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Regional and rural cancer care

Overview: Regional cancer services in Australia: some evidence of improvement but a long way to go

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It is six years since the Clinical Oncological Society of Australia (COSA) held the first Cancer in the Bush summit in Canberra. This meeting brought together a multidisciplinary group of oncology health professionals and government representatives to discuss rural oncology services. It seemed timely to us to take stock of what has happened since then, by examining some of the key issues that were identified for cancer patients and their carers in regional and rural Australia.

In the Cancer in the Bush report eight issues were identified that needed to be addressed as priorities: These were:

- Transport and the need to remove inequities in the current Isolated Patient Travel and Accommodation Assistance Scheme arrangements.
- Improved patient support, including the provision of breast cancer nurses nationally and a cancer nurse demonstration project.
- Training to be nationally coordinated and funded.
- Workforce planning, including implementation of Australian Health Workforce Advisory Committee recommendations and development workforce planning for disciplines covering the special needs of rural areas.
- Networks and the development of national accreditation, commencing with chemotherapy services and trialling these standards in all disciplines; and the development of a regional cancer demonstration project.
- Epidemiology, in particular study comparative outcomes in survival, access, psychological support and quality of life in rural and urban Australia.
- Reimbursement for item numbers for rural services and tele-oncology.
- Issues of national priority, such as rapidly making specific cancer drugs available on the Pharmaceutical Benefits Scheme and action to be taken on the Radiation Oncology Strategic Plan and the National Cancer Control Initiative utilisation strategy.

We have invited a number of authors who have been involved in aspects of rural cancer service delivery to share their understanding. There are many issues common to both metropolitan and regional areas, centred on management of the various malignancies, the ageing population and special interest groups such as adolescent and young adults and rare cancers. These issues, while not unique to rural Australia, are often exacerbated by the tyranny of distance and small patient numbers, as well as limited resources.

Transport, to date, has not been reviewed or addressed in any systematic way. We are therefore very pleased to note that a Senate inquiry will investigate this issue in 2007 and we look forward to a strong government response to what many regard as a chronic, unresolved problem.

Enhancing educational opportunities is also an area not covered in this forum, however several initiatives have been undertaken or are in development. The National Breast Cancer Centre (NBCC) and the Medical Oncology Group of Australia (MOGA) ran a series of workshops in 15 regional centres around Australia, covering issues around adjuvant therapy of breast2 and bowel cancer.3 Materials from these workshops are available on CD-ROM for use by any centre wishing to hold such workshops from either the NBCC or MOGA. The Federal Government has funded several national projects, currently in late stages of development, that are aimed at up-skilling oncology professionals. The National Education Framework Cancer Nursing project will develop a national framework for cancer nursing, curricula for undergraduate and specialist cancer nursing practice and enhance access to education with online resource materials provided through a consortium of university and hospital partners.4 A web-
Cancer Australia is funding the development of continuing professional education modules for cancer professionals, counsellors and general practitioners, managing the University of Sydney’s Centre for Innovation in Professional Health Education and Research, together with The Cancer Council Australia, COSA, National Breast Cancer Centre and The Royal Australian College of General Practitioners. This initiative will provide a national framework for the delivery of continuing professional development networks including: workplace-based, multi-professional packages, targeting skills in a variety of practice environments (including general practice) and targeted educational resources for practitioner groups in priority areas such as psychosocial assessment and appropriate referral for psychosocial care.

Epidemiological issues have been examined in more detail since the Cancer in the Bush report. In this issue, Katharine Heathcote and Bruce Armstrong review the evidence for differences in outcomes between rural and metropolitan areas. They review data, some of which they have generated, which shows significant disparities between regional and rural Australia compared to metropolitan areas. They investigated what data there was that might explain this and came up with some important possible answers relating to both service delivery differences and the different levels of service received by minority groups, in particular Indigenous Australians.

Their findings, previously published but overviewed and updated here, make a strong case for more attention on improving services in order to improve outcomes. They also support a call for more health services research, specifically targeted at overcoming regional/ rural disparities. Internationally there is paucity of data in this field and Heathcote and Armstrong make the practical suggestion of gathering much more specific data, which would require an investment in hospital-based data registries and epidemiologists, as well as researchers, who examine health service delivery.

Lack of investment in clinical data systems and health services research may be putting the national oncology reform agenda at risk. How can we travel the road to reform if we are driving in the dark without headlights?

David Rodier provides an in-depth analysis of outcomes data for Indigenous Australians, including a relative increase in the rate of less curable malignancies, more advanced stage of presentation, less treatment and higher co-morbidities. This data adds to reports in other chronic diseases suggesting that a large challenge lies ahead and Rodier looks at some pathways to following gaps.

Indeed, both articles point to the importance of enhancing awareness of differences in cultural values and approaches to health and illness. These need to be recognised and incorporated into health management, with ownership given to the communities. Nationally, while governments are making efforts to improve cancer services, there is a lack of specific programs for regional/rural services and other areas of demonstrated need. In particular, the most deserving group in terms of lack of progress are Indigenous and rural communities, where there is a lack of specific programs and better support for oncology professionals. If we are to continue to have health services delivered by both state and federal governments, improved planning at a local level may help overcome some of the jurisdictional tensions.

Another example of novel approaches to improved service delivery is demonstrated in the report on the Single Machine Radiotherapy Trial by Adam Chapman, Tom Shakespeare and Mary Turner. By ensuring adequate linkages with central service providers, the trial was able to demonstrate dramatic increases in local delivery of radiation services; a staggering 63% increase in numbers of patients receiving radiation in one area. This was not at the expense of adequate quality, as a clinical audit showed the single units exceeding hubs in meeting clinical criteria of quality.

These last two projects, the Border Care Coordination Project and the Single Machine Unit Trial, demonstrate the value in investment in regional cancer services. Not only have they addressed gaps in services and improving access, but in doing so have developed innovative systems that lead the nation in quality clinical service and support delivery. There are lessons learnt for services everywhere, not just those in the Bush.

While some progress has been made, not all of the recommendations of the Cancer in the Bush report have been adequately addressed and much remains to be done. The articles in this issue demonstrate some pathways to follow for solutions. There is need for political will and leadership from both state and federal authorities to work in partnership to further improve regional and rural cancer services.

References
Disparities in cancer outcomes in regional and rural Australia

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Abstract

Cancer in Australia is largely a positive story. Despite increased incidence rates, which reflect an ageing population, the corresponding falling age-adjusted death rates and better survival suggest a health system well-equipped for early detection and treatment of cancer. However, there are inequalities in cancer survival among people in rural, regional and remote areas of Australia and disparities in cancer treatment, particularly in respect to colorectal, lung and breast cancer, are probably partly responsible. Other factors closely aligned with cancer risk and poorer survival in regional and remote Australia include: greater levels of socio-economic disadvantage, limited access to specialist cancer treatment services and a greater proportion of Indigenous people who have their cancers diagnosed at more advanced stages and may receive poorer treatment. In the absence of more complete data, the survival pattern we see in remote parts of Australia probably represents the cancer experience of Indigenous Australians. Questions about the ways in which all of these factors collectively explain the survival picture in Australia will remain unanswered, unless we enrich our understanding of the other factors most likely treatment-related, may also be responsible.

Disparities in cancer survival

The current cancer landscape in Australia is one of increasing crude incidence, falling age-adjusted death rates and better survival,1-4 reflecting an ageing population and the likelihood that our health system is performing well for early detection and treatment of cancer.5 However, inequalities in cancer survival among Australians may still persist.

Earlier work assessing cancer survival by categories of remoteness6 in NSW, showed that people living in the most remote parts of NSW were 35% more likely to die as a result of their cancer within five years of diagnosis in 1992-96, than people living in areas with the greatest access to services.7 More up-to-date data from NSW for the period 1994–2000, shows a relative excess risk of death higher than the NSW average, for over half of all rural Area Health Services (AHS),8 compared to about one-quarter of metropolitan and other urban AHS (Table 1).

Regardless of the way in which ‘rurality’ is assessed, cancer survival seems to be worse in areas with moderately to very remote access to services. Stage at diagnosis, apparently more advanced in the less accessible areas,9 does not appear to fully explain the poorer survival pattern for lung, colon, cervix and prostate cancer and cancer in general (Table 2).

Disparities in cancer treatment

Apart from stage, many other factors, such as socio-economic disadvantage and Indigenous identification, are thought to underpin these results. Poorer survival seems to persist after these are accounted for10 suggesting that other factors, most likely treatment-related, may also be responsible.

Table 1. Five-year relative risk of excess all cancer death due to cancer with 95% confidence intervals Area Health Services in NSW 1994–2000 #

<table>
<thead>
<tr>
<th>Area Health Service</th>
<th>Relative Risk of Death</th>
<th>95% CI</th>
<th>Higher than state average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan</td>
<td>0.96 (0.93–1.00)</td>
<td>0.88 (0.86–0.91)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.06 (1.02–1.09)</td>
<td>1.11 (1.06–1.16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.01 (0.98–1.04)</td>
<td>0.91 (0.89–0.94)</td>
<td></td>
</tr>
<tr>
<td>Other urban</td>
<td>0.99 (0.95–1.03)</td>
<td>0.98 (0.95–1.01)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.00 (0.97–1.04)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>0.95 (0.91–0.99)</td>
<td>1.00 (0.97–1.04)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.07 (1.02–1.13)</td>
<td>1.09 (1.02–1.16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.12 (1.06–1.18)</td>
<td>1.04 (0.95–1.12)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.01 (0.97–1.06)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Table 2. Five-year relative excess risk* (95% CI) of death, for all cancers by ARIA category of remoteness in NSW people from 1992 to 1996

<table>
<thead>
<tr>
<th>ARIA category of remoteness</th>
<th>Without stage as a covariate</th>
<th>With stage as a covariate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible</td>
<td>0.99 (0.96–1.02)</td>
<td>1.02 (0.99–1.04)</td>
</tr>
<tr>
<td>Moderately accessible</td>
<td>1.04 (0.98–1.11)</td>
<td>1.02 (0.96–1.09)</td>
</tr>
<tr>
<td>Remote</td>
<td>1.35 (1.20–1.51)</td>
<td>1.25 (1.11–1.41)</td>
</tr>
</tbody>
</table>

P<0.0001 P<0.0003


Table 3. Chemotherapy referral for patients with node positive colon cancer* according to ARIA index of remoteness#

<table>
<thead>
<tr>
<th>ARIA category of remoteness</th>
<th>Proportion of patients referred (n=357)</th>
<th>Proportion of patients who were treated (n=273)</th>
<th>Proportion of those referred who were treated (n=243)</th>
<th>Proportion of those treated who were treated (n=190)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly accessible</td>
<td>62%</td>
<td>47%</td>
<td>42%</td>
<td>32%</td>
</tr>
<tr>
<td>Accessible</td>
<td>74%</td>
<td>57%</td>
<td>46%</td>
<td>34%</td>
</tr>
<tr>
<td>Moderately accessible</td>
<td>67%</td>
<td>50%</td>
<td>67%</td>
<td>42%</td>
</tr>
<tr>
<td>Remote to very remote</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
<td>0%</td>
</tr>
</tbody>
</table>


Table 4. Chemotherapy referral for patients with node positive colon cancer* according to ARIA index of remoteness#

<table>
<thead>
<tr>
<th>ARIA category of remoteness</th>
<th>Proportion of patients referred (n=348)</th>
<th>Proportion of patients who were treated (n=274)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly accessible</td>
<td>76%</td>
<td>58%</td>
</tr>
<tr>
<td>Accessible</td>
<td>71%</td>
<td>63%</td>
</tr>
<tr>
<td>Moderately accessible</td>
<td>60%</td>
<td>59%</td>
</tr>
<tr>
<td>Remote to very remote</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>


Cancer in Australia is largely a positive story. Despite increased incidence rates, which reflect an ageing population, the corresponding falling age-adjusted death rates and better survival suggest a health system well-equipped for early detection and treatment of cancer. However, there are inequalities in cancer survival among people in rural, regional and remote areas of Australia and disparities in cancer treatment, particularly in respect to colorectal, lung and breast cancer, are probably partly responsible. Other factors closely aligned with cancer risk and poorer survival in regional and remote Australia include: greater levels of socio-economic disadvantage, limited access to specialist cancer treatment services and a greater proportion of Indigenous people who have their cancers diagnosed at more advanced stages and may receive poorer treatment. In the absence of more complete data, the survival pattern we see in remote parts of Australia probably represents the cancer experience of Indigenous Australians. Questions about the ways in which all of these factors collectively explain the survival picture in Australia will remain unanswered, unless we enrich our understanding of the other factors most likely treatment-related, may also be responsible.
and less likely to have private health insurance. Patients treated in a private hospital appear to have better survival from colorectal cancer and prostate cancer, compared to those treated in public hospitals. Surgical treatment for breast cancer in a regional public hospital is significantly and independently associated with poorer survival outcomes. However, similar results have not been found elsewhere for colorectal, lung and breast cancer survival, when private health insurance was assessed as a predictor of outcomes.

Possible explanations for the disparities in cancer survival

A number of factors associated with rural and remote place of residence might adversely influence cancer survival. Such factors include high stage at diagnosis, limited access to treatment facilities, socio-economic disadvantage and greater proportions of Indigenous people living in geographically isolated areas, who also suffer social and economic disadvantage.

How certain are we then that poorer survival is directly related to difficulties accessing specialist cancer treatment services? If access to health services were equal to all, irrespective of socio-economic status, race and treatment patterns, would there be comparable outcomes for patients at the same stage of their disease? A review of overseas data suggests that the answer is yes, but the relevance of these results to the Australian population is uncertain.

To the extent that survival in NSW is worse in the most remote part of the state, it is possible that socio-economic disadvantage and Indigenous origin play an independent role. How important then, are these and other factors to cancer survival outcomes?

Socio-economic status

Socioeconomic disadvantage is more common in people living in rural and remote areas and is associated with advanced cancer stage at diagnosis and poorer survival. Exactly how it explains poorer survival is not clear, but it is probably aligned with levels of income and education that in turn, influence cancer knowledge and health behaviour, affordability of care and ability to access the full spectrum of cancer detection and treatment services.

Affordability of healthcare may be important, given the greater proportion of economically disadvantaged people in rural and remote areas who are probably less likely to have private health insurance. Patients treated in a private hospital appear to have better survival from colorectal cancer and prostate cancer, compared to those treated in public hospitals. Surgical treatment for breast cancer in a regional public hospital is significantly and independently associated with poorer survival outcomes. However, similar results have not been found elsewhere for colorectal, lung and breast cancer survival, when private health insurance was assessed as a predictor of outcomes.

Indigenous origin

Given that Indigenous people are more economically disadvantaged than other Australians, it is possible that what we attribute to a socio-economic effect on cancer survival may be more properly attributed to an effect of race. Compared with other Australians, survival rates are worse for colorectal, breast, lung, cervix and non-Hodgkin’s lymphoma in Indigenous Australians. Indigenous people with cancer diagnosed at a later stage and have a lower prospect of surviving their cancer for every stage of disease.

Most of our information about cancer in Indigenous people has come from the Northern Territory and Western Australia, where high proportions live in remote areas. NSW has the highest proportion of Indigenous people and most of them inhabit rural and remote areas. Although NSW survival data has not been analysed according to Indigenous status, the combined findings of worse survival in the most remote areas of NSW and more advanced stage of diagnosed in less accessible areas of the state, suggest that Indigenous people could contribute substantially to the survival disadvantage of people in remote areas of the state.

Stage of disease

Stage of cancer at diagnosis, an important prognostic indicator, is probably influenced by socioeconomic status; the more socially and economically disadvantaged a population is, the greater the likelihood of being diagnosed with localised disease. Studies of Indigenous Australians so far, have not found alternative explanations for diagnosis of their cancers at a relatively more advanced stage. The possible explanatory variables considered have included age, cancer type, sex, remote residence, marital status, tobacco or alcohol use, chronic disease, access to private health care or time between onset of symptoms and diagnosis.

The possibility of biological differences between the tumours of Indigenous and non-Indigenous people has also been considered. Some studies have found differences in tumour biology between Indigenous and non-Indigenous Australians.

Treatment disparities

On the basis of the available evidence, it appears, that there are cancer treatment differences for lung, colorectal and breast cancer that would be likely to adversely affect survival in rural, regional and remote areas.

The cancer pattern in Indigenous people suggests that they may receive poorer treatment. For reasons that are most likely related to regular screening for chronic respiratory disease and tuberculosis, Indigenous people with lung cancer in the Northern Territory are more likely to be diagnosed with localised disease than non-Indigenous people, but are more likely to die from it. Indigenous people are less likely to get breast cancer than non-Indigenous women, but are more likely to die from it. Treatment disparities however, do not appear to fully explain the poorer survival in Indigenous people, nor do factors such as stage of diagnosis, co-morbidity, remoteness or socio-economic status. Significantly, they appear to be less likely to have treatment for cancer and when offered curative treatment, are less likely to accept and complete it.

Language and cultural factors can influence their ability to understand the full implications of a cancer diagnosis and the need to complete treatment.

Conclusions

In all probability, cancer survival continues to be worse in rural, regional and remote areas for Indigenous Australians. How, for example, does the health system respond to an Indigenous person’s needs and to what extent do language and cultural beliefs about cancer directly influence their ability to understand and treat their disease? A recent review of cancer surveillance efforts would go some way in providing an answer, as well as assisting health services to further investigate areas where the greatest disparities lie. In addition, more focused research extending beyond the realms of clinical care is required, to better understand the cancer survival story for socio-economically disadvantaged and Indigenous people.

Enhancing and better-coordinating cancer surveillance efforts would go some way in providing an answer, as well as assisting health services to further investigate areas where the greatest disparities lie. In addition, more focused research extending beyond the realms of clinical care is required, to better understand the cancer survival story for socio-economically disadvantaged and Indigenous people. How, for example, does the health system respond to an Indigenous person’s needs and to what extent do language and cultural beliefs about cancer directly influence their ability to understand and treat their disease? A recent review of cancer surveillance efforts would go some way in providing an answer, as well as assisting health services to further investigate areas where the greatest disparities lie. In addition, more focused research extending beyond the realms of clinical care is required, to better understand the cancer survival story for socio-economically disadvantaged and Indigenous people.

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Language and cultural factors can influence their ability to understand the full implications of a cancer diagnosis and the need to complete treatment.

Investigating the reasons for disparities in cancer treatment will require input from people in many disciplines such as epidemiology, social and behavioural science, health administration and information technology. In the end, a structured and collaborative approach, addressing specific questions, will help attain the common goal of equity in cancer survival outcomes for all.

References


IMPROVING ACCESS TO RADIOTherapy FOR REGIONAL CANCER PATIENTS – THE NATIONAL RADIOTherapy SINGLE MACHINE UNIT TRIAL

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Abstract
The National Radiotherapy Single Machine Unit Trial was a joint Australian and Victorian Government initiative to establish single machine radiotherapy service in regional areas. The trial arose in response to the need for decentralised radiotherapy services to improve access to treatment for rural patients. Key aims of the trial included assessing if single machine radiotherapy services could successfully be established and operated in regional areas, what impact they would have on patient access and radiotherapy utilisation and whether they could provide radiotherapy of equivalent safety and quality. In addition, the model comprised quality assurance guidelines and strong professional linkages between the hub and spoke staff, to facilitate appropriate treatment and referral practices for the types of cancers suitable for treatment at the SMUs.

