

Draft Cancer Services Plan 2008 - 2012

October 2007

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Executive Summary

The ACT Health *Cancer Services Plan 2007-2012* provides the framework for the future delivery of comprehensive cancer care to the people of the ACT and South East New South Wales.

The incidence of cancer is increasing and is attributed to the ageing of the population, screening and early diagnosis of the disease. Estimates suggest that between 2003 and 2011 there will be an increase of 22% in the number of new cases diagnosed each year in the ACT.

The plan focuses on further developing a multidisciplinary and integrated model of care for people with cancer. A person with cancer and their carers will experience a complex array of interactions with a range of clinical and support services, inside and outside of those services provided by the ACT Health Capital Region Cancer Service. The plan provides a framework for strengthening the links between those services so that the patient journey is as integrated and easy to navigate as possible. It recognises the central role played by a person's General Practitioner in the coordination of care and the need for stronger links and support for General Practitioners.

The establishment of these linkages will be underpinned by an integrated information technology and information management strategy for cancer services detailed in the plan.

The plan also recognises the importance of prevention and screening and the integration of cancer research and teaching with clinical care, and proposes the establishment of a comprehensive cancer care centre in the ACT.

In addition to enabling comprehensive care integrated with cancer research, this centre will position the ACT as an attractive workplace for a scarce skilled workforce which will need to grow and develop in line with projections of demand for cancer care.

SECTION 1: The Cancer Services Plan

1.1 Purpose of the Plan

The ACT Health Clinical Services Plan (2005) foreshadowed the development of the Cancer Services Plan (the Plan) which would set the strategic direction for the provision of public cancer services in the ACT.

The objectives of the Plan are to:

- Provide a framework for the provision of a comprehensive cancer service.
- Strengthen the patient centred focus of cancer services.
- Develop a focus on the assessment of performance in the provision of cancer services.

More detailed service delivery planning will be incorporated into planning for specific elements of the service. Appendix G shows the planning framework for cancer services.

1.2 Development of the Cancer Services Plan

Steering Committee

A Steering Committee with broad representation has overseen the development of the draft plan.

Consultation

A Reference Network was identified for consultation during the development of the draft plan. Members of the Reference Network were consulted individually about the delivery of cancer services. Once developed, the draft plan will be released for consultation with members of the Reference Network and the wider community.

1.3 Service Context

Challenges and priorities

- ◆ Developing an integrated and comprehensive patient centred cancer service for the ACT and region.
- ◆ Implementing priorities of national and local policies, strategies and frameworks.
- ◆ Embracing advances in pharmaceuticals and in clinical and information technology, where appropriate.

1.3.1 Establishment of the Capital Region Cancer Service

ACT Health has networked or streamed services delivered by a range of service providers in a variety of locations to maximise patient access to the services they need. Streamed services focus on the provision of services across the care continuum. In addition, streams facilitate the participation of clinicians and consumers in planning, development and improvement of services and the assessment of the best ways to use available resources to meet client needs.

The Capital Region Cancer Service (CRCS) was established as a clinical stream in August 2004 as a joint initiative between ACT Health and Greater Southern Area Health Service (GSAHS). The Director of CRCS is the Clinical Director of the GSAHS Southern Sector Cancer Network. The major outcomes for CRCS will be an integrated cancer service for the ACT and the eastern (former Southern Area Health Service) part of the Greater Southern Area Health Service in NSW, resulting in improvement in clinical practice and better health outcomes for consumers.

1.3.2 ACT & Region policy context

access health

This is the key health document for the ACT Government that sets the future direction for public health services for the period 2007-2010.

The document identifies the ACT Government's priority areas:

- Timely access to care.
- Aged care.
- Mental health.
- Chronic disease management.
- Early childhood and vulnerable families.
- Aboriginal and Torres Strait Islander health.

ACT Health Clinical Services Plan 2005-2011 (CSP)

The CSP provides the framework for the development and provision of public hospital and community health services for the people of the ACT. It sets a number of goals and initiatives for cancer services:

- The cancer stream will facilitate early diagnosis, improved outcomes and more seamless access to care across the spectrum of cancer-related services;
- Services expansion initiatives will include increased chemotherapy and radiation oncology services. Performance indicators to be achieved as a result a reduction of patient flows to other states for radiation oncology treatment, 100 percent of people requiring urgent radiotherapy service receiving those services within 48 hours, and 100 percent of people requiring semi-urgent services receiving treatment within standard timeframes;
- The development of specific service plans for cancer-related services including radiation and medical oncology services.

Public Health in the ACT 2004-2008

This Plan provides a strategic direction for health improvement through health promotion, health protection and quality of care initiatives.

ACT Health Primary Care Strategy 2005-08

The principles in the Strategy are:

- Person centred care and optimal self-care.
- Chronic disease prevention and care planning.
- Quality, safe and cost effective interventions that build on current best practice models.
- Addressing the needs of disadvantaged groups.
- Integrated multidisciplinary care.
- Cross sectoral partnerships and collaboration.

ACT Ambulatory Care Framework 2005 (Draft)

The framework outlines the adoption of fully coordinated ambulatory care services across the ACT which are:

- Patient centred.
- Multidisciplinary and collaborative.
- Accessible.
- Safe & high quality.
- And adopt a population health approach.

ACT Palliative Care Strategy 2007-2011

The strategy will provide overarching direction for the delivery of palliative care services across ACT Health.

ACT Health Surgical Services Plan Options Paper

The ACT Health Surgical Services Plan will be finalised during 2007.

The overall aim of the Surgical Services Plan is to:

- State surgical service directions;
- Delineate the roles of hospitals;
- Project demand for services;
- Inform facility and workforce planning;
- Clarify/progress governance arrangements.

At the time of finalisation of the Cancer Services Plan, an Options Paper for the Surgical Services Plan has been distributed for comment. This paper provides a range of possible options for surgical services improvement in the ACT.

1.3.3 NSW Policy Context

The NSW Government established the NSW Cancer Institute under The Cancer Institute NSW Act 2003 with the following objectives:

- To increase cancer survival rates for cancer patients.
- To reduce the incidence of cancer in the community.
- To improve quality of life of cancer patients and their carers.
- To operate as a source of expertise on cancer control for the government, health service providers, medical researchers and the general community.

The NSW Cancer Institute has developed the NSW Cancer Plan 2007-2010.

Greater Southern Area Health Service is finalising its Cancer Services Plan as part of the Area Health Service Clinical Services Plan.

Coordination of strategies in this plan with initiatives planned in NSW is important because of the regional role of CRCS and the location of the ACT within the boundaries of NSW.

1.3.3 Health and demographic overview¹

In 2004 the population of the ACT was 324,000². Population projections suggest there will be around 347,200 people living in the ACT by the year 2011 with the greatest increase expected to be in the 60-69 years age group. The proportion of people under 20 years of age is expected to decrease from about 28.2 per cent in 2001 to about 24.2 per cent of the population in 2011. These shifts in the age structure and other demographic changes will have significant implications for future service demand, service planning and delivery of health care services in the ACT.

Population health indicators show that the ACT enjoys a more favourable level of health status than the rest of Australia. However, like the rest of the country, the ACT has specific health issues and trends of concern, with various health inequities in vulnerable population groups.

Appendix A provides a profile of cancer in the Capital Region. The incidence of cancer is increasing and is attributed to the ageing of the population, screening and early diagnosis of the disease. Estimates suggest that between 2003 and 2011 there will be an increase of 22% in the number of new cases diagnosed each year in the ACT³. Cancer is the second leading cause of death for residents of both the ACT and NSW.

Key findings of the report *Cancer in the ACT 1998-2004*⁴ include:

- Although the number of new cancer cases and cancer deaths has risen since 1985, age standardised mortality rates per 100,000 population have remained relatively stable. This indicates that the increase was due to changes in the age structure of the population rather than the risk of cancer for any particular group.
- Overall rates of new cancer cases were slightly higher in males than females.
- Forty-seven percent of cancers occurred in persons over 65 years of age.
- Over the period of 1985 to 2004:

The most common cancers were: cancer of prostate, female breast cancer, colorectal cancer, melanoma of skin and lung cancer. These cancers accounted for over 60 percent of new cancers overall.

¹ Extracted from: *Public Health in the ACT 2004-2008*

² ABS, 3101.0 - Australian Demographic Statistics, Jun 2006

³ ACT Health ACT Chief Health Officer's Report 2006.

⁴ ACT Health Population Health Research Centre (2007) *Cancer in the ACT 1998-2004*

There were

- decreases in the age standardised rates of : lung cancer and melanoma of skin in both genders, ovarian cancer, and colorectal cancer in females.
 - increases in the age standardised rates of: prostate cancer, breast cancer, cancer of uterus, colorectal cancer in males and non-Hodgkin's lymphoma in both genders; and
- Prostate cancer was the most common cause of male cancer and the second most common cause of male cancer death. The risk of developing prostate cancer before the age of 75 years was 1 in 9 males. The notable increase of new cases since 1985 most likely reflects an increase in the use of Prostate Antigen Test (PSA).
 - Breast cancer was the most common cause of female cancer and the most common cause of female cancer death. The risk of developing breast cancer before the age of 75 years was 1 in 10 females. Earlier detection and treatment of cancer has been facilitated through the introduction of the BreastScreen program in 1993.

Low fertility, delayed aged of first child and higher participation rates in screening programs are contributing factors to the higher breast cancer and prostate cancer in the ACT.
 - Lung cancer was the fourth most common cause of cancer in both genders. It was the most common cause of death from cancer in males and third in females. Since 1985 there has been a decrease in new cases, which coincides with a national decrease in prevalence of tobacco smoking.

In NSW in 2004 the most common new cancers were of the prostate, large bowel, breast, melanoma and cancer of the lung⁵.

The ACT report includes all cancers excluding non melanocytic skin cancers when reporting incidence and mortality.

⁵ Tracey.E et al (2006) Cancer in New south Wales: Incidence and Mortality 2004. NSW Cancer Institute. Sydney.

1.4 National goals and challenges

The National Service Improvement Frameworks (NSIF) are joint initiatives of the Commonwealth and State and Territory governments and are part of the National Chronic Disease Strategy. The NSIFs are tools developed to direct improvement in health services for people with national health priority conditions. The NSIF for Cancer was the first to be developed.

In 2005 the Senate Committee on Community Affairs completed a report on an inquiry into services and treatment options for persons with cancer: *The cancer journey: Informing choice*.

The recommendations of the report cover:

- Availability of information at diagnosis and referral.
- Promoting multidisciplinary care.
- Improving coordination of cancer services.
- Improving support for cancer patients.
- Travel and accommodation issues for regional Australians.
- Improving cancer care for Indigenous Australians.
- Increasing research into complementary therapies.
- Improving access to and information on complementary therapies.
- Access to breast screening.
- Cancer care for adolescents.
- Improving data collection.

The Australian Government has established a national cancer agency, Cancer Australia, to guide improvements in prevention, provide support to consumers and health professionals and make recommendations to the government about cancer policy and priorities.

Cancer Australia has established a National Centre for Gynaecological Cancers which will provide national leadership to improve outcomes for gynaecological cancers and increase awareness and education about gynaecological cancers for medical and allied health professionals. The establishment of the Centre follows recommendations from the [Report on the Inquiry into Gynaecological Cancers in Australia](#) by the Senate Community Affairs Reference Committee.

The Australian Better Health Initiative endorsed by the Council Of Australian Governments (COAG) in 2006 aims to promote good health and reduce the burden of chronic disease through the following priority areas:

- Promoting healthy lifestyles.
- Supporting early detection of lifestyle risks and chronic disease.
- Supporting lifestyle and risk modification.
- Encouraging active patient self management of chronic disease.
- Improving integration and coordination of care.

1.5 New technology & pharmaceuticals

1.5.1 Treatment

Cancer treatment modalities are moving toward more targeted and highly specific therapies enhanced by improvements in technology.

Some examples of new treatments are the application of nanotechnology-enabled products which has facilitated the movement from chemotherapy to more targeted drug therapy (targeted drug therapies attack the specific proteins in cells that cause normal cells to become cancerous), developments in anti-cancer drug technology, combined modality therapies such as the combination of more limited surgery with radiation therapy, better targeted radiotherapy, chemotherapy and hormonal manipulation and changes in the frequency of therapies.

New targeted drug therapies aim to improve survival and decrease side effects but will significantly impact on drug and staffing costs.

Changes in treatments are also leading to changes in practice in cancer services. Chemotherapy can be administered via a range of routes and advances in technology are assisting in the increasing ability to treat more diseases in an outpatient or ambulatory care setting.

ACT Health has introduced a formal process for the assessment of new technologies prior to implementation.

1.5.2 Diagnostic procedures

Diagnostic procedures also continue to improve.

Positron Emission Tomography (PET) is an example of a diagnostic procedure that results in improved diagnostic accuracy over conventional imaging in a number of indications.

Feasibility planning will be undertaken to determine the need for PET technology in the ACT in the future.

1.5.3 Genetic testing and screening

In the future genetic testing and screening will identify people at genetic risk of developing cancer.

1.5.4 Information technology

Information technology will address some of the issues associated with access to services and enable enhancements to information management for patient care and monitoring the performance of services. Information technology (IT) and information management (IM) have been identified as key issues in the planning for cancer services for the future. A cancer stream IM/IT strategy has been incorporated into this plan as an acknowledgement of the importance of IT in improving the delivery of cancer services.

SECTION 2: Target Population

Challenges and priorities

- ◆ Meeting demand for services generated by the projected increase in numbers of new cases of cancer.
- ◆ Providing services to an increasing number of older people diagnosed with cancer.

2.1 Cancer Projections for the ACT and Region

The combined population of the ACT and South East NSW is projected to grow between 2006 and 2021. The projections for cancer incidence for both the ACT and south east NSW (the area covered by the former Southern Area Health Service) reveal an increasing number of expected new cases of cancer in the future.

Trends in cancer incidence and mortality rates vary with the type of cancer. The report *Cancer in Australia: an overview 2006*⁶ details the trends for various cancers over the period of the report.

The report notes that “In Australia the total number of cancers diagnosed in 2003 was 26% higher in 2003 [sic] than in 1993, compared with a 12% increase in the Australian population during this period. However, the age standardised incidence for ‘all cancers’ was 0.7% lower in 2003 than 1993”.

