Education Program in Cancer Care (EPICC): a national education program for non-cancer specialists

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Abstract

Background: Increasing involvement of general practitioners and other non-cancer specialists in cancer care is essential for provision of coordinated cancer care and effective delivery of cancer care in rural and remote Australia where access to cancer specialists is limited. To engage and encourage coordinated care, there is a need to develop effective education strategies in cancer, targeting non-cancer specialists.

Methods: A multidisciplinary working group, led by the Medical Oncology Group of Australia and involving key stakeholders representing cancer specialties, professional colleges and general practice organisations has been established with support from Cancer Australia. The aims of the group were to analyse the need for cancer education of non-cancer specialists and to provide recommendations for detailed program development.

Results: A needs analysis consisting of a literature review, an online survey of stakeholders and focus groups was undertaken and utilised to inform content development and program format. Preliminary research outcomes suggest that there are a number of cancer educational initiatives available for non-specialists; however, they vary in scope and delivery format and are frequently limited in their long term evaluation. Additionally, some forms of delivery are not wholly applicable in the rural and remote setting. General practitioners and other non-cancer specialist medical practitioners have expressed interest in an educational program focusing on all common cancers, their management and related clinical care.

Background

Non-cancer specialist medical practitioners* including general practitioners and primary care providers have a key role to play in cancer control including early diagnosis, referral, follow up, detection of recurrence and survivorship. Integrated cancer services between specialists and primary care providers is emphasised across all stages of the cancer journey in the provision of quality cancer care. Access to medical oncology services is often inadequate throughout Australia especially in rural areas. With limited access to specialist services outside of metropolitan centres, non-cancer specialist medical practitioners have an increased role in the provision of cancer care beyond their usual role of advocate, supporter, counsellor and communication facilitator through greater involvement in provision of cancer treatments and management of cancer related symptoms.

It is the patients' expectation that their practitioner is sufficiently skilled to recognise and diagnose cancer, though research shows that non-specialist medical practitioners have reported a lack of basic knowledge about the nature of cancer and its management. This lack of knowledge can be attributed to the reduction of exposure to cancer curricula in medical school. For example, a study by Koczwara et al (2005) found that in Australia, medical students' exposure to cancer curricula has been reduced and varies by institution, a change which impacts graduates' skills, competency and experience in cancer care. While continuing medical education programs can provide ongoing learning in cancer management for interested non-cancer specialist medical practitioners, the practitioner's location (metropolitan, rural or
remote) has implications for the availability of continuing medical education opportunities. Studies have shown that rural non-cancer specialist medical practitioners have less access to ongoing education opportunities as well as more barriers to attending available opportunities. Thus, while cancer education may be available, it might not be readily accessible to those who need it most.

The geographic disparities in rural and remote areas of Australia have significant impacts on access to and quality of cancer care. These inequalities have been found to create barriers in provision of quality cancer care in rural areas, including higher financial and social costs, difficulty in providing multidisciplinary care, increased reliance on visiting clinics and health professionals who are working additional hours often without support from trainees. Challenges faced by patients with cancer in rural and remote areas such as travelling for cancer treatment or accessing local treatment can often be addressed by primary care providers.

One way to address challenges in cancer care is the development of integrated models of care which provide quality care for patients with cancer, including care that is close to home and provides timely symptom management, early detection of recurrences and psychosocial support with the care provided where possible by non-specialist cancer providers. The first step in developing this service model is to ensure the non-specialist medical workforce has access to appropriate training and education.

This project aims to improve the quality of cancer care and management, particularly in rural and regional Australia, by providing greater opportunities for interested medical practitioners to increase their expertise in cancer management through an educational program. Support for the project was sought from the Australian Government through Cancer Australia.

Methods

The project was conducted in three phases beginning in May 2008 and is set for piloting in May 2009. The final program launch is planned for August 2009.

Phase 1 began with stakeholder identification and consultation in order to identify appropriate project support and representation from professional colleges representing general practice, general and rural medicine and cancer related specialities. Led by the Medical Oncology Group of Australia, a Steering Committee was appointed to be responsible for project oversight. A project plan and a detailed risk analysis were completed.

