Joint Select Committee Preventative Health Care

Cancer Screening & Control Services Level 4 25 Argyle St., Hobart Tasmania

As Tasmania's population ages and rates of chronic disease, including cancer, increase, focusing action on preventative health has never been so important.

Cancer kills more Tasmanians than any other single cause.

Encouraging preventative behaviours and screening of the healthy population is at the forefront of effective management of cancer, through proven reduction in mortality and morbidity of the target population. The preventative and screening strategies complement early detection (most often in primary care setting), treatment and ongoing care, such as monitoring, rehabilitation, long term follow-up and palliative care (delivered in the acute care setting) These key stages of cancer management must be managed in a setting appropriate to their unique features.

Screening detects unsuspected cancer at an early stage so that early treatment can reduce illness and death from cancer. The population based approach encourages asymptomatic individuals in the target population to have regular screening. It is distinctly different from diagnostic tests to investigate symptoms in individuals.

Australia has achieved a status as a global leader in reduced cancer mortality rates, however this success poses a new challenge: as cancer incidence rises sharply in step with population ageing, so too does cancer prevalence as patients also survive for longer periods. With the ongoing improvements in cancer treatments, procedures and screening technologies, secondary prevention and prompt presentation to health services are increasingly playing a key role in reducing mortality from the disease.

Cancer is a major burden on our community. In 2012, cancer was estimated to be the leading cause of burden of disease in Australia, accounting for approximately 19 per cent of the total disease burden. In 2010, the risk of developing cancer before the age of 85 years was 1 in 2 in men and 1 in 3 in women. In 2010, there were 116,580 new cases of cancer in Australia (65,983 new cases in men and 50,598 new cases in women), excluding non-melanoma skin cancer. An estimated 149,990 are expected to be diagnosed in 2020¹.

¹ Australian Institute of Health and Welfare 2014. Cancer in Australia: an overview 2014. Cancer series No 90. Cat. no. CAN 88. Canberra: AIHW

Cancer kills more Tasmanians than any other single cause. Moreover, it is predominantly a disease of older people, therefore presenting an enormous challenge to health resources as Tasmania's population continues to age. Recent statistics from the Menzies Research institute indicate that:

- Tasmania has the overall second highest incidence of cancer in Australia;
- The commonest cancers (excluding non-melanoma skin cancer) diagnosed in males in Tasmania in 2011 were prostate cancer (496 cases), colorectal cancer (253 cases), lung cancer (186 cases) and melanoma (137 cases).²
- The commonest cancers (excluding non-melanoma skin cancer) diagnosed in females in Tasmania in 2011 were breast cancer (371 cases), colorectal cancer (230 cases), melanoma (131 cases) and lung cancer (126 cases).

Thus, cancer is a major cause of illness in Tasmania and has a substantial social and economic impact on individuals, families and the community.

The major opportunity for reducing incidence and mortality from cancer as well as reducing the burden of the disease on the community, is through prevention, screening and the detection of early-stage cancers. Late-stage diagnosis, treatment and palliation of people with cancer consume significant health care resources, and does not reduce the burden of cancer on the community.

The key stages of cancer management are listed below and each belongs in a setting appropriate to its unique features:

- 1. prevention,
- 2. screening,
- 3. early detection,
- 4. treatment and
- 5. ongoing care (including monitoring, rehabilitation, long term follow-up and palliative care).

Prevention and early detection of cancer using education and awareness programs and screening programs has been proven to be the most appropriate public health interventions in reducing mortality from cancer.

Population screening programs are planned and coordinated to bring maximum health benefits for the community. Cancer screening is a critical step in the healthcare continuum, by diagnosing cancers early, when the likelihood of a cure is most achievable, and through early intervention to prevent abnormalities progressing to cancer. For example mortality from

² Cancer in Tasmania. Incidence and Mortality 2011. Menzies Research Institute, 2014.

breast cancer has reduced by more than thirty percent since the introduction of the BreastScreen Australia program in 1992.

