

EMERGENCY MEDICINE SERVICES

CHAPTER 1

Emergency Departments currently operate 24 hours a day, 7 days a week in all Hospitals in SWSAHS, covering the full spectrum of illness and injury for people of all age groups. SWSAHS Emergency Departments provide about 160,000 occasions of service per year. Approximately 30% of all Emergency Department (ED) attendances subsequently require an inpatient bed.

The core role of ED includes clinical care as well as:-

- Teaching and training (medical, nursing, postgraduate and undergraduate);
- Managerial/administrative roles;
- Clinical duties beyond the ED; and
- Research.

ED activity has increased in all sector hospitals over the past 5 years. Given the projected growth in population and the increasing complexity of acute medical problems – particularly in the elderly, and with limited numbers of 24 hour medical clinics and GPs who bulk bill, it is expected that people accessing care through Hospital EDs will increase, and the unplanned to planned admission ratio will increase.

In 2001/02 82% (84% adults and 76% paediatrics) of SWSAHS residents requiring emergency admissions received their care in SWS EDs. The highest outflows were to adjoining Area Health Services such as WSAHS, CSAHS and SESAHS.

ED Services are provided through the six general acute hospitals in SWSAHS. The ED role levels vary as a reflection of the overall role level of the hospital. *The Emergency Department State Service Plan* identified the directions for networking of EDs within SWSAHS and with the Southern Area Health Service and recommended that the default linkages that are aligned with the critical care networks be formalised. Liverpool ED remains SWSAHS's hub service with a designated major Trauma service and has the third highest activity in the State.

SWSAHS established a part time position of Area Advisor of Emergency Services in 2001. The ED Services within SWSAHS meet regularly to review operational and policy matters.

The Liverpool ED will be expanded and refurbished at a project cost of \$9.1 million. This project is expected to be complete by end of 2005. On completion the ED will have a total of 65 built spaces (including 6 resuscitation bays).

Table 1.1 : Overview of Emergency Department Role and Activity

Hospital ED	Role Delineation	Annual ED Attendances* (rounded)	Annual Admissions from ED	% of SWS Total Attendances (rounded)
Liverpool	Level 6 Major Trauma Centre	45,000	13,700	30
Bankstown	Level 5	30,000	9,800	20
Campbelltown	Level 5	30,000	7,300	20
Camden	Level 3	12,500	300	5
Total Macarthur		42,500	7,600	25
Fairfield	Level 4	25,000	5,300	15
Bowral	Rural Level 3	16,500	2,700	10

Source: 2002 / 03 EDIS; SWSAHS Draft ED Plan

Current Service Provision

Bankstown Hospital

- Significant workload with over 31,000 attendances and nearly 9,800 admissions per annum, with a particularly large aged care load.
- Level 5 service.
- The service has a complex casemix with many aged people.
- The ED has a total of 15 spaces (includes 2 resuscitation bays) and 2 paediatric beds. One room has also been recently refurbished to cater for patients requiring secure isolated accommodation within the ED.
- Reconfiguration of the current physical space is proposed.

Fairfield Hospital

- Significant load with over 26,000 attendances and 5,300 admissions per annum. A quarter of the workload is paediatric.
- Level 4 service.
- A Mental Health inpatient service is planned.
- Fairfield has 14 ED spaces including 2 resuscitation bays.

Liverpool Hospital

- One of NSW's busiest trauma centres with over 45,300 attendances and nearly 13,700 admissions per annum.
- Level 6 service incorporating a major trauma centre. Patient complexity is therefore high.
- Significant training load for registrars.
- Principal Referral Hospital for SWSAHS and links to Southern Area Health Service.
- There is significant pressure on beds and services
- Currently the Liverpool ED has 17 spaces for adults (three resuscitation bays) and 5 spaces (includes 1 resuscitation bay) for paediatrics.
- The refurbished ED will have a total of 65 built spaces. A total of 35 spaces will be operational in 2005/06.

