HEALTH

QUESTION

Background

Cancer is a major cause of illness and death in Australia. It is a disease in which some of the body's cells become abnormal and multiply out of control. These abnormal cells invade and damage the tissues around them, and eventually spread to other parts of the body. Uncontrolled spread of these tumours can result in death. Some tumours are benign, not spreading to other parts of the body and are generally not life-threatening. Cancers are classified by the site in the body where the disease began or by the cell type involved.

About 50% of the population will develop cancer at some stage during their lifetime and 20% will die from it before age 85. Cancer is responsible for 30% of all deaths. There are significant impacts on individuals, families and the health system. It is responsible for 35% of total years of life lost, defined as the number of years between premature death and life expectancy.

The following table provides incidence and mortality rates for selected cancers:

Cancer type	Incidence Rate Per 100,000 population age standardised*		Mortality Rate Per 100,000 population age standardised*	
	1994	2012	1994	2012
Prostate	92.4	81.3	21.9	13.9
Bowel	64.0	59.0	28.8	15.7
Melanoma	41.6	48.7	5.5	6.0
Lung	46.9	43.0	41.3	32.3
Breast	60.3	61.4	16.9	11.2
Cervical	6.5	3.7	2.0	0.9
Ovarian	6.3	5.2	4.2	3.4
All cancers	482.7	485.3	213.1	169.2

*IE: demographic differences between years have been allowed for

The Victorian Government recently released its first *Victorian Cancer Plan 2016-2020*. The plan sets out the Government's long term goals and immediate priorities for improving cancer outcomes. It includes long term goals for 2040 to halve the proportion of the population diagnosed with preventable cancers, double the improvement in one- and five-year cancer survival rates, and provide the best possible cancer treatment and care experience. A medium term goal is to avoid 10,000 cancer related deaths in the ten years to 2025.

Victorian one-year survival rates increased from 80% in 2010 to 82% in 2013, and five-year survival rates increased from 49% in 1993 to 67% in 2013. Five-year survival rates by cancer type in 2013 were: prostate 94%, breast 90%, melanoma 89%, bowel 69%, lung 17%.

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In 2014, more than 30,000 Victorians were diagnosed with cancer and almost 11,000 died from cancer. Five types of cancer make up more than half of all new cancer diagnoses: breast (14%), prostate (13%), bowel (12%), lung (9%) and melanoma (8%).

The average age of cancer diagnosis is 67. Cancer survival rates have been improving and mortality rates reducing due to earlier detection and improved treatment.

The *Victorian Cancer Plan 2016-2020* contains five action areas: primary prevention, screening and early detection, treatment, wellbeing and support, and research.

Primary Prevention

While the causes of many cancers are not fully understood, some major risk factors related to lifestyle and environmental hazard have been identified for lung, bowel, melanoma and breast cancer. Six risk factors have been identified as causing 90% of these preventable cancers: smoking, UV radiation, poor diet, being overweight, physical inactivity and excessive alcohol consumption. It is estimated that up to 50% of cancer cases could be avoided through healthy lifestyle and regular screening.

Recent government initiatives to reduce cancer risk factors have included: smoking bans (both indoor and outdoor), quit smoking initiatives, bans on commercial solaria, increased shade in public areas, and vaccination programs for common virus infections.

Screening and early detection

Screening and early detection of cancer can lead to better outcomes through prompt treatment. Early detection occurs through identification of early symptoms, identifying those at increased cancer risk, routine and opportunistic testing, and organised population screening programs.

Population screening programs operate for breast, cervical and bowel cancer with Victorian participation rates (in target populations) of 55%, 59% and 37% respectively.

Treatment

Cancer treatment is part of the broader health system, accounting for about 20% of hospital activity and $4.5 billion total expenditure in 2009. Growth in new diagnoses plus expansion and improvement in treatment options is placing ongoing pressure on services and funding. Cancer treatment is becoming increasingly complex, requiring highly specialised staff and specific equipment. Optimal Care Pathways have been developed for 15 tumour types, describing the standards of care focussed on the patient from prevention and early detection to recovery and end of life care.

The Victorian government is continuing to expand its network of integrated cancer centres (including radiotherapy and chemotherapy facilities) in regional areas to complement the major metropolitan based facilities.

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Wellbeing and Support

Cancer diagnosis and treatment is often a challenging and life changing event for patients and their families, affecting all aspects of their lives, and needing supportive care for their information, physical, emotional, spiritual, social, practical and financial needs. These needs vary across the diagnosis, treatment, post-treatment and end of life stages of cancer. Following cancer treatment, some people will need support in post-treatment recovery. Palliative care and end of life care provide support for people with terminal cancer conditions.

Research

Cancer research provides the basis for improvements in prevention, detection, treatment and support. Research outputs include new technology, different treatment options and care models. Funding for research is provided by Commonwealth and State governments, cancer councils, research foundations and charitable organisations.

Clinical trials are undertaken to establish the evidence for new treatments and best practice cancer care.

Your Tasks

1. The Victorian Government has sought your assistance with the development of performance measures to assess progress in each of the five key action areas of the Cancer Plan: primary prevention, screening and early detection, treatment, wellbeing and support, and research. They would also like your advice on how to develop a framework to assist government officials decide how to allocate available funding to each of the five key action areas, and then to decide how to allocate funds to activities and programmes within each action area.

   Draft a report to the Chief Advisor – Cancer supporting your recommended performance measures and funding allocation framework to support the *Victorian Cancer Plan*, including consideration of any data collection requirements and likely data sources.

2. The Chief Advisor - Cancer has advised that the Health Minister is particularly interested in the future expansion of the network of integrated cancer centres into regional areas. The Chief Advisor would value your advice on how to choose the location for the next regional integrated cancer centre as the Health Minister wishes to make an announcement so that the centre is operational prior to the next state election. Draft a letter to the Chief Advisor summarising the important considerations in selecting the location for the next integrated cancer centre.

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For the purposes of the assignment, you can refer to the *Victorian Cancer Plan 2016-2020* (available at www2.health.vic.gov.au/about/health-strategies/cancer-care/victorian-cancer-plan) and you can also make use of Australian Institute of Health and Welfare (AIHW) publications and data. The recommended publications are:

- Cancer in Australia: an overview 2014 (www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129550202)
- Australian cancer incidence and mortality books (www.aihw.gov.au/acim-books/)

END OF QUESTION

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