

# Joint Response to the Strategic Review of Health and Medical Research in Australia: State and Territory Managers of Breast, Cervical and Bowel Cancer Screening Programs

## Recommendations – health and medical research strategic directions and priorities

The state and territory managers of the breast, bowel and cervical screening programs provide the following recommendations to the Strategic Review of Health and Medical Research in Australia:

1. An increased focus on investment in cancer prevention and screening as it provides a considerable return on investment – in lives saved and in reduced morbidity.
2. Research into cancer in general and screening in particular carries its own philosophical, ethical, policy and legislative implications regarding the capture and storage of genetic and other data from consumers. Any research that informs policy and legislation needs to balance consideration for privacy with the importance of collecting adequate data for service planning and delivery.
3. A renewed focus on research into cancer screening and treatment service delivery. Applying best practice and evidence based research, generated through engagement with key stakeholders, and a careful consideration of technological advancements, to optimise the translation of research into better health outcomes.
4. It is also recommended that researchers proposing work in prevention, screening and diagnosis should be required to include in their research applications/submissions responses against key research criteria such as:
  - What is the identified need?
  - Rationale for the research (with supporting evidence).
  - Support/endorsement from clinical and/or policy experts in the domain.
  - Support and endorsement of the proposed stakeholders (e.g. services or organisations providing the data).
  - Projected cost imposts on those services or organisations supporting the research (not just researchers' costs) and how this cost burden is to be addressed
5. The McKeon Review committee are encouraged to consult with screening program managers to further understand the importance of increased prioritisation of research into primary prevention, screening and early detection.

## Background

### Cancer control is one of the national health priority areas

The National Health Priority Areas (NHPAs) are diseases and conditions that have been chosen for focused attention at a national level because of their significant contribution to the burden of illness and injury in the Australian community.<sup>1</sup> The eight NHPAs identified for particular attention are:

- Arthritis and musculoskeletal conditions
- Asthma
- Cancer control
- Cardiovascular health
- Diabetes mellitus
- Injury prevention and control
- Mental health
- Obesity

The NHPA initiative, established in 1996, is a program emphasising collaborative action between Commonwealth and State and Territory government, non-government organisations, health experts, clinicians and consumers, for specific diseases and conditions. The initiative recognises that the strategies for reducing the burden of illness should be pluralistic, encompassing the continuum of care from prevention through to treatment, management and maintenance, and based on appropriate research and data sources. The initiative is overseen by the National Health Priority Action Council (NHPAC) as a sub-committee of the Australian Health Ministers' Advisory Council (AHMAC).

The NHPA Cancer Control initiative focuses on eight different types of cancers, including the three cancers that are the focus of the national screening programs – breast, cervical and colorectal:<sup>2</sup>

- lung cancer
- melanoma
- non-melanoma skin cancers
- colorectal cancer
- prostate cancer
- non-Hodgkin lymphoma
- cervical cancer
- breast cancer.

### Burden of disease – breast, bowel, cervical cancer

Breast and bowel cancer are among the most common cancers diagnosed in Australia, representing a significant burden of disease on our community.

In 2007, 12,897 women were diagnosed with breast cancer nationally, the most common cancer diagnosed in women. Bowel cancer ranked second highest for men and women with 14,234 people diagnosed in 2007.

During 2007, 2,680 women died from breast cancer, the second most common cause of death from cancer and 4,047 people died from bowel cancer, the third most common cause of death for men and women<sup>3</sup>.

Whilst reliable national data on incidence and mortality of cancer in Aboriginal and Torres Strait Islander Australians is not available, there is some indication that this population group is at higher risk of poorer health outcomes. For example, while Aboriginal and Torres Strait Islander cancer screening participation data does not yet meet the AIHW national standards for data collection and reporting, the current national cancer incidence data shows that incidence of cervical cancer in Aboriginal and Torres Strait Islander women was more than

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<sup>1</sup> Australian Institute of Health and Welfare; 'Health Priority Areas'; <http://www.aihw.gov.au/health-priority-areas/>

<sup>2</sup> Australian Institute of Health and Welfare; 'Cancer Control Health Priority Area'; <http://www.aihw.gov.au/cancer-control-health-priority-area/>

<sup>3</sup> Australian Institute of Health and Welfare, Cancer in Australian an overview 2010 <http://www.aihw.gov.au/publication-detail/?id=6442472459&tab=2>

twice that of non-Indigenous women, and mortality of Aboriginal and Torres Strait Islander women is five times that of non-Indigenous women<sup>4</sup>.