The report shows that for all cancers excluding non-melanocytic skin cancers, the ACT recorded the sixth highest age-standardised incidence rate during the period 1999-2003. There were 5,516 new cases of cancer diagnosed in residents of the ACT in 2000-04⁷.

In the ACT between 1985 and 2004 the five most common cancers registered were of the prostate, female breast, colorectal cancer, melanoma and lung cancer. In NSW in 2004 the most common new cancers were of the prostate, large bowel, breast, melanoma and cancer of the lung.

⁶ AIHW, Australasian Association of Cancer Registries (2007). *Cancer in Australia: an overview 2006*. AIHW. Canberra

⁷ ACT Health Population Health Research Centre (2007) *Cancer in the ACT 1998-2004*.

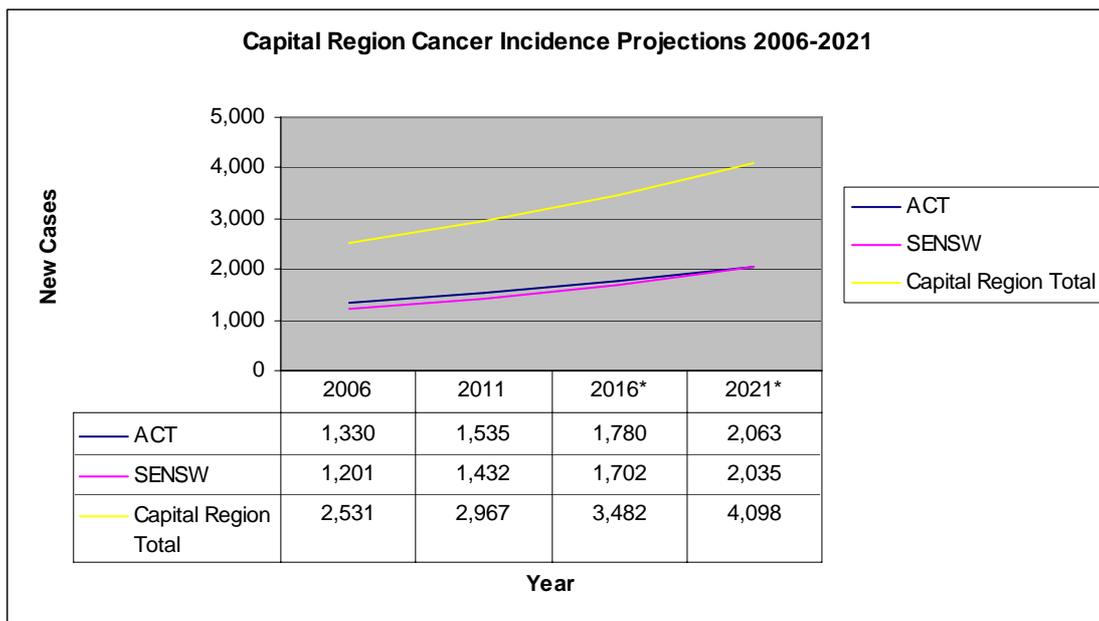


Figure 1: Cancer incidence (new cases) projections for ACT and SENSW 2006-2021
 *Incidence projected at 3%pa beyond 2012 for ACT and beyond 2016 for residents of south eastern NSW
 Source: Major Radiation Oncology Equipment Strategy & Linear Accelerator Procurement Feasibility Plan, ACT Health 2006.

SECTION 3: A Comprehensive Regional Cancer Centre in the ACT

Challenges and priorities

- ◆ Establishment of a comprehensive cancer care centre in the ACT

The Australian Senate Community Affairs Committee expressed concern (2005)⁸ that “While Australia is doing well in cancer control across the continuum, improvements could be made through the systematic implementation of best practice treatments for people with cancer.” Current thinking in cancer care supports a model that facilitates innovation and translation of research to maximise effective outcomes by locating research, prevention and multidisciplinary service delivery resources in close proximity. As a result, comprehensive cancer centres have been established in the USA and are being proposed in Australia⁹.

The US National Cancer Institute Cancer Centers (NCI centers) aim to foster multidisciplinary and transdisciplinary interactions between basic, clinical, prevention, control and population research. The centres fall into two categories and may be freestanding operations, a centre within an academic institution or a formal consortium under centralised leadership. Centres may be classified either as cancer centres which comprise one or two of the laboratory, clinical and behavioural and population based research types or comprehensive cancer centres that integrate the three types of research activity. The majority of the comprehensive cancer care centres also provide clinical care and services. The centres must be able to demonstrate research expertise in each of the three areas (laboratory, clinical and population based research). They are also required to conduct outreach and education activities and to provide information on advances in health care for both health care professionals and the public¹⁰.

The vision for cancer services in the ACT is the establishment of a patient focussed comprehensive regional cancer centre which will facilitate multidisciplinary care, translation of research to improve health outcomes and increase the ability of the service to attract and retain skilled staff by building a higher research profile and lifting the profile of cancer services in the ACT.

A number of comprehensive cancer centres that deliver multidisciplinary, multimodality cancer care have been established in Australia. In NSW these

⁸ Commonwealth of Australia (2005). The cancer journey: Informing choice. Senate Community Affairs Committee (Chapter 6)

⁹ (NSW) O’Brien C *Sydney Morning Herald* January 16 2007

(SA) http://www.flinders.sa.gov.au/fmcfoundation/a8_publish/modules/publish/content.asp?navgrp=can centre

¹⁰ <http://www.cancer.gov/> accessed 20 March 2007

include the Westmead Cancer Centre opened in February 2007, as a 'one stop shop' for cancer care, the Nepean Cancer Centre, Illawarra Cancer Care Centre and the Sydney Cancer Centre delivering multidisciplinary cancer services for patients integrated with basic, translational and clinical cancer research. The centre also conducts outreach services.

The Olivia Newton-John Cancer Centre at Austin Health in Melbourne integrates interdisciplinary cancer care with a wellness centre and a strong cancer research program in partnership with the US based Ludwig Institute for Cancer Research.

The Flinders Centre for Innovation in Cancer, Prevention and Care (FCIC) is currently under construction in South Australia. The FCIC will be a multidisciplinary academic cancer centre with space for research and clinical activities. The focus of the new centre will be to provide environments that facilitate clinical trials, data management, data informatics, multidisciplinary networking in meetings, and new laboratory facilities needed for emerging technologies. At FCIC, the science focus is specifically on precancer biology and the development of preventive strategies.

An ACT cancer centre will integrate, and co-locate where possible, research and teaching with service provision. It will build on the momentum gathering as a result of the work to date of the CRCS site specific advisory groups to systematically implement best practice treatment for people with cancer.

The cancer centre will consolidate services currently provided at the Canberra Hospital on that campus. Co-location of research, teaching, screening services and ambulatory cancer service delivery (not requiring an overnight stay in hospital) in one or more locations will enhance communication, enable more rapid interaction between clinical and research staff and encourage and support an inspirational environment that fosters and encourages innovation. The result for patients will be a service that coordinates services for their complex needs.

Networking of multidisciplinary clinical services will improve access by patients and other members of the cancer care network including patients' GPs to the people delivering and monitoring cancer services and to comprehensive and up to date information.

Once a cancer diagnosis has been made, surgery is often the first modality. Patients may then go on to receive chemotherapy, radiotherapy and in selected cases hormone therapy. The benefits of multidisciplinary care for people with cancer are well documented. Multidisciplinary care is defined as an integrated team approach to health care in which medical and allied health care professionals consider all relevant treatment options and develop collaboratively an individual treatment plan for each patient¹¹.

¹¹ National Health Priority Council (NHPAC) (2006), National Service Improvement Framework for Cancer, Australian Government Department of Health and Ageing, Canberra, Page 47.
National Breast Cancer Centre (2003) National Multidisciplinary Care Demonstration Project, Camperdown.

While some progress has been made in the ACT toward multidisciplinary care through the formation of some site specific groups and the establishment of cancer nurse care coordinator positions supporting patients with specific tumour types, cancer services remain fragmented.

The care of the cancer patient is generally passed from one clinical department to another in sequence. There are some multidisciplinary meetings and a head and neck multidisciplinary clinic.

There is not an integrated and multidisciplinary model of psychosocial care for cancer patients.

Established cancer centres promote the integration of their research, academic and clinical programs in staff recruitment drives. The impact of such a centre on the ability to attract and retain skilled staff in the ACT will be significant.

A cancer centre will be developed in a staged approach. The centre will be confined to the services that are currently provided from the Canberra Hospital and will:

- Facilitate the implementation of the model of care adopted for the Capital Region Cancer Service (Section 5).
- Establishment of the concept of a patient centred “one stop ambulatory cancer care shop”. This will be achieved by enabling concurrent service delivery clinics for treatment that does not require an overnight stay. Co-locating and integrating delivery of services will encourage multidisciplinary care planning and delivery. The concept of a self-care short stay residential facility (or Medi-hotel) to complement an ambulatory service will be further investigated.
- Foster and provide multidisciplinary cancer care.
- Establish a focus and foundation for laboratory, clinical, behavioural and population based cancer research.
- Facilitate innovation, discovery and translation of cancer research.
- Provide a local, regional and national teaching, research and information resource for clinicians, general practice, patients and their carers.
- Raise the profile of prevention and health promotion as significant elements of cancer services.
- Provide a focus for developing and supporting general practice capacity in cancer care.
- Establish a focus for collaboration with other service providers such as the private sector, non government and cancer support organisations.
- Establish the Capital Region Cancer Service as a magnet for scarce workforce, strategic alliances, fundraising opportunities and research grants.
- Maximise the benefits of the proximity local academic and research centres of excellence by providing a focus for networking and collaboration with the ANU and University of Canberra.

Cancer Services will continue to be delivered from satellite centres at Calvary HealthCare in Bruce outreach clinics and other facilities in the community in addition to services offered from the proposed Cancer Centre. There will also continue to be visiting services to inpatients.

The Centre might also be expanded to integrate services not currently located within Capital Region Cancer Services facilities such as:

Research:

- Cancer Registry.

Risk Group Screening:

- Breast Screening for people at risk and not meeting Breastscreen eligibility criteria.

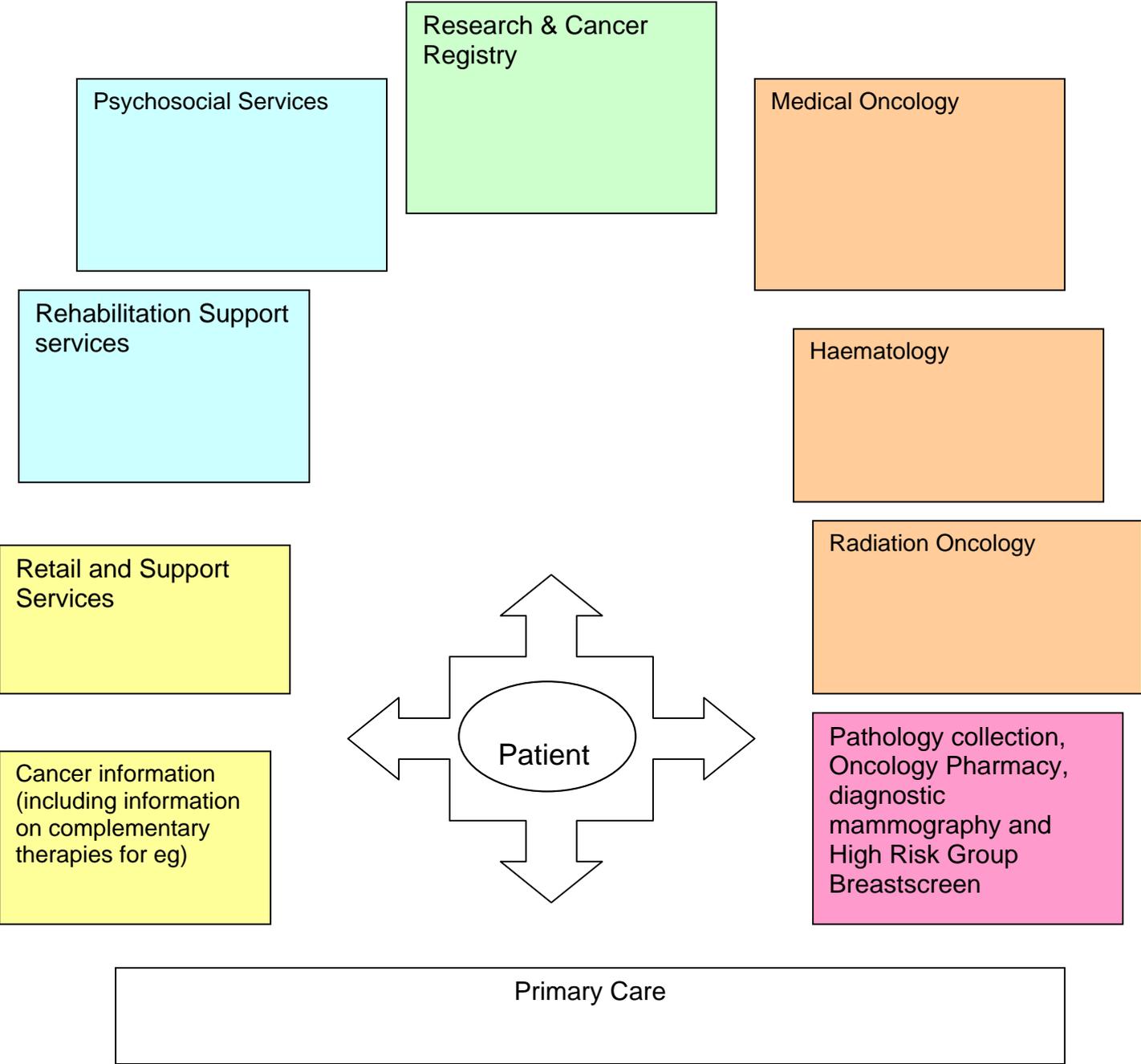
Diagnostic/Pharmacy:

- Oncology pharmacy
- A public mammography diagnostic service
- Access to diagnostic facilities (eg. blood collection for ACT Pathology).

Patient Resources/Retail:

- Patient resource/cancer prevention centre
- Wig Library and other agreed community-based/non government organisation services
- Retail pharmacy
- Restaurant/coffee shop.

