

Organ donation: a chance for Australia to do better

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We can learn from the US Breakthrough Collaborative, which increased organ donation rates by 20% in 3 years

Organ donation saves lives. This trite but true slogan applies to all the solid organs that are currently transplanted. Even in patients with kidney failure, where dialysis provides long-term treatment, the mortality rate is reduced significantly in those who receive transplants compared with those remaining on the waiting list.¹ Improved survival, improved quality of life and reduced economic costs of care provide an unusual coincidence of benefits from this therapy.

For example, with respect to cost, the recently published *Economic impact of end-stage kidney disease in Australia*² contains a careful and conservative assessment of the direct costs of kidney transplantation (excluding costs from comorbidities, transport, loss of income and other incidentals). It reports that the cost of the first year after both live and deceased donor transplants is \$62 375, with additional costs related to the donor of \$8178 and \$3000, respectively. The subsequent annual cost is \$10749 for both types of recipients. These costs compare with an annual dialysis cost of \$48 631 for satellite-based patients, \$56 828 for peritoneal dialysis, and \$82 764 for hospital-based patients (excluding costs from comorbidities, transport, loss of income and other incidentals). Consequently, the cost advantage of transplantation is clear within 1–2 years.

However, organ donation and transplantation continue to provoke ethical, legal and clinical debate with respect to procurement of organs from both living and deceased donors. The shortage of organs for transplantation in Australia is a key problem that has been well documented in recent times; it was the subject of an editorial in this Journal just over a year ago,³ responding to a report in the same issue of the adverse impact on Australians arranging kidney transplantation overseas.⁴ The variability of donor procurement rates between major hospitals was highlighted as demonstrating the potential for improvement. Since that time, the national Australian organ donation rate has sadly remained static at 10 donors per million population. Now, in this issue of the Journal, Opdam and Silvester address the process of organ procurement in hospitals in Victoria and underline the potential for increasing organ donation through change in hospital practice (page 250).⁵

They describe a carefully performed audit of Victorian hospitals, which assessed the potential for increasing the number of organ donors and confirmed the interhospital variation in donor performance in the Melbourne area. The main issues identified by Opdam and Silvester as opportunities for improving the donation rate were an increase in the consent rate and an increase in the identification of potential donors. Their study found that “there is limited but real potential to increase the number of organ donors in Victoria”. They state that “a maximum practically achievable organ donation rate for Victoria was estimated to be 15 to 17 donors per million population”.

This “practically achievable rate” compares to a mean actual donation rate for Victoria of 9.2 donors per million population over the past 5 years. The economic impact alone of an increase of 50% in the donor procurement rate applied nationwide, as conservatively modelled in the report *Economic impact of end-stage kidney disease in Australia*,² would be to save \$26 million over the next 10 years (apart from an arguably even more important

The US Organ Donation Breakthrough Collaborative⁶

Overarching principles

- Unrelenting focus on change, improvement and results
- Rapid, early referral and linkage
- Management of an integrated donation process
- Aggressive pursuit of every donation opportunity

First things/first changes

- Create a hospital presence or in-house coordinator for the organ procurement organisation
- Analyse and apply current hospital-specific data
- Identify a physician or clinician “champion”
- Conduct monthly reviews of death records
- Establish clinical triggers for referrals
- Hold “huddles” for the donation team
- Identify effective donation “requesters”
- Conduct after-action reviews

Strategies established as successful (“high-leverage” changes)

- Advocate organ donation as the mission
- Involve senior leadership to get results
- Deploy a self-organising team of staff from the organ donor agency and hospital
- Practice early referral and rapid response
- Master effective requesting
- Implement donation after cardiac death

significant improvement in quality of life). There is no reason to doubt that the findings of Opdam and Silvester would apply in all states of Australia — they have been replicated (albeit in unpublished studies) in other states.

How then does Australia break the present pattern and lift its donation rate to an internationally accepted benchmark of 15–20 donors per million population? Over the past few years, we have looked to the Spanish experience, but we should perhaps also pay attention to recent activities in the United States, where the organ donation rate has increased significantly. Over about the past 30 months, there has been a sustained rise in numbers, from a national mean of 508 donors per month (before October 2003) to a current mean of 614 donors per month — an outstanding increase of 20% on top of an already respectable rate of 24 donors per million population. Even allowing for the difference in rates of traumatic death between Australia and the US that might affect the number of potential donors, this performance is impressive.

The explanation for the improved performance in US donor procurement appears to lie in a sustained strategy, starting in 1997 and culminating in the Organ Donation Breakthrough Collaborative, announced as a national program in April 2003 and commenced in October 2003.^{6,7} The details of the Collaborative approach have been recently described and can be summarised as an intensive effort to facilitate “breakthrough transformations” in the performance of organisations working together to achieve common goals, based on strategies shown to work in highly successful organisations. A key element is to identify best practices

associated with higher donation rates in lead organisations, with a particular focus on early identification of potential donors and the consenting process — factors already identified by Opdam and Silvester as pertinent locally.

The methodology of the Collaborative begins with selecting a planning committee of expert teams from hospitals interested in participating, and developing strategies to achieve the target (a “change package”). These strategies are then tested, modified if necessary and implemented. The strategies adopted are guided by what has been shown to work elsewhere and are always multiple in their focus (see Box).

The announcement by the federal Minister for Health and Ageing, Tony Abbott, in February this year, that up to 20 of Australia’s major hospitals would be invited to participate in a similar Collaborative, with the aim of increasing organ and tissue donation rates, is welcomed.⁸ This project, facilitated by Australians Donate (the peak national body for organ and tissue donation for transplantation in Australia), commenced in May 2006 with the aim of building on the US experience. The potential for increase in Australia’s organ donation rate is substantial, as evidenced in the article by Opdam and Silvester. The expected outcome of the Collaborative project is a sustainable increase in the donation rate emanating from more effective early detection of potential donors and a higher conversion rate of potential to actual donors, thus realising the wishes of most Australians to be donors after death.⁹ There seems every reason to believe that many of the critical “success” factors in the US experience — engagement and commitment of the whole institution, a strong emphasis on support and teamwork of those in the frontline of the process, and a particular focus on an effective consenting process — will also be successful in Australia.

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