In line with Closing the Gap and COAG commitments to better data collection, all three screening programs have developed, or are implementing a range of programs and strategies to both improve data collection to inform program delivery and activities to improve participation in ATSI communities.

## Current activity in cancer screening programs

### Breast Screening

BreastScreen Australia (BSA) was established in 1991 and is a joint program of the Commonwealth and the state and territory governments. It is governed by the Department of Health and Ageing, working in collaboration with BreastScreen Program Managers from each jurisdiction, and a National Quality Management Committee.

The program aims to achieve significant reductions in mortality and morbidity from breast cancer through an organised approach to screening.

The program currently operates in over 500 locations nationwide via fixed, relocatable and mobile screening units.

BSA provides free mammography screening and assessment for women aged 50-69, as evidence indicates this age group has the highest risk of developing breast cancer and thus benefits most from screening. Women aged 40-49 and 70 years and older are also able to access the program. The recommended screening interval is every two years.

Almost half of invasive breast cancer cases diagnosed each year are detected by the BreastScreen Program. Nearly two-thirds of these are found early while the cancers are small, offering women the best chance of successful treatment and recovery.

The program aims to achieve a participation rate of 70% among women aged 50-69 years. At present, the program is screening 54.9% of Australian women in this age group<sup>5</sup>. There is currently little research identifying why the participation has remained static over an extended period of time.

The most recent national evaluation of the BreastScreen Australia Program was released by the Australian Health Ministers Council on 7 September 2009. Key findings demonstrated that the Program has been successful in reducing mortality from breast cancer in the target age group by approximately 21–28%.

Funding has been provided by the National Breast Cancer Foundation to the BreastScreen Australia Program to develop a BreastScreen Australia Research Framework (see Attachment 1). The aim of the framework is to ensure that the BreastScreen Australia program and policy issues drive research priority-setting in an ongoing and systematic way, and to enable collaborative dialogue with research experts who can provide advice on planning, resourcing and funding opportunities. Workshops are scheduled for mid April (16<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup>) in Melbourne, Brisbane and Sydney; the expectation is that the Framework will be ready for dissemination in June.

An evidence-based policy agenda is a priority for the program, and is fundamental to ensuring the program delivers the best possible services and outcomes for women into the future.

### Cervical Screening

The National Cervical Screening Program (NCSP) was first established in 1991 and is a joint program of the Commonwealth and the state and territory governments.

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<sup>4</sup> Australian Institute of Health and Welfare report on Cervical Screening in Australia 2008-2009

<sup>5</sup> This shortfall is partly as a result of increased demand due to the growing size of the target group with an ageing population and decreased service capacity to meet demand due to ongoing workforce pressures and rising costs. In addition, it has been noted that breast cancer is one of the very few diseases that is over-represented in higher socio-economic groups, and it is acknowledged that many women chose to undertake private mammography rather than participate in the free BreastScreen Program.

The program aims to reduce illness and deaths from cervical cancer, in a cost-effective manner through an organised approach to screening. Up to 90% of the most common form of cervical cancer, squamous cell cancer, can be prevented through regular participation of eligible women.

The program encourages women aged 18 (or two years after first sexual intercourse, whichever is later) to 69 years to have regular Pap smears.

Since its introduction, incidence and mortality from cervical cancer in Australia has approximately halved.

The science of cancer is one of the most rapidly changing areas in health. Since the introduction of the program, there is a greater depth of knowledge and understanding about the natural progression of cervical abnormalities and the development of cervical cancer.

Evidence about the screening age range and interval has changed over time and there are new tests for the early detection of pre-cancerous cervical changes. Furthermore, young Australian women are now provided the opportunity to be vaccinated against the human papillomavirus (HPV), which prevents some HPV infections that can lead to cervical cancer.

The National Cervical Screening Program is currently going through a renewal process. The aim of the renewal is to ensure the continued success of the program and that all Australian women, HPV vaccinated and unvaccinated, have access to a cervical screening program that is based on current evidence and best practice.

The objectives of the Renewal are to:

1. Assess the evidence for screening tests and pathways, the screening interval, age range and commencement for both vaccinated and non-vaccinated women.
2. Determine a cost-effective screening pathway and program model.
3. Investigate options for improved national data collection systems and registry functions to enable policy, planning, service delivery and quality management.
4. Assess the feasibility and acceptability of the renewed program for women.