Diagram : A vision for a comprehensive cancer centre in the ACT



SECTION 4: Current CRCS Services & Future Demand, Service Linkages and Other Cancer Service Providers.

Challenges and priorities

- ◆ Establish mechanisms to integrate cancer care with high quality research to enable the implementation of innovation and the achievement of better health outcomes.
- ◆ Develop and resource a multidisciplinary and holistic approach to cancer care.
- ◆ Develop a sustainable workforce required to deliver increasing cancer services.
- ◆ Coordinate services to cancer patients and their carers.
- ◆ Strengthen linkages with general practice.
- ◆ Improve cancer information systems to enable integrated service provision and to provide quality and consistent information to assist cancer patients, their carers and health care providers.
- ◆ Adopt a population health approach.
- ◆ Meet demand for a range of services generated by the increased number of people surviving cancer as a result of improvements in cancer detection and treatment.
- ◆ Address issues about access to cancer services, particularly Aboriginal and Torres Strait Islander people, people from disadvantaged backgrounds and rural patients.
- ◆ Sustain and increase and support the research and education capability of the CRCS.

4.1 Capital Region Cancer Service

4.1.1 Corporate Governance

ACT Health has established The Capital Region Cancer Service as a clinical stream in conjunction with Greater Southern Area Health Service of NSW. The Service encompasses inpatient, outpatient, community health services and outreach services delivered by ACT Health. The organisational chart for CRCS can be found at Appendix B.

The stream has the objective of building the organisational infrastructure that will enable the quality and accessibility of services for people with cancer to be improved.

The Capital Region Cancer Service will improve the coordination of services to patients, increase the focus on multidisciplinary care and facilitate planned

service expansion. It will do this by improving communication between primary, secondary and tertiary services, as well as fostering professional development and promoting best practice in cancer care.

The major outcomes for CRCS will be an integrated cancer service for the ACT and southern NSW, resulting in improvement in clinical practice and better health outcomes for consumers.

4.1.2 Clinical Integration

Clinical Groups

Cancer site-specific clinical groups have been established for head and neck cancers, lung cancers and mesothelioma, colorectal cancer and malignant haematology. Melanoma/sarcoma, genitourinary cancers and gynaecological cancers groups are planned but yet to be established.

The aim is that the groups will in the future provide direction and guidance on current cancer management in the region, standardising management protocols, optimising clinical pathways and to identify and implement best practice, education and professional development needs. The advisory groups will also identify service deficiencies and benchmark services and cancer outcomes in the region against services elsewhere. Additional support will need to be provided to this initiative including administrative and non clinical support time and support for focused research.

The groups will have multidisciplinary membership and will include representation from the various professional groups, consumer representation and representation from other stakeholders as appropriate.

Breast Cancer Treatment Group & Proposed Centre of Excellence

The Breast Cancer Treatment Group is comprised of members of the multidisciplinary team involved in the treatment of breast cancer in the ACT and SE NSW and consumer representatives. The Group examines data on treatment and outcomes for patients with breast cancer collected as part of the Breast Cancer Treatment Quality Assurance Project to inform improvements in treatment of breast cancer in the ACT and surrounding region.

CRCS will develop a proposal to form an ACT Breast Care Network of Excellence to better integrate existing services for people with breast cancer.

4.2 Consumers and Primary Care Linkages

4.2.1 Consumer, Carer and Community Participation

The consumer will be the focus of the patient centred service. Input will be sought from consumers, carers and the community in planning, delivery and evaluation of cancer services. This will occur in a variety of ways, including the establishment of an information forum through which those with a particular interest in cancer services can learn about the work undertaken in the cancer centre and convey issues of concern and feedback to the Capital

Region Cancer Service. There may be an opportunity to partner with other organisations such as the Cancer Council in the organisation of these fora.

4.2.2 Linkages with General Practice

General Practice is an integral part of the ACT health system and is a key interface between all parts of the health system. General practitioners (GPs) are a central focus of community and individual primary health care and are major providers of primary care services.¹² GPs are major providers of primary health care services across the ACT and surrounding region.

Their role in providing cancer services ranges from prevention and health promotion, diagnosis, and referral at a number of points in a patient's journey, administration of some treatments, through to the management of side-effects of treatment administered by specialist cancer services, followup care, and addressing end of life issues and care of the dying. A GP will be the patient's common point of contact throughout their cancer experience and be able to provide input to the care team about the patient outside of the journey through services provided by or organised through Capital Region Cancer Service.

The ACT Health *Primary Care Strategy* notes the importance of integration of health care services and for primary health care services to work in partnership with other health service providers to ensure that consumers and carers are at the centre of their own health care.

There is a need for improved integration and communication between CRCS and GPs across the region. CRCS will work with the Divisions of General Practice in the region to develop a strategy to develop capacity in general practice to assist GPs in the management of their patients with cancer and to ensure integrated and best practice care.

General practitioners provide medical care to people requiring palliative care. There are workforce issues in general practice in the ACT. Strategies to support GPs with information and involving them in the multidisciplinary approach to care of people with cancer will be developed in consultation with general practice.

4.3 Cancer Prevention and Screening

Health promotion is a key element of all services provided within CRCS and of primary care services in the community. The Capital Region Cancer Service will work with Population Health Division to identify required programs and recommend evidence-based approaches and evaluation of strategies for cancer prevention.

Screening Services

Breast, cervical and colon cancer screening programs are currently available for ACT residents. Further information on the current programs is available in Appendix C.

¹² ACT Health, ACT Division of General Practice. Memorandum of Understanding 2005-2008 p3.

CRCS will keep abreast of advances in information technology (IT) and identify points in the patient journey where patient access to services or clinical effectiveness can be maximised through IT.

- ACT and SENSW Breast Screening Program will ensure that Information Technology/Information Management systems are appropriate to provide a comprehensive breast screening program that meets the national standards for breast screening and comply with national accreditation standards.
- The Australian Health Ministers' Advisory Council (AHMAC) has recently sponsored a review of BreastScreen Australia.
- The ACT will undertake feasibility planning to ascertain the costs and benefits of moving to digital mammography.
- The Cervical Screening program registers participating women on a database that complies with NHMRC guidelines.
- There will be a focus on the promotion of screening amongst Aboriginal and Torres Strait Islander women in consultation with Winnunga Nimmityjah Aboriginal Health Service, and women from culturally and linguistically diverse backgrounds.
- The Australian Government National Bowel Cancer Screening Program commenced in late 2006 and targets people who turn 55 and 65 years in each year. The program is conducted through Medicare and in collaboration with public and private health providers. It is envisaged that this initial roll out of the program will be formally evaluated in 2009/09.

4.4 Cancer Treatment Services

Services provided by Capital Region Cancer Service:

Care type	Cancer Service	Type of Service	Location	Facility
Prevention and early detection	Screening	Breastscreen ACT Cervical Screening		
Treatment	Medical Oncology	Outpatient (pred. chemotherapy)	Medical Oncology Unit	TCH
			Zita Mary Clinic	Calvary Hospital
			Greater Southern Area Health Service	Bega, Moruya, Goulburn, Young, Cooma
		Inpatient	Haematology /Radiation Oncology/Medical Oncology	TCH
	Radiation Oncology	Outpatient	Radiation Oncology Unit	TCH
			GSAHS Consultative Clinics	Bega, Moruya, Goulburn
		Inpatient		TCH
	Haematology	Outpatient	Haematology Clinic	Calvary Hospital
			Clinical Haematology	TCH
	Lymphoedema	Outpatient	Lymphoedema Clinic	Calvary Hospital
GSAHS			Bega, Moruya, Goulburn	
Continuing Care	Palliative Care Services	Home based	Clare Holland House	Calvary Hospital
		Inpatient	Clare Holland House Calvary-JJ TCH	Calvary Hospital Calvary-JJ TCH

Table:

Other Services Provided in the ACT

	Cancer Service	Type of Service	Location	Facility
Prevention and early detection	Screening	Bowel cancer screening	Australian Government program	*This is managed by Gastroenterology
Treatment	Medical Oncology	Chemotherapy		Calvary-JJ National Capital Private Hospital
	Surgery	General		TCH
		General and Breast Surgery		Calvary Hospital
		General		Calvary-JJ
	General		National Capital Private Hospital	
Support	Psychosocial Services	Psychosocial services	Community based	ACT Health
		Social Work services	Inpatient	TCH Calvary Hospital
Continuing Care	Continuing care & Rehabilitation	Breast Care Nurses	Community Based	Managed by Calvary Hospital
		Continuing Care services		ACT Health Community Health
	Rehabilitation and therapy services	Rehabilitation and therapy services	Hospital and community based	ACT Health Community Health TCH Calvary Hospital

Medical and Radiation Oncology

The Canberra Hospital (TCH) is the regional centre for cancer services providing level 6 services in haematology and level 5 medical oncology and radiation oncology services. Calvary Hospital operates as a satellite cancer centre focussing on outpatient services, with a role delineation of 4 for medical oncology and 3 in haematology. A description of these role delineation levels is included in Appendix D.

Additional chemotherapy services will be provided during the life of the Plan, principally in order to meet the increased need for these services by the ageing ACT population.

- Increasing demand for chemotherapy services will be met by enhancing services at TCH and providing more intensive community-based services.
- The efficiency and effectiveness of new technologies will be evaluated for introduction into treatment regimes in line with ACT *Health Introduction of New Technology* policy and processes.
- A radiation oncology strategic plan will be developed incorporating the results of the Linear Accelerator Procurement Feasibility Plan and Major Radiation Oncology Equipment Strategy which identified additional resources required to increase radiation oncology services, achieve the national target to increase the proportion of patients diagnosed with cancer who would receive radiation as an optimal part of their management and implement other recommendations of the *Report of the Radiation Oncology Inquiry: A vision for Radiotherapy* (the Baume Report, 2002).
- Radiation oncology services will meet national standard timeframes for treatment.

Haematology

Haematology services offer stem cell/bone marrow harvest and storage facilities for specific diagnostic groups and ablative treatment and autologous bone marrow/stem cell transplant where clinically appropriate and within established guidelines.

Gynaecological cancer services

Cancer Australia has recently established a National Gynaecological Cancer Centre that will fund research projects focussed on gynaecological cancer.

Gynaecological cancer services are provided at The Canberra Hospital with outreach from the Centre for Gynaecological Cancer at the Royal Hospital for Women in Sydney (RHW).

Outreach consultation clinics are held fortnightly in Canberra and surgery is conducted at The Canberra Hospital by local surgeons in conjunction with gynaecological oncologists from RHW. Most surgery is undertaken at TCH, except where clinical indications require the facilities at RHW.

If a woman with a large malignant ovarian tumour, for example, undergoes surgery at RHW, the first course of chemotherapy will be administered at RHW but subsequent courses and radiation oncology will be delivered at The Canberra Hospital.

There is no planned change to the model of care for delivery of gynaecological oncology services in the ACT. The increased demand for outreach clinics will require the negotiation of additional services in the ACT.

Surgery

Surgical services are not a formal component of the Capital Region Cancer Service, however surgery is one of the accepted treatment modalities for many types of cancer and associated issues.

ACT Health will complete a Surgical Services Plan in 2007.

CRCS will enhance and expand on links with surgical services in the ACT.

Advanced and metastatic skin cancer

The need for increased capacity in the public sector for surgical treatment of advanced and metastatic skin cancer requires further investigation.

4.5 Clinical support services

Cancer services are supported by diagnostic and allied health support services including Pharmacy, Pathology, Medical Imaging services and allied health services such as social work, nutrition, occupational therapy, physiotherapy, speech pathology, psychology and cancer psychosocial services in the public and private sectors. As public cancer services grow to meet demand and the model of multidisciplinary care planning and service delivery evolves within CRCS, the service will need to form and maintain effective networks with these services. In addition, increased psychosocial and other support services such as pathology and specialised oncology pharmacy services will need to be factored into services planning.

PET

ACT residents requiring Positron Emission Tomography (PET) are referred to Liverpool (NSW). The ACT Health Clinical Services Plan flags the need to assess new technologies such as PET for implementation in the ACT in the future. Feasibility planning will be undertaken to determine the need for PET technology in the ACT in the future.

Genetic services

This service is not a service of Capital Region Cancer Service but provides specialist services to the stream. The service currently employs two genetic counsellors who work with a clinical geneticist in Sydney. Genetic diagnostics and counselling will grow during the life of the plan and the integration of genetic counselling across a number of speciality areas will be explored, including the establishment of a familial cancer clinic. However, the ACT will

continue to rely on interstate services to undertake testing and intervention related to rare genetic issues.

4.6 Paediatric services

There is no paediatric oncology service in the ACT because the number of paediatric patients doesn't support such a service. At present, children with cancer are referred to Sydney for treatment.

Some treatments are administered in the ACT under the direction of the service based at Sydney Children's Hospital (SCH), and some outreach clinics are provided in Canberra by SCH staff.

Services in the ACT provided by the paediatric service at The Canberra Hospital offer:

- diagnosis
- referral for staging and induction therapy
- maintenance chemotherapy – delivered either as an inpatient, outpatient or in the patient's home
- management of acute incidents
- ongoing paediatrician care
- haematology and oncology outreach clinics from Sydney Children's Hospital
- terminal care if required.

4.7 Services for Aboriginal and Torres Strait Islander people with cancer

Nationally, indigenous people with cancer are twice as likely to die from cancer than non indigenous Australians¹³. Little information is currently available about the reasons for this. Contributing factors are believed to be the rates of cancer with poorer survival outcomes diagnosed in the Aboriginal community, as well as factors such as delayed diagnoses and the reduced likelihood of completing treatment.

In the ACT there will be a focus on the promotion of cervical screening amongst Aboriginal and Torres Strait Islander women. CRCS will explore opportunities for collaborative research to understand the local issues and to work in partnership with Winnunga Nimmityjah Aboriginal Health Service and regional Aboriginal and Torres Strait Islander services to address identified issues.

¹³ Lowenthal RM, Grogan PB, Kerrins ET (2005). Reducing the impact of cancer in indigenous communities: ways forward. *MJA*; 182 (3):105-106

4.8 Cancer as a chronic disease, rehabilitation and services for survivors

Services required by this group of people who have had cancer will include rehabilitation and psychosocial services as well as response to effects of cancer treatment, such as fertility of child cancer survivors and early menopause issues for survivors of breast cancer.

