Patient Portals
PMS Review 2

September 2014

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Introduction and Background

This briefing series is focused on practice management systems used in general practice in New Zealand and has therefore reviewed only the patient portal offerings that are directly produced by vendors of those systems. It is recognised that there are a variety of portal offerings in New Zealand in addition to those provided by PMS vendors. While these are not reviewed in this briefing series, there is passing reference to some in the market scan section of this report. The term portal is commonly used interchangeably to describe a number of concepts and the term often covers a variety of functionalities and technical architectures. This review focuses on Portals that provide patients access to interact with their health care providers.

In introducing and framing patient portals as a topic of the second PMS review, the project agreed that, given the nascent nature of this e-health intervention, it would not be reasonable to provide a score to assess the various PMS vendor portal offerings. While this briefing paper does not score the portals, it does compare and contrast the offerings based on the most common features of portals from international literature. The panel enlisted the assistance of Dr Sue Wells to assist in defining these features.

The expert panel reflected on a number of questions that it believes need some clarification for the sector to broadly adopt patient portal technology. Equally it was recognised that any commentary on portals in New Zealand would not be complete without reflecting on some of the other portal related initiatives in New Zealand outside of the General Practice PMS realm.

Definition

Patient portals are a developing health intervention and there is currently some debate as to exactly what they are and what purpose they serve. There are a variety of ways in which portals can be implemented but few standards. Commonly they are confused with Personal Health Records (PHRs) or Electronic Medical Records. Given this confusion, this definition from Wikipedia is a credible attempt to define the term:

'Patient Portals are healthcare-related online applications that allow patients to interact and communicate with their healthcare providers, such as physicians and hospitals. Typically, portal services are available on the Internet at all hours of the day and night. Some patient portal applications exist as stand-alone web sites and sell their services to healthcare providers. Other portal applications are integrated into the existing web site of a healthcare provider. Still others are modules added onto an existing electronic medical record (EMR) system or PMS. What all of these services share is the ability of patients to interact with their medical information via the Internet. Currently, the lines between an EMR, a personal health record, and a patient portal are blurring.'

Electronic medical records are also known as electronic health records. They contain an electronic health information about patients. The content of these records are contributed to by health professionals.

Personal Health Records are collections of health information contributed to by the patient.

It is possible for systems to be hybrids that have more than one type of functionality.
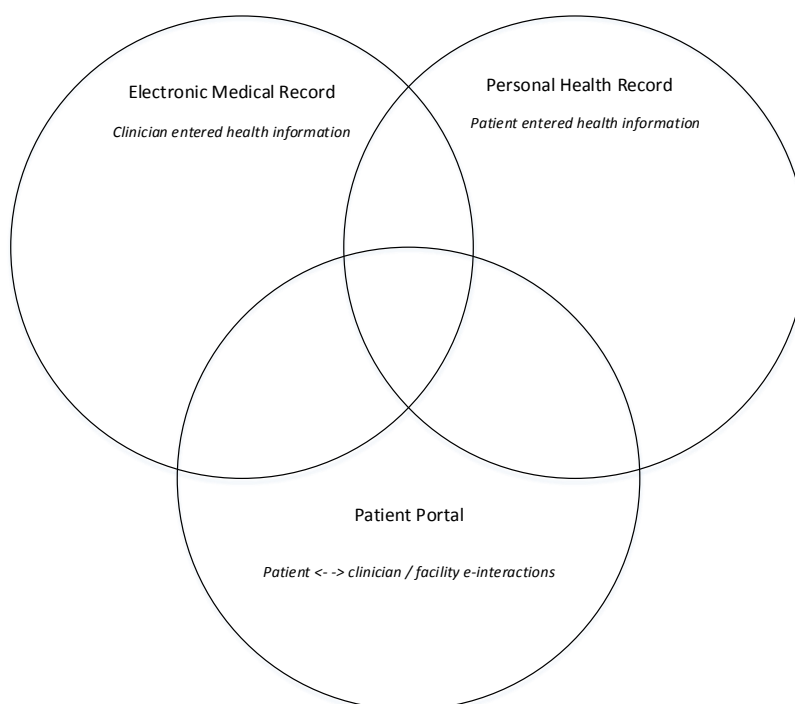
This brief considers Patient Portals in the broad context of systems that potentially exhibit features from any three of these system types.

