Providing renal services closer to home in country South Australia

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Over the last ten years Country Health SA has increased its renal services with the aim of allowing rural patients requiring haemodialysis to be treated as close to home as possible. Opening new haemodialysis units, redeveloping and expanding existing units, providing support and respite to home dialysis patients as well as implementing new services such as the Mobile Dialysis Unit, Country Health SA has seen a doubling of the number of locations that haemodialysis can be provided in rural and regional South Australia and a doubling of the haemodialysis treatments provided. This has saved many rural patients from having to move away from their home town for their treatment as well as saving many hours of travelling, resulting in a reduction in the impact that kidney disease has on their everyday life. For those who have had to move away from home to access permanent units the Mobile Dialysis Unit provides much sought after opportunities to get home for family and cultural business and holidays.

Approximately 1.7 million Australians (or one in ten) aged 18 years and over have indicators of Chronic Kidney Disease (CKD). When CKD progresses to End Stage Kidney Disease (ESKD), patients require Renal Replacement Therapy to do what their kidneys are no longer able to do. Renal Replacement Therapies includes both kidney transplant or dialysis. It is noted that dialysis is not a cure for kidney disease, it will do the work of healthy kidneys and in the same way that healthy kidneys work continuously, dialysis needs to be attended repeatedly to do the same work. Patients are required to have dialysis for their whole life or until they receive a kidney transplant. The ANZDATA registry reports that there were 13,051 Australians receiving dialysis treatment at the end of 2017. While there are different forms of dialysis treatment available, including peritoneal dialysis, home haemodialysis and centre based haemodialysis, the most common form of dialysis being used in South Australia is centre based haemodialysis. Haemodialysis is undertaken at least three times a week for around four to five hours each treatment and therefore is a large burden on the patient in regards to time and impact on their and their families lives.

Dialysis patients suffer from anxiety and depression at much higher rates than the general population with studies showing that the prevalence of depression is three to four times higher than the general population and two to three times higher than other patients with chronic illness. For many the added burden of moving away from home or travelling significant distances for treatment three times a week, has a significant impact on their mental wellbeing. Providing services close to home has been a focus for Country Health SA for many years and the Renal Services team has put this into action, significantly increasing the number of people who can be treated safely in country areas.
Through a planned and coordinated approach to the development of country satellite haemodialysis units in areas of need as well as the redevelopment of existing smaller units, Country Health SA has managed to grow services and local expertise to ensure dialysis care for medically stable patients in country SA is equal to that of what is provided in metropolitan Adelaide satellite units.

In 2005/06 there were six dialysis units located in country South Australia providing approximately 7,000 haemodialysis treatments annually, by 2017/18 this had grown to 12 units, with 57 chairs providing around 25,500 treatments annually. A thirteenth unit is set to open in 2019 which will enable additional patients to be treated closer to home than their current locations. By the end of 2018, nearly one third of dialysis patients across the state were being treated in country satellite haemodialysis units, making Country Health SA Local Health Network the second largest provider of haemodialysis in the state.

In addition to the satellite haemodialysis units, Country Health SA owns and operates a Mobile Dialysis Unit. The Mobile Dialysis Unit was developed to provide respite dialysis to Indigenous patients in their home communities. Indigenous people are over represented in the dialysis statistics with Indigenous patients accounting for approximately nine per cent of people commencing kidney replacement therapy each year. Those living in the remotest parts of the state are required to relocate to larger regional centres or metropolitan areas for their ongoing care. The Mobile Dialysis Unit is able to visit these remote parts of the state, ensuring Indigenous patients are able to return to their home communities safely, enabling them to reconnect with their people and their land. The establishment of a permanent dialysis unit in the APY Lands (the far north west of South Australia) by a non-Government Organisation, the Purple House, in 2019 will see a positive change in service delivery for these patients.

The introduction of telehealth services has provided another avenue for patient care, once again ensuring patients only travel when they really need to. Providing metropolitan based Nephrologists, who currently visit country areas, Cisco Jabber licences to enable videoconference reviews from their laptops is contributing to saving the patient, and the clinician, extensive travel time and costs for short review consultations. New dialysis unit builds have included videoconferencing equipment to enable ease of access for renal patients.

Investments have been made in nursing staff training, development and retention to ensure the dialysis services provided in country SA are safe and effective. There is a supported initial and ongoing renal training program in place and staff are assessed for competency in larger metropolitan units with complex patients prior to heading out to smaller country units. Funding is provided from the central Country Health SA head office for nurse training including nurse salary for backfill, travel and accommodation costs to ensure health sites are not disadvantaged while nurses are released to complete their training.

Central coordination has been key to the success of the program over the years, a small multidisciplinary team focused on the planning of services and clinical service provision has provided leadership and direction for renal services in Country Health SA. With two of the team members based in a tertiary hospital, relationship building with metropolitan services and clinicians has been a key success factor. Medical support for the country dialysis units is provided by metropolitan based Nephrologists who also all provide visiting services to the units. Senior nursing support is available by phone for assistance with clinical decision making and problem solving as well as providing on site visits when extra support and training is required. The country hospitals have a limited ability to manage deterioration in renal patients or inpatient care for dialysis patients and therefore there is an agreed process with the metropolitan hospitals for patients who require transfer. Importantly the
metropolitan team do not expect the local service and/or local GP to manage the acute issues and therefore facilitate patient transfer as quickly as possible.

**Recommendation**

The centralised support and service planning approach has enabled Country Health SA to provide renal services to patients where and when they are needed. This type of approach to service planning is easily adaptable to other services and consideration should be made for true statewide provision of services rather than isolated Local Health Network only service planning.

**References**


**Presenter**

Jayne Westling is the Principal Project Manager within the Clinical Planning team of Country Health SA Local Health Network. Her key roles are to provide project management for initiatives within the renal and emergency clinical areas in country SA. Key projects have included the development and implementation of the Mobile Dialysis Unit (the Renal Truck) and the South Australian Virtual Emergency Service (SAVES). Jayne has a background in speech pathology, working in rural NSW for 10 years prior to returning to SA. Jayne grew up in rural SA and has a passion for ensuring rural residents receive the best health care available, whether that be by traditional face-to-face services or through innovations in telehealth care.