



Cancer control is not beyond us ... but could be if we don't invest wisely

There must be a balanced investment portfolio in cancer control

The 2015 World Cancer Day theme is “Not beyond us”. It is recognised worldwide that we need to invest wisely in areas of cancer control that will actually deliver the very best outcomes for patients and the community more broadly. The Choosing Wisely program is an exemplar of large health systems optimising outcomes while disinvesting in practices that, at best, add cost and, at worst, add substantially to patients’ harms.¹

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Australia needs to invest wisely in cancer control, or the rate at which outcomes have improved in the past 30 years will not be maintained.^{2,3} Action in three areas will guarantee better cancer outcomes across the population:

- Continuing to reduce the use of tobacco. In the 50th anniversary report of the United States Surgeon General (2014) outlining the relationship between cancer and smoking, a new relationship was highlighted: that people who continue to smoke even after a diagnosis of cancer have subsequent higher all-cause and cancer-specific mortality compared with people who ceased smoking at such a time.⁴ Efforts to reduce tobacco use need to be complemented by an increased focus on other lifestyle behaviours, such as physical activity and reducing body mass indices across the community.
- Having every Australian between the ages of 50 and 75 years undertake regular 2-yearly faecal occult blood testing. Mortality from bowel cancer nationally would be reduced by more than 500 people each and every year, with improved outcomes being delivered by simpler and less costly treatments.⁵
- Reducing variations in clinical outcomes that are directly related to health facilities’ caseloads for procedures. People with rarer cancers, such as oesophageal or pancreatic cancers, and sarcomas, should be treated in an institution with an adequate caseload and an effective multidisciplinary team.⁶ Simultaneously, effort is required to improve the local availability of therapies with outcomes not affected by a volume–outcome relationship, including low-risk chemotherapy, colon cancer surgery and most radiotherapy. However, the full extent of variations in cancer outcomes in the Australian community will only be apparent when there is routine access to identified unit record level data from Medicare, the Pharmaceutical Benefits

Scheme, population and clinical cancer registries, and the National Death Index.

By contrast, there is increasing pressure to invest in new therapies that have captured the imagination and hopes of many people but for which there are limited efficacy data and few effectiveness data. Despite the investments to date in targeted and biological therapies, the overall impact on population health outcomes has been limited.²

Once any new medication is introduced, it will be used: for longer periods of time; in a wider patient population; at different doses; for a wider range of indications; and in people with a larger number of comorbidities. Another way to state this is that registration studies are likely to show better outcomes than can be achieved in the real-world use of the medication. Most of these new therapies will have harms that were not identified in the original registration studies, and we lack an adequate pharmacovigilance program to ensure a timely response to early signals of any emerging longer term toxicities, especially if the toxicity relates to amplification of a prevalent comorbidity.

There is also the assumption that an average increase in life expectancy is spread evenly across the population exposed to a new therapy. This is unlikely. For example, a small group of responders with markedly prolonged survival may mask premature mortality in others, even when the comparator arm may be best supportive care.^{7,8}

As our investment in new, high-cost therapies increases and the benefits approach the asymptote, we urgently need an honest community conversation about the level of benefit that needs to be achieved (and to understand what is forgone) if we prioritise this expenditure. While parts of the pharmaceutical industry are comfortable with a willingness-to-pay model for pricing these therapies, at a systems level we must consider cost-effectiveness, not simply a right to access.⁹ Decisions to fund such therapies require full disclosure of all trial data relating to the new therapy.

If there is a finite pool of resources for cancer control in Australia, then it is urgent we understand how best to invest those resources to improve population-wide cancer outcomes. It is human nature to put faith in new and emerging therapies; but when we have potential further gains from proven programs that have delivered better outcomes today, these are where the first call on resources should be.

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- 1 Schnipper LE, Smith TJ, Raghavan D, et al. American Society of Clinical Oncology identifies five key opportunities to improve care and reduce costs: the top five list for oncology. *J Clin Oncol* 2012; 30: 1715-1724.
- 2 Ward RL. A decade of promises in personalised cancer medicine: is the honeymoon over? *Med J Aust* 2014; 200: 132-133.
- 3 Zafar SY, Peppercorn JM, Schrag D, et al. The financial toxicity of cancer treatment: a pilot study assessing out-of-pocket expenses and the insured cancer patient's experience. *Oncologist* 2013; 18: 381-390.
- 4 United States Department of Health and Human Services. The health consequences of smoking – 50 years of progress: a report of the Surgeon General. Atlanta, Ga: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <http://www.surgeongeneral.gov/library/reports/50-years-of-progress> (accessed Jan 2015).
- 5 Australian Institute of Health and Welfare. National Bowel Cancer Screening Program: monitoring report 2012-13. Canberra: AIHW, 2014. (AIHW Cat. No. CAN 81; Cancer Series 84.) <http://www.aihw.gov.au/publication-detail/?id=60129547721> (accessed Jan 2015).
- 6 Smith RC, Creighton N, Lord RV, et al. Survival, mortality and morbidity outcomes after oesophagogastric cancer surgery in New South Wales, 2001-2008. *Med J Aust* 2014; 200: 408-413.
- 7 Cherny NI, Abernethy AP, Strasser F, et al. Improving the methodologic and ethical validity of best supportive care studies in oncology: lessons from a systematic review. *J Clin Oncol* 2009; 27: 5476-5486.
- 8 Temel JS, Greer JA, Muzikansky A, et al. Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med* 2010; 363: 733-742.
- 9 Kantarjian HM, Fojo T, Mathisen M, Zwelling LA. Cancer drugs in the United States: Justum Pretium – the just price. *J Clin Oncol* 2013; 31: 3600-3604. ■