

Information exchange between electronic medical record systems

The Health Information Strategy for New Zealand articulates a vision which sees greater information sharing between health care providers. This has been reinforced through numerous recent strategic and tactical activities, not limited to: Key Directions for the Primary Care Environment, initial work of the Ministry of Health around refreshing HIS-NZ, the Health Information Strategy Advisory Committee and most recently the Ministerial Review Group and the Health IT Board (formerly HISAC). In addition work by the National Institute of Health Innovation in articulating a set of information management principles for health and the Ministry-sponsored Interoperability Workshop are all broadly aligned.

The Health IT Board's vision is:

To achieve high quality health care and improve patient safety, by 2014 New Zealanders will have a core set of personal health information available electronically to them and their treatment providers regardless of the setting as they access health services.

In order to achieve that vision the New Zealand health system will need to ensure that:

- information is recorded in digital formats throughout the health system;
- personal health information will be available, with appropriate access, across health care organisations;
- health care providers will have clearly defined roles when collecting, using and sharing personal health information, and;
- information improvements will be prioritised to enable clinicians to optimise their resources (time, facilities and equipment) and focus on the delivery of quality health care.

Issue definition

The Health IT Board is working on a national IT plan which covers the following components:

- Information
- Applications (clinical and administrative)
- Infrastructure

It is a tiered plan where information requirements are driven by model of care, applications capture and record information, and the entire environment is supported by robust infrastructure.

The context for this document and the associated set of draft principles is the juncture between the information and application layer.

There is a recognised disconnect between the strategic direction for health information exchange and the implementation of systems enhancements. Specific developments have been managed on a case-by-case basis with a lack of overarching standards and in the absence of a cohesive approach.

This is particularly evident at points of information exchange between primary and secondary care. Key priorities such as electronic prescribing, exchange of laboratory orders and results, electronic referrals and discharge summaries, patient notes transfer between GP systems, and the population of a personal health summary record are all examples where ad hoc developments have occurred.

Clinical data that resides in electronic medical records 'belongs' to the individual to whom it pertains; the health care provider acts as the responsible custodian in respect of that information.

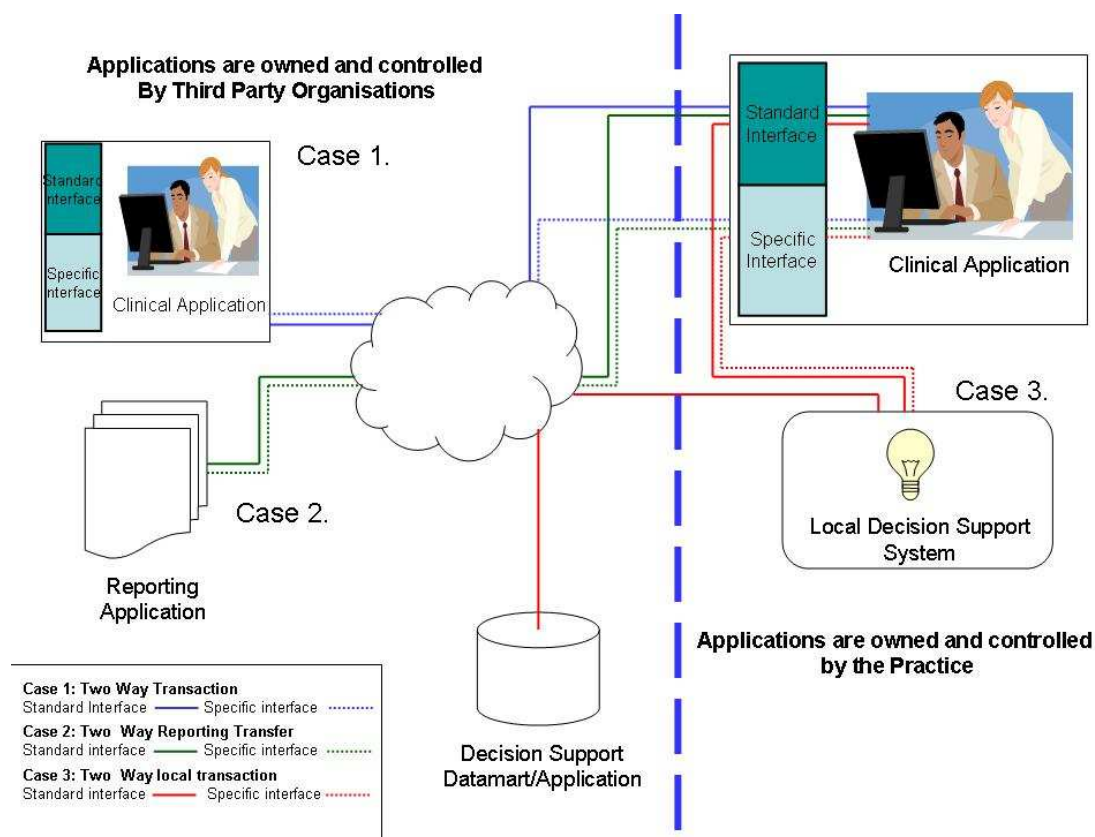
Administrative and management data that resides in or is attached to a clinical record 'belongs' to the health care provider who created or is custodian of it.