Outcomes
Access
In Victoria in 2001 there were 10,918 courses of radiotherapy provided by 16 public and seven private linear accelerators, 10,255 of which were for notifiable cancers. Of the total courses, 20% were provided to residents of regional Victoria. In the first full year of operations of the SMUs at Bendigo and Ballarat, both services provided 374 courses. The total number of courses of radiotherapy provided to residents of regional Victoria increased from 2856 in 2001 to 3070 in 2002-03. Conversely, the number of courses provided to residents of metropolitan Melbourne decreased slightly and overall numbers of patients treated with radiotherapy in Victoria increased by 7.5% (from 3070 in 2002-03 to 3313 in 2003-04). The second year of operations (2003-04) showed both services significantly increasing activity, with the number of regional patients receiving radiotherapy increasing to 76% compared to 2002-03. Compared to 2001, an additional 367 regional patients received radiotherapy in 2003-04.

Self-sufficiency
Self-sufficiency relates to the number of cancer patients from a particular region who received their treatment in that region. Prior to the SMUs commencing, all patients receiving radiotherapy from the SMU regions left their region to receive treatment. In contrast, in 2002-03, 71% of patients from the Ballarat catchment received radiotherapy locally, increasing to 77% in 2003-04. In the Bendigo region, self-sufficiency for radiotherapy increased from 47% in 2002-03 to 57% in 2003-04. A further 5% increase in self-sufficiency in the Bendigo region accounts for some of the difference.
between the proportions. Another factor is that the
Burnov service reached its two years of commencement, with waiting lists increasing as a result.
Quality
While advances in technology may have rendered some of the poorer results from earlier studies of single
machine radiotherapy services redundant,11 services still face a number of potential problems. These include the
absence of back-up services between the SMUs (in the event of machine breakdown), the potential difficulty in attracting
and maintaining staff at smaller facilities, and more highlighted opportunities for practitioners to discuss cases with
colleagues.

The establishment of the SMUs in a hub and spoke arrangement with larger metropolitan radiotherapy services
may help to overcome or ameliorate these potential problems and maintain an appropriate quality of service. In addition to providing a back-up machine, the hub facility supports the SMU through providing a forum for the discussion of cases, relief staff and clinical and quality protocols to help ensure an effective high quality service.

A formal clinical audit of the quality of radio-therapeutic management was conducted as part of the SMU evaluation. Randomly selected patients from two hub and two spoke sites were audited using the validated 11
evaluation. Randomly selected patients from two hub and spoke sites were audited using the validated 11
audit as research instruments to audit the SMUs and the hub sites, the only instances of sub-optimal management occurred in the hub sites.

BROAD IMPLICATIONS
The evaluation of the National Radiotherapy SMU Trial has clearly shown that radiotherapy services can be successfully provided at single machine facilities under a hub-spoke model. Each of the broad objectives of the trial were met, with significant improvements in access and radiotherapy utilisation for residents of regions adjacent to the SMUs, and quality outcomes being the equivalent of and in some instances bettering those of the hub services. However, there are a number of factors to consider before developing this model in other areas.

Victoria’s regional population is highly dispersed, with large regional centres and smaller towns located throughout the state. This is unlike many other states, which have substantial unpopulated areas between regional centres. One reason for this is Victoria’s smaller size compared to other states, with few major regional towns more than a three hour drive from Melbourne. A formal clinical audit of the quality of radiotherapeutic services to district general hospitals report of a working party of the Royal College of Radiologists. Clin Oncol (R Coll Radiol). 1991. 3(1): 41-5.

The outcomes of the National SMU Trial demonstrate the degree of unmet demand for radiotherapy services in regional areas. Prior to commencement of the SMUs, uptake of radiotherapy for regional cancer patients may have been low due to personal decisions based on time and costs associated with accessing treatment, or insufficient knowledge of this modality among referring clinicians in regional areas. A combination of both is likely, and the widespread regional media and community interest in the SMUs would have gone a long way to meeting the SMU’s statement that “oncologists in general, and radiation oncologists in particular, have a role in ensuring that information is widely available, to assist referring practitioners in determining whether radiotherapy is an optimal course of treatment”. Getting this message across from a radiotherapy service. These broader impacts require consideration in the development of regional radiotherapy services, not least in the terms of the workforce implications.

The quality of care provided by adequately funded SMUs is at least equivalent to that provided in larger metropolitan centres in Victoria. Indeed, appropriateness of care also compares favourably to audits of Australian-staffed radiotherapy departments outside Victoria.11,13 This was not a surprising finding, as the levels of staffing, quality of staff training and quality of equipment and processes were the same as in larger centres (and in certain instances better). With modern radiotherapy equipment and appropriate funding, the applicability of the findings of the old American Patterns of Care studies has been superseded. Indeed, older established centres may learn some lessons from the newer SMUs, particularly in terms of applying modern processes and equipment in order to improve patient care.

The commencement of the SMUs led to substantial increases in demand for other cancer services within the local regions. This included increases in allied health referrals and significant increases in demand for chemotherapy. In addition, as patients from further afield were referred for radiotherapy, suitable patient and carer accommodation services was required. In most instances, pre-existing patient accommodation will not be sufficient to meet the additional demand from a radiotherapy service. These broader impacts require consideration in the development of regional radiotherapy services, not least in the terms of the workforce implications.

Telehealth includes diagnoses, consultations and treatment. The ability to practise telehealth is constantly being simplified by new technology. The telephone system had some useful applications, however the addition of vision with videophones increased the social dimension of the interaction. Linking centres with digital lines enhanced the transfer of data, but carried the expense of installation and there are limits to the accessibility, especially in remote areas. Now, fast broadband technology individuals can videoconference using the internet or mobile phones. This should hasten the application of videoconferencing to telehealth. One response to the increasing complexity of multimodality cancer diagnoses, consultations and treatment, as well as education and transfer of medical data”. The ability to practise telemedicine is constantly being simplified by new technology. The analogue telephone system had some useful applications, however the addition of vision with videophones increased the social dimension of the interaction. Transmitting images clearly stressed the analogue system, as occurred when the internet was accessed using phone lines. Linking centres with digital lines enhances the transfer of data, but carries the expense of installation and there are limits to the accessibility to digital lines, especially in remote areas.

Now, fast broadband technology is being used for telemedicine, providing widespread access. There are fewer problems with compatibility of equipment; cheap webcams and free provision of videoconferencing software enable individuals to videoconference...
Cancer management is becoming increasingly complex with multimodality treatment and supportive care. One response to this is the formation of multidisciplinary teams of nurses and practitioners, from each treatment modality, palliative care and allied healthcare. Team meetings are also excellent continuing education opportunities. The challenge in rural and remote areas is to assemble such teams so that there is access to specialist information where there are no specialists in residence. There is also the need to try to achieve equity of outcomes by facilitating access for diagnosis and treatment. Palliative care is the greater than a third of Australians who live outside major cities, with 3% living in remote or very remote areas.11 Some of this can be achieved using telehealth systems.

Analogue telephone system

The analogue telephone system has some useful applications. It has long been used for counselling and is particularly useful for patients who are confined to home. The Cancer Councils in each state and territory provide telephone helplines for patients, their carers and the general public and reviews of these have found that they are widely used for emotional support, however the benefits of helplines have not been fully evaluated.12

Studies overseas have shown that although patients have noted benefits from telephone counselling, it has not been easy to show statistically, significant benefits between telephone counselling and control groups.13 This is because centres offering such counselling, usually have well developed support programs which make it difficult to evaluate the impact of new technology for delivering them.13 Other trials have detected only small differences because all patients were counselled rather than those with a high risk of distress or depression.14 It is not certain feasible to conduct psychotherapy for patients with cancer by phone.15 Group interventions in oncology training of remote psycho-oncology psychologists and social workers. Twenty-two of 26 staff who had been provided with video-conferencing and recorded support in rural NSW participated in a trial of being professionally mentored and educated. They participated in group education and clinical discussion in groups of three to five on topics voted for by the participants, supplemented by individual phone supervision. There was a significant difference in pre- and post-testing in self-reported confidence in dealing with areas such as assessing and treating pain, body image issues, and the art of dying, which was covered by the educational component of the course. Eighty-two per cent of the participants were “very” or “extremely” satisfied with the sessions and 77% were interested in ongoing participation, if offered.16

A further use for videoconferencing has been demonstrated in women with breast cancer in rural areas, who in most situations do not have access to professionally led support groups. Twenty-seven such women in the Intermountain region of north-eastern California participated in an eight session support group under the leadership of an oncology social worker, who joined them by teleconference.17 As with the other examples, this proved feasible and was acceptable to the participants. Comparing tests prior to and after the group sessions, showed significant decreases in depression (p<0.02) and post-traumatic stress disorder symptoms (p<0.05) as a result of the group support. Teleconferencing allowed these women to avail themselves from a useful service despite the leadership expertise not being available in their community.

Telemedicine in diagnosis and treatment

When we first conducted multidisciplinary meetings by telemedicine Xavier et al. and Darwin, they incorporated a demonstration of the pathology and radiology to the team.18 This provided a second opinion to the remote team who had provided the information. One lesson learned was that videoconferencing would be more easily embraced if it did not try to alter the practices of the participants. If pathologists, for example, did not wish to give instant opinions then the pathology slides would not be sent in advance of the consultation. Initially we had the slides mailed down, but with improved technology the image was considered sufficient to be able to provide an opinion and the slides were later sent. Telemedicine and telepathology trials have been reported as successful19 and telepathology and telemedicine has been used between major specialists hospitals and rural hospitals.20

Sending pathology images by the internet is being used particularly in remote and emergency situations at Cornell University.21 This can be done in real time with remote control of the microscope stage. Likewise, radiology images transmitted digitally and used in a multidisciplinary conference.22 There is also the potential for remote reporting of scans and X-rays such has been done in remote areas by satellite.23 An extension of this is treatment in remote radiotherapy planning, which can be achieved by transmitting a remote CT scanning image to a planning centre, possibly in a tertiary centre, thereby making the best use of the planning expertise.

We have employed remote planning as part of the interaction between Australian centres (which do not have a radiotherapy unit) and although patients are still required to travel to receive radiotherapy, the time and expense of doing so is reduced if planning can be done in advance. In a further extension of the concept, a Norwegian study linking two remote planning systems, explored the feasibility of remote planning supervision and second opinions. Remote simulation was limited by software capabilities, although remote supervisory systems helped the investigators to be able to calculate the patient load per annum which would make such a system economically viable.24 Furthermore, even in cancer surgery, robotic surgical equipment such as the Da Vinci equipment for prostate surgery, linked by telemedicine, could feasibly make remote surgery possible. A project exploring telemonitoring of remote surgical practice for brain tumours in Canada has been reported between a large academic center (Halifax, Nova Scotia) and a community-based centre (Saint John, New Brunswick) located 400km away.25 The initial experience found it feasible, reliable and safe, with the potential to extend neurosurgical expertise to more rural and remote centres. Also in Canada in 2003, the world’s first telerobotic surgical service was established between Josephine Healthcare Hamilton, a teaching hospital affiliated with McMaster University and North Bay community Hospital 40km away.26 Procedures included laparoscopic colonic resections, again demonstrating the potential exists for exporting surgical expertise from major centres.

Medicolegal issues

The medicolegal issues are not unique, but shared by other medical consultations and distant communications.27 Studies have reported, however, that the increase in technological developments has led to community concerns about the security of health information.28 There are now legal issues about who is responsible for being informed about their case being discussed in a multidisciplinary meeting and the need for privacy. Telemedicine adds the difficulty that there may be individuals who are off camera unknown to the patient at one end of the link. The consultation should be secure and any record kept of it should be private. The whole of the multidisciplinary team may be held responsible for the opinion of the team. There may also be potential medico-legal issues if a telemedicine consultation crosses state or national boundaries.

In the Adelaide to Darwin link, these considerations were minimised by the consultation occurring between doctors who were registered in both states and the patient in his own home. The consultation came direct from the clinic to the patient. In our evaluation, several
patients would like to have seen a recording of the videoconference.\textsuperscript{12} A further potential issue is that if

there is a link available to remote experts to improve

patient care, could the local practitioner be liable for not

using it?

Evaluation

There is no standard evaluation of teleoncology or globally agreed parameters for evaluation. Often patient numbers are relatively small because of the small populations in remote centres which preclude randomised comparisons. Most studies have focused on patient and clinician satisfaction with the consultation. As recorded above, where interventions have measurable health outcomes, these have been measured. There has been little prospective evaluation of the economic impact of a telemedicine consultation.\textsuperscript{14}

Most retrospective evaluations compare the costs of the telemedicine, with the costs of travel for a face-to-face consultation and offset the cost of the equipment and its operation against that. Health outcomes should be evaluated unless it is assumed they will be the same for telemedicine as for a face-to-face consultation. Certainly the equipment is becoming much cheaper as the technology evolves. Patient preferences will be important since remote patients may be prepared to pay more for the convenience of telemedicine, despite equal health outcomes.

Conclusions

Telehealth is one of the solutions to the problems of equity of access to specialist cancer consultations for rural and remote patients. With rapid advances in communication technology, which has seen us progress from analogue telephone lines to broadband internet, videoconferencing is now more accessible to the whole population.

Increasingly, cancer treatment is multimodal and requires management decisions to be made by multidisciplinary teams. These can be created for rural and remote patients by supplementing the clinicians who are geographically available, with experts from distant urban centres using videoconferencing. Moreover, counselling and psychological support can be provided using this technology. In turn, remote psycho-oncology staff can be supported by their urban peers.

Extrapolating from what is already possible, remote diagnosis, treatment planning for radiotherapy and even surgery will extend the reach of expert specialty care to include rural areas.

CANCER CARE ACROSS BORDERS: THE POTENTIAL FOR EXCELLENCE WHEN COLLABORATION IS GENUINE

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Abstract

The Border Cancer Collaboration is a coordination of care model developed from the documented success of the Border Cancer Care Coordination project.\textsuperscript{1} The collaboration is designed to overcome the difficulties of providing equitable services for cancer patients, their carers and families when federal, state, public and private, acute and community health borders exist. It provides a model of potential excellence in cancer care for regional Australia.

Cancer care in north-east Victoria and south-west NSW is complicated by the jurisdictional issues of borders in healthcare: two state health services requiring compliance with respective cancer frameworks,\textsuperscript{2,3} and cancer specialists who are for the most part private practitioners providing services in two public hospitals and two private hospitals. General Practice is Commonwealth, supported through the Border Division of General Practitioners, which services both Albury (NSW) and Wodonga (Victoria) practices.

The difficulties of these jurisdictional issues has led to inequities in the delivery of cancer and cancer support services to residents based on where they lived, rather than their needs.

Profile of cancer services in the region

The twin cities of Albury and Wodonga support a municipal population of 83,000\textsuperscript{4} people within a regional population of 150,000. Provision of chemotherapy and radiation oncology services is to an even larger catchment, estimated at 200,000. Up until 1998 the area had been serviced by cancer outreach services from Melbourne, but now has five resident oncologists, a clinical trials unit and a two machine radiotherapy service, treating some 750 local patients per year.\textsuperscript{5} While the clinical services are impressive and substantial, what had been lacking was the coordination of care for cancer patients, their carers and families, despite our understanding that this was essential to best outcomes\textsuperscript{6} and an acknowledged dearth of psychosocial support for these people.

From 1999-2002 Albury and Wodonga health providers participated in the Victorian Breast Services Enhancement Program (BSEP), which demonstrated that coordination of care and multidisciplinary care could work across state, public and private, acute and community health boundaries.\textsuperscript{7} The local BSEP stakeholders had a vision of the ‘best of breast’ being available to all cancer patients – that the principles underpinning breast cancer support were applicable to all cancers.\textsuperscript{8} Between 2003-06 these principles were built on locally through the Commonwealth-funded Border Cancer Care Coordination Project (BCCCP). This project demonstrated the value of cancer care coordination positions, the benefits of multidisciplinary team meetings and psychosocial support. The importance of accurate local data and the capacity of building the cancer service sector through a coordinated, planned approach to service delivery and support.\textsuperscript{9}

The BCCCP had been overseen by a national external advisory group of cancer specialists, which had given it credence and ensured congruity with the national, NSW and Victorian frameworks for cancer services improvement.

The external group had provided input and advice to the local steering committee, which initially comprised the key stakeholder organisations from the BSEP. The project was externally reviewed by Professor Michael Barton\textsuperscript{8} and was found to have successfully improved patient care and experience, established care coordination in a regional centre, successfully trialled non-nursing cancer care coordinators and modelled cancer care across borders.

The action research nature of the BCCCP had allowed the steering committee to deliver services, while at the same time evaluating their efficacy and refining their processes. At the end of the project phase, the level of cancer services in Albury and Wodonga had increased substantially and sustainably through the investment of resources (staff positions) in the region by both the NSW and Victorian governments, under the principles of their respective cancer frameworks. From NSW, the positions are funded by the Cancer Institute NSW and implemented through the Greater Southern Area Health Service (GSAHS). In Victoria, the positions are funded through the Department of Human Services (DHS) Victoria via the Hume Regional Improvement for Cancer Services (RISCS). Locally, additional resources are contributed by Wodonga Regional Health Service and Upper Hume Community Health Services.

A very important contribution is through the unpaid participation in multidisciplinary care and multidisciplinary team meetings by surgeons and cancer specialists. The private hospital sector contributes infrastructure support for meetings and multidisciplinary

References

7. Sandgren AK, McCaul KD. Short-term effects of telephone therapy for
team meetings.

A key issue for all parties is the need to be able to provide local solutions, while still complying with funding body principles and policies. For example, the NSW Cancer Framework mandates that cancer care coordinators must be nursing positions with direct patient contact, while the Victorian direction does not mandate nursing. But views the cancer care coordinator as a position working to develop system capacity, rather than having direct patient contact. Locally, the BCCCP has demonstrated that care coordination could be effective as a non-nursing position, as long as nursing support was available and had also shown that direct patient contact was essential for the role, while still working on systemic development. The success of local work in the context of broader conflicting models, depends on the adoption of evidence-based principles and practice of successful partnerships.

Why is Albury Wodonga cross border cancer care working?

Once the project funding ceased, the steering committee reviewed terms of references and membership in order to facilitate sustainable collaboration.

Working in a regional cross-border setting, all health professionals had a shared understanding of the barriers that borders bring to effective healthcare, and had a true desire to see “good things” resulting from working together for the benefit of cancer patients. We had demonstrated that this could be achieved through our BSEP and BCCCP projects. What was now required was to ensure mainstream, long-term delivery under the models we knew worked for our region.

Characteristics of effective collaboration

The steering committee members are the decision makers of their respective organisations – CEOs, chairpersons or regional managers – each able to bring resources to the table and to make decisions. They bring individual excellence, defined by Kanter as having individual strength and something to contribute to the partnership.

The steering committee, through terms of reference and its formal status, has clear responsibilities and decision making processes. This extends beyond the particular people who formed it and cannot be broken on a whim.

The committee has created a shared understanding of the aims of the alliance to provide patient-centred, multidisciplinary coordinated cancer care to our local communities. The literature shows that tailoring the mission and goals to fit the goals of individual member organisations, has been found to increase the chance that members will support the partnership, contribute resources and remain active participants over time.

In the Border collaboration, all members have to acknowledge the constraints and reporting demand made of the respective members by their funding or political masters. Internal memorandums of understandings and contracts have been developed that allow each partner to be able to fulfil their own individual organisational requirements, while still focusing on the larger picture.

The steering committee has an established history of trust and success (through the BSEP and BCCCP projects) and this has made it easier to coordinate work and divide responsibility. The partners have invested in each other with long-term commitments of financial and other resources to the relationship.

Synergy and transformational leadership

From the inception of the BSEP project the steering committee has achieved synergy the power to combine the perspectives, resources and skills of a group of people and organisations resulting in creativity, comprehensive thinking, practical thinking and ‘transformatick’ thinking.

All of the steering committee has had to embrace the mantle of transformational leadership. Transformational leadership produces change through its emphasis on new values and a vision of the future which transcends the status quo. Such leadership inspires all to put aside their own interests for a collective team; this is what the Border leaders do.

