

GP2GP Patient Notes Transfer

Jim Primrose

Ministry of Health

No 1, The Terrace, PO Box 5013, Wellington, New Zealand

jim_primrose@moh.govt.nz

Sandra Hicks

Halswell Health

137 Hamilton Ave, Christchurch, New Zealand

s.hicks@xtra.co.nz

on behalf of the GP2GP Project Steering Group

Abstract

The Ministry of Health is working on a significant initiative for primary care called GP2GP Patient Notes Transfer Project (“GP2GP”) that will make a significant contribution towards a patient centred, provider friendly health information environment.

This paper introduces GP2GP to the health informatics community. It will provide an overview of the concept and the key drivers for the electronic transfer of patient records, the progress to date, the plan for the implementation of GP2GP and the key challenges facing the project.

1. GP2GP

The goal of GP2GP is to provide capability to all GPs to electronically transfer their patients’ electronic medical records safely, securely and in a way that retains content and meaning when received by another GP.

Every year, over 375,000 New Zealanders change their GPs. While almost all GPs use computerised practice management systems (‘PMS’), and while almost every New Zealander has an electronic medical record, these records are being mailed across the country as hard copies and manually re-entered, if at all, every time a patient changes their GP.

The current process for transferring patient records in general practice is neither person centred, nor is it provider friendly. The absence of any standards for or capability to effectively transfer patient records fails to provide relevant historical information in the right place at the right time to support ongoing quality care. This results in a significant risk to safety each and every time a person changes their GP. A person’s health information today remains trapped in a series of disconnected silos that is centred around their GPs instead of being a longitudinal record of all relevant medical information that is centred around them – the person. This situation perpetuates disconnected episodic care causing disjointed management of chronic conditions and risk factors for patients over time.

The manual transfer of patient notes between general practices is also highly inefficient and not provider friendly for general practices. Considerable time and effort can be spent re-entering patient information when a patient joins a new clinic. Manual re-entering of patient’s notes also results in the potential for errors which may have patient safety implications. Inefficiencies can also result from the repetition of health care activity arising from the inability to see the activities and results across a person’s care path.

GP2GP will facilitate changes to the mainstream GP PMS applications that will enable a person’s medical record to be electronically transferred from their previous GP to their new GP. The entire medical record will be transferred in a structured and searchable format but a core subset of the record will be transferred ‘field-to-field’. This core subset is expected to include the person’s:

- basic demographic information;
- diagnoses and medical history;
- encounters (consultation notes);
- immunisation, injection, and screening events;
- current and past medications;
- allergies and alerts warnings,
- procedures (minor surgery, medical interventions etc);
- family and social history;
- recall items (queued reminders for screening appointments);
- PMS resident documents including lab/radiology results, outpatient/discharge letters etc.

To achieve interoperability between the PMS systems, GP2GP will develop a standard dataset and data model for a primary care longitudinal care record. This standard is expected to initiate the development of primary care information standard(s) by providing an initial core data set that could be re-used or expanded upon to create, for example, a provider-to-provider Standard, or the Primary Care Minimum Dataset. GP2GP will also develop a primary care messaging standard that is agnostic of its transport mechanism and which could be extended for other electronic events including electronic hospital discharges. These standards will provide a base capability to transfer health information that, with appropriate consent, could be extended beyond general practice to become a more widely used provider-to-provider solution.

2. Benefits to Patients – Towards a Person Centred Information Environment in Primary Care

“ the general public have got this concept that we are all interlinked electronically, and they’ll say ‘My GP is down in Napier, but you’d be able to just get the notes, won’t you?’ and they think it’s all linked, but no, it’s not that easy. - Urban GP Practice [1]

GP2GP will contribute towards a person centred health information environment and will deliver a range of benefits to patients.

Patients will benefit from improved health outcomes from improved clinical decision-making, reduction in errors, and involvement in their own healthcare.

GP2GP will stop or reduce the loss of medical history every time a person moves and will ensure that the person’s most important health information is available to their new GP. GPs are concerned about the lack of clinical information about new patients that may be held by other providers. This presents a risk that patients safety may be jeopardised if clinical decisions are made in the absence of critical information that is held by their patient’s previous GPs. Of particular concern is the lack of information on medications prescribed by other providers, as this increases the risk of accidental harm due to unforeseen drug interactions or reactions. It also increases the risk of treatments being ineffective due to medications prescribed by different provider inadvertently have opposing effects, or due to one provider prescribing a drug already proven ineffective by another provider.