It is unclear to those organisations that provide electronic medical record systems as to the basis by which they should provide access to clinical or administrative information to third party systems.

This lack of clarity has the potential to impose barriers to the flow of information necessary for the provision of patient care.

We want an environment whereby common information exchange occurs in a routine, transparent and standardised manner across the New Zealand health system. In time systems will be certified as conforming to agreed and published requirements.

Categories of information exchange and system integration



We have identified three broad categories of interaction. Each is illustrated with examples.

Clinical (case 1)

This includes transfer of care eReferrals/eDischarges, and referred services ordering such as electronic prescribing, pathology test orders, and x-ray ordering. We would also include here possible future interfaces with other EMR services such as selected information being sent at the patients' request to Medic Alert, a personal health summary, and shared cared plans. Complete EMR transfer as with GP2GP patient notes transfer or inter-DHB exchange would also fit this category. Portals that allow the individual to contribute their own clinical information would also apply.

Reporting and administration (case 2)

This category includes regional and national reporting, claiming, PHO enrolment, PHO performance programme monitoring and specific local service utilization and capacity planning activities. Also included here would be primary and secondary care directories (such as Cervin Publishing and HealthPoint).

Decision support and clinical governance (case 3)

Decision support tools such as Get Checked II, specialized clinical systems interfaces (e.g psychiatry assessment tools) and other clinical programmes such as smoking cessation.

Going Forward

The Health IT Cluster is leading a piece of work, with the support of Health IT Board and the Ministry, to resolving the identified issues.

Our view is that we should develop a set of principles and provide those to interested parties for comment. Having agreed on the principles we would then engage the services of an independent third party with relevant expertise to make recommendations around an appropriate economic and commercial model governing information exchange and system integration.

Ultimately our goal to establish an open and transparent platform on which vendors can innovate to meet the current and emerging needs of clinicians and consumers.

We also want to have an environment whereby vendors are able to realise a fair commercial return on their investment and are funded at market rates for the work required to achieve the information environment articulated by the Health IT Board.

Timeline

Activity	Date
Present revised information to HISAC	4 December
Provide revised information to PMS vendors, HealthLink and Enigma	7 December
Present to IPAC CEO's Forum	11 December
Present and discuss at the National Vendor's Forum	11 December
Issue the Consultation Draft for public comment	14 December
Invite proposals from EY, LECG and Deloitte	11 December
Obtain Ministry commitment to funding	14 December
Engage third party economics expertise	14 December
Receive draft commercial model	22 January
Submissions	29 January
Revise document based on feedback and finalise with HISAC/MOH	12 February

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Draft principles for consultation

1. Software companies that provide electronic medical record (EMR) systems in New Zealand are required to implement and publish open interfaces that meet the requirements of current and future HISO standards. These published interfaces will form part of the base product. Requirements will be approved by an appropriate national clinical body.
2. HISO published standards will be reflected in published interfaces by vendors. It is envisaged that published interfaces will eventually be subject to a certification process, which will be governed by an appropriately independent body.
3. With the appropriate permission of the medical practice acting as the custodian of patient information, 3rd parties (software vendors, health sector organisations) are able to make use of the published interfaces to send and receive information to and from EMR systems. Possible uses for 3rd parties could include: decision support systems that add additional features alongside the EMR system; to meet reporting requirements e.g. for public health, utilisation or population health reporting; or, e-event transactions that support the transfer of care between clinicians e.g. sending e-referrals or receiving e-discharges.
4. 3rd parties may choose to negotiate separate software integration support agreements with vendors that provide EMR systems that reflect the level of support required for the particular service that is utilising the published interface.
5. Health system solutions that utilise published interfaces to access EMR information must reflect the medical environment that they are being deployed and operated within both from a patient safety and efficiency aspect. Acceptable integration points between systems that reflect the medical environment will form part of the published interface standards environment. However, where it is not clear the principle is that the end to end solution must be clinically safe and efficient for the user of the solution, in most cases a clinician or people within the clinicians practice.
6. While all parties are free to negotiate appropriate fees and charges, there is a strong preference for practice based pricing over volume based pricing.
7. Whether for the establishment of an information exchange interface or to achieve system integration – individual parties continue to own their respective intellectual property.