

Cancer: Evidence Summary

Introduction:

Cancer is a diverse group of several hundred diseases in which some of the body's cells become abnormal and begin to multiply out of control. The abnormal cells can invade and damage the tissue around them, and spread to other parts of the body, causing further damage and eventually death. Despite a decline in cancer deaths and an increase in survival over time, cancer is still the second-most common cause of death in Australia—after cardiovascular diseases. Cancer has a significant impact on individuals, families and the health-care system and has had a prominent policy focus for decades. Cancer is the leading cause of mortality in Victoria and generates a high level of consumer concern. The care of cancer patients represents a significant proportion of all healthcare delivered in Victoria.

Between 1982 and 2014, the number of new cancer cases diagnosed more than doubled. This increase can be largely attributed to the rise in the incidence of prostate cancer, colorectal cancer, breast cancer in females and lung cancer. The increase can also be partly explained by the ageing and increasing size of the population, improved diagnoses through population health screening programs, and improvements in technologies and techniques used to identify and diagnose cancer.

Cancer outcomes differ by Aboriginal and Torres Strait Islander status and remoteness area. In 2008–2012, for all cancers combined, Indigenous Australians experienced higher mortality rates than non-Indigenous Australians. In 2005–2009, incidence rates were highest for those living in *Inner regional* areas of Australia; in 2008–2012, mortality rates were highest for those living in *Very remote* areas.

Campaspe data:

Cancer incidence and mortality in Campaspe Shire, 2012-2014

During the period 2012-2014, there were on average 260 new cancers diagnosed each year in the Campaspe Shire. About 53% of new cancers were diagnosed in males and 74% in persons aged over 60 years.

New cases and deaths in 3 years by age group and sex

Age group	New cases				Deaths			
	Males	Females	Total	% of total	Males	Females	Total	% of total
Under 40	16	16	32	4.1%	3	2	5	1.7%
40-59	81	92	173	22.2%	12	20	32	10.8%
60-79	241	193	434	55.6%	83	73	156	52.9%
80+	72	69	141	18.1%	50	52	102	34.6%
Total	410	370	780	100.0%	148	147	295	100.0%

New cases & deaths in 3 years by leading cancer sites

Leading cancer sites	New cases				Deaths			
	Males	Females	Total	% of total	Males	Females	Total	% of total
Prostate	116	-	116	14.9%	20	-	20	6.8%
Bowel	56	56	112	14.4%	13	21	34	11.5%
Breast (female)	-	106	106	13.6%	-	20	20	6.8%
Lung	34	36	70	9.0%	34	30	64	21.7%
Melanoma	33	36	69	8.8%	3	6	9	3.1%
Lymphoma	21	16	37	4.7%	6	10	16	5.4%
Leukaemia	18	6	24	3.1%	10	5	15	5.1%
Bladder	17	5	22	2.8%	2	2	4	1.4%
Pancreas	6	15	21	2.7%	11	11	22	7.5%
Uterus	-	21	21	2.7%	0	1	1	0.3%
Other cancer types	109	73	182	23.3%	49	41	90	30.5%
Total	410	370	780	100.0%	148	147	295	100.0%

Source: Cancer Council Victoria, statistics from the Victorian Cancer Registry 2016.

Most common cancers: the most commonly occurring cancers for Campaspe are prostate, bowel, breast, lung and melanoma (refer to table above).

Deaths: During the period 2012-2014 the most common cancer deaths for Campaspe females were from lung, bowel and breast. For males it is lung, prostate and bowel.

Cancer incidence and mortality in Campaspe Shire, 2008-2010

Men

New Cases: - Between 2008 and 2010, the most common type of new cancer cases for Campaspe males were (in order): prostate, bowel, melanoma and lung. Compared to the Victorian figures for males, Campaspe males had a greater proportion of all new cancers that were cancer of the: bowel, kidney, melanoma or multiple myeloma. Compared to Campaspe females, Campaspe males had a higher number of new cancer cases for cancer of the bowel, head and neck, kidney, lung, melanoma, multiple myeloma, prostate, and others sites. Campaspe males, compared to Campaspe females, had a higher number of all new cancer cases.

Deaths: - Between 2008 and 2010, the most common cancer deaths for Campaspe males were caused by (in order): other sites, lung, prostate and bowel. Compared to the Victorian figures for males, Campaspe males had a greater proportion of all cancer deaths that were for cancer of the: bowel, kidney, lung, multiple myeloma, prostate and other sites. Compared to Campaspe females, Campaspe males had a higher number of cancer deaths for cancer of the bowel, head and neck, kidney, lung, melanoma, multiple myeloma, and prostate. Campaspe males, compared to Campaspe females, had a higher number of all cancer deaths.

Women

New Cases: Between 2008 and 2010, the most common type of new cancer cases for Campaspe females were (in order): breast, bowel, lung and melanoma. Compared to the Victorian figures for females, Campaspe females had a greater proportion of all new cancers that were cancer of the bowel, breast, kidney, leukaemia, lung, melanoma or multiple myeloma. Compared to Campaspe males, Campaspe females had a higher number of new cancer cases for cancer of the breast and for leukaemia.

Deaths: Between 2008 and 2010, the most common cancer deaths for Campaspe females were caused by (in order): other sites, breast, lung and bowel. Compared to the Victorian figures for females, Campaspe females had a greater proportion of all cancer deaths that were from cancer of the: bowel, breast, kidney, lung, melanoma and multiple myeloma. Compared to Campaspe males, Campaspe females had a higher number of cancer deaths for cancer of the breast, lymphoma and cancer of other sites.

Smoking: Compared to Victoria (15.8%), Campaspe (17.2%) had a higher proportion of population aged 18 years and over who were current smokers. Campaspe (16.0%) compared to Victoria (11.9%) had a higher frequency of daily smoking.

Males from all Campaspe SLAs were more likely to be smokers than the regional Victoria and Victoria average. Within the region, males from Campaspe – Echuca SLA had the highest rate of smoking. Within the region, females from Campaspe - Echuca SLA were the most likely to be smokers, followed by Campaspe – South SLA.

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In 2008, across Victoria, around 48% of Indigenous persons reported being a smoker.

Smoking - Victorian Indigenous population aged 15 yrs and over

Current smoker	47.6
Ex-smoker	21.8
Never smoked	30.6

National Aboriginal and Torres Strait Islander Social Survey, 2008 ABS cat. No. 4714

Mammograms: Compared to Victoria (70.1%) Campaspe females aged 50-69 years were slightly less likely (74.6%) to have had a mammogram in the two years preceding 2011-12.

