



TOWARD A CONTINUUM OF E-COMMUNICATION IN VICTORIA HISA Victoria 'Speed Networking' Session – April 13th 2007

This short document is separated into distinct sections describing the HMS business and its recent achievements, the HMS products, the internal integration across the continuum of care, and finally the support HMS products provides for **true** e-communication across health care services.

The purpose of this document is not to describe the HMS software, but to demonstrate that HMS software is already sharing data across disparate systems, and that many years of work have culminated in a system that enables it to **send and receive** electronic data across the continuum of care.

Sharing Data and True e-Communication

There is a gross misunderstanding that *e-referral* is the attachment of PDF or Word documents to an e-mail for sending and receiving client health data. This is obviously not the intended meaning of *e-referral*.

True e-communication, however, involves the transmission and receipt of electronic data that is, in essence, completely transparent to the end user, and supports more than just the referral process. Data should flow freely and securely between and within systems for maximum benefit to patients, health services and clinicians.

In Victoria, all of the components required to enable true communication are available. SCTT 2006, HL7 message definitions in Australian Standards AS400.6, as well as recent initiatives to report data to the DHS using HL7 protocols (eg VINAH) suggest a readiness to adopt electronic data interchange now. The following preconditions for full e-communication to be possible now exist:

- An agreed protocol is to be used. In Australia, HL7 versions 2.4 and 2.5 have been adopted
- An agreed data standard for communication must be published. The SCTT 2006 is a data standard, and is the only standard that is being encouraged for use across services.
- The database systems used by organisations should be able to send and receive HL7 messages with an agreed structure and set of rules that use the SCTT MDS. This is regardless of the internal or external reporting required of the system at either end.

HMS possess the technology and systems to support multiple minimum data sets, enable the range of service delivery models across the spectrum of health care, and has developed utilities to both send and receive HL7 messages. *HMS is already achieving these outcomes to various extents in its installations around Victoria.*

Moving HMS Clients from Stand-Alone Systems to Fully Integrated Networks

In 2000, HMS recognised the need to improve its product design and redeveloped it for high performance. As part of this work, separate processes were put in place to move all clients from the stand-alone HMS databases across the networks into a single HMS system that supported all of the health care programs.

Throughout 2005 and 2006, these separate HMS systems were merged and the resulting very high level of integration across different services and service types, made it possible to share health information about a client as well as coordinate the care and reduce the unnecessary duplication of effort and waste of resources.

HMS Company Overview

HMS is an organisation that has fully harnessed the concept of global, agile product development. Suppliers and contractors are sourced from over 22 organisations in 12 countries, and provide specialist expertise that enables HMS to develop state of the art products using the latest software development principles and techniques. This approach leaves HMS with ample resources to remain committed to meeting the current and future business needs of its clients through careful business and market analysis.

Efficient product development is core to the company's success, but other critical factors that include rapid deployment techniques, simple delivery and upgrade, as well as low cost of maintenance enable HMS to remain a lean, successful organisation with a very high output. HMS sales since 2005 have grown considerably due to the fully integrated and readily expandable nature of the products it has developed, made possible by the efficient systems it uses for delivering its products to market.

HMS develops all of its own software, has no debt, and is expanding rapidly. Major projects have been won since 2005, and in 2007 the scale of projects has increased dramatically, with the largest systems now supporting hundreds of users, across multiple businesses in multiple sites.

HMS Philosophy

The business of delivering health care services is complex, but in essence the same core principles, functions and practices exist regardless of the service delivery model used. Within each health business or network, a high level of integration is mandatory for obvious business efficiencies and for achieving a high quality of care.

Simply put: one worker record, one client record and one system that can communicate externally and internally is the goal HMS has pursued relentlessly since 1994.

HMS Now – April 2007

- HMS is used in the largest health care networks in Victoria and the company has won many large contracts to support HARP, SACS, Post Acute Care, Community Health and HACC funded services, Day Centres and Day Therapy Services. This was against competition from much larger organisations.
- Several large rural services are replacing existing, well known, products with HMS to manage the Sub-Acute, Acute Allied Health, Community Health, Post-Acute Care, Community Health services in a fully integrated system. Large projects are under way, and others have committed in principle.
- *The Harrison Scheduler* is supporting single point of entry models in very large health care networks
- The HMS HL7 engine is generating multiple HL7 messages and querying information from different systems (HOMER, IBA, VITAL). In one very large Victorian installation, it is obtaining data from five PMIs in five different public hospitals.
- A new HMS HL7 Listener has been completed, which enables HMS to respond to HL7 messages

Products

HMS Client Management System – also known as HMS Mastercare, and HMS:

- HMS is a client management system that supports a true single client record.
- Manages multiple sites, supports different service delivery models, and hundreds of users.

Harrison Scheduler

- Very powerful and flexible booking tool that is fully integrated with the HMS system
- Enables booking, scheduling and 'templating' of clinician diaries to allow full resource management

HL7 Message Generator

- HL7 standards 2.3.1, 2.4 and 2.5 are supported.
- True trigger based implementation that follows HL7 standards

HL7 Listener

- This is a new product that has only been completed in March 2007. It is a web based HL7 service that can receive HL7 messages from any source and respond accordingly by retrieving data from the HMS database.
- **This is the final link in HMS' product suite to enable a fully conversant e-communication system**

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