

Impact of

FLOW REVERSAL

Strategy

2001-20**06**

Clinical Services Plan

South East Health

Acknowledgements

This impact statement was prepared by the South East Health Clinical Services Policy and Planning Unit in conjunction with administrative staff and chairmen of clinical reference groups throughout the Area.

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FOREWORD

The Mission of South East Health is “Good Health Care, Better Health” and we have been proud of a long tradition of care for residents of New South Wales from all over the State. We are 93% self sufficient in the care of our local residents in our own public and private hospitals for non-tertiary and tertiary care. Approximately one quarter of our workload in acute hospital care is referred, or flows in, from other Area Health Services.

On July 1, 2001 the Flow Reversal Strategy of the New South Wales Government Action Plan for Health will begin as a planned coordinated approach to proactively managing the flow of patients for non-tertiary (and some tertiary) elective surgery and procedures between Area Health Services. Specifically its aim is to increase the self sufficiency of all area health services for work involving their local residents. This will be achieved by targetting for reversal from inflow areas to outflow areas, that work which could be performed in the area of residence of the patient if that Area Health Service were funded for that work.

This document builds on our earlier “Flow Profile 1998” and it analyses, by Service Related Groups and Diagnosis Related Groups, our activity trends. It projects our agreed volume of work for each of our hospitals and estimates the budget impact on South East Health.

We believe this document will be useful for analysis and use in negotiations with other Area Health Services as well as for planning the reorganisation of our own services.



Deborah Green
Chief Executive Officer

EXECUTIVE SUMMARY

In response to one of the initiatives of the Government Action Plan for Health, NSW has developed a "Flow Reversal Strategy" which aims to have patients receive their health care as close to the area health service of residence as possible. One of the components of this strategy is that of 'budget holding'.

This flow reversal budget holding process involves area health service executive staff negotiating on targets for flow reversal. The funds identified which account for this work are then to be held by the Department of Health in a "flow transition pool" and an accounting protocol will transfer those funds back to the Area Health Service which performs the procedures.

Currently we are in the first phase of a new three-year budget. This budget was developed for each Area Health Service on the basis of the Resource Distribution Formula. The RDF distributed approximately \$432M to South East Health for acute hospital care; \$277M for residents of South Eastern Sydney and \$155M for residents of other area health services in 1999/2000.

Although outflow areas will be initiating activities which will encourage GPs and Specialists to refer patients to doctors in the area with procedural rights at the local hospitals, the main strategy to be utilised in the short term is that of targetting the waiting lists held in each hospital for each credentialled clinician.

This document reviews the status of flows into South East Health and the impact likely to be made by a planned approach to reversal of those flows.

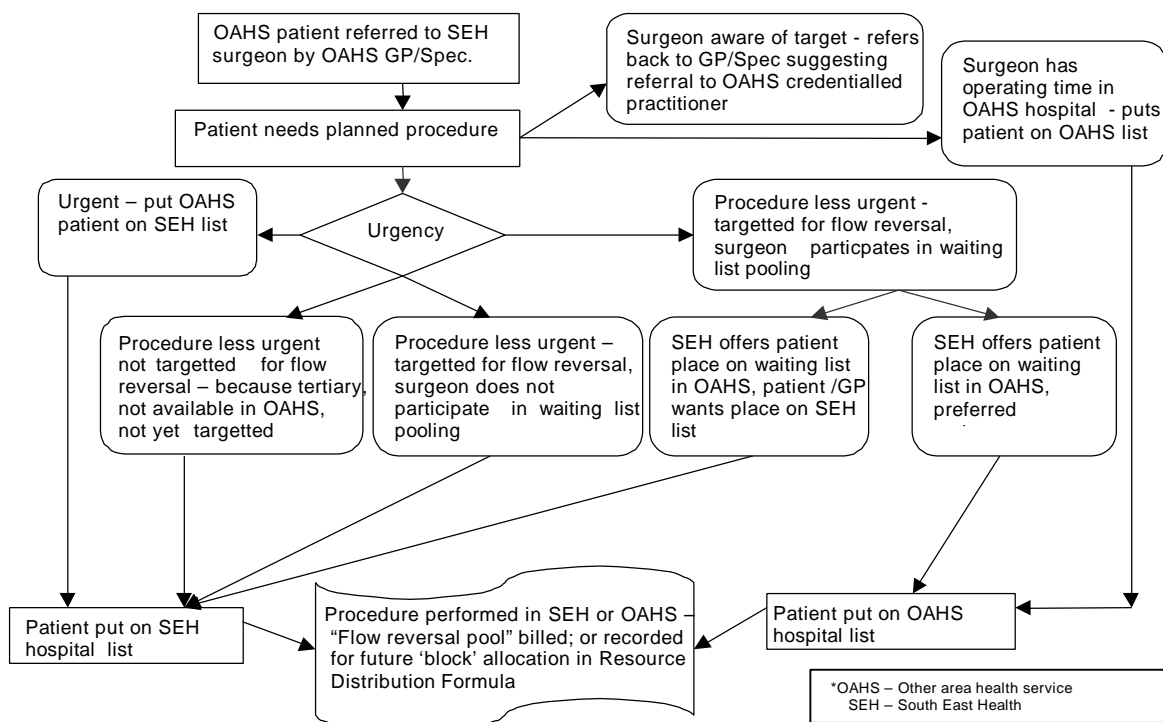
South East Health has an outflow of approximately \$36M (unplanned \$14M and planned \$22M), chiefly orthopaedics, obstetrics and gynaecology, cardiothoracic surgery and neurosurgery to CSAHS and NSAHS. The outflow volumes have not changed much in the past five years.

South East Health's chief inflows occur from CSAHS, NSAHS, IAHS and SWSAHS. The work from CSAHS and NSAHS is considered "natural" flow and not amenable to planned flow reversal.

The adult planned work from IAHS and SWSAHS is considerable (13.7M and 13.0M respectively in 1999/2000). Inflows of some services from these two Area Health Services have been steadily declining in recent years, particularly the non-tertiary overnight work, as services have been developed in those areas.

It has been agreed that the SWSAHS and the IAHS will adopt the following pathway with respect to South Western Sydney and Illawarra residents who have been referred to SESAHS clinicians.

Pathway for flow reversal management



Although there is some inflow from other metropolitan area health services, it does not match the proportions of the SWSAHS and IAHS. The rural areas are significant inflow contributors, as expected. There are no plans to reverse country work in the short term, although it has similarly reduced a little in recent years, with natural referral pattern shifts.

In 2001/2002 South East Health will relinquish \$1.18M to the "Flow Transition Pool". This represents \$427,616 for the IAHS, \$676,144 for the SWSAHS and \$75,298 for the HAHS as follows:

Summary

Illawarra Area Health Service

Pacemakers	\$249,133
Ophthalmology	\$178,483

South Western Sydney Area Health Service

Neurosurgery	\$125,496
Ophthalmology	\$254,710
Gynaecology	\$176,252
Urology	\$119,686

Hunter Area Health Service

Lithotripsy	\$75,298
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Initially, this process will affect Prince of Wales Hospital, St Vincent's Hospital and St George Hospital and will have a significant impact on Sydney Eye Hospital. Discussions to date have indicated that because most of these cataracts are day only procedures by VMOs, it may not be too detrimental for Sydney Eye.

Other work which has been flagged for possible planned flow reversal is urology and cardiac services from Hunter Area Health Service and interventional cardiology from Illawarra Area Health Service.

Outflow work which has been identified for flow negotiations in 2001 includes brain injury rehabilitation from SWSAHS, orthopaedics and cardiothoracic surgery from CSAHS and paediatric cardiothoracic surgery from the New Children's Hospital at Westmead.

NOTE The figures outlined in these chapters were agreed at the time of preparation in early June 2001. There is an expectation that some of the documentation may vary slightly as negotiations continue.

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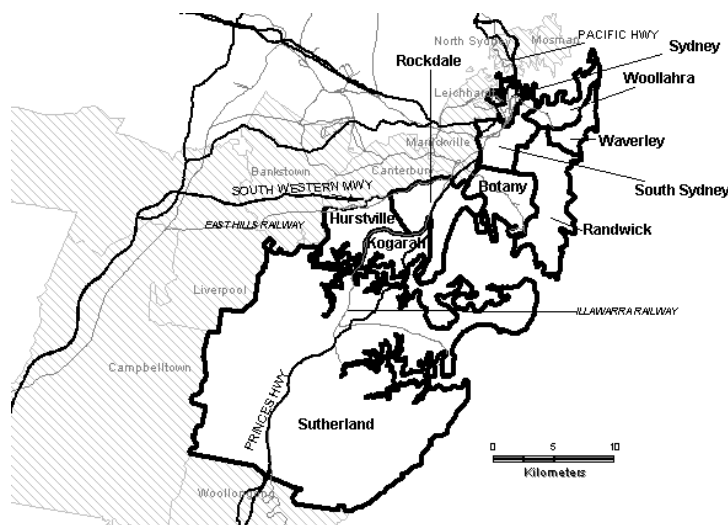
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1 INTRODUCTION

1.1 THE AREA HEALTH SERVICE

South East Health (SEH) covers the publicly provided health services from Sydney Harbour in the north through Botany Bay and Port Hacking to the Royal National Park in the south. The Area Health Service boundaries incorporate the Local Government Areas of Sydney (.6), South Sydney (.6), Woollahra, Waverley, Randwick, Botany, Hurstville, Kogarah, Rockdale and Sutherland.

MAP 1: THE SOUTH EAST HEALTH AREA



The Area Health Service is responsible for the administration of ten hospitals and their associated community health services across the spectrum from prevention and harm minimisation services through critical, acute and rehabilitative services to maintenance and support care.

The Motto of South East Health is *“Good Health Care; Better Health”* and its four Corporate Directions are:

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- Innovation in health service delivery;
- Leadership and management;
- Cooperative partnerships;
- Efficient economic performance.

South East Health has adopted a four-sector based population planning framework (Table 1 -1); the 10 hospitals (2,300 beds) mainly serve their local sectors and there are four community health service teams. In addition there is an overlay of special programs which are Area or State-wide and based in designated hospitals eg Sydney Children's Hospital provides the local services for children of the northern sectors and it is also one of three State wide tertiary children's hospitals.

The health service provision is also influenced by the presence of four General Practice Divisions (Eastern Sydney, South Eastern Sydney, St George and Sutherland), 12 private hospitals (841 beds), 26 day procedure centres, 35 hostels (1974 beds) and 70 nursing homes (4,500 beds). South East Health services are major providers of support to the Universities of New South Wales and Sydney Medical Schools and the Nursing and Allied Health faculties of Sydney University and University of Technology Sydney.

TABLE 1 - 1: POPULATION BASED SECTORS

"Sector"	LGAs	Hospital Location	Population 1999 ^a	People aged over 70 years 1999 ^a	Projected population 2006 ^b
Inner city	Sydney (.6) South Sydney (.5) Woollahra Waverley	Sydney/Sydney Eye St Vincent's	176,174	16,487	184,457
Eastern suburbs	Randwick Botany South Sydney (.1)	Waverley War Memorial Prince of Wales Royal for Women Sydney Children's	171,287	15,912	180,663
St George	Hurstville Rockdale Kogarah	St George Calvary	213,666	25,341	214,460
Sutherland		Sutherland Garrawarra	211,782	17,398	214,120

Data source: a. ABS. 30 June 1999 population by age and sex, NSW. Cat. 3235.1.2000.

b. NSW Health Department. Population projection to 2016. March 2000.

It is this historical establishment of facilities and specialist providers in addition to the growth of centres of excellence which has led to the South Eastern Sydney Area being 93% self sufficient in providing health care for its own residents in the public and private sector and in being a major "inflow" area for the treatment of residents from other areas. 35% of the expenditure on acute inpatient activity of South East Health hospitals is applied to residents of other area health services.

This amounts to some \$155M of the South East Health budget (1999/00); of which \$60M is tertiary and \$95M is non -tertiary.

\$22M of elective work on residents of South Eastern Sydney 'flows' out to other area health services.

This analysis concentrates on the planned adult inflow work (some \$88M) and, in particular, the planned non -tertiary inflow (\$52M).

1.2 NSW HEALTH FLOW REVERSAL STRATEGY

In March 2000 the Minister for Health released the Report of the NSW Health Council which had reviewed the existing systems for provision of health services in NSW and made recommendations on reform. The key platforms for reform which have become the Government Action Plan (GAP) for Health were:

- consumer driven health care;
- increased management decision making by clinicians;
- improvement in the quality of health care;
- better management of chronic disease across the GP -Hospital -Community interface;
- reforms in processes of health care –
 - targets for day surgery, day of surgery admission rates;
 - clinical information systems;
 - coordinated metropolitan and rural health service planning and role delineation;
 - and budget holding for flow reversal.

1.2.1 Resource Distribution Formula

Under the Resource Distribution Formula (RDF), all Area Health Services are allocated their 'share' of the State Pool based on population, weighted by relevant socioeconomic and service factors. The budget, however, is adjusted for "acute flows" – so the Area which admitted the resident in the relevant financial year chosen for the purpose, is allocated an amount of funding from the outflow area's RDF to continue to perform that service in the subsequent budget year. This practice perpetuates the continued flow of patients to the area 'funded' to perform the work.

Historically some Area Health Services have reversed this 'flow' of funds by use of existing RDF allocation or with special enhancement or growth funds which have led to patients of their area health services being treated locally, rather

than having to travel elsewhere for the service. There are two points to be made here.

On the whole, successful reversal has been achieved with the advent of a major capital investment e.g. the building of a cardiac catheterisation laboratory or a linear accelerator with its consequent growth in related clinical disciplines. (With the opening of a linear accelerator in Liverpool, the workload for Prince of Wales Hospital dropped from four linear accelerators to three in a three year period and there has also been a consequent drop in the SWSAHS patients admitted to Prince of Wales in that time for medical and surgical oncology.)

Where the enhancement is the appointment of a new clinical discipline of specialist (neurosurgery, cardiothoracic surgery, intensive care beds etc) the 'reversal' is less dramatic – if it occurs at all. The new specialists' growth in workload is the meeting of hitherto hidden unmet need in that Area Health Service.

1.2.2 Flow reversal "intentions"

NSW Health is committed to a "Flow Reversal Strategy". The ultimate aim of the Flow Reversal Strategy is the provision of high quality health care close to home.