The collaboration now has the opportunity to contribute to market forces through public policy, playing a critical role in fostering competition. For example, it is possible that clinicians who do not participate in the multidisciplinary team decisions regarding patient care are missing market leverage and promotional opportunities and could be assessed over time as less attractive to patients. The Border group has attained a high level of domain consensus – the degree to which members agree and accept each others claims regarding products, services and clientele.

Where to now?

Locally, the collaboration had been able to promote their ‘quick wins’ and this, coupled with recurrent positive funding by the NSW and Victorian governments, has resulted in a service platform which has been able to attract philanthropic and private investment. The collaboration now employs a considerable mixed workforce of professionals supporting cancer care coordination for the region (Table 1).

The collaboration now oversees monthly Albury Wodonga multidisciplinary team meetings for breast, colo-rectal, haematology and urology cancers, and a general tumour stream meeting in the city of Wangaratta. Through the Commonwealth research projects, the collaboration is also developing mentoring links towards multidisciplinary care in head and neck and paediatric cancers.

However, the differing politico-administrative culture of Victoria and NSW in the face of central policy dictates, creates barriers in mounting strategies relevant to local communities.

The only components of the Border model that are not now recurrently funded are the management and infrastructure costs of keeping the collaborative model intact. This is the real risk of the collaboration. Without the management component to manage staff as an integrated team, to negotiate and manage the complex contracts and memorandums of understanding necessary in complying with various state and Commonwealth demands, the collaboration will have no future.

The Border Cancer Collaboration has overcome the classically renowned and long standing view that healthcare is ‘a strife of interests’. The steering committee and staff have achieved this by changing organisational culture in positive ways. The collaboration has built relationships, cooperated over the care of cancer patients and negotiated constructively when difficulties arise.

The evidence seems to be saying that changing the structure of the financial and delivery aspects of a health system may be a precondition to viable change, but of far more importance is the need to find, promote and nurture shared values and practices. It involves building relationships working collaboratively, cooperating over the care of patients and negotiating constructively when differences arise.

The Border Cancer Collaboration has been able to develop horizontal and vertical integration, terms derived from economic theory, in patient care. Horizontal integration is defined as the integration of activities which occur at the same level in the production process.

<table>
<thead>
<tr>
<th>Position</th>
<th>Full-time equivalent</th>
<th>Funding source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer care coordinator - general</td>
<td>1</td>
<td>Cancer Institute NSW GSAHS</td>
</tr>
<tr>
<td>Continuity of care coordinator</td>
<td>0.8</td>
<td>DHS Victoria – Hume RICS</td>
</tr>
<tr>
<td>Cancer care coordinator</td>
<td>0.8</td>
<td>Wodonga Regional Health Service</td>
</tr>
<tr>
<td>Oncology social worker</td>
<td>0.6</td>
<td>Cancer Institute NSW GSAHS</td>
</tr>
<tr>
<td>Oncology dietetic support</td>
<td>0.2</td>
<td>Cancer Institute NSW GSAHS</td>
</tr>
<tr>
<td>Loss and grief counsellor</td>
<td>0.4</td>
<td>Upper Hume Community Health</td>
</tr>
<tr>
<td>Multidisciplinary team meetings administrator</td>
<td>0.6</td>
<td>Cancer Institute NSW GSAHS</td>
</tr>
<tr>
<td>Multidisciplinary team meetings administrator</td>
<td>0.6</td>
<td>Hume RICS</td>
</tr>
<tr>
<td>Website development and management</td>
<td>0.4</td>
<td>Cancer Institute NSW GSAHS</td>
</tr>
<tr>
<td>McGrath breast care nurse</td>
<td>1.0</td>
<td>McGrath Foundation</td>
</tr>
<tr>
<td>Leukaemia support services coordinator</td>
<td>1.0</td>
<td>Leukaemia Foundation</td>
</tr>
<tr>
<td>Manager mentoring research projects</td>
<td>1.8</td>
<td>Department of Health and Ageing</td>
</tr>
</tbody>
</table>
In the border collaboration, the community health centre for example, employs the nurse cancer coordinator integrating a new product (cancer nurse coordination) into its more traditional social services product suite. The collaboration has also achieved integration vertically within the acute sector – integrating surgical and oncology treatments – integrate with the community sector – psychosocial supports, general practice and primary care – to provide seamless continuity of care.

Towards a centre of excellence

Despite the governance arrangements of Australia, many people would agree it is high time we resolved the politico-structural impediments to providing healthcare in an integrated way.1 The multi-tiered nature of the Australian health system, particularly the discrepancies in state-to-state, state-to-federal and public-to-private systems, can create artificial and often frustrating and inefficient ways of working in cancer care. These can be overcome by health services seeking new, more cost effective configurations of services across specialty and organisational structures.2

As the report says: “We should move away from the mantra that country care should be the same as city care – we need innovative models of care that suit residents of rural Australia and deliver for them, equatable services”.3

The evidence, considering rural inequalities in cancer care and outcomes, strongly suggests that we need to develop well-defined patient pathways that each person with cancer can follow to receive timely expert care. Such pathways necessitate effective interaction between the many services involved in cancer care, innovative information systems and cooperation between government agencies.

The Border Cancer Collaboration is an innovative and flexible model that is integrating cancer services for our rural communities. It has demonstrated efficient navigable pathways for patients, their families and carers, and effective interaction between providers in multidisciplinary care.

It is now time for policy makers at all levels to acknowledge the success of the model and allow the collaboration to develop its full potential as a regional centre of excellence in cancer care. This will involve allowing the assessment of the risk of doing things differently and the resources to allow those risks to be managed.

References


Indigenous people comprise about 2.4% of the Australian population and 29% of the population of the Northern Territory (NT). Many experience significant socio-economic deprivation and cultural marginalisation, which impacts negatively on their health. Commonly encountered health risk factors include tobacco smoking, excess body weight, misuse of alcohol and exposure to violence.1 For many Indigenous people, barriers to good health include poor access to culturally acceptable health services.2

Health conditions more common in Indigenous than non-Indigenous people include diabetes, renal disease, injuries, respiratory organs and infectious diseases.3 While these health problems have been reported widely, the risk of cancer in Indigenous Australians has been less well documented.

The cancer incidence data described in this report comes predominantly from a collaborative project undertaken to estimate the cancer incidence in Indigenous and non-Indigenous South Australians during 1977-2001.

Collaborating partners included members of the South Australian Department of Health Epidemiology Branch and Aboriginal Health Division, the Aboriginal Health Council of South Australia and The Cancer Council South Australia. The purpose of the project was to estimate the incidence of all cancers combined, and of individual cancer types, as a basis for broader consultation with Indigenous groups and for the planning of cancer services.

Reference also is made to incidence data published for the NT and Queensland, and4 to mortality data from Queensland, South Australia (SA), Western Australia (WA), the NT and New South Wales (NSW).5

Cancer incidence has been poorly defined in Indigenous Australians due to difficulties faced by cancer registries in identifying Indigenous status. The South Australian Department of Health Epidemiology Branch implemented a special project for the diagnostic period from 1988 to 1994, in which extensive attempts were made to validate the Indigenous status of cancer patients.5 The State Cancer Registry collaborated in that study with...
Epidemiological methods

Relativities of incidence (all cancer types combined) between Indigenous and non-Indigenous South Australians, as determined in the 1988-1994 project, were generalised to the broader 1977-2001 period, with apportioning by cancer type according to the distribution of cancer types by age and sex for that broader period.

The data were standardised by age and sex to the world population, as employed by the International Agency for Research on Cancer, to facilitate international comparison. The direct method of standardisation was used for the international data and for all cancer types combined in SA, whereas the indirect method was substituted for individual cancer types in SA, due to small numbers of these cancers in the Indigenous population, in order to gain greater statistical precision. It was assumed in this context that incidence differences by Indigenous status were consistent by age.

Use was made of 95% confidence limits when identifying likely non-random differences between incidence rates for Indigenous and non-Indigenous populations. Where differences were indicated, risk factors were investigated using the international literature. Members of the Department of Health Aboriginal Health Division and the Aboriginal Health Council of South Australia then considered these risk factors to determine the ones potentially most applicable to Indigenous Australians.

Cancer incidence

All cancer types

Indigenous Australians presented a 45% higher cancer death rate than other Australians of equivalent age, with elevations of a similar magnitude applying to males and females, at least in SA, WA, NT and Queensland. The age standardised ratio of Indigenous to non-Indigenous cancer deaths (95% confidence limits) for males was 1.45 (1.34, 1.57), females 1.46 (1.33, 1.58) and for both 1.43 (1.37, 1.54). More recently, published NSW data has pointed to a larger 69% elevation.

While cancer death rates are elevated in Indigenous Australians, incidence data from the NT, SA and Queensland do not show an elevation. While the SA incidence was relatively high in an international context, both for Indigenous and non-Indigenous people (Figure 1), a 5% lower incidence was suggested for Indigenous residents. Since confidence intervals overlapped, it seems that this difference could well have occurred by chance.

The question arises as to why the Indigenous population has a higher cancer death rate when incidence rates are not elevated. Is it due to differences in type of cancer? Do Indigenous people get more lethal types or are their cancers found later, with reduced prospects for cure? Or are other factors involved?

In fact, the present data show that Indigenous people get more lung, oral-pharyngeal-oesophageal, pancreatic, stomach, liver and gallbladder cancers, and cancers of unspecified organ origin, where prospects for survival are relatively low. In addition, Indigenous Australians have an elevated risk of cervical cancer.

By comparison, the present data show that Indigenous people get fewer cancers of the skin (melanoma), lip, prostate, female breast and bowel, where prospects for survival are relatively high. In addition, Indigenous Australians appear to be at lower risk of some haematological cancers.

Cancers more common in Indigenous people

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Ratio Indigenous to Non-Indigenous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung cancer</td>
<td>48% higher incidence</td>
</tr>
<tr>
<td>Intra-oral, pharyngeal and oesophageal cancers</td>
<td>Elevated incidence</td>
</tr>
<tr>
<td>Pancreatic cancer</td>
<td></td>
</tr>
<tr>
<td>Stomach cancer</td>
<td></td>
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</table>

This cancer had an incidence about twice as high in Indigenous as other South Australians (Figure 2). A corresponding elevation was also seen in the Indigenous population of the NT. Again, this underscores the importance of tobacco control. Excess alcohol consumption is another risk factor for these cancers, plus diets low in fruit and vegetables.

Pancreatic cancer

The incidence was approximately twice as high in Indigenous as other South Australians (Figure 2), with corresponding elevations presenting in NT incidence and NSW mortality data. Again, tobacco smoking is associated with this cancer, and possibly poor diet. Excess alcohol consumption is another risk factor for these cancers, plus diets low in fruit and vegetables.

Figure 1: Estimated annual age-standardised (world population) cancer incidence per 100,000 (95% confidence limits) in South Australia by race, and in comparison regions of the world

Figure 2: Age-standardised (world population) cancer incidence per 100,000 (95% confidence limits) by race in South Australia: 1977-2001 estimated annual rates

in Indigenous as other South Australians (Figure 2). Diets high in salt and low in fruit and vegetables may predispose to these cancers.\textsuperscript{[6,7]} Incidence figures for Indigenous people are variable around Australia,\textsuperscript{[6]} which may reflect variations in Helicobacter pylori infection.

Liver cancer

A marked elevation in incidence was evident in the Indigenous population of SA, at about seven times that of other South Australians (Figure 2). A greater excess was suggested in the NT.\textsuperscript{[1]} Apart from excess alcohol intake, risk factors include hepatitis B and C infection, and tobacco smoking.\textsuperscript{[8,9]} Hepatitis B vaccination has been used to combat this cancer in some populations.\textsuperscript{[10,11]}

Gallbladder cancer

The incidence of this cancer was about four times as high in Indigenous as other South Australians (Figure 2). The reasons are not clear, although there may have been a contribution from obesity and an elevated prevalence of gallstones and chronic inflammation.\textsuperscript{[12]–14]} Multiple pregnancies have also been raised as a possible risk factor in some studies.\textsuperscript{[15]}

Cervical cancer

A four-fold elevation in incidence applied to Indigenous women when compared with non-Indigenous South Australians (Figure 2). Corresponding elevations were evident for the Indigenous population.\textsuperscript{[3,4]} An incidence in Indigenous people about 55% lower than for the non-Indigenous population was evident (Figure 3). Lower rates were also seen for Indigenous residents of the NT and Queensland.\textsuperscript{[3,4]} Again, insofar as these cancers have an upper socio-economic gradient, this finding would be expected.\textsuperscript{[10,11]} In addition, faecal occult blood testing (FOBT), which can increase the detection rate for these cancers, may be less common in Indigenous Australians.\textsuperscript{[16]}

Skin cancer (melanoma/lip cancer)

The incidence of melanoma was 99% lower in Indigenous than non-Indigenous South Australians (Figure 3). This would reflect the protective effects of skin colouring for these sun-related cancers.\textsuperscript{[20]} Probably for similar reasons, no lip cancers were observed in the Indigenous population (Figure 3).

Prostate cancer

Indigenous South Australians had an incidence almost 80% lower than the non-Indigenous population (Figure 3). Insofar as these cancers have an upper socio-economic gradient, it would be expected that incidence rates would be lower in Indigenous people.\textsuperscript{[17,18]} Numbers of diagnosed prostate cancers are strongly influenced by prostate specific antigen (PSA) testing,\textsuperscript{[19,20]} which may be less common in Indigenous Australians.

Female breast cancer

The incidence in Indigenous women was about half that in non-Indigenous women (Figure 3). Corresponding findings also applied for the NT and Queensland.\textsuperscript{[3,4]} There are probably a number of explanations whereby Indigenous women tend to have their first full-term pregnancy at a younger age, and to have a higher parity, which is likely to be protective against breast cancer.\textsuperscript{[10,11]} In addition, their participation in breast screening programs is less common,\textsuperscript{[9]} such that breast cancer detection rates are likely to be lower.

Bowel cancer

An incidence in Indigenous people about 55% lower than for the non-Indigenous population was evident (Figure 3). Lower rates were also seen for Indigenous residents of the NT and Queensland.\textsuperscript{[3,4]} Further research is warranted to explore differences and reasons for differences in incidence between Indigenous and non-Indigenous Australians.

Haematological cancers

The incidence of these cancers was about 42% lower in Indigenous than non-Indigenous South Australians (Figure 3). Confirmatory evidence has been found for the NT, in that lymphoma risk tended to be lower in the Indigenous population.\textsuperscript{[11]} These cancers have been linked to immune system disorders.\textsuperscript{[17]} Further research is warranted to explore differences and reasons for differences in incidence between Indigenous and non-Indigenous Australians.

Differences in survival

The results so far presented indicate that cancers in Indigenous Australians include a higher proportion of the more lethal types and a lower proportion of the less lethal types. However, this appears to not account fully for differences in survival.

In SA, the five-year survival from cancer of Indigenous patients was 37% in 1988-1994, as compared with about 56% for other South Australians.\textsuperscript{[17]} Non-Indigenous patients had the same distribution of cancer types as Indigenous patients, and the same age profile, their five-year survival still would have been 49%, which greatly exceeds the 37% for Indigenous patients.\textsuperscript{[17]}

Cancers are found at a more advanced stage of progression in Indigenous than non-Indigenous patients, as indicated by SA, Queensland and NT data.\textsuperscript{[3,4]} However, further adjustment of survival for Indigenous people in SA, by stage of progression of cancer at diagnosis, still left a survival deficit for Indigenous patients (p<0.058).\textsuperscript{[21]}

More recent survival data from the NT and Queensland are confirmatory, in that survival differences were not fully explained by type of cancer or stage of progression of cancer at diagnosis.\textsuperscript{[22]} In the NT, the deficit in survival in Indigenous patients after stage adjustment was observed, and was not explained by an Indigenous language.\textsuperscript{[23]} There is also evidence from the NT and Queensland that Indigenous patients obtain less comprehensive treatment,\textsuperscript{[24]} which would be less conducive to cure. In addition, higher levels of co-morbidity are likely to complicate the treatment of many Indigenous patients.\textsuperscript{[25,26]}

Future direction

Steps that could be taken to reduce cancer incidence in Indigenous Australians have been specified already. They include addressing specific risk factors, such as smoking, poor diet, excess alcohol consumption and obesity, and undertaking vaccination programs. In addition, earlier detection should be pursued through screening and related early detection initiatives.\textsuperscript{[27]} These control measures are the same as those required by the non-Indigenous population. However, additional challenges present in many Indigenous communities due to socio-economic deprivation, cultural marginalisation and geographic isolation.

Cancer control initiatives for Indigenous people are likely to be most effective when there is a devolution of decision-making to local communities to define their health needs and priorities.\textsuperscript{[28]} Mainstream health services should include Indigenous people in their governance structures and partner with the Indigenous health sector to promote culturally acceptable services, as advocated by the Australian Health Ministers’ Advisory Council.\textsuperscript{[29]} Service providers should be educated about Indigenous culture and about culturally safe and respectful care, as built into the action plans of a number of Australian Health agencies.\textsuperscript{[30]} Outreach health services should be introduced, wherever practicable, for remote Indigenous populations, and appropriate transport and accommodation should be available when remote residents need to travel to metropolitan centres for care.

References

Cancer services to be proud of in rural Australia: Lessons learnt from the Clinical Oncological Society of Australia Cancer Service Audit

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Abstract
Recent evidence suggests that there are differences in cancer outcomes between metropolitan and rural/Regional services in Australia. This has been seen in cancer services that are on the political agenda in Australia. The report by the Clinical Oncological Society of Australia, Mapping Regional and Rural Oncology Services in Australia, March 2006, explored issues of access and quality of care and made a number of recommendations for improvement. Governments across Australia have initiated cancer service improvement programs, but not always specifically targeting regional disparities. The way forward

When Martin Luther King quoted the words “we hold these truths to be self evident, that all men are created equal,” he had in mind a very different disparity than that which faces rural Australians as they look to access the health services that their metropolitan equivalents take for granted. The general principle of the Medicare system, firmly entrenched, is that Australia boasts a “universal healthcare system for all Australians.” However, when universal is our healthcare system and most particularly when, how equitable is the nation’s access to cancer services?

The rural healthcare issue is firmly set on the political landscape, with federal and state governments endeavours to address the issues which have highlighted in many parts of the country by the deepening drought. For those passionate about healthcare reform in rural Australia, it has been pleasing to see that government bodies like the Australian Health Minister’s Advisory Council and cancer societies such as the Clinical Oncology Society of Australia (COSA) have placed improvement in rural cancer care firmly on their list of priorities.

It is in this context that COSA produced Mapping Rural and Regional Oncology Services in Australia (March 2006).1 By surveying regional hospitals administering chemotherapy and benchmarking against three larger metropolitan and larger urban centres, the study demonstrated that access to services may explain some of the differences in cancer treatment outcomes between metropolitan and regional and rural areas.

The COSA report was met with much fanfare, but what lessons have those of us in rural cancer practice to learn from it and how should we be moving forward in practical terms, to produce cancer centres to be proud of in rural Australia. The first step in solving any problem is to clearly analyse and document the extent of the problem. In this regard, COSA’s effort to analyse existing services in rural Australia and to compare them with identified metropolitan centres showed the extent of the interesting and useful background. In NSW, the recently formed Cancer Institute NSW performed a Rural Access Review 2005,3 and these findings are further outlined under the terms of the NSW Cancer Plan 2007-2010.4

What we have learnt from these reviews is perhaps well known to many of us who work outside metropolitan Australia. Findings showed that compared to metropolitan sites there is: inadequate coverage of rural health areas with medical and surgical specialties; significant safety questions around the ordering and administration of chemotherapy; and significant gaps in the provision of allied health services and accepted levels of cancer outcomes.

The lack of adequate clinical data systems that can better inform us of rural experience to broaden the horizons of cancer care and how can we get there efficiently and to high quality care.15 We could argue that there is a need to look for the same in Australia, both metropolitan and regional. While regional centres are not likely to have a “high end” surgical oncology focus, they are likely to lead to significant improvements in patient care, by better access at a regional level to state-of-the-art cancer care.