Campbelltown Hospital

- Significant workload with over 32,500 attendances and 7,300 admissions per annum.
- Level 5 service providing for the Macarthur area.
- Large paediatric population.
- There is significant pressure on beds.
- The facility has been significantly upgraded as part of the Macarthur Strategy.
- Campbelltown ED has a total of 14 spaces (including 5 emergency short stay unit beds). There are no separate beds for isolation. It has three negative pressure rooms.

Camden Hospital

- Almost 13,000 attendances per annum with very few admissions (317).
- Level 3 service.
- New facility.
- Many ED patients require transfer for admission to Campbelltown or are managed by the ambulatory care service.
- From December 2003, the services no longer accepts acute ambulances.
- The ED has 8 spaces for adults and 2 places for paediatrics.

Bowral Hospital

- 16,500 attendances and nearly 2,700 admissions per annum.
- Rural Level 3 service.
- No specialist Emergency Medicine presence.
- Many ED patients require transfer including Mental health.
- The ED has a total of 11 spaces. However there are no areas quarantined for paediatrics.

Activity

All ED patients undergo a triage process (a rapid assessment of the urgency for treatment), which results in a triage category assignment. Urgency categorisation reflects the time-criticality of the patient's condition according to the principles of the Australasian Triage Scale (Australasian College for Emergency Medicine).

Weighted ED attendances have increased since 1996/97 by 17.3% at Liverpool, 22.1% at Bowral and 12.1% at Campbelltown. Associated increases have occurred in admissions (Liverpool 15.1%; Bowral 28.4% and Campbelltown 7.8%). There have been reductions in both attendances and admissions at Camden (-5.1% and -11.1% respectively). Attendances have increased at Fairfield (3.4%) and Bankstown (7.4%) while admissions have decreased (-1.2% and -3.6% respectively).

There has been an increase in the number of life threatening presentations (triage categories 1 & 2) over the past 2 years of 20% and a decrease in less threatening Triage 4 & 5 by 3%.

Winter presentations are increasing with the highest winter activity at Liverpool and Bankstown.

Projected Activity

ED Activity has increased at all SWSAHS hospitals over the past five years. Patients are presenting with increasingly complex problems. Due to the projected population growth and limited numbers of 24-hour medical clinics and GPs who bulk bill, it is expected that people accessing care through ED will increase.

Liverpool ED has demonstrated a steady rate of increasing activity over the past 5 years and is extrapolated to grow at approximately 4% per annum. However, population increases projected in Bringelly may increase this estimation. Both Fairfield and Bankstown have demonstrated 1% increase in activity per annum over the past 5 years. Bowral has demonstrated the highest growth with both Campbelltown and Camden having slight increases.

RECOMMENDATIONS

- Emergency Medicine be managed as an integrated Area network.
- An Area Director of Emergency Medicine be appointed.
- There be cross credentialling and appointment of senior Emergency Department (ED) medical staff.
- Training registrar rotation be established.
- Appropriate resources be dedicated to ED departments. Senior medical, nursing, allied health and other staff be enhanced.
- A Chair of Emergency Medicine be created.
- Liverpool and Fairfield be run as a single Emergency Department on two sites.
- Fairfield ED be developed to have senior medical cover 12 hrs per day, 7 days per week, coordinated from Liverpool ED.
- A Paediatric Emergency Medicine Unit or Short Stay Unit be developed at Fairfield Hospital. This unit will be networked into SWSAHS and The Children's Hospital at Westmead's paediatric network.
- Campbelltown and Camden EDs be run as a single department on two sites, with Camden further developing its urgent care role.
- An Area Nurse Educator in emergency medicine be appointed
- Dedicated triage staff at Bowral be appointed.
- Develop and implement newer models for short stay (EMU) medicine and transitional care medicine.

