns. This work will be coordinated by a National Change and Adoption Partner, for which a procurement process will commence in February 2011.
Appendix A – Conference Agenda

Day 1: Tuesday 30th November 2010

<table>
<thead>
<tr>
<th>Time</th>
<th>Session / Activity</th>
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<tbody>
<tr>
<td>08:00</td>
<td>Registration Open</td>
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</table>

**Plenary Session**

09:00  Welcome by Conference Master of Ceremony
       Conference Master of Ceremony – Peter Couchman

09:10  Opening Address
       The Hon Nicola Roxon, Minister for Health and Ageing
       Australian Government’s vision for a 21st century Australia and the place of eHealth within the reform agenda

09:50  International Keynote Speaker
       Professor Omid Moghadam
       Center for Biomedical Informatics, Harvard University and Chair, National Development Board of Ignite Institute for Individual Health
       Looking ahead – how eHealth will affect healthcare in 2020 and beyond

10:30 | Morning Tea |

11:00 | Conference Master of Ceremony
       Peter Couchman
       So what is the PCEHR system? |

11:05 | Guest Speakers
       The PCEHR system’s governance
       The landscape for introducing the PCEHR system across Australia – working together to ensure connectivity across the public and private health sectors

       Perspectives from:
       Department of Health and Ageing: Ms Jane Halton, PSM, Secretary
       State and Territory Health Department representative: Mr Michael Reid, Director-General
       Queensland Health
       National E-Health Transition Authority (NEHTA): Mr Peter Fleming, Chief Executive Officer

11:50 | Guest Speakers
       Introducing conference discussion themes
       How will the PCEHR system revolutionise “real” healthcare?

       The consumers view: Why we need this system in place
       Ms Carol Bennett, Executive Director, CHF

       Clinicians driving change: Supporting my care of patients
       Dr Steve Hambleton, Federal Vice President, AMA

       Industry, partners in care delivery: Responding to and driving technological advances
       Mr Philip Cronin, Chairman of Board, AIIA

12:40 | Lunch |

| Themed Workshops |
## Appendix B – Group 1 Workshop Summary

### Time | Session / Activity
---|---
13:30 | Working Session 1: Making the PCEHR system work – priority topics  
**Session objective:** Provide a context for discussion with a focus on identifying our starting points and the priority topics for the PCEHR system

14:45 | Afternoon Tea

15:15 | Working Session 2: Making the PCEHR system work – opportunities and actions  
**Session objective:** Determine the opportunities and key actions to be taken to inform the development of the PCEHR system

### Plenary Session

### Time | Session / Activity
---|---
16:30 | International Keynote Speaker  
Dr Ivan Pedersen, Program Manager, Connected Digital health, Denmark  
**Key lessons and opportunities from a national electronic health record system implementation**

17:15 | Closing Remarks  
Conference MC Peter Couchman introduces  
Mr Adam Powick (conference lead facilitator) to present Day One wrap up

### Day 2: Wednesday 1\textsuperscript{st} December 2010

### Time | Session / Activity
---|---
07:30 | Optional Breakfast Function  
PCEHR demonstrator introduced by Dr Chris Pearce (NEHTA Clinical Lead)

### Plenary Session

### Time | Session / Activity
---|---
09:00 | Opening Remarks  
Conference Master of Ceremony – Peter Couchman

09:05 | Opening Address  
The Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, Minister Assisting the Prime Minister on Digital Productivity  
The digital economy – complementing the health reform agenda and benefits of eHealth

09:35 | Keynote Speaker  
Mr Shane Solomon, Head of Healthcare, KPMG Australia  
A glimpse of the future – using eHealth to provide system wide clinical benefits of real value to consumers

10:05 | Telehealth Simulation – working with today’s technology  
Dr Mukesh Haikerwal, NEHTA, Head of Engagement and Clinical Leadership

10:30 | Morning Tea

### Innovation Project Breakout Sessions
<table>
<thead>
<tr>
<th>Time</th>
<th>Session / Activity</th>
</tr>
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<tbody>
<tr>
<td>11:00</td>
<td>Innovative Projects Session</td>
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<td>Bringing tomorrow to today</td>
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<td></td>
<td><strong>Session objective:</strong> To provide opportunities to showcase the breadth of eHealth</td>
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<td>innovation, coming from the ground up, where benefits are being delivered locally to</td>
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<td></td>
<td>healthcare consumers and the healthcare sector</td>
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<tr>
<td>12:15</td>
<td>Lunch</td>
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<td></td>
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<tr>
<td>Plenary Session</td>
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<tr>
<td>13:15</td>
<td>Facilitated Panel Session</td>
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<td></td>
<td>Recognised experts, senior clinicians and peak body representatives</td>
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<td></td>
<td>Taking us towards tomorrow – envisioning the 21st century when eHealth is embedded</td>
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<td></td>
<td>across the health sector</td>
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<tr>
<td>14:30</td>
<td>Closing Remarks</td>
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<tr>
<td></td>
<td>Ms Rosemary Huxtable, PSM, Deputy Secretary, Department of Health and Ageing</td>
</tr>
<tr>
<td>14:45</td>
<td>Afternoon Tea</td>
</tr>
</tbody>
</table>
Appendix B – Group 1 Workshop Summary

Facilitator: Adam Powick (Deloitte)
Scribe(s): Ben McCartney (Deloitte) and Mark Watson (Deloitte)
Panel Members:
- Dr Mary Foley, National Health Practice Leader, PriceWaterhouseCoopers Australia
- Dr Chris Mitchell, eHealth Spokesperson, Royal Australian College of GPs (RACGP)
- Mr Andrew J Howard, PCEHR Program Manager, NEHTA

Summary of workshop themes / insights

<table>
<thead>
<tr>
<th>Key Questions</th>
<th>Workshop themes / insights</th>
</tr>
</thead>
</table>
| What are the priority factors that we need to address if we are to successfully implement a national PCEHR? | - The PCEHR must be useful, usable and accessible
|               | - Must address privacy, security and consent concerns early                                |
|               | - Achieve broad usage across the health sector, not just within specific fragments        |
|               | - Meaningful, quality and trusted information within the PCEHR                            |
|               | - Provision of change management and education will be critical                           |
|               | - Balancing and managing the scope of the PCEHR with the expectations of consumers and care providers |
|               | - Measure and demonstrate the benefits of the PCEHR Program                               |
|               | - Start engagement and awareness building with consumers early, and continue throughout the PCEHR Program |
|               | - Educate consumers to raise their health literacy                                       |
|               | - Ensure equitable rollout of the PCEHR across the consumer and care providers            |
|               | - Funding models need to be aligned to support adoption                                   |
|               | - Get the right local feeder systems / IT capabilities in place                            |
|               | - Implement the PCEHR in small, manageable chunks                                        |
|               | - Clear governance model spanning the Government, consumers, care providers and industry. |
### Key Questions

#### What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

- Uncertainty regarding medical-legal implications of PCEHR
- Increased inequity between advantaged and disadvantaged
- Acknowledging initial pain and inefficiencies, and addressing resistance this generates
- Scarcity of resources to implement the PCEHR
- Lack of appropriate maturity of technology infrastructure in some parts of the health sector
- Care providers potentially acting on incomplete information
- Quality of existing health information in local care provider systems and its suitability for use in the PCEHR
- Insufficient financial, people and other resources within care providers to implement local PCEHR changes.