Pap smears: The participation rate for pap tests in Campaspe females aged 20 – 69 years who have a cervix was slightly lower (59.9%) than the state average (60.2%) over the 2012-13 period . Compared to rural Victoria (68.4%) and Victoria (70.6%), Campaspe females aged 20 – 69 years were significantly more likely (64.3%) to have had a pap smear test in the two years preceding 2011-12.

Breast Cancer Screening

Compared to Victoria, rural Victoria and Loddon Mallee, in 2011-12 Campaspe females aged 50 years or over were more likely to have had a mammogram in the last two years.

Had Mammogram in Last Two Years, Women^(a) Aged 50 years or over (2011-12)*

Area	% of Surveyed Women Aged 50-69
Campaspe	74.6
Loddon Mallee Region	73.0
	69.9
Victoria	70.1

Victorian Population Health Survey 2011-12. * self reported ^(a) out of surveyed women aged 50 – 69 years.

State-wide findings from the Victorian Population Health Survey also indicate that across Victoria:

- In 2007, there were 2,680 deaths from breast cancer in Australian women
- Women aged 60-69 years were most likely to have had a mammogram, and
- Women aged 80 years or over, followed by 50-59 years, were least likely to have had a mammogram.

Cervical Cancer Screening

The participation rate for pap tests in Campaspe females aged 20 – 69 years who have a cervix was slightly lower than the state average over the 2012-13 period.

Proportion of women screened for cervical cancer (2012-13)

Area	% of cervical cancer screening
Campaspe	59.9

Victoria	60.2
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Department of Health, LGA Profiles 2013

The 2011-12 Victorian Population Health Survey also collected information about participation in pap smear tests and this is based on self-reported information from the survey respondents. Largely reflecting the Victorian Cervical Cytology statistics, the VPHS results indicate that, compared to Victorian averages, Campaspe females had a lower participation rate.

Had a Pap Smear*in The Past Two Years^(a) - Females Aged 20–69 Years (2011-12)

Area	% of surveyed women aged 50-69
Campaspe	64.3
Loddon Mallee Region	66.8
Rural Victoria	68.4
Victoria	70.6

*Victorian Population Health Survey 2011-12. * self reported ^(a) out of surveyed women aged 20 – 69 years.*

Bowel Cancer Checks

Compared to Victoria and rural Victoria averages, a significantly lower percentage of residents aged 50 years and over for Campaspe Shire returned the faecal occult blood test (FOBT) kit sent in the mail to them from the National Bowel Cancer Screening Program (NBCSP).

Bowel Cancer testing in population aged 50 years and over (2011-12)

	Received faecal occult blood test (FOBT) kit in mail from NBCSP	Returned faecal occult blood test (FOBT) kit in mail from NBCSP
Campaspe	49.9	47.1
Loddon Mallee Region	49.1	61.7
Rural Victoria	48.6	64.5
Victoria	48.6	61.2

Victorian Population Health Survey 2011-12.

State-wide findings from the Victorian Population Health Survey also indicate that *across Victoria*:

- Males and females aged 70 years and over were most likely to report having received the FOBT kit in the mail from the NBCSP
- Females were more likely than males to report receiving the kit and to return the kit, and
- The most common reason for not completing and returning the test - for both males and females - was that they had already had another bowel test, followed by they were too busy or didn't have enough time.

Sun Protective Behaviour

Compared to Victoria, in 2011-12 Campaspe had a significantly higher proportion of population aged 18 and over that, when out in the sun, usually wore both a hat and

sunglasses. Campaspe had a much lower proportion of population that usually wore neither hat nor sunglasses when out in the sun.

Sun Protective Behaviour, 18 Years and Over (2011-12)

Behaviour	Campaspe	Loddon	Rural Victoria	Victoria
Usually wears hat & sunglasses**	48.2	46.4	46.4	39.3
Wears neither hat nor sun-glasses**	9.8	10.9	10.9	15.6

*Victorian Population Health Survey 2011-12. * self reported ** when out in the sun*

State-wide findings from the 2011-12 Victorian Population Health Survey also indicate that across Victoria:

- Males were notably more likely than females to usually wear a hat only when out in the sun or to wear both a hat and sunglasses
- Out of all males and females, males aged 65 years and over were most likely to report they usually wear a hat and females aged 18 – 24 were least likely, and
- Out of all males and females, males aged 35-44 years were most likely to report they usually wore both a hat and sunglasses when out in the sun, while females aged 18-24 were least likely.

Cancer

Between 2003 and 2007, Campaspe – Echuca and Kyabram SLAs had a higher average annual rate of avoidable mortality from all cancers in population aged 0 to 74 years, compared to the Victoria average. Within the PCP region, Campaspe – Kyabram SLA had the highest rate and Campaspe – South SLA had the lowest.

Colorectal Cancer

Between 2003 and 2007, compared to Victoria and regional Victoria, Campaspe had a higher rate of colorectal cancer per 100,000 population. Within the PCP region, Campaspe – Echuca and Campaspe – Kyabram had rates higher than regional Victoria and Victoria average figures. The Campaspe – Echuca rate was significantly higher than the regional Victoria and Victoria average.

Lung Cancer

Between 2003 and 2007, compared to Victoria and regional Victoria, Campaspe had a lower rate of lung cancer per 100,000 population. Within the PCP region, Campaspe - Kyabram SLA had the highest rate and Campaspe – Echuca SLA had the lowest.

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Avoidable Deaths at Ages 0 to 74 Years: Cancers (2003 to 2007)

SLA	All cancers		Colorectal cancer		Lung cancer	
	No.	Rate*	No.	Rate*	No.	Rate*
Statistical Local Area						
Campaspe - Echuca	41	63.1	9	13.7	12	18.1
Campaspe - Kyabram	43	64.6	12	17.9	13	19.1
Campaspe - Rochester	21	45.7	#	..	9	19.3
Campaspe - South	7	27.3	#	..	#	..
Local Government Area						
Campaspe	112	55.1	26	12.7	37	17.8
Regional Victoria	4,732	65.9	903	12.5	1,646	22.6
Victoria	14,617	61.4	2,693	11.3	4,916	20.6

Public Health Information Development Unit- 2011 * average annual rate per 100,000 population. .. not applicable # number too small to be published.

Echuca Regional Health statistics for cancer related separations

Table 4 shows the number of cancer related separations at Echuca Regional Health for 2004 to 2013.

FY	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10	2010/11	2011/12	2012/13
Number of Separations	980	992	930	1400	1087	1109	1152	1195	1148

Number of cancer related separations from Echuca Regional Health (Source VAED)

An analysis of the data shows that there has been a steady increase in the number of separations over the period 2004/5 to 2012/13 including an unusual peak of 1400 separations in 2007/2008.

