Quarterly Project Bulletin

HealthCollect and Victorian Health Information Repositories (VHIRS) Redevelopment Project

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DEPARTURES, HANDOVERS AND NEW PEOPLE

Outgoing

None.

Incoming

Belinda Napoli joined the project as a junior business analyst.
Fiona Rippin joined the project as a new graduate for a four month rotation. Fiona will be working on project communications.

Project Board Changes

Three new members joined the project board:

- **Bruce Ryan** – new member representing HealthSMART.
- **Alec Savin** – replaced **Paul Morton** in the Quality Assurance role.
- **Dick Austin** – replacing **Bruce Lawrence** as the Information Services Branch representative in the Senior Supplier role.

ONGOING COMMUNICATION ACTIVITIES

A project bulletin will be released every quarter. Project Forums will be conducted biannually.

The next forum is scheduled for **14 April 2009.** All welcome! For an invitation contact Michael Bouchaud.

DATA REFORM PROJECT

At present data collection from Victorian hospitals is fragmented across different data collections.

The key patient level data collections - ESIS (elective surgery waiting list), VAED (admitted episodes), VEMD (emergency management) - are being collected in varied formats.

Although some data elements are being defined and collected in the same way - such as sex - several are not, such as referral source.

Some of our collections also collect 'derived items' rather than 'transactional items' - for example reporting total leave days instead of individual leave periods.

The data reform project has developed a common conceptual framework as a foundation on which to align all the data collections and their constituent elements. In conjunction with a data review to remove derived items and standardise / harmonise data elements, more efficient and less burdensome data collections will be delivered.

A discussion draft of the results of the first phase of the data reform work is expected to be released for comment shortly.

RECENT PROJECT PROGRESS

Key Deliverables	What It Is & Why	Status	Analogy (Building a New House)
Reverse Mapping.	Process where report objects are mapped back to source data. Done to ensure that current reports can be recreated in the new ODS / Data Warehouse.	Delivered	Examining your existing house to determine the materials used to build it.
Solution Outline.	High level document that shows the core components of solution architecture. Undertaken as the initial step in the solution architecture process.	Delivered.	Determining the number and types of rooms, hallways and entrances for the new house.
Solution Architecture.	Document describing the structure of the systems framework put forward to address identified problems and requirements. Prepared as a guide and reference for detailed specification and build activity.	Delivered.	Detailing the key specifications for the new house - materials, layout, size of rooms, etc.
Solution Design Stage.	Key project stage where the overall project solution is prepared.	Delivered.	Preparing the blue print for constructing the new house.
Planning for Stage 4 – Specification Phase 1.	Specifying requirements for: • HealthSMART integration. • Data acquisition framework. • Data validation.	Delivered In Progress Pending	Laying the foundations.
Patient Level Data Reform.	Reforming key health data sets: • VAED (admitted episodes). • ESIS (elective surgery). • VEMD (emergency management).	In Progress	Changing the fixtures and fittings.

Other Project Activities of Note:

- A review of the RRHACS data repository has been undertaken. A second review will be conducted when the operational data store (ODS) design in complete.
- A draft Security Model has been prepared.

HEALTHCOLLECT - WHAT HAPPENS NOW; WHAT WILL HAPPEN IN THE FUTURE?

THE DHS PERSPECTIVE

Now

Health data is captured via a variety of non-uniform acquisition methods. NeHTA standards are not met. Data is provided in a variety of formats. For VAED and mental health data an external facilities manager (PayOffice) is utilised. Once provided, data is processed and validated. Processes are largely not documented and vary from one data collection to another. Process knowledge is resource-specific with individuals generally responsible for processing a particular data collection. Edits are well documented but hospitals are routinely contacted re data errors and requested to edit / resend data. As a general rule data for any period is not available to users until all errors have been corrected. Overall, significant effort is applied to data processing / validation.

Data capture time cycles are largely determined by the ability of health services to supply / re-supply data. Data processing is time consuming and affects the timeliness of data availability. There is constant business demand for more timely data.

Validated data is exported to a variety of data repositories including VHIRS (metro health data), VHIRS-M (mental health data) and the RRHACS Data Repository. The health data repositories are not integrated and lack capacity to effectively report historical data. The routine data linkage of key collections is performed manually. Cost weight data is stored and managed at a desktop level. Reports are run against the various data repositories – primarily using SAS and Business Objects. Substantial time and effort is applied to DHS report preparation. Numerous data extracts are provided for manipulation and reporting via MS Access, SAS, SPSS and other tools. There is a reliance on reconciliation of extract-based reports against the data repositories, and when this doesn't occur it frequently leads to variances in reporting outcomes.

The current HealthCollect environment is a discrete subnet that is inherently insecure and subject to the risks of data loss and hacking. As reported by MKS Consulting in 2006, the current HealthCollect environment is not meeting business requirements and is quite unsustainable.

The Future

Health data will be captured directly from HealthSMART applications and via B2B technology from larger hospitals.

An alternative uniform data acquisition framework will apply for the smaller public hospitals and private day procedure centres.

In so far as possible there will be accordance with NeHTA (HL7 / web services) standards.

PayOffice will not be involved.

Once provided, data will be validated using a data validation engine. Required data derivations / aggregations will be performed. Uniform and consistent processes will be in place – all processes will be documented and process knowledge will be generic. Data edits will be simpler - in some cases closer to source - and the move to transactional data is expected to reduce edit failures. The effort required to process and validate data will be substantially decreased.

Validated data will be exported to an integrated DHS health domain-level data warehouse environment. The operation data store (ODS) / data warehouse will be the major source of data – data extracts will generally not be available. The data warehouse will have the capacity to effectively report historical data and to perform standard data linkages.

Cost weight data will be stored and reported via the data warehouse.

An extensive suite of reports will be available. The data warehouse will allow for complex analysis and data mining.

There will be more standard reports / direct user access using Microsoft Reporting Services and SAS.

A Front Office will be established to support the users of the data warehouse.

The redeveloped HealthCollect environment will reside in DHS' secure Enterprise Application Zone (EAZ).

Significantly less time and effort will be applied to DHS health reporting.