This article covers the role of the GP in the PCEHR, the benefits in practice, getting started, progress over the first six months and other perspectives from a GP point of view.

The role of the GP in the national e-health record system

The personally-controlled e-health record (PCEHR) now known as the e-health record is intended to put individuals at the centre of their own healthcare. A person determines whether or not they have an e-health record (the system is opt-in), which providers can access it and what information goes into it. The e-health record is designed to make it easier for consumers to see their health information and share information about their health with providers of their choice. It is designed to be easy for consumers to share and easy for clinicians to contribute to and access. The national e-health record system was made available for consumer registration on 1 July 2012, and provider registration was available from 19 August 2012. I was fortunate to be one of the first consumers and providers to register for the national e-health record.

I have been working in rural general practice for almost 25 years, in a small town on the north coast of NSW. For me, rural general practice is the best job in medicine. As General Practitioners (GPs), we specialise in people not just in a few diseases or procedures and we have the opportunity to treat people from the cradle to the grave. The great joy of general practice is our role in sharing in the lives of our patients and our work with our communities over time. One of my first calls about the national e-health record was from the daughter of one of my patients, Sarah. Sarah is a nurse who works in Sydney, in one of the larger teaching hospitals. Sarah’s mother Jean, my patient, has had long-term issues with a variety of chronic illnesses, including heart failure, atrial fibrillation and diabetes. A few years ago, she suffered a stroke and has residual problems down her right side. She is managed on a number of medicines including warfarin and insulin and I share her care with her pharmacist, physiotherapist and occupational therapist. Jean lost her husband some time ago but continues to manage at home by herself; however, she does have occasional admissions to our local district hospital. Sarah was aware of the e-health record system and was keen to help her mother register. She understands that it is still early days but she sees the value of making Jean’s health information more accessible, and her mother has given Sarah her permission to access and manage her record.

Jean’s e-health record already includes uploaded Medicare Benefits Schedule (MBS) and Pharmaceutical Benefits Scheme (PBS) information. She also has an up-to-date shared health summary that includes her medical history, allergies and intolerances, medicines and vaccinations. I created Jean’s shared health summary from the health summary Jean already had at my practice. It is the same summary I already use for specialist and allied health referrals. To share this summary requires my practice software to look up Jean’s Individual Healthcare Identifier and link that number into her record. The process was really simple, just a couple of clicks—one click to get the summary up and after a discussion with Jean about the information we agreed to share just another click to share it.

My local district hospital is not yet registered for the e-health record; however, Sarah purchased an iPad for her mother, and Jean uses this for much of her messaging and calls. All of the information that would be available to healthcare providers through the e-health record is also available to Jean and Sarah, and Jean can take her iPad if she needs to go to hospital. To access her record, Jean logs in to her consumer portal and shares the information with the doctors and nurses at the hospital. When the hospital starts to participate in the e-health records system this same information will be available to authorised providers over a web browser, and when the hospital upgrades their clinical information system it will also be available to that system.

Over time, the e-health record system will grow and its value will increase. Right now, Jean’s e-health record does not yet include discharge summaries, specialist letters, referrals or records of her allied health visits. However, it is already very valuable to Sarah and Jean and the information in her record is also of benefit to others involved in her care. As her GP, I get most of this information sent to me directly and have the opportunity to add it to her health summary. Soon this information will be available to all the people involved in her care. For her pharmacist, physiotherapist and occupational therapist, timely access to the discharge summary will make a huge difference to the care they can provide.

The record will contain summary information that is felt to be important to the ongoing care of Jean. Jean can restrict access to the record to health care organisations if she chooses and can also request that information

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1 Names and some details changed for publication.
not be held in her e-health record; so far, less than 1% of patients have chosen to restrict access\(^2\). When documents are removed from the record it is at a ‘whole of document’ level - you cannot just change a part of a document.