Policy Review:

The Cancer Australia Act 2006

Cancer Australia is a statutory agency within the health portfolio, established under the Cancer Australia Act 2006, to reduce the impact of cancer for all Australians. It provides strategic leadership in cancer care by bringing together key cancer organisations and aims to lessen the divide in outcomes for groups of people who have poorer than average survival rates or cancer experiences, including Aboriginal and Torres Strait Islander peoples, people living in rural and regional areas, people from culturally and linguistically diverse backgrounds, and people from low socioeconomic backgrounds.

The Cancer Australia Act 2006 (Part 2, Section 7) specifies the following functions for Cancer Australia:

- a) to provide national leadership in cancer control
- b) to guide scientific improvements to cancer prevention, treatment and care
- c) to coordinate and liaise between the wide range of groups and health care providers with an interest in cancer
- d) to make recommendations to the Commonwealth Government about cancer policy and priorities
- e) to oversee a dedicated budget for research into cancer
- f) to assist with the implementation of Commonwealth Government policies and programs in cancer control
- g) to provide financial assistance, out of money appropriated by the Parliament, for research mentioned
- h) in paragraph (e) and for the implementation of policies and programs mentioned in paragraph
- i) any functions that the Minister, by writing, directs Cancer Australia to perform.

National Aboriginal and Torres Strait Islander Cancer Framework

The National Aboriginal and Torres Strait Islander Cancer Framework (the Framework) provides high-level guidance and direction for the many individuals, communities, organisations and governments whose combined efforts are required to address disparities and improve cancer outcomes for Aboriginal and Torres Strait Islander peoples.

The **National Tobacco Strategy 2012–2018** is a policy framework for the Australian Government, and State and Territory Governments to work with non-government agencies to reduce the burden of tobacco-related harm in Australia. The goal of the strategy is to improve the health of Australians through reducing the smoking rate, and the health, social and financial costs associated with tobacco use (IGCD 2012)http://wiki.cancer.org.au/policy/Tobacco_control/Policy_context..

Occupational Cancer

In Australia there are a number of government agencies and structures in place for development and implementation of policy addressing occupational cancer risk, including:

- Safe Work Australia;
- National Industrial Chemical Notification and Assessment Scheme, within the Federal Department of Health;

- Cancer Australia, which has links with the International Agency for Research on Cancer;
- Australian Pesticides and Veterinary Medicines Authority; and
- jurisdictional work safety agencies.

Primary Health Networks

Primary Health Networks (PHNs) have been established with the key objectives of increasing the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes, and improving coordination of care to ensure patients receive the right care in the right place at the right time. The Government has agreed to six key priorities for targeted work by PHNs. These are mental health, Aboriginal and Torres Strait Islander health, population health, health workforce, eHealth and aged care. *Cancer Prevention is a national performance indicator for PHNs.*

Victorian Context:

Improving Cancer Outcomes Act 2014

The Improving Cancer Outcomes Act 2014 (the Act) supports the government's overall strategy for cancer control and strengthens our ability to respond to scientific, technological and policy developments in cancer. The Act establishes a modern, flexible and principles-based legislative framework that provides for the collection, use and disclosure of cancer and cancer screening information. For the first time the Act requires the preparation of a regular four-yearly Cancer Plan, providing an essential strategic policy framework for cancer in Victoria.

The Act repeals the Cancer Act 1958 and addresses the issues and barriers that existed within the previous legislation. It also provides for the transition of the Cancer Council of Victoria to a more modern governance structure.

In summary, the Act:

- Articulates the role and functions of the Secretary with respect to cancer
- Authorises the collection of information relating to cancer
- Establishes a framework for the appropriate management use and disclosure of the information
- Requires the preparation of a Cancer Plan every four years
- Provides for the registration of Cancer Council Victoria as a company
- Repeals the Cancer Act 1958.

Victoria's cancer action plan 2008–2011

Released in December 2008, Victoria's cancer action plan was developed to provide policy leadership and common goals for government, health services, research institutes, peak bodies, health professionals and consumer organisations working in the cancer control arena in Victoria. The Improving Cancer Outcomes

Act requires the preparation of a cancer plan every four years. The next plan is due to be released by October 2016.

Linking Cancer Care: Cancer care coordination policy

The purpose of this policy is to:

- identify strategic directions for cancer care coordination in Victoria
- promote the development and implementation of activities and initiatives that facilitate the coordination of cancer care at one or more levels of the health and community care system.

Victorian Cancer Screening Regulations:

On 1 October 2015 new regulations come into effect to provide for the continued notification of screening tests and cancer diagnoses to cancer registries. The new regulations are:

- Improving Cancer Outcomes (Diagnosis Reporting) Regulations 2015; and
- Improving Cancer Outcomes (Screening Reporting) Regulations 2015

Providing optimal cancer care: Supportive care policy for Victoria

The purpose of this policy is to promote:

- a strategic, population-based, person-centred approach to the provision and enhancement of supportive care for all Victorians affected by cancer;
- capacity building for supportive care;
- efficient and effective use of supportive care resources to meet the needs of those affected by cancer;
- linkages between services within and across sectors to provide a network of supportive care resources and services that are accessible and responsive to the needs of those affected by cancer.

Integrated Cancer Services

Victoria's Integrated Cancer Services (ICS) are the Victorian Cancer Clinical Network and comprise clusters of hospitals and associated health services that deliver services for people with all types of cancers within a geographic area. Services include public hospitals, community-based services, general practitioners and other primary health organisations, private hospitals and supportive care services. The role of the ICS is to build relationships, implement best practice models of care, improve the effectiveness of cancer care and monitor systems and processes to improve performance.

- Loddon Mallee ICS - <http://www.lmics.org.au/>
- Paediatric ICS - <http://www.pics.org.au/>

Victorian Solarium Regulations

The Victorian solarium industry has been regulated since 2008. From January 2015, the Victorian Government banned commercial tanning units in Victoria.

Clinical Guidelines:

The **Cancer services framework for Victoria** recommended that tumour streams be developed to reduce unwanted variation in practice. **Optimal care pathways** (OCPs, formerly 'patient management frameworks') were developed to provide a consistent statewide approach to care management in each tumour stream and are intended to improve patient outcomes. The OCPs were revised during 2015 and are currently available on the Victorian Government Department of Health and Human Services website.

Optimal care pathways:

- provide a clear description of the care pathway, identifying the critical points along that pathway and the optimal model of care;
- set out the key requirements for providing optimal care;
- guide the patient journey to ensure patients with cancer and their families receive optimal care and support.