The principles are that:

- The public health system should provide high quality health care for people close to home;
- At present large numbers of patients are travelling long distances to receive health services which could be provided within their Area Health Service of residence if that Area Health Service had the funds to provide the service;
- System wide management strategies (conjoint appointments of clinicians, targetting of waiting times, networking etc) can be developed and coordinated to facilitate the flow of patients back to their areas of residence where this is appropriate;
- The Public and the health provider community (clinicians in the public and private sector, especially General Practitioners) will be informed that high quality care can be and is being provided locally;

Introduction

- The funding model for area health services can be used to create incentives for provision of services locally – firstly in dedicated growth funding and secondly in the creation of a quarantined targeted transition pool;
- “Flow reversal” will be a component of the performance agreements of Area Health Service Chief Executive Officers and will be monitored and evaluated annually by the Department of Health.

The funding model will have two key areas:

“Growth” money proposed in the Government Action Plan for Health will be used by Area Health Services to set up new services which will ‘take work back’ from inflow areas to the area of residence of the patient. The RDF will take less from that “outflow” Area for its budget in future; and

The “targeted flow transition” pool will identify agreed amounts of funding currently in the budgets of inflow areas to be reversed to outflow areas over two-three years (by which time the RDF will ‘catch up’) for pockets of work to be returned to the area of residence of the patients.

1.2.3 Flow plans

Area Health Services are expected to produce annual documentation of Flow Reversal Intentions and Flow Transitions for accountability purposes. “Flow reversal intentions” are plans for future capital investment which may impact on inflow areas. The IAHS, for example, is known to be planning the commissioning of a cardiac catheterisation laboratory within three years. If this occurs, some 500 patients for interventional cardiology currently being referred to the Prince of Wales Hospital are likely to have their procedures in the Illawarra in the future.

“Flow transition plans” are the annual amounts of funding related to specific identified services such as 100 cataract procedures from a specific hospital, or the annualised payments normally made to a given surgeon and the anaesthetist, and the cost of the prosthesis for those procedures, to be done in the area of residence of the patients rather than in the existing inflow hospital.

1.2.4 Flow transition pool

Each Area Health Service is expected to have negotiated the amount of funding it wishes to have identified in the 'flow transition pool' – a pool to be held centrally by the Department of Health (DOH).

- Inflow areas will receive almost the "usual" amount of inflow funding that they would otherwise have received under the RDF.
- The value of flows that change in each year from the agreed base year will be calculated based on the price (in 2001/2002 likely to be \$2,324 per cost weighted separation (cwtd sep) and \$2,240 per cwtd sep excluding ED)
- The DOH will reduce the budget of Areas losing net flows based on the values of flow changes planned for the flow transition pool in each year and notification will occur in Budget Allocation letters.
- The DOH will hold the budget adjustments in a targeted flow transition pool.
- A weekly cash payment will be made to the area of residence of the patients based on the first quarter of planned flow reversal. Continuation will be based on a quarterly review following each release of "FlowInfo" (an inpatient database produced by DOH for the purpose of flow study). Where planned net flows are being achieved, the DOH will continue to make cash payments from the central pool.
- Where flow reversals have not occurred as planned, the DOH will hold those funds and return part of the "pool" to those areas which did provide the service.

1.2.5 Flow example

1999/00 is chosen as the 'baseline' because it is the most recent annualised information. So in 1999/00 the Other Area Health Service (OAHS) performed 240 planned procedure A's (\$270,000) on its residents and South East Health performed 360 procedure As (\$403,000) on OAHS residents. It is expected that the need has grown and that in 2001/2002 OAHS will be performing 276 (\$309,000) and South East Health 396 (\$444,000) if there is no planned reversal (or OAHS will do 23 per month and SEH will do 33 per month).

If there is an agreement to 'reverse' 96 procedures then OAHS will do 372 (31 per month) and SEH will perform 300, or 25 per month. \$107,000 will have

gone into the pool and if OAHS has performed the 'extra' work ie has done more than 23 per month, it will be allocated the funding. If SEH has not performed that which would have been reversed, but has performed 'growth' work, it will not be reimbursed, until the new RDF in 2003/2004.

1.3 INTERNAL STRATEGIES FOR FLOW MANAGEMENT

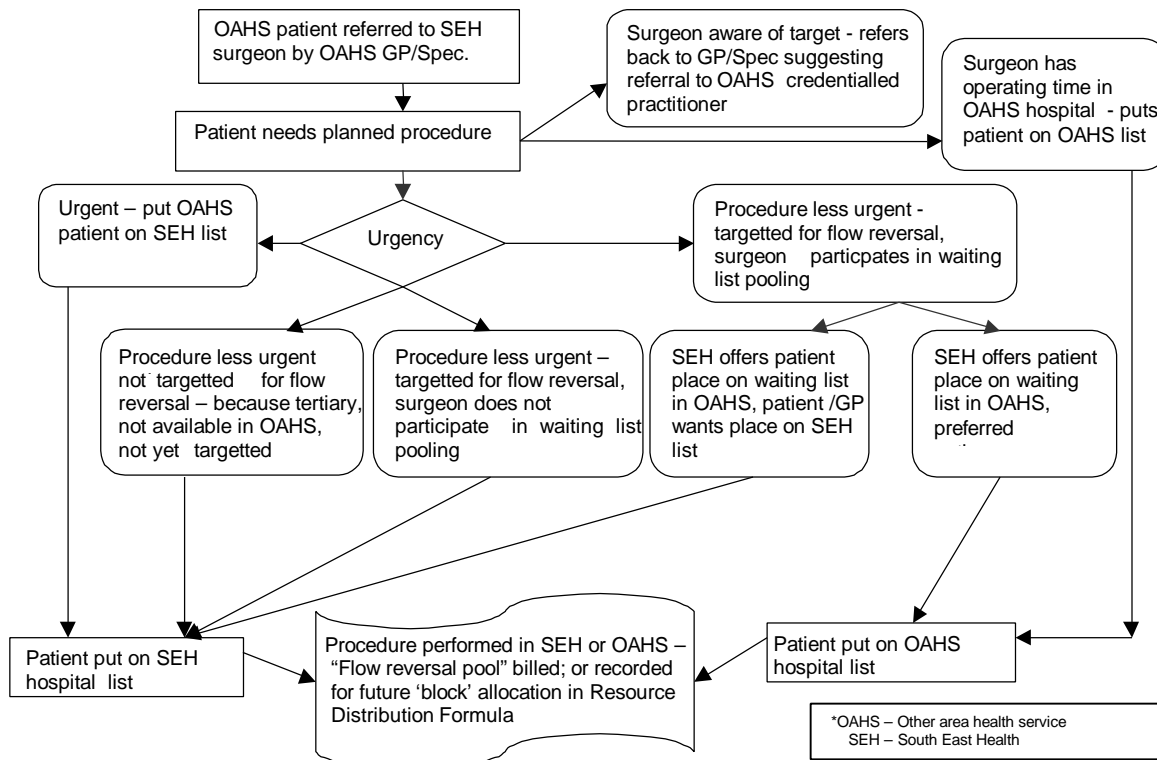
South East Health will be participating in networking arrangements which continue to provide advantages for patients in terms of quality of care and for the efficiency of service provision because it is planned and mutually advantageous. For example some surgeons will work across two area health services; a critical mass of procedure lists in a given specialty may form a network across two area health services providing non tertiary work locally and tertiary or quaternary work only in the one place which needs the critical mass to continue to be a centre of excellence or because it is more efficient that way. The aim of networking will be that emergency and most tertiary planned work will continue to flow in (as will enough of the private non tertiary work) and the 'loss' of the planned non tertiary work will not be detrimental strategically or financially to the Area.

Outflow area health services will have negotiated with their GPs and specialists to be referring patients wherever possible to credentialled clinicians in the area of residence of the patients. However patients may still prefer to be referred to South East Health clinicians either because of their reputations or because of the reputations of the hospitals in which they practice.

1.3.1 Waiting list management

Where possible, South East Health will instigate the following pathway for management of waiting times for procedures.

FIGURE 1-1: PATHWAY FOR WAITING LIST MANAGEMENT OF FLOW REVERSAL



This process will require negotiation with South East Health credentialed proceduralists on their willingness to pool their waiting lists with other area health service lists and possibly on their willingness to reduce their operating time availability in South East Health hospitals to operate in other area health services. It will also require other area health services to be willing to add patients to their waiting lists, who would otherwise have had their procedures performed in an inflow area health service.

Training of our admissions clerical staff will need to be clear on which procedures are being targetted in relation to potential for patients from outside South Eastern Sydney being placed on other Area Health Service waiting lists and standard formats for admission requests by our clinicians and letters to patients and referring GPs and specialists will need to be developed.

1.3.2 Transfer of proceduralists' operating times

Another tactic which may be used is that of transferring operating time of individual proceduralists from the current Area Health Service to the Area of residence of the patients being referred. So, for example, a surgeon with rooms in Bankstown has operating time at Prince of Wales Hospital (say one session per week) is offered operating time one session per fortnight at Bankstown Hospital and his time at POW is reduced to one session per fortnight. This has the benefit of residents of SWSAHS currently being referred to this person being immediately reversed (as opposed to the time required for a "new" proceduralist at Bankstown taking time to build a referral base).

The negotiations required would focus on the 'ideal' amount of operating time and the amount of funding to be transferred from one hospital to another to cover the proceduralist's and possibly the anaesthetist's time in addition to the prostheses used; which then 'equated' to a specified number of procedures costed according to the state average default price.

There are Equal Opportunity Employment processes and credentialling procedures which may preclude this option being proactively pursued, but facilitation of a voluntary activity may result in the same outcome.

This document outlines the analysis of South East Health's trends to date and incorporates the findings from negotiations with other area health services to project 'flow intentions' across three years and 'flow transitions' for 2001/2002.

In the following chapters most of the tables with cost estimates are based on 1999/00 cost weighted DRG activity from "FlowInfo 4.2Q3", since at the time of preparation, the budgets for 2000/2001 and the projections for 2001/2002 were based on this modelling. In general it is referring to adult work, since there is no intention for paediatric flows to the tertiary centres to be targeted for funding reversal in the early stages of the Strategy.

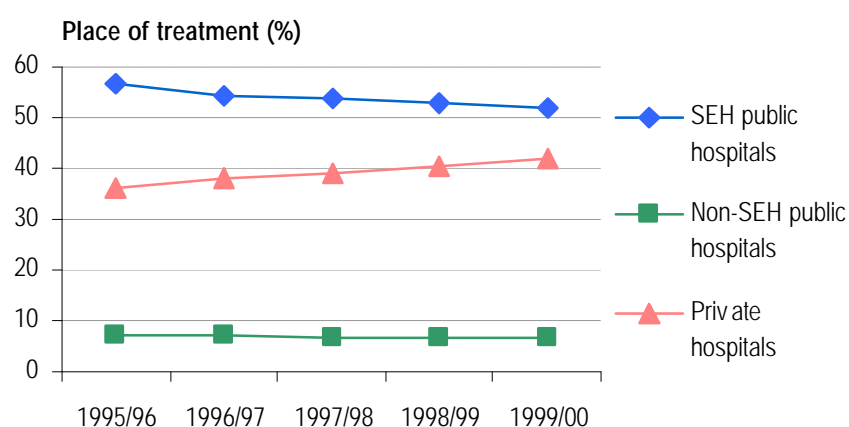
2 OUTFLOWS FROM SOUTH EAST HEALTH

South East Health is 93% self sufficient in caring for residents of South Eastern Sydney, for non tertiary and tertiary acute care in the public and private sectors. Over recent years there has been a trend to reducing resident admissions in South East Health facilities and other Area Health Service Hospitals and an increasing trend in admissions to the private sector (Table 2 -1).

TABLE 2 - 1: INPATIENT EPISODES BY PLACE OF TREATMENT AND YEAR OF SEPARATION FOR RESIDENTS OF SOUTH EASTERN SYDNEY

Year	SEH public hospitals	Non-SEH public hospitals	Private hospitals	TOTAL
1995/96	116018	14996	73628	204642
1996/97	113503	15270	79716	208489
1997/98	113059	14345	82108	209512
1998/99	112086	14616	85808	212510
1999/00	110422	14190	89088	213700

FIGURE 2 - 1: TRENDS IN PLACE OF TREATMENT FOR SOUTH EASTERN SYDNEY RESIDENTS



Outflows

Of the 14,190 outflow episodes in 1999/00, 9,893 (10,042 cost weighted excl ED episodes) were planned and of this 5,534 were planned day only, non tertiary cases. Children aged under 15 made up about 14% of the total outflow or 10% of the planned outflows. The following tables in this chapter are for planned adult outflows only. Details for paediatric outflow/inflow are presented in Chapter 11.

Adult planned outflows represent approximately \$19M (\$2,324 multiplied by the number of cost weighted excl ED episodes) leaving the Area Health Service budget (Table 2 -2).

TABLE 2-2: ESTIMATED COST OF PLANNED ADULT OUTFLOW TREATMENT BY SERVICE RELATED GROUPS, 1999/00

	CSAHS	SWSAHS	NSAHS	WSAHS	Other Intrastate	Interstate	Total
Orthopaedics	\$1,979,576	\$242,416	\$123,108	\$29,642	\$76,184	\$182,292	\$2,633,218
Obstetrics	\$1,386,729	\$102,874	\$81,822	\$46,171	\$31,003	\$39,266	\$1,687,864
Gynaecology	\$887,488	\$103,559	\$66,735	\$48,573	\$14,386	\$22,291	\$1,143,032
Non Subspecialty Surgery	\$595,762	\$96,605	\$60,396	\$31,506	\$12,551	\$273,497	\$1,070,317
Tracheostomy	\$654,814	\$45,977	\$0	\$0	\$50,524	\$50,524	\$801,838
Cardiothoracic Surgery	\$500,488	\$90,796	\$87,940	\$44,285	\$3,137	\$0	\$726,646
Renal Dialysis	\$358,612	\$33,675	\$309,905	\$1,332	\$10,878	\$48,355	\$762,757
Plastic Surgery	\$533,683	\$42,231	\$55,304	\$28,474	\$19,447	\$36,822	\$715,961
Urology	\$449,017	\$180,595	\$17,987	\$26,577	\$4,267	\$33,460	\$711,902
Haematology	\$406,233	\$83,970	\$70,157	\$89,294	\$3,254	\$15,294	\$668,202
Other	\$4,916,818	\$816,251	\$828,130	\$496,407	\$265,259	\$2,555,199	\$9,878,064
Total	\$12,669,219	\$1,838,949	\$1,701,485	\$842,260	\$490,890	\$1,628,500	\$19,171,302

Most of the planned outflow of residents of South Eastern Sydney went to Central Sydney Area Health Service. Orthopaedics, obstetrics and gynaecology were the major clinical specialties. The outflows were not restricted to residents of LGAs adjacent to Area Health Service boundaries (Table 2 -3).

