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Cancer survivorship – the role of the GP

Background

Improvements in cancer detection, treatment and an ageing population mean that there are increasing numbers of people living with and beyond cancer. Current hospital-centred models of cancer follow-up have tended to focus on detection of cancer recurrence, which may result in significant unmet needs, particularly psychosocial needs.

Objective

This paper discusses the evidence from previous studies of primary care involvement in cancer survivorship and key areas to consider in the follow-up care for common cancers.

Discussion

General practice has an important role in the holistic care of cancer survivors and could take on an expanded role in cancer follow-up.

Keywords

cancer; primary care; general practitioners; therapy-related cancer; holistic medicine; survivorship



The number of people living with and beyond cancer, or 'cancer survivors', is increasing in all developed countries. This reflects an ageing population, increased cancer detection and improvements in treatment with consequent higher survival rates. The most recent estimates of cancer prevalence show that in 2007 there were approximately 775,000 people living in Australia who had been diagnosed with cancer in the previous 26 years, including 339,000 in the previous 5 years.¹

In 2005, the US Institute of Medicine (IOM) released a landmark report, *From Cancer Patient to Cancer Survivor: Lost in Transition*.² This report recognised the multitude of issues facing cancer survivors and the need to address the serious medical, functional and psychosocial consequences of cancer and its treatments. For example, breast cancer survivors may experience premature menopause, infertility, lymphedema, osteoporosis, cognitive dysfunction and cardiomyopathy due to anthracycline treatment. Psychosocial issues include fear of recurrence, altered body image, sexual dysfunction and change in roles.^{3,4} After breast cancer treatment, women may also become less active and gain weight, with consequent effects on cardiovascular and diabetic risk.⁵ Similarly, men, following treatment for prostate cancer, experience ongoing problems with sexual function, urinary and bowel symptoms (dependent on treatment modality), and psychological concerns about their future.^{6,7}

Current models of care are often focused on cancer as an acute illness during treatment, whereas follow-up appointments are centred on detection of cancer recurrence, missing out the wider range of issues that should be covered as part of good chronic disease management. The focus on recurrent disease is despite evidence that cancer recurrences often present between scheduled hospital visits and usually in primary care.⁸ Internationally, there is growing recognition that cancer survivorship needs to shift towards a chronic disease model with the following four goals: (1) prevention of recurrent and new cancers and of other late effects; (2) surveillance for cancer spread, recurrence or second cancers; assessment of medical and psychosocial late effects; (3) intervention for the consequences of cancer and its treatment; and (4) coordination between specialists and



primary care providers to ensure that all of the survivor's health needs are met.²

The role of primary care in follow-up of cancer

The challenges of meeting the range of physical and psychosocial needs of an escalating number of cancer survivors has led to the development of alternative models of cancer follow-up. These models recognise the core aspects of good generalist care, such as accessibility, holistic patient-centred, team-based care, care coordination, continuity and management of complex multiple problems.⁹ Within Australia there have been several pilot projects to implement new models of cancer survivorship that increase the involvement of primary care. Some cancer specialists already have in place various degrees of 'shared care' of cancer patients with general practice but the majority of cancer follow-up in Australia is currently performed by hospital specialists.

Several trials have assessed alternative models of cancer follow-up involving primary care, either as shared care between oncology services and primary care or direct transfer of follow-up to primary care.¹⁰ The term 'shared care' needs careful definition in this context. In some circumstances it may reflect that the cancer specialist manages the majority of cancer-related health issues and the GP provides ongoing care for a patient's other healthcare needs. More advanced models of 'shared cancer care' ideally involve explicit arrangements where at least some of the ongoing cancer-related follow-up is provided in primary care and some by the cancer specialist. These models are more closely aligned to models of shared antenatal care.

Two systematic reviews have summarised the findings of trials where all cancer-related follow-up is provided in general practice; these reviews found no differences between primary care and specialist follow-up in terms of patient quality of life, satisfaction with care or clinical outcomes.^{11,12} Breast cancer follow-up has been most extensively studied in several large trials conducted in the UK and Canada, demonstrating the acceptability of this alternative model.^{8,13} One trial of colorectal cancer follow-up, conducted in Australia, found no differences in psychosocial outcomes or satisfaction with care. GPs were more likely to order faecal occult blood tests as part of follow-up, whereas surgeons ordered more ultrasound scans and colonoscopies, but no differences were seen in recurrence detection.¹⁴ It should be noted though that this trial was conducted several years ago when there was poorer GP access to colonoscopy. Most trials have been inadequately powered to detect differences in detection of recurrence or other clinical outcomes. One trial showed that primary care follow-up of breast cancer was more cost-effective than specialist follow-up.¹⁵

There are several critical issues in implementing alternative models of follow-up involving primary care. First, one must recognise the importance of patient and provider preferences: not all patients nor all GPs will feel confident enough to accept this alternative model of care.

