

# 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 and internationally. Reasons for these differences are not entirely clear, but as a consequence rural and regional cancer services 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 may be hampered by an existing lack of rural/regional health services research, however some potential solutions are explored.

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”.<sup>1</sup> But how universal is our healthcare system and most particularly, 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 endeavoring to address health issues which have been 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 evidence 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.<sup>2,3</sup>

It is in this context that COSA produced *Mapping Rural and Regional Oncology Services in Australia* (March 2006).<sup>3</sup> 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, provided some interesting and useful background. In NSW, the recently formed Cancer Institute NSW performed a Rural Access Review 2005,<sup>4</sup> an analysis of which is to be further refined under the terms of the *NSW Cancer Plan 2007–2010*.<sup>5</sup>

What we have learned from these reviews is perhaps well known to many of us who work outside metropolitan Australia. Findings show 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 multidisciplinary care and psychosocial support. Services are not universally bad, but in general, the more remote the site, the more difficult access to quality care becomes.

There is other evidence of disparities in cancer outcomes between metropolitan and regional areas in Australia and internationally.<sup>6-13</sup> Late stage of presentation as is commonly believed does not adequately explain differences,<sup>7</sup> so access to care may be a factor. The issue of poor health outcomes in general in Indigenous Australians is well known and a recent study highlighted poor cancer outcomes.<sup>14</sup>

Socioeconomic factors may also be an explanation<sup>6</sup> and recent data from the Victorian Cancer Registry may support this hypothesis. Five-year survival rates for all cancers were marginally worse in regional Victoria in 2004, compared to metropolitan Melbourne.<sup>15</sup> However, comparisons within Melbourne showed that some areas, generally those with lower socioeconomic status,

had lower survival rates. In some cases, these metropolitan areas fared worse than regional areas.

Interpretation of the cancer registry data is hampered by adequate clinical data systems that can better inform us and allow us to move forward. We are hampered also by a relative paucity of health services research specifically aimed at rural issues.<sup>16</sup> What is the way forward for rural cancer care and how can we get there efficiently and cost effectively?

### Identifying regional oncology centres of excellence

The COSA report advocates developing regional cancer centres of excellence, where an adequate regional population exists and such centres could serve as a focus to recruit and retain regional oncology health professionals and provide better multidisciplinary care. They could improve capacity across a region by providing training and support for smaller centres and by improving access to clinical trials. These regional centres could be linked with metropolitan sites for mentoring, continuing professional development (CPD) and improved access and coordination for the management of complex cases. In the US, a system of comprehensive cancer centres is established to improve outcomes and access to high quality care.<sup>17</sup> We could argue that there is a need 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 giving 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 populations are adequate to justify new radiation therapy centres. These assessments should be partly based on regional cancer incidence, however there may also need to be recognition of regional isolation, which justifies multidisciplinary regional oncology centres at sites where cancer patient numbers fall marginally short of benchmarks.

### Manpower crisis

It is one thing to identify sites that 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 workforce<sup>18</sup> 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, so that they can look beyond metropolitan Australia as their eventual destination.

Once the workforce is trained, it would seem logical to encourage clinicians out of their comfort zone to

regional oncology centres, with contracts and conditions that recognise a degree of risk and challenge associated with rural cancer practice. A recent survey of advanced trainees in medical oncology in Australia identified a number of barriers to working in regional Australia. Firstly, there were social issues, such as distance from family and access to educational facilities, which are difficult to overcome. But secondly, trainees identified that they wanted to work in a centre with more than one cancer specialist and wanted protected time for CPD and access to clinical trials (Personal communication, H Francis, Border Medical Oncology). Overcoming this last set of factors is more easily solved and may be enabled by developing regional cancer centres.

### Education of rural area health services

Many rural area health services have a high turnover 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 their resources and to build regional oncology centres that they and their communities can be proud of.

Change is often challenging for bureaucracy, 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 significant cost savings as well as quality improvements, which need to be articulated to area health services.

### Can the quality of regional oncology centres be maintained?

It is sometimes argued that the isolation of regional practice will necessarily lead to gradual erosion in quality. This could be true in an under-resourced and under-staffed regional oncology centre, where the pressures of patient care and administration squeeze out access to peer review and continuing education.

It is contingent upon health planners and professional bodies to provide mechanisms to support regional oncology centres, which may be staffed by one to two cancer specialists in each sub specialty, as well as smaller numbers of cancer nurses and allied health professionals. These facilities will need funding and programs which enable attendance at national and international conferences through provision of locums, travel grants and other forms of professional support.

While there are significant advantages to being in a large metropolitan department, there are many joys to be had as a clinician in a regional community, where one's involvement and contribution to a community can be powerful and extremely satisfying. Cancer clinicians

also need adequate support from diagnostic services, such as radiology and pathology services. Any review of oncology centres needs to guarantee the quality and consistency of these vital inputs to cancer decision making.

In this information technology age, it seems crucial for issues of quality and safety that we make use of technological advances to improve our provision of cancer care. The Cancer Institute NSW has recognised the importance of this with the development of the CI-SCAT protocol website,<sup>19</sup> 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 sustain them, 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 impossibility. 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

## Mapping rural and regional oncology services – key findings

- Twenty one per cent of all rural hospitals administering chemotherapy (RHAC) had a resident medical oncology service; 41% had access to a visiting service, with access ranging from weekly to as little as once in six months. An additional 38% of RHAC had neither a resident nor visiting medical oncology service. This was more likely to occur as remoteness increased.
- Medical oncologists write the majority of chemotherapy orders in 100% of benchmarked metropolitan centres, but only 58% of RHAC reported the majority of orders written by a medical oncologist. The degree of supervision and involvement by medical oncologists or haematologists is not always clear.
- Chemotherapy-trained nurses administered chemotherapy in 61% of RHAC Australia-wide. As rural hospitals administering chemotherapy remoteness increased, chemotherapy was increasingly administered by people other than a chemotherapy-trained nurse, such as other trained nurses and GPs.
- Twenty two per cent of RHAC had a dedicated palliative care doctor and 59% had dedicated palliative care nurses.
- Seven per cent of hospitals that reported administering chemotherapy had access to a radiation unit – a total of 11 radiation units for all 157 RHAC.
- Of the 26 available radiotherapy machines nationwide, fewer than half (46%) were reported as fully staffed.
- Most RHAC provided access to allied healthcare services. However, many reported long waiting times, out-of-pocket expenses or services restricted to inpatients.
- In RHAC nationally, 43% of hospitals held multidisciplinary clinics.
- Dedicated oncology counselling services were available at 39% of RHAC.
- Sixty one per cent of all RHAC requested urgent access to psychological services and support; 65% indicated travel support was a problem for rural patients. Patient transport refunds were criticised in many returned surveys.

Note that results from the two metropolitan centres and one large regional centre surveyed were used as a benchmark for service provision in rural hospitals administering chemotherapy and therefore can be considered at 100%, unless otherwise indicated.

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.

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