The Australian Population Based Screening Framework³ cites the World Health Organization (WHO) definition of screening as being 'the presumptive identification of unrecognised disease or defects by means of tests, examinations or other procedures that can be applied rapidly'. Screening is intended for all people in an identified target population, who do not have symptoms of the disease or condition being screened for, and this is clearly separate from the way that the treatment and care system operates. It is a public health activity.

The screening process can identify:

- a pre-disease abnormality;
- · early disease; or
- · disease risk markers.

The aim of screening for a disease or a risk marker for a disease is to reduce the burden of the disease in the community including incidence of disease, morbidity from the disease or mortality.

Cancer Screening and Control Services' work plays a critical role in Tasmania achieving the objective of the 'Healthiest State' status, by investing in the future health of the state through strategies and initiatives that will reduce morbidity and mortality attributable to cancers that are largely preventable. Cancer screening interventions, risk identification, prevention and early detection initiatives can achieve substantial control over the burden of the many cancers impacting Tasmanians.

Prevention of cancer, especially when integrated with the prevention of chronic diseases and other related issues, offers the greatest public health benefit and the most cost-effective long-term method of 'cancer control'⁴. Some of the most common cancers have been found to be associated with smoking, obesity, excessive alcohol consumption, physical inactivity and UV exposure. This means that a significant number of cancer deaths could be avoided by helping people to adopt healthier lifestyles.

Early detection detects (or diagnoses) the disease at an early stage, when it has the highest potential for cure

There are two strategies for early detection⁵:

 early diagnosis, often involving the patient's awareness of early signs and symptoms, leading to a consultation with a health care provider –

³ Australian Population Health Development Principal Committee. **Screening Subcommittee**.

⁴ Cancer Control: Knowledge into Action: WHO Guide for Effective Programs. Prevention. World Health Organisation. 2007.

⁵ Cancer Control: Knowledge into Action: WHO Guide for Effective Programs. Early Detection. World Health Organisation. 2007.

who then will refer the patient for tests for confirmation of diagnosis and treatment.

 screening of asymptomatic individuals to detect pre-cancerous lesions or an early stage of cancer (e.g. breast or bowel cancer).

CSCS, in providing 'population based screening programs' for the asymptomatic, well population, is uniquely different to the acute health sector, where people who are sick, seek treatment to manage their illness, or become well again. It is a different paradigm.

A recent report from the Australian Institute of Health and Welfare, *Cancer in Australia: an overview 2014*, notes that there has been increasing interest in the life course approach to reducing the incidence of chronic diseases, such as cancer. Studies suggest that exposure to risks during childhood, adolescence and early adult life influence the risk of adult incidence and mortality due to chronic disease⁶. Preventing death from cancer has often focused on early detection and treatment rather than on modifying long-term behaviour and exposure to risk factors⁷.

More needs to be done to promote a more positive and holistic image of lifelong health. It is essential that the entire community are supported to better manage their health and wellbeing needs across a lifetime. There is a very positive move from a medical treatment model of cancer towards a preventative approach, focusing on health and well being, however there needs to be research on:

- Why people delay in presenting with cancer symptoms
- How the participation in cancer screening programs can be optimised
- How the community can be better educated about lifestyle choices which minimise cancer risk

There are many causes of cancer which may differ from person to person. Genetic, environmental and lifestyle factors interact in many cases. Social inequities such as poverty and unemployment are also linked to cancer. For many common forms of cancer, cessation of smoking, healthy eating and regular physical activity are important lifestyle choices that can have a positive impact on cancer risk. The entire community needs to be educated about the positive steps that can be taken to reduce cancer risk. It is essential that every Tasmanian knows how to recognise the early sign and symptoms that may indicate cancer and know where and when to look for advice.

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⁶ Uauy R & Solomons N 2005. Diet, nutrition, and the life-course approach to cancer prevention. The Journal of Nutrition 135:2934S–45S.

Australian Institute of Health and Welfare 2014. Cancer in Australia: an overview 2014. Cancer series.