General practitioners will play a key role as primary care providers and in coordinating care. Strategies to build capacity will be developed in consultation with general practice.

4.9 Palliative and respite care services

While CRCS is responsible for the overall direction and program content of palliative care across the ACT, the day to day operation of the Clare Holland House hospice is the responsibility of Calvary Health Care ACT. The hospice provides Level 6 (specialist) palliative care services, including a 19 bed inpatient unit and in-centre day respite services. Approximately 85% of admissions to Clare Holland House in 2005-06 were cancer related.

Clare Holland House is also the base from which Calvary Health Care provides home-based palliative care services. The Community Health Link team is the out-of-hours point of contact for the home based service. These services are expected to grow during the life of the Plan. A volunteer service operated by the ACT Palliative Care Society and Palliative Care Liaison Service also operate from Clare Holland House.

An ACT Palliative Care Strategy was released in 2007. A Palliative Care Services Plan will be developed to support the Strategy. ACT Community Health, aged care services and non-government organisations funded by ACT Health also provide care services to people with life limiting illnesses and these will also increase.

4.10 Patient and carer support services

Psychosocial support

ACT Community Health provides a cancer support service that offers psychological, social and practical support and referrals for adult cancer patients, their families and carers. Education, consultation and liaison facilities are also available to cancer sufferers and their immediate support group as well as to interested service providers and community groups. The Canberra Hospital and Calvary Hospital and the hospice also provide social work services.

Peer Support Groups

There are a number of community based peer support groups in the region. The Cancer Council ACT provides a *Directory Cancer Services ACT (2006-07)* which provides information on the support services available within the community.

Interstate Patient Travel Assistance Scheme (IPTAS)

IPTAS provides assistance to permanent residents of the ACT towards travel and accommodation expenses when referred interstate for medical treatment not available in the ACT. ACT IPTAS has recently been reviewed and reimbursement rates increased from July 2007. The NSW IPTAAS scheme was reviewed in 2006.

4.11 Research and Teaching

Oncology research in ACT Health is currently limited to involvement in clinical trials and has been restricted to the haematology and medical oncology units. There is currently limited basic cancer research conducted by the Capital Region Cancer Service.

The enhancement of research in this area will require additional resources. The establishment of a Clinical Cancer Research Group that will work to increase participation in clinical trials and establish research priorities will be explored.

Haematology Clinical Trials Unit

The unit is involved in a number of clinical trials associated with treatments for leukaemias, lymphoma, multiple myeloma and coagulopathies and haematology research projects.

Breast Cancer Treatment Quality Assurance Project

The project is responsible for developing and maintaining databases for longitudinal studies of the treatment of breast cancer. The aim of the project is to collect and examine data on treatment and outcomes for patients with breast cancer to inform improvements in treatment of breast cancer in the ACT and surrounding region. The studies are designed to monitor and evaluate the implementation of national guidelines. The project is continuing and will publish results in appropriate fora.

ACT Cancer Registry

As in other State and Territories, all cancers, apart from non-melanocytic skin cancer, are notifiable diseases in the ACT. Since 1994, there has been a legal requirement that all public and private hospitals, general practitioners, nursing homes and pathology laboratories notify all newly diagnosed cancers to the ACT Cancer Registry. The Registry collates cancer information and produces regular reports on the incidence of new cases and cancer deaths in the ACT.

4.12 Other Service Providers

There are many other individuals and organisations that play a significant role in the provision of cancer services and who will be critical in improving health outcomes for people with cancer in the ACT and region.

4.12.1 Private sector services

Private hospitals in the ACT offer a range of services including cancer surgery, chemotherapy and palliative care.

Calvary Private Hospital, Calvary - John James Hospital (Canberra Cancer Care Centre) and National Capital Private Hospital are key facilities in the treatment of people with cancer in the region.

Apart from general practitioners and private hospitals there are a number of other private sector providers who play a major role in the provision of cancer services. These include day procedures centers, pathology and imaging services and private specialists and allied health professionals.

4.12.2 Non-government organisations

There are a number of organisations in the ACT contributing to the care and wellbeing of cancer patients and their carers. Services provided by some of these non government organisations are described in Appendix C.

4.13 Complementary therapies

The Senate Community Affairs Committee report *The Cancer Journey* (2005)¹⁴ made several recommendations regarding the need for further research on complementary therapies.

The NSW Cancer Institute initiated a review of complementary therapies under the 2004-06 NSW Cancer Plan and has identified a need for evidence based information and guidelines for clinicians

The CRCS will monitor the development of the guidelines.

¹⁴ Commonwealth of Australia (2005). *The cancer journey: Informing choice*. Senate Community Affairs Committee, section 4.

4.14 Service Utilisation

The majority of services to cancer patients are high volume services reflecting the frequency of treatment regimens required. Service planning impacts of the projected growth in inpatient and ambulatory care services will be explored in Medical Oncology and Radiation Oncology services planning to be completed in 2006.

Data¹⁵ shows a high level of self-sufficiency for the ACT for inpatient cancer care (haematology, medical oncology and admitted chemotherapy Service Related Groups), meaning that hospitals in the ACT supply the majority of hospital services in these clinical specialties for ACT residents.

In ACT public hospitals cancer services (haematology, medical oncology, chemotherapy and radiotherapy service related groups) there were approximately 1300 admissions to hospital in 2005-06.

In 2006-07 the following services were provided in the ACT:

- Almost 41,000 outpatient occasions of service.
- Over 20,000 women screened by Breast screening services.
- 375 separations from the hospice.
- Almost 2600 hospice outpatients.
- Nearly 6,000 hospice home visits,

(See Appendix F).

Services are also provided by CRCS in the region in Young, Goulburn, Moruya, Cooma and Bega.

4.15 Projected Service Demand

Projections indicate an average annual increase in new cancer cases diagnosed in the region of an average 3.2% per year between 2005-06 and 2011.

It is projected that cancer outpatient occasions of service will increase by an average 7% per year.¹⁶

Chemotherapy

Whilst a small proportion of episodes of care for chemotherapy are delivered to admitted patients, the majority of treatment is conducted on an outpatient basis.

¹⁵ ACT FlowInfo V8.0

¹⁶ ACT Health Clinical Services Plan 2005-2011 background projections

Projections for 2011 show an increase in the total occasions of service for chemotherapy of over 50% over 2002/03 activity. These projections will be revisited during development of the Medical Oncology Services Plan.

Radiation Oncology

It is projected that there will be an increase in courses of radiation oncology treatments administered at TCH from approximately 800 in 2004-05 to over 1700 in 2011, an increase of over 100% reflecting both increasing cancer incidence, increasing self sufficiency for the region and achievement of national utilisation targets for radiation therapy. A major equipment strategy has been developed and is being implemented to ensure that infrastructure is available to deliver a significant increase in activity and the increasing complexity of treatments.

Haematology

Projections for 2011 show an increase in the total occasions of service for clinical haematology of approximately 5% per annum from 2002/03. These projections will be revisited during development of the Clinical Haematology Services Plan.

Inpatient Services

Inpatient admissions to ACT public hospitals are projected to continue to increase. The number of additional inpatient beds required in ACT public hospitals to meet this demand will be clarified during the development of the ACT Health Capital Asset Development Plan during 2007.

Rehabilitation Services

Demand for rehabilitation services will grow. Generally, patients with cancers will survive longer than in the past and, as the population ages, the period of rehabilitation after cancer will be complicated by other conditions. Patients will be referred to mainstream physical and psychological rehabilitation services which will be providing services to an ageing population with complex care needs.

Hospice Demand

Future hospice and palliative care services demand will be determined in the development of a Palliative Care Plan.

4.16 Challenges and concerns

4.16.1 Demand and service development

Given information currently available, it is anticipated that the projected growth and ageing of the population will lead to a continued increase in the demand for cancer screening, diagnostic and treatment services in the region, particularly in cancers with the highest incidence in older people (such as prostate, colorectal and breast cancer). Increased activity has been projected for all cancer services, and particularly for services such as breast screening, outpatient services and radiation oncology.

There will be implications for the development of facilities, equipment and the workforce as a result of the growth in demand for cancer services.

4.16.2 Workforce

A report generated in 2002¹⁷ noted that “The most notable thing about the cancer care workforce is that there are shortages in almost every category.” It cites the 2001 report of the Australian Medical Workforce Advisory Committee (AMWAC) which indicates a current deficit in the examining specialist haematology and medical oncology workforce and also deficits in radiation oncologists, radiation physics and radiation therapy workforces. The shortfall in nurses and various allied health professions has also been identified¹⁷.

The ACT Health Workforce Plan sets out current and future strategies for achieving a sustainable workforce in the ACT, including workforce redesign and the development of interprofessional learning.

Planning for the sustainable development of cancer services will need to consider the workforce in support services such as pharmacy, pathology, allied health and psychosocial services and general practice as well as staff employed by Capital Region Cancer Service.

Oncologists in the ACT are general oncologists. With the increasing specialisation in therapies for people with cancer, there has been some discussion among the profession about whether there needs to be a degree of subspecialisation. This is complicated by the need for specialists attending outreach clinics, for example, to retain knowledge of the broad range of cancers and their treatment. The need for increased specialisation will also impact on other professions and may be able to be addressed in some part by telehealth initiatives as they are enhanced.

¹⁷ Clinical Oncological Society of Australia, The Cancer Council of Australia and the National Cancer Control Initiative (2002): *Optimising Cancer Care in Australia*. National Cancer Control Initiative, Melbourne.

Initiatives for development of skills in general practice might include the rotation of GPs through specialty areas of Capital Region Cancer Service, the development of information resources and clinical pathways.

4.16.3 Survivorship

There will also be demand for a range of services generated by the increased number of people surviving cancer as a result of improvements in cancer detection and treatment. The NSW Chief Cancer Officer's report (2005) notes that by 2011, two thirds of all cancer patients in NSW will be cancer survivors.¹⁸

Services required by this group will include rehabilitation, surveillance and psychosocial services as well as response to effects of cancer treatment, such as fertility of child and adult cancer survivors and early menopause issues for breast cancer survivors, and for some cancer as a chronic disease.

4.16.4 Access to appropriate services

The recently released report by AIHW on health inequalities in Australia¹⁹ has identified that among women, those from disadvantaged backgrounds were more likely to have never had a mammogram or Pap smear.

As noted in section 3.1, Aboriginal people with cancer experience poorer survival outcomes due to factors such as incidence of cancer with poorer survival outcomes, delayed diagnoses and the reduced likelihood of completing treatment.

It is expected that residents of south eastern NSW (the former Southern Area Health Service) will have accounted for almost half of new cancer diagnoses in the ACT and south eastern NSW in 2006. Many of the region's NSW residents diagnosed with cancer live in rural locations with limited access to cancer clinical services. In some rural areas access to a general practitioner is also a problem.

ACT residents have had to travel to other centres for timely access to radiotherapy services as waiting times were affected by longstanding workforce shortages and equipment breakdowns in The Canberra Hospital's Radiation Oncology Department. These issues are being addressed with resulting improvements in waiting times being recorded recently. Access to services, particularly outpatient services, has also been identified as an issue for the elderly and people with disabilities within the ACT.

The extent of the problem of access to cancer services by residents and particularly rural patients with cancer will be compounded as the population ages. Older people being treated for cancer experience, for example, side

¹⁸ Cancer Institute NSW: Annual Report 2004/05 Cancer Institute NSW, Sydney, 2005 p.6

¹⁹ Turrell G, Stanley L, de Looper M & Oldenburg B 2006. Health Inequalities in Australia: Morbidity, health behaviours, risk factors and health service use. Health Inequalities Monitoring Series No. 2. AIHW Cat. No. PHE 72. Canberra: Queensland University of Technology and the Australian Institute of Health and Welfare.

effects of some treatment options that may not be experienced by younger people. Some strategies that will contribute to improving access to services are the development of outreach clinics in south eastern NSW, improvement in information technology infrastructure and investigation into the establishment of a medi-hotel and flexible transport options²⁰.

Information technology enhancements such as videoconferencing to enable access to clinicians, telemedicine enhancements such as Picture Archiving and Communication System (PACS) to enable transmission of images, and patient held equipment with remote access capabilities will enable patients to receive more timely and accessible services in the future.

The introduction of an oncology information system with connectivity to a system-wide scheduling and booking service will improve coordination of services.

4.16.5 Information management

Information technology (IT) and information management (IM) have been identified as key issues in the planning for cancer services.

The complexity of the range of services and locations at which cancer patients seek health services within the Capital Region Cancer Service means that better integrated patient information systems will be required in the future to enable the health services to meet patient needs. Information technology can provide the means by which the cancer stream issues associated with improving clinical and service delivery can be addressed.

Work commenced in 2006-07 on the development of an information system for cancer services. Advances in technology will be harnessed to improve:

- Integration of patients' clinical information;
- Integration of administrative systems such as patient bookings;
- Integration and enhancement of outcomes and activity data collection and reporting; and
- Information available to patients to enable informed choice and self-management of elements of their care.

There is an expanding range of information technology tools that are available to enable better management of patient information. Some of these are :

- Integrated Patient Administration System (available within TCH and Community Health, with planned connectivity across ACT Health ie including services provided at Calvary Hospital).
- Digital storage of unstructured paper based clinical records (available within TCH).
- Remote access capability (including mobile access) (planned within ACT Health).
- PACS (Picture Archiving and Communication System) rollout (planned: ACT Health).
- Electronic patient record capability.
- EMM (Electronic Medicines Management)(planned within ACT Health).
- Bedside Technology (planned within ACT Health).
- Personal Digital Assistant (PDA/ hand held) technology (available but not connected in ACT Health) .
- Point of Care Clinical Systems.

²⁰ ACT Health (2006) Ambulatory Care Framework page 14-15

The ACT Health IM/IT Plan identifies a number of system-wide strategies that will impact on the management of information related to cancer patients and also identifies the following specific strategies in relation to the cancer stream:

- That IM/IT refers to all aspects of information management and technology such as hardware, software, data, methodologies, networks and communications;
- That cancer information collected or produced must be patient/client centric;
- That cancer information collected or produced must be readily and easily accessible to all treating clinicians and wherever applicable to patients and their carers;
- It is essential that whatever technical solution(s) are chosen to support the cancer patient that they are integrated with other systems within ACT Health rather than operating as 'Cancer or Service Silo';
- The chosen solution(s) must assist front line staff in their day-to-day work; and
- There will be differing levels of IM/IT skills amongst staff using the systems and this must be taken into consideration when choosing any solution.