TABLE 2-3: PLANNED ADULT OUTFLOWS BY LGA OF RESIDENCE, 1999/00

	No. of episodes	Estimated cost
Sutherland	1629	\$3,458,112
Rockdale	1316	\$3,049,088
Hurstville	1212	\$2,960,776
South Sydney (part)	924	\$2,068,360
Randwick	772	\$2,075,332
Waverley	726	\$1,210,804
Woollahra	525	\$959,812
Sydney (part)	485	\$1,117,844
Kogarah	476	\$1,120,168
Botany	413	\$1,136,436
Lord Howe Island	10	\$13,944
Total	8488	\$19,170,676

As the bulk of these outflows of residents of South Eastern Sydney is to area health services bordering South East Health, predominantly to tertiary centres of care in CSAHS, this flow is considered "natural" flow. It is a result of access and choice by residents and referring clinicians and is not considered amenable to reversal. The outflow volumes have not changed much in the past five years and will not be targeted for reversal.

Although in general there is not an intention for children's flow to be targeted by other area health services initially, review of paediatric flows to the New Children's Hospital at Westmead by South Eastern Sydney residents suggests potential for the development of agreed intentions to reverse and this will be conducted in the context of the Metropolitan Paediatric Networking.

3 ADULT INFLOWS TO SOUTH EAST HEALTH

3.1 FLOW PATTERNS

In the past five years there has been an annual decline of 1% in the flow of adult patients from other area health services into South East Health hospitals. This has been matched by a concomitant loss of inflow-related (RDF) budget to this area health service of approximately \$12M in this period (Table 3 -1).

TABLE 3-1: SOUTH EAST HEALTH ADULT INPATIENT EPISODES BY PATIENT ORIGIN

	Local	Intra-state inflows	Interstate inflows	NFA/ Not stated	Total	% Inflows	Estimated cost of inflows*
1995/96	99937	40825	1488	864	143114	29.6	\$136,465,277
1996/97	98333	38118	1357	938	138746	28.5	\$128,175,265
1997/98	97338	37535	1378	1005	137256	28.4	\$132,494,407
1998/99	95986	37164	1208	1005	135363	28.3	\$125,611,955
1999/00	94182	36658	1242	1221	133303	28.4	\$123,636,280

* discounted cost weighted episodes ~ \$2324

Of the 37,900 adult inflow episodes to South East Health in 1999/00, 9,011 were unplanned admissions, or emergencies, and 28,889 were booked admissions or 'planned' care. Table 3 -2 demonstrates the significant amount of non-tertiary (and therefore proposed potentially reversible) planned work flowing in to South East Health hospitals.

TABLE 3-2: PLANNED ADULT INFLOWS BY CASE COMPLEXITY AND LENGTH OF STAY, 99/00

		Inflow episodes	% of Inflow total	Estimated cost*
Planned adult inflow total		28889	100.0	\$88,275,990
Tertiary	Dayonly	64	0.2	\$555,850
	Overnight	2600	9.0	\$35,367,794
Non-tertiary	Dayonly	15734	54.5	\$15,261,436
	Overnight	10491	36.3	\$37,090,910

* Excluding ED cost weighted episodes ~ \$2324

Clearly most of this adult inflow to South East Health is from bordering Area Health Services – CSAHS, NSAHS, SWSAHS and IAHS (Table 3 -3). Although there is little to gain from targetting the flow from CSAHS and NSAHS (which are outflow areas for South Eastern Sydney residents), there is a significant amount of non-tertiary and tertiary work, which is potentially reversible to SWSAHS and IAHS (see Chapter 5 and Chapter 6).

TABLE 3-3: REFERRAL AREAS FOR PLANNED INFLOWS 1999/00

AHS of residence	Episodes	% of inflow total	Estimated cost			
			Total	Tertiary	Non-tertiary dayonly	Non-tertiary overnight
CSAHS	9108	31.5	\$15,951,605	\$2,860,608	\$4,971,214	\$8,119,783
Illawarra	3161	10.9	\$13,696,460	\$7,292,982	\$1,433,681	\$4,969,797
SWSAHS	4822	16.7	\$12,984,201	\$4,394,236	\$2,639,134	\$5,950,831
NSAHS	3082	10.7	\$6,813,136	\$1,562,431	\$2,027,059	\$3,223,646
Mid North Coast	994	3.4	\$5,315,130	\$3,340,365	\$488,029	\$1,486,735
New England	983	3.4	\$5,162,122	\$3,212,746	\$440,869	\$1,508,507
WSAHS	1506	5.2	\$4,403,233	\$1,405,052	\$1,032,147	\$1,966,034
Greater Murray	645	2.2	\$4,344,472	\$3,121,934	\$179,369	\$1,043,169
Mid Western	746	2.6	\$3,469,283	\$2,001,409	\$343,263	\$1,124,611
Central Coast	792	2.7	\$3,285,091	\$1,257,836	\$389,513	\$1,637,742
Hunter	595	2.1	\$2,532,174	\$1,189,849	\$246,433	\$1,095,892
Southern	500	1.7	\$2,301,404	\$907,792	\$197,843	\$1,195,769
Wentworth	644	2.2	\$2,093,204	\$824,564	\$378,740	\$889,900
Macquarie	399	1.4	\$1,848,892	\$758,482	\$154,584	\$935,826
Northern Rivers	242	0.8	\$1,305,228	\$658,056	\$85,386	\$561,786
Far West	79	0.3	\$315,903	\$133,028	\$21,991	\$160,884
Interstate	591	2.0	\$2,454,452	\$1,002,273	\$232,182	\$1,219,997
Total	28889	100.0	\$88,275,990	\$35,923,644	\$15,261,436	\$37,090,910

Inflows

The highest inflow Service Related Groups are ophthalmology, obstetrics, gynaecology, urology and interventional cardiology and these clinical areas could become the targets for special strategies for reversal.

The children's work and most of the tertiary work is unlikely to be reversed and will not be targeted in the short term. However, some of the tertiary cardiothoracic surgery, interventional cardiology and neurosurgery currently flowing in from SWSAHS and IAHS may be targeted by those area health services for identified flow reversal (Tables 3 -4 and 3-5).

TABLE 3-4: TOP 10 SRGS FOR PLANNED TERTIARY INFLOWS, 1999/00

SRG	Episodes	% of Inflow total	Estimated cost
Cardiothoracic Surgery	960	36.0	\$13,851,213
Tracheostomy	120	4.5	\$6,261,720
Neurosurgery	502	18.8	\$4,693,135
Interventional Cardiology	706	26.5	\$4,551,067
Haematology	101	3.8	\$2,872,795
Head & Neck Surgery	37	1.4	\$559,255
Non Subspecialty Surgery	49	1.8	\$524,455
Plastic Surgery	28	1.1	\$470,036
Urology	40	1.5	\$469,135
Upper GIT Surgery	22	0.8	\$453,468
Sub-total	2565	96.3	\$34,706,277
Tertiary planned inflow total	2664	100.0	\$35,923,644

TABLE 3-5: TOP MOST COSTLY SRGS FOR PLANNED NON-TERTIARY INFLOWS, 1999/00

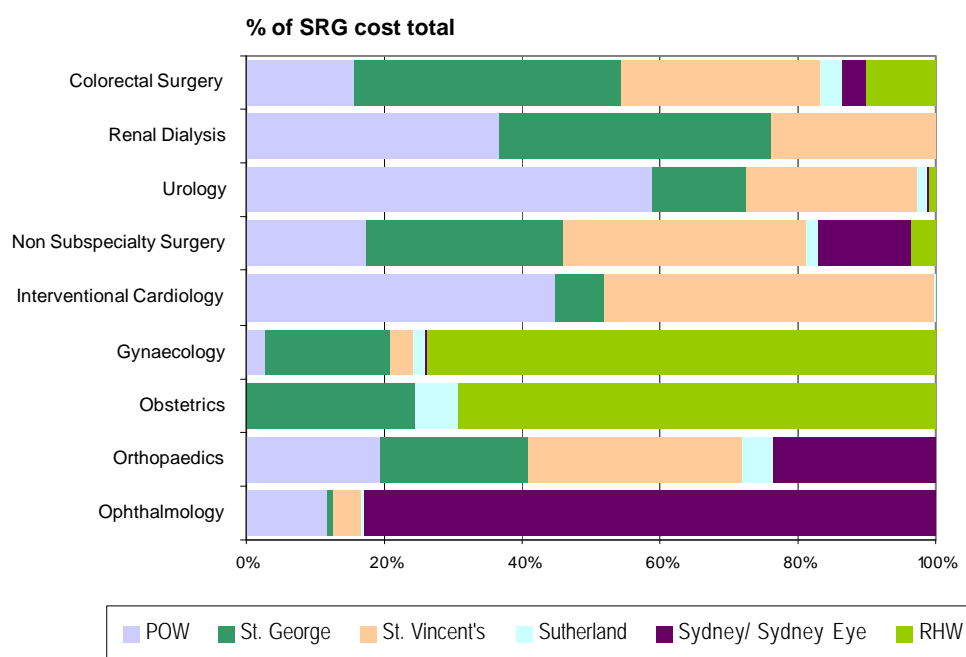
SRG	Inflow episodes	% of Inflow total	Estimated cost
Ophthalmology	3223	12.3	\$7,679,989
Orthopaedics	1306	5.0	\$5,040,040
Obstetrics	2075	7.9	\$4,074,194
Gynaecology	1773	6.8	\$3,109,782
Interventional Cardiology	1537	5.9	\$2,927,967
Non Subspecialty Surgery	804	3.1	\$2,741,669
Urology	1580	6.0	\$2,729,369
Renal Dialysis	4446	17.0	\$2,135,311
Colorectal Surgery	307	1.2	\$1,955,994
Upper GIT Surgery	293	1.1	\$1,910,497
Sub-total	17344	66.1	\$34,304,811
Non-tertiary planned inflow total	26225	100.0	\$52,352,346

The distribution of the inflow work reflects historical developments of statewide status of some units and the tertiary nature and teaching status of most of the hospitals in South East Health. (Tables 3 -6 and 3 -7). In spite of some of the work being coded as non -tertiary because it is not high cost work, it may still be 'tertiary' in that it has been referred by specialists in other areas who do not have the expertise or facility based resources available in their own area health services to do this work. Notably the wrist and hand work referred to the Hand Unit at Sydney Hospital is mostly quite complex work although it is coded as non tertiary and much of the gynaecology and obstetrics work referred to the Royal Hospital for Women is also quite complex.

TABLE 3-6: PLANNED INFLOWS TO SEH HOSPITALS, 1999/00

Hospital	Tertiary		Non-tertiary dayonly		Non-tertiary overnight	
	Episodes	Estimated cost	Episodes	Estimated cost	Episodes	Estimated cost
Prince of Wales	1119	\$12,903,070	4,868	\$4,632,276	1751	\$7,175,106
Royal for Women	18	\$219,554	1,138	\$1,109,645	1765	\$4,515,955
St. George	373	\$6,076,337	3,468	\$2,450,935	2312	\$9,096,372
St. Vincent's	1121	\$16,013,371	4,363	\$4,189,086	2122	\$8,813,590
Sutherland	28	\$593,532	315	\$301,678	295	\$894,762
Sydney/Sydney Eye	5	\$117,780	1,582	\$2,577,817	2246	\$6,595,124

FIGURE 3-7: PLANNED NON-TERTIARY INFLOWS TO SEH HOSPITALS BY SRG, 1999/00



3.2 FLOW REVERSAL INTENTIONS FOR THE NEXT 3 YEARS

Some Area Health Services have indicated that they will be implementing strategies for a planned, targetted reversal of flow of their residents back to their areas of residence over the next three years.

They are the Illawarra Area Health Service, which intends reversing ophthalmology services and interventional cardiology; the South Western Sydney Area Health Service which intends targetting reversal of neurosurgery, orthopaedics, urology, ophthalmology, urology, cardiothoracic surgery and gynaecology; Hunter Area Health Service which intends reversing urology; the Central Coast Area Health Service which may reverse some interventional cardiology and Southern NSW which has considered orthopaedics.

Consistent with historical trends most of the obvious work which it is intended will be reversed relates to the commissioning of expensive equipment – cardiac catheterisation laboratories and lithotripsy machines.

3.3 FLOW TRANSITION PLAN FOR 2001/02

When negotiations began around services which should be targetted for budget and patient flow reversal, a number of principles were agreed:

- | The outflow area wishes to reverse the work because it is consistent with overall future directions of that AHS;
- | The flow for targetted reversal is likely to be for planned work;
- | The flow for reversal is public patients;
- | The flow for reversal is generally for non -tertiary work;
- | The waiting lists of specific surgeons with rooms or existing operating credentials in the outflow area are to be targetted;
- | The outflow area has the infrastructure to immediately begin performing the identified work;
- | The amount of funding is practical enough to cover the costs of a 'new person', or a new operating session, or a new piece of equipment, etc;
- | The amount of funding is identifiable as, for example, one operating session per week/fortnight/month in a particular hospital and the inflow area is relinquishing the costs of a VMO proceduralist, VMO anaesthetist and prosthesis, thus minimising the impact of the loss;
- | There is a match of the practical funding as above with the 'default' price of planned (i.e. ED excluded) separations of the projected numbers of DRGs;

Only two other area health services have negotiated for funds to be provided from the South East Health budget to the "Flow Transition Pool" for 2001/02. They are the Illawarra Area Health Service and South Western Sydney Area Health Service and the nominated specialties and amounts are profiled in Table 3 -6. The IAHS has targetted \$427,616 for reversal in cardiac pacemaker implantation and replacement; and ophthalmology; the SWSAHS has targetted \$676,144 in ophthalmology, neurosurgery, urology and gynaecology; and the HAHS has targeted \$75,298 in lithotripsy.