Table 1.2 : Attendances and Admissions by Triage Category 2002/03

	Bankstown	Fairfield	Liverpool	Campbelltown	Camden	Bowral	SWS total
ED attendances 2002/03	31,382	26,127	45,332	32,543	12,961	16,554	164,807
Triage 1	272	161	694	275	46	188	1636
Triage 2	1779	1,882	3,234	2,215	669	643	10,422
Triage 3	16,888	10,604	22,490	15,996	4,876	4,851	75,705
Triage 4	12,066	10,952	16,609	12,299	6,005	9,063	66,994
Triage 5	377	2,529	2,285	1,754	1,346	1,969	10,260
Ward admission according to triage category							
Triage 1	188	81	495	131	3	12	910
Triage 2	1,084	962	2,001	974	18	332	5,371
Triage 3	6,423	3,039	8,773	4,798	142	1,487	2,4662
Triage 4	2,036	1,155	2,227	1319	143	817	7,697
Triage 5	11	90	173	106	11	44	435
Total admissions via ED	9,742	5,329	13,669	7,329	317	2,692	39,075
% to ward as total of ED activity*	31.04%	26.41%	30.15%	22.5%	2.45%	16.26%	23.77%

Triage 1: Immediately life threatening

Triage 2: Imminently Life threatening

Triage 3: Potentially life threatening

Triage 4: Potentially Serious

Triage 5: Less Serious

Table 1.3: Change in Urgency 2002 and 2003 Calendar Years

Hospital	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
	Triage 1	Triage 1	Triage 2	Triage 2	Triage3	Triage3	Triage 4	Triage 4	Triage 5	Triage 5
Bankstown	235	271	1,470	1,762	14,238	15,940	12,246	10,101	228	225
Fairfield	168	159	1,477	1,865	10,062	10,261	8,775	9,698	1,534	1,823
Liverpool	603	692	2,644	3,231	22,165	21,714	13,571	14,236	1,516	1,796
Campbelltown	244	274	1,688	2,207	14,761	15,425	11,697	10,374	1,986	1,059
Camden	34	46	546	669	3,814	4,812	5,349	5,618	1,295	904
Bowral	30	27	650	1,762	5,294	4,812	12,246	8,601	1,490	1,806
Total	1,314	1,469	8,475	10,375	70,424	72,964	60,256	58,628	8,049	7,613