The COSA report predicates oncology centres of excellence on existing radiotherapy facilities. While this may provide part of the solution, it is also crucial in the analysis of rural cancer care that government bodies determine where it is that people are adequate to justify new radiation therapy centres. These assessments should be part based on regional cancer incidence, however there may also need to be recognition of regional cancer care improvement programs, but not always specifically targeting regional disparities. The way forward

Manpower crisis
It is one thing to identify that sites which warrant a regional oncology centre and it is quite another thing to staff these centres. It is well documented that at all levels of the cancer workforce6 there are short falls and it goes without saying that some parts of Australia will find it easier to recruit among the limited workforce than others. It is therefore up to governments, universities and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals. At the same time, this training must include a component of rural experience to broaden the horizons of cancer professionals training and professional bodies to continue the recent momentum towards training cancer professionals.

Education of rural area health services
Many rural area health services have a high turnout of management positions and often lack both experience and passion in the area of cancer management. Bodies such as the Cancer Institute NSW have a valuable role in educating health bureaucrats about the optimal use of resources.
of their resources and to build regional oncology centres that they and their communities can be proud of.
Change is often challenging for bureaucracies, however established patterns of management need to be analysed and altered where they are producing inferior clinical outcomes. One example of this is the widespread reliance on medical outreach clinics from metropolitan centres. These services provide crucial medical input in centres too small for a regional oncology centre, but in themselves can delay the move to a regional oncology centre model due to perceived cost savings.

Good quality cancer care does cost money, however a full-time medical presence in a regional centre provides them with the necessary skills and experience to improve their overall cancer care. The Cancer Institute NSW has emphasised the importance of this with the development of the CI-SCAT protocol website, and with moves to consider how information technology tools can be used more effectively, in both metropolitan and regional Australia.

Research and education
Two of the great pillars of cancer practice in the 21st century are clinical research and medical/nursing education. As part of the endeavor to select, build and staff regional oncology centres, there must be a will to promote and resource high quality clinical cancer research and the education of students and undergraduates.

The benefits of clinical research are well understood for both patients and clinicians. Funding to seed research programs, as well as support sustained research, is of crucial importance. Clinical research is one of the first things to go when patient load increases and efforts to provide protected time for regional clinicians to conduct research should be encouraged. Investment in rural medical and nursing schools in Australia should be commended as an initiative that is likely to bear fruit in terms of rural cancer clinicians in the long term. However, to consolidate this undergraduate exposure to regional Australia, it is of vital importance that cancer planners and professional bodies include exposure to regional oncology centres in postgraduate training schemes.

To persuade a clinician who has grown up in metropolitan Australia and done all of their training there, to move to regional Australia at the completion of their training, is a near impossible task. However, to encourage individuals who have had a breadth of exposure to all types of career options is likely to encourage them to choose a regional/rural pathway.

Conclusions
The COSA report has provided a sobering snapshot into the state of rural and regional cancer services. Its recommendations divide rural cancer services into regional oncology centres and those without the current size and infrastructure to justify such a development.

It is vital that we not only work at identifying and developing the regional oncology centres, but adequately resource those centres in smaller, more remote communities, with the basic facilities that they require to provide adequate cancer care for their populations. In centres where this cannot be justified, we need to look more carefully at the travel and accommodation needs of patients, so that they can equitably access regional oncology centres. As a society we need to decide whether cancer care for Australians is a right or a privilege. If we believe that it is a right, then we need to work out how best to provide adequate levels of service for even the most remote and disadvantaged. It is pleasing to see the focus on rural and regional Australia, however it is crucial that we rapidly turn our good intentions into practical suggestions, concrete plans and rural oncology centres that we can all be justifiably proud of. We need all levels of government to recognise the problem and work together to put solutions in place.

References
Literature attests to the fact that psychosocial needs for cancer patients are not being adequately addressed. The tools, frameworks and guidelines developed, reflect differing professional perspectives and models of disease. Most studies have usually looked at what is happening from the patient and family’s viewpoint in terms of medical and other needs. New national initiatives in psychosocial care include the organisation of nationwide practitioner workshops to encourage the implementation of the Clinical Practice Guidelines for the Psychosocial Care of Adults with Cancer. These guidelines focus mainly on the emotional and existential areas of need.

The aim of this study was to understand how a diversity of approaches and professional perspectives play out in everyday practice within a rural context; see how issues of distance and access affect this process; and highlight the deficiencies in the delivery of psychosocial services for cancer patients in rural Victoria. The study involved 59 questionnaire respondents (a 71% response rate), from which two interviews and six focus group discussions were drawn.

Key findings were: regional and metropolitan hospitals and specialists not referring for support services; private cancer stream, rather than identifiable communities and specific healthcare organisations.

The current focus on improving cancer patient care has seen the production of guidelines at a national level for psychosocial care of adults with cancer. New initiatives include the organisation of nationwide practitioner workshops to encourage the implementation of these guidelines and the development of a tiered model of psychosocial care in oncology by The Cancer Council Queensland. In the UK, guidelines have been developed to critique existing services and implement improved service delivery.

Problems of delivery of health services in rural areas in Australia centre around shortages of specialised skilled workers, difficulties of services accessing resources and the incorporation of new approaches in health care. We know of the difficulties of costs, accommodation and separation of seriously ill patients travelling to access services.

Often the tools, measures and frameworks discussed above reflect the diversity of approaches and professional perspectives involved in contemporary healthcare. The aim of this paper is to: understand how this diversity of approaches and professional perspectives play out in everyday practice within a rural context; see how issues of distance and access affect this process; and highlight the deficiencies in the delivery of psychosocial services for cancer patients in rural Victoria.

Procedure

This study was carried out in the Grampians region, Victoria, in 2005. The region has 11 health services, including 23 public hospitals with acute beds, one private hospital and one private cancer treatment centre. From 2000–2002 there were 2992 new cancer cases diagnosed in the region.

The overarching framework of practical, emotional and existential domains was adopted because it covered the diversity of patient needs at a range of levels and was accessible from health professionals’ perspectives, whether or not they were working within a biomedical model.

Participants targeted were nurses, occupational therapists, psychologists, social welfare workers and a lymphoedema physiotherapist. These workers saw most cancer patients, usually had most interactions with these patients and addressed most psychosocial needs either themselves or took the responsibility to refer on. Key organisations involved were hospitals, community health centres, treatment centres (chemotherapy and radiotherapy), carer services, district nursing and palliative care services.

Eighty-two letters of introduction and accompanying questionnaires were mailed to all relevant known practitioners, in organisations delivering services to cancer patients in the Grampians region. The study involved 59 questionnaire respondents (a 71% response rate), from which two interviews and six focus group discussions were drawn.

The breakdown of the 59 respondents to the questionnaire was:

- Regional and metropolitan hospitals and specialists not
- Nurses 37
- Occupational therapists 5
- Social workers 8
- Psychologists 1
- Managers 8
- Hospitals 34
- District nursing 4
- Palliative care 4
- Community health 10
- Carers 3
- Radiotherapy/chemotherapy treatment 3

Questionnaire content included postcodes receiving services, number of consumers, a checklist of psychosocial services, referral pathways and worker assessment of cancer services strengths and gaps. Focus groups were semi-structured and elicited information on local services; strengths and gaps in the continuum of care; current local psychosocial assessment; the validity of questionnaire findings; and prioritisation of themes. The same focus group structure and content was used for the two interviews when only one focus group member was able to attend.

The qualitative data from questionnaires was analysed according to themes and geographic locations and then questionnaire respondent comments were checked with focus groups during discussions. Recordings of focus group discussions were analysed according to themes, then categorised according to whether they were common across the region or specific to a particular town. Themes for analysis were extracted in an evolving process, building first from questionnaire responses and then developed in interview and focus groups, where two more themes were added. An item had to be reiterated at least three times to be considered a theme. Findings were prioritised according to the rank ordering of themes by focus groups.

Findings

The following six themes were deemed of highest significance by all focus groups:

- Regional and metropolitan hospitals and specialists not
referring for support services;
- private patients missing out;
- general practitioners (GPs) not referring to support services;
- late referrals to palliative care and district nursing;
- haphazard continuity of care for support needs of patients; and
- disrupted responsibility for initial assessment.

Regional and metropolitan hospitals and specialists not referring to support services

Workers across the region saw this as a problem. They described this kind of situation as something they would attend hospitals, or specialists away from home (Geelong, Bendigo, Ballarat and Melbourne) and then would not be linked back into services when they returned. Unless patients presented to local hospitals or were referred by a family member who was aware of services, they would “struggle on” in the community unassisted. “Patients are diagnosed locally and sent on, mainly to Melbourne to get brain surgery, and then sent back to the community. We could have provided earlier support in terms of the management and education of the family regarding the changes that would come.”

When describing surgeons not referring, one worker stated: “There’s often a kind of feeling of anything or everything like that. This is a really common problem… unfortunately. You don’t know whether they’ve [patients] had news about the cancer or not, you don’t know when to put your face in [to speak to the patient]. We often get the response, ‘if only you’d seen me before surgery’.

Private patients missing out

Many workers stated that if the patient was being treated in a private Melbourne hospital and followed up by a specialist privately, they were unlikely to be referred back to support services in their local community. “You don’t think about it. If a patient from a metropolitan Hospital is a public patient they get the service. If they’re a private patient, going to the private hospital; seen by a private practitioner in his [her] room, they’re the ones that slip through the net. The only way we pick those up is if the family knows our service and rings us, or if the GP sees them quickly after their return and refers, or if a friend will ring us.”

GPs not referring to support services

Except for workers in Ballarat, GPs not referring patients to local support services was seen as a major concern. “They’re quite consistent with what we’ve been looking at referral patterns, and they’ve [GPs] known the person all their lives and they don’t want to admit, even to themselves, that this person’s in trouble. Sometimes GPs don’t know what services are available.”

Late referrals to palliative care and district nursing

Workers across professions talked about a reticence in the community to accept help. Thus patients try to manage on their own even though they could have benefited greatly.

Haphazard continuity of care for support needs of patients

Some district nurses and palliative care workers identified their initial assessment interview of newly referred patients as including psychosocial issues. Another worker said he/she depended on the day oncology nurses to identify services needed by patients. Workers on several sites said they depended on the social workers and nurses at radiotherapy and chemotherapy centres for assessments. All workers agreed that there was no comprehensive psychosocial assessment of all cancer patients and no one taking overall responsibility to help people address their psychosocial needs. That is, there was no psychosocial linking person. “There’s no seamlessness…it’s often a jerky journey [for the patient]. It’s the luck of the draw.”

According to workers, the longer the patient is in hospital, or the higher the number of new patients/acute doctor or patient/acute nurse contacts, the greater the possibility of psychosocial assessment and consequent referral occurring.

Disrupted responsibility for initial assessment

Workers talked about what they saw as the “frontline” (the initial contact and ongoing contact person) and who should manage it. There was common agreement that the first point of contact was the time of diagnosis. Some suggestions about how this role should be undertaken included the introduction of new case managers or shared care case manager/guidance amongst existing workers. Others saw that GPs with extra support and assistance could take on the role of the patient’s contact person for the patient.

The following findings were common across all focus groups, but not consistently seen as the most pressing issues:

- increased funding needed for palliative care services;
- issues with transport and accommodation assistance; and
- limited service provision because of limited staff availability.

The following findings are the result of the researcher’s observations of focus groups and analysis of questionnaires.

Differing professional perspectives

During discussions with workers, in groups and individually, it was apparent that workers had differing professional models of practice, world views and priorities. These differences impacted on their understanding of patient psychosocial needs, how they were identified and how they were addressed. So in discussions workers’ ways of eliciting, prioritising and addressing commonly agreed gaps in care were extremely different, given the different roles they used. The psychologist talked about “meeting people where they’re at”, the social worker about “leaving patients” (in control) and the nurse about “preparing the patients and family” and the fact that “everything was done for them straight away”.

Quantifying difficulties - lack of cancer specific data

When trying to quantify how many cancer patients they were helping, workers either found it difficult to access accurate numbers, recording how many cancer patients they saw, or what percentage of their client group were cancer patients.

Discussion

This study suggests that the delivery of psychosocial care for cancer patients in rural Victoria is haphazard. There is an overlap of some services and gaps in other services and apparently a diminution of services the more rural the setting.

There is a lack of clarity about the kinds of tasks undertaken by the different professions and health workers themselves have diverse perceptions about their roles. For example, one occupational therapist saw her/his role as providing grief counselling and another did not see he/she offered any psychosocial support at all. In another town, nurses and social workers were both providing assistance with financial needs of patients. In many cases these professionals were working from quite different models of disease, as formerly discussed by Spence,

A skilled worker will also have the capacity to tailor the kind of psychosocial services they are receiving.

Whatever their journey, patients and their families have complex needs that change over the trajectory of the illness, and patient and family needs can differ as well. Workers need high level skills when working with the patient and/or family in the initial eliciting and identifying of need, especially if the first contact occurs around the time of diagnosis when the patient is often numb with shock. A skilled worker takes time to build a trusting and collaborating relationship so that patient or family trust and confidence are maintained.

Conclusion

In a climate when internationally and nationally there are pressures to try to improve the delivery of psychosocial support services for cancer patients, this across-discipline and across-settings rural study identifies some of the complex realities of on-the-ground practice. The introduction of measures such as the development of doctors’ communication skills, the creation of psychosocial support case managers or the development of checklists, will not necessarily resolve the problem. The terrain of across discipline perspectives and the culture of the local community and its professional networks are vital when considering the delivery of support services for cancer patients. There needs to be: clearer documentation of what support practices are occurring at the local level; increased understanding and acknowledgment of the complexities of the actual delivery of support services at the regional level; and greater appreciation of what is happening in day-to-day practice in rural Victoria at the state and national levels.

The immediate implication for cancer care at the national level is that there should be further specification of the practice guidelines and their implementation by services. However, before we are in a position to consider the desirability of such developments as a national standard of care for all patients and families, national standards for the towns and professionals and the best way to facilitate psychosocial care, further research is warranted into the complexity of need and how this plays out in practitioner/patient interactions.

This research was funded by the Grampians Integrated Cancer Service Department of Health Services Victoria.

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In many countries around the world, people with cancer often face difficulties accessing effective care because of long distances to treatment centres.1 This is true for Australia where it is estimated that approximately 30% of all people with cancer live outside a major population centre.2 Rural and remote residents experience more problems and concerns associated with travel for treatment and/or managing their care, than their peers who reside in urban or regional cities. A person’s sense of isolation is compounded by significant economic and social costs, relating to transport, accommodation and being physically separated from family and friends for considerable periods of time.3 Time spent away from home for cancer care is also disruptive of family life, work and education, and can lead to feeling burdensome to other people.4 The concept of ‘hope lodges’ is emerging as a highly effective community-based solution to many of these identified needs.5 Originally developed by the American Cancer Society, hope lodges are designed to provide low-cost or free accommodation to cancer patients and carers, and where resources permit, integrate psychosocial support such as access to counselling and social work. Lodges of this kind offer a friendly, convivial environment, where people with cancer, carers and families can share experiences and support one another through what is often described as a life changing experience. Lodges are usually run on a not-for-profit basis with links to hospitals or other health networks. Recently, the International Union Against Cancer (UICC) has promoted the establishment of hope lodges globally, with lodges now established or being developed in the US, Canada, France, Tunisia and Turkey. The UICC has developed a publication to assist interested organisations to set up hope lodges in their local area.5

The Cancer Council South Australia has owned and operated an accommodation service for rural cancer patients for over 10 years, among much the same model of the hope lodges. This paper describes the South Australian experience of providing accommodation services to people living outside the metropolitan area who need to access cancer care in Adelaide. The Cancer Council South Australia has owned and operated an accommodation service for rural cancer patients for over 10 years, among much the same model of the hope lodges. This paper describes the South Australian experience of providing accommodation services to people living outside the metropolitan area who need to access cancer care in Adelaide. Following the purchase of Seaview Lodge, priority was placed on improving existing services at existing lodges. The most significant development was the appointment of a social worker to work across both sites. The support coordinating role was established in response to both the research literature and community feedback. Evidence from the literature indicates that psychosocial interventions are associated with improved physical and psychological outcomes for people affected by cancer.6 Consultations conducted by The Cancer Council South Australia with rural cancer patients identified a need for better liaison between metropolitan services and rural communities (internal report). In 2003, the Board again reviewed future accommodation needs. Findings indicated that The Cancer Council was likely to meet the demand from rural and remote South Australians attending for radiotherapy for the next five years, but would need to increase capacity to cater for other cancer care needs (eg, investigation, assessment, chemotherapy, follow-up care), as well as clients coming from Mildura (Victoria), Northern Territory and Broken Hill (NSW). In light of this, the Board began investigating opportunities to expand the current style of accommodation and support. In July 2006, The Cancer Council South Australia purchased another 75-room motel complex adjacent to the city, which is currently being developed along the lines of Greenhill Lodge. Once full capacity is fully operational the total capacity will be 130 rooms.

The facilities and services

Support services

Cancer patients who feel well supported, tend to have better health outcomes and cope better with having cancer.7 Particular importance is placed on ensuring a supportive environment for people who are a long way from their normal support networks. To help meet the social work position was introduced in 2003, whose primary objective is to provide coordinated support to individuals by assessing and identifying their needs, and assessing them appropriately, through advocacy, advice, counselling or referral. In addition to responding to all individual guest’s needs, the support coordinator’s role includes coordinating volunteers, developing recreational programs to enhance the supportive environment at the lodge, working with other providers to improve information and service provision. On average, the support worker assists around 300 cancer patients and 170 carers per year. The role involves ongoing contact with all health professionals and other relevant agencies in relation to specific guests’ needs. Advocacy occurs at both an individual level and a systemic level to address issues of access and equity. The main reason patients and carers contact the support worker include: 1. psychosocial/ emotional support; 2. help with financial difficulties; and 3. practical/ informational assistance.
In response, the support worker assists either directly through counselling, providing verbal or written information or aiding in travel and/or coordinating services, or indirectly through referral (Figure 1). Trends over the past three years indicate an increase in face-to-face meetings with guests in regard to emotional and financial issues.

In addition, guests also have access to the full range of information and support resources and programs offered by The Cancer Council, which is located next door or within a five minute drive.

Volunteer programs

The support worker coordinates and supervises a group of volunteers, including friendly visiting volunteers who meet with guests on a weekly basis and provide social contact and practical assistance in relation to other appointments or shopping. They also facilitate links with other services as needed.

Volunteers are involved in providing recreational activities such as cooking classes, art classes or event-based functions such as the Melbourne Cup lunch. Activities are held in the recreation room at Greenhill Lodge and are open to patients and family members. Activities such as craft and cooking are hosted by volunteers with skills in a specific area, who are often personally affected by cancer themselves, and occur on a weekly basis. Weekend bus trips are also provided to extend support to those people who cannot travel home for the weekends or are isolated from family and friends. These are often run by a couple of volunteers who, with the assistance of The Cancer Council staff, develop a program of excursions to local attractions around Adelaide.

All volunteers undergo an induction training program when joining The Cancer Council. Skill development workshops are held at regular intervals (approximately three per year) and cover topics such as communication, aspects of treatment and dealing with loss and grief. They are open to volunteers across the organisations who have contact with people affected by cancer e.g., peer support volunteers. Accommodation service volunteers also receive regular ongoing supervision and support for the support worker.

Transport service

The Volunteer Transport Service was initiated in 1995 to provide practical assistance with transport to and from the main treatment centres in the city. A bus service has operated from 8am-8pm Monday through Friday consistently since then, with three volunteers each doing a three-hour shift per day. This service was expanded in October 2003 to transport guests to a treatment facility 15km south of the city. This service offers one trip in the morning and one in the afternoon. Currently there is a contingent of 37 volunteer drivers.