SECTION 5: A Model of Care

The model of care for the Capital Region Cancer Service links closely with the ACT Health Ambulatory Care Framework and Chronic Care Strategy.

Services provided by the Capital Region Cancer Service will:

- Be patient focused and be designed around individual patient needs.
- Be multidisciplinary and collaborative.
- Have a holistic approach to care and an awareness of and attention to the psychological, emotional, physical, social, financial and practical needs of patients at all points in the care continuum.
- Be integrated.
- Be coordinated with other services inside and outside of the cancer stream, particularly with general practice, regardless of where the patient enters the service.
- Be safe and of high quality.
- Provide quality and consistent information to cancer patients, their carers and health care providers to enable them to understand and contribute to decision making about their care.
- Actively involve patients in planning and making decisions about their care and respect informed decisions made by patients.
- Empower individuals to be involved in self-management with support from integrated health services.
- Be accessible.
- Have a population health approach.

Treatment for most cancers is multimodality and multidisciplinary. The key role of CRCS is to promote integration of services, collaboration and best practice for cancer care. Strategies for coordination of care can be divided into those directed at the team such as multidisciplinary team meetings, those directed at the patient such as patient held records and strategies aimed at the health care system such as electronic patient records and standards and performance indicators²¹.

Patients' journeys for care and treatment related to their cancer are potentially complex involving various pathways through these and other primary care and privately provided services. Patients are also likely to draw on a number of services (such as General Practitioners, Community Health and Emergency Departments) for treatment related to complications of their condition or components of treatment, for monitoring or in situations unrelated to their cancer. Regional patients will access services provided by their local and regional health services, in addition to outreach services of CRCS such as

²¹ Victorian Government Department of Human Services, Metropolitan and Aged Care Services Division (May 2006) *Patient Management Framework*. Colorectal tumour stream: colon and rectal cancer. A guide to consistent cancer care.

screening and outpatient consultation or chemotherapy, and services provided in the ACT.

In order to provide best practice cancer care, CRCS will need to adopt a model of care that ensures that :

- The journey for each patient is planned.
- Treatments for patients with complex pathways are coordinated, so that care is consistent and not fragmented.
- Treatment is based on the best available evidence.
- The model of self management will be more consistent and better supported.
- The patient will be able to navigate through the system with the best possible health outcome with the assurance of linkages to supportive, rehabilitation and palliative care services if required.

5.1 Primary health care services

GPs are major providers of primary health care services across the ACT and surrounding region. Their role in providing cancer services covers the range of health promotion and intervention and referral at a number of points in a patient's journey and followup care.

The CRCS model of care recognises that a patient's GP will be the patient's common point of contact throughout their cancer experience and be able to provide input to the care team about the patient outside of the journey through services provided by or organised through Capital Region Cancer Service.

The ACT Health *Primary Care Strategy* notes the importance of integration of health care services and for primary health care services to work in partnership with other health service providers to ensure that consumers and carers are at the centre of their own health care.

CRCS will work with the Divisions of General Practice in the region to improve GP liaison/coordination as well as to develop shared care guidelines and clinical pathways ensure integrated and best practice care and to establish a strategy to develop capacity in general practice to assist GPs in the management of their patients with cancer.

5.2 CRCS Nurse Care Coordinators

The Nurse Care Coordinator positions in the ACT are a new initiative of the Capital Region Cancer Service. Nurse care coordinators have been appointed for the malignant haematology, lung cancer and mesothelioma, colorectal cancer and head and neck groups and will be appointed for each cancer site-specific clinical group established. Once these roles have been established, planning will be undertaken for the appointment of a nurse care coordinator or coordinators for cancers not covered by the proposed site-specific coordinators.

The main function of each Nurse Care Coordinator is to provide a patient centred approach for people and their families living with a diagnosis of cancer. The Nurse Care Coordinator will provide support and education across all of the health settings a patient with a diagnosis of cancer in the Capital Region may have to negotiate.

Many patients with a diagnosis of cancer have complex appointments for diagnostic tests, treatments and monitoring in a number of different health settings. It is envisaged that the Nurse Care Coordinator will provide expertise and support across the disease trajectory, thus making a positive difference to the illness experience for these groups of patients.

Breast care nurses work from Calvary Hospital and coordinate care for women during their breast cancer journey. The role includes patient care, coordination of care and patient advocacy, professional and community education as well as research and audit activities.

5.3 Framework for Implementing the Model of Care

The following framework indicates the processes that will ensure that the principles of the model of care are implemented. The stages and processes won't be followed in a linear manner.

During the planning process, a number of gaps were identified between current practice and the full implementation of the framework. The strategies in the Implementation Plan in Section 7 have been developed to ensure that the Capital Region Cancer Service is able to fully implement this framework.

Framework for Implementing the Model of Care

Stages of Care	Processes
Prevention	<i>Deliver prevention and health promotion programs</i>
Early Detection and Diagnosis	<i>Provide information to enable community and those at higher risk of cancer to be aware of risk factors and signs and symptoms that should lead to GP consultation.</i>
	<i>Deliver screening programs</i>
Initial Diagnosis & Referral	<i>Provide clear clinical care pathways and information and education to assist GPs</i>
	<i>Implement clear referral pathways and triage of referrals</i>
Providing treatment & support options	<i>Identify care coordination process and commence patient record</i>
	<i>Provide information & education for patients and carers</i>
	<i>Determine treatment aims in consultation with patient and carer/s</i>
	<i>Undertake multidisciplinary care planning (including GP and patient) according to treatment guidelines</i>
	<i>Undertake Psychosocial Support planning</i>
Treatment	<i>Provide/refer to treatment</i>
Continuing Care & Rehabilitation	<i>Provide/refer to continuing care/ maintenance care if necessary</i>
	<i>Provide/refer to rehabilitation services if necessary</i>
	<i>Provide/refer to Quality of Life care</i>
	<i>Provide/refer to care for consequences of cancer (eg. infertility, psychosocial implications) & to assist the patient with living with a chronic illness</i>
Followup Care	<i>Implement Shared Followup Care</i>
	<i>Provide education/information about recurrence, life after cancer & family (genetic) implications</i>
Provision of information to inform treatment aims for recurrence	<i>Provide information</i>
Palliative approach and quality of life care leading to end of life care	<i>Provide/refer to care</i>
Research & Education	<i>Where possible and appropriate refer patients for clinical trial participation</i>

SECTION 6: Key Performance Areas and Reporting Measures for Cancer Services

Reporting against progress in the implementation of the cancer Services Plan will include progress against the Implementation Plan in Section 7, in addition to measures included in the ACT Health Business Plan.

Section 1 Community & Consumers (ACT Health Business Plan 2007-08 Indicators)

1. ACT Breast cancer mortality rate
2. ACT Cervical cancer mortality rate
3. Percentage of urgent consumers receiving services within standard time (Radiation Therapy)
4. Percentage of all consumers receiving services within standard time (Radiation Therapy)
5. Rate of cervical screens
6. Rate of breast screens for women aged 50-69 years

Section 2 Our People (ACT Health Business Plan 2007-08 Indicators)

Reduction in staff turnover (Capital Region Cancer Service)

Section 7: Implementation Plan

Summary of Key Performance Areas and Objectives

1. Community & Consumers:

- 1.1 Decrease cancer incidence by improving processes for the prevention and early detection of cancer.
Strengthen the patient centred focus of the cancer service.
Provide quality and consistent information to assist cancer patients, their carers and health care providers.

2. Safety and Quality of Care

- 2.1 Optimise cancer care.
- 2.2 Sustain and increase the research and education capability of the CRCS .

3. Partnerships

- 3.1 Strengthen partnerships within and outside the Cancer Stream: promote and enable optimal cancer care in General Practice.
- 3.2 Strengthen service linkages within and outside the cancer stream.
- 3.3 Work with Aboriginal and Torres Strait Islander organisations to improve access to cancer services by Aboriginal and Torres Strait Islander people.

4. Accountability and Internal Systems

- 4.1 Plan for and manage a sustainable cancer service to enable the delivery of appropriate cancer care services.
- 4.2 Develop cancer information systems to enable integrated service provision and to provide quality and consistent information to assist cancer patients, their carers and health care providers.

5 Our People

- 5.1 Attract and retain a skilled workforce

Key Strategic Directions

Key Performance Area 1: Community and Consumers: Improving population health outcomes.

Objective 1.1: Decrease cancer incidence by improving processes for the prevention and early detection of cancer

	Goal	Strategy
1.1.1	Reduce the rate of ACT resident deaths due to cancer.	<p>Implement information systems and collect clinical outcome data to enable monitoring of the effectiveness of cancer interventions and for benchmarking on patient outcomes.</p> <p>Develop a partnership with Population Health Division to develop strategies aimed at reducing rates of modifiable cancer risk factors in the population.</p> <p>Increase the target number of women to be screened at Breastscreen each year to correlate with the increasing number of women in the target age group.</p>
1.1.2	Increase participation rates in the cervical cancer screening program.	Focus promotion of cervical screening amongst Aboriginal and Torres Strait Islander women and women of culturally and linguistically diverse backgrounds.
1.1.3	Reduce the proportion of Aboriginal and Torres Strait Islander people with cancer who die from the disease.	<p>Investigate, in partnership with indigenous organisations, the factors that influence access to diagnostic and treatment services by ACT and region Aboriginal and Torres Strait Island people, and develop strategies to address these.</p> <p>Determine the baseline rate for local Aboriginal and Torres Strait Islander residents and develop processes to monitor improvements in mortality rates.</p>

Key Performance Area 1: Community and Consumers:

Providing better access to appropriate services

Promoting the independence of consumers and their carers

Delivering comprehensive information to consumers and actively involving them in decision-making

Objective 1.2: Strengthen the patient centred focus of the cancer service.

	Goal	Strategy
1.2.1	Develop a consumer and carer input strategy	Develop a consumer and carer input strategy for Capital Region Cancer Service, including a patient and carer information forum.
1.2.2	Establish nurse care coordinator position/s for cancers not covered by established site specific positions	Plan for the establishment of non site specific nurse care coordinator position/s
1.2.3	Develop and implement an integrated and multidisciplinary model of care for psychosocial services for people with cancer.	Integrate existing psychosocial oncology services Implement a team approach to psychosocial support Implement psychosocial screening of patients with cancer.
1.2.4	Improve access to appropriate services for people with cancer.	Undertake an access improvement project for cancer services. Investigate the need for accommodation for patients undergoing long treatment regimens. Undertake a review of transport for patients undergoing cancer treatment. Improve patient awareness of entitlements under the Interstate Patient Travel Assistance Scheme (IPTAS) and NSW IPTAAS. Develop links with NSW Cancer Care Coordinators to enable the most effective care in the community for NSW residents.
1.2.5	Provide quality and consistent information to assist cancer patients, their carers and health care providers	Implement the CRCS IM/IT strategy (Objectives 6&7).

Key Performance Area 2: Safety and Quality of Care:
Improving patient safety and quality of care
Improving care options and the continuity of care across the care spectrum.

Objective 2.1: Optimise Cancer Care

	Goal	Strategy
2.1.1	Identify and implement evidence based clinical best practice.	<p>Establish an integrated and comprehensive patient centred cancer service for the ACT and region.</p> <p>Resource current multidisciplinary Cancer Site Specific Groups and establish further Advisory Groups for melanoma/sarcoma, genitourinary cancers and gynaecological cancers.</p> <p>Develop clear referral and clinical care pathways and clinical guidelines for multidisciplinary care of people with cancer.</p> <p>Develop proposal for ACT Breast Care Network of Excellence.</p> <p>Develop a strategic plan for palliative care services based on the National Palliative Care Strategy and National Palliative Care Standards and draft ACT Palliative Care Strategy.</p>
2.1.3	Improve processes for identifying and assessing new technologies and developments in cancer diagnosis and treatment on service provision.	Receive and evaluate horizon scanning reports from the Australian Government Health Policy Advisory Committee on Technology that relate to cancer treatment.
2.1.4	Increase participation rates in cancer clinical trials.	<p>Provide resources to enable the employment of data managers.</p> <p>Increase the number of clinical trials in the rural areas covered by CRCS.</p>
2.1.5	Maximise academic links.	Establish better linkages between clinicians and local tertiary institutions.
2.1.6	Increase research activity	<p>Source resources to support the research activity of CRCS. Establish better linkages between clinicians and The John Curtin School of Medical Research at the Australian National University.</p> <p>Establish a Clinical Cancer Research Group to establish research priorities and increase participation in clinical trials.</p> <p>Investigate alternative ways to attract grants for research.</p>

Key Performance Area 3: Partnerships

Forming effective partnerships with key stakeholders.

Objective 3.1: Optimise Cancer Care by strengthening partnerships within and outside the Cancer Stream.

	Goal	Strategy
3.1.1	Promote and enable optimal cancer care in General Practice.	<p>Work with the ACT and SENSW Divisions of General Practice to develop a strategy to build capacity in general practice to play a coordinating role in the care of people with cancer, assist General Practitioners with the management of patients and provision of educational material for patients with cancers and cancer survivors.</p> <p>Improve liaison between services provided by Capital Region Cancer Service and General Practice.</p> <p>Review examples of the use of patient held records for people with chronic diseases and develop a patient held record for patients with cancer to help them better manage their illness.</p>
3.1.2	Strengthen service linkages within and outside the cancer stream.	<p>Form effective networks between the public and private sectors for cancer care.</p> <p>Form linkages with rehabilitation services, GPs, geriatricians and rural hospitals.</p>

Key Performance Area 4: Accountability and Internal systems:
Implementing an effective policy and planning framework
Improving management and planning through the use of quality information
Managing our assets with a view to the future

Objective 4.1: Plan for and manage a sustainable cancer service to enable the delivery of appropriate cancer care services.