#### What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

- Uncertainty regarding medical-legal implications of PCEHR
- Increased inequity between advantaged and disadvantaged
- Acknowledging initial pain and inefficiencies, and addressing resistance this generates
- Scarcity of resources to implement the PCEHR
- Lack of appropriate maturity of technology infrastructure in some parts of the health sector
- Care providers potentially acting on incomplete information
- Quality of existing health information in local care provider systems and its suitability for use in the PCEHR
- Insufficient financial, people and other resources within care providers to implement local PCEHR changes.

#### What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date?

- Discharge summaries
- Secure messaging
- GP health summaries
- Medications
- Pathology / Diagnostic Test Results
- Key elements of the core PCEHR infrastructure
- Implementation of IHI across key segments of the health sector
- Patient health diary
- Achieving a critical mass that will continue to carry the PCEHR and eHealth program forward.

#### What are the key assets in situ today that we should focus on leveraging in the first instance?

- National data registries operated by Medicare (e.g. MBS, PBS)
- High level of computerisation in general practice, pharmacy and diagnostic services
- The trusted and personal relationship between a care provider and their patient
- Existing domestic and international standards
- Goodwill and general consensus that a PCEHR / eHealth is needed
- Existing eHealth projects, initiatives and communities of practice
- Professional groups, associations and networks of practitioners
- Skills and knowledge in clinical research and outcomes / benefits measurement.
<table>
<thead>
<tr>
<th>Key Questions</th>
<th>Workshop themes / insights</th>
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<tbody>
<tr>
<td>What do we need to do to drive initial consumer and care provider adoption of the PCEHR?</td>
<td>• Ensure the PCEHR is usable, useful and adds value to the delivery of care</td>
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<td>• Ensure the information within the PCEHR is directed towards consumer and care provider usage</td>
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<td>• Provide tools to consumers that assist them in managing their own health</td>
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<td>• Ensure the PCEHR can be easily integrated into existing care processes</td>
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<td>• Ensure the PCEHR contains useful and meaningful information from the July 2012</td>
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<td>• Build consumer and care provider confidence in the system through early and ongoing engagement.</td>
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**Workshop 1 – Key considerations for the implementation of the PCEHR**

<table>
<thead>
<tr>
<th>Theme</th>
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</table>
| The PCEHR must be useful, usable and accessible                       | • Must be useful, usable and accessible to consumers and care providers as this will drive take-up and adoption  
• Needs to be support integration into existing clinical workflows and processes, and needs to add value to these processes  
• Information must be presented / accessible in a way that supports care providers and consumers (i.e. human-machine interface will be key), though it was recognised that this responsibility will largely fall to vendors / industry as the Government is putting in place the core ‘backend’ PCEHR infrastructure  
• The shift to mobility and mobile access is important and need to be considered as part of implementation, as consumers and care providers will be expecting this  
• Ensure that it is easy and simply to access the PCEHR through local care provider systems . |
| Must address privacy, security, consent and data ownership concerns early | • The PCEHR has a range of privacy and consent implications associated with its introduction, and these need to be addressed to ease consumer and care provider concerns  
• Demonstrate that the system can protect information within the PCEHR, and access to that information, and that the Government is prepared to assure this  
• Need clarity regarding ownership of the data within the PCEHR and what the information is allowed to be used for (especially secondary usage of data). |
| Achieve broad usage across the health sector, not just within specific fragments | • The PCEHR must be capable of linking across various segments of the health sector, including those that are fragmented  
• The community health sector must be contributed to the summary as they play a critical role in patient care.  |
| Meaningful, quality and trusted information within the PCEHR          | • The PCHER must present meaningful, trusted summary-level information that care providers and consumers can interpret quickly and easily  
• The PCEHR must not simply be a collection of vast amounts of information, as that is what we have today in paper form and leads to information overload for care providers. |
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<thead>
<tr>
<th>Question 1 – What are the priorities / factors that we need to address if we are to successfully implement a national PCEHR?</th>
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<tbody>
<tr>
<td><strong>Theme</strong></td>
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<tr>
<td>Provision of change management and education will be critical</td>
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<td>Balancing and managing the scope of the PCEHR with the expectations of consumers and care providers</td>
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<td>Measure and demonstrate the benefits of the PCEHR Program</td>
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<td>Start engagement and awareness building with consumers early, and continue throughout the PCEHR Program</td>
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<td>Educate consumers to raise their health literacy</td>
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<td>Ensure equitable rollout of the PCEHR across the consumer and care providers</td>
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**Question 1 – What are the priorities / factors that we need to address if we are to successfully implement a national PCEHR?**

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| **Funding models need to be aligned to support adoption** | For the PCEHR to be useful it must be used in both the hospital and community health domains, which may require alignment of funding models to support adoption and usage of the PCEHR.  
At present there are very little incentives that drive a focus on the continuity of care across different parts of the health sector. |
| **Get the right local feeder systems / IT capabilities in place** | Ensure that appropriate focus is placing on getting the right local ‘feeder’ systems (i.e. local care provider IT systems) in place that will allow information to flow into and out of the PCEHR.  
Focus on getting the quality of the data within feeder systems up to an appropriate level, so that information going into the PCEHR is also of a quality level.  
Ensure that basic infrastructure (i.e. computers and internet access) is available. |
| **Implement the PCEHR in small, manageable chunks** | Ensure that the scope is narrow enough that it remains manageable.  
Ensure the program is manageable by pursuing small, well-defined pieces and having clear communication and education around each of these pieces. |
| **Clear governance model spanning the Government, consumers, care providers and industry** | Need to ensure there is clarity regarding the overall governance model for implementing and operating the PCEHR.  
Need to clarify who is driving the program / leadership amongst these stakeholders, and that the roles and responsibilities of stakeholders are clearly defined and broadly understood.  
Acknowledgement that the implementation of a PCEHR is a community effort, with no one able to take the full leadership and control position – however, in a community effort the roles and responsibilities need to be clearly defined. |
Question 2 – What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