Inflows

TABLE 3-6: PUBLIC PATIENT FLOW REVERSAL PROJECTION FOR 2001/02

		IAHS		
		Current net-flows (1999/00)	Reversal to IAHS in 2001/02	Money to the Pool
Ophthalmology				
	cataract procedures	96	96	\$178,483
	Day only ophthalmology total			
Interventional cardiology				
	Day only pacemaker Implantation	30	29	\$191,405
	Day only pacemaker Replacement	10	9	\$57,728
Grand total				\$427,616
		SWSAHS		
		Current net-flows (1999/00)	Reversal to SWSAHS in 2001/02	Money to the Pool
Ophthalmology				
	cataract procedures			
	Day only ophthalmology total	204	137	\$254,710
Urology				
	Non-tertiary cases excl lithotripsy	84	50	\$119,686
Gynaecology				
	Total	60	96	\$176,252
Neurosurgery				
	DRG I10B and DRG I68B: Oth back & neck proc/Non-surgical back & neck	31	30	\$125,496
Grand total				\$676,144
		HAHS		
		Current net-flows (April 2000 - March 2001)	Reversal to IAHS in 2001/02	Money to the Pool
Urology				
	Lithotripsy	54	60	\$75,298
Grand total				\$75,298

4 ADULT INFLOWS FROM CSAHS

The largest amount of adult inflow from an Area Health Service to South East Health comes from residents of Central Sydney. 32% of the South East Health's planned inflow (9,108 episodes in 1999/00) comes from Central Sydney (Table 4-1) and this amounts to about \$15M (\$2.8M in tertiary flow, \$5.0M in non-tertiary day only flow and \$8.1M in non-tertiary overnight flow).

TABLE 4-1: NON-TERTIARY PLANNED INFLOWS TO SEH FROM CSAHS, 1999/00

	Tertiary		Non-tertiary Overnight		Non-tertiary Dayonly			
	Episodes	Estimated cost	Episodes	Estimated cost	Episodes	Estimated cost		
Cardiothoracic Surgery	48	\$749,067	Obstetrics	856	\$1,808,354	Renal Dialysis	3030	\$1,464,188
	10		Orthopaedics	159			414	\$751,275
Neurosurgery	55	\$475,981	Ophthalmology	204	\$607,339	Gynaecology	359	\$328,787
	17		Vascular Surgery	79			232	\$254,140
Interventional Cardiology	41	\$222,319	Gynaecology	205	\$450,823	Diagnostic GI Endoscopy	359	\$252,686
	11		Non Subspecialty Surgery	130			208	\$249,539
Immunology & Infections	9	\$118,236	Colorectal Surgery	55	\$383,612	Orthopaedics	144	\$203,117
	5		Upper GIT Surgery	74		Interventional Cardiology	119	\$192,792
Upper GIT Surgery	3	\$72,509	Respiratory Medicine	73	\$275,631	Non Subspecialty Surgery	102	\$181,958
	1		Urology	76			311	\$165,990
Other	9	\$96,137	Other	723	\$2,300,193	Other	987	\$926,744
	209		Total	2634		6265	\$4,971,214	

A breakdown of the non tertiary planned inflow from CSAHS (Table 4 -1) reveals a large amount of work chiefly going to the Royal Hospital for Women in the form of obstetrics (presumed complicated) and gynaecology (it is also a centre for gynaecological oncology). Ophthalmology workload from Central Sydney is significant and this work is mainly flowing to the Sydney Eye Hospital – a statewide service for tertiary ophthalmology. Of the 618 planned adult

Inflows to CSAHS

ophthalmology admissions to South East Health Hospitals, 434 went to Sydney Eye Hospital in 1999/00. The other main service related group is orthopaedics and this is spread across POW, St. Vincent's, Sydney/ Sydney Eye and St. George Hospitals.

Because of the "natural" form of this flow and the strong referral bases which have been historically developed and which are unlikely to change in the Metropolitan Health Services Plan, no funding has been targeted for the Health Department's 2001/2002 Flow reversal Pool. CSAHS is not planning any capital refurbishment which is likely to impact on residents of Central Sydney currently flowing to South East Health.

5 ADULT INFLOWS FROM SWSAHS

The second highest amount of inflow to South East Health comes from residents of South Western Sydney; approximately 17% of the adult planned inflow episodes, representing \$13.0M in 1999/00. This amounted to 4,822 episodes of which \$4.4M was tertiary, \$2.6M was non-tertiary day only and \$6.0M was non-tertiary overnight work. The profile is outlined in Table 5-1.

TABLE 5-1: TRENDS IN INFLOWS FROM SWSAHS BY TYPE OF INFLOW

	Unplanned		Planned					
	Episodes	Cost ¹	Tertiary		Non-tertiary overnight		Non-tertiary dayonly	
			Episodes	Cost ²	Episodes	Cost ²	Episodes	Cost ²
1996/97	1055	\$4,388,558	519	\$6,280,346	2066	\$6,746,735	2765	\$2,298,455
1997/98	1139	\$3,984,408	428	\$5,582,303	2035	\$6,606,808	2613	\$2,411,186
1998/99	1091	\$3,972,396	345	\$4,316,342	1860	\$6,448,603	3045	\$2,647,969
1999/00	1158	\$4,321,239	316	\$4,394,236	1631	\$5,950,831	2875	\$2,639,134

¹ Discounted Cost Weighted episodes ~ \$2324

² Excluding ED Cost Weighted episodes ~ \$2324

South Western Sydney Area Health Service has been expanding in recent years and building up many new specialties. Linear accelerators being commissioned in Liverpool Hospital saw the reversal of radiation oncology from this Area Health Service to SWSAHS and with it much of the medical and surgical oncology which flowed in the past to Prince Henry/Prince of Wales and St George Hospitals. There has been little impact on St Vincent's. Two years ago Liverpool Hospital also began a cardiothoracic surgery service and enhanced its neurosurgery service. If more funding could be identified then further surgery in those disciplines would be prioritised in SWSAHS hospitals.

Inflows from SWSAHS

TABLE 5-2: PLANNED INFLOWS FROM SWSAHS, 1999/00

	Tertiary			Non-tertiary Overnight			Non-tertiary Dayonly	
	Episodes	Estimated cost		Episodes	Estimated cost		Episodes	Estimated cost
Cardiothoracic Surgery	89	\$1,266,212	Orthopaedics	158	\$937,973	Ophthalmology	280	\$500,022
Tracheostomy	20	\$1,023,692	Obstetrics	289	\$631,197	Renal Dialysis		\$471,969
Neurosurgery	85	\$798,355	Ophthalmology	202	\$549,901	Urology	279	\$336,321
Interventional Cardiology	72	\$525,475	Gynaecology	125	\$365,291	Interventional Cardiology		\$218,223
Haematology	7	\$246,286	Urology	87	\$345,388	Gynaecology	182	\$172,068
Urology	11	\$141,996	Colorectal Surgery	28	\$323,679	Orthopaedics		\$131,045
Head & Neck Surgery	6	\$91,542	Upper GIT Surgery	48	\$310,514	Diagnostic GI Endoscopy	156	\$109,439
Transplantation	2	\$58,415	Non Subspecialty Surgery	75	\$271,582	Non Subspecialty Surgery		\$91,630
Non Subspecialty Surgery	7	\$56,052	Medical Oncology	59	\$247,051	Chemotherapy	151	\$88,140
Upper GIT Surgery	2	\$48,339	Vascular Surgery	34	\$236,464	Haematology		\$81,215
Other	15	\$137,870	Other	526	\$1,731,790	Other	421	\$439,061
Total	316	\$4,394,236	Total	1631	\$5,950,831	Total		\$2,639,134

5.1 NEUROSURGERY

Private hospitals were the major Neurosurgery service providers for SWSAHS residents (55% of the total Neurosurgery work), followed by SWSAHS hospitals (20%). About 8% of the Neurosurgery episodes for SWSAHS residents occurred in SEH hospitals.

In 1999/00, there were 109 adult Neurosurgery inflows from SWSAHS to SEH. These inflows were distributed across the three facilities – POW, St. Vincent's and St. George.

TABLE 5-3: PLANNED NEUROSURGERY INFLOWS FROM SWSAHS, 1999/00

	POW	St. George	St. Vincent's	Total
Episodes				
Non-surgical Neck & Back Cond W/O Pain Managmt Proc/Myelogram Age<75 W/O CC (DRG: I68B)	7		2	9
Other Back and Neck Procedures W/O Catastrophic or Severe CC (DRG: I10B)	6	10	13	29
Craniotomy (DRG: B02A, B02B, B02C, W01Z)	13	11	3	27
Other	26	9	9	44
Total	52	30	27	109
Estimated cost				
Non-surgical Neck & Back Cond W/O Pain Managmt Proc/Myelogram Age<75 W/O CC (DRG: I68B)	\$9,390	\$0	\$2,324	\$11,714
Other Back and Neck Procedures W/O Catastrophic or Severe CC (DRG: I10B)	\$28,764	\$49,295	\$65,258	\$143,316
Craniotomy (DRG: B02A, B02B, B02C, W01Z)	\$151,257	\$178,313	\$27,888	\$357,459
Other	\$188,694	\$86,227	\$61,154	\$336,076
Total	\$378,105	\$313,836	\$156,624	\$848,564

It is noted that in 1999/00 there were 5 episodes of neurosurgery performed on SEH residents in SWSAHS hospitals. None of these cases were in the categories 'Non-surgical neck & back condition' or 'Other Back and Neck Procedures'

No consistent trend was found in the number of planned 'DRG I68B: Non-surgical back and neck conditions' or 'DRG I10B: Other back and neck procedures' inflows from SWSAHS over the past 3 financial years (Table 5-4). The inflow number however was the lowest in 1999/00.

TABLE 5-4: TRENDS IN THE NUMBER OF 'DRG I68B: NON-SURGICAL BACK AND NECK CONDITIONS' AND 'DRG I10B: OTHER BACK AND NECK PROCEDURES' INFLOWS FROM SWSAHS TO SEH

	POW	St. George	St. Vincent's	SEH total
1997/98	17	16	15	48
1998/99	15	17	21	53
1999/00	13	10	15	38

Negotiation with SWSAHS on neurosurgery:

Development of a critical mass in Neurosurgery is a priority for SWSAHS which is keen to develop the capacity to undertake elective work in addition to the

Inflows from SWSAHS

Emergency work currently being performed. At this time, SWSAHS employs three neurosurgeons and plans to employ one more in the near future. SWSAHS would like to recommence elective Neurosurgery work at Bankstown hospital.

To stimulate this process, SWSAHS has targetted 'DRG I68B: NON -SURGICAL BACK AND NECK CONDITIONS' AND 'DRG I10B: OTHER BACK AND NECK PROCEDURES' for immediate reversal. In 1999/00, there were 38 inflows under these DRGs (approximately \$155,030).

Of these 38 cases, 31 were public patients and 7 were private patients or other 'compensable' type patients such as DVA patients. If only public patients are included, the cost would drop to approximately \$129,377.

The cases at St Vincent's are likely to be attributable to neurosurgeons with rooms at Bankstown, whose operating time at Bankstown was terminated when neurosurgery was transferred to Liverpool a few years ago. Whilst they continue to have rooms there it is assumed that patients will continue to present to St Vincent's. Another surgeon, who operates at POW, has rooms in Bankstown but has recently been admitting SWSAHS patients to Concord Hospital.

Cost Implications

The potential to reverse "neurosurgery" cases from POW and St Vincent's is dependent on clarification of the above issues and negotiations with individual clinicians. If the critical mass increases in SWSAHS, then emergency work will also be reversed. There is potential for \$125,496 to be transferred to the pool in 2001/02, calculated as 30 cases of back and neck separations from St Vincent's, St George and Prince of Wales Hospitals.

5.2 CARDIOTHORACIC SURGERY

SWSAHS currently provides 39% of all planned adult cardiothoracic surgery work for its local residents. Private hospitals provide another 29%. SEH is the second largest outflow recipient (11% of SWSAHS resident total), after CSAHS (14%). In 1999/00, there were 89 adult cardiothoracic surgery inflow episodes of SWSAHS

residents to SEH. These inflows were distributed across three facilities – St. Vincent's, POW and St. George (Table 5 -5).

TABLE 5-5: PLANNED TERTIARY CARDIOTHORACIC SURGERY INFLOWS FROM SWSAHS, 1999/00

	St. Vincent's	POW	St. George	Total
<u>Episodes</u>				
Coronary Bypass	29	24	5	58
Other Cardiothoracic Surgery	10	14	7	31
Total	39	38	12	89
<u>Estimated cost</u>				
Coronary Bypass	\$399,947	\$280,226	\$74,205	\$754,378
Other Cardiothoracic Surgery	\$194,747	\$209,416	\$107,671	\$511,834
Total	\$594,694	\$489,642	\$181,876	\$1,266,212

Cardiothoracic inflows from SWSAHS to SEH declined continually over the past 5 financial years (Table 5 -6).

TABLE 5-6: TRENDS IN PLANNED TERTIARY CARDIOTHORACIC SURGERY INFLOWS FROM SWSAHS

	St. Vincent's	POW	St. George	SEH total
1995/96	107	200	36	343
1996/97	88	117	32	237
1997/98	52	66	21	139
1998/99	42	35	15	92
1999/00	39	38	12	89

There were 6 cardiothoracic surgery outflows from SEH to SWSAHS in 1999/00 (\$90,636)

Negotiation with SWSAHS on cardiothoracic surgery:

Some of the drop in procedures may be due to the internationally recognised decline in the need for cardiothoracic surgery for coronary artery disease, which

is now increasingly being treated definitively with intravascular stenting. There is still a need for open heart surgery for mitral valve disease and other problems. In recent years a cardiothoracic surgery service has been developed at Liverpool Hospital, mostly provided by the Royal Prince Alfred Hospital group of surgeons, although one of these people is also a surgeon operating at Prince of Wales Hospital.

There are no plans to reverse flow from SESAHS in cardiothoracic surgery in the 2001/2002 financial year, although it is believed that this work will decline and the notional allocation from 1997/98 will revert to a very low amount. Clearly there are enough cardiothoracic surgeons operating in Liverpool for a roster so there is likely to also be a reversal of emergency work. There are no plans to include this work in the flow transition pool for 2001/2002.