	Goal	Strategy
4.1.1	Identify service development priorities.	<p>Undertake feasibility planning to accommodate a co-located comprehensive cancer care centre in the ACT.</p> <p>Complete Medical Oncology Strategic Service Plan which will include planning for the provision of increased chemotherapy services to cater for increased future demand.</p> <p>Complete Radiation Oncology Strategic Service Plan.</p> <p>Implement procurement and replacement program for major radiation oncology equipment detailed in the "Major Radiation Oncology Equipment Strategy and Linear Accelerator Procurement Feasibility Plan (2006)".</p> <p>Develop better ambulatory care models to cope with the projected increase in cancer patient numbers including the development of services in the community such as Hospital in the Home (HITH).</p> <p>Explore the need for additional gynaecological oncology outreach clinics to the ACT during the development of the ACT Health Women's Health Plan.</p> <p>Contribute to service planning for surgical services.</p> <p>Enhance and expand links between CRCS and surgical services in the ACT.</p> <p>Explore during the development of the ACT Health Surgical</p>

	<p>Identify service development priorities (ctd)</p>	<p>Services Plan the capacity in the public sector for surgical treatment of advanced and metastatic skin cancer.</p> <p>Develop a planning framework for outreach services.</p> <p>Contribute to feasibility planning for PET services in the ACT.</p> <p>Contribute to feasibility planning for familial cancer clinic in conjunction with genetic (Women's and Children's) services.</p> <p>Identify ways in which to integrate genetic counselling with cancer specialty areas, including the establishment of a familial cancer clinic.</p> <p>Investigate the need for a prosthetic and equipment scheme for cancer services including single use equipment for community based patients.</p> <p>Develop a fundraising strategy for the Capital Region Cancer Service.</p>
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Key Performance Area 5: Our People:
Building our capacity and valuing our staff
Promoting ongoing and future learning
Striving for continuous improvement.

Objective 5.1: Attract and retain a skilled workforce.

	Goal	Strategy
5.1.1	Attract and retain a skilled workforce.	Develop recruitment and retention strategies for the stream. Investigate opportunities for workforce redesign to achieve a sustainable cancer services workforce. Improve opportunities for staff professional development. Identify ways to increase the research and teaching profile of the CRCS

Objective 6: To improve cancer information and harness information technology to enable integrated cancer service provision

by integrating cancer stream patient clinical information, patient administration and outcomes and activity reporting systems, with other systems within and outside the stream, subject to satisfactorily addressing security and access framework issues.

	Strategy	Cancer Stream Resource Issues	IM/IT Resource Issues
6.1	<p>Determine the key information management requirements for the Capital Region Cancer Service in collaboration with the implementation of the Cancer information management system.</p> <ol style="list-style-type: none"> 1. Determine the key data to be collected for: <ul style="list-style-type: none"> • Cancer risk prevention and early detection; • Cancer treatment; • Population health and planning; and • Cancer service management. 2. Develop a minimum data set, with a data dictionary, to provide definitions and standards for the collection of cancer information. (Ensuring consistency with national and ACT/NSW standards); and 3. Determine the information to be reported for clinical management, research and/or statistical analysis. 		Business Systems Analysis
6.2	Implement a unique patient identifier for the identification of patients, to support coordinated information sharing.		
6.3	Map future cancer patient flow within and outside the stream (including with General Practice) and identify points at which information management and information technology could improve patient outcomes within the stream.		
6.4	Develop, in conjunction with Medical Records service, a strategy to <ol style="list-style-type: none"> 1/ integrate clinical records/discharge summaries developed or received within the cancer stream with other health service clinical records; and 		Storage capacity on CRIS (digital record storage system) Security framework

6.5	<p>2/ store records to enable remote access.</p> <p>Implement a Cancer Information Management System within the Capital Region Cancer Service.</p> <ol style="list-style-type: none"> 1. Implementation at The Canberra Hospital – Phase 1. Registration, appointments, treatment plans, pharmacy, prescriptions and outreach access; 2. Implementation at The Canberra Hospital – Phase 2. Assessment, diagnosis and medical consultations; 3. Implementation at The Calvary Hospital; 4. Implementation at the Outreach Centres (subject to discussions with GSAHS). 		
6.6	<p>Develop a Business Case for the implementation of the Cancer Information Management System beyond phase 1 at The Canberra Hospital to ensure a sustainable Capital Region Cancer Service information system(s).</p>	<p>Resources for data systems planning and management, and access to IM/IT expertise and advice.</p>	<p>Advise on connectivity of systems considered with existing ACT Health systems and with GSAHS systems</p>
6.7		<p>Investigate options and implement action to ensure ongoing planning for future replacement of cancer stream clinical information system (maintenance & procurement).</p>	
6.8	<p>Ensure the Cancer information Management system continue to meet business needs</p> <p>Review clinical and patient workflows to ensure information systems improve these workflows.</p> <ol style="list-style-type: none"> 1. Utilisation of Medical Imaging Technologies 2. Implementation of Electronic Medication Management 3. Implementation of Electronic Ordering of Test Results 4. Implementation of Electronic Discharge Referrals (outgoing) 5. Implementation of Electronic Referrals (incoming) 		

	Strategy	Cancer Stream Resource Issues	IM/IT Resource Issues
6.10	Identify stream performance indicators and investigate options for recording and reporting patient outcomes for the purpose of measuring change (benchmarking).		
6.11	Work with GSAHS and Information Services Branch to plan the most effective method of ensuring the most recent patient clinical information on stream patients is available for local emergency treatment and case management.	Identify data collected and format required for consistency with NSW Cancer Institute data.	
6.12	Undertake feasibility planning into the introduction of digital mammography for BreastScreen ACT		

Objective 7: To provide quality and consistent information to assist cancer patients, their carers and health care providers.

	Strategy	Cancer Stream Resource Issues	IM/IT Resource Issues
7.1	Identify the information that patients, their carers and health care providers require.		
7.2	Identify which information might be provided via links to other services and the information that needs to be developed by the CRCS.		

APPENDIX B

Abbreviations and Acronyms

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
ALOS	Average Length of Stay
ANU	Australian National University
CNC	Clinical Nurse Consultant
COAG	Council of Australian Governments
CRCS	Capital Region Cancer Service
CRIS	(Tower) Clinical Record Information System (TCH medical record digital storage management system)
CSP	Clinical Services Plan (ACT Health)
CT	Computed Tomography
Cws	Cost Weighted Separation
EMM	Electronic Medicines Management
GI	Gastrointestinal
GP	General Practitioner
GSAHS	Greater Southern Area Health Service
HR	Human Resources
IM	Information Management
IPTAS	Interstate Patient Travel Assistance Scheme (ACT)
IPTAAS	Interstate Patient Travel and Accommodation Scheme (NSW)
IT	Information Technology
CALVARY-JJ	Calvary -John James Hospital
MRI	Magnetic Resonance Imaging
NCI	National Cancer Institute (USA)
NHL	Non Hodgkins Lymphoma
NHMRC	National Health and Medical Research Council
NSIF	National Service Improvement Framework
NSW	New South Wales
OOS	Occasions of Service
PACS	Picture Archiving and Communication System
PAS	Patient Administration System
PDA	Personal Digital Assistant
PET	Positron Emission Tomography
PFP	Procurement Feasibility Plan
PSA	Prostate Specific Antigen
RHW	Royal Hospital for Women (Randwick NSW)
RN	Registered Nurse
SAHS	Southern Area Health Service
SCH	Sydney Children's Hospital
SENSW	South East New South Wales
SNAPS	Smoking, Nutrition, Alcohol and Physical Activity Survey
SRG	Service Related Group
TCH	The Canberra Hospital
UK	United Kingdom
Var	Variance
YTD	Year to Date

Glossary/Definitions

Ambulatory care

Care that takes place at the patient's home or on a day stay basis in a health facility.

Average Length of Stay (ALOS)

The average days spent "in hospital – using a bed" associated with each separation or episode of care.

Brachytherapy

Internal radiotherapy during which the radioactive material is placed inside the body.

Cancer

A group of neoplastic diseases in which there is a transformation of normal body cells into malignant cells. (ACT Health. Cancer in the ACT 1998-2004)

Chemotherapy

Chemotherapy involves the systemic administration through the bloodstream of a prescribed course of medications that aim to kill cancerous cells and their growth.

Cost Weighted Separation

A DRG cost weight is the relative cost of treatment for a Diagnosis Related Group (attributed to each patient separation). Cost weights are developed each year based upon the costs of treating individual patients in public hospitals.

Diagnostic Related Groups (DRGs/AR-DRGs)

The Australian Refined Diagnosis Related Groups (AR-DRGs) classification has been developed to classify acute admitted patient episodes in public and private hospitals.

Episodes/Episode of Care

A phase of treatment during which the patient receives a particular type of care (e.g. acute, rehabilitation, etc). When that type of care is concluded the episode of care is ended and the patient undergoes either a type change separation to a different type of care or a formal separation and leaves the hospital. During a period of stay in hospital a patient may record one or more episodes of care eg acute care and then rehabilitation care = 2 episodes.

Linear Accelerator

A linear accelerator is used to deliver radiation therapy. The linear accelerator generates x-rays and electron beams, which are precisely focused on the tumour site.

Medical Oncology

Medical oncology is a sub-specialty of internal medicine devoted to the investigation, diagnosis and management of people with malignant diseases including preventative and palliative medicine.

Occasions of Service (OOS)

(National Health Data Dictionary)

The number of occasions of examination, consultation, treatment or other service provided to a patient in each functional unit of a health service establishment. For example, each diagnostic test or simultaneous set of related diagnostic tests for the one patient referred to a hospital pathology department consists of one occasion of service.

Palliative Approach

An approach linked to palliative care that is used by primary care services and practitioners* to improve the quality of life for individuals with a life limiting illness, their caregivers and family.

**for the purposes of the Standards for Providing Quality Palliative Care for all Australians primary care providers include all those health services and staff that have a primary or 'first contact' relationship with the patient with a life limiting illness.*

Palliative Care

Palliative care is provided for people who have a life limiting illness, with little or no prospect of cure, and for whom the primary treatment goal is quality of life.

Pap test/smear

Papanicolaou test can detect early changes in the cells which may be the first warning signs that a problem is occurring. These changes need to be checked and if necessary, treated as some may develop into cancer (Department of Health and Ageing (2005) Health inSite website accessed 15 Aug 05).

Patient-centred care

The delivery of care configured around the needs, priorities and goals of the person. Care can include health, welfare and support interventions and other services that address the person's circumstances. Where the role of health care providers is concerned, it implies a systematic approach to the delivery of care that crosses over professional boundaries, service types, organisational structure and funding arrangements, to consider the needs of the whole person as these change over time.

(wording from Department of Human Services, Victoria. Ambulatory Care website <http://www.health.vic.gov.au/ambulatorycare/FAQ>)

Radiation Oncology

Radiation oncology is the study and discipline of treating malignant disease with radiation. The treatment is referred to as radiotherapy or radiation therapy.

Rehabilitation

Rehabilitation services aim to improve independence and function for people experiencing disability following an illness / trauma.

Treatment is usually undertaken by a multidisciplinary team that may include:

- Occupational Therapy
- Physiotherapy
- Speech Pathology
- Psychology Neuropsychology and Clinical Psychology

- Social Work
- Prosthetics and Orthotics
- Exercise therapy (gym and hydrotherapy).
- Vocational Rehabilitation
- Rehab coordinator
- Rehabilitation physician

Role Delineation

Role delineation is a process of determining that support services, staff profile, minimum safety standards and other requirements are provided to ensure that clinical services are provided safely and appropriately supported. The role level describes the clinical complexity of clinical activity undertaken at that service. (NSW Health Guide to role Delineation of Health Services)

Separation

A separation refers to the completion of an episode of inpatient care (that is where a person is discharged from hospital after being admitted and treated within a hospital).

Stream

Clinical streaming builds on the networking of services to focus on the provision of services across the care continuum and in a number of care settings. Streamed services operate under one management model and cover services from health promotion and early intervention, community health services, outpatient services through to acute care services and beyond.

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Aboriginal Health Impact Statement

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Disability Impact Statement

DRAFT

APPENDICES

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- F ACT Public hospital cancer service activity data
- G Framework for cancer services planning in the ACT

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APPENDIX A

A Profile of Cancer in The Capital Region²² ²³ ²⁴ ²⁵

- Incidence of cancer is increasing. The increase in cancer incidence in Australia can be attributed to the ageing of the population, screening and early diagnosis.²⁶ Most of the increase in new cancer diagnoses each year in the ACT between 2003 and 2011 will occur in the older age groups.

Key findings of the report Cancer in the ACT 1998-2004 include:

- Although the number of new cancer cases and cancer deaths has risen since 1985, age standardised mortality rates per 100,000 population have remained relatively stable. This indicates that the increase was due to changes in the age structure of the population rather than the risk of cancer for any particular group.
- Overall rates of new cancer cases were slightly higher in males than females. Forty-seven percent of cancers occurred in persons over 65 years of age.

- Over the period of 1985 to 2004 there were:

decreases in the age standardised rates of : lung cancer and melanoma of skin in both genders, ovarian cancer, and colorectal cancer in females.

increases in the age standardised rates of: prostate cancer, breast cancer, cancer of uterus, colorectal cancer in males and non-Hodgkin's lymphoma in both genders; and

The most common cancers were: cancer of prostate, female breast cancer, colorectal cancer, melanoma of skin and lung cancer. These cancer accounted for over 60 percent of new cancers overall.

- Prostate cancer was the most common cause of male cancer and the second most common cause of male cancer death. The risk of developing prostate cancer before the age of 75 years was 1 in 9 males. The notable increase of new cases since 1985 most likely reflects an increase in the use of Prostate Antigen Test (PSA).
- Breast cancer was the most common cause of female cancer and the most common cause of female cancer death. The risk of developing breast cancer before the age of 75 years was 1 in 10 females. Earlier detection and treatment of cancer has been facilitated through the introduction of the BreastScreen program in 1993.

Low fertility, delayed aged of first child and higher participation rates in screening programs are contributing factors to the higher breast cancer and prostate cancer in the ACT.

²² ACT Health Population Health Research Centre (2007) *Cancer in the ACT 1998-2004*

²³ *ACT Chief Health Officer's Report 2006*

²⁴ AIHW *Australia's Health 2004* p 67

²⁵ Source: ACT Health *Cancer in the ACT 1996-2000* November 2003

²⁶ Cancer Institute NSW (2004). *NSW Cancer Plan 2004-2006*.