Figure 1.1 : Winter Attendance 1998/99 to 2002/03

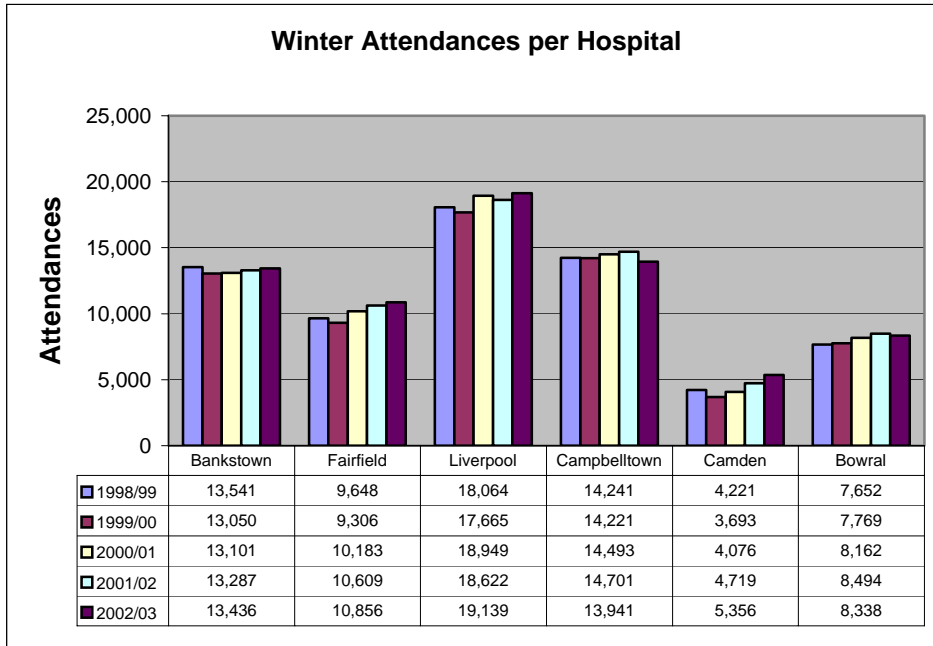
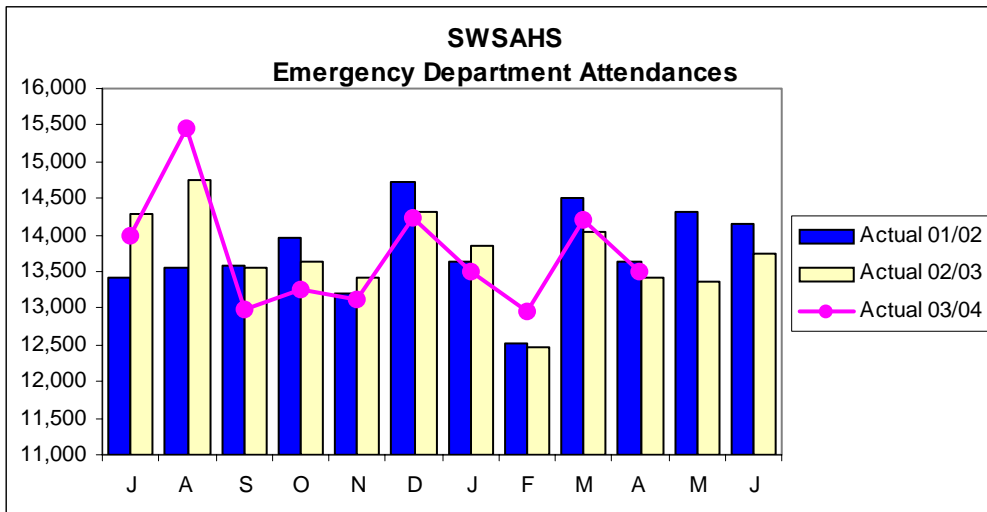


Figure 1.2: Monthly Emergency Department Attendances 2001/2–April 2004: SWSAHS Hospitals



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Figure 1.3: Monthly Emergency Department Attendances 2001/2–April 2004: Bankstown Hospital

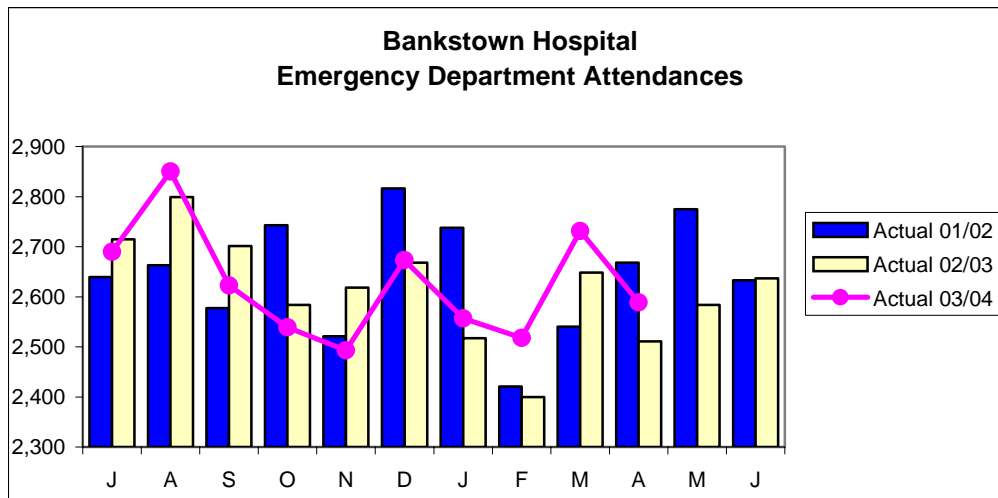


Figure 1.4: Monthly Emergency Department Attendances 2001/2–April 2004: Fairfield Hospital