Although patient portals have now been around for many years particularly in United States and Scandinavia, their use is now increasing rapidly.

Common Portal Features

A literature search indicated that the most common features provided to patients via a portal are:[1-4]

- Secure patient-provider messaging functionality
- Prescription refill requests
- Appointment requests
- Patient reminders (for preventive care or appointments)

- Problem list
- Medications
- Allergies and alerts
- Record of visits (time/date/provider)
- Immunisations
- Laboratory results
- Provision of condition-specific information and links to relevant web sites
- Clinical summary record

The most common features exhibit characteristics of both patient portals and electronic medical records.

Other features that may be provided include: pathology and radiology results, family history, social and lifestyle history, visit notes, operation notes and the ability for patients to self-schedule appointments. The use of portals to enable patients to view their health information is a central element of New Zealand's National Health IT Strategy.

Increasingly, patients are seeking to view their medical record in whole or in summary and in some cases portals are being used to enable patients to enter their own data into a medical record. This may give rise to issues related to provenance and clinical accountability and is not currently in wide use in New Zealand. However, international experience suggests that data from patients entered into the medical record happens most commonly when patients message their doctor with the data (and the medical team adjudicates data entry) or infrequently there is a facility for patients to directly upload to patient-specific fields. In addition portals have been used to gather patient generated data (e.g. home monitoring, journals or diaries) and to facilitate the distribution, collection and storage of questionnaires (PHQ-9, ADL, pain scores or condition-specific templates), patient decision aids and automated clinical guideline-based patient decision support as well as on-line e-health support programmes (such as on-line cognitive behavioural therapy for mild depression and anxiety).

Research suggests that the functions most commonly used by patients are:[4]

- Viewing lab results
- Requesting an appointment
- Secure messaging
- Requesting prescription refills

Architectural Considerations

The portals reviewed in this brief are provided as an extension of an established PMS. One strategic view is that a key attribute of a patient portal is the ability to aggregate data from multiple sources and this *may* be more challenging if tethered to a single PMS product. This type of portal may limit the ability for patients to transfer to a practice that uses a different PMS system. Notwithstanding these concerns, the potential value of portals to patients and clinicians alike is such that if PMS based portals offer the path of least resistance to uptake, then architectural considerations should not be seen as a significant barrier to usage.

It also needs to be recognised that in New Zealand and elsewhere many of the standards required to create a truly interoperable infrastructure are still lacking or immature at this stage. It could therefore be argued that it is preferable to provide patients and clinicians with portal functionality based on currently available products, than to wait (and it will likely not be a short wait) for fully standard compliant and architecturally preferable products to become available. As an interim solution the common data model used by all vendors in GP2GP may be the starting point to enable a common, flexible model to develop.

The early indications are that portal usage is mostly determined at present by the policies of the local practice owner or primary care network and this, together with privacy and security issues, is another area where (non-technical) national standards are desirable.

Standards

The Health IT Plan highlights the need for enabling the widespread availability of portals. The sector has begun a journey, sometimes down different paths. In some cases, there is commonality of the underlying software product, in other cases not.

In their response to the PMS Survey, Medtech observed that they developed a product based on sector input and in the absence of any relevant standards *"It is very important to highlight that there were no standards for either Patient Portals or Personal Health Records in New Zealand or in the world when ManageMyHealth™ was created."* Standards still lag behind.

It is the observation and recommendation of the Project and Expert Group that standards that set guidance on the minimum structured dataset to be included in the portal are key to a competitive and innovative market. For this to happen, current HISO standards, including the Interoperability Reference Architecture (HISO 10040) and those that define clinical content such as HISO 10041.1 Clinical Document Architecture Templates for Medications, Allergies and Adverse Reactions, should be adopted. Similarly, there is a need for the introduction of published interface standards that enable portals to be plugged into and take feeds from different systems.