5.3 ORTHOPAEDICS

Private hospitals are the major orthopaedic surgery service providers in SWSAHS (58% of SWSAHS resident total). About 30% of the work is provided by SWSAHS. Only 3% of the episodes occur in SEH.

In 1999/00, there were 249 planned adult orthopaedic inflow episodes of South Western Sydney residents to SEH hospitals. These inflows were spread across mainly four hospitals: St. George, POW, Sydney/Sydney Eye and St. Vincent's.

In the same year, 77 residents of South Eastern Sydney were admitted to SWSAHS hospitals for orthopaedic services. The majority of them were from St. George LGAs (56) and Sutherland (15). Over 81% of these outflows went to the Bankstown Hospital.

TABLE 5-7: PLANNED ORTHOPAEDIC INFLOWS FROM SWSAHS, 1999/00

	St. George	St. Vincent's	POW	Sydney/ Sydney Eye	Other	Total
Episodes						
Hip & Knee Replacement	13	14	6	2	2	37
Injuries to limbs - Medical	1			2	0	3
Knee Procedures	7	7	5	2	2	23
Other Orthopaedics - Non-Surgical	2			3	0	5
Other Orthopaedics - Surgical	37	37	29	13	1	117
Wrist and Hand Procedures incl Carpal Tunnel	11	6	15	32	0	64
Total	71	64	55	54	5	249
Estimated cost						
Hip & Knee Replacement	\$166,143	\$185,229	\$76,088	\$24,216	\$25,291	\$476,966
Injuries to limbs - Medical	\$720	\$0	\$0	\$1,441	\$0	\$2,161
Knee Procedures	\$15,292	\$11,081	\$8,018	\$3,207	\$3,207	\$40,805
Other Orthopaedics - Non-Surgical	\$4,340	\$0	\$0	\$53,777	\$0	\$58,117
Other Orthopaedics - Surgical	\$132,265	\$122,765	\$113,876	\$21,594	\$2,073	\$392,573
Wrist and Hand Procedures incl Carpal Tunnel	\$14,526	\$7,888	\$19,266	\$56,715	\$0	\$98,396
Total	\$333,286	\$326,963	\$217,248	\$160,951	\$30,571	\$1,069,019

No consistent trend was shown in the number of inflows from SWSAHS over the past 5 years.

TABLE 5-8: TRENDS IN PLANNED ORTHOPAEDIC INFLOWS FROM SWSAHS

	St. George	St. Vincent's	POW	Sydney/ Sydney Eye	Other	SEH total
1995/96	75	47	46	62	13	243
1996/97	73	39	49	42	8	211
1997/98	93	51	46	61	8	259
1998/99	104	44	60	49	16	273
1999/00	71	64	55	54	5	249

Negotiation with SWSAHS on orthopaedic surgery:

SEH is not the major flow destination for SWSAHS orthopaedic patients. However, of the amount, the largest recipient of flows in SEH is St George hospital –71 cases in 1999/2000. This is known to be attributable to an orthopaedic surgeon with rooms in Campbelltown. If this surgeon were to

Inflows from SWSAHS

operate in Campbelltown all those cases could probably be reversed immediately.

SEH has approximately 77 outflow cases to SWSAHS. This, in addition to the Campbelltown residents might negate the effect of SWSAHS inflows.

There is no known factor influencing the flow patterns to other SEH facilities. Some may represent procedures post trauma follow -up eg pin removal.

SWSAHS does not plan to reverse orthopaedic flows from SEH at this time due to the long waiting time for orthopaedic service in SWSAHS hospitals.

5.4 GYNAECOLOGY

SEH is not a major planned gynaecology flow destination for SWSAHS patients (only 3% of SWSAHS resident total).

In 1999/00, there were 308 planned gynaecology inflows from South Western Sydney to SEH. The major recipient hospitals were the Royal Hospital for Women and St. George. Of these 308 cases, 222 were public patients (88 in Royal for Women – approximately \$160,131, 111 in St. George - \$206,296 and 21 in other SEH facilities - \$56,229).

In the same year, there were 64 planned gynaecology outflows from South Eastern Sydney to SWSAHS. Of these outflow episodes, 31 were residents of Sutherland and 26 were from the St. George LGAs. The Liverpool Hospital received 31 of these outflows and Bankstown Hospital received 25.

TABLE 5-9: PLANNED GYNAECOLOGY INFLOWS FROM SWSAHS, 1999/00

	Royal for Women	St. George	Other	Total
Episodes				
Abortion W D&C, Aspiration Curettage or Hysterotomy	5	7	0	12
Conisation, Vagina, Cervix and Vulva Procedures	17	15	5	37
Diagnostic Curettage or Diagnostic Hysteroscopy	18	20	4	42
Endoscopic Procedures for Female Reproductive System	20	14	2	36
Hysterectomy	9	21	2	32
Non-procedural Gynaecology	5	3	3	11
Other Gynaecological Surgery	84	44	10	138
Total	158	124	26	308
Estimated cost				
Abortion W D&C, Aspiration Curettage or Hysterotomy	\$3,718		\$0	\$8,790
Conisation, Vagina, Cervix and Vulva Procedures	\$36,211		\$4,067	\$52,479
Diagnostic Curettage or Diagnostic Hysteroscopy	\$12,773		\$2,817	\$29,934
Endoscopic Procedures for Female Reproductive System	\$19,087		\$1,909	\$34,896
Hysterectomy	\$30,337		\$6,647	\$118,128
Non-procedural Gynaecology	\$4,002		\$3,370	\$9,766
Other Gynaecological Surgery	\$155,532		\$42,348	\$295,846
Total	\$261,661		\$61,157	\$549,839
Public patients only				
Episodes	88		21	222
Estimated cost	\$160,131		\$56,229	\$422,656

The number of planned gynaecology inflows from SWSAHS shows an increasing trend in the most recent three years, especially flows to the Royal Hospital for Women.

SWSAHS intends to reverse flows to St. George only.

TABLE 5-10: TRENDS IN PLANNED GYN AECOLOGY FLOWS BETWEEN SWSAHS AND ST. GEORGE

	Inflows to St. George from SWSAHS	Outflows from St. George/ Sutherland areas to SWSAHS	Net flows
1997/98	123	55	68
1998/99	110	67	43
1999/00	124	57	67

Negotiation with SWSAHS on gynaecology:

The net-flow number is very small for St. George (67 or 60 for public patient only) and this is probably attributable to a gynaecologist with rooms in Kogarah who operates at Bankstown. There is also a gynaecologist with rooms in Bankstown and operating time in St George, who has recently closed those rooms.

158 cases at the Royal Hospital for Women were probably referred because of the tertiary nature of the hospital and they are unlikely to be reversed unless they can be attributed to clinicians' rooms location within SWSAHS.

Cost implications

SWSAHS intends to reverse 96 public patient flows from St. George Hospital in 2001/02. The cost implication will be \$176,252 for St. George Hospital.

5.5 OPHTHALMOLOGY

Over 64% of SWSAHS residents utilise private hospitals for ophthalmology services. SEH is the major ophthalmology outflow recipient, providing approximately 10% of the total SWSAHS resident ophthalmology work.

In 1999/00, there were 482 planned adult ophthalmology inflows from SWSAHS to SEH. These flows were mainly received by Sydney Eye Hospital.

TABLE 5-11: PLANNED OPHTHALMOLOGY INFLOWS FROM SWSAHS, 1999/00

	Sydney Eye	POW	Other	Total
<u>Episodes</u>				
Cataract Procedures	182	33	17	232
Non-procedural Ophthalmology	35	6	0	41
Other Eye Procedures	171	29	9	209
Total	388	68	26	482
<u>Estimated cost</u>				
Cataract Procedures	\$335,154	\$59,404	\$30,016	\$424,575
Non-procedural Ophthalmology	\$64,294	\$13,201	\$0	\$77,495
Other Eye Procedures	\$453,034	\$73,949	\$20,870	\$547,854
Total	\$852,482	\$146,555	\$50,887	\$1,049,924

Of these 482 inflows, 345 were public patients (Sydney Eye 158, POW 25 and 12 in other hospitals). The public patient inflows amounted to approximately \$742,558.

The number of planned ophthalmology inflows from SWSAHS to SEH increased in recent years. The increase is most noticeable in the inflow number to Sydney Eye Hospital.

TABLE 5-12: TRENDS IN PLANNED OPHTHALMOLOGY INFLOWS FROM SWSAHS

	Sydney Eye	POW	Other	SEH total
1995/96	259	46	35	340
1996/97	247	48	23	318
1997/98	309	41	25	375
1998/99	348	44	25	417
1999/00	388	68	26	482

In 1999/00, there were 8 public patient outflows and 1 private patient outflow from SEH to SWSAHS. Of these outflows, 4 were cataract procedure related and 5 were other eye procedure related.

Negotiation with SWSAHS on ophthalmology

Consistent with the statewide strategy, SWSAHS has the capacity to provide more cataract services within existing personnel. It has estimated an ability to reverse the flow of 50 - 70 % of the cataract work and 15 -20% of the other eye procedures.

Cost implications

SWSAHS plans to reverse 137 day only ophthalmology public patient flows from Sydney Eye Hospital in 2001/02. The cost implication will be \$254,710 for the Sydney Eye Hospital.

5.6 UROLOGY

In 1999/00, there were 206 planned non -tertiary urology separations excluding lithotripsy inflows to SEH from SWSAHS. These inflows were mainly received by St. Vincent's and Prince of Wales Hospitals. About 48% of these inflows were overnight cases .

TABLE 5-13: PLANNED NON - TERTIARY UROLOGY INF LOWS (EXCLUDING LITHOTRIPSY) FROM SWSAHS, 1999/00

	POW	St. Vincent's	St. George	Other	Total
Episodes					
Cystourethroscopy	33	5	16	4	58
Other Non-procedural Urology	2	3	5	1	11
Other Urological Procedures	31	57	21	1	110
TURP	1	6	3	2	12
Urinary Stones and Obstruction	9	2	4	0	15
Total	76	73	49	8	206
Estimated cost					
Cystourethroscopy	\$29,689	\$4,381	\$14,071	\$2,998	\$51,138
Other Non-procedural Urology	\$2,463	\$3,013	\$6,464	\$906	\$12,847
Other Urological Procedures	\$80,119	\$330,791	\$72,695	\$5,554	\$489,160
TURP	\$2,792	\$20,351	\$9,203	\$6,135	\$38,481
Urinary Stones and Obstruction	\$10,975	\$2,463	\$4,927	\$0	\$18,365
Total	\$126,038	\$360,999	\$107,359	\$15,594	\$609,990

Of these inflows, 15 were non -public patients (\$35,106).

In the same period, SWSAHS hospitals received 102 planned non tertiary urology cases from SEH (approximately \$180,596). 6 of these 102 cases were non - public patients (\$12,012). About 80% of the ouflows were treated at Bankstown Hospital.

No consistent trend was observed in the number of urology inflows from SWSAHS over the past 3 financial y ears.

TABLE 5 - 14: TRENDS IN PLANNED URO LOGY INFLOWS (EXCLUDING LITHOTRIPS Y) FROM SWSAHS

	Inflows from SWSAHS to SEH					Outflows from SEH to SWSAHS	Netflows
	POW	St. Vincent's	St. George	Other	Total	Total	Total
1997/98	96	77	35	10	218	96	122
1998/99	84	103	38	9	234	97	137
1999/00	76	73	49	8	206	102	104

Negotiation with SWSAHS

SWSAHS intends to reverse 50 non -tertiary public patient flows from SEH in 2001/02. This could be achieved for St Vincent’s by negotiation with a surgeon with rooms in SWSAHS and Darlinghurst who operates at Fairfield, Liverpool and St Vincent’s Hospitals.

Cost implications

The cost implication will be \$119,686 for the St. Vincent’s Hospital.

5.7 ENT

ENT surgery was not in the original bid from SWSAHS but there is an ENT surgeon with rooms in Bankstown who operates at POW and Bankstown and another with rooms in Bankstown who operates at Sydney Hospital. There may be potential for easy reversal if the operating time could be found in SWSAHS.

In 1999/00, there were only 80 ENT inflows into SEH from SWSAHS. These cases were distributed across 5 hospitals in SEH. SWSAHS does not plan to reverse any ENT cases from SEH in 2001/02. Negotiations however, are continuing to achieve a transfer of the waiting lists for ENT, to Bankstown Hospital.

6 ADULT INFLOWS FROM IAHS

The Illawarra Area Health Service has been a major partner in many developments in South East Health over many years. Residents of the Illawarra and Shoalhaven areas are significant contributors to the workload of South East Health, occupying 11% of the adult planned episodes at a funding commitment of \$13.7M. In 1999/00 it is estimated that \$7.3M was spent on tertiary planned flow, \$1.4M on non-tertiary day only and \$5.0M on non-tertiary planned overnight episodes (Table 6 - 1).

TABLE 6-1: PLANNED ADULT INFLOWS FROM IAHS TO SEH, 1999/00

	Tertiary			Non-tertiary Overnight			Non-tertiary Dayonly	
	Episodes	Estimated cost		Episodes	Estimated cost		Episodes	Estimated cost
Cardiothoracic Surgery	256	\$3,230,605	Orthopaedics	129		Interventional Cardiology	185	\$302,700
Interventional Cardiology	228	\$1,304,401	Upper GIT Surgery	74	\$622,032	Ophthalmology	103	\$178,597
Tracheostomy	21	\$1,126,192	Ophthalmology	175		Urology	127	\$150,881
Neurosurgery	96	\$805,175	Obstetrics	167	\$371,036	Diagnostic GI Endoscopy	198	\$136,416
Non Subspecialty Surgery	20	\$196,939	Non Subspecialty Surgery	64		Orthopaedics	64	\$95,096
Haematology	7	\$180,226	Gynaecology	76	\$235,985	Non Subspecialty Surgery	40	\$79,364
Transplantation	5	\$143,251	Vascular Surgery	30		Gastroenterology	50	\$68,463
Upper GIT Surgery	6	\$113,458	Interventional Cardiology	75	\$212,969	Gynaecology	63	\$62,741
Urology	5	\$56,670	Medical Oncology	58		Plastic Surgery	26	\$40,716
Plastic Surgery	2	\$32,838	Urology	50	\$188,108	Haematology	58	\$33,571
Other	10	\$103,226	Other	394		Other	299	\$285,136
Total	656	\$7,292,982	Total	1292	\$4,969,797	Total	1213	\$1,433,681

Unlike SWSAHS, the Illawarra Area Health Service is not targeting tertiary flow at this time. There are plans under way for a cardiac catheterisation laboratory in 2004 which will be performing interventional cardiology and a second

Inflows from IAHS

neurosurgeon will be appointed in the new financial year. The negotiations for targeted flow reversal between IAHS and SEH have centred around cardiac pacemakers and cataract surgery.