However, especially within the public health system, it may not always be practicable to meet patient and provider preferences. There must be clear routes of rapid access back to the cancer specialist, when needed, to reassure patients and providers, and clear guidance for GPs about appropriate management to detect recurrence and manage common side effects of treatment. *Table 1* provides a summary of current guidelines for the follow-up of some common cancers including specific surveillance protocols for melanoma, breast, prostate and colorectal cancer. The majority of these surveillance protocols are based on expert consensus opinion as there is little high-quality evidence to inform the ideal follow-up regime for these cancers, nor the cost-benefit ratio of these regimes. The strongest evidence comes from intensive follow-up for colorectal cancer, which has been shown to improve survival, but the optimum frequency of colonoscopy and potential role of monitoring carcinoembryonic antigen (CEA) remain uncertain.¹⁶

Fundamentally, good survivorship care requires clear channels of communication between the specialist, GP and patient. On the basis of experience from antenatal care, several trials have tested patient-held records (PHRs), usually in a paper-based format, to improve communication between healthcare providers. Unfortunately, a systematic review of 13 trials of PHRs found that they do not improve communication, patient health or satisfaction with care, principally because of limited use by clinicians.¹⁷ Survivorship care plans (SCPs) have been promoted internationally as a way of improving communication and integrating cancer follow-up care and are gradually being adopted into routine services in Australia.¹⁸ They usually include a treatment summary, information on potential side effects of treatment, guidelines for follow-up and detection of recurrence, supportive care resources and access back to specialist care, but further research may be needed to identify which are the most important issues from a general practice perspective and how to create a brief, primary care relevant SCP. There are challenges in implementing SCPs into routine care given the time needed to complete one in the absence of complete electronic hospital records. Furthermore, the only randomised controlled trial to test the implementation of SCPs in cancer follow-up in primary care found no differences in a range of measures of psychosocial outcomes or satisfaction with care.¹⁹ With the gradual implementation of the patient-controlled electronic healthcare record, it may be that sharing key information between cancer hospitals and general practice about patients will improve but this remains a major challenge for good survivorship care.

Long-term cancer survivors and late effects of treatment

Improvements in cancer treatment mean that many people are living longer and free of cancer and this has important implications for their long-term follow-up. In particular, management of comorbidities and late effects of treatment need to be considered. A systematic review of studies looking at the management of patients in primary care who had survived for more than 3 years after cancer treatment suggested that they have poorer compliance with treatment for diabetes and



cardiovascular disease than non-cancer patients.²⁰ Their cancer screening participation was higher than non-cancer patients. Long-term cancer follow-up should not be at the expense of management of other common comorbidities. This is particularly important given that certain cancer treatments may be associated with increased risk of metabolic and cardiovascular disease, and some have a specific cardiotoxic effect.²¹ Some cancer patients may be at increased risk of second cancers, either due to treatment or a particular genetic syndrome. For example, women who received radiation treatment for Hodgkin's lymphoma are at increased risk of developing breast cancer, especially if they were treated in childhood.²² Early breast cancer screening is therefore recommended for women who are childhood survivors of Hodgkin's lymphoma. Bone health and osteoporosis risk should also be considered, especially in patients on drugs such as aromatase inhibitors for breast cancer and androgen deprivation for prostate cancer. The RACGP *Guidelines for Preventive Activities in General Practice*²³ currently recommend bone mineral densitometry every 2 years in these patients as part of managing their bone

health. It is beyond the scope of this paper to discuss the specifics of late effects of the wide range of cancer treatments. Moreover, one of the challenges of long-term follow-up is that, especially for newer cancer treatments, not all late-effects may be known yet and recommendations for monitoring late effects can change over time. Cancer centres therefore need to consider mechanisms by which long-term cancer survivors and their GPs can be informed about changes to treatment recommendations (eg. extending the duration of tamoxifen to 10 years) or monitoring for late effects of treatment.