The default setting when patients register for an e-health record is general access. General access allows appropriately authorised healthcare professionals involved in a patient’s care to access the patient’s record during, or in regard to, a consultation or clinical event involving that patient. If a patient chooses restricted settings, they can decide to restrict access, at an organisational level, to their e-health record in its entirety or to particular documents within the e-health record. A person can also nominate someone to have access to their record, such as a family member. That is exactly what Jean did with her daughter.

While the e-health record is opt-in, once a person establishes their record, providers can assume consent to contribute. The patient provides standing consent for all providers to upload information, which can then be withdrawn for any particular event. So it is important for patients to understand if they do not want something shared they should have that discussion with their healthcare provider. As a GP it is important to apply some common sense to the decision to share information into the e-health record. The discussion is similar to the discussion I have right now when I decide what information I put into the general practice health summary; some patients do not want information like termination of pregnancies or mental health issues recorded. Sometimes people do not want to share information that is really important and clinically significant. It is an important conversation and one that sometimes takes additional time. The e-health record is opt-in for the provider as well; the provider is not compelled and is not forced to upload information.

The e-health record also has an emergency access facility that overrides access restrictions. Asserting emergency access is warranted where a provider believes that access to the information is necessary to lessen or prevent a serious threat to an individual’s life, health or safety and where the patient’s consent cannot be obtained. This might occur, for example, if the patient is unconscious or there is a threat to public health or safety.

The e-health record has the potential to provide considerable value to consumers and clinicians alike. This value will take time to grow and be realised. Currently, most of the documents in the e-health record are from Pharmaceutical Benefits Schedule (PBS) and Medical Benefits Schedule (MBS) information. Having had the opportunity to review this information for some of my new patients, it gives a surprisingly good summary. Almost 75% of community pharmacy prescriptions are potentially available through PBS data (Australian Government Department of Health and Ageing 2011). Increasingly, the records will also contain hospital discharge summaries, specialist’s letters and the shared health summary. Table 1 shows the planned list of documents to be available in the e-health record.

### Table 1: Planned documents available to the e-health record

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<th>Documents provided by Healthcare professionals</th>
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<tr>
<td>Shared Health Summary</td>
<td>Event Summary</td>
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<td>Discharge Summary</td>
<td>Referrals</td>
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<td>Specialist Letters</td>
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<td>Patient entered data</td>
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<td>Personal details</td>
<td>Emergency contact details</td>
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<td>Consumer entered health summary</td>
<td>Consumer entered notes</td>
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<td>Advance Care Directive custodian</td>
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<td>Information from DHS Medicare</td>
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<td>Medicare Benefits Schedule and Veterans’ Affairs Program</td>
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<td>Pharmaceutical Benefits Scheme and Repatriation PBS</td>
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<td>Australian Childhood Immunisation Register</td>
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<td>Australian Organ Donor Register</td>
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The shared health summary is a curated health summary and includes allergies and adverse events, medical history, medications and immunisations. The author of a shared health summary is sometimes referred to as the patient’s nominated provider. The nominated provider can be a medical practitioner, registered nurse or registered Aboriginal and Torres Strait Islander health worker. To create a shared health summary, the provider should have an excellent understanding of the person’s history and be delivering continuing, coordinated and comprehensive care. The author of the shared health summary is expected to be a GP in the majority of cases. Like all documents in the e-health record, these documents are copies of documents from the provider’s clinical information system. The e-health record is not a replacement for local clinical records. The ‘source of truth’ remains where it is today— in local clinical records. A consequence of information from local clinical information systems being used in the e-health record is that our local clinical record data quality affects the quality of the information in the e-health record. From a provider’s perspective, this is the greatest challenge and perhaps one of the greatest opportunities for the e-health record system.