The OCPs have been developed in collaboration with a wide range of practitioners, consumers and carers. Wherever possible, they are based on current best practice, including clinical guidelines, care pathways, standards and research. In many cases, however, they are a statement of consensus regarding currently accepted approaches to optimal treatment.

As a guide, the OCPs are to be followed subject to the health professional's independent medical judgment and the patient's preference in each individual case.

Preventable Risk Factors

Around one third of all cancer deaths in Australia are caused by modifiable risk factors, which are predominantly lifestyle-related. Tobacco smoking is the highest preventable risk factor, attributable for around 20% of all cancer deaths in Australia. The combined and individual effects of obesity/overweight, physical inactivity and poor nutrition are also important cancer risk factors, along with alcohol consumption and exposure to ultraviolet radiation and occupational carcinogens (cancer-causing agents).

Smoking

Comprehensive epidemiological studies over many years have established a clear link between tobacco smoking and a number of cancer types. There are over 60 known carcinogens in cigarette smoke, the most important of which are polycyclic aromatic hydrocarbons, N-nitrosamines, aromatic amines, 1,3-butadiene, benzene, aldehydes, and ethylene oxide due to their carcinogenicity and levels^[3]. Smoking has been identified as a risk factor for 16 cancer types: lung, oral cavity, pharynx, oesophagus, stomach, bowel, liver, pancreas, nasal cavity and paranasal sinuses, larynx, uterine cervix, ovary, urinary bladder, kidney, ureter and bone marrow (myeloid leukaemia)[4]. There is limited evidence for a link between tobacco

smoking and breast cancer[4]. Smoking and alcohol together have a synergistic effect on upper gastrointestinal and aero-digestive cancer risk, meaning the combined effects exceed the risk from either alone[20]. It has been estimated that over 75% of cancers of the upper aero-digestive tract in developed countries can be attributed to this effect.

Obesity

The links between body mass, nutrition, physical activity and cancer causation are complex, because each risk factor has a direct impact on cancer risk but the risk factors can also combine. It can be difficult to separate these combined effects. For example, poor nutrition contributes to overweight and obesity, which are independent cancer risk factors. In addition, inadequate consumption of fresh fruit and vegetables can increase cancer risk directly, as these healthy food choices can help to protect against some cancers. In the same way, physical inactivity contributes to overweight and obesity, and can also be a direct cancer risk factor, even in people who are not overweight.

Sun exposure

The major cause of melanoma and NMSC is UV radiation exposure[1]. Childhood and adolescent sun exposure is thought to be important in determining the lifetime potential for skin cancer. Adult exposure appears to contribute to the extent to which this potential is realised. The exact exposure needed to develop various skin cancers is not entirely clear. It is likely that both episodic and cumulative exposures are important; episodic exposures have been shown to more strongly determine the risk of melanoma. Based on a review of recalled sun exposure by period of life in studies of melanoma, the relative risk of melanoma with a history of childhood sunburn has been estimated to be 1.8, while for sunburn in adulthood it is 1.5[2].

Alcohol

In 1988 the International Agency for Research on Cancer classed alcohol as a Group 1 carcinogen (the highest IARC classification) for cancers of the mouth, pharynx, larynx, oesophagus and liver[1]. Cancer risk is increased because of the ethanol in alcohol, irrespective of the type of alcoholic beverage[2]. Ethanol, the chemical in alcoholic beverages that induces the physical and mental responses experienced with alcohol use, is also a Group 1 carcinogen[3]. Alcohol use and cancer have a dose-response relationship; the more alcohol consumed over time, the higher the risk. The relationship is not a straight line, but shows upward curvature at higher drinking levels over time; the relationship appears to be consistent for women and men[4].

Occupational

The association between occupation and cancer has been known for centuries and in some instances this link has led to the identification of carcinogens. In Australia, mesothelioma caused by [asbestos exposure](#) is probably the best known

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occupational cancer. In terms of occupational exposure, the most common carcinogens are estimated to be solar UV radiation, diesel engine exhaust, second-hand tobacco smoke, benzene, lead and silica.

Evidence based strategies/ Intervention evidence :

Protection and Health Promotion:

Interventions targeting preventable risk factors:

- Smoking (see Drug & Alcohol)
- Alcohol (see Drug & Alcohol)
- Obesity (see Obesity)
- Sun Exposure
 - Increase knowledge of the UV Index and SunSmart UV Alert to promote safe sun exposure;
 - Support and monitor settings-based approaches (school/children's services policies and procedures)
 - UV protection policies mandated as workplace requirement;
 - Eradication/phasing out of solariums;
 - Providing sunscreen and shade structures to reduce sun exposure.
- Occupational Cancers
 - Monitoring and surveillance of exposure to known risks and carcinogens
 - Inter-sectoral partnerships between industry groups and occupational health and safety organisations;
 - Work place health promotion programs providing a structured framework for delivering health messages, whether relating to hazardous exposures and harmful work practices or to individual health behaviours;
 - Evaluation and monitoring of new technologies and potential risks;
 - Effective policies and procedures for working with hazardous materials and carcinogens

Illness Prevention:

Australia currently has three population screening programs for cancer which meet the World Health Organization criteria including breast, cervical and bowel. There is currently insufficient evidence for screening for prostate cancer and melanoma.

Cervical Cancer immunisation & screening:

In 2006 the TGA approved the quadrivalent HPV vaccine Gardasil for use in women aged 9–26 years and males aged 9–15 years. The national Human Papillomavirus (HPV) vaccination program began in 2007 and is an Australian, State and Territory Government initiative. The Program provides the HPV vaccine free of charge to eligible children to protect against the most common types of HPV infection that can lead to HPV-related cancer and disease. The TGA subsequently approved extension of the age ranges, up to 45 years for females and up to 26 years for males. The bivalent vaccine Cervarix was approved by the TGA in 2007 and is registered for use in women aged 10–45 years.

The National Cervical Screening Program. (NCSP) was implemented in 1991 as a joint initiative of the Australian, State and Territory Governments. The national policy for Australia's NCSP guidelines for screening state:

- Routine screening with Pap smears should be carried out every two years for women who have no symptoms or history suggestive of cervical pathology.
- All women who have ever been sexually active should start having Pap smears between the ages of 18 and 20 years, or one or two years after first having sexual intercourse, whichever is later.
- Pap smears may cease at the age of 70 years for women who have had two normal Pap smears within the last five years. Women over 70 years who have never had a Pap smear, or who request a Pap smear, should be screened.
- Women with abnormal Pap test results are managed in accordance with the National Health and Medical Research Council guidelines.