- Lung cancer was the fourth most common cause of cancer in both genders. It was the most common cause of death from cancer in males and third in females. Since 1985 there has been a decrease in new cases, which coincides with a national decrease in prevalence of tobacco smoking.
- The risk of developing cancer in the ACT before the age of 75 years was 1 in 3 for males and 1 in 4 for females in both the 1998-2002 and 2000-2004 reporting periods. The risk estimate does not include the risk of developing non-melanocytic skin cancer.
- There were 5,516 new cases of cancer registered for ACT residents between 2000 and 2004.
- It was projected that in 2006 1,201 new cases of registered cancers will be recorded for residents of the former Southern Area Health Service and 1,330 for ACT residents.
- Cancer was the most common cause of death in the ACT in 1998 (30 per cent of all deaths) and 2004 (31 per cent of all deaths).
- In general the prevalence of modifiable risk factors in the ACT compare favourably with the prevalence of risk factors nationally. The 2006 ACT Health Chief Health Officer's Report notes that estimates from the 2004 SNAPS Survey suggest that only about half of all adults in the ACT were undertaking sufficient levels of physical activity to meet national guidelines and about one in ten adults were physically inactive or sedentary in 2004. Further, survey estimates suggest that only one in ten adults in the ACT consumed sufficient vegetables and about half consumed sufficient fruit to meet dietary guidelines in 2004.
- Participation in the BreastScreen program has been higher among ACT women aged 50 to 69 years of age than observed nationally, as has the rate of early cancer detection in the BreastScreen program²⁷. The average age at which ACT residents were diagnosed with cancer was 63 years for males and 60 years for females from 1996 to 2000.
- Compared with NSW as a whole, age-standardised incidence rates for all cancers were higher in residents of North Coast Area Health Service and males of SouthEastern Sydney and Illawarra, Greater Southern and Greater Western area health services in 2004²⁸.

²⁷ ACT Health *Breast Cancer in the ACT 2003*

²⁸ Cancer Institute NSW (2006) *Cancer in NSW Incidence and Mortality Report 2004*.

Projections

- National projections²⁹ to 2011 show that skin and lip cancer projections (including melanoma) will increase for both men and women. During the period 1999-2003 melanoma incidence rates in ACT residents was consistent with Australian rates in 2001²⁰.
- The national age-standardised incidence rate for colorectal (bowel) cancer in men is projected to remain stable but for women there will be a slow increase. The expected ageing of the population is projected to cause a large increase in the number of new cases of bowel cancer. There may also be some impacts on these projections as a result of the national bowel screening program implemented in 2006. The age-standardised colorectal cancer incidence rate for both ACT males and females between 1999 and 2003 was similar to the national rate in 2001³⁰.
- The age standardised incidence rate for lung cancer nationally is projected to continue decreasing for men and to continue to rise for women, but at a slower rate than previously. Between 1999 and 2003 the lung cancer incidence rate for ACT men was below the Australian rate and the female lung cancer incidence rate was similar to the national rate for 2001.
- For breast cancer the age standardised rate is projected to remain stable nationally but the ageing of the population will still lead to large increases in expected new cases as breast cancer is the most common cancer for women and in particular affects older women. The average annual incidence rate 1999-2003 was higher than the incidence rates for Australian females in 2001.
- National projections for prostate cancer show that incidence is projected to remain stable however numbers are projected to increase as again this is a cancer predominantly of the older age group. The five year age-standardised ACT prostate cancer incidence rate 1999-2003 was not significantly different to the rate for Australian males in 2001. ACT prostate cancer incidence trends over time show a substantial time lag behind Australia, which reflects the delayed uptake of PSA testing in the ACT, compared with the rest of Australia.

Aboriginal and Torres Strait Islander people with cancer

- Nationally, indigenous people with cancer are twice as likely to die from cancer than non indigenous Australians.³¹

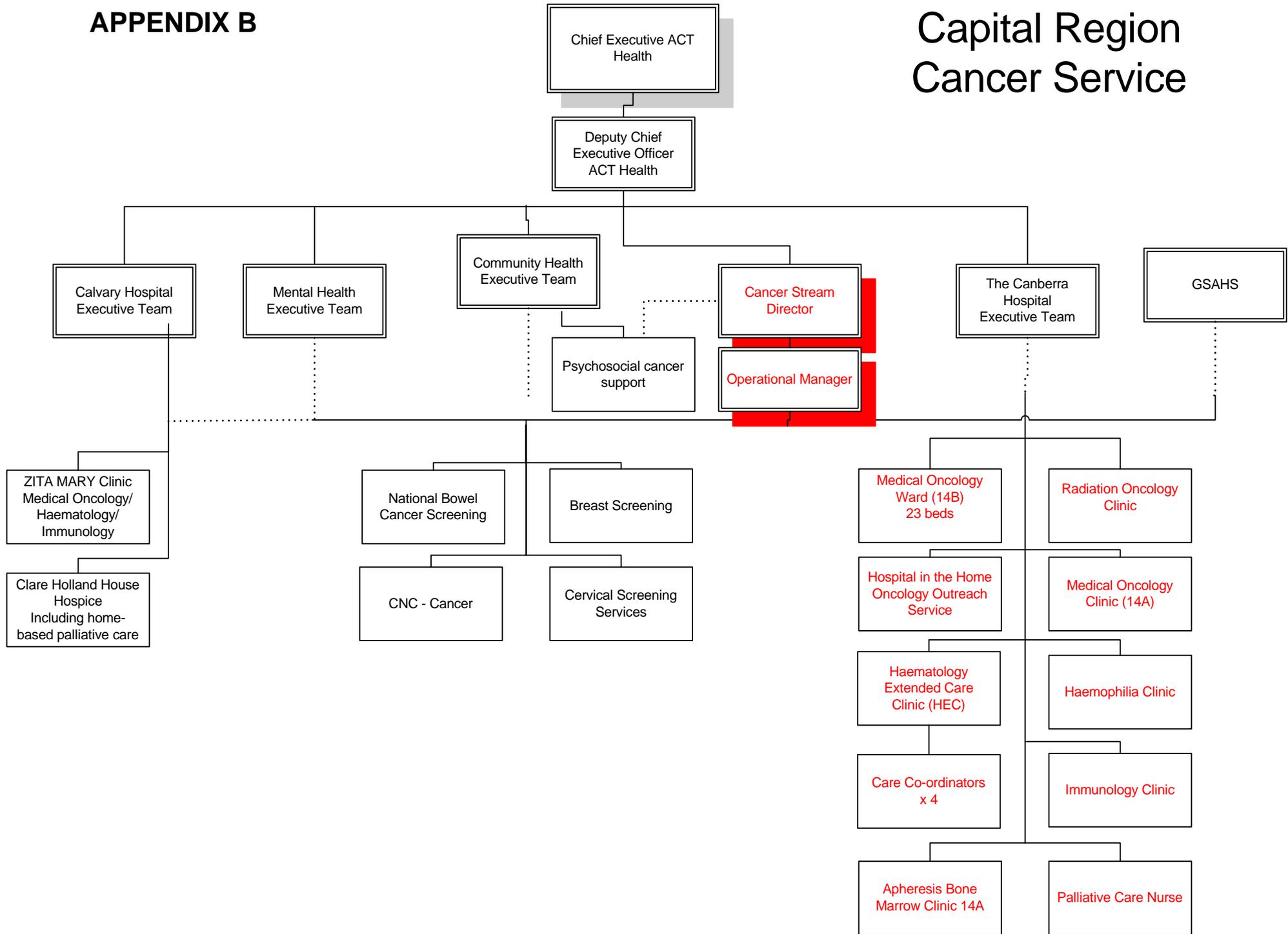
²⁹ AIHW, AACR & NCSG: Ian McDermid 2005. *Cancer incidence projections, Australia 2002 to 2011*. Canberra.

³⁰ ACT Health 2003. *Cancer in the ACT 1996-2000*

³¹ Lowenthal RM, Grogan PB, Kerrins ET (2005). Reducing the impact of cancer in indigenous communities: ways forward. *MJA*; 182 (3):105-106

APPENDIX B

Capital Region Cancer Service



APPENDIX C

Cancer Screening Services in the ACT

BreastScreen ACT is a component of the BreastScreen Australia national breast cancer screening program. Policies and accreditation standards are produced nationally. BreastScreen ACT provides services for ACT women and the population of southeastern NSW.

The BreastScreen program provides free screening mammograms at two-yearly intervals for women aged 50-69 with the aim of reducing deaths from breast cancer in this target group through early detection of the disease. The participation rate for BreastScreen Australia was 57.1 per cent of the target population (women aged 50-69 years) in 2001-02 aiming toward reaching 70% of women aged 50-59 years over any 2 year period.³²

The service in the ACT includes both screening and assessment components. The cervical screening program, including the Cervical Cytology Register, promotes two yearly Pap testing for women. The Cervical Cytology Register is the basis for a reminder service for women overdue for a Pap test or follow-up test. The participation rate for ACT women is currently 62% and since the inception of this program 10 years ago, the ACT death rate for cervical cancer has reduced by more than 50 per cent.

ACT Health does not currently offer routine Prostate Specific Antigen (PSA) testing for prostate cancer. There is insufficient evidence at present to determine whether PSA testing prevents death from prostate cancer. There is no national screening program.

A national screening program for colorectal cancer will commence late in 2006. People turning 55 years and 65 years will be invited to participate in screening during the first stage of the program. It is planned to extend the screening to cover all people aged 55-74 years during the second stage which is planned to commence after review of the program. ACT Health will monitor the impact of the program which is expected to result in a national decrease in mortality from colorectal cancer of 15-33% and an increase of approximately 160 colonoscopies per year in the ACT.

³² Department of Health and Ageing *Annual Report 2003-04*

APPENDIX C

Cancer Services in the ACT

Medical Oncology services

The majority of medical oncology services, predominantly chemotherapy services, are provided as outpatient services via the Medical Oncology Unit at TCH and the Zita Mary Oncology Clinic at Calvary. Inpatient services are provided in the Haematology/Oncology Ward at TCH.

Outreach consultative and chemotherapy services are provided by TCH via centres in Young, Goulburn, Moruya and Bega. GSAHS provides the staff and infrastructure for the outpatient clinics however they are operated as private clinics.

Radiation oncology services

Radiation oncology services are delivered at The Canberra Hospital and cover:

- Radiation planning and treatment
- Brachytherapy planning and treatment
- Superficial X-ray therapy planning and treatment
- Megavoltage X-ray therapy planning and treatment.

The majority of radiation therapy services delivered at The Canberra Hospital are external beam radiation treatments provided by means of linear accelerators.

Radiation oncology occasions of service have decreased in recent years. This drop reflects shortages in radiotherapists and equipment breakdowns.

The Radiation Oncology Department of the Canberra Hospital has experienced a chronic shortage of radiation therapists in recent years, with the effect of reducing the operational capacity of the linear accelerators (linacs). This resulted in increased waiting times for treatment and the referral of patients to interstate sites to receive their care within a clinically appropriate timeframe. There has been a concerted effort to recruit and retain staff with a resulting improvement in waiting times across all urgency categories.

The ACT has two linear accelerators located at TCH. One of these has been replaced in 2006 further reducing the operational capacity of the service during the procurement and commissioning of the replacement machine.

A Major Radiation Oncology Equipment Strategy and linear accelerator Procurement Feasibility Plan (PFP) was completed in 2005-06. The 2006-07 ACT Budget provided for the expansion of radiation therapy capacity at The Canberra Hospital to three linear accelerators by 2009 and the construction of a bunker to house a fourth linear accelerator by 2012. The PFP recommends that any further expansion be on another site or in the private sector and also that brachytherapy capacity be enhanced.

APPENDIX C

Services provided to Cancer Patients and their Carers by community based organisations in the ACT

Bosom Buddies

Bosom buddies provides psychosocial support for patients with breast cancer and their families. Members of Bosom buddies are also involved as consumer representatives on various research and reporting groups and in lobbying governments and private organisations to improve conditions for women undergoing surgery, reconstruction or other medical procedures. The organisation also provides a Breast Awareness Program to schools and community groups and undertakes fundraising for contributions to research and community projects.

The Cancer Council ACT

Is a member of The Cancer Council Australia, the peak body for cancer control in Australia. The Cancer Council provides medical research, education programs and patient and family support services.

The Cancer Council ACT is a not-for-profit, non-government organisation that receives some funding from ACT Health but raises most of its funds from the Canberra community.

ACT Eden Monaro Cancer Support Group

Provides a range of support services to families of people experiencing cancer treatment, including financial assistance, family functions, counselling services and hospital visits. The Group raises most of its funds from the local community and receives some funding from ACT Health.

There are also a number of national organisations and local and national support groups that local residents can access.

Cancer Voices ACT

A group of ACT and district cancer consumers, auspiced by the Health Care Consumers Association ACT, which is linked to Cancer Voices Australia and concentrates on advocacy and representational work on behalf of those affected by cancer.

The Canberra One-Stop Cancer Web Shop

The Web Shop has been established to help cancer patients and carers in the ACT and region to locate reliable web resources of interest to them.