My practice has been involved in the primary care collaboratives program (www.apcc.org.au) for many years and a major focus of the collaboratives is to improve data quality. It is hard to track outcomes for our diabetic patients if one cannot track who in the practice has diabetes and unless the diagnosis is consistently coded it is even more difficult to do that. Our practice has recognised that unless there is constant vigilance, the quality of the records can deteriorate. A health summary cluttered by minor illnesses such as upper respiratory tract infections or a medicine list that includes once only medicines that have not been used for years has less value. While the quality of general practice records is high, thanks to many years of general practice accreditation and formal processes of peer review, even in the best practices data quality can be improved.
One process our practice found really useful in preparing for the e-health record, was to have our staff print out the person’s current general practice health summary on yellow paper and provide our patients with a clip board and pen in a private area to update their summary. We found this a great time saver and very helpful in improving our GP health summaries. Just knowing the health summaries would be visible to patients made a big difference to the effort we all made to improve their quality. There are other times such as at the time of referral or following a GP Management Plan, Health Assessment or Medication Review when the health summary is also formally reviewed and these are obvious opportunities for curating and sharing a shared health summary. The other tool we used was the Pen Clinical Audit Tool, to run data searches through the Clinical Data Self Assessment Tool. The tool is available free from Pen. In fact, we ran a variety of searches but the most useful was medications not printed for more than six months.

I often hear of the good work being done in the USA with electronic health records from organisations such as Kaiser Permanente. The advantage these organisations have is that they own the system from end to end, from general practice through allied health to the hospital electronic record. To achieve results in this environment is relatively simple. In Australia, there are many systems that will all need to eventually integrate with the e-health record system. The initial focus has been on general practice systems and we will soon have 90% of the clinical information system market able to work with the e-health record system. In addition, there is work underway in aged care and community pharmacy. Over time, specialist systems and allied health systems will also connect to the e-health record system.

As a GP, I was surprised at how easy it was to create a shared health summary. Once the data were fit to share it was very simple. Other than data quality and clinical information system integration there are also registration challenges. The e-health record has to be secure and that means both providers and consumers have to be able to be authenticated. That creates challenges for registration. Despite these challenges, at 1 March 2013 there were already over 67,000 consumers registered for an e-health record with around 80% registering online. For those that find the process difficult, there is the opportunity to register by phone, mail or at a Medicare shopfront. Some GPs also provide facilitated registration at the practice or outpatient clinic where the patient is known to the practice. It is early days, but I believe the e-health record system will make a huge difference to the quality and efficiency of the care I can provide as a GP and I expect it will be even more valuable for pharmacy and allied health providers.

Our healthcare system aims to promote, restore or maintain health by making sure that every person and their family can access the resources and care that they need, when and where they need it. The person-centred medical home is a concept that is gaining increasing traction across the world (Australian Centre for the Medical Home n.d.). With the aim of providing coordinated, ongoing, comprehensive primary healthcare for children, youth and adults—it is a model of care that facilitates partnerships between individual patients and their healthcare providers and, when appropriate, the patient’s family (Patient Centered Primary Care Collaborative 2007). In most cases, the primary care provider will be a GP. In some contexts, it may be another primary healthcare provider, such as an Aboriginal Health Worker or Remote Area Nurse (Australian Centre for the Medical Home (n.d.). The patient-centred medical home is a move away from a model of symptom and illness-based episodic care to a system of comprehensive coordinated primary care to provide proactive, preventive and chronic care management through all stages of life. These personal physicians are responsible for the patient’s coordination of care across all healthcare systems facilitated by registries, information technology, health information exchanges, and other means to ensure patients receive care when and where they need it.

With a commitment to continuous quality improvement, care teams utilise evidence-based medicine and clinical decision support tools that guide decision making as well as ensure that patients and their families have the education and support to actively participate in their own care (American Academy of Family Physicians (n.d.). It is a powerful model of care based on a strong evidence base (Franks & Fiscella 1998; Rosenthal 2008; Starfield, Shi & Macinko 2005).

The e-health record system supports the concept of a medical home and helps pull a person’s health information together and make it available to all the people involved in their care.

References

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3 Personal communication with National E-Health Transition Authority