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<tr>
<td>Uncertainty regarding medical-legal implications of PCEHR</td>
<td>• Ensure a focus on exploring and resolving concerns around medical-legal uncertainties in regard to the role and responsibilities of care providers in accessing and using the PCEHR.</td>
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</tbody>
</table>
| Increased inequity between advantaged and disadvantaged             | • Need to make sure that the PCEHR doesn’t further increase the gap between poorly educated and socio-economically disadvantaged parts of society, and those who are well educated and socially-economically positioned  
  • The PCEHR should be equally accessible to all parts of society, and especially those in priority cohorts. |
| Acknowledging initial pain and inefficiencies, and addressing resistance this generates | • The introduction of a new system such as a PCEHR is going to introduce inefficiencies and challenges in its usage at the beginning (i.e. same as any new IT system)  
  • Whilst these can be minimised, there needs to be a focus on the fact that this will occur and how potential resistance is addressed. |
| Scarcity of resources to implement the PCEHR                         | • The potential shortage of people resources with the necessary skills to design, construct and implement the PCEHR, and to carry out all the engagement, consultation, education and training that the program will require. |
| Lack of appropriate maturity of technology infrastructure in some parts of the health sector | • The lack of appropriate computerisation and technology in some parts of the health sector (e.g. allied health, community health) will be an issue to those care providers being able to utilise the PCEHR. |
| Care providers potentially acting on incomplete information          | • Care providers have concerns that they may be making clinical decisions based on incomplete information (i.e. patient decides to hide parts of the health record, another care provider decides not to include certain information in the health summary, etc) |
| Quality of existing health information in local care provider systems and its suitability for use in the PCEHR | • Quality of data within existing systems in the health sector may pose a challenge to its usage as part of the PCEHR (i.e. lack of structured data, inconsistent or lack of usage of appropriate terminologies and standards, etc). |
| Insufficient financial, people and other resources within care providers to implement local PCEHR changes | • Capacity of some parts of the sector to implement change and be able to participate in using the PCEHR. For example, aged care, community care and other NFPs who may not be able to find the financial / people / other resources to implement new systems and train / educate their personnel. |
### Workshop 2 – Implementation opportunities and quick wins

**Question 1** – What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date?

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| **Discharge summaries**              | • Discharge summaries to be routinely generated following acute care visits and contributed to the PCEHR, where they are accessible  
• Increase the connectivity of the public hospital sector with the primary care sector  
• Increasing level of maturity of discharge summaries across the health sector. |
| **Secure messaging**                 | • Delivery of wide-spread secure messaging within the health sector, which is simple to use and has low transaction costs associated with it.          |
| **GP health summaries**              | • Generation of health summaries from the primary care community and contribution to the PCEHR  
• Summaries need to be tight, focused summaries that communicate essential information quickly to care providers – cannot be blobs or chunks of large amounts of information. |
| **Medications**                      | • List of current medications that the patient is currently on  
• Potentially a record of dispensed and/or prescribed medications would be advantageous, but may be more challenging to achieve within the timeframe (some viewed as being aspirational)  
• Medications seen as important to go after given the importance of medications management in delivering benefits associated with eHealth. |
| **Pathology / Diagnostic Test Results** | • Through leveraging the highly computerised diagnostic services sector, it may be possible to incorporate this type of information into the PCEHR  
• Most likely this would be approached opportunistically. |
| **Key elements of the core PCEHR infrastructure** | • National consumer and care provider portals for accessing information within the PCEHR  
• Indexing services  
• Core PCEHR repositories. |
| **Implementation of IHI across key segments of the health sector** | • Implementation of the IHI into systems within key parts of the health sector, such as the acute, primary and allied health. |
| **Patient health diary**             | • Quick, easy win, and would be a good mechanism for driving close, active engagement with consumers through the PCEHR  
• Potentially other tools and functions for self health management could also be offered. |
| **Achieving a critical mass that will continue to carry the PCEHR and eHealth program forward** | • In the next 18 months it is critical that the PCEHR Program nurture, develop and achieve the ‘nucleus’ of a community that will continue to drive and sustain the PCEHR and eHealth journey in Australia over the years that follow. |
| Question 2 – What are the key assets in situ today that we should focus on leveraging in the first instance? |
| Theme | Supporting points |
| National data registries operated by Medicare (e.g. MBS, PBS) | • We have a number of comprehensive national data registries operated by Medicare that could potentially be utilised to populate a PCEHR – PBS, MBS, ACIR  
• Key priority is to engage Medicare early and bring them on the PCEHR journey, and address legislative questions and questions around what the information would be used for. |
| High level of computerisation in general practice, pharmacy and diagnostic services | • The GP, pharmacy, diagnostic services (i.e. imaging, radiology, pathology) segments of the sector are highly computerised and have substantial data / information assets in place today. These assets could potentially be integrated with the PCEHR. |
| The trusted and personal relationship between a care provider and their patient | • The trusted and personal relationship between a patient and their care provider could potentially be leveraged as a means to educate and build awareness of consumers amongst the role and benefits of the PCEHR (i.e. face-to-face change and adoption agent). |
| Existing domestic and international standards | • Various standards exist for eHealth that we should be adopting, or using as a foundation for localised Australian eHealth standards (i.e. don’t re-invent the wheel). |
| Goodwill and general consensus that a PCEHR / eHealth is needed | • There is a general consensus amongst consumers, providers and industry that something needs to be done now. This goodwill needs to be harnessed by the PCEHR Program. |
| Existing eHealth projects, initiatives and communities of practice | • We need to acknowledge that we are not going to have a depth of eHealth capability across the national health system  
• We need to identify early demonstration, pilot and other eHealth projects and initiatives that are scalable and that we should be directing additional resources towards whilst we put in place the necessary infrastructure for a national eHealth system  
• Various communities of practice are already working well together and tightly around eHealth, so we should be identifying and leveraging those. |
| Professional groups, associations and networks of practitioners | • Australia has very strong professional groups, associations and networks of practitioners that could be leveraged for education, awareness building, selling benefits and providing targeted, focused stakeholder engagement. |
| Skills and knowledge in clinical research and outcomes / benefits measurement | • Australia has very strong skills and experience in designing and running clinical research activities, and measuring outcomes and benefits  
• Such skills and knowledge could be leveraged to assist in determining ways to measure the benefits of the PCEHR, which in effect is a clinical intervention (i.e. a new clinical product). |
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<th>Question 3 – What do we need to do to drive initial consumer and care provider adoption of the PCEHR? (Assuming industry / supplier investment has been addressed)</th>
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<tr>
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| Ensure the PCEHR is usable, useful and adds value to the delivery of care | • The PCEHR must be simple-to-use / usable, useful and add value to the way that clinical care is delivered  
• The PCEHR must change the practice of care in a positive way for both consumers and care providers. |
| Ensure the information within the PCEHR is directed towards consumer and care provider usage | • Ensure that the information that the PCEHR captures and presents is orientated to the needs of consumers and care providers, not to the monitoring and measurement of the broader health system. |
| Provide tools to consumers that assist them in managing their own health | • Ensure that the PCEHR provides the means of engaging consumers through provision of tools that help patients’ self-care  
• Enables them to take a more active role in their care and gets them more engaged with the PCEHR. |
| Ensure registration is simple and consistent for consumers | • Ensure that registration processes are simply and easy to understand, especially for those with disabilities and accessibility challenges  
• Ensure consistency of registration rules and processes across all States and Jurisdictions. |
| Ensure the PCEHR can be easily integrated into existing care processes | • Care providers (such as GPs) are time poor and don’t traditionally invest heavily in training. As such the products they use need to work easily, first-time and be intuitive. It shouldn’t place additional burden and complexity into their existing care processes. |
| Ensure the PCEHR contains useful and meaningful information from the July 2012 | • The information within the PCEHR needs to meaningful and consist of useful summary information  
• To ensure ongoing usage, consumers and care providers need to find useful information within the PCEHR the first time they use it. |
| Build consumer and care provider confidence in the system through early and ongoing engagement. | • Close engagement with consumers and care providers throughout the design, implementation and operation of the system  
• Ensure that key concerns such as privacy, consent, accuracy and provenance of information is addressed. |
Appendix C – Group 2 Workshop Summary