Dining room service

The cost of eating out when away from home can be a considerable burden. Furthermore, it is not uncommon for people having treatment for cancer to experience side effects that may cause difficulty in eating, including loss of appetite, nausea and difficulty in swallowing, which can lead to poor nutrition and undesirable weight loss. It is therefore important that patients maintain a varied and balanced diet of high nutritional value.

To help address these issues, Greenhill Lodge provides dining facilities for guests in the evening and a communal kitchen for self-catering throughout the day. The two-week rotational menu at Greenhill Lodge ensures a balance of all the food groups, with an emphasis on vegetables and fruit at every meal. Meals are deliberately high in calories to ensure adequate nutrition for patients undergoing cancer treatments. The menu also includes a majority of ‘traditional’ meals such as roasts, as these dinners are found to be popular with guests from regional areas.

Another option for guests is to use the communal kitchen where food can be stored, prepared and enjoyed from 8am to 8pm, seven days a week. This facility not only provides a meeting place for guests to interact and socialise. Smoke-free policy and quiet support

Passive smoking has been a problem for guests in the past. Recent improvements have been made to ensure a smoke-free environment and quit smoking support is available at Greenhill Lodge. There is a designated outdoor smoking area in a central location. Signage has been placed beside each room and at the entrance of Greenhill Lodge, clearly identifying the designated smoking area and reminding patrons and visitors that the accommodation facility is smoke-free.

Providing quit smoking support and a smoke-free environment are key strategies of The Cancer Council to reduce the harm caused by smoking. Guests have access to the Quitline service which is available by ringing an internal extension. This service is available from 9am-8pm weekdays and 2-5pm weekends and public holidays.

Managing the service

Running a facility such as Greenhill Lodge is based on the same principles as a commercial accommodation facility, with standard operating procedures relating to reservations and services offered. The ambience of the property is purposely designed to create a homely atmosphere. The major difference between commercial facilities and the lodges is the level of understanding needed by employees in relation to guest needs. This applies to housekeepers, volunteers, catering and reception staff. To equip staff with skills to relate effectively with guests, a specialised training program was developed for accommodation services. Delivered over two sessions to staff from all sections (catering, housekeeping and reception), the program focused on developing empathetic communication styles. It also emphasised the need to recognise when guests need additional support and refer them to professional support services (i.e., the social worker).

No medical services are offered or available. Guests are required to be able to care for themselves, or have a carer present at all times. Whilst staff are present at Greenhill Lodge 24 hours a day, emergency situations are handled by phoning an ambulance. The response time is approximately seven minutes.

Occupancy at Greenhill Lodge now averages in excess of 90% per annum. A commercial hotel of this size would be closer to 65%. This places considerable stress on the resources, both human and physical (Figure 2).

Financial aspects

The operation of a facility such as Greenhill Lodge has required a careful balance between viability (the budget) and the need to cater for the special needs of cancer patients and carers. In most cases, the patient and carer have no out-of-pocket costs relating to accommodation. This is covered through federal and state government funding programs such as the Patient Assistance Travel Scheme (PATS) or the equivalent in other states. The South Australian scheme provides financial assistance to people residing 100km or more from the Adelaide CBD who require care at a metropolitan health service. Room rates for guests who qualify for PATS do not exceed the current level of reimbursement ($10 a single/$60 a double). Room rates are reduced for guests who require cancer-related care, but do not qualify for PATS because they live within the 100km limit. Commercial guests, including regular clients from a number of service organisations, are accepted when the facility is not fully occupied by non-commercial guests (for example on weekends when many guests return home), at standard rates comparable to similar motels. This system is carefully managed to ensure that commercial guests are aware and respectful of the needs of guests who have a cancer diagnosis.

Maintaining a high occupancy rate is an important factor in the financial viability of operating such a service. Trends over the past seven years indicate the ongoing profitability of this model of operation (Figure 2). A cash surplus allows for the provision of extra services not normally associated with a commercial operation and the ongoing upgrading of facilities.

The accommodation facilities also provide a focal point for various fundraising events undertaken by The Cancer Council South Australia branches. Sixteen of the 17 branches are located in rural areas of South Australia, hence potential donors can see direct links and benefits for their communities. Accommodation services have been a central theme in rural door-knock appeals in the past and continue to be promoted in relation to other major Cancer Council events in regional areas eg. Daffodil Day. Individual branches also run their own local events with specific fundraising objectives. For example, one rural branch held a concert to raise money to purchase an additional bus for Greenhill Lodge. A large number of donations are also received from former guests and family members, either directly or through in memoriam donations and bequests.
with a request that they be directed toward further improving accommodation facilities. In-kind donations are also offered by both individuals and service clubs, for example labour/supplies to renovate several rooms. Formerly, substantial donations were acknowledged and recognized through dedication of individual rooms. More recently, donations are recognized via individualized engravings that form part of a sculpture located in the garden at Greenhill Lodge.

Evaluation and continuous improvement

Surveys of guest satisfaction at Greenhill Lodge have been undertaken annually since 2000, as part of The Cancer Council’s commitment to continuous improvement. Each year, all non-commercial guests staying at Greenhill Lodge during a specific month are sent a postal survey, four to six weeks after their stay, which they could complete and return anonymously. Response rates have ranged from 65% to 79%. Due to the smaller number, only one survey of Seaview Lodge guests has been undertaken.

Trends indicate a change in the profile of Greenhill Lodge guests over the past six years, with significant decreases in both the mean length of stay (35 days in 2000, compared with 18 days in 2005) and the proportion receiving radiotherapy while at the Lodge (67% in 2000, compared with 32% in 2005). In 2005, only 30% of those surveyed were first time guests (Figure 3).

Satisfaction with the facilities and services has been perceived as highly valued aspect of the service. In 2005, nearly three quarters of all guests had made use of the bus to access treatment facilities (72%). Sixty-six per cent had used the dining room and 62% had used the guest kitchen during their stay. A smaller proportion of guests had accessed the recreational facilities (40%) and recreational programs (18%) (Table 1). However, almost all of those who attended recreational programs rated them very highly (98%) (Table 2). Approximately one third of guests utilised supportive care programs, 35% had contact with the friendly visitor program and 32% had contact with the support worker. Guests who stayed for an extended period (one week or more) had made greater use of the various practical and supportive services than those staying for shorter periods.

Guest feedback has led to continuous improvements in the facilities and services provided at the lodges. For example, the kitchen facilities have been upgraded and larger fridges placed in rooms, in response to guests’ desire for more self-catering options. Room upgrades have incorporated guests’ suggestions where possible. Additional information has been added to the information directory, reflecting guests’ needs. Greater restrictions have been placed on smoking at Greenhill Lodge in light of a notable shift in attitudes and numerous negative comments about exposure to others’ “second-hand” smoke (Table 3).

Seaview Lodge guests rate the facilities as highly as those at Greenhill Lodge. While the self-catering style is preferred by many, a few guests felt isolated and unsupported at Seaview Lodge. This feedback has led to a stronger commitment to ensuring Seaview Lodge guests are aware of and have access to support services at Greenhill Lodge.

Conclusion

The Cancer Council South Australia has been committed to supporting rural communities through the provision of affordable, supportive accommodation for rural patients and their families.

The model adopted by The Cancer Council South Australia has proved to be highly successful, both in terms of its popularity with guests and as a viable financial venture. In our experience it is possible to provide a quality accommodation service and return a profit, which can be utilised to continually improve facilities for guests. Success has been due to sound financial management, continuous growth in demand, ongoing evidence-based improvements, well-integrated support services and strong community support for such a service.

In light of our positive experience, The Cancer Council South Australia endorses the concept of hope lodges. We encourage other organisations interested in supporting people with cancer (or other medical conditions) to consider establishing similar facilities where there is an obvious need.

References


Table 1. Guests’ use of services at Greenhill Lodge

<table>
<thead>
<tr>
<th>Use of support services at Greenhill Lodge</th>
<th>Per cent of Greenhill Lodge survey respondents (2001-2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short stay (&lt;7 days)</td>
<td>Longer stay ≥7 days (+)</td>
</tr>
<tr>
<td>(n=218)</td>
<td>(n=210)</td>
</tr>
<tr>
<td>Used bus/transport service</td>
<td>45</td>
</tr>
<tr>
<td>Used dining room service</td>
<td>60</td>
</tr>
<tr>
<td>Used guest kitchen</td>
<td>44</td>
</tr>
<tr>
<td>Used recreation room</td>
<td>25</td>
</tr>
<tr>
<td>Used information directory</td>
<td>82</td>
</tr>
<tr>
<td>Had contact with friendly visitor</td>
<td>19</td>
</tr>
<tr>
<td>Had contact with support worker</td>
<td>15</td>
</tr>
<tr>
<td>Attended recreation program</td>
<td>8</td>
</tr>
<tr>
<td>Used Cancer Council services/resources</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 2. Usefulness of services at Greenhill Lodge

<table>
<thead>
<tr>
<th>Service</th>
<th>Per cent of guests surveyed (n=85)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had contact with support worker</td>
<td>15</td>
</tr>
<tr>
<td>Had contact with friendly visitor</td>
<td>19</td>
</tr>
<tr>
<td>Used information directory</td>
<td>82</td>
</tr>
<tr>
<td>Used recreation room</td>
<td>25</td>
</tr>
<tr>
<td>Used dining room service</td>
<td>60</td>
</tr>
<tr>
<td>Used bus/transport service</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 3. Guests views on smoking restrictions at Greenhill Lodge

<table>
<thead>
<tr>
<th>Smoking allowed anywhere outdoors</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=85)</td>
<td>(n=70)</td>
<td>(n=91)</td>
<td></td>
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</table>
ARTICLES


REPORTS

AUSTRALIAN BEHAVIOURAL RESEARCH IN CANCER

Viertel Centre for Research in Cancer Control (VCRCC), Queensland

Pilot project to investigate the supportive care needs and adjustment concerns of adults with brain tumours and their carers

A collaboration between The Cancer Council Queensland, Griffith University and BrizBrain and Spine, this pilot project was developed in response to a need for better understanding of the impact of primary brain tumours on individuals and their families and their associated supportive care needs.

The results will inform the development of a larger study to assist in providing strategic direction for the development of future resources and services, including The Cancer Council Queensland’s Brain Tumour Support Service, Cancer Helpline and Cancer Counselling Service, as well as external cancer care services.

The pilot project aims to:
1. Describe the medical and allied health support provided to individuals with a brain tumour and their families;
2. Complete a supportive care needs assessment of individuals with brain tumours and their families;
3. Understand the quality of life of people with brain tumours and their families;
4. Investigate patterns and relationships between individuals’ cognitive abilities, neuropsychological assessment and support needs;
5. Understand the economic impact to individuals and families associated with brain tumour diagnosis and treatment and how this relates to their quality of life.

Approximately 80 adults with brain tumours will be recruited to the study via The Cancer Council Queensland Brain Tumour Support Service and BrizBrain and Spine neurosurgical practice. BrizBrain and Spine patients will provide the point of view of recently diagnosed patients, while approximately half of the members of the Brain Tumour Support Service are five to 10 years post-diagnosis. The study will be conducted in two stages. In stage one, individuals will take part in a semi-structured interview investigating emotional well-being, psychological functioning and quality of life. In stage two, individuals will have the option of undergoing cognitive and neuropsychological testing.

The project will commence with the recruitment of participants in early 2007 and will run until the end of 2007. The results of the pilot study will inform the development of a larger study for which external funding will be sought in 2008.

Centre for Cancer Control Research (CCCR) & Tobacco Control Research and Evaluation Program (TCRE), South Australia

Solaria compliance in metropolitan Adelaide (CCCR)
A study of 30 randomly selected solaria was conducted in December 2006 to assess the level of compliance that solaria in Adelaide have with the Australia/New Zealand Standard for solaria use for cosmetic purposes. Results revealed a very low level of compliance to the standard, with most centres allowing access to under-aged people and people with fair skin. This shows the need for the regulation of solarium centres in order to reduce skin cancer risk.

Evaluation of smoking cessation education among dental hygiene students (TCRE)
TCRE is working with QuitSA to determine whether knowledge, attitudes and delivery of a clinical intervention about tobacco education for dental patients improve over time among students participating in a tobacco cessation intervention course. Results will be available in 2008.

Evaluation of three QuitSA interventions to increase interaction with Quitline advisors (TCRE)
TCRE is evaluating the effects of three separate interventions to increase the proportion of callers who discuss smoking cessation with a Quitline advisor, rather than terminate the call after requesting written materials on quitting. The interventions involve increasing access to Quitline advisors and follow-up contact with callers requesting only written information. Results will be available in late 2007.

Evaluation of smoke-free hospitality legislation in South Australia (TCRE)
TCRE is undertaking a comprehensive evaluation of the smoke-free hospitality legislation, which is due to take effect from 31 October this year. As part of this evaluation a survey will assess venue compliance with current phase-in provisions and to assess bar managers opinions of the impending laws. Results will be available in early 2008.

Centre for Behavioural Research in Cancer Control (CBCRC), Western Australia

Longitudinal investigation of pharmacological smoking cessation aids in real-life settings

CBCRC has commenced its longitudinal study from 2007 to 2009 to track the incidental use of pharmacological smoking cessation aids by smokers, as funded by the National Health and Medical Research Council. To date 1300 smokers have been successfully recruited and initial interviews have been conducted. Recurrent interviews will now take place every three months for the next two years to measure attitudes towards and reasons for use of pharmacological smoking cessation aids, tracked by advertising, previous personal experience, health professional recommendations and recommendations from friends and family.

That’s disgusting! Evaluation of a youth tobacco-control advertisement distributed by chain-email deemed too vulgar for television (but the kids loved it!)

Most adolescents appear unmoved by warnings about the long-term health consequences of smoking: they believe they have time to quit ‘before it gets to that’. However they are particularly sensitive to the short-term cosmetic effects of smoking such as bad breath, smelly hair and bad skin. Indeed a common word-association adolescents provide for smoking is “disgusting”.

A series of near-finished television advertisements was developed with funding from Healthway to strengthen this association by overtly associating smoking with other things disgusting, including excrement, cockroaches and maggots. In partnership with The Cancer Council WA these advertisements will be distributed using chain-emails and assessed via an online survey in 2007. The number of hits to the advertisement webpage and origin of viewers will be automatically tallied using Webalizer software.

Reducing overweight and obesity in mothers with young children (MYC)

Funded by Healthway for two years, this project will develop, implement and evaluate a community-based intervention to influence the physical activity and nutrition behaviours of mothers with young children attending playgroups in Western Australia. It is expected to reduce prevalence of overweight and obesity in this group over the long-term. As women still do the majority of childcare in Australia, an intervention that successfully improves physical activity and nutrition behaviours will also impact on behaviours of the family, making it a ‘whole family’ approach.

Women are the primary target group, and their children and partners, secondary target groups. The project will be conducted in two stages over 24 months, consisting of formative research via a series of in-depth interviews and focus groups, and the development, implementation and evaluation of an intervention.

Centre for Behavioural Research in Cancer (CBRC), Victoria

The prostate cancer screening debate: public reaction to medical controversy in the media

This study explored older men’s and their partners’ reactions to a television news program on the medical debate surrounding the use of the prostate-specific antigen (PSA) test for prostate cancer screening. Both qualitative (six focus groups) and quantitative (self-completion questionnaire) methods were employed. In general, viewers seemed to appreciate from the debate that there was controversy surrounding prostate cancer screening and they recognised that PSA testing is more applicable to certain sub-groups of men.

Additionally, it appeared that exposing health consumers to medical uncertainty and expert conflict can help raise awareness of the issues and complexities involved. However, there was evidence to suggest that lay people may be better equipped to negotiate conflicting medical information if the different sides of the argument are plainly noted and a clear distinction is made between opinion and evidence.

[Dixon H, Scully M, Wakefield M, Murphy M. Public Understanding of Science (in press)]

LORNE CANCER CONFERENCE Record numbers of cancer researchers flocked to Erskine House in February for the 19th Annual Lorne Cancer Conference. The conference was spearheaded by two of the most influential researchers into the aetiology and biology of cancer, Doug Hanahan (University of California, San Fransisco) and Bob Weinberg (The Whitehead Institute). Their landmark review in Cell, The Hallmarks of Cancer, describes what a cell needs to become malignant and the ancillary features that aid tumour progression. As such, this year’s Lorne Cancer Conference focused on the biology of cancer cells and the important supporting role of the microenvironment.

In the Ashley Dunn oration, Professor Weinberg suggested that the multi-step nature of tumour progression follows a Darwinian-like law of succession; he presented several examples of “gene acquisitions” that can transform normal cells and promote metastasis. As such, Weinberg provided evidence that loss of growth control and potential re-activation of dormant embryonic-like mechanisms that endow metastatic propensity in tumour cells can be achieved through deregulation of the Ras, NF-kB and Smad signalling pathways, leading to activation of transcription factors Twist, Slug and FoxC2. Excellent presentations by John Blenis (Harvard Medical School) and Rick Pearson (Peter MacCallum Cancer Centre) further detailed the molecular events that underpin tumour initiation and progression following aberrant activation of the PI3 kinase pathway. A selection of these presentations on signal transduction was sponsored by ASBMB.

Bill Sellers, the Global Head of Oncology at Novartis, then detailed how small molecule inhibitors of the PI3 kinase pathway and other oncogenic signal transduction pathways are being developed for cancer therapeutics.

Scott Lowe from Cold Spring Harbor Laboratories gave the delegates an exciting insight into how highly sophisticated mouse models of cancer may be utilised to study cancer biology in an in vivo setting. These models highlighted a novel link between the onset of tumour cell senescence and activation of an anti-tumour response mediated by the innate immune system. Paul Spear of the Institute for Rehabilitation Research and Development, Ottawa extended this notion, describing how innate anti-viral and anti-tumour responses can be modulated through the type I interferon receptor. Talks by Nigel McMillan (Centre for Immunology and Cancer Research, University of Queensland) and Ledich Eckhardt (Peter MacCallum Cancer Centre) further highlighted the potential of targeting oncogenes or metastasis suppressor genes to prevent tumour progression in preclinical models, while Richard Lock (Children’s Cancer Institute, Sydney) showed how genotyping and screening human leukemic cell lines in immunodeficient mice could powerfully inform treatment regimes.

Another major theme of the meeting centred around cancer stem cells. Talks by John Dick (University of Toronto), Michael Clarke (Stanford) and Jane Visvader (Walter and Eliza Hall Institute) provided important insight into the biological characteristics of these cells and how they may be identified. This field is rapidly evolving and...
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Andreas Strasser from the Walter and Eliza Hall Institute provided evidence suggesting that cancer stem cells (as currently defined) may not be as rare as first thought. Significantly more work is required to differentiate between these two rare cell types that sustain the first series of oncogenic lesions leading to neoplastic transformation and the more prevalent amplifying cells that can sustain and propagate the growth of established tumours.

The conference clearly reflected that the progression of a tumour is dependent not only on the cell of origin, but also on its relationship with local and distant microenvironments. In his plenary speech, Doug Hanahan addressed the multi-faceted nature of the tumour microenvironment and described how not only do they represent 0.3% of the total cell component of a tumour, neutrophils can control tumour angiogenesis by reducing the bioavailability of VEGF. The concept of “vascular normalization” was introduced by Ruth Ganss (Western Australian Institute for Medical Research), who showed that RGS5 deletion increased the maturity of pericytes supporting tumour blood vessels, which intriguingly potentiated T-lymphocyte infiltration and the growth and metastasis of tumours. In addition, Hanahan also described how tumours evade anti-VEGF therapy over time by upregulating expression of other pro-angiogenic factors such as FGFs in tumour and stromal cell compartments. Blockade of both VEGF and FGFs provided greater efficacy in reducing tumour angiogenesis. Christian Fischer (Centre for Transgene Technology and Genetherapy, Belgium) also demonstrated that neutralising antibodies targeting PIGF in preclinical models held great promise in addressing the shortcomings of anti-VEGF treatment. The role of cancer-associated fibroblasts in the regulation of tumour growth was also presented by Gisela Bisby (Monash Institute of Medical Research) and Bob Weinberg and may provide alternative therapeutic targets.

