

Cancer screening and better clinical diagnosis should not be in competition

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In this volume of the *Journal*, we publish two articles that raise a challenging issue: how can we manage a screening programme and also protect or enhance the normal process of clinical diagnosis? Cox et al.¹ point to limitations in colposcopy services for cervical cancer and treatment services for breast cancer, and state that the limitations of clinical services—particularly for colonoscopy—necessitated a reduction in test sensitivity and a narrower age range for the bowel cancer screening programme when first introduced. Meredith and Lawrenson² argue that screening for breast cancer can impact the services for symptomatic patients and exacerbate existing inequities. They state that a screening programme should be part of an integrated service for the diagnosis and treatment of all patients. These papers come at a good time: recent major reviews of the breast and cervical screening services have called for major changes.^{3–6}

In many ways, the screening programmes for cervical cancer, breast cancer and colorectal cancer have features that should be the ideal for all health services. The programmes have been designed based on high-quality international evidence, usually from large randomised trials, and follow international best practice. The programmes are nationally coordinated and designed to be consistent throughout the country, avoiding post-code lottery variations, although that depends on local service delivery issues. There are set performance criteria and requirements for evaluation. There has never been evaluation or quality control for other diagnostic routes on a national basis.

There is evidence that the inequities apparent in many aspects of New Zealand healthcare can be overcome, such as the demonstration that Māori and non-Māori women have similar outcomes following detection by screening, while inequities exist after clinical diagnosis.^{7,8} The recent detailed review of the breast screening programme^{3,4} concluded that it was consistent with the best

international programmes in its design and performance; it was estimated that women who accepted regular screening had a 39% reduction in mortality.⁹

New Zealand has been cautious in its implementation of cancer screening, introducing programmes some years later than many other countries. Even so, resource limitations have produced restrictions on the screening programmes and unmet needs in diagnostic services. Ideally, setting up a screening programme should involve assessing and improving the various steps in the diagnostic process, and should lead to improvements in diagnostic and treatment services for all patients, not just those screened.

Much depends on how resources are managed. A new screening programme will require new, specific resources but will also put additional demands on services and staff who deal with the diagnosis and treatment of all patients. The demands of the screening programmes on gynaecologists, radiologists, surgeons, pathologists, nurses and other staff will be substantial. If the extra work is not adequately resourced, diagnostic and treatment services for other patients will be disadvantaged. Thus, the time from diagnosis to surgery in breast cancer for all patients has been increasing, with the proportion having surgery within 31 days dropping from 56% to 37% between 2004 and 2019, even before COVID-19.⁸

The clinical diagnosis route in New Zealand is far from satisfactory. One measure of poor quality of routine diagnostic processes is the proportion of patients presenting after an emergency admission: in a study of eight cancer types in 14 jurisdictions for 2012–2017, New Zealand ranked worst in this proportion overall and for seven of the eight cancer types assessed.¹⁰ A higher proportion of emergency admissions was associated with a lower 1-year survival rate for most cancers.¹⁰ In a study of primary care comparing 11 jurisdictions, access to diagnostic tests and specialist referrals for cancer by primary care

practitioners was more limited and took more time than in most other regions.¹¹

A fundamental problem is that the cancer screening services are managed separately from the normal diagnostic services for the same disease, although the same staff may deal with the patients in both situations. The recent Wellington review noted that patients attending for screening who had symptoms could not be referred to

diagnostic services, but were sent back to their general practitioner, causing more delay.⁵ Further, the three cancer screening services are separate, using different invitation systems and promotion activities. A screening service for a disease should be planned and managed to improve the diagnostic services for all patients. As these two papers show, we have not done this well in New Zealand.

COMPETING INTERESTS

Nil.

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