

Accessing patient information

Developing a statewide clinical management model for cancer

Factsheet Overview

August 2007

Developing health information and communication technology (ICT) solutions to facilitate clinical management in cancer care has, to date, largely been progressed at a unit or institutional level, with limited coordination of initiatives between health services. Requirements for contemporary health ICT solutions focus on ensuring the availability and communication of information across the service spectrum to reflect modern care pathways, including new treatment modalities such as multidisciplinary care (MDC). New management models will also provide the data capacity and integrity to underpin future research and public health initiatives.

Why is there a need to develop a statewide clinical management model for cancer?

Advances in ITC to support health care are being driven by the need to:

- reduce inefficiencies and errors in service delivery
- supply information critical to providing patient care at the point of care and time of clinical decision making
- facilitate treatment continuity across a range of health care providers
- continually improve outcomes for patients.

Improved data and information is also needed to support and evaluate the impact of cancer service reforms in Victoria, and to deliver on the recommendations of the *Cancer services framework for Victoria*¹. This includes collecting agreed data for monitoring performance indicators across health services, establishing benchmarks and using these to assess activity levels, variations in care and identify service pressures, and analysis of patterns of cancer care. Timely feedback of this information to clinicians is valuable.

What will be the process?

Developing an appropriate clinical management model for cancer across the state relies on consistency in data collection, which will require broad agreement by health services and Integrated Cancer Services² (ICS). A clinical framework for structuring this has already been developed in the Patient Management Frameworks³ (PMF). These delineate the optimal care pathway for patients across ten tumour streams, and can be used to provide the basis for agreement on where the major points are for data collection and support the information management of MDC, including documentation of MDC meetings and recommendations.

Using the PMFs to determine basic information and functionality requirements is the first stage in the process to develop a clinical management model for cancer.

The next stage will involve engaging a contractor to compare these requirements against commercially available ICT systems and those currently in operation in the hospital sector for clinical cancer management. This stage will also involve undertaking an assessment on how developing such a system will fit within the rollout of new hospital systems through the Government's HealthSMART⁴ strategy. The expected outcome from these first stages will be a report that:

- reviews existing hospital computer-based cancer clinical management systems as identified by ICS in Victoria
- provides an assessment of the capacity of existing systems and ICT initiatives to meet the identified functional requirements
- assesses how developing a statewide model will fit within the rollout of new hospital systems through the HealthSMART strategy
- identifies obstacles or risks in establishing a cancer clinical management model for cancer such as privacy, indemnity and additional resource requirements
- identifies options and costs for developing statewide solutions.

Subsequent stages will require funding to trial and evaluate the clinical management model for cancer, prior to broader implementation.

How will health services be involved in the first stage?

ICS are the formal mechanism through which clinical information will be shared across health services. Local collaborating tumour groups (LCTG) have been established in each ICS to facilitate the delivery of clinical treatment and care through ten major tumour streams.

The first stage requires that information and functional specifications are detailed in alignment with the PMFs. The process for identifying these specifications will be piloted across a single tumour stream (lung cancer has been selected for this), then rolled out to other tumour streams as required. The pilot will work with a group of expert lung cancer clinicians to identify these requirements, with representation from the ICS. The outcomes from the pilot will inform progress to subsequent stages.

What about other ICT initiatives?

A number of significant initiatives to inform cancer data and information initiatives are currently taking place in Victoria. These initiatives have the potential to facilitate and/or be supported by the development of a clinical management model in cancer.

HealthSMART

A major statewide initiative in health information and communications technology is HealthSMART, an initiative that aims to improve patient care, reduce the administrative burden on health care professionals and ease

the costs associated with updating technical infrastructure within the public health care system by adopting a more standardised approach to information systems.

A key component of HealthSMART that is relevant in terms of clinical management is the Clinical System⁵ project. This project aims to improve patient care through implementing the Cerner Millennium® clinical system to support clinical service delivery. The system's functionality will be implemented incrementally in clinically logical workflow groups with enabling infrastructure from

Release 1: Clinical Workbench and Electronic Prescribing;

Release 2: Order Entry and Medication Management; and

Release 3: Clinical Documentation.

The estimate completion of Release 1 at nominated agencies is April 2008.⁶

The development or redevelopment of information systems in Victoria should adhere to HealthSMART principles and coordinate with the rollout of HealthSMART.

Molecular Medicines Informatics Model⁷

The Molecular Medicines Informatics Model (MMIM) is a data-sharing platform that provides researchers with access to a federated dataset covering a number of major Melbourne hospitals and research institutions. MMIM has a significant focus on cancer, with a pilot linking colorectal cancer data across four hospitals providing an example of the effectiveness of such collaborative infrastructure.

Building on this success and MMIM's platform technology is a proposal to develop an Australian Cancer Grid to provide Australian researchers access to integrated cancer data from hospitals and research institutes across Australia, and formative links with major international researchers and data.

Victorian Cancer Outcomes Network

The Victorian Cancer Outcomes Network (VCON) is an initiative to trial the statewide collection of the National Health Data Dictionary Cancer (clinical) Data Set Specification (DSS) (previously the National Cancer Control Institute Core Clinical Cancer Dataset). Collecting this data will greatly expand the capacity of the existing Victorian Cancer Registry⁸ and will, for the first time, provide population information on cancer patients from diagnosis and staging through to treatment and outcome, including recurrence.

What are the timeframes envisaged?

It is envisaged that identifying the information and functionality requirements across a single tumour stream will be completed by October 2007. The outcomes from this pilot will inform progress to subsequent stages.

Who to contact for further information?

For information regarding the development of a clinical management model for cancer, please contact the Cancer and Palliative Care unit on 03 9096 2136.

1 www.health.vic.gov.au/cancer/framework.htm

2 www.health.vic.gov.au/cancer/integratedcancerservices.htm

3 www.health.vic.gov.au/cancer/pmfsnew.htm

4 www.health.vic.gov.au/healthsmart

5 www.health.vic.gov.au/healthsmart/documents/csnews_may07.pdf

6 www.health.vic.gov.au/healthsmart/documents/driveguideapr07.pdf

7 <http://mmim.ssg.org.au/whatis.htm>

8 www.cancervic.org.au/about-our-research/our-research-centres/cancer-epidemiology-centre/victorian-cancer-registry/