Leukaemia Foundation

The Leukaemia Foundation provides services such as support and counselling, information, education programs, accommodation and transport and practical support for patients and families living with:

- leukaemias
- lymphomas
- myeloma
- Myelodysplastic Syndromes (MDS)
- Myeloproliferative Disorders (PRV, ET, MF)
- Waldenstroms
- Amyloidosis
- Aplastic Anaemia

**APPENDIX D
Role Delineations Levels**

General Medicine

Level	Description	Minimum Level of Support Services							
		Path	Phar	DiagImag	NMed	Anaes	ICU	CCU	Op/S
1	Management and appropriate referral by Medical Practitioner. RN in charge of each shift. Quality assurance activities. Interpreters as per Circular 94/10.	1	1	1	-	1	-	1	-
2	As for Level 1 plus General Physician consultation available. Continuing education programs for nurses available specific to the needs of the service. Access to allied health professionals. Nursing staff with isolated certificate to perform emergency x-rays of chests and broken limbs.	1	2	1	-	1	-	1	-
3	As Level 2 plus referral and management primarily by Accredited Medical Practitioners or General Physicians. Has 24 hour access to Medical Officer on site or available within 10 minutes. Consultations available from other specialists. NUM for general ward. Some RNs having completed or undertaking relevant post-basic studies. Formal quality assurance program. Access to health promotion services, and liaison psychiatry. Formal links to community health services in particular community nursing.	3	3	3	-	2	3	3	2
4	As Level 3 plus service provided by General Physicians rostered on call 24 hours. May have subspecialty interest/skills. Medical Officer(s) on site 24 hours. Has Medical Registrar. Has NUM and experienced RNs. Allied health professionals on site. Formal link with Level 4 Rehabilitation Service.	4	4	4	-	4	4	4	2

Medical Oncology

Level	Description	Minimum Level of Support Services							
		Path	Phar	Diaglmag	NMed	Anaes	ICU	CCU	Op/S
4	As for Level 4 General Medicine plus service provided by General Physician with interest in medical oncology. May have visiting Medical Oncologist clinics. Established liaison and consultation with radiotherapy, palliative care, psychiatric and social work services. Formal links to community health services in particular Community Nursing.	4	5	4	3	4	4	4	3
5	As level 4 plus Medical Registrar on call 24 hours. Appointed Medical Oncology Specialist. Access to CNC is desirable. May have teaching and research role. Multidisciplinary management of oncology patients, including case conferences with Radiotherapists and Surgeons. May have Pain Clinics. Links with palliative care service and participates in health promotion.	5	5	5	5	4	5	4	4
6	As Level 5 plus Medical Registrar on site 24 hours. Has Oncology Department, Oncology Specialist(s) and Oncology Registrar. Has teaching and research role. Participates with other oncology specialties as part of comprehensive cancer service and is a component of a Cancer Care Centre consistent with the <i>Optimising Cancer Management Cancer Care Model</i> .	6	6	5	6	5	6	4	6

Radiation Oncology

Level	Description	Minimum Level of Support Services							
		Path	Phar	DiagImag	NMed	Anaes	ICU	CCU	Op/S
4	Visiting Radiation Oncologist, working in conjunction with a comprehensive cancer care service. No treatment facilities. Quality assurance activities. Interpreters as per circular 94/10.	1	1	1	-	1	2	1	-
5	Basic modern radiation treatment centre comprising a minimum of superficial, deep x-ray therapy and megavoltage machine(s). Has intracavity irradiation equipment. May have mould room. Has dual modality linear accelerators equipped with multileaf collimator, electronic portal imaging and internal wedging system. Has one bunker per linac and recommissioning bunker. Access to simulator with digital imaging capability and access to CT and MRI scan and/or CT simulator. Required equipment includes: immobilisation system, automated block cutting and casting system, beam data acquisition system and invivo dose monitoring system. Has dedicated Information Network System including electronic patient records. Has 3D Planning system. Has data collection program for annual recording and monitoring of work undertaken for the Radiation Therapists, Biomedical Engineers or Technicians and Therapeutic Radiographers.	5	5	5	5	4	5	4	4
6	As Level 5 plus has Radiation Oncology Registrar(s). Multiple linacs with at least one linac of 10-25 MeV potential with photon and electron capabilities. A fully integrated, computer assisted, planning and treatment system with system(s) for verifying precision, planning and treatment modalities. Remote control intracavity equipment with afterloading techniques. Mechanical workshop and biomedical support facilities. Provides training in biomedical engineering, mould room techniques and medical physics. Has research role. Located in principal referral hospital with ready access to all subspecialties. Is a key component of a Cancer Care Centre consistent with the Optimising Cancer Management Cancer Care Model.	6	6	6	6	5	6	4	6

Radiation Oncology

Level	Description	Minimum Level of Support Services								
		Path	Phar	Diaglmag	NMed	Anaes	ICU	CCU	Op/S	
4	As for Level 4 General Medicine plus service provided by General Physician with interest in haematology. May have Haematologist visiting regularly. Link with palliative care service.	4	4	4	3		4	4	4	2
5	As Level 4 plus General Medical registrar on call 24 hours. Appointed Haematologist. Access t CNC is desirable. May have teaching and research role.	5	5	5	5		4	5	4	4
6	As Level 5 plus Medical Registrar on site 24 hours. Has Haematology Department. Haematologist on call 24 hours. Has Haematology Registrar. Has teaching and research role. May provide cell separation. May perform bone marrow transplantation.	6	5	5	5		5	5	4	4

From NSW Health Guide to role Delineation of Health Services

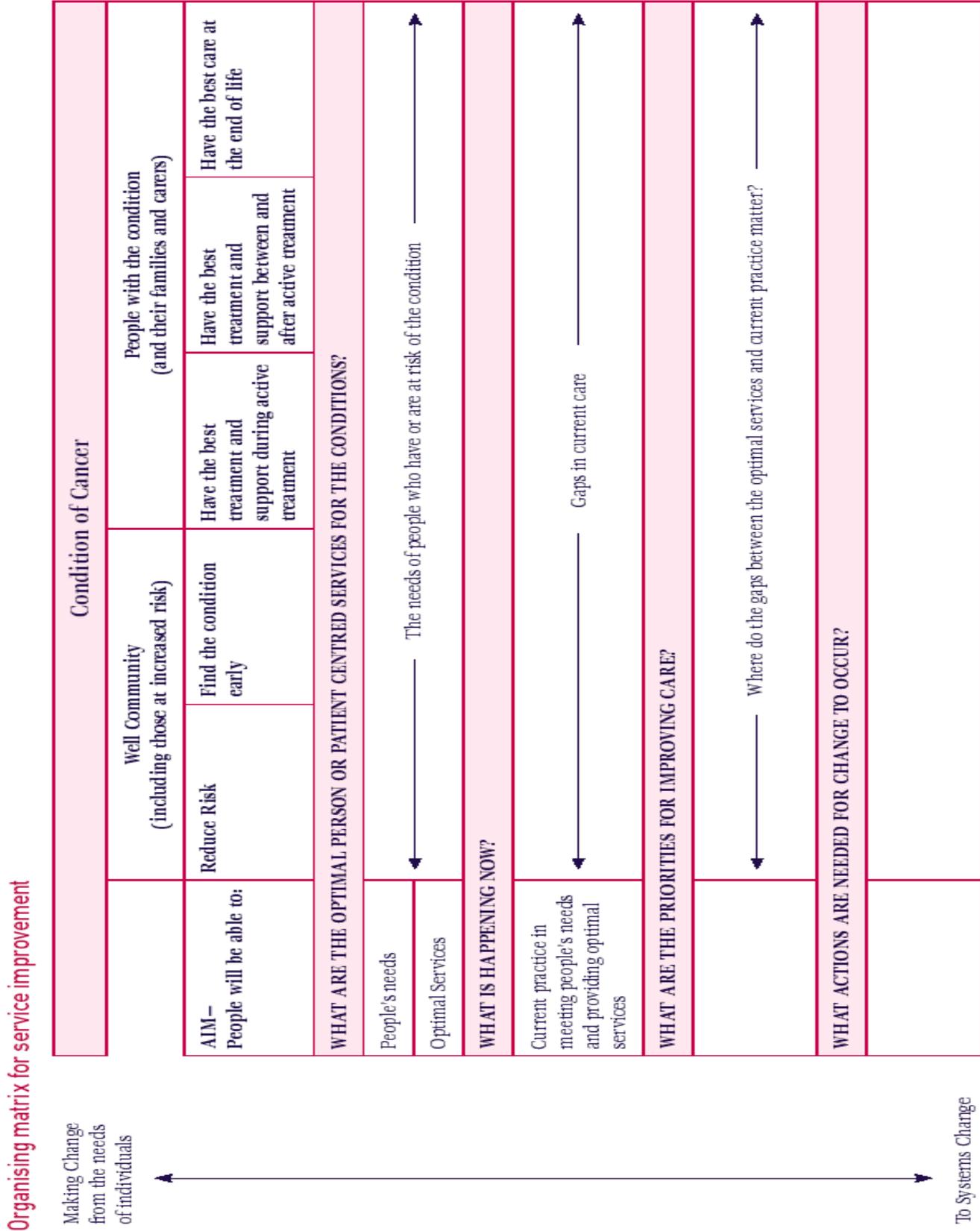
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APPENDIX E

From National Health Priority Council (NHPAC) (2006), National Service Improvement Framework for Cancer, Australian Government Department of Health and Ageing, Canberra, Page 9.

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FIGURE 1: NATIONAL SERVICE IMPROVEMENT FRAMEWORK
Cancer



APPENDIX F

Cancer services ACT public hospital activity

Source: ACT Public Health Services Activity Report

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Clinical Streams

Capital Region Cancer Stream: Monthly Activity Summary

June 2007

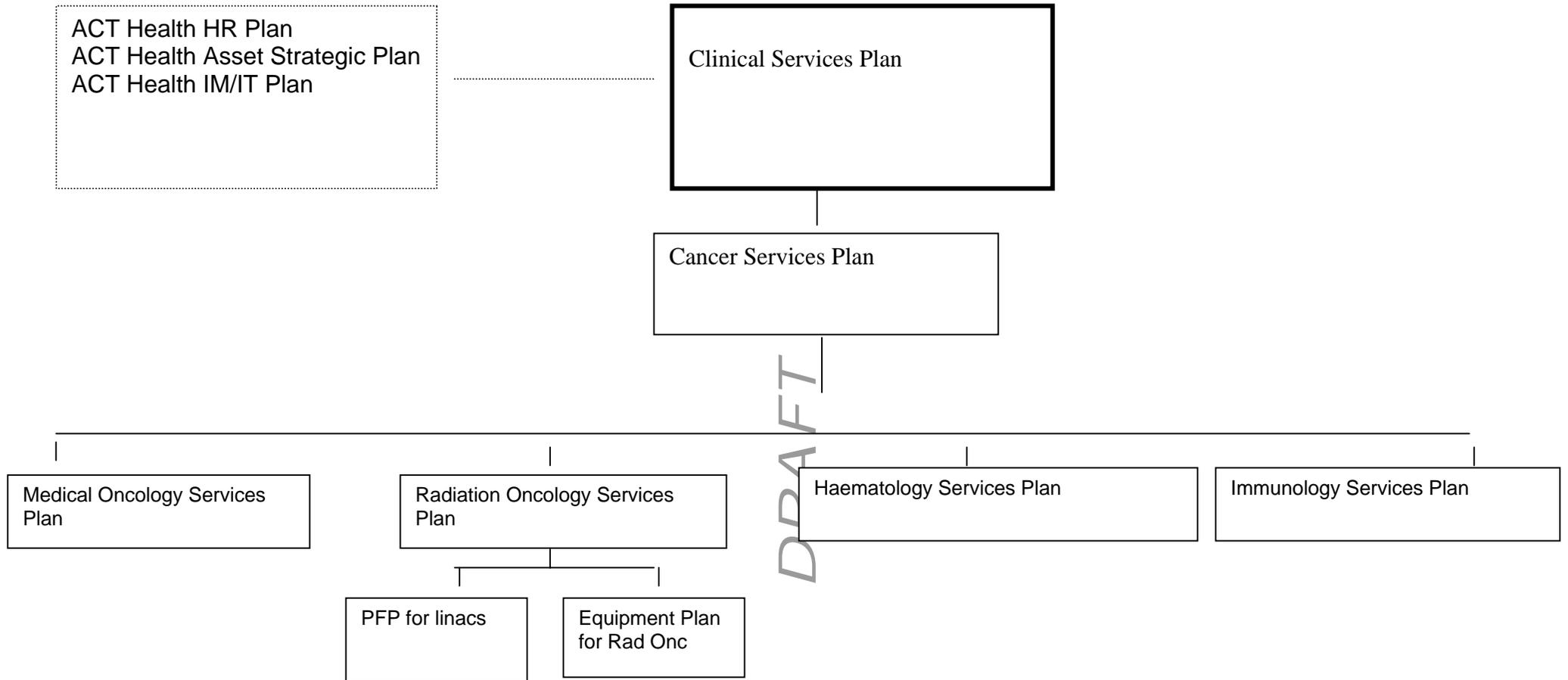
The Canberra Hospital

Inpatients (cws)	YTD	Target	Var	% Var	Comments
Medical Oncology	850	802	48	6%	Executive Information Package
Radiation Oncology	318	246	72	28%	Executive Information Package
Haematology	1834	1943	-109	-6%	Executive Information Package
Immunology	188	209	-21	-10%	Executive Information Package
Total	3190	3200	-10	0%	
Outpatients (Occasions of Service)	YTD	Target	Var	% Var	Comments
Medical Oncology	11021	10669	352	3%	Executive Information Package
Radiation Oncology	23714	20778	2936	14%	Executive Information Package
Haematology	3284	3024	240	8%	Executive Information Package
Immunology	1725	1675	50	3%	Executive Information Package
Total	39724	36146	3578	10%	
Timeliness	Period	Target	Var	% Var	Comments
Radiotherapy waiting time (days)	14.2	24.0	-9.9	-41%	
Haematology (ALOS)	7.4	5.0	2.4	48%	EIP Database
Calvary outpatients (Occasions of Service)	YTD	Target	Var	% Var	Comments
Zita Mary public occasions of services	n/a	2620	#VALUE!	0%	Capital Region Cancer Services
Lymphodaema	1337	x		0%	Information Bulletin
Palliative care services	YTD	Target	Var	% Var	Comments
Hospice separations	375				Ward Transfer file
Hospice ALOS	14.7				
Hospice bed occupancy (days)	5514	6242	-728	-12%	19 beds at 90% occupancy
Hospice outpatients	2573				Face to face only
Hospice home based visits	5826				Face to face only
Community Services	Actual	Target	Var	% var	
Breast Screening, Number of ACT Women Screened	11965	12,000	-35	-0.29%	Capital Region Cancer Services
Breast Screening, Number of NSW Women Screened	8071	9,118	-1047	-11.48%	Capital Region Cancer Services
% of women who wait 28 days or less from their appointment date to the date of their breast cancer	93%	90%	3%		Capital Region Cancer Services
% of women who < 28 days from screen to assessment of results	75%	90%	-15%		Capital Region Cancer Services
% of women offered appointment within 28 days of booking for June	83%	90%	-7%		Capital Region Cancer Services
	60%	70%	10%		Capital Region Cancer Services
Cervical Screening Register (year to date)	38595	33000	5595	16.95%	Capital Region Cancer Services
Notes	June				
Median wait time to Assessment (Days)	24				Capital Region Cancer Services
Median Wait Time to Screening Appointment (days)	17				Capital Region Cancer Services
Did Not Attend Rate	3.90%				Capital Region Cancer Services

DKAF 1 in Progress

APPENDIX G

Framework for Cancer Services Planning



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