GP2GP will provide GPs timely and full access to their new patient’s electronic medical record. GPs will have knowledge of their new patient’s current medication, allergies, current problems and past medical history. Having this knowledge at their fingertips will lead to improved clinical decision-making so that the right care can be provided by a person’s new GP at the right place and at the right time thus reducing the risk to patient safety during the handover of care.

Individuals will also benefit from improved health outcomes through the number or transcription errors or omissions because the need to re-key patient information will be significantly reduced through electronic transfers. Access to a patient’s previous clinical history will also reduce the number of duplicate lab tests, which can be uncomfortable as well as inconvenient for patients.

GP2GP will enable GPs to provide patients with a copy of their medical record upon request. This will improve accuracy, trust and engagement by letting patients verify their own information and will help foster greater levels of patient involvement and self-care leading to greater effectiveness and improved outcomes. The opportunity to involve individuals, their families and whanau in their healthcare through sharing their medical records with them enables general practices to move towards person centred healthcare.

The interoperability standards that GP2GP will develop and implement can also be used by other sector e-event initiatives including electronic hospital discharges, e-Referrals, provider-to-provider and the Primary Care Minimum Dataset. These initiatives, built on the foundation established by GP2GP, will begin to create a person centred health information environment that integrates all relevant health information about a person across care settings and care pathways and that provides appropriate access to this information so that the right care can be provided by the right provider at the right place and time.

3. Benefits to GPs – Towards a Provider Friendly Information Environment in Primary Care

“They said IT would remove paper – well we still get as much, if not more, paper ... and we have to maintain the hard copy file because we don’t have the time or the resources to scan [everything] into the electronic patient database. And we receive stuff in hard copy, so we have to actually scan that into the patient files.” – Urban GP Practice [1]

GPs will benefit from spending less time printing and mailing an outgoing patient’s medical record, and re-entering an incoming patient’s record. Patient records will also be presented in a format that is structured, easy to read and searchable so that key pieces of information can be located by GPs more efficiently than thumbing through reams of scanned pages that may not be extremely legible or readable. GP2GP will also improve the value of the interaction with patients as there will be less time spent ordering duplicate tests and less time spent capturing patient information that has already been captured elsewhere.

GP2GP also delivers benefits to the wider sector. Reducing the number of duplicate tests and the improvement in health outcomes will also benefit the health and disability system by cost savings and increased system performance. The interoperability standards that GP2GP will develop and implement can also be used by other sector e-event initiatives including electronic hospital discharges, e-Referrals, provider-to-provider and the Primary Care Minimum Dataset.

4. Programme status

GP2GP began its journey with the Health Information Strategy Action Committee (HISAC) late in 2006. The capability to electronically transfer patient notes in primary care was identified as a sector priority as part of the sector engagement for Health Information Strategy for New Zealand (HIS-NZ) 2005. HISAC included GP patient notes transfer as a required standard and capability as part of Action Zone 10: Primary Care Information and placed it on its roadmap for delivery in mid-2008. After confirming that there were no other primary care medical records transfer initiatives in New Zealand, and after convincing all of the five major PMS vendors to participate, GP2GP was launched as a project in July 2007. HISAC worked with the Primary Care Information Management Group to establish a project reference group, which worked together to define concept requirements for an electronic medical record transfer solution for general practice. The project then began to work with the PMS vendors to develop an implementation guide based on these requirements.

Late in 2008, the Minister reconstituted HISAC and changed its role from an *action* to an *advisory* committee. Because of the need for independence under its new terms of reference, it was no longer appropriate for HISAC to be actively and directly involved in the delivery of projects.

Consequently, GP2GP was transferred to the Ministry of Health early in December 2008. A new project governance structure was established with Jim Primrose, the Ministry’s Chief Advisor of Primary Care, appointed as Project Business Owner. A Project Steering Group was also established that includes the previous reference group members, as well as representation from the GP Leaders’ Forum, College of Practice Nurses, Practice Managers and Administrators Association of New Zealand, Healthcare Aotearoa, and the Ministry’s Information Strategy and Architecture Group.