Portal Usage

As at the time of publishing this report (August 2014), there are a range of activities in the portal space. The following is a cross section of activity and is not intended to be an exhaustive list. It provides some localised context of various portal solutions (including and broader than PMS vendor supplied portals) and how they are being applied:

Where	What
Southern	eSCRV is a multidisciplinary clinical portal created as a partnership between CDHB, Pegasus Health (primary care network) and Orion health. It is a clinician portal which uses Orion Concerto with a number of feeds from primary and secondary care. It is not tightly tethered to one underlying system and has a variety of feeds of information including CDHB, Pegasus Health GP practices, community pharmacy and Nurse Maude . It is focussed on the clinical sharing of information to inform care delivery regardless of setting. It does not provide patient access and therefore in terms of current functionality it cannot be described as a patient portal, however focus is now being applied to a patient view into this data. A targeted long-term-conditions programme of work in Canterbury (CREST) is using HSA Global's CCMS product for the interactive management of a selected cohort of patients with chronic conditions.
Central	Initially sponsored by the primary care network COMPASS Health in Wellington and Wairarapa, the adoption of MedTech's ManageMyHealth is probably the longest running example of a portal project in New Zealand. This project focussed initially on providing ED and After Hours facilities and clinicians access to patient records to assist in the provision of care. More recently, this functionality is being considered for Hutt Valley DHB and the Manage My Health patient portal is being offered to patients by some participating practices including Island Bay.
Midland	Midland Health Network has implemented Manage My Health to enable a new service delivery model including centralised triage, remote eConsults and patient portal. This functionality has been designed around a process model to support streamlined care delivery based on a local variation of the (US) Group Health model.

Northern	The Northern region has focussed its activity on shared care, particularly on the management of patients with long term conditions. The Northern Region Shared Care project is using HSA Global's CCMS product to support this.
	In the Northland DHB area, Care Insight (a joint product from DrInfo and Healthlink) is being used for after hours (in Kaitaia and Dargaville) and and ED use to retrieve a view of patient information from GP Practices.

Patient Portal Product Comparison

The PMS vendors that product Patient Portals each have separate product names for their products. The below table outlines the vendor and the name of their product.

PMS Vendor	Patient Portal Product Name
Houston	NA*
Intrahealth	Accession Patient
MedTech	ManageMyHealth™
MyPractice	Health365

*Houston have indicated that they do not currently provide Portal functionality, although they are currently working with MedTech to integrate with the ManageMyHealth™ platform. The Intrahealth Accession Patient Portal is integrated with Profile for Windows although there are no stated installations of Accession Patient in New Zealand, but this functionality is currently used in Canada.

The comparisons in the following tables is derived from lists of functionality as self-reported via the PMS Review by vendors and compares functionality that is most prevalent in Portals as indicated internationally.

The panel has not verified that this functionality exists in the relevant product and has relied on the vendors' self-reported information to construct this matrix.

Common Functionality

Functionality	Accession Patient[3]	ManageMyHealth	Health365
Viewing lab results	Yes	Yes	Yes
Requesting an appointment	Yes	Yes	Yes
Secure messaging	Yes	Yes	Yes
Requesting prescription refills	Yes	Yes	Yes

Common Features

Features	Accession Patient	ManageMyHealth	Health365
Problem list	Yes	Yes	Yes
Medications	Yes	Yes	Yes
Allergies and alerts	Yes?	Yes	Yes
Record of visits (time/date/provider)	Yes	Yes	Yes
Immunizations	Yes	Yes	Yes
Laboratory results	Yes	Yes	Yes
Provision of condition-specific information and links to relevant web sites	Yes	Yes	Yes
Clinical summary record	Yes	Yes	Yes
Secure patient-provider messaging functionality	Yes	Yes	Yes
Prescription refill requests	Yes	Yes	Yes
Appointment requests	Yes	Yes	Yes
Patient reminders (for preventive care or appointments)	Yes	Yes	Yes?

Adoption

The following adoption information is based on vendor self-reported numbers in June 2014. The counts provided represent the number of practices and patients using the Patient Portal functionality. Some vendors did not provide information on uptake, represented here by a dash (-).