The high quality of research presented was echoed in the poster sessions, which for the first time had to be split over two nights. A large number of students this year took the opportunity to present their own data and interact with some of the greatest researchers in the field. With Lorne turning on starry beach weather, networking and discussions continued outside of the seminar rooms on to the sand and well into the evening. That cutting-edge research was still being discussed late into the night was a keen reflection of how inspirational the meeting had been. The organisers would like to thank the many sponsors of the conference and look forward to another beneficial partnership for next year’s 20th anniversary.

The Lorne Cancer Conference is supported by The Cancer Council Australia

NEWS & ANNOUNCEMENTS

Experts release new guidelines on sun exposure

New guidelines have been released to tell Australians how much sun they need to avoid vitamin D deficiency and stay healthy without increasing their risk of skin cancer.

The guidelines follow research from The Cancer Council’s National Sun Survey, which found that 17% of teenagers and 13% of adults thought they needed to go out in the sun more without sun protection as a result of hearing media reports about vitamin D.

“We’re alarmed that a small but significant number of Australians are deliberately seeking sun exposure without sun protection because they are concerned about vitamin D, and are therefore more likely to be putting themselves at risk of skin cancer,” The Cancer Council Australia’s CEO, Professor Olver said.

The Cancer Council has joined with other health experts from Osteoporosis Australia, the Australasian College of Dermatologists and the Australian and New Zealand Bone and Mineral Society to address the public’s confusion about Vitamin D deficiency. The new guidelines recommend:

- Fair skinned people can maintain adequate vitamin D levels in summer from a few minutes of exposure to sunlight on their face, arms and hands or the equivalent area of skin on either side of the peak UV Index periods on most days of the week.
- In winter in the southern parts of Australia, where UV radiation levels are less intense, people need about 2-3 hours of sunlight to the face, arms and hands or equivalent area of skin over a week.
- Medical Director of Osteoporosis Australia, and Head of Endocrinology, University of Melbourne at Western Hospital, Professor Peter Ebeling, said it was important to stress that the majority of Australians had sufficient levels of vitamin D. “However, those likely to be at risk of vitamin D deficiency include people with very dark skin, people who are housebound or in institutionalised care, women who wear concealing clothing for cultural purposes, and breastfed babies of vitamin D deficient women,” Professor Ebeling said.
- “Anyone who thinks they may be vitamin D deficient should seek medical advice, not seek more sun.”

The new guidelines – The risks and benefits of sun exposure – can be found at www.cancer.org.au/sunpositionVITD.

One million Australians targeted in first bowel cancer screening program – Cancer Council urges eligible Australians to take the test

Ever been told you are one in a million? If you are turning either 55 or 65 between May 2006 and June 2008, you soon will be.

Phase one of the Federal Government’s National Bowel Cancer Screening Program is now underway with around one million men and women being urged to screen for a disease that kills 90 Australians every week.

As part of Bowel Cancer Awareness Week in June, The Cancer Council Australia encouraged all eligible Australians to take part in the free testing program. Those eligible in the first phase will receive a simple, at-home kit in the post to test their bowel motion for early signs of bowel cancer.

The Cancer Council Australia’s CEO, Professor Ian Olver, said that if detected early enough, “90 per cent of bowel cancer cases are curable”. Professor Olver said that while Pap testing and mammograms had been available to women for many years, this was the first time both men and women had been included in a national, population-based cancer screening program. “The National Bowel Cancer Screening Program has the potential to save more lives each year than breast and cervical screening combined,” he said.

“Around one million people are being targeted in the first phase of the program. However, when the program is running at full capacity, we estimate more than five million people will be eligible for regular bowel cancer screening.”

The Cancer Council is urging all Australians targeted in this first phase to take part to ensure the

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The Cancer Council is urging all Australians targeted in this first phase to take part to ensure the
ongoing success of the program.*

Working with cancer

Many cancer patients continue to work during their treatment and recovery, just as many people caring for someone with cancer are also holding down jobs. Often colleagues don’t know what to say or how to help.

Our Working With Cancer® toolkit helps to make attending work or returning to work easier for patients, carers and their colleagues.

Working with cancer was developed in association with employers and with people diagnosed with cancer. It is suitable for companies large and small, and includes case studies, handouts and workshop materials on:

- Supporting patients and carers in the workplace
- Talking to workmates about cancer
- Developing supportive policies
- Employer responsibilities
- Helping everyone cope with cancer at work
- Balancing company and individual needs
- Coping with death and bereavement


The Cancer Council Australia welcomes skin cancer awareness and obesity survey measures in Budget

The Cancer Council Australia has welcomed the Federal Government’s Budget commitment to continue its skin cancer awareness campaign over the next two years and to put additional funding into an ongoing national nutrition and physical activity survey program.

The Cancer Council Australia’s Chief Executive Officer, Professor Ian Olver, said the $11.5 million the Government had allocated to the national skin cancer campaign over the next two years would provide a significant additional return on the $7 million invested in the campaign over the next two years, such as measures to reduce disparities in treatment access between urban and rural patients.*

Growth in solariums alarms skin cancer experts

Skin cancer experts have expressed alarm at new Cancer Council research showing an explosion in solarium numbers across Australia, with one capital city recording a 1000 per cent increase over the past decade.

The new figures, published in the Australian New Zealand Journal of Public Health, show the number of solariums advertised in the Yellow Pages1 in Australian capital cities increased four fold between 1996 and 2006. The startling rise has prompted a call for tighter regulation of the industry, which currently operates under a voluntary code.

The Cancer Council Australia’s Chief Executive Officer, Professor Ian Olver, said the figures were staggering, yet understated as the research did not cover solariums in beauty salons or fitness centres.

“This study backs existing research showing that hundreds of thousands of Australians are being needlessly exposed to excessive UV radiation and an increased risk of skin cancer,” Professor Olver said. “Solariums emit ultraviolet radiation up to five times as strong as the sun and there is clear evidence of the link between solariums and skin cancer.”

Professor Olver said the findings were especially worrying in light of a recently published international study, which found a 75 per cent increased risk of melanoma for people using solariums before the age of 35.2

According to the Chair of The Cancer Council’s National Skin Cancer Committee, Craig Sinclair, more than 1600 Australians lose their lives each year to skin cancer and the revelation that solariums were increasing at such a rapid rate would be of enormous concern to skin cancer and public health experts.

“We are particularly worried about the risk to young Australians,” Mr Sinclair said. “We already know the voluntary code is not working and our own studies show poor compliance in restricting solarium access to those under 18.

The Cancer Council released bowel cancer screening forum report

A whole-of-government approach to bowel cancer screening built around quality assurance is the key to ensuring the Australian Government’s National Bowel Cancer Screening Program reaches its potential to reduce bowel cancer mortality in Australia.

Moving forward on bowel cancer screening in Australia is a summary report of the expert presentations and panel discussion on bowel cancer screening documented at a national forum hosted by The Cancer Council Australia in Melbourne late last year, under the auspices of the Commonwealth Department of Health and Ageing.

Population-based bowel cancer screening using faecal occult blood testing has been shown to reduce bowel cancer mortality by up to 40 per cent among the screened population. But, according to the report, converting this evidence-based potential into optimal success in terms of bowel cancer mortality reduction requires a commitment by governments at all levels. It requires the application of minimum standards, quality controls, adequate follow-up, ongoing monitoring of the program, measures to maximise screening participation and improved support for the medical workforce, as explored in the report.

The report is available at www.cancer.org.au.

Palliative care community education initiative

Palliative Care Australia has launched a new National Aussies make every cup count for Australia’s Biggest Morning Tea

The help of more than one million Australians from all corners of our country has ensured another successful Australia’s Biggest Morning Tea in 2007. While funds are still being counted, we are well on the way to our $8 million target thanks to the many morning teas held throughout May in schools, at home, in the workplace and in the community.

Australia’s Biggest Morning Tea is one of The Cancer Council’s foremost fundraising events and the largest, most successful event of its kind in Australia. The funds raised by generous Australians will help The Cancer Council continue its fight to defeat cancer.

Hellooo yellow!

Daffodil Day 2007

Say goodbye to the dark hues of winter and hello to all things yellow for The Cancer Council’s Daffodil Day on Friday 24 August. With more than two million daffodils on sale, along with the ever popular Daffodil Bear, funky yellow ‘hope’ wristbands, pins and pendants and a myriad of other items, it’ll be easy to brighten your day and the lives of thousands of Australians affected by cancer.

By purchasing a daffodil or other item in memory of a loved one, to celebrate a survivor, or to simply give hope for a brighter future, you can help us reach our fundraising target.

All funds raised during Daffodil Day activities contribute directly to The Cancer Council’s initiatives in cancer research, education, information, advocacy and patient support services.
Breast Cancer (2nd edition)

DJ Winchester, DP Winchester, CA Hudis, L Norton
BC Decker (2006)
ISBN: 9781550092721
607 pages

The mission of publishing company BC Decker, according to their website, is to produce premium quality information for medical and allied health professionals in the form of text books, journals and electronic media. Their areas of medical speciality are varied and this text on breast cancer is one of many in their oncology collection.

This latest edition of Breast Cancer has a comprehensive list of distinguished contributors from various well-known cancer institutions across America. No surprise then that this has a distinctly American flavour, however this does not in any way detract from the high quality information discussed.

The textbook includes a CD-Rom with the book in PDF and with full text and images. This is a positive aspect of the package as it enables the user to access information in a convenient format. It is also ideal for printing information for patient education at the discretion of the health professional.

The stated goals of this book are clearly articulated in the preface. These goals are to identify and disseminate significant developments in the areas of breast cancer prevention, diagnosis and treatment.

My first perusal of the table of contents revealed 37 chapters beginning with the history of breast cancer and finishing with a chapter on a ‘patient’s perspective’, with a woman detailing her breast cancer experience. All disciplines involved in the management of breast cancer are represented.

Areas covered include epidemiology, hereditary breast cancer and the role of risk assessment and management. Diagnostic imaging is covered over three chapters with a focus on magnetic resonance imaging. Pathology and staging of breast cancer is discussed. The book also discusses various breast pathologies with chapters devoted to ductal carcinoma in situ and unusual breast histology.

Early stage disease is discussed in detail, with a chapter devoted to each treatment modality. Of note is a chapter devoted to multi-focal, multi-centric and bilateral breast cancer. Of interest was the management of breast cancer in the previously augmented breast, an issue that will only increase with the ageing population of women who have breast implants and the challenges this will pose for treatment and aesthetics.

Breast reconstruction is highlighted with a chapter detailing the evolution of these procedures; perhaps more diagrams and photos could be of use here. Special chapters are devoted to breast cancer and the pregnant woman and importantly the male with breast cancer.

The organisation and flow of the book is easy to follow and is highly systematic and comprehensive in its approach. Importantly it details areas of controversy as appropriate to the subject discussed and has summaries of all relevant clinical trials as they stand at the time of printing.

It is disappointing not to find reference to the role of breast care nurses as part of the multidisciplinary approach to breast cancer. This is discussed in passing early on in the book with a chapter devoted to a discussion on what constitutes a specialist breast centre, with a focus on the different operational models evolving in the concept of the specialised breast cancer centre.

Attention is paid to the value added dimension of medical surveillance strategies. Emerging information about the positive impact of exercise and maintaining weight within ideal range on reducing the risk of breast cancer recurrence is lacking.

Metastatic disease is discussed within the chapters of radiotherapy and endocrine therapy. The emphasis really is on early stage breast cancer, with a chapter devoted to locally advanced breast cancer.

Despite some shortcomings from a breast care nurse perspective, this textbook fulfils its stated objectives, which are medical in context. I would recommend this as an introduction to any student of breast cancer either from a medical, nursing or allied health stream for a useful medical overview. It would be a useful addition to any oncology collection in a medical/hospital library in a teaching institution.

Julie McGarr
Department of Surgical Oncology, Peter MacCallum Cancer Centre, Melbourne, Victoria

Breast Cancer Research Protocols

SA Brooks, A Harris (eds)
Humana Press (2006)
517 pages
RRP: $135.00

This is one of the latest books of the Methods in Molecular Medicine series. It is primarily targeted at clinicians and research scientists interested in initiating translational breast cancer research. One of the main problems in translational research is the wide variation and lack of standardisation in the methods and protocols used. This book introduces and summarises the current

methods and protocols in obtaining and analysing breast cancer tissue specimens from the patient to the molecular level.

The content is divided into five parts covering important and current topics in preparation of cell and tissue samples, markers of clinical outcome and prognosis, analysis of tumour-derived proteins and antigens, analysis of gene and gene expression in tumour specimens and studying cancer cell behaviour both in vitro and in vivo.

Each part is subdivided into smaller chapters and written by experts in the related field. Each chapter has a summary, introduction, methods, notes and references. The summary and introduction at the beginning highlight major discussion points. Methods and protocols are described in a concise and easy to follow numerical sequence. The notes provide practical advice in dealing with problems encountered during the research. A list of references for the methods and protocols is conveniently available at the end of each chapter for more in-depth discussion. The black and white illustrations of molecular techniques and histopathology make interpretation difficult at times.

In an era where translational research in breast cancer is rapidly progressing and becoming an exciting reality in its clinical application, this book is a useful reference point for current methods and protocols in this area and highly recommended for those interested or initiating translational breast cancer research.

Weng Ng
Liverpool Hospital, NSW

Lack of standardisation in translational breast cancer research.

One of the main problems in translational research is the wide variation and lack of standardisation in the methods and protocols used. This book introduces and summarises the current methods and protocols in obtaining and analysing breast cancer tissue specimens from the patient to the molecular level.

The content is divided into five parts covering important and current topics in preparation of cell and tissue samples, markers of clinical outcome and prognosis, analysis of tumour-derived proteins and antigens, analysis of gene and gene expression in tumour specimens and studying cancer cell behaviour both in vitro and in vivo.

Each part is subdivided into smaller chapters and written by experts in the related field. Each chapter has a summary, introduction, methods, notes and references. The summary and introduction at the beginning highlight major discussion points. Methods and protocols are described in a concise and easy to follow numerical sequence. The notes provide practical advice in dealing with problems encountered during the research. A list of references for the methods and protocols is conveniently available at the end of each chapter for more in-depth discussion. The black and white illustrations of molecular techniques and histopathology make interpretation difficult at times.

In an era where translational research in breast cancer is rapidly progressing and becoming an exciting reality in its clinical application, this book is a useful reference point for current methods and protocols in this area and highly recommended for those interested or initiating translational breast cancer research.

Weng Ng
Liverpool Hospital, NSW
BOOK REVIEWS

Cancer Control Knowledge into Action: WHO Guide for Effective Programmes

ISBN: 92-4-154699-9
40 pages
RRP: $US13.50

Cancer Control Knowledge into Action: WHO Guide for Effective Programmes is one of a series of six modules (booklets) that provides practical advice for program managers and policy-makers on how to advocate, plan and implement effective cancer control programs. The module is essentially an instruction manual for developing a cancer control plan targeted to low and middle income countries.

The booklet is based on several key principals: that a comprehensive cancer control strategy allows more efficient and equitable use of resources; the context and past experiences need to be considered; the plan must be goal-orientated and people-centred; and consideration must be given to affordability, cost-effectiveness and priorities (especially in low and middle income countries).

The module chapters are structured around the phases of planning, specifically: pre-planning; assessment; data collection and analysis; setting objectives and priorities; implementation; monitoring; and evaluation. Basic aspects of planning are reviewed, including how to determine whether a plan is needed, how to draw up a strategic plan, stakeholder involvement, self assessment and defining the target population. The text is also supported with definitions of key words and activities.

Acknowledgement is given to the importance of priority initiatives, particularly in countries where resources are limited and political support is weak. There is strong advocacy for a “bottom-up” approach and consideration of the social and political context in which plans and programs are developed. The booklet is interspersed with stories and examples of successful and failed cancer control plans, the reaction of policy makers, the importance of reassessment and the search for new approaches. Input for the resource was provided from a range of low and middle income countries including Cameroon, Vietnam, Hungary, China, India and Pakistan, with core content contributed by a range of experts in developed countries.

The resource is short, at just 40 pages, logically sequenced, inexpensive and written in plain English.

While targeted to low and middle income countries, the booklet may also be useful for students in policy development. Other booklets in the series are: Prevention; Early Detection; Diagnosis and Treatment; Palliative Care; and Policy and Advocacy.

Anne-Marie Dewar
The Cancer Council Queensland

Clinical Fundamentals for Radiation Oncology Residents

Hasan Mushed
ISBN: 978-1-903524-28-6
343 pages
RRP: $US60.00

This small textbook is written primarily for radiation oncology residents and registrars. The information covered was written by the author as part of his preparation for his final specialist exam in radiation oncology. It aims to provide a management approach and summary of all the key literature on neoplasms treated with radiotherapy.

To this end, the book achieves its aim and provides a concise, well-written summary of each topic. Information includes the relevant epidemiology, symptoms, investigations, management, expected outcomes and complications of treatment. Radiation techniques are also provided in reasonable detail. Images of simulator films and digitally reconstructed radiographs are used to supplement the written information on radiation techniques.

Extremely useful is the annotated bibliography of key articles at the end of each chapter. These are summarised by the author including key discussion points, which most radiation oncology trainees would find particularly helpful.

The book is written mainly in note format, which is reasonable given its aim. Overall it is well written, but does use some US terminology. The main disadvantages are that recommendations for treatment follow US approaches which are used less often in Australia. Some approaches used in Australia are not part of the recommended treatment approaches for certain tumour sites. For example, short course pre-operative radiotherapy without chemotherapy is not included as an option for treatment of rectal adenocarcinoma.

Having said that, this book does not aim to provide a comprehensive review of the literature and so it does not significantly detract from the book’s usefulness. Regrettably, topics such as melanoma and melanoma and nejad cell carcinoma are not included. These have been used in the part two Royal Australian and New Zealand College of Radiologists exams indicating the importance of these areas of cancer management in Australia.

I highly recommend this book to radiation oncology trainees who wish to have a small summary book on radiation oncology management of neoplasms. It would be of most use as a quick review reference book, especially in the lead-up to the final exit exams in radiation oncology. Trainees in other specialties may also find it useful for a small reference on the various neoplasms covered.

Mark Lee
Liverpool Hospital, NSW

Communicating with dying people and their relatives

J Lugton
Ausmed (2003)
ISBN: 0-9579876-7-6
184 pages
RRP: $49.95

Over the last decade, books on communication and how to do it better are appearing with increasing regularity on our bookshelves. Yet few exist specifically on the topic of communicating with dying people and their relatives. Jean Lugton has attempted to fill this gap.

Communicating with dying people and their relatives at 184 pages, with nine chapters, appendices, references and suggestions for further reading, offers strategies for improving our communication with this vulnerable group of patients (the dying) and their relatives. To this end, I believe the book has been successful.

It begins by establishing the importance of good communication in palliative care. From the outset, it differentiates between terminal care and palliative care, always a necessary distinction to make. Subsequent chapters provide lists of what nurses need to possess to work in palliative care, such as educational preparation and self awareness concerning attitudes to death and dying. There is a chapter on how to break bad news which perhaps repeats what others have written about...
in this area, namely Robert Buckman. Yet the chapter also extends Buckman’s work in that it outlines differing coping styles to the ‘bad news’ scenario. While I don’t necessarily agree with the use of Kubler Ross’ stages to explore coping in terminal illness, it does provide a vehicle from which to talk about impending loss and the implications that this loss may have on those closest to us.

