

Inequity in rural cancer survival in Australia is not an insurmountable problem

Craig R Underhill, David Goldstein and Paul B Grogan

Inequity in rural cancer survival in Australia is not an insurmountable problem: it is a test of our health systems

Australia has lower cancer mortality rates than comparable nations like the United States, United Kingdom, Canada and New Zealand. However, there is increasing evidence that this success may be bypassing the 2.8 million Australians who live in rural and remote Australia.¹⁻³

Indeed, the further from a metropolitan centre patients with cancer live, and adjusting for stage of presentation, the more likely they are to die within 5 years of diagnosis.²⁻⁴ Geographical isolation, a relative shortage of health care providers, and a higher proportion of disadvantaged groups such as Indigenous people are acknowledged to be contributing factors.³

How access to specific treatment and support services may explain the differences in cancer survival was a central question of the first national mapping of rural and regional oncology services, commissioned by the Clinical Oncological Society of Australia. The study showed that the availability of oncology services diminished as geographical isolation increased, and that quality and availability of services by location directly influenced survival rates. For all survey criteria assessed, service provision was measurably and significantly poorer in rural and remote centres than in benchmark metropolitan and large regional centres (see Box). Established rural and visiting oncologists, nurses and other cancer care professionals provide a vital service, but they are evidently stretched well beyond capacity.

While much of the study's findings are alarming, the data support our rationale for what we believe are achievable reforms to reduce the geographical inequity in cancer services. Access may not be the only explanation — some remote patients may, for example, choose not to have treatment — but there are ways in which access to quality care can be improved.

The centrepiece of our recommendations is the establishment of Regional Cancer Centres of Excellence (RCCEs) in regions

with a suitable population. These centres would provide multidisciplinary care, improve support and educational services and, by being mentored by major metropolitan centres, could provide a link to smaller, more remote services. They would also boost access to clinical trials and may provide a critical mass for technological platforms like positron emission tomography scanning.

We have pragmatic evidence that RCCEs do work, through the success of a centre in Albury–Wodonga, a former outreach facility that now has five resident oncologists, a clinical trials unit and a two-machine radiotherapy service. Reported benefits include an increase in the number of new patients treated locally from 150 to 750 a year, an eightfold increase in chemotherapy day treatments, establishment of multidisciplinary clinics and more than 10% of new patients participating in a clinical trial.⁴

The Border Cancer Care Coordination Project, a pilot study funded by the Australian Government, with contributions from the Victorian and New South Wales governments, showed that a modest investment in expanding the Albury–Wodonga service has significantly improved the coordination of care and quality of experience for patients, carers and health professionals. The pilot study employed cancer care coordinators, an oncology social worker, clinical psychologists, a multidisciplinary meeting coordinator and a researcher. Information gathered through this project and reported to key stakeholders showed that patients across the wider catchment area were better able to access multidisciplinary care, regardless of their postcode, insurance status or whether they were treated in an acute or community setting.

The best way to gradually roll out a network of similar centres is to build them where a radiotherapy unit is in place. Radiation oncology is essential to multidisciplinary cancer care. And, while

Mapping rural and regional oncology services⁵ — key findings

- Nationally, 21% of all 157 rural hospitals administering chemotherapy (RHACs) had a resident medical oncology service; 41% had access to a visiting service, with times of availability ranging from weekly to once in 6 months; 38% had neither a resident nor visiting medical oncology service, and this was more likely to occur as remoteness increased.
- Chemotherapy-trained nurses administered chemotherapy in 61% of RHACs Australia-wide. Chemotherapy was increasingly administered by people other than a chemotherapy-trained nurse, such as other nurses and general practitioners, as the remoteness of RHACs increased.
- Medical oncologists write most chemotherapy orders in 100% of benchmark metropolitan centres, but only 58% of RHACs reported that most orders are written by a medical oncologist. The degree of supervision and involvement by medical oncologists or haematologists is not always clear.
- 22% of RHACs had a dedicated palliative care doctor and 59% had dedicated palliative care nurses.
- 7% of non-metropolitan hospitals that reported administering chemotherapy had access to a radiation unit — a total of 11 radiation units for all 157 RHACs.
- Of the 26 available radiotherapy machines in regional centres, fewer than half (46%) were reported as fully staffed.
- Most RHACs provided access to allied health care services, but many reported long waiting times, out-of-pocket expenses or services restricted to inpatients.
- Multidisciplinary clinics were held in 43% of RHACs.
- Dedicated oncology counselling services were available at 39% of RHACs.
- 61% of all RHACs 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.
- Results from the two metropolitan centres and one large regional centre surveyed were used as a benchmark for comparison of service provision in RHACs. ◆

it is costly in capital outlays and maintenance, and generally immobile, it is the most cost-effective in terms of operational cost versus efficacy.⁶ A number of non-metropolitan centres have radiotherapy units (Wagga Wagga, Wollongong, Albury–Wodonga, and units are soon to be operational in Coffs Harbour and Port Macquarie in NSW; Ballarat, Bendigo, Geelong and Latrobe Valley in Victoria; and Townsville, Tugun and Nambour in Queensland). There are plans for new units in Darwin, Toowoomba and the NSW far north coast. The combined population of these centres is more than 1.5 million, and an additional 700 000 people are estimated to live within a 150 km radius.

Attracting two medical oncologists and a range of allied health service providers to each of these centres would provide a platform for a multidisciplinary team approach to patient care, and enhanced remote supervision by engaged clinicians. It would also be consistent with the Australian Medical Workforce Advisory Committee's recommendations on practitioner-to-patient numbers. Moreover, a recent unpublished survey by the

Medical Oncology Group of Australia showed a high proportion of medical oncology trainees would consider regional practice provided there was adequate support. While awaiting this longer-term solution, we also advocate structural reforms such as a national quality assurance framework (eg, service accreditation, and the use of clinical practice guidelines).

Investment and improved innovation in delivering psychosocial support services and the coordination of government-funded travel and accommodation schemes are also required in the interim. Telemedicine is another flexible model that should be supported, as it has proven beneficial in reducing the impact of extreme distance.^{7,8} Distance education and mentoring are also proving effective.⁹ RCCEs would provide many of these improvements within their region.

Inequity in rural cancer survival is not an insurmountable problem, but it is a real test of our health systems. Investment needs to be made now to deliver long-term benefits. The first step is recognising the extent of the problem and identifying practicable solutions. The second step will require a whole-of-government response.

Author details

Craig R Underhill, MB BS, FRACP, Conjoint Senior Lecturer and Medical Oncologist¹

David Goldstein, MB BS, MRCP, FRACP, Clinical Associate Professor and Medical Oncologist²

Paul B Grogan, Advocacy Manager³

¹ Clinical Oncological Society of Australia's Rural and Regional Oncology Group, Border Medical Oncology, Murray Valley Private Hospital, Wodonga, VIC.

² Department of Medical Oncology, Prince of Wales Hospital, University of New South Wales, Sydney, NSW.

³ The Cancer Council Australia, Sydney, NSW.

Correspondence: paul.grogan@cancer.org.au

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