There has been no analysis as to the utilisation of these systems. Practices or patients having access to the systems does not indicate the frequency with which they are used.

Adoption (vendor self-reported)	Accession Patient	Manage MyHealth	Health365
Practices	-	235	8
Patients	-	-	1746

Panel Commentary

It is likely that within five to ten years a significant proportion of the population, patients and clinicians alike, will be using portals in everyday practice just as electronic banking and on-line airline bookings are part of day-to-day life for New Zealanders today. However, it is worth noting that, as with many like initiatives, portals may initially serve to reduce the equity of patient access, disadvantaging those who through language barriers or lack of access to the Internet, may not be able to take advantage of the technology. However, it is thought that in due course of time that the opportunities offered by portals will become effectively ubiquitous to those wishing to avail themselves of the services.

With portals still in their infancy, the panel does not feel qualified to make judgements on architecture or specific offerings from a scoring and ranking perspective. That said the group does strongly support the need for new technology that will allow patients to become partners in care and enhance patient experience, care delivery and safety. To this end, we offer some key questions regarding portals in New Zealand that we believe need to be addressed in order to reach the tipping point which will move us from "why?" to "why not?"

The approach being taken by the National Health IT Board is one of promotion and awareness rather than funding and directing implementation. In other words, create

demand and let the sector respond. This differs from the PCeHR in Australia, the NHS and other jurisdictions who have driven specific product development and uptake from a central point. The practical viewpoint is that this nationally directed approach has not worked well in most jurisdictions where it has been tried (e.g. England and with the jury still out in Australia) and that New Zealand does not have the funding at the centre to support this approach. If there is demonstrable benefit that is cost neutral or cost saving, then this "organic" approach to adoption should work, although it is recognised that current reward frameworks do not effectively recognise clinicians using this type of technology, and the failure to address this (and in many other forms of telehealth) may impede wider uptake. Broader considerations of relying on General Practice offering of portals to Patients include the relevant practice policy for offering patient access and patients current access to practices.

Promoting a wider understanding of the benefits to patients and clinicians of patient portals and addressing some of the barriers to usage (including obtaining the endorsement of the professional clinical bodies) would do much to increase uptake, although the panel notes and supports the approach adopted by the National Health IT Board of having ambassadors who promote the use and uptake of portals through their own stories and experiences (good and bad). We note that some of the ambassadors have invited Patients to join their presentations to provide their perspective though there are currently is no "patient ambassador" equivalent in this approach.

While the portal functionality is as outlined by the three vendors' offerings, Medtech's ManageMyHealth clearly enjoys the greatest adoption and awareness in the marketplace to date and through its first mover advantage has secured a key role in many of the more innovative projects. Medtech should be recognised for their early investment in and commitment to this important area of development. We look forward to seeing evidence of integration with other products (e.g. the Houston PMS system and other complementary products) per our earlier comments regarding the necessity for integration and inter-operability in this space.

Key Questions for Portal Adoption

One of the objectives of this report is to create a focal point for discussion and debate and from this, the sector "learns its way" toward adoption of this technology. A number of questions will need to be addressed by a variety of stakeholders.

While it is acknowledged that some of these questions have already been or are being addressed regionally or in isolated pockets, there is no cohesive toolkit or place for interested parties to go to as a resource for guidance on New Zealand examples.

The key questions that require addressing that will aid in adoption of portals include (but are not limited to):

Usage

- How can consumers be best protected from a privacy and security perspective?

- Should patients have full access to their EMR and if so, what issues does that give rise to for their clinicians?

- How do portals address the issue of user authentication?

- What issues in terms of clinical accountability arise from these technologies and how can they best be addressed?

- What consumer generated data would be useful and what safeguards would be needed to ensure data integrity that differentiates consumer and clinician sourced data?

- Will portals appeal to a broad range of the population or only to sub groups, such as those with long term conditions or those with a particular interest in technology?

- Which patient groups would it be most helpful for you to offer early access to portals and why? Are there some portal functions that can usefully be offered to all your clients? e.g. appointments, prescription renewal

- What would be the impact of a significant uptake in portal usage on the staffing and workflow within a GP practice?