The only other chapter I will specifically mention is ‘Making communication more effective’, which explores the controversial issue of nurse-patient friendships, the development of which has been frowned upon in recent years. Rather than actual friendships, Lugton supports the development of covenantal relationships, relationships aimed at listening and befriending, without the imposition of duties on the patient or their family. She suggests that traditional barriers between nurse and patient can be broken down by the use of first names, by the use of the same nurse in daily patient care and by identifying and supporting families’ areas of strength. These suggestions are not new in the palliative care arena, however have not often been seen as therapeutic.

The use of conversational extracts throughout the book to illustrate salient points are effective in grounding the discussion in the experiences of actual people living with a life-limiting illness and make the book highly readable. I found the list of questions at the end of each chapter useful as prompts for reflection.

In summary, Lugton’s book provides a useful resource for all healthcare professionals. It would appeal to a larger audience, not just nurses. In an increasingly litigious world, how to communicate better with people in our care is a constant challenge.

Katrina Breaden
Department of Palliative and Supportive Services, South Australia

Comprehensive Cervical Cancer Control: A Guide to Essential Practice

World Health Organization (2006)
ISBN: 92-4-154700-6
372 pages
RRP: US$45.00

This guide was developed by the World Health Organization (WHO) and the International Agency for Research on Cancer (IARC) in collaboration with a number of other international agencies. The introduction states that it is “intended primarily for use by healthcare providers working in cervical cancer control programs in the health centres and district hospital settings with limited resources. However, it may be of interest to community and tertiary-level providers, as well as workers in other settings where women in need of screening might be reached”.

The main focus of the guide is on the knowledge and skills needed by healthcare providers, particularly those at level one and two. It has been field-tested by reviewers in China, Egypt, India, Lithuania, Trinidad and Zimbabwe. The information presented is evidence-based and broadly applicable, however of course may need to be adapted to local health systems, needs, language and culture.

There are seven chapters:

- Background
- Anatomy of the female pelvis and natural history of cervical cancer
- Health promotion, prevention, health education and counselling
- Screening for cervical cancer
- Diagnosis and management of pre-cancer
- Management of invasive cancer
- Palliative care

Each chapter includes:

- a description of the role and responsibilities of various healthcare providers in relation to the chapter topic;
- a story illustrating or personalising the topic;
- essential background information on the subject, followed by discussion of established and evolving practices in clinical care, and recommendations for practice;
- information on service provision at each of the four levels of the healthcare system (ie. community, primary, secondary and tertiary level);
- counselling messages to help providers communicate with women about the services they have received and the follow-up they will need; and
- a list of additional resources.

Most chapters have associated practice sheets that provide step-by-step information on specific components of care (eg. obtaining informed consent, taking a history and performing a pelvic examination, taking a Pap smear, colposcopy, cone biopsy, hysterectomy, radiation therapy, pain management and management of vaginal discharge and fistulae). These sheets are intended to be used as ‘job aids, to remind providers of the essential steps and to help them to educate, counsel and correctly explain services to women and their families’.

Nine annexes provide guidelines on specific areas of clinical practice (eg. management flowcharts and treatment protocols for screen-detected abnormalities, cervical pre-cancer and invasive cancer), as well as strategies for improving service delivery. A glossary and a list of abbreviations and acronyms are also included.

The guide is compact in size and the use of spiral binding and good quality paper make it likely to be a durable resource. There is extensive use of key points, lots of simple figures and tables throughout and good cross-referencing to practice sheets and annexes. This makes it an easy-to-use reference document.

Regardless of the resource setting, I would highly recommend this publication to general practitioners and medical students, as well as nurses and other allied health professionals working in the area of women’s health and/or oncology.

Annie Stenlake
Department of Gynaecological Oncology, Westmead Hospital, NSW

Comprehensive Textbook of Genitourinary Oncology

(3rd edition)

NJ Vogelzang, PT Scardino, WU Shipley, FMJ Debruyne, WM Linehan (eds)
Lippincott Williams & Wilkins (2006)
ISBN: 07-817498-40

897 pages
RRP: $328.90

Comprehensive Textbook of Genitourinary Oncology is a large and well-researched reference book for clinicians working in this field. The third edition is designed to incorporate the latest medical and scientific advances in each clinical domain – surgery, medical and radiation oncology – from laboratory to bedside. The editors are well recognised and highly respected in their fields, and with over 200 international contributing authors, the reader is provided with a strong philosophical foundation for multidisciplinary care. Evidence in the medical literature indicates that an integrated team-based approach, including surgeons, pathologists and medical and radiation oncologists, can lead to improved survival and better quality of life for patients affected by these malignancies.

The textbook is divided into five parts – prostate, bladder, testicular, kidney and other rare genitourinary malignancies. The contents are clearly listed, ensuring the reader has quick and easy access to all relevant information. Each part of the textbook follows a logical structure covering epidemiology, genes, risk factors, screening, symptoms, diagnosis and management for the differing stages for these malignancies. There are a number of interesting and varied diagrams and illustrations, including histopathology, imaging technologies, anatomy and surgical techniques. There are also flow charts and tabulated data that are clearly labelled and easy-to-understand. For example, if you needed to find information on survival advantages for high risk prostate cancer using adjuvant hormonal treatment and radiotherapy, you could readily find the relevant table and summary of the major prospective trials using this form...
of treatment.

In essence, the textbook encompasses a thorough review for each genitourinary cancer from a clinical and scientific context and aims to guide the clinician by providing answers to clinical questions that are evidence-based. The importance of research is a common theme that links each chapter and the authors identify gaps in knowledge for future study. The search to identify new molecular markers for prostate cancer that indicate faster disease progression are in progress; this will in turn enable us to more effectively target aggressive therapeutic management towards patients who will gain the most benefit.

There have been many significant advances across each genitourinary cancer and the following are a few examples that illustrate some of the changes. There are faster recovery times, less morbidity and lower rates of positive surgical margins for patients having radical prostatectomy; we have seen the development and wider availability for laparoscopic and robotic surgical techniques. The delivery and accuracy of radiotherapy for prostate cancer has also improved; knowledge from prostate motion studies has seen the introduction of prostate fiducial markers that allow more effective tracking of its movement during treatment. Other significant advances include IMRT in radiation oncology and the use of taxanes for hormone resistance in medical oncology. The future for renal and bladder cancers also looks promising with the introduction of anti-angiogenic drugs for metastatic renal cell carcinoma and new chemotherapy drug combinations for bladder cancer in the neoadjuvant setting.

I would strongly recommend this high quality textbook for clinicians, urologists, medical and radiation oncologists in training, researchers and specialist nurses working in this field. The textbook demonstrates the progress made towards the ultimate goal for the editors, which is the improved survival for patients and the eradication of these malignancies.

Diana Van der Saag
Urology Cancer Service, Royal North Shore Hospital, NSW

Doctors and Paintings
J Middleton and E Middleton
ISBN: 9781846190520
102 pages
RPP: $78.00

As a physician and a painter myself, I welcomed the opportunity to review this book, sub-titled to afford “insights and replenishment for health professionals”. Although it is an easy read, I found the conversational style of the book irritating, the tone prescriptive and somehow patronising of patients, as though doctors and patients have little common ground and the humour just didn't work.

Early on, the authors seem to have a clear focus, i.e. to highlight the importance of doctors' self-knowledge/self-awareness to better understand our patients, and to do this through the medium of painting. There is a lot to explore about the impact of art for physicians, the creative process as enlightenment to this end and the parallels between this, medicine and humanity. If one goes beneath the surface, this topic has enormous relevance to how doctors perceive themselves and others, how we integrate information, how we respond to difficult situations and how we evolve as compassionate, caring clinicians who don't burn out through the very practice of doctoring.

After the first third of the book, the authors quickly lose their own way, a problem for the self-confessed, self-aware. While some worthy points are made early on, even these seem self-evident; for example that the arts help to stimulate insights into common patterns of response, highlight individual differences and can enrich the language and thought of the practitioner, and the exploration of a doctor's own feelings and defences – but there is nothing new about this.

The authors raise other pertinent issues, such as the value and risks of vulnerability as it relates to professional virtue, the concept of healing for the healer as well as the patient, the use of narrative and story-telling, and how, as in life, doctors may arrive in the middle of a patient's story. In addition they discuss notions of ambiguity in painting and in life, the value of interpreting the patient's own language and how we bring our own perceptions to the interpretation of either a painting or a patient, so that the processes can be seen to run in parallel.

The authors refer to some well-known artists: Frida Kahlo, her physical disability; Mark Rothko, his depression; Francis Bacon, his childhood sexual abuse and adult homosexuality; Vincent Van Gogh, his presumed mental illness (I always thought he had acute intermittent porphyria myself); Tracey Emin, her own-life narrative, bringing the distasteful or unspoken into full view (eg. abortions); Rembrandt van Rijn, his life tragedy; and Lucien Freud, his struggle for power and concerns about ageing. It all feels a bit flat and superficial, though.

The fact that one author chooses to use her own paintings (which aren't particularly engaging) to highlight some concepts is a tad self-referential and narcissistic. Sadly, the book ends up feeling like an opportunity for self-promotion, billed under the guise of something nobler. In the end, the authors are saying, “first, know thyself”. We all have different routes for getting there; for some of us, the act of painting or art appreciation may help us getting along the way. It is patronising, though, to suggest that it will help all of us, and these authors, for one, fail to really tell us why.

Lesley Ades
Department of Clinical Genetics,
The Children's Hospital Westmead, NSW

Hodgkin's and Non-Hodgkin's Lymphoma
JP Leonard, C Morton (eds)
Springer (2006)
488 pages
RPP: €119.95

This book is a comprehensive overview of the diagnosis, treatment and future directions in the treatment of lymphomas. It is part of a Springer series on Cancer Treatment and Research and its contributors are mainly lymphoma researchers. As such, the text offers a current review of the standard diagnostic and therapeutic approaches to lymphoma, as well as covering the most promising new directions in treatments.

There are 14 chapters, each individually written and covering the entire range of lymphomas. At 450+ pages, it gives a broad overview of the disease but is easily read. There are plenty of headings in each chapter to enable a logical progression. There is an introduction at the start of each chapter which gives a notion for what the chapter will cover.

The chapters cover such topics as pathology of lymphomas and multiple myeloma, the use of monoclonal antibodies, transplantation and treatments for both Hodgkin’s and non-Hodgkin’s lymphomas and nuclear medicine techniques in diagnosis. There is also an excellent chapter on the role viral infections play in the development of lymphomas. This covers well known viruses such as Epstein-Barr, Kaposi’s sarcomas and HTLV-1.

In each chapter, there is also an in-depth mention of relevant and recent clinical trials relating to the subject matter. This is one of the best aspects of this text as it allows non-researchers to keep up-to-date with some of the latest research, as the contributors themselves are researchers. An entire chapter is devoted to new agents currently being developed and trialled in the treatment of lymphomas, including proteasome inhibitors such as Bortezomib, immunomodulatory agents such as thalidomide and mTOR inhibitors. In the treatment chapters there are discussions on conventional treatments such as CHOP and ABVD and the role the monoclonal antibodies have played in current treatment of non-Hodgkin’s lymphoma.

This is a text meant for medical clinicians. However, for nurses with considerable experience in managing lymphoma patients, there are selected chapters that are easily read and understood. The chapters are very specific in their coverage of individual lymphomas and if you were looking for a complete book on the pathology and treatment of lymphomas, then this would be a good buy.
BOOK REVIEWS

Jaye Manning
Haematology and Oncology Clinics of Australasia, Brisbane, Queensland

Living Dying Caring: Life and Death in a Nursing Home
R Hudson, J Richmond
Ausmed (2000)
299 pages
ISBN: 0-9577988-6-5
RRP: $49.95

Hudson and Richmond’s earlier publication – Unique and Ordinary: reflections on living and dying in a nursing home was a remarkable book published in 1994, well in advance to the surge in interest that now surrounds the issue of death and dying in residential aged care facilities. I was delighted to see a second publication by these authors and the incorporation of implications for practice pertinent to the stories told.

These practice implications are geared toward three different audiences – the gerontic nurse, management and indirect carers (by indirect, the authors identify those workers who are non-nursing staff such as domestic services, clerical, allied health professionals and volunteers). I was surprised that there were no practice implications specifically for the nursing/ personal care workers who make up such a large proportion of the workforce. A further issue with these practice implications is that they are not referenced and with the increasing trend to evidence- based practice, this may be a limitation for use. There is however, a comprehensive further reading list at the back of the book.

Notwithstanding this issue, the reader is privileged to read the intimate relationships that are often missing from the literature, which is dominated by quality issues and the functional aspects of providing care for the dying.

The book is separated into nine chapters, each one with sub-headings for the main point of interest of the stories to be told. A boxed text area introduces who the story is about, a short discussion of the pertinent issue and reflections that further explore some of the issues raised in the story. Important stories that reflect the complexity of care in these settings include the death of significant residents, the issue of shared rooms, cultural sensitivity, sudden death and organisational factors that shape the dying experience.

I was particularly taken by the beautiful and touching notes written in the residents’ case files following their death, much more dignified than leaving the final record as respirations ceased. This book is not all about ‘good death’ stories, the authors are willing to explore when deaths were not well managed and provide suggestions of what could be done better.

I would recommend this book to those who are not familiar with this setting or for those that are, but want a different perspective than that offered by journals and textbooks.

Deborah Parker
Dementia Collaborative Research Centre, Queensland University of Technology, Queensland

Lymphoedema
R Twycross, K Jones, J Todd (eds)
Ausmed (2003)
ISBN: 0-9579876-6-8
377 pages
RRP: $64.95

This text is a compilation of information on all aspects of lymphoedema and its management. It is an excellent resource for health professionals involved in the care of patients with lymphoedema or those interested in learning more on the subject. Primarily a UK text, it also contains contributions from Israel, Belgium and India.

The 23 chapters come from a range of multidisciplinary authors, including medicine, nursing and physiotherapy. The opening chapter of a patient’s perspective is an excellent inclusion.

Each chapter concentrates on a particular aspect of lymphoedema. It can be read chapter by chapter, or used as a reference to investigate certain aspects of care. The format of the text and inclusion of many photos, drawings and tables, makes it easy to understand. However, some lymphoedema sufferers and carers may find the language too technical, especially in relation to the chapters on pain and drug treatments.

The text begins by outlining the pathophysiology, classification and clinical features of lymphoedema. The psychological aspects of lymphoedema are dealt with in a brief chapter, while psychological issues relating to aspects of lymphoedema treatment are also dealt with throughout the text. The management strategies of lymphoedema are the main focus, including chapters on skin care, manual lymphatic drainage and drug treatments. Step by step exercises, massage techniques and instructions for bandaging are included, though cannot replace practical instruction. Novel treatments and surgery for lymphoedema are also discussed.

The remaining chapters of the text investigate specific instances of lymphoedema, such as in childhood, head and neck, breast, male genital and advanced cancer.

The final chapter discusses an Indian perspective, highlighting the challenges in managing lymphoedema with limited resources. A thorough index allows the reader to find information easily and extensive reference lists allow for further investigation if required.

Anne Mellon
Hunter Centre for Gynaecological Cancer, John Hunter Hospital, Newcastle, NSW

Nursing Patients with Cancer: Principles and Practice
N Kearney, A Richardson
Churchill Livingstone (2006)
ISBN: 978-0-443-07288-8
864 Pages
RRP: $159.90

This book has been expressly written for European healthcare workers. The text refers to adult cancer nursing and is aimed at providing key skills and knowledge for specialist cancer nurses.

Contributors to the book comprise nurses, doctors, allied health professionals, and therapists - overall 60 authors. The text is well formatted into a logical series of six inter-related sections. The information is easy to access and provides the practitioner with a comprehensive guide to cancer nursing practice.

Section one considers the principles of self care and deals with the social and cultural aspects of cancer nursing. This is a refreshing view of issues relating to the media, the internet, partnerships (both personal and professional) and cultural concepts. Section two explores the scientific basis of cancer, while section three deals with health promotion including cancer prevention and early detection. Section four examines treatment strategies in detail based on current practice and future trends. This is a particularly informative section relating to specific nursing interventions. Section five discusses optimal supportive care strategies with a thorough consideration of morbidities experienced by patients with cancer and section six discusses care delivery systems, including intensive care nursing of the cancer patient, rehabilitation and survivorship and palliative care.

The hard copy edition has 864 pages and is supported by well-defined and comprehensive tables throughout the text. The text is well-referenced and would be a very useful addition to any oncology ward library.
## Calendar of Meetings

### Australia and New Zealand

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<th>Date</th>
<th>Name of Meeting</th>
<th>Place</th>
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<tr>
<td>2007</td>
<td>Medical Oncology Group</td>
<td>Melbourne VIC</td>
<td>Moga Conference Secretariat c/o Pharmaevents PO Box 265 Annandale NSW 2038 Tel: +61 2 9280 0577 Fax: +61 2 9280 0533 Email: <a href="mailto:moga@pharmaevents.com.au">moga@pharmaevents.com.au</a> Web: <a href="http://www.moga.org.au">www.moga.org.au</a></td>
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<tr>
<td>August</td>
<td>1-5</td>
<td>Medical Oncology Group Australia Annual Scientific Meeting</td>
<td>Melbourne VIC</td>
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<tr>
<td>28-31</td>
<td>9th Australian Palliative Care Conference</td>
<td>Melbourne VIC</td>
<td>APCC 07 Conference Secretariat C/- ICE Australia P/L 6 Clarendon Place South Melbourne VIC 3205 Tel: +61 3 9681 6288 Fax: +61 3 9681 6553 Email: <a href="mailto:apcc@iceaustralia.com">apcc@iceaustralia.com</a> Web: <a href="http://www.pallcare.org.au/Default.htm">http://www.pallcare.org.au/Default.htm</a></td>
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<td>2007</td>
<td>9th Australian Palliative Care Conference</td>
<td>Melbourne VIC</td>
<td>APCC 07 Conference Secretariat C/- ICE Australia P/L 6 Clarendon Place South Melbourne VIC 3205 Tel: +61 3 9681 6288 Fax: +61 3 9681 6553 Email: <a href="mailto:apcc@iceaustralia.com">apcc@iceaustralia.com</a> Web: <a href="http://www.pallcare.org.au/Default.htm">http://www.pallcare.org.au/Default.htm</a></td>
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<td>October</td>
<td>1-7</td>
<td>RANZCR 58th Annual Scientific Meeting</td>
<td>Melbourne VIC</td>
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<td>November</td>
<td>14-16</td>
<td>34th Clinical Oncological Society of Australia Annual Scientific Meeting</td>
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### International