6.1 INTERVENTIONAL CARDIOLOGY

SEH is the second largest interventional cardiology service provider for Illawarra residents (31% of the Illawarra resident work total) after the private sector (57%).

TABLE 6-2: PLANNED INTERVENTIONAL CARDIOLOGY INFLOWS FROM IAHS 1999/00

	POW	St. George	St. Vincent's	Total
Episodes				
Cardiac Pacemaker Implantation	33	14	6	53
Cardiac Pacemaker Replacement	9	8	9	26
Cardiac Pacemaker Revision Except Device Replacement	1			1
Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W Cat or Sev CC	3			3
Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W/O Cat or Sev CC	2	1		3
Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W Complex DX/Pr	33	4	4	41
Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W/O Complex DX/Pr	137	14	20	171
Implantation or Replacement of AICD, Total System			2	2
Other Trans-Vascular Percutaneous Cardiac Intervention	3			3
Percutaneous Coronary Angioplasty W AMI	7	6	1	14
Percutaneous Coronary Angioplasty W/O AMI W Stent Implantation	115	28	10	153
Percutaneous Coronary Angioplasty W/O AMI W/O Stent Implantation	15	2		17
Total	358	77	52	487
Estimated cost				
Cardiac Pacemaker Implantation	\$224,657	\$126,398	\$47,758	\$398,813
Cardiac Pacemaker Replacement	\$61,911	\$55,032	\$57,356	\$174,300
Cardiac Pacemaker Revision Except Device Replacement	\$5,206	\$0	\$0	\$5,206
Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W Cat or Sev CC	\$16,198	\$0	\$0	\$16,198
Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W/O Cat or Sev CC	\$3,765	\$1,441	\$0	\$5,206
Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W Complex DX/Pr	\$81,033	\$10,029	\$8,198	\$99,260
Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W/O Complex DX/Pr	\$207,240	\$25,762	\$31,142	\$264,144
Implantation or Replacement of AICD, Total System	\$0	\$0	\$76,526	\$76,526
Other Trans-Vascular Percutaneous Cardiac Intervention	\$10,249	\$0	\$0	\$10,249
Percutaneous Coronary Angioplasty W AMI	\$48,204	\$37,331	\$10,675	\$96,210
Percutaneous Coronary Angioplasty W/O AMI W Stent Implantation	\$447,694	\$110,558	\$43,691	\$601,942
Percutaneous Coronary Angioplasty W/O AMI W/O Stent Implantation	\$58,747	\$5,904	\$0	\$64,650
Total	\$1,164,903	\$372,454	\$275,346	\$1,812,703

In 1999/00, there were about 487 planned adult interventional cardiology inflows from Illawarra to SEH. Of these inflows, about 47% were 'Tertiary' cases.

About 38% of the inflows were non -tertiary day only admissions. 73% of the inflows attended POW/Eastern Heart Clinic. Nearly 96% of the interventional cardiology inflows were public patients.

The Illawarra Area Health Service plans to reverse some of its pacemaker implantation and replacement flows from SEH in 2001/2002.

TABLE 6-3: TRENDS IN PLANNED CARDIAC PACEMAKER IMPLANTATION INFLOWS FROM IAHS

	POW/EHC	St. George	St. Vincent's	Total
1997/98	59	4	2	65
1998/99	64	3	1	68
1999/00	33	14	6	53

TABLE 6-4: TRENDS IN PLANNED CARDIAC PACEMAKER REPLACEMENT INFLOWS FROM IAHS

	POW/EHC	St. George	St. Vincent's	Total
1997/98	13		1	14
1998/99	33	5	1	39
1999/00	9	8	9	26

Negotiation with IAHS on interventional cardiology:

IAHS is unable to accommodate a full flow reversal in interventional cardiology at this time due to lack of infrastructure. Capital works development at Wollongong Hospital, due for completion in 2003/4, includes cardiac catheterisation services. This year (2000/2001) they have performed 54 (YTD April) pacemaker insertions in the Digital Subtraction Angiography Laboratory. There is capacity to increase this to 3 per week (or 156 per year) with commencement of new financial year, with a boost in funds. The numbers over 100 would represent growth.

Cost implications

IAHS plans to reverse 38 pacemaker cases in 2001/2002 from SEH. The cost implication will be \$249,133 for SEH.

Flow intentions for interventional cardiology and cardiothoracic surgery

The cardiac catheterisation service will be opened in Wollongong in 2003/4 and it is expected that most of the work currently flowing to POW will be reversed (in addition to that which is flowing to CSAHS). This amounts to a substantial component of the existing contract that Prince of Wales Hospital has with Eastern Heart Clinic. This contract is due for renewal in 2003/4 so the timing is relevant to those negotiations. There is an expectation that South East Health cardiothoracic surgeons will continue to support the IAHS and that some non complex work may be performed in the future in Wollongong.

6.2 OPHTHALMOLOGY

Private hospitals are the major ophthalmology service provider for Illawarra residents, accounting for 68% of the total Illawarra resident workload. IAHS shares about 22% of the total workload while SEH shares only 9%.

In 1999/00, there were 278 planned ophthalmology inflows from IAHS to SEH. These inflows chiefly went to the Sydney Eye Hospital. About 42% of the ophthalmology inflows were cataract procedure related.

TABLE 6-5: PLANNED OPHTHALMOLOGY INFLOWS FROM IAHS, 1999/00

	Sydney Eye	POW	Other	Total
Episodes				
Cataract Procedures	99	7	11	117
Non-procedural Ophthalmology	13	1	1	15
Other Eye Procedures	116	21	9	146
Total	228	29	21	278
Estimated cost				
Cataract Procedures	\$184,960	\$12,826	\$19,865	\$217,651
Non-procedural Ophthalmology	\$30,076	\$1,301	\$1,301	\$32,679
Other Eye Procedures	\$397,360	\$57,435	\$17,483	\$472,278
Total	\$612,396	\$71,562	\$38,650	\$722,608

The number of cataract procedure inflows from IAHS to Sydney Eye increased greatly between the last 2 years.

TABLE 6-6: TRENDS IN PLANNED CATARACT PROCEDURE INFLOWS FROM IAHS

	Sydney Eye	POW	Other	SEH total
1997/98	68	5	10	83
1998/99	61	6	5	72
1999/00	99	7	11	117

Of the 117 cataract procedure inflows in 1999/00, 96 were public patients and 69 were day only cases.

Negotiation with IAHS on ophthalmology:

Consistent with the statewide principles, the IAHS expects to target reversal of routine cataract procedures from next financial year. These will be done at Shoalhaven and Bulli Hospitals. More complex work will probably continue to be managed at Sydney/Sydney Eye Hospital. There is a concern that the wait at Sydney Eye Hospital is only 2 -3 months. The wait in the IAHS is much longer and this may take a year to improve.

Cost Implications

It is planned to include \$178,483 (96 cases) in the flow transition pool for 2001/2002 and 2002/2003, in the expectation that reversal may not begin until the 2002/2003 financial year.

7 ADULT INFLOWS FROM HAHS

About 2% of adult inflows to SEH were from Hunter Area Health Service, amounting to approximately \$2.5M in 1999/00. About \$1.2M of this was spent on tertiary planned flow and \$1.3 on non -tertiary planned flow.

TABLE 7-1: PLANNED ADULT INFLOWS FROM HAHS TO SEH, 1999/00

	Tertiary			Non-tertiary Overnight			Non-tertiary Dayonly	
	Episodes	Estimated cost		Episodes	Estimated cost		Episodes	Estimated cost
Cardiothoracic Surgery	21	\$350,431	Ophthalmology	133	\$366,906	Urology	79	\$96,380
Tracheostomy	6	\$298,595	Orthopaedics	16	\$79,476	Ophthalmology	21	\$34,651
Neurosurgery	16	\$181,267	Plastic Surgery	18	\$74,428	Interventional Cardiology	14	\$21,658
Interventional Cardiology	11	\$155,835	Non Subspecialty Surgery	17	\$65,861	Non Subspecialty Medicine	27	\$13,315
Head & Neck Surgery	6	\$89,799	Vascular Surgery	7	\$55,429	Diagnostic GI Endoscopy	19	\$13,073
Urology	5	\$52,430	Medical Oncology	11	\$45,708	Plastic Surgery	7	\$12,178
Haematology	1	\$43,157	Interventional Cardiology	8	\$39,990	Non Subspecialty Surgery	6	\$10,063
Plastic Surgery	1	\$11,922	Gynaecology	10	\$34,588	Gynaecology	7	\$6,143
Neurology	2	\$6,414	Gastroenterology	6	\$29,604	Orthopaedics	3	\$4,509
			Obstetrics	9	\$26,450	Cardiology	6	\$4,485
Other			Other	75	\$277,453	Other	243	\$276,412
Total	69	\$1,189,849	Total	310	\$1,095,892	Total	216	\$246,433

HAHS intends to establish a pubic lithotripsy service in the new financial year and has negotiated reversal of 60 procedures in 2001/02.

There are no plans to reverse other flows in 2001/02 although there is an "intention" flagged to target cardiac services in the future.

7.1 LITHOTRIPSY

The Prince of Wales Hospital hosts the Statewide lithotripter. In 1999/00 a total of 164 lithotripsy inpatient episodes were recorded for Hunter residents. About 37% of them were treated at Prince of Wales and 63% were treated in private hospitals.

While the number of lithotripsy episodes occurring in private hospitals for Hunter residents did not change consistently over time, the number of episodes admitted to Prince of Wales has declined over the past 5 years.

TABLE 7-2: TRENDS IN PLANNED LITHOTRIPSY INPATIENT EPISODES FOR RESIDENTS OF HAHS

	SEH	Private Hospitals
1995/96	74	116
1996/97	71	113
1997/98	72	95
1998/99	62	92
1999/00	60	104

Negotiation with HAHS on lithotripsy

HAHS intends to reverse 60 public cases in 2001/02. The referral for lithotripsy is an urologist -urologist system and there is an in-principle agreement in place from Hunter urologists to refer to HAHS if a service is commissioned.

Cost implications

The cost implication will be \$75,298 for Prince of Wales.

8 ADULT INFLOWS FROM OTHER METROPOLITAN AHSs

Inflows from NSAHS account for nearly 11% of the planned adult inflow total to SEH and the other areas also have substantial inflows, particularly when considering tertiary inflow. There are, however, no plans for the flow transition pool for 2001/2002 with these partners.

TABLE 8-1: PLANNED ADULT TERTIARY INFLOWS FROM OTHER METROPOLITAN AHSs TO SEH, 1999/00

	NSAHS	WSAHS	CCAHS	WAHS
Episodes				
Cardiothoracic Surgery	39	31	22	28
Tracheostomy	6	9	4	1
Neurosurgery	21	33	19	20
Interventional Cardiology	17	18	14	15
Haematology	7	1	6	1
Head & Neck Surgery	4		1	
Urology	1			1
Plastic Surgery	2	1		1
Respiratory Medicine	2	2		
Non Subspecialty Surgery		2	1	
Other	2	3	3	3
Total	101	100	70	70
Estimated cost				
Cardiothoracic Surgery	\$541,976	\$459,564	\$337,213	\$355,959
Tracheostomy	\$306,684	\$460,237	\$230,419	\$50,524
Neurosurgery	\$200,193	\$250,062	\$258,075	\$221,036
Interventional Cardiology	\$152,457	\$115,879	\$141,993	\$105,549
Haematology	\$218,102	\$43,157	\$251,172	\$43,157
Head & Neck Surgery	\$57,172	\$0	\$14,967	\$0
Urology	\$8,273	\$0	\$0	\$13,154
Plastic Surgery	\$16,872	\$11,922	\$0	\$11,922
Respiratory Medicine	\$26,517	\$16,640	\$0	\$0
Non Subspecialty Surgery	\$0	\$28,763	\$6,228	\$0
Other	\$34,186	\$18,828	\$17,771	\$23,263
Total	\$1,562,431	\$1,405,052	\$1,257,836	\$824,564

TABLE 8-2: PLANNED ADULT NON-TERTIARY INFLOWS FROM OTHER METROPOLITAN AHSs TO SEH, 1999/00

	NSAHS	WSAHS	CCAHS	WAHS
Episodes				
Ophthalmology	682	290	136	83
Orthopaedics	114	91	58	55
Gynaecology	319	119	73	24
Obstetrics	277	85	19	14
Non Subspecialty Surgery	88	46	31	24
Urology	110	150	53	69
Respiratory Medicine	46	58	15	20
Plastic Surgery	67	41	20	32
Medical Oncology	55	19	15	9
Haematology	239	38	34	26
Other	984	469	268	218
Total	2981	1406	722	574
Estimated cost				
Interventional Cardiology	\$1,547,169	\$627,914	\$385,993	\$181,028
Orthopaedics	\$330,975	\$337,967	\$327,423	\$171,659
Ophthalmology	\$442,588	\$180,901	\$151,585	\$51,624
Medical Oncology	\$514,399	\$181,175	\$40,521	\$29,227
Non Subspecialty Surgery	\$229,524	\$168,341	\$184,325	\$104,726
Urology	\$163,369	\$191,756	\$71,571	\$85,349
Gynaecology	\$150,596	\$210,027	\$61,098	\$51,747
Vascular Surgery	\$173,181	\$106,567	\$53,255	\$72,517
Plastic & Recon. Surgery	\$156,715	\$68,571	\$67,635	\$30,572
Colorectal Surgery	\$227,125	\$55,014	\$37,013	\$45,454
Other	\$1,315,066	\$869,950	\$646,836	\$444,737
Total	\$5,250,705	\$2,998,181	\$2,027,255	\$1,268,641

9 ADULT INFLOWS FROM RURAL AREAS

To date the rural area health services have not participated in flow reversal negotiations with South East Health. The planned adult tertiary inflows represent approximately \$14M (Table 8 -1) and the planned adult non -tertiary work approximately \$10M (Table 8 -2).