The Australian Government has now accepted the evidence based recommendations of the Medical Services Advisory Committee (MSAC) that a primary human papillomavirus (HP) test should replace the current Pap test for cervical screening. This will ensure Australian women will have access to a cervical screening program that is safe, effective, efficient and based on current evidence.

The renewed National Cervical Screening Program will commence on 1 May 2017 when the HPV screening test will become available on the Medicare Benefits Schedule and the National Cancer Screening Register will be in place to support the renewed clinical pathway.

LOCAL CONTEXT: There are 14 Cervical Cytology test providers providing service in the Campaspe catchment (MBS item 2504).

Breast screening & risk assessment:

BreastScreen Australia invites women aged 50-74 to have free two-yearly mammogram. Women aged 40-49 and 75 and over are eligible to receive free mammograms but do not receive an invitation to attend.

There are a number of validated computerised breast cancer risk assessment tools that estimate an individual woman's breast cancer risk based on her personal risk factors:

- the IBIS tool available at <www.ems-trials.org/riskevaluator/>
- the Cancer Australia tool available at <<http://canceraustralia.gov.au/affected-cancer/cancer-types/breast-cancer/your-risk/calculate>>
- the Cancer Australia Familial Risk Assessment tool available at <<http://canceraustralia.gov.au/affected-cancer/cancer-types/breast-cancer/your-risk/calculate>>.

LOCAL CONTEXT: There are BreastScreen clinics in Echuca, Shepparton and Bendigo. There are no mobile van screening sites in the Shire of Campaspe, however some services offer a bus to attend one of the clinics listed above.

Bowel Cancer Screening:

The National Bowel Cancer Screening Program (NBCSP) aims to reduce illness and death from bowel cancer by offering people over the age of 50 a free screening test to complete in the privacy of their own home. The NBCSP is currently inviting men and women turning 50, 55, 60, 64, 65, 70, 72 and 74 to screen for bowel cancer. Participants are sent a free, easy to use screening kit that can be completed at home.

Between 2015 and 2020, more age groups will be added to the screening program:

- 2017 – 68, 58 and 54 year olds
- 2018 - 62 and 66 year olds
- People aged 52 and 56 will be included from 2019 to 2020.

Screening - Lung: No form of population screening has been shown to improve lung cancer outcomes (Cancer Australia 2012). Low-dose CT lung cancer screening may reduce lung cancer mortality but is not considered ready for a national screening program.

Screening – Prostate: There is no population screening program for Prostate cancer. GP's may routinely undertake the following assessments based on the age and risk profile of a client. Digital Rectal Examination (DRE) involves the doctor inserting a gloved finger into the rectum to feel the prostate gland. Some abnormality may be felt, but it is not possible to feel the entire prostate or a small cancer. A tumour that is out of reach of the finger may be missed. The PSA test measures the level of PSA in your blood. It does not specifically test for cancer. Virtually all PSA is produced by the prostate gland. The normal range depends on your age. A PSA above the typical range may indicate the possibility of prostate cancer. However, two thirds of cases of elevated PSA are due to noncancerous conditions such as prostatitis and BPH. If either of these tests suggest an abnormality, other tests are necessary to confirm a diagnosis of prostate cancer, usually a trans-rectal ultrasound (TRUS) and biopsy.

LOCAL CONTEXT: The Kyabram Cancer Screening Project: Kyabram District Health Service in partnership with Cancer Council Victoria and in consultation with other local organisations and the community, will develop, implement and evaluate a number of initiatives to increase cancer screening (breast, bowel and cervical) with a focus on people from low socio-economic backgrounds. The project will focus on three main areas: To raise awareness & knowledge of cancer screening; to support training and development of local health professional and community workers to promote and deliver cancer screening; and to improve accessibility of cancer screening services.

Primary Care/Secondary Care/Tertiary Care/Quaternary Care:

The following information is a summary developed from the “optimal care pathways” as developed by DHHS and released late 2015.

Optimal Timeframes:

	Breast	Colorectal	Prostate	Lung	Melanoma
Presentation initial investigations and referral	Within 2 weeks	Test results should be provided to the patient within one week of testing. If symptoms are suggestive of colorectal cancer, patients should be referred for colonoscopy within 4 weeks. Patients should be seen by a surgeon within 2 weeks of GP referral.	Men without symptoms should see a specialist within 6-12 weeks of an abnormal result being identified. Men with symptoms should see a specialist earlier, depending on the urgency of the symptoms (including psychological distress).	Tests results should be provided to the patient within one week. The specialist appointment should take place within 2 weeks of initial GP referral.	GP consultation should be within one week of identifying a definitive change. Biopsy should be performed within 2 weeks of the decision it is necessary. Referral to a specialist should be within 2 weeks
Diagnosis, staging and treatment planning	Results of all relevant tests and imaging should be available for the multidisciplinary team discussion. (meetings should occur monthly)	Investigations should be completed within 2 weeks. 10-15% of colorectal cancers will present as an emergency. This necessitates appropriate acute care followed by management from a multidisciplinary team.	Diagnostic work up completed within 4 weeks.	Ideally, all newly diagnosed patients should be discussed at multidisciplinary team meeting before beginning treatment.	The result of the biopsy should be available within one week. Staging investigations should be completed within 2 weeks Where appropriate, multidisciplinary discussion should be conducted before implementing treatment.
Treatment	Surgery – to occur within one month of decision Chemo –	Neoadjuvant radiation therapy should commence	Surgery – within 3 months of diagnosis. Chemo &	The time from initial referral to initial treatment should be no	<i>No timelines outlined in Optimal Care Pathways.</i>

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	<p>within 4 weeks of surgery.</p> <p>Neo-adjuvant – as soon as practicable</p> <p>Endocrine – as soon as appropriate after chemo/radio</p> <p>Radiation – within 8 weeks of surgery (if no chemo), or 3-4 weeks after chemo.</p>	<p>within 3 weeks of the management plan.</p> <p>Neoadjuvant chemotherapy should commence within 3 weeks of the management plan.</p> <p>Adjuvant chemotherapy should commence within 8 weeks of surgery.</p>	<p>drug therapy – within 3-months of diagnosis.</p> <p>Radiation Therapy - timely consultation with a medical oncologist in patients who are not responding to first line therapy.</p>	<p>more than 6 weeks.</p>	
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WORKSHOP DISCUSSION: how often do Campaspe patients meet these timeframes?

Imaging:

- Mammography;
- Ultrasound;
- CT;
- FDG PET;
- MRI.