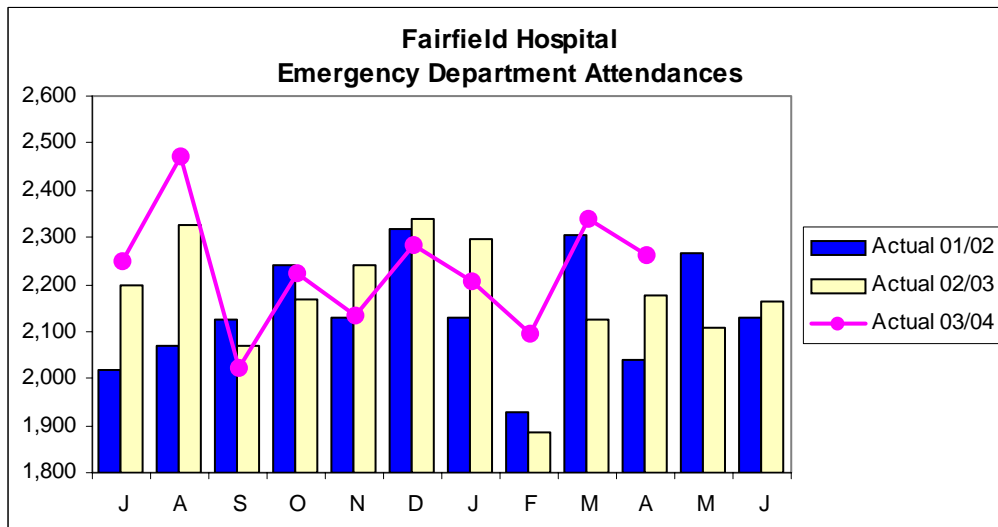


Figure 1.5: Monthly Emergency Department Attendances 2001/2–April 2004: Liverpool Hospital

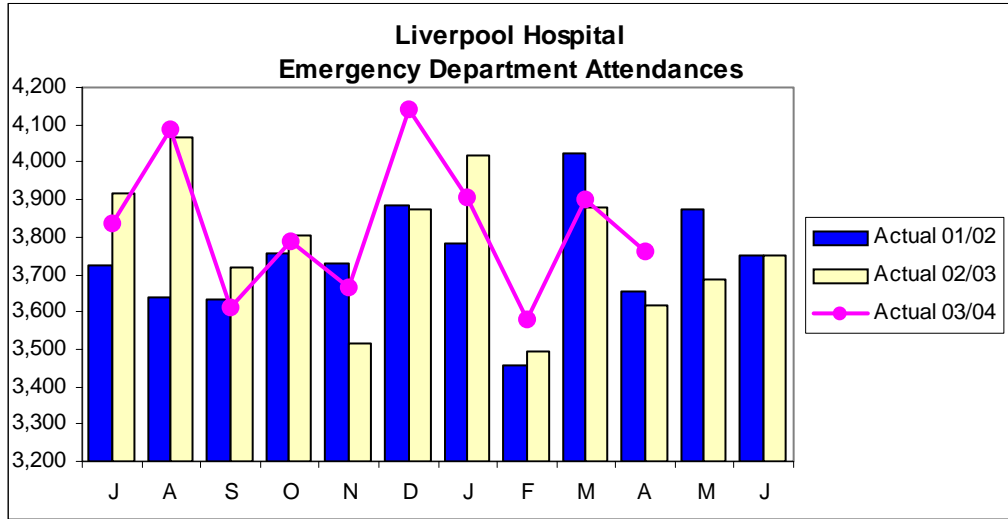


Figure 1.6: Monthly Emergency Department Attendances 2001/2–April 2004: Campbelltown Hospital