TABLE 9-1: PLANNED ADULT TERTIARY INFLOWS FROM RURAL AHSS TO SEH, 1999/00

	Mid North Coast	New England	Greater Murray	Mid Western	Southern	Macquarie	Northern Rivers	Far West
Episodes								
Cardiothoracic Surgery	113	99	80	69	17	15	16	4
Tracheostomy	12	7	8		5	3	2	
Interventional Cardiology	55	75	69	54	14	12	1	1
Neurosurgery	17	38	33	16	13	12	8	3
Haematology	6	14	10	12	2		6	
Head & Neck Surgery	5	2	4	4		2		
Plastic Surgery	3		3	3	2			
Non Subspecialty Surgery	2	2	5	3	2	2		
Upper GIT Surgery	1	1	2		2	2		
Urology	3	3	2	1	1	3		1
Other	3	4	0	6	4	2	6	0
Total	220	245	216	168	62	53	39	9
Estimated cost								
Cardiothoracic Surgery	\$1,766,829		\$1,290,707		\$214,174		\$255,383	
Tracheostomy	\$637,126		\$396,984		\$295,278		\$101,047	
Interventional Cardiology	\$339,371		\$479,730		\$74,345		\$9,087	
Neurosurgery	\$162,130		\$418,029		\$88,963		\$85,527	
Haematology	\$221,753		\$272,838		\$58,635		\$167,514	
Head & Neck Surgery	\$69,445		\$58,519		\$0		\$0	
Plastic Surgery	\$33,930		\$81,154		\$47,799		\$0	
Non Subspecialty Surgery	\$26,861		\$84,466		\$30,201		\$0	
Upper GIT Surgery	\$24,170		\$16,779		\$32,559		\$0	
Urology	\$31,630		\$22,729		\$14,455		\$0	
Other	\$27,121		\$0		\$51,384		\$39,498	
Total	\$3,340,365		\$3,121,934		\$907,792		\$658,056	

It is expected that the revelations of the Metropolitan and the Rural Health Services Plans under the Government Action Plan for Health will stimulate review

of current referral patterns and forecast the commissioning of new services in rural areas which will influence flow patterns. It is therefore anticipated that South East Health will be involved in discussions in 2001/2002 to understand the various flow intentions of our partners.

TABLE 9-2: PLANNED ADULT NON-TERTIARY INFLOWS FROM RURAL AHS TO SEH, 99/00

	Mid North Coast	New England	Greater Murray	Mid Western	Southern	Macquarie	Northern Rivers	Far West
Episodes								
Interventional Cardiology	200	213	117	139	26	29	11	4
Ophthalmology	76	66	38	47	86	34	24	19
Orthopaedics	35	17	21	45	26	51	6	3
Medical Oncology	22	53	19	32	16	25	17	3
Non Subspecialty Surgery	38	11	13	12	20	11	3	4
Urology	74	52	8	27	27	39	12	7
Haematology	19	40	43	44	8	12	27	
Colorectal Surgery	6	6	11	5	13	2	4	
Gynaecology	16	42	20	23	30	16	8	1
Vascular Surgery	14	10	5	9	9	4		1
Other	274	228	134	195	177	123	91	28
Total	774	738	429	578	438	346	203	70
Estimated cost								
Interventional Cardiology	\$390,018		\$233,422		\$55,198		\$17,267	
Ophthalmology	\$222,761		\$106,981		\$229,148		\$88,661	
Orthopaedics	\$174,509		\$107,975		\$176,743		\$32,675	
Medical Oncology	\$81,579		\$71,896		\$66,427		\$64,020	
Non Subspecialty Surgery	\$158,894		\$69,216		\$130,835		\$6,786	
Urology	\$127,309		\$21,590		\$52,373		\$31,442	
Haematology	\$38,394		\$61,945		\$24,419		\$80,470	
Colorectal Surgery	\$30,514		\$96,307		\$119,122		\$119,674	
Gynaecology	\$44,341		\$47,497		\$115,098		\$25,537	
Vascular Surgery	\$94,822		\$45,016		\$70,590		\$0	
Other	\$611,621		\$360,693		\$353,660		\$180,639	
Total	\$1,974,764		\$1,222,538		\$1,393,612		\$647,172	

10 ADULT INFLOWS FROM INTERSTATE

There has always been a critical mass of inflow from interstate, in some instances reflective of South East Health’s reputation in tertiary and very special services (heart -lung transplantation etc); which is unlikely to be reversed. It is believed that most of the other work from the other states should be considered natural ‘border -based’ flow. It should be noted that this work has dropped by about 400 episodes over the past five years. The inflow of children has remained at approximately 400 per year.

TABLE 10-1: PLANNED ADULT INFLOWS (TERTIARY AND NON -TERTIARY) FROM INTERSTATE TO SEH, 1999/00

	A.C.T.	Queensland	Victoria	South Australia	Tasmania	North Territory	West. Australia
Episodes							
Tracheostomy	2	1	2	1			
Ophthalmology	90	12		2	1	2	3
Gynaecology	31	11	8	3	1	3	
Cardiothoracic Surgery	5	2	1	1	1	2	1
Colorectal Surgery	6	3	1	1	1		
Haematology	12	1	2	1			
Neurosurgery	12	5	3				
Non Subspecialty Surgery	10	6	3	4	3		1
Interventional Cardiology	15	12	3	1		1	
Upper GIT Surgery	1	2	2		1		
Other	124	56	37	33	13	18	11
Total	308	111	62	47	21	26	16
Estimated cost							
Tracheostomy	\$127,483	\$50,524	\$96,500	\$50,524	\$0	\$0	\$0
Ophthalmology	\$264,669	\$43,758	\$0	\$4,670	\$1,836	\$4,320	\$3,670
Gynaecology	\$165,090	\$18,569	\$7,564	\$4,767	\$740	\$2,460	\$0
Cardiothoracic Surgery	\$69,243	\$40,983	\$20,112	\$9,435	\$15,269	\$21,130	\$21,381
Colorectal Surgery	\$68,484	\$16,407	\$1,418	\$17,616	\$60,971	\$0	\$0
Haematology	\$151,548	\$442	\$3,495	\$486	\$0	\$0	\$0
Neurosurgery	\$78,269	\$36,510	\$27,261	\$0	\$0	\$0	\$0
Non Subspecialty Surgery	\$50,891	\$36,115	\$7,724	\$28,605	\$11,006	\$0	\$1,580
Interventional Cardiology	\$47,219	\$40,178	\$4,671	\$1,557	\$0	\$3,416	\$0
Upper GIT Surgery	\$17,345	\$35,023	\$14,571	\$0	\$21,994	\$0	\$0
Other	\$288,389	\$137,896	\$89,288	\$45,876	\$18,688	\$33,309	\$11,506
Total	\$1,328,630	\$456,405	\$272,605	\$163,537	\$130,504	\$64,636	\$38,137

11 IMPACT OF TARGETTED FLOW REVERSAL ON SEH HOSPITALS

11.1 PRINCE OF WALES HOSPITAL

Inflows from other NSW Area Health Services and interstate comprise a significant portion of the Prince of Wales workload. In 1999/00, planned inflows accounted for 24% of episodes, 19% bed days and 25% of the total expenditure on acute care.

TABLE 11 - 1: FLOW PATTERNS AT PRINCE OF WALES, 1999/00

	Episodes	Bed days	Estimated Cost*
Unplanned admissions	10822	77249	\$48,878,098
Planned admissions - SEH residents	13332	29629	\$25,737,379
Planned admissions - Intrastate inflows	7636	24324	\$24,238,204
Planned admissions - Interstate inflows	102	615	\$472,248
Planned admissions - NFA/Not stated	14	49	\$24,130
Total	31906	131866	\$99,350,059
% planned intra-state inflows	23.9	18.4	24.4
% planned interstate inflows	0.3	0.5	0.5

* For unplanned admissions: Discounted cost weighted episodes ~ \$2324.

For planned admissions: Excluding ED cost weighted episodes ~ \$2324.

In 1999/00, the top three tertiary SRGs for planned inflows were cardiothoracic surgery, interventional cardiology and neurosurgery. The top three for non-tertiary work are urology (lithotripter), ophthalmology and haematology.

Impact on targetted hospitals –Prince of Wales

In 2001/2002 there is an expectation of reversal of flow of pacemakers (\$249,133), non-surgical neck and back neurosurgery (\$41,832) and lithotripsy (\$75,298). The pacemakers will reverse to the IAHS, the neurosurgery work will reverse to SWSAHS and the lithotripsy work will reverse to HAHS, a total of \$366,263.

TABLE 11-2: FLOW REVERSAL AFFECTED SERVICES PRINCE OF WALES

	Total admissions in 1999/00			Reversal to IAHS in 2001/02			Reversal to SWSAHS in 2001/02			Reversal to Hunter in 2001/02		
	Episodes	Bed days	Estimated Cost	Episodes	Bed days	Estimated Cost	Episodes	Bed days	Estimated Cost	Episodes	Bed days	Estimated Cost
Interventional cardiology												
Total	1799	4524	\$6,568,828	38	38	\$249,133						
Pacemaker Implantation	186	733	\$1,552,640	29	29	\$191,405						
Pacemaker Replacement	42	88	\$289,064	9	9	\$57,728						
Neurosurgery												
Total	858	7226	\$5,959,267				10	39	\$41,832			
DRG I10B and DRG I68B: Oth back & neck proc/Non-surgical back & neck	249	967	\$844,777				10	39	\$41,832			
Urology												
Total	2192	4199	\$3,871,383							60	60	\$75,298
Lithotripsy	907	925	\$1,131,963							60	60	\$75,298

1 Discounted cost weighted episodes = \$2324.

2 Excluding ED cost weighted episodes = \$2324.

11.2 ST VINCENT'S HOSPITAL

Inflows from other NSW Area Health Services and interstate comprise a significant portion also of the St Vincent's workload. In 1999/00, planned inflows accounted for 27% of episodes, 27% bed days and 35% of the total expenditure on acute care.

TABLE 11-3: FLOW PATTERNS AT ST. VINCENT'S, 1999/00

	Episodes	Bed days	Estimated Cost*
Unplanned admissions	12122	53341	\$39,187,774
Planned admissions - SEH residents	8112	17420	\$13,658,430
Planned admissions - Intrastate inflows	7391	26054	\$28,120,218
Planned admissions - Interstate inflows	215	817	\$895,829
Planned admissions - NFA/Not stated	50	240	\$129,845
Total	27890	97872	\$81,992,097
% planned intra-state inflows	26.5	26.6	34.3
% planned interstate inflows	0.8	0.8	1.1

* For unplanned admissions: Discounted cost weighted episodes ~ \$2324.

For planned admissions: Excluding ED cost weighted episodes ~ \$2324.

In 1999/00, the top three tertiary SRGs for planned inflows were cardiothoracic surgery, interventional cardiology and neurosurgery. The top three non-tertiary SRGs were haematology, interventional cardiology and orthopaedics.

In 2001/2002 there will be little impact on St Vincent's Hospital. The total loss to its budget will be \$161,518 identifying non tertiary urology and non surgical back and neck neurosurgery.

TABLE 11-4: FLOW REVERSAL AFFECTED SERVICES ST VINCENT'S

	Total admissions in 1999/00			Reversal to SWSAHS in 2001/02		
	Episodes	Bed days	Estimated Cost ¹	Episodes	Bed days	Estimated Cost ²
Urology						
Total	775	2464	\$2,167,202	50	139	\$119,686
Non-tertiary cases excl lithotripsy	742	2069	\$1,717,259	50	139	\$119,686
Neurosurgery						
Total	927	4802	\$4,341,313	10	39	\$41,832
DRG I10B and DRG I68B: Oth back & neck proc/Non-surgical back & neck	318	1106	\$946,824	10	39	\$41,832

¹ Discounted cost weighted episodes ~ \$2324.

² Excluding ED cost weighted episodes ~ \$2324.

11.3 ST GEORGE HOSPITAL

Inflows from other NSW Area Health Services and interstate comprise a relatively high portion of the St George workload. In 1999/00, planned inflows accounted for 16% of episodes, 13% bed days and 17% of the total expenditure on acute care.

TABLE 11-5: FLOW PATTERNS AT ST. GEORGE, 1999/00

	Episodes	Bed days	Estimated Cost*
Unplanned admissions	12845	88949	\$52,160,892
Planned admissions - SEH residents	19568	46074	\$33,841,790
Planned admissions - Intrastate inflows	6094	20451	\$17,208,361
Planned admissions - Interstate inflows	59	485	\$415,284
Planned admissions - NFA/Not stated	40	173	\$112,456
Total	38606	156132	\$103,738,783
% planned intra-state inflows	15.8	13.1	16.6
% planned interstate inflows	0.2	0.3	0.4

* For unplanned admissions: Discounted cost weighted episodes ~ \$2324.

For planned admissions: Excluding ED cost weighted episodes ~ \$2324.

The top tertiary SRGs for planned inflows in 1999/00 at St. George were cardiothoracic surgery, interventional cardiology and Neurosurgery. The top non-tertiary SRGs were obstetrics, diagnostic GI endoscopy and haematology.

Most of the inflow to St George is "natural" flow from CSAHS (Canterbury) and SWSAHS (Bankstown). There is an expectation that the St George budget will lose \$218,084 to the "Flow transition pool" in 2001/2002 for Gynaecology and neurosurgery.

TABLE 11-6: FLOW REVERSAL AFFECTED SERVICES

	Total admissions in 1999/00			Reversal to SWSAHS in 2001/02		
	Episodes	Bed days	Estimated Cost ¹	Episodes	Bed days	Estimated Cost ²
Gynaecology						
Total	1439	3375	\$2,306,666	96	225	\$176,252
Neurosurgery						
Total	642	5835	\$5,228,190	10	39	\$41,832
DRG I10B and DRG I68B: Oth back & neck proc/Non-surgical back & neck	209	1181	\$707,672	10	39	\$41,832

¹ Discounted cost weighted episodes ~ \$2324.

² Excluding ED cost weighted episodes ~ \$2324.

11.4 SYDNEY AND SYDNEY EYE HOSPITALS

Sydney Eye Hospital is the most affected by targetted flow reversal strategies. Consistent with the Metropolitan Services Plan, the two main flow partners have identified cataracts and other non-tertiary ophthalmology as potentially reversible to improve the provision of core services to people as close to home as possible. Of its 7,500 admissions, some 3,700 are for ophthalmology and of this 65% is tertiary eye work. There are approximately 1300 cataracts performed annually and these are mostly inflow.

