CHAPTER 36

RENAL MEDICINE SERVICES

Renal Medicine services provide inpatient and outpatient care of patients with all renal diseases including: glomerulonephritis and immune renal disease, kidney stones and infection, high blood pressure, hypertension in pregnancy, acute and chronic renal failure requiring dialysis and long term care of renal transplant patients.

There is evidence that lower socio-economic status groups have higher rates of renal disease. The Fairfield-Liverpool statistical subdivision has the highest standardised incidence for end stage renal disease (ESRD) of all NSW and Australian metropolitan areas. The reported incidence in Campbelltown/Camden is lower, possibly due to service access.

In SWSAHS, renal services are established as a single Area service, with all funding and management through the Division of Medicine, Liverpool Health Service. The services are adult-focussed, as paediatric renal disease requires a service that can only be provided at a specialist children's hospital.

Dialysis services in SWS are provided at Liverpool and Bankstown Hospitals and Campbelltown Hospital has recently commissioned a new service. In 2001, there were approximately 340 SWS residents on dialysis and nearly 100 were treated out of SWSAHS.

Dialysis patient numbers are projected to grow by an average of 7% per annum. In 2006, at a planned 85% occupancy, assuming no changes in flows that for adult patients there will be a need for approximately 17 beds for inpatient renal medicine patients in SWSAHS hospitals treated under the Renal Medicine SRG. Additional beds are required for other patients treated by renal physicians (approximately 8 extra beds).

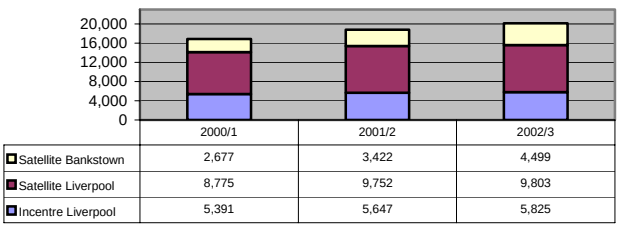
The number of SWSAHS patients receiving kidney transplants has increased from 6 in 1996 to 18 in 2002. There has recently been an increase in living donors.

Current Services

The annual performance indicator reports indicate that in 2002/03 the Area renal dialysis in-centre unit provided 5,825 treatments and the satellite units provided 14,302 treatments (Bankstown, 4,499 and Liverpool, 9,803).

The current Area Renal Service provides daytime and nightime/after hours specialist renal consultant inpatient cover only for Liverpool Hospital and Bankstown Hospital. Fairfield Hospital and Campbelltown Hospital inpatients have access to renal consultation during normal working hours. After hours phone support is available throughout the SWSAHS, but patients acutely requiring Renal Review, are transferred to Liverpool Hospital. Elective patients can access clinics in Liverpool or Bankstown Hospitals, in Fairfield private rooms or in a single clinic at Campbelltown Hospital.

SWSAHS Incentre and Satellite Haemodialysis 2000/03



	2000/1	2001/2	2002/3
Satellite Bankstown	2,677	3,422	4,499
Satellite Liverpool	8,775	9,752	9,803
Incentre Liverpool	5,391	5,647	5,825

Source: SWSAHS PIRS, 2002/03

Bankstown Hospital

Bankstown Hospital provides a comprehensive renal service, including both inpatient and outpatient services. Full renal services are provided both within working hours and after-hours. Four Area nephrologists provide consultations. The 8-chair dialysis unit provides a mix of in-centre and satellite haemodialysis.

In 2002/03, there were 355 inpatient renal medicine separations; average LOS was 3.7 days (8.7 days excluding day only). At 95% occupancy this is equivalent to 4.0 beds.

The dialysis unit provided 4,499 dialysis treatments in 2002/03.

In 2002/03 there were approximately 980 occasions of service provided by the renal clinic.

Fairfield Hospital

Patients with renal disease are managed by VMO Physicians, with an Area nephrologist providing inpatient consultations.

In 2002/03, there were 80 separations for inpatient renal medicine; average LOS was 4.6 days (5.7 days excluding day only). At 95% occupancy this is equivalent to 1.0 bed.