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<tr>
<td>2007</td>
<td>July</td>
<td>Joint European Conferences International Symposium on State-of-the-Art Imaging</td>
<td>Dubrovnik Croatia</td>
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<tr>
<td>5 – 7</td>
<td>European Society for Medical Oncology Conference</td>
<td>Lugano Switzerland</td>
<td>European Society for Medical Oncology (ESMO) Via Vianello-Lugano, Switzerland Tel: +41 91 973 1919 Fax: +41 91 973 1918 Email: <a href="mailto:congress@esmo.org">congress@esmo.org</a> Web: <a href="http://www.esmo.org/activities/esmoconference">www.esmo.org/activities/esmoconference</a></td>
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<tr>
<td>11 – 13</td>
<td>27th Sapporo International Cancer Seminar</td>
<td>Sapporo Japan</td>
<td>Sapporo Cancer Seminar Foundation Sapporo, Japan Tel: +81 22 1526 Email: <a href="mailto:scc@phoenix-c.or.jp">scc@phoenix-c.or.jp</a> Web: <a href="http://www.phoenix-c.or.jp/scc.html">www.phoenix-c.or.jp/scc.html</a></td>
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<td>August</td>
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<td>Best of ASCO International, Brazil</td>
<td>Porto Alegre Brazil</td>
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<td>9 – 11</td>
<td>1st Kuala Lumpur International Breast and Colorectal Cancer Congress</td>
<td>Kuala Lumpur Malaysia</td>
<td>Malaysian Oncological Society Kuala Lumpur, Malaysia Tel: +60 3 2093 0100 Fax: +60 3 2093 0900 Email: <a href="mailto:kbcc@malaysiacancerology.org">kbcc@malaysiacancerology.org</a> Web: <a href="http://www.malaysiacancerology.org/article.php?aid=223">www.malaysiacancerology.org/article.php?aid=223</a></td>
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<td>13 – 16</td>
<td>Meeting future challenges: centres for Disease Control and Prevention Cancer Conference 2007</td>
<td>Atlanta US</td>
<td>Centers for Disease Control and Prevention c/o DTI Associates Arlington, United States Tel: +1 703 299 1619 Fax: +1 703 706 0474 Email: <a href="mailto:CancerConference@dti.com">CancerConference@dti.com</a> Web: <a href="http://www.cdcancerconference.net">www.cdcancerconference.net</a></td>
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<td>25 – 30</td>
<td>25th International Congress of Paediatrics</td>
<td>Athens Greece</td>
<td>C &amp; C International S.A. Conventions &amp; Congresses 16, Paradissou Str. 151 25 Athens Tel: +30 210 688 9190 Fax: +30 210 684 777 Email: <a href="mailto:icp2007@cnc.gr">icp2007@cnc.gr</a> Web: <a href="http://www.icp2007.gr/">www.icp2007.gr/</a></td>
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<td>2 – 6</td>
<td>12th World Conference on Lung Cancer</td>
<td>Seoul, South Korea</td>
<td>International Association for the Study of Lung Cancer</td>
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<td>7 – 8</td>
<td>1st Global Insight Conference on Leukaemia</td>
<td>Mumbai, India</td>
<td>European School of Oncology</td>
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<td>8 – 13</td>
<td>9th Biannual European Society for Therapeutic Radiation and Oncology Meeting</td>
<td>Barcelona, Spain</td>
<td>European Society for Therapeutic Radiology and Oncology (ESTRO)</td>
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<td>13 – 15</td>
<td>World Cancer Conference: Latest scientific and technical achievements in cancer and new drugs research</td>
<td>Beijing, China</td>
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<td>15 – 19</td>
<td>European Respiratory Society Annual Congress 2007</td>
<td>Stockholm, Sweden</td>
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<td>16 – 20</td>
<td>9th World Congress of Psycho-Oncology</td>
<td>London, UK</td>
<td>International Psycho-Oncology Society (IPOS)</td>
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<td>18 – 20</td>
<td>IACR 07-29th Annual Meeting of the International Association of Cancer Registries</td>
<td>Ljubljana, Slovenia</td>
<td>Institute of Oncology Ljubljana</td>
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<td>21 – 23</td>
<td>3rd ESH-EHA Conference on Focus on Paediatric Haematology and Oncology</td>
<td>Sextro Levante, Italy</td>
<td>European School of Haematology (ESH)</td>
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<td>9 – 10</td>
<td>Joint Conference of the Canadian Association of</td>
<td>Toronto, Canada</td>
<td>Canadian Association of Radiation Oncology (CARO)</td>
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<td>Radiation Oncology and the Canadian Organisation</td>
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<td>Vancouver, Canada               Tel: +1 604 877 6193  Fax: +1 604 877 0505 Email: <a href="mailto:mary.lee@uhn.on.ca">mary.lee@uhn.on.ca</a></td>
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<td>11 – 13</td>
<td>4th European Conference Tobacco or Health 2007</td>
<td>Basel, Switzerland</td>
<td>Swiss Cancer League, German Cancer Society Bern, Switzerland</td>
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<td>Tel: +41 31 389 9163  Fax: +41 31 389 9160 Email: <a href="mailto:office@ectoh7.org">office@ectoh7.org</a></td>
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<td>ESH-EHA Conference: Focus Paediatric Haematology</td>
<td>Sitges, Spain</td>
<td>European School of Haematology (ESH) Paris, France</td>
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<td>Tel: +33 1 4206 6540  Fax: +33 1 42 06 05 87 Email: <a href="mailto:ghyslaine_lebouguilt@paris7.jussieu.fr">ghyslaine_lebouguilt@paris7.jussieu.fr</a></td>
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<td>17 – 20</td>
<td>8th Asia-Pacific Conference on Tobacco or Health</td>
<td>Taipei, Taiwan</td>
<td>John Tung Foundation, Taipei, Taiwan</td>
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<td>Tel: +886 2 2376 2133  Fax: +886 2 2752 7247 Email: <a href="mailto:secretariat2007@tfh.org.tw">secretariat2007@tfh.org.tw</a></td>
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<td>18 – 21</td>
<td>4th Congress of the World Society for Breast</td>
<td>Tianjin, China</td>
<td>Tianjin Medical University Cancer Institute and Hospital Tianjin, China</td>
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<td>26 – 28</td>
<td>4th International Conference on Thrombosis and</td>
<td>Bergamo, Italy</td>
<td>Associazione Italiana di Oncologia Medica Bergamo, Italy</td>
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<td>Haemostasis Issues in Cancer</td>
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<td>28 – 31</td>
<td>TIMM 2007: 3rd Trends in Medical Mycology</td>
<td>Torino, Italy</td>
<td>European Organisation for Research and Treatment of Cancer (EORTC)</td>
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<td>28 – 31</td>
<td>49th ASTRO Annual Meeting</td>
<td>Los Angeles, US</td>
<td>American Society for Therapeutic Radiology and Oncology (ASTRO)</td>
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<td>30 – 3 Nov</td>
<td>2007 International Society of Paediatric Oncology</td>
<td>Mumbai, India</td>
<td>SIOP 2007 - International Society of Paediatric Oncology</td>
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<td>Local Organising Committee 37/900, Adarsh Nagar Century Bazaar, Worli 400 030</td>
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### November

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<td>Nutrition and Cancer</td>
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<td>International Washington DC, United States</td>
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<td>Tel: +1 202 328 7744  Fax: +1 202 328 7226 Email: <a href="mailto:aicrweb@aicr.org">aicrweb@aicr.org</a></td>
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<td>3 – 10</td>
<td>24th International Papillomavirus Conference and</td>
<td>Beijing, China</td>
<td>Chinese Medical Association c/o International Convention Services Beijing,</td>
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<td>Clinical Workshop</td>
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<td>China Tel: +86 10 8515 8149 Email: <a href="mailto:ips2007@cmca.org.cn">ips2007@cmca.org.cn</a></td>
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<td>7 – 9</td>
<td>Cancer in the Developing World</td>
<td>Cairo, Egypt</td>
<td>National Cancer Institute, Cairo University Cairo, Egypt</td>
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<td>8 – 10</td>
<td>Geriatric Oncology: Cancer in the Elderly</td>
<td>Madrid, Spain</td>
<td>Society for Geriatric Oncology (SOGO) Genolier, Switzerland</td>
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<td>9 – 11</td>
<td>2007 Oncology Nursing Society (ONS) Institutes</td>
<td>Chicago, US</td>
<td>Oncology Nursing Society (ONS) Pittsburgh, PA, United States</td>
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<td>10 – 14</td>
<td>International Conference on Clinical PET and</td>
<td>Bangkok, Thailand</td>
<td>International Atomic Energy Agency (IAEA) Vienna, Austria</td>
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<td>Molecular Medicine</td>
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<td>12 – 14</td>
<td>Cancer 2007: From Molecular Biology to Treatment</td>
<td>São Paulo, Brazil</td>
<td>8th Sao Paulo Research Conference University of Sao Paulo Sao Paulo, Brazil Tel: +55 11 3361 3056 Fax: +55 11 3361 3089 Email: <a href="mailto:eventsus@eventus.com.br">eventsus@eventus.com.br</a> Web: <a href="http://www.eventus.com.br/bioconferences">www.eventus.com.br/bioconferences</a></td>
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<td>15 – 17</td>
<td>Making Connections: A Canadian Cancer Research Conference celebrating NCCIC's 60th Anniversary</td>
<td>Toronto, Canada</td>
<td>National Cancer Institute of Canada (NCIC) c/o DR Dunlop &amp; Associates Ottawa, Canada Tel: +1 613 235 8879 Fax: +1 613 235 0094 Email: <a href="mailto:dunlop@rogers.com">dunlop@rogers.com</a> Web: <a href="http://www.ncic.canada.ca">www.ncic.canada.ca</a></td>
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<td>15 – 17</td>
<td>19th Asia-Pacific Cancer Conference (APCC) 2007</td>
<td>Tehran, Iran</td>
<td>Tehran University of Medical Sciences Department of International Relations PO Box 14155-6599 Tehran Tel: +98 21 649 1070 Fax: +98 21 641 9537 Email: <a href="mailto:office@rusa.tums.ac.ir">office@rusa.tums.ac.ir</a> Web: <a href="http://www.tums.ac.ir/about/index.html">http://www.tums.ac.ir/about/index.html</a></td>
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<tr>
<td>22 – 23</td>
<td>8th International Netherlands Cancer Institute Head and Neck Symposium</td>
<td>Amsterdam, Netherlands</td>
<td>The Netherlands Cancer Institute Amsterdam, Netherlands Tel: +31 20 512 2550 Fax: +31 20 512 2554 Email: <a href="mailto:knog@mkr.nl">knog@mkr.nl</a> Web: <a href="http://www.hoofdhals.nl">www.hoofdhals.nl</a></td>
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<tr>
<td>25 – 28</td>
<td>2nd International Cancer Control Congress</td>
<td>Rio de Janeiro, Brazil</td>
<td>National Cancer Institute (INCA) c/o International Conference Services Vancouver, Canada Tel: +1 604 681 2153 Fax: +1 604 681 1049 Email: <a href="mailto:cancercntrol2007@mintel.com">cancercntrol2007@mintel.com</a> Web: <a href="http://www.cancercontro2007.com">www.cancercontro2007.com</a></td>
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<tr>
<td>25 – 30</td>
<td>RSNA 2007: Radiological Society of North America Annual Meeting</td>
<td>Chicago, USA</td>
<td>Radiological Society of North America (RSNA) Oak Brook, United States Tel: +1 630 571 2670 Fax: +1 630 571 7837 Email: <a href="mailto:kchristianson@rsna.org">kchristianson@rsna.org</a> Web: <a href="http://www.rsna2007.rsna.org">www.rsna2007.rsna.org</a></td>
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<td>26 – 27</td>
<td>BASO-ACS and ABS at BASO Joint Scientific Conference</td>
<td>London, UK</td>
<td>BASO – the Association of Cancer Surgery London, United Kingdom Tel: +44 20 7046 5612 Fax: +44 20 7046 6574 Email: <a href="mailto:admin@baso.org.uk">admin@baso.org.uk</a> Web: <a href="http://www.baso.org.uk/content/acs-Meetings.asp">www.baso.org.uk/content/acs-Meetings.asp</a></td>
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<td>29 – 30</td>
<td>Cell Signalling and Novel Cancer Therapeutics</td>
<td>London, UK</td>
<td>British Association for Cancer Research (BACR) Sutton, United Kingdom Tel: +44 20 8722 408 Fax: +44 20 8770 1395 Email: <a href="mailto:bacr@bacr.ac.uk">bacr@bacr.ac.uk</a> Web: <a href="http://www.bacr.org.uk/scientificmeetings/meetingdetail.asp?id=58">www.bacr.org.uk/scientificmeetings/meetingdetail.asp?id=58</a></td>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Name of Meeting</th>
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<tbody>
<tr>
<td>26 – 28</td>
<td>Childhood Cancer: In Quest of a Complete Cure 5th SIOP Asia Conference</td>
<td>Muscat, Oman</td>
<td>International Society of Paediatric Oncology (SIOP) c/o Informed Events Dubai, United Arab Emirates Tel: +971 4 268 9040 Fax: +971 4 269 8903 Email: <a href="mailto:ifodub@emirates.net.ae">ifodub@emirates.net.ae</a> Web:  <a href="http://www.infomedweb.com/ourevents/SIOP2008/index.htm">www.infomedweb.com/ourevents/SIOP2008/index.htm</a></td>
</tr>
<tr>
<td>27 – 14th</td>
<td>Society for Research on Nicotine and Tobacco Annual Meeting</td>
<td>Portland, USA</td>
<td>Society for Research on Nicotine and Tobacco Tel: +1 608 443 2462 Fax: +1 608 443 2474 Email: <a href="mailto:mgamblin@smu.edu">mgamblin@smu.edu</a> Web: <a href="http://www.smu.edu">www.smu.edu</a></td>
</tr>
<tr>
<td>28 – 5th</td>
<td>American Psychosocial Oncology Society (APOS) Annual Conference</td>
<td>Irvine, USA</td>
<td>American Psychosocial Oncology Society (APOS) Charlotteville, WA, United States Tel: +1 434 293 5350 Fax: +1 434 977 0899 Email: <a href="mailto:aball@apos-society.org">aball@apos-society.org</a> Web: <a href="http://www.apos-society.org">www.apos-society.org</a></td>
</tr>
<tr>
<td>27 – 29</td>
<td>6th European Oncology Nursing Society (EONS) Spring Convention</td>
<td>Geneva, Switzerland</td>
<td>Federation of European Cancer Societies (FECS) Brussels, Belgium Tel: +32 2 775 0200 Fax: +32 2 775 0200 Email: <a href="mailto:EONS@feesco.org">EONS@feesco.org</a> Web: <a href="http://www.eons.org">www.eons.org</a></td>
</tr>
<tr>
<td>15 – 19</td>
<td>EBCI 6: 6th European Breast Cancer Conference</td>
<td>Berlin, Germany</td>
<td>EDRTC – EUSOMA- Europa Donna c/o Federation of European Cancer Societies (FECS) Brussels, Belgium Tel: +32 2 775 0200 Fax: +32 2 775 0245 Email: <a href="mailto:EBCI@feesco.org">EBCI@feesco.org</a> Web: <a href="http://www.eons.org/eurapageid=1300">www.eons.org/eurapageid=1300</a></td>
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**CALENDAR OF MEETINGS**

**December**

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<tbody>
<tr>
<td>1 – 5</td>
<td>47th American Society for Cell Biology Annual Meeting</td>
<td>Washington DC, USA</td>
<td>American Society for Cell Biology (ASCB) Bethesda, United States Tel: +1 301 347 9300 Fax: +1 301 347 9310 Email: <a href="mailto:ascbinfo@ascb.org">ascbinfo@ascb.org</a> Web: <a href="http://www.ascb.org/meetings/index.cfm">www.ascb.org/meetings/index.cfm</a></td>
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**February**

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<tbody>
<tr>
<td>25 – 27</td>
<td>International Conference on Burkitt Lymphoma and Related Lymphoproliferative Disorders</td>
<td>Kampala, Uganda</td>
<td>Department of Pathology and Human Oncology University of Siena Siena, Italy Tel: +39 0577 232 000 Fax: +39 0577 232 134 Email: <a href="mailto:servcong@unisi.it">servcong@unisi.it</a> Web: <a href="http://www.unisi.it/eventi/burkitt">www.unisi.it/eventi/burkitt</a></td>
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**2008**

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<td>American Psychosocial Oncology Society (APOS) Charlotteville, WA, United States Tel: +1 434 293 5350 Fax: +1 434 977 0899 Email: <a href="mailto:aball@apos-society.org">aball@apos-society.org</a> Web: <a href="http://www.apos-society.org">www.apos-society.org</a></td>
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<tr>
<td>May</td>
<td>44th ASCO Annual Meeting</td>
<td>Chicago, US</td>
<td>American Society of Clinical Oncology (ACSO)</td>
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<td>30-3 June</td>
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<tr>
<td>June</td>
<td>10th International Conference on Malignant Lymphoma</td>
<td>Lugano, Switzerland</td>
<td>Instituto Oncologico della Svizzera Italiana (IOSI)</td>
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<td>4-7</td>
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<tr>
<td></td>
<td>5th World Conference on Breast Cancer</td>
<td>Winnipeg, US</td>
<td>Canadian Breast Cancer Foundation</td>
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<td>4-8</td>
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<tr>
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<td>10th World Congress of Psycho-Oncology</td>
<td>Madrid, Spain</td>
<td>International Psycho-Oncology Society (IPOS)</td>
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<td>9-13</td>
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<tr>
<td>July</td>
<td>EACR 20: European Association for Cancer Research Conference</td>
<td>Lyon, France</td>
<td>Federation of European Cancer Societies (FECS)</td>
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<td>5-8</td>
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<tr>
<td>August</td>
<td>12th World Congress on Pain</td>
<td>Glasgow, Scotland</td>
<td>International Association for the Study of Pain (IASP)</td>
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<td>17-22</td>
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<tr>
<td></td>
<td>UICC World Cancer Congress 2008</td>
<td>Geneva, Switzerland</td>
<td>UICC Congress Secretariat</td>
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<tr>
<td>27-31</td>
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<tr>
<td>September</td>
<td>ESSO 2008: 14th Congress of the European Society of Surgical Oncology</td>
<td>The Hague, Netherlands</td>
<td>Federation of European Cancer Societies (FECS)</td>
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<td>10-13</td>
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THE CANCER COUNCIL AUSTRALIA

The Cancer Council Australia is the peak national cancer control organisation. Its members are the leading state and territory cancer councils, working together to undertake and fund cancer research, prevent and control cancer and provide information and support for people affected by cancer.

MEMBERS
The Cancer Council ACT
The Cancer Council New South Wales
The Cancer Council Northern Territory
The Cancer Council Queensland
The Cancer Council South Australia
The Cancer Council Tasmania
The Cancer Council Victoria
The Cancer Council Western Australia

AFFILIATED ORGANISATIONS
Australasian Association of Cancer Registries
Clinical Oncological Society of Australia Inc
Palliative Care Australia

CEO
Professor I Olver MD, PhD, CMin, FRACP, FAChPM, MRACMA

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Office Bearers
President
Professor I Frazer BSc(Hons), MBChB, MD MRCP, FRCP, FRCPA
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Members
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Dr J Dunn
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Professor C Gaston
Mr G Gibson QC
Professor D Goldstein MBBS, FRACP
Dr S Hart FRACS
Professor D Hill AM, PhD
Professor W McCarthy AM, MBBS, FRACS
Dr A Penman
Assoc Professor S Smiles RN, RM, ICC, BHA, GradDipPSEM
Dr K White PhD

CLINICAL ONCOLOGICAL SOCIETY OF AUSTRALIA INC

The Clinical Oncological Society of Australia (COSA) is a multidisciplinary society for health professionals working in cancer research or the treatment, rehabilitation or palliation of cancer patients.

It conducts an annual scientific meeting, seminars and educational activities related to current cancer issues. COSA is affiliated with The Cancer Council Australia.

EXECUTIVE COMMITTEE
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Associate Professor D Goldstein MBBS, FRACP
President Elect
Professor B Mann MBBS, PhD, FRACF
Executive Officer
Ms M McJannett
Council Nominees
Ms K Cameron RN, OncCert, GrDipN, MNSc
Professor B Stewart MSc, PhD, FRACI, Dip Law
Ms A Woollett

MEMBERSHIP
Further information about COSA and membership applications are available from:
www.cosa.org.au or cosa@cancer.org.au

Membership fees for 2007
Ordinary Members: $160
Associate Members: $100
(includes GST)

INTEREST GROUPS
ANZ Children’s Haematology and Oncology
Breast Oncology
Cancer Nurses Society of Australia
Cancer Research
Clinical Research Professionals
Epidemiological
Familial Cancer
Gastrointestinal Oncology
Gynaecological Oncology
Lung Oncology
Medical Oncology
Melanoma and Skin
Neuro-oncology
Palliative Care
Pharmacy
Psycho-Oncology
Radiation Oncology
Regional and Rural Oncology
Social Workers
Surgical Oncology
Urological Oncology