## **Bowel Screening**

Bowel cancer is one of the most common forms of cancer in Australia, and around 80 Australians die each week from the disease. Bowel cancer can be treated successfully if detected in its early stages, but currently fewer than 40 per cent of bowel cancers are detected early.

The National Bowel Cancer Screening Program (NBCSP) was initiated by the Commonwealth in 2006. The program invited eligible people to participate in faecal occult blood testing (FOBT). The program undertook a phased approach to allow time for capacity-building across the sector.

The NBCSP currently offers screening via free FOBT to people turning 50, 55 and 65.

Program participants with positive test results are advised to attend their GP who may refer them on for follow up, including colonoscopies and related histopathology.

Nationally between 2006 and 2011, over three million people have been invited to screen. Approximately 40% of people returned a kit for testing; and 7.6% of participants received a positive result. Of the 58,042 who participated with a recorded colonoscopy, 2,081 had suspected or confirmed cancer and 8,608 had adenomas.

## Current investment in cancer prevention, early detection and diagnosis research

Cancer Australia's report *Cancer research in Australia: An overview of cancer research projects and research programs in Australia 2003 to 2005*<sup>6</sup> looked at the proportion of direct funding<sup>7</sup> allocated to cancer research across the spectrum – from research into aetiology to treatment.

The report found that funding of research into cancer prevention, early detection and diagnosis – areas of key interest for the cancer prevention and screening programs – were poorly funded, relative to research into cancer biology and cancer treatment.

Of the total \$291.50 million (for over 1,332 cancer research projects and research programs) funded between 2003 and 2005, early detection, diagnosis and prognosis comprised 8% of the funding, or \$21.9 million, for 120 projects.

When this is analysed by specific cancer site, the figures are as follows:<sup>8</sup>

**Table 1: Funding to cancer research projects and research programs in specific cancer sites across Australia, 2003 to 2005<sup>9</sup>**

<b>% Funding</b>							
<b>Cancer type</b>	<b>Biology</b>	<b>Aetiology</b>	<b>Prevention</b>	<b>Early detection, diagnosis &amp; prognosis</b>	<b>Treatment</b>	<b>Cancer control, survivorship &amp; outcomes research</b>	<b>Scientific model systems</b>
Lung cancer & mesothelioma	17	12	2	44	15	10	0
Colorectal cancer	31	4	1	12	32	15	5
Cancer of unknown primary site	0	0	0	0	100	0	0
Prostate	50	0.4	0.6	15	25	9	0
Breast	51	18	5	6	11	7	0.6
Pancreatic	40	0	0	6	54	0	0
Lymphoma	50	12	26	0	13	0	0
Leukaemia	44	14	0.6	14	21	0.7	6
Stomach	24	27	18	0	0	0	31