Liverpool Hospital

Liverpool Hospital provides a comprehensive renal service with inpatient and outpatient services. Full renal services are provided both within normal working hours and after-hours. The services provided include diagnosis and treatment of hypertension, hypertension in pregnancy, diabetic nephropathy, general renal diseases, kidney failure and all types of dialysis and renal transplantation care. There are 20 beds at Liverpool for non-dialysis in-hospital care for renal medicine patients.

There are a total of 15 chairs for in-centre dialysis (including a freestanding VRE/Isolation haemodialysis unit), 17 chairs for satellite dialysis, 5 chairs for home training and CAPD nursing staff support for 110 patients. The vast majority of SWSAHS Dialysis Access Surgery is performed at Liverpool Hospital.

In 2002/03, there were 325 separations for the Renal Medicine SRG; average LOS was 8.1 days (8.9 days excluding day only). At 95% occupancy this is equivalent to 8.0 beds, although renal physicians require additional beds to service their caseloads that are not recorded within the Renal Medicine SRG.

The annual performance indicator reports indicate that in 2002/03 the Area renal dialysis service in-centre unit provided 5,825 treatments and the satellite unit provided 9,803 treatments.

Campbelltown Hospital

A satellite unit commenced operation in March 2004 with six chairs and an Area Nephrologist was appointed to set up inpatient and outpatient services. The planned staged development of Campbelltown's renal services will see an additional two nephrologists appointed, resulting in comprehensive services, both in hours and out of hours.

In 2002/03, there were 97 separations for renal medicine; average LOS was 4.8 days (6.9 days excluding day only). At 95% occupancy this is equivalent to 1.0 bed. There is currently one renal clinic provided.

Camden Hospital

In 2002/03, there were 54 separations for renal medicine; average LOS was 3.0 days (7.5 days excluding day only).

Bowral Hospital

In 2002/03, there were 24 separations; average LOS was 1.0 day (1.2 days excluding day only).

Non-Inpatients

Clinics are provided for hypertension, diabetic nephropathy, all types of renal disease, chronic renal failure, dialysis and renal transplantation.

In 2002/03 the Liverpool pre-dialysis clinic provided 619 occasions of service, CAPD clinic 7,648, the community dialysis 2,462 and the renal unit 1,748.

Renal Referral Clinics are provided and staffed by Renal Consultants at Bankstown and Liverpool Hospitals.

Research and Teaching

There is an active quality improvement and patient safety program. Teaching is provided for all medical and nursing staff and patients. The Area Renal Service is extensively involved in clinical research. Current areas being studied include:

- Treatment of anaemia in CRF and Dialysis patients;
- Dyslipaemia in renal disease and dialysis patients;
- Dyslipaemia in diabetes;
- Role of hypertension and BSL management in diabetic outcomes;
- Treatment of Hypertension; and
- Quality of care, outcomes and nursing care.

Major Equipment

Area Renal Service will be commencing a price per treatment contract with a private provider. All dialysis equipment will be included in the contract.

RECOMMENDATIONS

- Renal Medicine services be developed further as an integrated Area Service.
- An Area Renal Service Director be appointed to oversee the provision of the Area service.
- The core comprehensive unit be provided at Liverpool Hospital.
- Develop and implement an isolation haemodialysis unit in Liverpool Hospital to care for patients carrying multiresistant organisms such as MRSA, VRE and hVISA.
- Renal transplant service to be developed over time.
- Campbelltown Hospital renal service to progressively develop comprehensive care to include out of hours consultation, an after hours roster and ICU dialysis.
- Bankstown Hospital renal dialysis expands its current haemodialysis unit to 10-12 chairs.
- Appropriate levels of renal dialysis services to be provided.
- Fairfield and Bowral Hospitals be provided with outreach clinics.
- Comprehensive plans be developed for future satellite haemodialysis units at Bowral and Fairfield Hospitals.
- Dialysis access surgery be increased at Liverpool and Bankstown.
- A renal clinical database be implemented to track inpatient and outpatient care in patients with renal disease, hypertension, renal impairment, dialysis and transplantation, including download and analysis of SWAPS pathology data.