Facilitator: Andy Peck (Deloitte)
Scribe(s): Pablo Arias (Deloitte) and Mark Watson (Deloitte)
Panel Members:
- Dr Geoff Sayer, President, Medical Software Industry Association (MSIA)
- Dr John Zelcer, Head of Strategy, NEHTA
- Mr Leigh Donaghue, Accenture

Summary of workshop themes / insights

<table>
<thead>
<tr>
<th>Key Questions</th>
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</table>
| What are the priority factors that we need to address if we are to successfully implement a national PCEHR? | • Clear understanding of benefits for each stakeholder group  
• Effective stakeholder engagement and communication  
• Focused and pragmatic program of work  
• Clear governance model incorporating stakeholders  
• Control and ownership of information  
• Data security and privacy. |
| What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR? | • Shift in Mindset / Cultural attitudes  
• Political will  
• ICT investment in the healthcare sector  
• Timeframes for implementation  
• Availability of funding  
• Delivers clinician benefits. |
| What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date? | • Conformance, Compliance & Accreditation (CCA)  
• Security and access  
• Benefit and outcome measurement approach. |
| What are the key assets in situ today that we should focus on leveraging in the first instance? | • Existing policy and legislation  
• Existing funding available  
• Goodwill  
• Existing projects, technology and vendors delivering EHealth solutions  
• Existing health data / information assets. |
Key Questions | Workshop themes / insights
--- | ---
What do we need to do to drive initial consumer and care provider adoption of the PCEHR? | • Consumers adoption:
  - Manage the expectations of what can realistically be delivered to consumers within 18 months
  - Clearly define and communicate what the PCEHR is
  - Ensure consumers have the ultimate choice to participate
  - Ensure that it is simple to use.
• Care provider adoption:
  - Needs to improve current business processes
  - Ensure PCEHR data is accurate and reliable
  - Ensure the benefit for consumers is clear and tangible.

Workshop 1 – Key considerations for the implementation of the PCEHR

**Question 1 – What are the priority factors that we need to address if we are to successfully implement a national PCEHR?**

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| Clear understanding of benefits for each stakeholder group | • There is a need to consider each of the major stakeholder groups and the benefits which will make a PCEHR successful from their perspective
  • For example, for clinicians, it has to be useful, effective and make their work easier; for consumers, it has to be simple to use; for industry (vendors), it must satisfy commercial aspects. |
| Effective stakeholder engagement and communication from the beginning | • Ensure that effective change and communication strategies are in place at the beginning. Need to recognise that this is a long term program ‘journey’ which will require continual engagement with various stakeholder groups thus education and communication will be key elements for improving awareness and adoption. |
| Focused program of work | • Discussion on developing a coordinated program of work which builds upon the foundation of lead sites
  • Desire to ensure that bottom-up initiatives / projects are aligned with broader top-down programs. |
| Clear governance model incorporating stakeholders | • Ensuring there is a strong Governance Framework in place to monitor delivery of eHealth whilst recognising the various expectations from stakeholder groups
  • Ensuring consumer representation and input – they need a ‘seat’ at the table. |
| Control and ownership of information | • These concepts need to be clearly defined and guidelines / rules developed to determine who ‘owns’ information in the PCEHR and what controls do consumers have – particularly with regards to updating / changing health info. |
| Data security and privacy | • These are likely to be the biggest barriers / constraints to the adoption efforts. Requires robust processes and communication effort to address consumer concerns. |
### Question 2 – What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

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<tr>
<td><strong>Shift in Mindset / cultural attitudes</strong></td>
<td>• There is a need for various stakeholder groups to ‘shift their mindset’ from a silo view of information towards the concept of ‘sharing information’ and making the patient the centre. There is a strong need to manage the various stakeholder group’s expectations and perspectives.</td>
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<tr>
<td><strong>Political will</strong></td>
<td>• Ensuring ‘political willingness’ to make a national PCEHR work; balancing the views / requirements between State and Commonwealth bodies and minimizing ‘sovereign risk’.</td>
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</table>
| **ICT investment in the healthcare sector** | • A traditionally low level of ICT investment in the Healthcare sector – recognition is required that large capital investment in ICT will be required, particularly in the first years, to develop the infrastructure and connectivity requirements to make a PCEHR work  
  • Focusing on a single sector of Healthcare – allied health traditionally has low ICT investment and knowledge although they are important part of supporting healthcare. Need to ensure the solution encompasses all sectors. |
| **Timeframes for implementation**          | • Need to carefully consider the timeframes being proposed to deliver outcomes – particularly from vendor’s perspectives. Vendors are likely to already have a pipeline of development work so a mechanism for prioritizing requirements and engaging with vendors is required. |
| **Availability of funding**                | • Funding – how will the Government ensure the sustainability beyond 2012? Will additional funding be provided? There is a need to recognise that eHealth will require significant capital expenditure, above and beyond Government funding. |
| **Delivers clinician benefits**            | • Ensuring the initial solution delivers benefits to clinicians – particularly GPs whom are in a position to influence adoption to consumers.                                                                 |

### Workshop 2 – Implementation opportunities and quick wins

### Question 1 – What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date?

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<tr>
<td><strong>Conformance, Compliance &amp; Accreditation (CCA)</strong></td>
<td>• Implementation of the IHI across various sectors can be achieved but will require significant collaboration and negotiation by all stakeholder groups. Will also require an effective CCA process in place.</td>
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<tr>
<td><strong>Security and access</strong></td>
<td>• Focus on the Security and Access Frameworks – leverage what has been developed from the lead implementation sites; apply these lessons to new projects and create momentum for a national roll-out.</td>
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<tr>
<td><strong>Benefit and outcome measurement approach</strong></td>
<td>• Ensure that there is mechanism in place to capture lessons and value from the first / second wave of lead implementation sites. Ensure that the outcomes and benefits can be measured, monitored and captured so that these can be applied to broader projects.</td>
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### Question 2 – What are the key assets in situ today that we should focus on leveraging in the first instance?

