GP AND SPECIALIST/CRITICAL CARE REFERRAL CONTENT SPECIFICATION

Release Notes

28 February 2007

NEHTA announces the release of specifications to standardise the content of electronic referrals between GPs and specialists.

Referrals, being one of the most frequently exchanged clinical documents between healthcare providers, are a high priority for standardisation and electronic transmittal. General practitioners generate a high volume of referrals (approximately 9.5 million per annum based on 2001-02 estimates) and there has been considerable interest shown by a number of State and Territory health departments in primary care to hospital/specialist referrals.

Currently, the content and format of referrals produced by the various clinical information systems used in healthcare vary significantly. Some systems use completely unstructured free text without any standardised content; others have some form of structure to describe problems, diagnoses, medications and requests, but the structure is not standardised across different software products. Such variability means that one practitioner's system usually cannot use the information in a referral sent to them from another practitioner.

This not only limits the efficiency with which healthcare can be delivered, it can also risk patient safety – for example, typing errors can be made when re-entering information from a referral into the specialist's records; or the GP may not include information in the referral which later turns out to be essential.

NEHTA has released specifications to standardise the content of electronic referrals across Australia. This work also makes possible the development of improved decision support systems, which will be able to make use of the information in electronic versions of clinical documents (such as referrals) to assist healthcare practitioners make better decisions; and is an important step towards realising shared electronic health records.

NEHTA's *GP and Specialist/Critical Care Referral Content Specification* was developed following extensive consultation with clinicians, professional organisations and colleges, health informaticians and health departments.

Referral Standardisation Priorities

Several different types of referral have been identified by NEHTA as requiring standardisation, based on the care setting and the practice disciplines involved. The first specification released by NEHTA is for referrals between GPs and specialists/critical care; the remaining types of referral specifications are currently under development by NEHTA. The 'family' of referral specifications will include referrals for diagnostic tests, community and aged care, and referrals that embody additional specialised content such as care plans or mental health assessments.

The GP and Specialist Referral

NEHTA's *GP and Specialist/Critical Care Referral Content Specification* encompasses standard specifications for the structure and content of a typical referral exchange between GP and specialist providers. The relevant information is compiled by the referring provider and is transmitted to the referred-to-provider, where the information may be displayed, stored and used (by people and computer applications) to plan and provide the requested services.

NEHTA's data specifications are aimed at standardising the information structure and language used to name and describe clinical concepts, and to provide the necessary contextual constraints to remove potential ambiguity. They are not intended to be software or messaging design specifications. Instead they represent the clinical information requirements for facilitating safe and effective continuity of care across the different healthcare providers, i.e. GPs and specialists/critical care.

It is expected that the *GP and Specialist/Critical Care Referral Content Specification* will be used in conjunction with other NEHTA provided specifications and SNOMED-CT based clinical terminologies, such as NEHTA's Australian Medicine Terminology, as they become available.

The UML Class diagrams included in the specification explain relevant information structures, concept names and data types in a concise, industry-standard format.

A Comprehensive Specification

It is important to understand the philosophy behind specifying referral content as comprehensively as appears in this specification. The specification needs to be comprehensive to capture as much information as required for the recipient to understand the patient's condition as fully as possible. However, it is quite clear

that any one referral sent by a healthcare practitioner is unlikely to require the full suite of details embodied in the specification.

In developing the referral specification, NEHTA has considered:

- how prescriptive the referral template should be, in terms of:
    - structure;
    - comprehensiveness; and
    - the terminology used;
- the burden imposed on clinicians creating and receiving referrals; and
- the burden on clinical information systems to capture, send and/or receive and process structured information.

Therefore, while the specification is prescriptive with respect to structure, information richness, and terminology, it is not prescriptive about which information should be sent under what circumstances.

It is important to note that the specification was also designed for use within clinical information systems to reduce the burden of data entry for the referring healthcare provider, and the subsequent data interpretation, storage and manipulation by the referred-to provider.

The specification and included samples therefore indicate the richness of information that can be expressed, sent and ultimately imported into clinical information systems and shared electronic health records. The specification should not be interpreted as the set of information that must be sent, irrespective of the condition of the patient and the purpose of the referral.

Implementation Considerations

The establishment of clinical information systems that can interoperate regarding the transmission and computer interpretation of referrals (and other documents) is an evolutionary process. NEHTA anticipates that, in the first instance, the health community will review the *GP and Specialist/Critical Care Referral Content Specification* to become familiar with the content and intention of the specification, and plan to implement elements of the specification where possible within planned system upgrades.

Once the additional elements required by interoperable systems become available, the systems that have incorporated the specification will be able to quickly transition to interoperability. The key additional elements are outlined below.

Correct identification of the subject of care, the referring healthcare provider and the referred-to provider (both in terms of identifying the particular healthcare facility and individual clinicians involved) is required in any referral but particularly electronic referrals, to ensure that the right information about the right patient is seen by the right healthcare provider/s. This is critical for both patient safety and to maintain the security of the patient's health information. NEHTA is currently developing a national approach to this issue of unique identification, within a health context.

A standard for the transmittal of electronic health information such as referrals is also required. To this end, Standards Australia have established Australian Standard AS4700.6, identifying the HL7 V2.4 standard for "Discharge, Referral and Health Record Messaging". With appropriate mapping, it will be possible to represent much of the contents of the specification using the HL7 V2.4 "Referral" message. However, it is noted that there are a number of other endeavours in progress both nationally and internationally to upgrade HL7 standards to better support some of the more complex structural and semantic requirements encountered with expressing clinical information in referrals.

A standard clinical terminology across health information systems is also required for interoperability. This enables all systems to use the same terms to name and describe the information (problems, diagnoses, medications etc) contained within the referral. NEHTA has established SNOMED Clinical Terms® as the national standard clinical terminology. The latest version of SNOMED CT is now freely available in Australia, particularly for familiarisation and planning purposes. NEHTA is currently establishing the arrangements by which SNOMED will be freely available for ongoing use.

NEHTA will be developing implementation specifications to support the packaging and transmission of referrals in a standardised, interoperable fashion within Australia. In particular, NEHTA will be laying out a migration path and timetable to assist vendors and implementers move from the current ad-hoc message-based environment to a service-based environment underpinned by strong conformance and accreditation processes.

Ongoing Development

Because the development of data specifications is an iterative process, the NEHTA *GP and Specialist/Critical Care Referral Content Specification* may evolve in response to changing healthcare practices, workflow and information requirements. NEHTA continues to accept feedback on the specification, and will be engaging further with the healthcare industry as an ongoing commitment to the development of quality standards specifications.

To provide feedback or for further information visit: **www.nehta.gov.au** or email: **clinicalinfo@nehta.gov.au**.