Three types of research were conducted in this phase: a literature review, a needs analysis (including a survey and focus group) and an expert workshop. Each research method will be examined in detail below.

A systematic literature review was undertaken to critically appraise cancer education for non-cancer medical practitioners as well as the perceived success of such programs applied in the Australian context. The study addressed several questions: Is cancer education available to non-cancer medical practitioners? Are these programs utilised to improve cancer care? If so, are these programs successful? Is GP education useful? Is there a need for cancer education? What should be taught in the curriculum? Are there existing foreign models? Is there evidence that education leads to new skills and skill implementation? Using the key words cancer education, oncology curriculum, rural and remote education and general practitioners, the systematic literature search considered articles written since 1990 that contained information on the development of cancer education programs in other countries such as Canada, the United States of America and Europe, as well as the existing programs in Australia. Literature was sourced from the Internet via Google Scholar and from databases including Medtext, Informit, Cochrane Library and Medline. Additionally, specific searches covered the following journals: Asia Pacific
Journal of Oncology, The Lancet Oncology, Journal of Cancer Education and the Medical Journal of Australia. Soft literature sources from Medical Oncology Group of Australia programs, funded by Rural Health Education, Support and Training funding, included Enhancing Palliation in Patients with Advanced Cancer in Rural Areas of Australia and Training of Rural Health Workers in the Management of Adjuvant and Systemic Chemotherapy for Colorectal Cancer. The results of the literature review were utilised at a one day workshop of cancer specialists, non-cancer specialist medical practitioners and education specialists, to determine program topics and delivery methods.

The needs analysis was conducted to establish the extent of the need for a cancer education program for non-cancer specialists in Australia. Ethics approval was granted by the NSW Population and Health Services Research Ethics Committee. The needs analysis consisted of the focus group and an online survey. The focus group was conducted by an experienced researcher via teleconference in order to promote participation by rural and remote medical practitioners. The focus group lasted for two hours. An online survey of non-cancer specialist medical practitioners was conducted utilising the member marketing channels of the Australian College of Rural and Remote Medicine, the Royal Australian College of General Practitioners and the cancer education website, Cancer Learning.

The workshop of cancer specialists, non-cancer specialist medical practitioners and education specialist was held face to face in Sydney to discuss program content and delivery methods.

**Phase 2** includes content development for the five modules selected at the expert workshop. Each module has a working group led by one cancer specialist and one non-cancer specialist medical practitioner and co-opted additional members from a range of multidisciplinary professions. Each working group is responsible for content development of the module including existing resources, module outline, case study development, as well as editing. Content for all modules is being written by a health communications company of medical writers. Working groups approve content prior to online development.

The entire program including five modules will be hosted online by a content management system and will be linked directly to the Cancer Learning website. This website, developed by Cancer Australia, is the national hub for cancer education programs.

An evaluation plan, tools and materials are being developed as a component of Phase 2. These tools will be employed not only in the pilot study to provide initial feedback for program finalisation, but will also be utilised once the program has been implemented.

The program will be piloted in two ways; first as a pilot study which aims to engage twenty-five non-cancer specialist medical practitioners from around Australia to participate in and evaluate the program. Additionally, piloting will include a face to face workshop held at the National Rural Health Conference in Cairns, Queensland, 18 May 2009 to engage users in a face to face setting. This workshop will provide an opportunity for direct feedback from the target audience, as well as promotional activities targeting rural and remote Conference delegates. Modules will be finalised following feedback from the pilot and the workshop.

The final program will be approved by the Steering Committee prior to release.

**Phase 3** is the implementation phase of this project. Evaluation of the program following the pilot study will be ongoing.
Results

The results of each method of research are presented below. All research outcomes contributed to program design, content and delivery.