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<tr>
<td>Existing policy and legislation in place</td>
<td>• The government is committed to delivering on Health Reform and eHealth will be a key driver in delivering these reforms.</td>
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<tr>
<td>Existing funding available</td>
<td>• The Government has committed $467M in funds to support the development and implementation of eHealth across the nation</td>
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<tr>
<td>Goodwill</td>
<td>• There is a tremendous amount of goodwill amongst the various stakeholder groups who recognise the benefits of a platform such as the PCEHR can deliver.</td>
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</table>
| Existing projects, technology and vendors delivering eHealth solutions | • There are vendors and industry partnerships in place which are already delivering eHealth services across various sectors (as demo throughout conference)  
• Leverage the knowledge, expertise and solutions in place now and consider in broader national context. |
| Existing health data / information assets   | • There is already good data about patient health stored in various (separate) Healthcare systems. Need to consider the mechanism for securely bringing these disparate information sources together. |

### Question 3 – What do we need to do to drive initial consumer and care provider adoption of the PCEHR? (Assuming industry / supplier investment has been addressed)

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| Consumer Adoption success factors             | • We need to carefully manage the expectations of what can realistically be delivered to consumers within 18 months  
• We need to clearly define and communicate what the PCEHR really is – what does it mean from a consumer’s perspective  
• Need to ensure consumers have the ultimate choice – opt in or opt out and make this process easy  
• Need to ensure that it is SIMPLE to use. |
| Care Provider PCEHR Adoption success factors | • It needs to improve current business processes. If the PCEHR complicates current processes or is not effective, GPs won’t use it  
• Need to ensure that PCEHR data is accurate and reliable – otherwise will undermine confidence in the system (thus CCA is critical)  
• Will adopt the PCEHR is the benefit for consumers is clear and tangible. |
## Appendix D – Group 3 Workshop Summary

**Facilitator:** Collette Rogers (Deloitte)  
**Scribe(s):** Nigel Foxwell (Deloitte) and Erin Sanderson (Deloitte)  
**Panel Members:**  
- Mrs Heather Weiland, National President, Country Women's Association of Australia  
- Dr Nathan Pinskier, Clinical Lead, NEHTA  
- Ms Lisa Pettigrew, Director – Health Services, CSC

### Summary of workshop themes / insights

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<thead>
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</table>
- Privacy, security and quality of information within the PCEHR  
- Establishing a compelling case for change with consumers and care providers  
- Clarity of scope regarding what will be delivered when  
- Create surety for investors such as vendors and care providers  
- Building momentum and drive sustainability through ‘value adding’ applications  
- The need to balance consumer engagement and involvement in the PCEHR  
- Vendor reform / adoption. |
| What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR? |  
- Lack of consumer understanding and demand  
- Not addressing related implementation requirements at the local care provider level  
- Management of scope in order to be able to deliver practical, tangible outcomes by July 2012  
- Failure to have core elements in place at the right times (i.e. standards, core infrastructure)  
- Scarcity of resources  
- Lack of vision. |
| What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date? |  
- Government funded items have high likelihood of success  
- Implementation should be limited  
- Improvements to existing capabilities  
- Encourage private investment  
- Basic patient consent. |
Appendix D – Group 3 Workshop Summary

Key Questions

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<td>Use existing data repositories (e.g. Medicare, ABS)</td>
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<td>Utilise existing networking and communication forums</td>
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<td>Utilise existing high technology penetration in doctors and pharmacists</td>
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<td>Utilise social media to engage consumers and sell benefits of the PCEHR.</td>
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<tr>
<th>What do we need to do to drive initial consumer and care provider adoption of the PCEHR?</th>
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<td>Education and consultation of consumers</td>
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<td>Communicate the benefits to consumers and care providers</td>
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<tr>
<td>Engage care providers regarding benefits to, and impact to their clinical processes</td>
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<tr>
<td>Make it easy for users (simple to use)</td>
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<td>Establish a clear vision of the role of the PCEHR for consumers and care providers.</td>
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Workshop 1 – Key considerations for the implementation of the PCEHR

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<td>Theme</td>
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<tr>
<td>Privacy, security and quality of information within the PCEHR</td>
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<tr>
<td>Establishing a compelling case for change with consumers and care providers</td>
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<tr>
<td>Clarity of scope regarding what will be delivered when</td>
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<tr>
<td>Create surety for investors such as vendors and care providers</td>
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<tr>
<td>Building momentum and drive sustainability through ‘value adding’ applications</td>
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<tr>
<td>The need to balance consumer engagement and involvement with data integrity of the PCEHR</td>
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<td>Supporting points</td>
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<tr>
<td>Maintaining the privacy of information and the security of access is a critical enabler to uptake</td>
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<tr>
<td>The quality of information must be maintained at an acceptable level, understanding that some areas may have very low quality.</td>
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<tr>
<td>We must build the case for change with clinicians and the public</td>
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<td>This must be done to overcome inertia and scepticism of past failures.</td>
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<tr>
<td>The communications must be clear about what can / will be delivered and within what timeframe.</td>
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<td>There must be an ongoing focus on standards of systems and processes to provide surety to vendors and adopters in ICT investment</td>
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<td>This must be complimented by realistic goals and timeframes so as not to dissuade participants from realistically expecting success.</td>
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<tr>
<td>Build momentum and drive sustainability through smart initiatives aligned to how people want to work / operate and high value initiatives.</td>
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<tr>
<td>Difficult decisions will need to be made regarding the extent to which, if any, the patient will have a say in being able to include / exclude items within his / her PCEHR. The GP community strongly feels that little to no interaction is mandatory in order to ensure that the record is useful</td>
</tr>
<tr>
<td>Medication management is a number one priority with patients, and could be a good focal point in the beginning.</td>
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</table>
### Question 1 – What are the priority factors that we need to address if we are to successfully implement a national PCEHR?