No 90. Cat. no. CAN 88. Canberra: AIHW.

Evidence-based population screening is an important approach to cancer control. Cancers such as breast, bowel and cervical cancer can be identified early through screening programs and treated before they show any symptoms. At this stage, these are the only cancers where there are proven screening methods and evidence to support population-based screening programs. However participation in screening programs is below national targets and it is important to continue a coordinated approach to screening. In particular greater focus needs to be directed on hard to reach and underscreened segments of the population which are the groups in whom cancers are diagnosed at a later stage, resulting in poorer survival outcomes.

BreastScreen Tasmania is part of the BreastScreen Australia program, and provides free screening mammograms for the early diagnosis of breast cancer for the women of Tasmania through fixed screening clinics (Hobart and Launceston) and the Mobile Screening Unit (19 locations State-wide). Assessment for exclusion, or diagnosis of early breast cancer from abnormalities detected at screening and occurs at the highly specialised Screening & Assessment unit in Hobart. Current state-wide screening throughput is approximately 30,000 women per annum. BreastScreen Tasmania diagnoses approximately two-thirds of the breast cancers in Tasmania each year. 2015 sees BreastScreen Tasmania undergoing Accreditation against BreastScreen Australia National Accreditation Standards. The service currently holds and aims to maintain full four year accreditation - rating as one of the best services in the country.

The Tasmanian Cervical Cancer Prevention Program (CCPP) is part of the National Cervical Screening Program, and includes the Tasmanian Cervical Screening Register (TCSR). The aim of the CCPP is to reduce morbidity and deaths from cervical cancer through an organised approach to cervical screening by encouraging women in the target age group 18 – 69 to have regular cervical screening tests. The TCSR records cervical cancer test results, provides screening histories to clinicians and pathology laboratories, monitors follow up and treatment of abnormalities and reminds women and clinicians when cervical cancer tests are overdue.

The NBCSP is administered nationally and CSCS works collaboratively with the Screening Section of the Department of Health (DoH) to implement the Tasmanian component of the Program. A dedicated Follow-Up Co-ordinator ensures that Tasmanian participants progress in a timely manner along the screening pathway from a positive screening result to colonoscopy, through either public or private sector 'usual care' pathways.

The CSCS Recruitment and Community Engagement Unit (RACE) is investing in improved outcomes and reduced incidence and mortality from cancer through education of the community about the importance of healthy behaviours, regular screening, improving health literacy through awareness of signs and symptoms to improve early detection, and supporting the population to make informed decisions about health choices. Cancer control policy based

on national and international evidence is an important element of Cancer Screening and Control Services' work to reduce the burden of cancer on Tasmanians.

CSCS, through cancer care nurses and counsellors also provides a critical service in the cancer care continuum in transitioning patients diagnosed with cancer through screening into and through, the 'usual care' pathway.

There is scope to extend the range of settings in which the community are offered advice and information in regard to cancer. Another key factor in improving cancer outcomes is to improve interaction with health professionals. Greater emphasis needs to be placed on educating health professionals, across the cancer care spectrum, in the manner in which they communicate about cancer prevention and early detection. This will enhance access to prevention, early detection, best practice treatment and follow-up care and also access to clinical trials.

Summary

Tasmania's population is the oldest in Australia and cancer is predominantly a disease of ageing. Demand for Cancer Screening and Control Services will continue to grow with the ageing population. The effectiveness of these programs in delivering long term improved health outcomes depends on the provision of quality, sustainable integrated screening services and enhanced community engagement. More consideration needs to be given as to how we can improve communication with health professionals and the wider community in regard to cancer prevention, participation in screening and early detection.

Tasmania has experienced considerable progress in the fight against cancer, and this is particularly evident in the last decade. Although these are important accomplishments, further challenges must be overcome, particularly in relation to improving reducing modifiable risk factors that are associated with a number of common cancers, if we are to continue to make progress in cancer control. Investment is needed in the full range of cancer control activities, including prevention and early detection in order to maximize further reductions in cancer incidence and mortality.

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