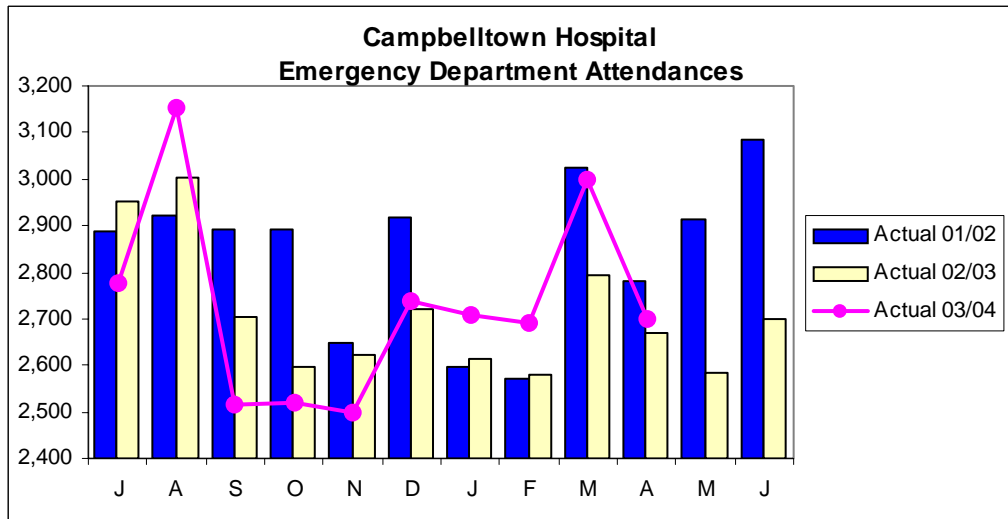


Figure 1.7: Monthly Emergency Department Attendances 2001/2–April 2004: Camden Hospital

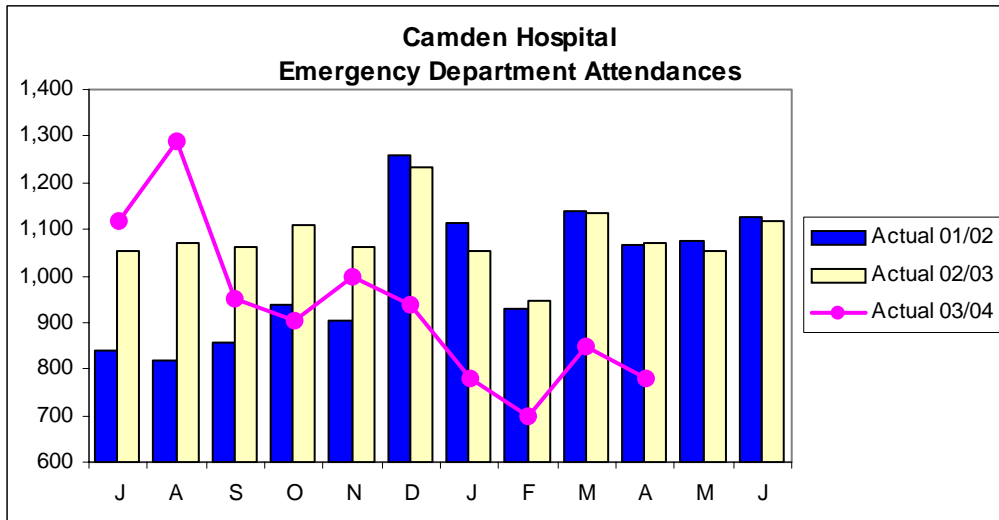


Figure 1.8: Monthly Emergency Department Attendances 2001/2–April 2004: Bowral Hospital