What to cover in a follow-up consultation

A recent systematic review of the healthcare needs of cancer survivors in general practice found several key areas which should be considered at a follow-up consultation.²⁴ These again recognise the broader holistic role of the GP in cancer follow-up and the potential to reduce current unmet needs of cancer survivors. Areas to cover include psychosocial support, help with medical issues, information on cancer,

Table 1. Current guidelines for follow-up of common cancers

Early breast cancer²⁵
History and examination Years 1–2: every 3–6 months Years 3–5: every 6–12 months After 5 years: every 12 months Mammography every 12 months Chest X-ray, bone scan, CT, PET or MRI scans, full blood count, biochemistry and tumour markers: only if clinically indicated on suspicion of recurrence
Colorectal cancer²⁷
For those patients treated with curative intent: <ul style="list-style-type: none"> • history and examination every 6 months • colonoscopy at 1 year postoperatively • subsequent frequency of colonoscopy will depend on findings (eg adenomas) and other higher risk features (eg family history or age of diagnosis <40 years). • serum CEA every 6 months*
Prostate cancer²⁸
<ul style="list-style-type: none"> • PSA and digital rectal examination 3, 6 and 12 months after treatment • PSA and digital rectal examination every 6 months in years 2 and 3 after treatment and then annually
Melanoma²⁹
Stage I disease <ul style="list-style-type: none"> • History and examination every 6 months for 5 years • Check skin cancer preventive behaviours, scar and regional nodes, and total body for new melanomas Stage II and III <ul style="list-style-type: none"> • History and examination every 3–4 months for 5 years • Annual history and examination after 5 years • Ultrasound of regional lymph nodes (by an experienced ultrasonographer) may be used in conjunction with clinical examination
*There are no Australian guidelines on the use of carcinoembryonic antigen (CEA) for colorectal cancer follow-up. US National Comprehensive Cancer Network guidelines suggest 3–6 monthly CEA for 2 years then 6 monthly until 5 years. ³⁰ CT, computed tomography; MRI, magnetic resonance imaging; PET, positron emission tomography



late treatment effects and adjusting to life after treatment. Cancer Australia has published a useful guide for GPs on areas to cover as part of the follow-up for breast cancer, which is summarised in *Table 2*.²⁵ The aspects of care highlighted in this guide are readily transferable to other common cancers. For example, for prostate cancer the key areas to cover are:

- arrange a prostate-specific antigen (PSA) test to detect recurrence
- check compliance with medications such as androgen deprivation therapy (ADT)
- assess psychosocial distress including sexuality and relationships
- assess other treatment side effects (urinary and bowel symptoms from surgery or radiotherapy; bone mineral density if on ADT)
- consider comorbidities, some of which could be exacerbated by ADT (eg metabolic syndrome)
- promote secondary preventive strategies (healthy weight and regular exercise).

For melanoma:

- clinical examination of the primary site and regional lymph nodes to detect recurrence
- total body examination to identify new primary melanomas

Table 2. Actions to consider during breast cancer follow-up²⁵	
History	<ul style="list-style-type: none"> • General health problems • New breast symptoms • Hormonal status • Change in medications • Compliance with medications
Clinical examination	<ul style="list-style-type: none"> • Breast/chest wall (ipsilateral and contralateral) • Chest and abdomen • Regional lymph nodes • Arm on treated side
Imaging	<ul style="list-style-type: none"> • Arrange mammogram
Psychosocial care	<ul style="list-style-type: none"> • Assess level of psychosocial distress and impact of disease and its treatment (consider sexuality, fertility and relationships) • Provide appropriate support and referral
Treatment side effects	<ul style="list-style-type: none"> • Check for early signs of lymphoedema • If on hormonal treatment (eg. tamoxifen or aromatase inhibitor), check for menopausal symptoms and reduced bone mineral density
Other considerations	<ul style="list-style-type: none"> • Promote secondary preventive strategies (maintaining healthy body weight, regular exercise and limiting alcohol intake)

- compliance with skin self-examination and awareness of features of melanoma
- psychosocial issues covered should include concerns about recurrence
- reinforcement of primary preventive strategies including sunscreen and sun avoidance.

Summary

General practice will need to become increasingly involved in the follow-up of patients after cancer treatment and cancer survivorship. Risk-stratified models of survivorship should be developed to identify which patients are best suited solely to primary care follow-up, and which to explicit shared care or hospital follow-up.²⁶ There are potentially large numbers of cancer patients who might be at least as well managed in general practice as they are in specialist care. Indeed, if well supported through good communication, clear guidance and routes back to specialist care, general practice may be a preferable place for cancer follow-up for many cancer survivors who would benefit from a broader generalist perspective.

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Competing interests: None.

Provenance and peer review: Commissioned, externally peer reviewed.

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