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| The vendor industry will undergo changes in scope and interoperability requirements and therefore needs to be engaged throughout roll-out | - Other stakeholders need to be mindful of unrealistic timeframes when expecting high quality vendor options  
- There needs to be as much structural reform to the IT vendor industry as to health itself as the vendors have built up around a different environment  
- Need to involve in all parts of the dialogue, need to incentivise properly. |

### Question 2 – What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

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| Lack of consumer understanding and demand              | - If the public does not understand, see the benefits, and demand the change, it is likely to fail  
- Requires stakeholder engagement and robust education  
- This could occur through poor communication, misaligned expectations and implementation failures. |
| Not addressing related implementation requirements at the local care provider level | - The program must recognise the need for required changes to support structures – i.e. Hospital and Primary Care IT systems, staff and processes  
- This is a post-implementation point of view but goes to sustainability and success. |
| Management of scope in order to be able to deliver practical, tangible outcomes by July 2012 | - Careful not to spread ourselves so thin and trying to build the entire solution by 2012. |
| Failure to have core elements in place at the right times (i.e. standards, core infrastructure) | - All of the core building blocks must be ready in time for each part of the implementation program  
- This includes the relevant standards and support structures  
- NBN availability will greatly affect ability to roll out the services to remote areas – this could defeat purpose of facilitating remote eHealth  
- Without this there will be serious delays or remediation work required. |
| Scarcity of resources                                  | - There must be adequate numbers of skilled resources to manage the deployment within the timeframe  
- This includes managing individual projects and large programs  
- There must be enough people engaged to ensure adequate support and education of consumers and healthcare workers. |
Question 2 – What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

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| A clear, stated, and actionable vision is necessary to move forward in a sustainable manner | • Ensuring that system implementation efforts do not just automate current processes, but also include innovative and visionary future capabilities  
• There needs to be clarity around ownership of the various areas of the eHealth implementation and operation, and a clear vision must be established in order to allow for all of the pieces of the PCEHR and further eHealth developments to come together realistically, in a reasonable time frame  
• The GP community feels that once a clear vision is established, action will follow. |
Workshop 2 – Implementation opportunities and quick wins

Question 1 – What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date?

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| Government funded items have high likelihood of success | • Those initiatives that have Govt funding are most likely to succeed as they will have some certainty and be driven by solid timelines  
• Organisations making diverse investment decisions will not be able to act in unison quickly. |
| Implementation should be limited                 | • The realistic goals of implementation should be limited to increase the chances of success  
• We cannot be all things to all people in this timeframe. |
| Improvements to existing capabilities             | • Successful implementation should start with extending current capabilities to build on success. |
| Encourage private investment                      | • The sooner we can get momentum to facilitate health records in the PCEHR sense in the private sector, the sooner we will be on track towards building what the government aspires to. |
| Basic patient consent                             | • Must be basic and binary, cannot labour over this debate. |

Question 2 – What are the key assets in situ today that we should focus on leveraging in the first instance?

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<th>Theme</th>
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<tr>
<td>Use existing data repositories</td>
<td>• Utilisation of Medicare information, ABS data sets (especially in epidemiology).</td>
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<tr>
<td>Utilise existing networking and communication forums</td>
<td>• There are a range of education and community of practice forums that can be leveraged in the adoption and uptake process as well assisting in communication of changes and benefits.</td>
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</table>
| Utilise existing high technology penetration in doctors and pharmacists | • There is a high usage of desktop computer technology in GP’s and Pharmacies that can be leveraged in delivery of eHealth systems and programs  
• Medical software vendors as a group can also be utilised through their exposure and involvement with these users as well. |
| Utilise social media to engage consumers and sell benefits of the PCEHR | • Utilise social media as a way of engaging the community and selling benefits  
• Utilising visual media online to provide more real-life stories and stories of eHealth project successes  
• There is also a large community of young people with chronic conditions that can assist through their knowledge of both technology and medical terminology and situations. |
### Question 3 – What do we need to do to drive initial consumer and care provider adoption of the PCEHR? (Assuming industry / supplier investment has been addressed)

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| **Education and consultation of consumers** | • This needs to be done face-to-face in many consumer segments to ensure that the right message is delivered in the right format for the various audiences  
• People need to feel involved and to be a part of the change  
• People need to be shown various perspectives to ensure they can understand how things will work  
• We need to remember – this is their information! |
| **Communicate the benefits to consumers and care providers** | • Identify upfront how things should work, why and the direct and indirect benefits  
• This should then guide all activities and be continuously reviewed to make sure we are on track  
• We must build the business case and the use case of meaningful and useful changes. |
| **Engage care providers regarding benefits and impact to their clinical processes** | • Healthcare professionals must be able to be convinced of the benefits, but also be assured that they will not have any increase in workload  
• The impacts of the change must be understood from the perspective of all participants  
• This POV comes from understanding that HCP’s are stretched and overworked and will not support more work – this must be seen as an efficiency improvement and a way to help more people with the same resources. |
| **Make it easy for users (simple to use)** | • Any change or new solutions must be very easy for consumers  
• We should sell the outcomes of the change not the details of the change (sell the sizzle not the sausage)  
• New technology should be “under the bonnet” for consumers, they just need to know how this will make their lives easier and better  
• Could be useful focusing on particular trial groups to grow initial interest amongst consumers – e.g. pregnant women were shown to be willing to pay [the highest] amount for a PCEHR-type service. |
| **Establish a clear vision of the role of the PCEHR for consumers and care providers** | • Patient groups and HCP’s need have a clear understanding of what eHealth is, why it is useful to them, and how it will improve quality of care and potentially quality of life  
• Simplicity above all as a marketed focal point. |
Appendix E – Group 4 Workshop Summary

Facilitator: John Meacock (Deloitte)
Scribe(s): Jacki Hatfield (Deloitte) and Linda Chai (Deloitte)
Panel Members:
- Ms Carol Bennett, Executive Director, Consumers Health Forum of Australia
- Ms Rosemary Huxtable, Deputy Secretary, Department of Health and Ageing
- Mr Jon Hughes, Director, Smart Health Solutions

Summary of workshop themes / insights

<table>
<thead>
<tr>
<th>Key Questions</th>
<th>Workshop themes / insights</th>
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</table>
| What are the priority factors that we need to address if we are to successfully implement a national PCEHR? | • Consumer engagement, participation and education as it will be consumers who will drive adoption of eHealth at the end of the day
• Expectation management around what will be delivered and when. In particular, there is a need to ensure that users of eHealth will have a positive first experience with the new technology / processes. This will engender support to eHealth and prevent disengagement by users whose expectations may not have been met by the reality of the solutions being provided
• Appropriate funding and support models, along with sustainable commercial models. There is a perceived mismatch between those who will need to make investments to make eHealth a reality and those who will reap the benefits of eHealth. As such, funding and support structures will be required to compensate for this mismatch and therefore promote the perceptions of eHealth's economic viability for each of the sectors that will need to participate
• Recognition that eHealth's success requires that time / effort be given to look at changing the way that work is done at a local provider level. As such, focus needs to be given to looking at:
  - The cultural changes that will be required to promote a culture that embraces technology
  - Embedding the use of technology as a 'normal' part of clinical practice
  - Change management activities that need to be undertaken to support workers whose way of performing work is changing. It is however recognised that health has already undergone so much change that people should be more open to change today than they were historically. |
Appendix E – Group 4 Workshop Summary

Key Questions

Workshop themes / insights

What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

- Insufficient financial / capital resources – this is related to the mismatch between those who must invest versus those who will receive the benefits of eHealth and the subsequent need to create viable commercial environments that encourage parties to invest
- Inability to deliver what was promised in timescales. The 19 months to June 2012 is not a long time to gear up for a major transformational change and deliver benefits that will in turn promote ongoing funding
- Inability to address concerns around funding models and impact to care delivery processes
- There are many stakeholders that will be impacted by eHealth and as such there is great complexity involved in effectively engaging with all of these stakeholders to successfully deliver a comprehensive outcome.