- What are the most appropriate roles in terms of the introduction and operation of portal technology for PHOs, Practice Managers, MSOs, Colleges, the NHITB and so on?

- If portals become a vehicle for patients accessing information not specifically provided by their clinician (as is likely), how can patients and clinicians be protected from the lack of an independent and authoritative QA resource on the Internet?

- What impact would significant uptake in portal usage have in staffing and workflow within a GP practice and how might it be used to ensure appropriate integrated care?

- Should the sector be funding independent and rigorous evaluation of portal usage, costs, benefits and pitfalls?

- Authorisation of caregivers?

- Access of parents to children's records and when is a child not a child?

Commercial

Considering the positive and negative experience of early adopters in New Zealand and international portal users, how can these be integrated into clinical practice and payment frameworks?

- How might the clinical advantages of the shared care role of patient portals be developed and enhanced by patient inclusion through a portal?

- To mitigate disparities in uptake inherent in payer/ payee models involving patient contributions to costs , what payer/ payee models are likely to encourage uptake and usage while still being commercially viable ?

- Do portals decrease or increase clinician workload and how should this be reflected in payment frameworks?

- Is there sufficient value in portals for patients that they can be expected to contribute payments – to sign up and or for ongoing usage?

- How might a shared care record role of portals move them away from the patient portal functionality?

- What are the commercial terms relating to the data in a portal e.g.

  - What can the vendor do with the data that is stored in their system

  - Where is that data stored (i.e. issues of security, is it in the cloud?, within NZ or overseas?)

  - Can the vendor enable third party access to the data?

Technical

- What standards and protocols are required?

- How does the sector balance the initiative and investment of the early to market vendors, with the need in the longer term to ensure a level playing field and easy interoperability for consumers (and clinicians)?

- What are the appropriate information governance frameworks for Data and Information systems that are relevant to Portals?

Perceived Adoption Barriers

1. Additional workload of "email" (electronic) consults.

2. Uncertain financial impacts for different ways of consulting (e.g. through secure messaging functionality rather than face-to-face or phone).

3. Lack of interest from the GP community and patients.

4. Lack of smart phone access to portal.

5. Weak data and information system governance structures.

6. Lack of integration from all relevant data sources so that systems are fragmented and all relevant data is not accessible.

7. Handling of lab result "misinterpretation" by patients of borderline results i.e. outside of normal range but not clinically relevant.

8. Potential issues relating to security, access and privacy.

9. Potential issues relating to clinical accountability.

10. Quality of notes (visibility to patients).

11. Quality and consistency of coding.

12. Handling adverse results – clinical review and framing to patient.

13. Funding the use/adoption.

14. Coding consultations by different practitioners.

15. Standards for e.g. minimum dataset, integration.

16. Implied and assumed changes to workforce, workflow and clinical practice and the need to adapt these or to create new roles within practices (e.g. providing telephone and email triage, increased email electronic consults).

References

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3.   Reti SR, Feldman HJ, Ross SE, Safran C. Improving personal health records for patient-centered care. Journal of the American Medical Informatics Association 2010;17:192-5.

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Appendix - Perspectives

Perspectives

This report has been developed from the PMS review panel perspective. In constructing the Portal component of the review, it is evident that there are a variety of stakeholder perspectives that are useful to triangulate and inform the picture. For this reason a consumer representative who is part of the National Health IT Board Consumer Panel and regarded as a subject matter expert on Portals in that group was asked to contribute some thoughts from her and some of her colleagues.

The National Health IT Board has a strong focus in driving the adoption of Portals and has also contributed their perspective in this addendum section).

A Consumer perspective

The National Health IT Board has made access to patient portals a key priority for 2014. It is a timely and appropriate intervention in health care and one that is generally welcomed by consumers. It has been my privilege to be part of the Working Group which has produced this paper. I support and endorse the paper. The National Health IT Board Consumer Panel welcomes the opportunity it provides to generate discussion and raise relevant issues. We look forward to these discussions and hope they will facilitate the wider adoption of patient portals in primary care throughout New Zealand by the end of 2014, as outlined in the National Health IT Plan.

