

# HealthCollect & VHIRS Redevelopment Project



## Michael Bouchaud, Manager HealthCollect & VHIRS Redevelopment Project

30 April 2009

# What is HealthCollect?

- **DHS' Metropolitan Health and Aged Care Services (MHACS) Division currently maintains an IT environment/subnet called HealthCollect.**
- **HealthCollect is also used to describe a set of health data collections e.g. Admitted Episodes Dataset (VAED), Emergency Management Dataset (VEMD) & Elective Surgery Dataset (ESIS).**
- **HealthCollect enables the exchange of information to and from DHS and the hospital sector and other health service providers.**
- **The environment is separate from DHS' corporate IT environment.**

# HealthCollect – Current Issues

**Current HealthCollect environment is not fully integrated. There are individual data collection systems and repositories, that have served us well for many years, but:**

- **Were built using different approaches.**
- **Were limited by the available technology and personnel.**
- **Have evolved gradually over time to satisfy business requirements.**
- **High maintenance, not fully automated.**
- **Not fully documented.**

# What We Are Doing – Key Objectives

- **To implement a uniform data acquisition, validation and processing environment.**
- **To leverage the HealthSMART application suite for direct data extraction purposes to reduce the burden of hospital reporting.**
- **To develop a DHS ‘health domain level’ data warehouse.**
- **To migrate the HealthCollect applications and datasets into DHS’ corporate IT environment.**
- **To reform the key patient level data collections.**
- **To improve security, governance, data integrity, data quality and system documentation.**
- **To implement an effective data management strategy supported by sound operational processes.**

# Key Gains

**Implementation of the redeveloped HealthCollect environment and whole of DHS health domain-level data warehouse will deliver many benefits.**

**Some notable key gains are:**

- 1. Freeing Up Health Sector Workforce.**
- 2. More Responsive Outcomes.**
- 3. Cost Reduction & Savings.**
- 4. Improved data quality.**

## **Health Sector Workforce**

**Reporting will be simpler. More operational data will be reported through a shift to event based data.**

**Data acquisition will be streamlined and simplified.**

**Data will be captured directly from the HealthSMART application suite.**

**Data editing effort will be reduced.**

**The reduction in the 'reporting burden' will mean that Health Information Managers and the other resources involved in reporting to DHS will have more time for other value-add tasks.**

## **More Responsive Outcomes**

**Health Service Providers will have access the DHS health domain-level data warehouse to perform in-depth data analysis.**

**A Front Office will be in place to support users of the data warehouse.**

**There will be increased capacity to quickly and effectively respond to departmental requests for health information.**

**There will be an increased ability to deliver meaningful data and reports to the health sector.**

# Cost Reduction & Savings

**The PayOffice Australia facility management contract will be eliminated (approx. \$800k p/a saving).**

**Productivity savings will allow for a shift in focus to data analysis – DHS & health sector.**

# **The HealthCollect & VHRS Redevelopment Project**

**Endorsed by MHACS Executive and  
formally initiated in July 2007**

## **Progress to Date – Completed Project Stages**

**Three project stages have been completed and two are in progress:**

**Project Initialisation Stage**

**Stage 1 Requirements Analysis**

**Stage 3 Solution Architecture**

# Project Initialisation Stage

**July – Sept 2007**

**Stage Deliverables:**

- Project Initiation Document (PID)**
- Project Plan**
- Communication Plan**
- Quality Plan**

# Stage 1 Requirements Analysis

**Sept 2007 – Feb 2008**

**Stage Deliverables:**

- Business requirements**
- Data warehouse review**
- Patient records system (PRS/2) review**

# Stage 3 Solution Design

Feb – Oct 2008

## Deliverables:

- **DW Business Information Requirements**
- **DW Logical Business Information Model (B.I.M.)  
(partial - reverse engineering)**
- **Solution Outline**
- **Solution Architecture (Independently reviewed)**

# **Current Project Stages**

**Stage 2 Patient Level Data Reform  
Feb 2008 – June 2009**

**Stage 4 Specification Phase 1  
Oct 2008 – June 2009**

# Stage 4 Specification Phase 1

**Prepare Requirement Specifications  
for three core project elements:**

- 1. HealthSMART Integration**
- 2. Data Acquisition Framework**
- 3. Data Validation**

## **Path Ahead**

# **Complete Data Warehouse Design**

## **Build and Implement - Iterative:**

- HealthSmart Integration**
- Data Acquisition Framework**
- Data Validation**
- Extract Transform Load (ETL)**
- Data Warehouse**

# Project End State Condition

- **A single source of data for decision making, planning and policy formation purposes**
- **Deliver data, workforce benefits and cost savings**
- **Basis for DHS Health Domain-level DW**

**\*\* Expected project completion date is November 2011 \*\***