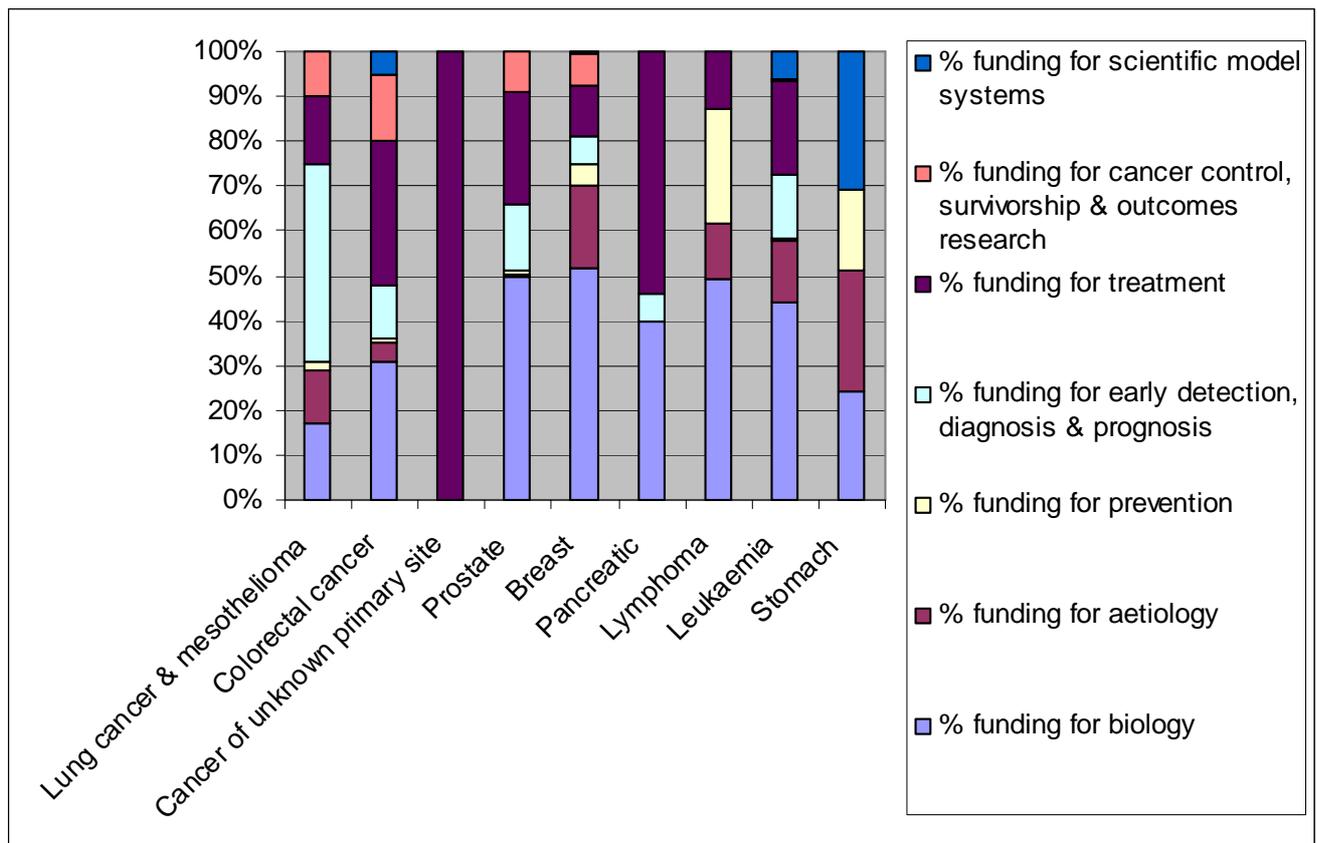
<sup>6</sup> Cancer Australia; 2008; *Cancer research in Australia: An overview of cancer research projects and research programs in Australia 2003-2005*. Available from: <http://www.canceraustralia.gov.au/publications/cancer-research-australia-overview-cancer-research-projects-and-research-programs-australia-2003-2005>

<sup>7</sup> Does not include funding from pharmaceutical companies and philanthropic funding

<sup>8</sup> The data source for this table does not include cervical cancer; however, as discussed in the previous section, investment in cervical screening has yielded considerable benefit in reduction of both incidence and mortality.

<sup>9</sup> Modified from data presented on page 36 in Cancer Australia; 2008

**Figure 1: Funding to cancer research projects and research programs in specific cancer sites across Australia, 2003 to 2005<sup>10</sup>**



The tables above identify the imbalance in research investment particularly for the screening programs. Nationally, health policy makers are focussing on the need for prevention and early detection interventions, whilst investment in research in these areas is minimal. With an ageing population, and cancer a disease of ageing<sup>11</sup>, the burden of the disease will increase exponentially. Research must enhance and support strategies to minimise the burden of disease on the community and focus on areas of identified need or knowledge gaps.

The McKeon Review committee is encouraged to recommend researchers actively consult with key stakeholders, and in particular screening experts in the development of research proposals to ensure future research activity is initiated from sound premises and with an identified need. It could be recommended that research proposers be required to include in their research applications/submissions responses against key research criteria such as:

- What is the identified need?
- Rationale for the research (with supporting evidence).
- Support/endorsement from clinical and/or policy experts in the domain.
- Support and endorsement of the proposed stakeholders (e.g. services or organisations providing the data).
- Projected cost imposts on those services or organisations supporting the research (not just researchers' costs) and how this cost burden is to be addressed.

<sup>10</sup> Figure derived from data presented in Table 1

<sup>11</sup> In 2007, the average age of death from cancer was 72, for both men and women. Australian Institute of Health and Welfare; 2010; Australia's Health 2010; pages 136-138