As the paper makes clear, there are a number of manifestations and functionalities proposed for the patient portal. However, their use and application is not always well described or well defined. The definition in the paper is important as it clearly puts the consumer in front and centre and describes the function of a patient portal: to allow patients to interact and communicate with their healthcare providers.

In my work with the development of patient portals, this connection to the consumer is often forgotten or gets lost in translation. Integrating consumer information from a variety of sources, and collecting it in one place under a patient identifier so that it is available to clinicians at the point of care, is certainly 'patient centred' and undoubtedly benefits the consumer. However, it is not a patient portal. Indeed, it maintains and perpetuates the myth of the passive consumer who has nothing to contribute and who needs to be seen to or done to; rather than as an informed partner and active participant in their care and wellbeing decisions. The definition requires a patient portal to connect directly with the consumer so that it becomes a vehicle they can use to interact and communicate with their health practitioners and healthcare providers.

Patient portals are a platform for consumers to access their own health information - so that they can make informed decisions about their health and actively manage it. They enable supported and holistic care, in partnership with relevant health practitioners and shared care plans, if they have them. Used this way, patient portals facilitate coordination of care, transparency of action and purpose and provide a constructive platform for consumer agency. They are more comprehensive than current patient management systems.

Patient portals have the potential to change the face of primary care and health care in general. While the possibilities are exciting, the reality is more sobering. It is easy to leap ahead to a dizzying array of possibilities and potentialities but these are accompanied by an equally dizzying array of challenges and barriers. It is important to tread carefully and walk before we run. The path forward is one of small steps, so that together we can discuss and resolve the identified challenges and barriers.

For most New Zealanders and their health practitioners, the most commonly used applications outlined in the paper (requesting appointments and prescription refills, secure messaging and viewing lab results) provide a useful roadmap for starting the patient portal journey. In fact, many practices have made considerable progress with these functionalities and all consumers would find at least one of them useful. They are also functionalities offered by all current PMS vendor portals in New Zealand. Future functionalities can be added as comfort, capacity and demand allow.

 Another area where considerable progress is currently being made is with medications. Medications management is important for consumers and their health practitioners. The utility of the 'yellow card' is well demonstrated and an electronic version accessible to consumers and their health practitioners would be invaluable. A patient portal with a medication functionality opens the door to important portal functions - increasing consumer health literacy and self-management. The Pharmacy agreement plays an important role here too, as it widens the scope of patient portals beyond general practice and into the field of general health care.

This also begins the journey using patient portals in integrative clinical practice and holistic health care. Integrated family health centres assume primary care delivery by a number of other health practitioners and providers. A patient portal can be useful to give substance to this within a practice - care is delivered and reported on by the appropriate health practitioner and used to inform them all - consumers and practitioners alike. It may also bring health practitioners and their clients closer together as consultations are informed by a wider array of relevant information.

Privacy and security are often raised as barriers to adoption of patient portals. They are extremely important but a strong legislative structure underpins our current system. The weakness in the current system is in the implementation of this strong legislative framework. We need robust governance frameworks with substantial consumer involvement in them.

Cost and access are other currently identified barriers. There is no consumer enthusiasm or expectation that patient portal costs will be borne by them and any costs to the consumer will be met with resistance and disengagement. In an increasingly mobile world, access from a variety of devices is also a key consideration. Equally important is access for those with communication barriers - both physical (as a result of age or disability) and electronic (access to and familiarity with the technology) .

The biggest barrier though is the fear, and sometimes loathing, from anxious health practitioners who imagine a future fraught with the multiple challenges of change. While this fear is not unfounded, it is one we can discuss and resolve together. We need to start the journey towards patient portals, one small step at a time, always ensuring that we are all comfortable with the incremental changes involved.

Jo Fitzpatrick with the National Health IT Board Consumer Panel June 2014

Appendix - PMS Vendor RFI Excerpts

As part of this review process we distributed to each of the 4 PMS vendors an RFI document and asked them to respond to various aspects of the PMS Briefing Series. The following are excerpts from each vendor.