Surgery

The training and experience required of the surgeon are as follows:

- surgeon (FRACS or equivalent) with adequate training and experience and institutional cross-credentialing and agreed scope of practice within the specific cancer area (ACSQHC 2004)

Hospital or treatment unit characteristics for providing safe and quality care include:

- a clearly defined path to emergency care and advice after hours
- an intensive care unit
- 24-hour medical staff availability
- 24-hour operating room access
- pathology
- a diagnostic imaging facility

Radiation therapy

Training and experience required of the appropriate specialist(s):

- radiation oncologist (FRANZCR) with adequate training and experience with institutional credentialing and agreed scope of practice for the specific cancer area (ACSQHC 2004).

Hospital or treatment unit characteristics for providing safe and quality care include:

- access to PET and electronic transfer of PET data for planning
- access to allied health, especially nutrition health and advice
- access to CT scanning for simulation and planning
- trained radiation therapy nurses, physicists and therapists.

Chemotherapy or drug therapy

The following training and experience is required of the appropriate specialist(s):

- Medical oncologists (RACP or equivalent) must have adequate training and experience with institutional credentialing and agreed scope of practice within this area (ACSQHC 2004).
- Nurses must have adequate training in chemotherapy administration and handling and disposal of cytotoxic waste.
- Chemotherapy should be prepared by a pharmacist with adequate training in chemotherapy medication, including dosing calculations according to protocols, formulations and/or preparation and/or methodology.
- In a setting where no medical oncologist is locally available, some components of less complex therapies may be delivered by a medical practitioner and/or nurse with training and experience with credentialing and agreed scope of practice within this area under the guidance of a medical oncologist. This should be in accordance with a detailed treatment plan or agreed protocol, and with communication as agreed with the medical oncologist or as clinically required.

Hospital or treatment unit characteristics for providing safe and quality care include:

- a clearly defined path to emergency care and advice after hours
- access to basic haematology and biochemistry testing
- cytotoxic drugs prepared in a pharmacy with appropriate facilities
- occupational health and safety guidelines regarding handling of cytotoxic drugs, including
- safe prescribing, preparation, dispensing, supplying, administering, storing, manufacturing,
- compounding and monitoring the effects of medicines (ACSQHC 2011)
- guidelines and protocols are available to deliver treatment safely (including dealing with
- extravasation of drugs)
- mechanisms for coordinating combined therapy (chemotherapy and radiation therapy), especially
- where facilities are not co-located
- appropriate molecular pathology access (such as Kras molecular testing).

Care Coordination:

In the context of cancer, care coordination encompasses multiple aspects of care delivery including multidisciplinary team meetings, supportive care screening/assessment, referral practices, data collection, development of common protocols, information provision and individual clinical treatment.

Multidisciplinary cancer care

Multidisciplinary care (MDC) is considered best practice in the treatment planning and care for patients with cancer. MDC is an integrated team approach to health care in which medical and allied health care professionals consider all relevant treatment options and collaboratively develop an individual treatment and care plan for each patient. MDC involves all relevant health professionals discussing options and making joint decisions about treatment and supportive care plans, taking into account the personal preferences of the patient.

It is well documented and accepted that multidisciplinary care represents best practice in terms of treatment planning and care for cancer patients. Effective multidisciplinary care assures:

- improved treatment
- improved team communication and support
- improved coordination of patient care
- reduced service duplication
- increased opportunities for recruitment into clinical trials
- consideration of patient's physical and emotional needs.

Multidisciplinary teams should adhere to the following:

- teams comprising health care practitioners required for all treatment and care decisions in a particular tumour stream.
- team members can be from the primary, community and acute sectors, public and private sector and can be from several health services.
- core team members will commonly include radiologists, pathologists, general practitioners, surgeons, physicians, medical oncologists, palliative care practitioners, radiation oncologists, social workers and/or psychologists, oncology nurses, data managers, and research nurses.

Implementation of best practice cancer care in regional and rural locations requires a multidisciplinary focus. In regional and rural areas, meetings should be timed to allow attendance either in person or via tele-/videoconference by appropriate specialist clinicians. Non-core team members should be aware of the regular meeting day and time and should be invited in advance if their input on specific cases is required.

LOCAL CONTEXT: Loddon Mallee Integrated Cancer Services (LMICS) coordinates MDC within the Loddon Mallee Region.

Telehealth

Telehealth refers to health care delivery, or related processes (such as education), when some of the participants are separated by distance and information and communications technologies are used to overcome that distance.

Telehealth can be a cost effective, real-time and convenient alternative to the more traditional face-to-face way of providing healthcare, professional advice and education. It can help to remove many of the barriers currently experienced by health consumers and professionals, such as distance, time and cost, which can prevent or delay the delivery of timely and appropriate healthcare services and educational support.

LOCAL CONTEXT: MBS data for 2014-2015 indicates that telehealth was applied for 213 patients.

McGrath Specialist Breast Care Nurses

The Commonwealth-supported McGrath Foundation breast care nurses are trained, registered nurses who provide information, care, and practical and emotional support to women diagnosed with breast cancer, their families and carers.

LOCAL CONTEXT: There is a McGrath Breast care nurse at Echuca Regional Health, Shepparton and Bendigo.

Research and clinical trials

Where practical, patients should be offered the opportunity to participate in research and/or clinical trials at any stage of the care pathway. Research and clinical trials play an important role in establishing efficacy and safety for a range of treatment interventions, as well as establishing the role of psychological, supportive care and palliative care interventions (Sjoquist & Zalcberg 2013).

Supportive Care

Supportive care in cancer refers to the following five domains:

- physical needs
- psychological needs
- social needs
- information needs
- spiritual needs.

Screening with a validated screening tool (such as the National Comprehensive Cancer Network distress thermometer and problem checklist), assessment and referral to appropriate health professionals or organisations is required to meet the identified needs of an individual, their carer and family. Referral to an appropriate health professional(s) and/or organisation(s) should be considered including:

- community-based support services (such as Cancer Council Victoria)
- peer support groups (contact the Cancer Council on 13 11 20 or Breast Cancer Network Australia on 1800 500 258 for more information)
- a nurse practitioner and/or specialist nurse
- a psychologist or psychiatrist
- a social worker
- a dietitian
- an exercise physiologist
- a genetic counsellor
- an occupational therapist
- a physiotherapist
- specialist palliative care.

