Improving quality in prostate cancer

Quality indicators can provide reassurance that cancer care is achieving the predicted outcomes

rostate cancer is a major health problem in Australia. In 2015, an estimated 17250 men developed prostate cancer and 3440 died because of it.1 Localised prostate cancer is a particularly problematic disease in terms of decision making and even public policy. After many years, controversy still surrounds the benefits of prostate-specific antigen (PSA) screening.² High level evidence for the management of localised prostate cancer is sparse when compared with that for other very common solid tumours, such as breast cancer and colon cancer. Large randomised clinical trials have been difficult to complete, perhaps because of the lack of equipoise among both clinicians and patients. 4,5 Moreover, some men with prostate cancer have relatively indolent disease, and measuring the outcomes of treatment is complicated by the long follow-up time required. Comorbid health conditions may dominate the survival outcomes of men with localised prostate cancer. Finally, the benefits demonstrated in randomised controlled trials may not always be achieved in routine practice; specifically, smaller clinical trials may be undertaken by elite, high volume centres with committed volunteer patients.5

That the quality of complex cancer care is not always optimal is apparent from studies in different health systems that have found unexplained variations in the care provided and of the outcomes of that care. Important regional differences in prostate cancer survival have been identified in Australia: men residing in rural areas appear to be disadvantaged, suggesting that gains can be made by enhancing service delivery in regional areas.8 There is evidence that complex cancer care, including radical prostatectomy, is best performed in high volume

To facilitate evidence-based cancer care, clinical guidelines have been developed. ¹⁰ In addition, evidence-based "optimal care pathways" were developed in Australia to assist health services and clinicians provide quality care, including the provision of supporting infrastructure services, such as multidisciplinary teams and psychosocial care. 11 Guidelines also enable the development of evidence-based quality indicators. ¹² Significant research effort has been required to develop more complex treatment outcome measures that include cancer control as well as patient-reported quality of life across multiple domains. 13

Measuring quality in cancer care enables systematic improvement by health services and clinicians. Combined, if possible, with assessment of outcomes, quality indicators may provide reassurance that cancer care is good and achieving the outcomes predicted. Alternatively, the results may provide an impetus for change and innovation. Quality indicators and care outcomes measured across the health system enable facilities to benchmark their performance against that of their peers and to assess change over time.

The paper by Sampurno and colleagues in this issue of the MJA builds on previous work of the Prostate Cancer Outcomes Registry-Victoria. The investigators measured care for localised prostate cancer with respect to three carefully selected quality indicators. 14 The indicators were evidence-based and supported by the participating clinicians. Over the 5-year study period, there was evidence of gradual improvement in treatment quality. Importantly, the study included regular and timely feedback to the clinicians involved and an opt-out patient consent procedure that resulted in high participation rates in a community setting. Overall, about 75% coverage of the relevant Victorian patient population was achieved.

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Similar assessment processes are also being established elsewhere. A prostate cancer registry in Sweden has aimed for even more rapid, essentially real-time, reporting of quality indicators to health care providers. 12 A prostate cancer registry covering all jurisdictions in Australia and New Zealand was recently established with donated funds.15

Registries that are focused on specific cancers, collecting outcome and treatment data, not only facilitate quality improvement, but can, over time, also provide unique insights into the effectiveness of treatment and contribute to translational research in cooperation with biological sample repositories. 16 Registry data complement, but do not replace, the information derived from large randomised controlled trials conducted over sufficiently long periods to assess long term outcomes. Despite the difficulties, at least ten such trials are being conducted internationally by cooperative groups, including two in Australia (the Australian and New Zealand Urogenital and Prostate Cancer Trials Group, and the Trans Tasman Radiation Oncology Group).⁴ With active cooperative trials groups in Australia and the development of the national outcomes registry initiative, some optimism about improving the outcomes for men with prostate cancer care is justified.

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