What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date?

- Leverage tried and tested existing systems and standards because much work and effort has gone into them and this should not be wasted
- The foundation to demonstrate initial benefits and drive further funding
- Clearly define a minimum data set (e.g. medications, diagnosis, pathology / imaging, discharge summary) that represents the base components that eHealth needs to deliver to support care delivery and commit to delivering these first
- Focus on priority cohorts where sharing of information will deliver benefits – in particular look at those with chronic diseases and those who are disadvantaged.

What are the key assets in situ today that we should focus on leveraging in the first instance?

- Existing care delivery and management models currently in place today. Technology must be delivered in such a way as to embed it within the way care is delivered today. Over time, it is expected that the way technology is used will evolve alongside the way care is delivered however
- Leverage technology assets in mature segments (e.g. diagnostic services, acute services) who have already successfully adopted computers / technology.

What do we need to do to drive initial consumer and care provider adoption of the PCEHR?

- Clear governance involving consumers
- Broad level of active stakeholder engagement that includes nursing and allied health as these sectors very much need the information that can be provided by a PCEHR.

Workshop 1 – Key considerations for the implementation of the PCEHR

Question 1 – What are the priority factors that we need to address if we are to successfully implement a national PCEHR?

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<thead>
<tr>
<th>Theme</th>
<th>Supporting points</th>
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<tbody>
<tr>
<td>Consumer engagement, participation</td>
<td>- Create public awareness of the benefits of the system to promote adoption</td>
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<td>and education</td>
<td>- Set clear expectations around what will be delivered and what will not be</td>
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<td>delivered. This will promote positive first experiences with eHealth and this</td>
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<td>engender support rather than disappointment that what has been delivered fails to</td>
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<td></td>
<td>live up to expectations</td>
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<td>- Improve health literacy through education.</td>
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</table>
### Question 1 – What are the priority factors that we need to address if we are to successfully implement a national PCEHR?

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<th>Theme</th>
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| **Expectation management around what will be delivered and when** | • Identify clear milestones for delivery and clearly define what will be delivered at these milestones  
• Demonstrate and celebrate achievements  
• Ensure priorities are set to achieve greatest amount of value to consumers and healthcare providers. Pick off the ‘low hanging fruit’  
• Take advantage of the strong goodwill and support from consumers to build momentum in the marketplace. |
| **Appropriate funding and support models, along with sustainable commercial models** | • Implement funding models and tools that align with desired changes. This will in turn promote investment by improving the economic viability of the investing in eHealth  
• Take a big picture approach which includes cost benefit analysis of multiple sectors and services impacted through the change and improvements anticipated by the PCEHR  
• Utilise the lessons learned through lead site monitoring of savings which have cascaded through the system  
• Create and define sustainable commercial models so that ongoing investment in eHealth occurs and the system continues to flourish and evolve over time. |
| **Focus and support for cultural and workflow design / change management aspects of local provider adoption** | • The system will impact clinical practice and it is critical that education, workforce redesign and strong stakeholder engagement is part of the implementation of the system  
• Put a significant amount of ‘thought’ into how the workflow can be efficient and back that with appropriate incentives to drive that change  
• Address upfront costs and time of preparing for the PCEHR in areas such as data cleansing, training, computer system design to enforce codified data entry, and other quality initiatives that are required to ensure sharing of relevant and trusted information. |

### Question 2 – What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

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| **Insufficient financial capital resources** | • A complicated federated model of funding may not sufficiently address the need for change in local, state and national level  
• Lack of investment in current technology solutions to bring them to a reasonable state and as such an inability for these solutions to integrate with others  
• Lack of investment in areas where there is no commercial benefit to systems yet integral value to the PCEHR structure and function  
• Non-contemporary funding models which continue to support non-collaborative and siloed care. There was a sense that the commercial environment in health delivery at present does not support the sharing of information between providers, in fact at times it encourages the reverse. |
Question 2 – What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

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<tr>
<td>Inability to deliver what was promised in timescales</td>
<td>Significant risk of disengagement from key participants such as the consumers or providers if expectations are not met. This was however primarily focused on ensuring that participants have a good first experience with eHealth prior to its release for general consumption.</td>
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<tr>
<td>Inability to address concerns around funding models and impact to care delivery processes</td>
<td>There appears to be a lack of confidence that government will be able to effectively unwind the existing funding model that promotes siloed behaviour and replace this with a funding model that in turn promotes the sharing of information between providers.</td>
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<tr>
<td>Extreme complexity of collaboration across some many different stakeholders</td>
<td>Working on multiple fronts to enable collaboration (NeHTA, NBN, DoHA, State, Commonwealth, Medicare, industry competitive environment, providers, consumers, private health, privacy, consent, etc) between the many stakeholders of eHealth will be difficult and there is limited confidence that the sector will be able to achieve the levels of collaboration required.</td>
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Workshop 2 – Implementation opportunities and quick wins

Question 1 – What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date?

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| Leverage tried and tested existing systems and standards | • Stay away from focus on national infrastructure dependencies as there is too much time and money required to progress in an efficient and timely manner. Focus instead of firmly scoped projects that can in fact deliver something tangible within a limited footprint  
• Be aware of what is not working and ensure these risks are mitigated / avoided – i.e. learn from the lessons of the past  
• Use skills and capability most readily available by leveraging for example the high levels of computerisation that already exist in some sectors  
• Development of a partnership model which enhances capacity to deliver by addressing infrastructure, governance and change management.                                                                                                                                                                                                                     |
| Foundation to demonstrate initial benefits and drive further funding | • Three items need to be achieved – 1.Capacity to register for PCEHR, 2. Indexing service and 3. Patient summary.                                                                                                                                                                                                                                                                                                                                                       |
| Clearly define a minimum data set (medications, diagnosis, pathology / imaging, discharge summary) | • Identify critical elements that need to be included to support care delivery and focus on making these available first  
• Be aware of making it less than what is useful, this will have a negative outcome for providers and patients through poor user experiences that fritter away the goodwill that is currently present for eHealth  
• Keep it simple in amount of information, should focus on drug lists, diagnosis, pathology / imaging and discharge summary.                                                                                                                                                                                                                                                                                      |
Question 1 – What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date?