LOCAL CONTEXT:

- **The Gift** (Kyabram) aims to provide financial and practical support to local community members who are experiencing cancer. Gifts are always given in the form of voucher, product or payment of a utility or other bill. The Gift is aiming to open a "House" where the primary purpose of is to act as an informal "drop-in" centre for people affected by cancer, providing information and resources and acting as a hub for cancer related services and support groups.
- The **Otis Foundation** is provides retreat accommodation at no cost to those living with the challenges of breast cancer. The aim is to provide immediate relief to people who need a short-term break away. Anyone who has faced the challenges of living with breast cancer is eligible to stay at an OTIS retreat, along with their partners, family or friends. The Otis Foundation is based in Bendigo.
- **Maggie Centres** are a UK-based initiative that provides free practical, emotional and social support to people with cancer and their family and friends. At Maggie's you can talk to, and get advice from, a range of professional people. Centres are staffed by Cancer Support Specialists, Benefits Advisors, Nutritionists and Psychologists. Built in the grounds of NHS cancer hospitals, Maggie's Centres are places with professional staff on hand to offer the support people need. The Centres provide places to find practical advice about benefits and eating well; places where qualified experts provide emotional support; places to meet other people; or places where you can sit quietly with a cup of tea.
- **Cancer Support Services** within Campaspe include General Cancer Support at Echuca Regional Health, Community Cancer Services at Kyabram Community & Learning Centre, and Cancer Support Groups at Kyabram District Health.

Rehabilitation:

Rehabilitation may be required at any point of the care pathway from preparing for treatment through to disease-free survival and palliative care.

Issues that may need to be addressed include managing cancer-related fatigue, cognitive changes, mood disturbances, improving physical endurance, achieving independence in daily tasks, returning to work and ongoing adjustment to disease and its sequelae.

Survivorship

Many cancer survivors experience persisting side effects at the end of treatment. Emotional and psychological issues include distress, anxiety, depression, cognitive changes and fear of cancer recurrence. Late effects may occur months or years later and are dependent on the type of cancer treatment. Survivors may experience altered relationships and may encounter practical issues including difficulties with return to work or study, and financial hardship.

Survivorship care: Survivorship care, as defined by the Institute of Medicine (USA), is 'the phase of care that follows primary treatment for cancer'. Survivorship care is a complex area that encompasses: transitioning patients off active treatment; providing support for rehabilitation and return to work; planning for disease-specific and treatment-related follow-up; and providing psychosocial and community-based support.

Collaborative models of care: The Victorian Cancer Survivorship Program (VCSP) was established in 2011 to help develop innovative models of follow-up care and to address the needs of survivors following treatment. In its first phase (2011–14) the focus of the VCSP was on trialling collaborative models of care across acute and primary/community care sectors. Six pilot projects were funded and evaluated for effectiveness, acceptability, sustainability and transferability. The VCSP pilot projects sought to: improve our understanding of the specific survivorship care needs of different groups; to develop resources tailored to survivors' and health professionals' needs; and to inform future survivorship care in Victoria. From 2015, three of the pilot projects have been supporting a select number of cancer services across Victoria to implement their models of care.

The Victorian Cancer Survivorship Program phase II grants closed February 2016.

End of Life:

Palliative care:

Early referral to palliative care can improve quality of life and in some cases survival. Referral should be based on need, not prognosis. Ensure that an advance care plan is in place.

Programs and Services:

Current local service access:

Surgery

Echuca Regional Health currently has visiting surgeons performing diagnostic endoscopy, colorectal and breast cancer surgery on a regular basis. Visiting Urologists perform bladder and prostate cancer surgery, some limited gynaecological surgery is performed as well as skin cancer surgery performed by visiting surgeons and GP surgeons.

Kyabram District Health Service and Rochester and Elmore District Health Service both have day procedure unit that support

Chemotherapy and Drug Therapy

Echuca Regional Health

Cancer services at Echuca Regional Health are well established with Medical Day Oncology Unit (chemotherapy), McGrath Breast Care Nurse (MBCN) and Cancer Support Nurse (CSN) services. Medical Oncology and Haematology specialist clinics are held fortnightly in the Specialist Consulting Suites and the ERH Cancer Service also coordinates a four weekly visiting medical oncology clinic. Types of treatments offered are a combination of chemotherapy and medical treatments. Referrals for treatment are made by Visiting Medical Oncologists, Haematologist, and VMO GP's.

Kyabram District Health Service

Chemotherapy is administered in the day procedure unit at Kyabram District Health. The health service is well placed to work in partnership with regional oncology services to provide supportive care, palliative care and survivorship services for residents in the local area.

Care coordination, Multidisciplinary cancer care & Telehealth

ERH Cancer Service participates in regional cancer multidisciplinary meetings (MDM) coordinated by Bendigo Health and is supported by Loddon Mallee Integrated Cancer Service (LMICS).

Current model of multidisciplinary care

- ERH surgical team presents patients at the combined breast and colorectal Bendigo cancer Multidisciplinary Team Meeting (MDM) via videolink. Treatment plans are developed following clinical input from a range of health professionals including surgeons, medical oncologists, radiation oncologists, nursing, allied health, pathologists and radiologists.
- Supportive care screening is undertaken by ERH staff and referrals to ERH allied health, local health professionals and complementary therapists arranged as required.
- ERH cancer care coordinators communicate with the patients GP on admission and discharge providing information about screening undertaken

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and services organised. GP's also receive information from treating specialist physicians via ERH specialist consulting suites clinic letters.

Radiation oncology

Bendigo Radiotherapy Centre, affiliated with Peter MacCallum, provides consultation and treatment for patients based within the Loddon-Mallee region requiring radiation therapy. Patients undergoing radiotherapy will receive cancer care coordination support from the cancer support nurse and McGrath Breast Care nurse and may also be receiving chemotherapy at Echuca Regional Health or Bendigo Health.

Treatment Access

Transport to treatment services has always been a reported issue when accessing services. The tables below indicate where Campaspe residents are accessing cancer treatments from;

Where Campaspe residents travelled for chemotherapy treatment?

Health Services	*New Patients	**No. of patients	Admissions
Alfred, The [Prahran]	<5	<5	12
Austin Hospital	5	6	38
Bendigo Hospital, The	52	111	789
Castlemaine Health	<5	<5	<5
Echuca Regional Health	25	48	383
Goulburn Valley Health [Shepparton]	11	39	216
Heathcote Health	<5	<5	<5
Kilmore & District Hospital, The	<5	<5	6
Kyabram & District Health Service	<5	<5	<5
Maroondah Hospital [East Ringwood]	<5	<5	<5
Mercy Hospital for Women	<5	<5	26
Monash Medical Centre [Clayton]	<5	<5	9
Monash Medical Centre [Moorabbin]	<5	<5	<5
Murray Valley Private Hospital [Wodonga]	<5	<5	<5
Other Private Hospital	20	49	381
Peter MacCallum Cancer Institute [East Melbourne]	24	35	141
Rochester & Elmore District Health Service	<5	<5	<5
Royal Children's Hospital [Parkville]	<5	<5	28
Royal Melbourne Hospital - City Campus	<5	<5	19
Royal Women's Parkville	<5	<5	<5
St Vincent's Hospital	6	8	18
University Hospital Geelong	<5	<5	11

Source: Victorian Admitted Episodes Data Set – provided by DHHS 2015. The data represents information about malignant cancer patients with all admission types (sameday, multiday, and overnight).