Literature Review

The systematic literature search resulted in thirty-five relevant articles to the key words: cancer education, oncology curriculum, rural and remote education, general practitioners. Key conclusions to highlight from the review include the following: recommendations for cancer curriculum; the availability of cancer education for non-cancer medical practitioners including their formats and success; examples of cancer education programs; and the need for cancer education by non-cancer specialist medical practitioners.

Results showed that cancer management and oncology curricula recommendations have been published in Australia by the Oncology Education Committee of The Cancer Council Australia as well as internationally by the European Society for Medical Oncology and the American Society of Clinical Oncology Task Force on the Global Curriculum in Medical Oncology. Cancer education based on these curriculum recommendations is available to non-cancer specialist medical practitioners in a variety of formats in Australia and overseas.

The European summer oncology schools for medical school students exemplify utilisation of recognised curricula. These summer programs prove that cancer education for non-cancer specialists is effective in improving health care services. International examples targeting medical practitioners are the British Columbia Preceptor Program and the North-western Ontario Community Cancer Care Program in Canada which also provide evidence that foreign models of cancer education and treatment coordination between primary care and specialists have been successful.

The need for cancer education by non-cancer specialist medical practitioners has been shown in the literature to differ depending upon location and exposure to patients with cancer, thus correlating with the low cancer caseloads outside cities and large rural centres. The role of the general practitioner in cancer management differs depending on location, thus the need for cancer education is greater among those residing in areas a significant distance from or without access to a cancer centre.

Needs analysis

The focus group was conducted via teleconference. Two of the scheduled four rural and remote medical practitioners attended to consider the individual needs of non-cancer specialist medical practitioners in rural and remote Australia and how best to address these needs. The focus group showed that rural and remote respondents saw their role as a general practitioner spanning the areas of prevention, diagnosis, treatment and palliative care of patients with cancer. Their personal interest in certain areas of cancer care and the profile of their patients determined the time spent on each of these areas. Both participants felt that additional specialised training in cancer management would improve the provision of cancer care.

Focus group participants identified a range of areas in cancer management in which they need to be knowledgeable. The following list was generated from the focus group and was considered when preparing the program content as key topics for education:

- understanding the role of chemotherapy in palliative care, new types of treatment that are available and advances in terms of what is amenable to treatment
- assisting patients to understand chemo-therapeutic options that the specialist has recommended
- assisting patients in their decisions regarding treatment protocols and options
• providing realistic figures and expectations to patients so that they can set realistic goals for their lives
• understanding where the patient is in a palliative or curative continuum (no longer a clear treatment/curative versus non treatment/terminal divide)
• accessing communication aids to explain complicated cancer treatments when patient is Aboriginal and speaks no English (or other language barrier)
• recognising when changes might be needed in the treatment and referral required.

The survey was the second component of the needs analysis. The survey link was live for three weeks, with fifty respondents starting the survey and forty three respondents finishing the entire survey; half of the respondents were general practitioners and the majority of respondents resided in areas with a population over 25,000 people. The survey addressed program content, delivery methods and possible incentives and barriers for participation.

Utilising the curricula, survey respondents suggested that education in cancer management of all types of cancer would be helpful in their practices. Specifically, education in oncologic emergencies, general principles of treatment and side effects and principles of palliative care would be most helpful to respondents’ practices. Additional education in cancer management activities such as multidisciplinary management of cancer, follow up and relapse of cancer patients, care of cancer survivors, psychosocial and cultural significance of cancer, family and community support for cancer patients and education of patients with cancer were listed as helpful topics to improve the respondents’ practices.

The research showed that a range of delivery preferences (online, face to face, written and interactive) components of the education program would have the most successful uptake by catering to the preferences of individuals through a variety of activities. The formats showing the highest potential uptake according to survey respondents are online case studies, online lectures / podcasts and face to face small group discussions.

Several incentives that would encourage non-cancer specialist medical practitioners to participate in an education / training program were included in the survey. Results showed that linking the program to a professional development scheme would promote participation through colleges such as the Australian College of Rural and Remote Medicine, the Australian College of General Practice and the Australasian College of Physicians. Additionally, financial incentives including grants to cover the cost of a locum, travel and loss of earnings would make non-cancer specialist medical practitioners more likely to participate.