The project is currently reconfirming its scope and requirements with the new Steering Group. Following on from this, the project expects to complete its detailed planning and design, and to be in the position to begin development by November 2009. Implementation of GP2GP across New Zealand is currently expected to begin by June 2010.

5. Key Challenges

5.1. Patient Safety

The main goal of GP2GP is to deliver the capability to safely and securely transfer patient notes. Patient safety is of critical importance and will be a key priority during the design, development and testing of GP2GP. While there are safety testing guidelines and minimum standards for medical equipment, these do not exist for applications such as PMS and there is no regulatory body, like MedSafe, overseeing health IT applications.

GP2GP will learn from the GP2GP project in the NHS and its approach to clinical safety testing. GP2GP in the NHS followed a robust methodology for clinical safety testing, which included strong clinical involvement. This approach includes:

- an end-to-end hazard workshop involving clinicians and the design team to identify hazards that need to be mitigated
- the development of a safety case that defines changes to the design and controls to be implemented that will mitigate the identified hazards
- the safety closure that provides proof that all necessary changes and controls have been performed

The GP2GP clinical safety testing process will involve comprehensive side-by-side comparison of test patient records, specifically created and transmitted to test the identified hazards. This testing will involve clinicians, practice managers and administrators and will need to ensure that no information is lost, inappropriately altered or added by the electronic transfer process.

5.2. Interoperability

Interoperability is the key to GP2GP and will need to be addressed on three levels.

GP2GP needs to achieve technical or syntactic interoperability so that the messages containing the electronic medical record can be exchanged securely and reliably between PMS. Technical interoperability with GP2GP will be achieved through the establishment of an agreed messaging standard that is network agnostic.

Semantic interoperability is the next level of integration where the sending and receiving GPs and systems share unambiguous meaning of the health information being exchanged. This will be a considerable challenge for the project as the various PMS are based on different data models and utilise a variety of different coding systems. GP2GP will develop a reference data model and data dictionary for a core general practice medical record that will guide the changes in PMS.

To ensure the smooth and efficient transfer of patient records, GP2GP must also achieve process integration so that sending and receiving GPs understand their roles and responsibilities at key points during the transfer. GP2GP will develop establish a business process standard for the transfer of patient records in general practice.

5.3. Uptake

For GP2GP to achieve its objectives there must be a critical mass of GPs that use the electronic capability to transfer their patients' notes. GP2GP will seek to achieve this critical mass by:

- ensuring that the changes to PMS systems are designed in conjunction with GPs and is easy to use, safe and reliable;
- facilitating training on the business processes and the new functionality;
- working with national primary care organisations such as the Royal College of GPs and PMAANZ to champion the use of GP2GP.

5.4. Privacy

Although privacy is also a concern with hard copies of patient records, the nature of hard copies makes it difficult for large-scale unauthorised access or widespread unauthorised dissemination. GP2GP doesn't require any more information to be captured and stored than is already being captured and stored. However by stopping the effective leakage of patient information each time a patient changes their GP, over time GP2GP will result in an increase in the volume of patient information that's stored electronically. This will increase the impact of any breach in security.

To ensure that GP2GP is designed and developed in a way that protects patient's privacy, the project will undertake a security review and a privacy impact assessment of the business process and the design.

6. Summary

The GP2GP Patient Notes Transfer Project (GP2GP) is a significant initiative for primary care that will deliver substantial benefits to patients and contribute to the development of a health information environment that can support a person centred approach to the delivery of primary care.

The project is being led by the Ministry of Health, with strong clinical input from a Project Steering Group, which includes representation from the GP Leaders' Forum, College of Practice Nurses, Practice Managers and Administrators Association of New Zealand, and Healthcare Aotearoa.

The Steering Group is currently confirming its scope and requirements of the GP2GP project. When complete detailed planning and design will follow and development is expected to start by November 2009. Implementation of GP2GP across New Zealand is currently expected to begin by June 2010.

7. References

- [1] Ministry of Health. Connected Health Market Research to Support Stage 2 Business Case. Wellington: Ministry of Health; 2009.