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Where Campaspe residents are travelling for treatment?

Health Services	Chemotherapy treatment		*Other treatment		**All treatment	
	Pts	Adms	Pts	Adms	Pts	Adms
Alfred, The [Prahran]	<5	12	17	42	17	48
Austin Hospital	6	38	17	23	19	55
Bendigo Health Care Group - Anne Caudle	0	0	45	62	45	62
Bendigo Hospital, The	111	789	238	401	279	1135
Box Hill Hospital	0	0	0	0	<5	<5
Castlemaine Health	<5	<5	<5	<5	21	21
Caulfield General Medical Centre	0	0	21	21	<5	<5
Dandenong Campus	0	0	<5	<5	<5	<5
Echuca Regional Health	48	383	<5	<5	219	642
Goulburn Valley Health [Shepparton]	39	216	191	264	75	304
Grace McKellar Centre [Geelong]	0	0	60	113	<5	<5
Heathcote Health	<5	<5	<5	<5	10	12
Heidelberg Repatriation Hospital	0	0	0	0	6	7
Kilmore & District Hospital, The	<5	6	10	11	<5	6
Kyabram & District Health Service	<5	<5	6	7	222	296
Mansfield District Hospital	0	0	222	296	<5	<5
Maroondah Hospital [East Ringwood]	<5	<5	<5	<5	<5	<5
Maryborough District Health Service [Dunolly]	0	0	0	0	<5	<5
Mercy Hospital for Women	<5	26	<5	<5	8	37
Monash Medical Centre [Clayton]	<5	9	8	27	<5	12
Monash Medical Centre [Moorabbin]	<5	4	<5	8	<5	<5
Murray Valley Private Hospital [Wodonga]	<5	<5	<5	<5	<5	<5
Other Private Hospital	49	381	327	462	343	810
Peter MacCallum Cancer Institute [East Melbourne]	35	141	103	168	117	287
Rochester & Elmore District Health Service	<5	<5	20	22	20	22
Royal Children's Hospital [Parkville]	3	28	5	32	5	40
Royal Melbourne Hospital - City Campus	5	19	11	27	13	42
Royal Victorian Eye & Ear Hospital, The [East Melbourne]	0	0	8	9	8	9
Royal Women's Parkville	<5	<5	<5	5	<5	5
Shepparton Private Hospital	0	0	21	24	21	24
St Vincent's Hospital	8	18	37	57	37	61
University Hospital Geelong	<5	11	<5	<5	<5	12
Wantirna Health	0	0	<5	<5	<5	<5
Western Hospital [Footscray]	0	0	<5	<5	<5	<5

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**Other treatment: Includes malignant cancer pts/admissions that received cancer related or non-cancer related treatment but did not receive chemotherapy. **All Treatment: Includes malignant cancer pts who attended hospital for any type of treatments (chemotherapy, surgical or non-cancer related care). However it's not a sum of chemotherapy treatment and other treatment.*

Source: Victorian Admitted Episodes Data Set – provided by DHHS 2015.

References:

- Cancer Australia Act <https://www.legislation.gov.au/Details/C2006A00035>
- National Aboriginal and Torres Strait Islander Cancer Framework
<https://canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/national-aboriginal-and-torres-strait-islander-cancer-framework>
- Nat tobacco strategy
http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/national_ts_2012_2018
- Improving Cancer Outcomes Act 2014
[http://www.legislation.vic.gov.au/domino/web_notes/ldms/pubstatbook.nsf/f932b66241ecf1b7ca256e92000e23be/3D121EB1DA0BA318CA257D7800162E36/\\$FILE/14-078aa%20authorised.pdf](http://www.legislation.vic.gov.au/domino/web_notes/ldms/pubstatbook.nsf/f932b66241ecf1b7ca256e92000e23be/3D121EB1DA0BA318CA257D7800162E36/$FILE/14-078aa%20authorised.pdf)
- Victoria's cancer action plan 2008–2011
<https://www2.health.vic.gov.au/about/health-strategies/cancer-care>
- Linking Cancer Care: Cancer care coordination policy
<https://www2.health.vic.gov.au/about/publications/policiesandguidelines/Cancer%20Care%20CoordWEB%20FINAL>
- Victorian Cancer Screening Regulations:
[http://www.legislation.vic.gov.au/Domino/Web_Notes/LDMS/PubStatbook.nsf/b05145073fa2a882ca256da4001bc4e7/D1FCBA958BDECC56CA257EC80013F90C/\\$FILE/15-106sra%20authorised.pdf](http://www.legislation.vic.gov.au/Domino/Web_Notes/LDMS/PubStatbook.nsf/b05145073fa2a882ca256da4001bc4e7/D1FCBA958BDECC56CA257EC80013F90C/$FILE/15-106sra%20authorised.pdf)
- Providing optimal cancer care: Supportive care policy for Victoria
<http://docs2.health.vic.gov.au/docs/doc/Providing-optimal-cancer-care---Supportive-care-policy-for-Victoria---May-2009>
- Integrated Cancer Services <https://www2.health.vic.gov.au/about/health-strategies/cancer-care/integrated-cancer-services>
- Cancer services framework <https://www2.health.vic.gov.au/about/health-strategies/cancer-care/cancer-services-framework>
- Optimal care pathways <http://www.cancervic.org.au/for-health-professionals/optimal-care-pathways>
- Risk factors wiki.cancer.org.au
- Protection & Health Promotion cancercouncil.org.au
- Illness Prevention cancerscreening.gov.au
- Sjoquist & Zalcborg 2013
- Sjoquist, Katrin M and Zalcborg, John R. Clinical trials - advancing national cancer care [online]. *Cancer Forum*, Vol. 37, No. 1, Mar 2013: 80-87.
Availability: <<http://search.informit.com.au/documentSummary;dn=399530725733200;res=IELH EA>> ISSN: 0311-306X. [cited 14 Mar 16]
- Cancer Council Victoria
- Loddon Mallee Integrated Cancer Service
- Hume Regional Integrated Cancer Service
- Echuca Regional Health Cancer Care and Wellness Centre Service Plan (2015)
- Campaspe PCP Community Health and Wellbeing Profile (July 2014)
- Kyabram and District Health Service Service plan (2013)
- Department of Health & Human Services (Victoria)
- Cancer Australia (Commonwealth)
- Murray Primary Health Network – 2014-2015 MBS data