The identified barriers to cancer education which these incentives would need to overcome include:
• the continual demand for non-cancer specialist medical practitioners to keep updated with many areas of medicine and the difficulty of prioritising these demands
• lack of time
• cost of training
• difficulty getting away from the practice.

Expert workshop
Key outcomes from the workshop were determination of the target audience, content and methods of delivery.

The workshop delegates determined three tiers of need for cancer education by non-cancer specialist medical practitioners (Figure 1). These tiers include those practitioners without interest or need for cancer
education (eg those based in metropolitan areas or within a large regional area with access to a specialist and / or cancer centre), those with a need to have information just in time or with limited interest (eg to treat a presenting patient) and lastly, those wishing to sub-specialise in oncology. It was decided that this program will focus on the middle tier—providing education to those with a “just in time” approach.

![Figure 1](image)

The key topics which could benefit this target audience were brainstormed at the workshop. Outcomes were grouped into the following five modules:

- **Module 1**—Principles, including:
  - A. General principles
  - B. Cancer treatments
  - C. Cancer diagnosis
  - D. Cancer care systems

- **Module 2**—Side effects of cancer treatment including symptom management

- **Module 3**—Oncologic emergencies

- **Module 4**—Psychosocial care

- **Module 5**—Follow up

It was determined that the best way to deliver this content to the target audience was to proceed as an online program. This delivery method allows access to the program in a flexible format including access in rural and remote areas of Australia and the potential to incorporate face to face learning in the future.

**Discussion**

It has been established that non-cancer specialist medical practitioners have a vital role to play in the management of cancer and the integration of cancer services between specialists and non-specialists.
This role requires non-cancer specialist medical practitioners to be skilled in specific areas of cancer care in order to provide quality cancer care, especially when working in rural or remote areas of Australia where access to specialists or a cancer centre may be limited. While a range of cancer education programs already exist, many are limited in content and accessibility.

This program aims to fill a gap in cancer education by providing a comprehensive cancer management program that is designed for non-cancer specialist medical practitioners who have some interest or need cancer care information "just in time" to provide support to a patient with cancer. The five module topics which compose the program are designed to address the cancer education needs of non-cancer specialist medical practitioners as determined by the needs analysis and guided by published curricula.

The national online delivery of these modules is a flexible and accessible format which aims to encourage participation by professionals in rural and remote areas of Australia. The program will be accessible, at no cost, in a complete format, as individual modules or as specific topics within those modules, thus enabling access to relevant information for which users have a specific use or interest. This format design addresses the need for better access to cancer education in rural and remote areas and removes barriers such as time away from work and the cost of training.

Additionally, the program has the potential for attaching incentives for participation such as continuing medical education points awarded through the various medical colleges. Incentives such as continuing education programs will not only encourage uptake, but also assist in program promotion to a variety of audiences. It is hoped that in the future this program will provide a foundation in cancer education which can be built upon to develop a specialised program for those medical practitioners wishing to sub-specialise in oncology through an award of diploma or other formal certificate.

As one of several Cancer Australia projects including the CanNET\textsuperscript{18} state based initiatives and the EdCaN\textsuperscript{19} nursing education program, the Education Program in Cancer Care is contributing toward improved coordination of cancer care and workforce support. Collectively these initiatives will continue to encourage multidisciplinary teamwork and collaboration between the professional networks of cancer specialists and non-cancer specialists throughout Australia.

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**Presenter**

Bogda Koczwara is a medical oncologist and the Head of Department of Medical Oncology at Flinders Medical Centre in Adelaide. Her interests include management of breast cancer, psycho-oncology and supportive care and she is involved in national and international collaborations in these areas. Bogda is the Chairman of the Medical Oncology Group of Australia. She chairs the Australia Asia Pacific Clinical Oncology Research Development, a collaborative of international cancer organisations aimed at improving cancer research capacity in our region and the Cancer Australia Education Program in Cancer Care (EPICC), aimed at improving skills of cancer management for non-cancer specialists.
References