Appendix - PMS Vendor RFI Excerpts

Intrahealth

The Intrahealth platform is one unified code set for every product and every country.

Portals, such as the patient portal (Accession patient) and external provider portal (Accession External Provider) are tightly coupled with the platform as is Profile and the Mobility solution (P4I) allowing Interactions to be real time.

The products are completely integrated and form part of the PMS functionality. Patients and external providers are able to update elements of the record (controlled by permissions within Profile).

Features include:

- Multiple platform support eg Windows, MacOS & Unix
- Multiple browser support
- Communicates with IHServer via Private web services
- "Enable" functionality at a patient & provider level
- Read & write options for a patient or group of patients
- 1.5 Factor Authentication
- Encrypted using SSL certificate authorities (VeriSign, Thwate)
- Usernames, passwords and security answers are encrypted in the database
- Anti XSS and SQL injection practices employed
- Vulnerability and penetration testing undertaken by Ministry of Health & Fraser Health Authority in Canada and "Plunket" in New Zealand

Accession Patient (Patient portal) is tightly integrated into Profile. Functionality around the Accession products are tightly integrated with patient "roles" determining what level of functionality a patient has e.g. change details only, or any combination of the functionality listed below. "Rules" within profile determine the action that occurs with the functionality e.g. when a patient enters a clinical note an action item appears in the "work centre" in profile for a clinician to review.

MedTech

The ManageMyHealth™ Patient Portal encompasses Patient Portal functionality and also a complete Personal Health Record as defined in the wider industry. At the time of its launch in 2008, ManageMyHealth™ was unique in its approach and was the first in the world to provide a unified product covering Patient Poral and Personal Health Record capabilities.

The ManageMyHealth™ Patient Portal allows a patient to view their health information and, where agreed, to communicate with their general practice team in a secure environment. The online Patient Portal gives patients the freedom to manage their health needs anytime, anywhere. They can view medical conditions, lab results, immunisation records, allergies, prescriptions and share health information as required with other health care providers. The Portal also provides online tools to improve their health, track their progress, and email their practice team.

The Personal Health Record functionality of ManageMyHealth™ Patient Portal allows users to record and maintain the following health related data:

- Medications (prescribed by an external provider or overseas)
- Natural medications
- Allergies
- Immunisations (given by external provider or overseas)
- Medical Conditions
- Notes
- Health Calendar
- Health Journal
- Diet Journal
- Fitness Journal
- Health Measurements (Health Indicators)
- Goals (personal goals like weight loss and quit smoking)

ManageMyHealth™ offers tightly coupled functions with practice management systems including:

- Online appointment booking
- Repeat Prescription requests
- Lab Results Notification

My Practice

The data set is based on the results of an extensive consumer survey carried by a market research company.

The data set is the data required to support the desired functionality. Currently it includes;

- Problem list
- Measurements e.g. BP, Weight, BMI
- Laboratory results
- Tasks
- Clinical notes
- Regular medicines
- Allergies and adverse reactions
- Vaccines given
- Appointment book
-

The portal provides the following functionality for patients:
- The problem list with links to medically reliable web sites for extensive information about the problem.
- The ability to make and cancel appointments. The appointments are made directly into the appointment book so the patient does not have to wait for a confirmation
- List of all recorded allergies and adverse reactions.
- The ability to order repeat medicines
- List of current vaccines that have been given
- Access to patients clinical notes
- Tasks that have been created. These include preventative and proactive health checks.
- Diagnostic test results including the GPs comments.
- The facility to conduct an on-line consultation.
- Access to a log that records all access to the patient's record by others.
- The ability for authorised persons to access other patient's record. This is for parents and caregivers for example.

The portal provides the following functionality for Healthcare providers:

- All of the patient functionality for patients at locations that they have authorised access to.
- The ability to search over multiple locations.

A&M centre can write a post treatment note direct to the patient's notes and the GPs mail box.

Houston

We have implemented an interface to MedTech's ManageMyHealth and have met all their requirements for CDA integration.