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| Focus on priority cohorts where sharing of information will deliver benefits | • Focus on existing clusters where sharing information is of substantial benefit such as chronic disease management, maternal care, semi-retired / retired, care providers etc  
• Do not forget the disadvantaged for whom information sharing can provide enormous benefits (e.g. those with mild cognitive impairment). |
**Question 2 – What are the key assets in situ today that we should focus on leveraging in the first instance?**

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| **Existing care delivery and management models currently in place today** | • Geelong model which involves various providers in local area to benefit consumers  
• Chronic disease management models are already in place. Put technology alongside these mature models of care delivery  
• Lead site consumer engagement experiences  
• Aged Care / Residential facilities already do a lot promote the sharing of information but this process could be enhanced with the use of technology. |
| **Leverage technology assets in mature segments (e.g. diagnostic services, acute services).** | • Pathology’s sophistication in information management should be leveraged as this sector is already heavily computerised  
• Acute service sharing of information amongst multiple providers. |

**Question 3 – What do we need to do to drive initial consumer and care provider adoption of the PCEHR? (Assuming industry / supplier investment has been addressed)**

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<td><strong>Clear governance involving consumers</strong></td>
<td>• Provide strong governance and communicate this effectively to engage consumer groups.</td>
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| **Broad level of active stakeholder engagement**| • Provide clear channels of communication and engagement models  
• Take advantage and take care to maintain good will and collaborative environment.                                                                                                                                   |
Appendix F – Group 5 Workshop Summary

Facilitator: Franco Santucci (Deloitte)
Scribe(s): Rodger Ganter (Deloitte) and Linda Chai (Deloitte)
Panel Members:
- Prof Michael Legg, Health Informatician, Australian Healthcare & Hospitals Assoc.
- Dr Andrew P Howard, Chief Information Officer, Department of Health Victoria
- Dr George Margelis, Health Industry Manager, Intel Australia

Summary of workshop themes / insights

<table>
<thead>
<tr>
<th>Key Questions</th>
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</table>
| What are the priority factors that we need to address if we are to successfully implement a national PCEHR? | • Benefits to key stakeholders  
• Clarity on what is being delivered  
• Solution scope and approach. |
| What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR? | • Current timeframes  
• Level of consumer knowledge  
• Current business models  
• Current infrastructure within the health sector. |
| What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date? | • Summary health profile with allowances for some consumer input  
• Use of existing information stores to populate the PCEHR. |
| What are the key assets in situ today that we should focus on leveraging in the first instance? | • Existing information stores / assets within the health sector. |
| What do we need to do to drive initial consumer and care provider adoption of the PCEHR? | • Address software integration issues  
• Drive adoption through key stakeholders. |
## Workshop 1 – Key considerations for the implementation of the PCEHR

### Question 1 – What are the priority factors that we need to address if we are to successfully implement a national PCEHR?

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| **Benefits to key stakeholders** | • Adoption and sustainability will be driven by patients and clinicians as both have to elect to use the PCEHR  
• Therefore the PCEHR has to offer immediate and long term benefits to both patients and clinicians if it is to succeed  
• The Commonwealth needs to work with consumers groups to really understand what they want  
• There may be a need to consider reimbursing clinicians for contributing to the PCEHR as the clinician entering data into the PCEHR is likely to accrue little immediate benefit from doing so (especially true in the case of the GP who is responsible for setting up a patient’s record). |
| **Clarity on what is being delivered** | • The Commonwealth needs to set clear expectations around what will be delivered in Phase One  
• In particular the Commonwealth needs to identify what form the record will take, what level of information it will contain and who will be able to access it. |
| **Solution scope and approach** | • The PCEHR needs to be accessible by all health practitioners not just clinicians  
• The PCEHR solution needs to be built using an incremental and iterative approach to delivery  
• Given the very tight timeframes the PCEHR solution will need to be built around existing information stores and utilise current infrastructure and standards  
• The Commonwealth needs to publish clear objectives and KPIs and report on progress against these goals. |

### Question 2 – What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

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| **Current timeframes**       | • The current timeframes are extremely tight  
• Given the timeframes the solution will need to be very simple and should be based around existing infrastructure  
• The Commonwealth Set realistic expectations. |
Question 2 – What are the most likely barriers or constraints that we have to take into account as we move towards the implementation of a national PCEHR?

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| Level of consumer knowledge | • The PCEHR will not succeed without consumer buy-in and therefore the consumers need to understand more about the PCEHR and how it will benefit them  
• The current level of consumer knowledge is low and they will be susceptible to any negative stories that the media publishes  
• The Commonwealth needs to utilise its own media channels to ensure that PCEHR good news stories and successes are published. |
| Current business model  | • GPs current consult timeframes are very short  
• GPs focus on care delivery rather than record keeping, which they do not see as an important part of their job  
• As a result GP’s records are often poor in quality and incomplete  
• There is a need to set expectations with GPs that accurate recording keeping is an essential part of any consultation  
• There is mixed feelings regarding whether GPs should receive any additional benefits for doing what is seen as part of their job. |
| Current infrastructure  | • The current systems and telecommunications infrastructure is likely to negatively impact on the ability of the Commonwealth to rollout the PCEHR  
• Current systems do not talk to each other, in particular the GP systems  
• Telecommunications infrastructure is currently patchy, especially outside of metropolitan areas  
• Both of these factors have impacted on the ability of the NT to rollout their SEHR system. |

Workshop 2 – Implementation opportunities and quick wins

Question 1 – What do you think we can realistically achieve by June 2012 and where should we focus our efforts to deliver tangible outcomes by this date?

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| Summary health profile with allowances for some consumer input | • Concentrate on basic information only, at least the equivalent of an SOS bracelet  
• Do not expect much process change within the first phase of rollout as this takes time  
• Ensure that the basic profile makes allowances for consumer input as this makes patients feel involved and gets them used to interacting with the record |
### Question 2 – What are the key assets in situ today that we should focus on leveraging in the first instance?

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<tr>
<td><strong>Focus on existing information stores</strong></td>
<td>• Focus on integrating to existing stores of information, in particular those that are well structured and of high quality</td>
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<td>• MBS and PBS could be useful stores of information to include within the first phase of the PCEHR rollout</td>
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<td>• Existing health data sets could be a useful starting point for beginning to populate the repository with acute and primary care information</td>
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<td>• GPs already have 5,000-6,000 records in place through the MSIA</td>
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<td>• Pathology results need to be included</td>
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<td>• Radiology reports could be included but images are not planned for inclusion at this stage.</td>
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### Question 3 – What do we need to do to drive initial consumer and care provider adoption of the PCEHR? (Assuming industry / supplier investment has been addressed)

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<tr>
<td><strong>Address software integration issues</strong></td>
<td>• The current generation of systems do not talk to each other, although integrating to a central PCEHR is easier than enabling application-to-application level integration</td>
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<td></td>
<td>• Although referrals messages are already included in most GP desktops the implementation of referrals is not completely consistent and there is a need for a central repository to store this information.</td>
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<td><strong>Drive adoption through key stakeholders</strong></td>
<td>• Make sure that the PCEHR is seen as the primary record for all key stakeholders</td>
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<td></td>
<td>• Understand what job it is that these stakeholders do and how the PCEHR will enable them to do it better</td>
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<td></td>
<td>• Understand that the key stakeholder group includes Disability, Aged Care, Nursing and Allied Health who will all be key users of the systems.</td>
</tr>
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