TABLE 11-7: FLOW PATTERNS AT SYDNEY/SYDNEY EYE 1999/00

	Episodes	Bed days	Estimated Cost*
Unplanned admissions	2087	7966	\$5,622,681
Planned admissions - SEH residents	1403	3469	\$3,186,873
Planned admissions - Intrastate inflows	3693	8761	\$8,916,965
Planned admissions - Interstate inflows	140	434	\$373,757
Planned admissions - NFA/Not stated	145	512	\$336,002
Total	7468	21142	\$18,436,278
% planned intra-state inflows	49.5	41.4	48.4
% planned interstate inflows	1.9	2.1	2.0

* For unplanned admissions: Discounted cost weighted episodes ~ \$2324.
 For planned admissions: Excluding ED cost weighted episodes ~ \$2324.

The planned flow reversal impact for Sydney Eye Hospital in 2001/2002 is \$433,193.

TABLE 11-8: FLOW REVERSAL AFFECTED SERVICES

	Total admissions in 1999/00			Reversal to IAHS in 2001/02			Reversal to SWSAHS in 2001/02		
	Episodes	Bed days	Estimated Cost ¹	Episodes	Bed days	Estimated Cost ²	Episodes	Bed days	Estimated Cost ²
Ophthalmology									
Total	3648	9374	\$9,358,281	96	96	\$178,483	137	137	\$254,710
cataract procedures	1306	1545	\$2,447,256	96	96	\$178,483			
Dayonly eye procedures (incl cataract)	1395	1395	\$2,508,136				137	137	\$254,710

¹ Discounted cost weighted episodes ~ \$2324.

² Excluding ED cost weighted episodes ~ \$2324.

12 PAEDIATRIC FLOWS

A paediatric patient is defined as a patient who is aged under 15 years and who is not an 'unqualified baby' or a patient who is outside this age range but is admitted to the Sydney Children's Hospital or to The Children's Hospital at Westmead.

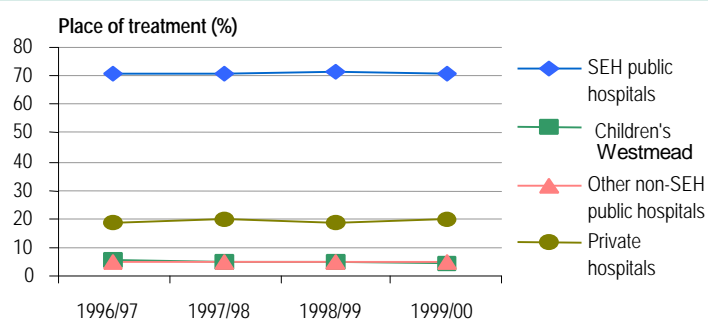
12.1 PAEDIATRIC OUTFLOWS FROM SOUTH EASTERN SYDNEY

Each year there are about 16,100 inpatient episodes involving South Eastern Sydney children. About 71% of these episodes occur in SEH hospitals, and 20% in private hospitals. Outflows to The Children's Hospital at Westmead (New Children's) accounted for only 4% in 1999/00 and outflows to other hospitals accounted for another 5%. While no consistent trend was observed in the number of SEH children treated in SEH hospitals, non-SEH hospitals or private hospitals, the number admitted to The Children's Hospital at Westmead has declined steadily over the past 4 years.

TABLE 12-1: PAEDIATRIC INPATIENT EPISODES BY PLACE OF TREATMENT AND YEAR OF SEPARATION FOR RESIDENTS OF SEH

	SEH public hospitals	Children's Westmead	Other non-SEH public hospitals	Private hospitals	Total
1996/97	11408	944	774	2980	16106
1997/98	11362	820	763	3170	16115
1998/99	11531	778	841	2964	16114
1999/00	11388	686	796	3210	16080

FIGURE 12-1: TRENDS IN PLACE OF TREATMENT FOR SOUTH EASTERN SYDNEY CHILDREN



Paediatric outflows

Of the 1482 outflows in 1999/00, 922 (or 62%) were planned. The planned paediatric outflows represented approximately \$3.6M.

TABLE 12-2: ESTIMATED COST * OF PLANNED PAEDIATRIC OUTFLOWS BY SERVICE RELATED GROUPS AND PLACE OF TREATMENT, 1999/00

	Children's Westmead	CSAHS	NSAHS	SWSAHS	Other	Total
Perinatology	\$86,573	\$803,267	\$207,931	\$156,551	\$50,136	\$1,304,458
Cardiothoracic Surgery	\$258,767	\$0	\$0	\$0	\$11,357	\$270,123
Extensive Burns	\$270,002	\$0	\$0	\$0	\$0	\$270,002
Qualified Neonate	\$56,836	\$159,411	\$6,088	\$28,153	\$3,299	\$253,788
Ear, Nose & Throat	\$106,819	\$25,046	\$15,300	\$18,731	\$12,133	\$178,029
Non Subspecialty Surgery	\$57,405	\$18,889	\$11,983	\$11,646	\$11,043	\$110,966
Neurosurgery	\$109,862	\$0	\$0	\$0	\$0	\$109,862
Orthopaedics	\$49,570	\$20,773	\$7,376	\$9,789	\$17,929	\$105,438
Ophthalmology	\$87,956	\$5,183	\$4,399	\$0	\$4,039	\$101,577
Plastic Surgery	\$58,834	\$26,185	\$2,448	\$0	\$8,507	\$95,974
Other	\$600,911	\$95,243	\$11,965	\$6,670	\$133,788	\$848,577
Total	\$1,743,534	\$1,153,996	\$267,491	\$231,540	\$252,232	\$3,648,792

*Excluding ED cost weighted episodes ~ \$2324

Outflows occurred largely from Sutherland LGA and the St. George LGAs.

TABLE 12-3: PLANNED PAEDIATRIC OUTFLOWS BY LGA OF RESIDENCE, 1999/00

Local Government Area	No. of episodes	Estimated cost*
Sutherland	266	\$857,556
Hurstville	160	\$664,664
Rockdale	148	\$766,920
Sydney (part)	65	\$467,124
Randwick	62	\$151,060
South Sydney (part)	62	\$165,004
Kogarah	65	\$281,204
Waverley	36	\$155,708
Botany	31	\$53,452
Woollahra	27	\$92,960
Total	922	\$3,648,680

*Excluding ED cost weighted episodes ~ \$2324

12.2 INFLOWS TO THE SYDNEY CHILDREN'S HOSPITAL

The total number of inpatient episodes at Sydney Children's Hospital showed mainly an increasing trend over the past 4 years. The increase was most noticeable in the number of local episodes.

TABLE 12-4: SYDNEY CHILDREN'S INPATIENT EPISODES BY PATIENT ORIGIN

	Local	Intra-state inflows	Interstate inflows	NFA/ Not stated	Total	% inflows	Estimated cost of inflows*
1996/97	5730	6597	235	29	12591	54.3	\$21,153,598
1997/98	6153	6882	344	17	13396	53.9	\$21,363,761
1998/99	6561	7225	317	25	14128	53.4	\$23,134,684
1999/00	6740	6892	451	47	14130	52.0	\$23,877,073

*Discounted cost weighted episodes ~ \$2324

Of the 7,343 inflows in 1999/00; 5,561 were planned admissions.

TABLE 12-5: PLANNED INFLOWS BY CASE COMPLEXITY AND LENGTH OF STAY, 1999/00

		Inflow episodes	% of inflow total	Estimated cost*
Planned children's inflow total		5561	100.0	\$17,483,844
	Tertiary Dayonly	10	0.2	\$61,784
	Overnight	465	8.4	\$8,413,888
	Non-tertiary Dayonly	3250	58.4	\$2,902,111
	Overnight	1836	33.0	\$6,106,061

*Excluding ED cost weighted episodes ~ \$2324

SWSAHS, Illawarra, CSAHS and NSAHS were the major referral areas for inflows to the Sydney Children's Hospital.

TABLE 12-6: REFERRAL AREAS FOR PLANNED PAEDIATRIC INFLOWS, 1999/00

AHS	Episodes	% of inflow total	Estimated cost*			
			Total	Tertiary	Non-tertiary day only	Non-tertiary overnight
SWSAHS	1101	19.8	\$3,733,053	\$1,791,189	\$561,106	\$1,380,758
Illawarra	577	10.4	\$2,150,172	\$1,126,299	\$282,035	\$741,838
CSAHS	1168	21.0	\$2,025,531	\$520,209	\$754,096	\$751,227
NSAHS	516	9.3	\$1,318,272	\$658,679	\$301,939	\$357,654
Hunter	170	3.1	\$894,801	\$649,524	\$101,370	\$143,907
Macquarie	183	3.3	\$852,860	\$396,599	\$55,072	\$401,189
Mid North Coast	206	3.7	\$841,582	\$436,077	\$70,148	\$335,358
New England	170	3.1	\$773,309	\$465,962	\$52,973	\$254,375
Southern	202	3.6	\$723,056	\$382,392	\$95,030	\$245,634
Greater Murray	172	3.1	\$645,456	\$319,920	\$103,378	\$222,159
WSAHS	306	5.5	\$609,982	\$261,168	\$150,000	\$198,814
Wentworth	127	2.3	\$426,223	\$227,512	\$57,997	\$140,714
Central Coast	121	2.2	\$399,972	\$196,108	\$72,968	\$130,897
Mid Western	110	2.0	\$325,422	\$56,733	\$54,254	\$214,434
Far West	41	0.7	\$200,666	\$124,373	\$18,545	\$57,748
Northern Rivers	29	0.5	\$190,648	\$117,785	\$9,166	\$63,697
Interstate	362	6.5	\$1,372,837	\$745,142	\$162,034	\$465,661
Total	5561	100.0	\$17,483,844	\$8,475,672	\$2,902,111	\$6,106,061

* Excluding ED cost weighted episodes ~ \$2324

TABLE 12-7: TOP SRGs BY REFERRAL AREA FOR TERTIARY PLANNED PAEDIATRIC INFLOWS, 1999/00

SRG	Episodes	Estimated cost*					
		Total	SWSAHS	Illawarra	A.C.T.	NSAHS	Other
Tracheostomy	37	\$1,910,248	\$496,143	\$301,572	\$0	\$248,072	\$864,461
Haematology	65	\$1,561,482	\$85,430	\$172,197	\$380,590	\$180,155	\$743,110
Cardiothoracic Surgery	78	\$1,261,629	\$189,140	\$192,485	\$190,968	\$28,647	\$660,389
Neurosurgery	82	\$1,145,791	\$198,273	\$82,781	\$22,659	\$97,820	\$744,257
Perinatology	41	\$998,554	\$341,211	\$196,053	\$31,025	\$0	\$430,265
Respiratory Medicine	65	\$590,204	\$225,565	\$80,217	\$0	\$49,920	\$234,502
Orthopaedics	23	\$355,889	\$39,837	\$56,589	\$0	\$15,333	\$244,129
Neurology	39	\$122,480	\$34,701	\$18,377	\$6,414	\$12,251	\$50,737
Transplantation	2	\$104,262	\$20,916	\$0	\$0	\$0	\$83,346
Non Subspecialty Surgery	6	\$93,793	\$13,191	\$6,228	\$19,527	\$18,209	\$36,638
Other	37	\$331,341	\$146,781	\$19,800	\$9,087	\$8,273	\$147,400
Total	475	\$8,475,672	\$1,791,189	\$1,126,299	\$660,270	\$658,679	\$4,239,234

* Excluding ED cost weighted episodes ~ \$2324

Paediatric inflows

TABLE 12-8: TOP SRGs BY REFERRAL AREA FOR NON-TERTIARY PLANNED PAEDIATRIC INFLOWS, 1999/00

SRG	Episodes	Estimated cost*					
		Total	SWSAHS	CSAHS	Illawarra	NSAHS	Other
Haematology	853	\$1,025,088	\$49,516	\$180,627	\$194,010	\$67,617	\$533,318
Neurology	381	\$818,043	\$126,955	\$89,552	\$78,122	\$72,103	\$451,310
Orthopaedics	204	\$629,062	\$82,937	\$148,350	\$44,904	\$37,346	\$315,524
Medical Oncology	345	\$601,254	\$63,338	\$133,291	\$73,938	\$12,759	\$317,928
Non Subspecialty Surgery	317	\$585,969	\$154,636	\$158,365	\$43,398	\$30,483	\$199,088
Non Subspecialty Medicine	545	\$583,290	\$147,203	\$62,703	\$55,120	\$73,353	\$244,912
Ear, Nose & Throat	428	\$579,969	\$168,366	\$187,584	\$49,707	\$21,739	\$152,572
Urology	269	\$490,389	\$122,444	\$64,662	\$27,338	\$50,615	\$225,330
Renal Medicine	214	\$454,590	\$205,902	\$26,757	\$8,120	\$32,403	\$181,408
Colorectal Surgery	54	\$397,828	\$142,296	\$29,025	\$68,380	\$33,668	\$124,459
Other	1476	\$2,842,690	\$678,270	\$424,407	\$380,836	\$227,507	\$1,131,670
Total	5086	\$9,008,172	\$1,941,864	\$1,505,323	\$1,023,873	\$659,593	\$3,877,519

* Excluding ED cost weighted episodes = \$2324

12.3 PAEDIATRIC INFLOWS TO THE ST. GEORGE HOSPITAL

St. George Hospital received 429 inflows aged under 15 in 1999/00. The paediatric inflows to St. George have declined continually over the past four years.

TABLE 12-9: ST. GEORGE'S INPATIENT EPISODES BY PATIENT ORIGIN

	Local	Intra-state inflows	Interstate inflows	NFA/ Not stated	Total	% inflows	Estimated cost of inflows*
1996/97	2299	560	5		2864	19.7	\$1,152,835
1997/98	2317	554	6	1	2878	19.5	\$1,113,735
1998/99	2353	499	9	2	2863	17.7	\$1,037,554
1999/00	2148	423	6		2577	16.6	\$970,329

* Discounted cost weighted episodes = \$2324

Of the 429 inflows in 1999/00, 61% were planned admissions, 99% were non-tertiary cases and 30% were day only admissions.

Of 262 planned paediatric inflows to St. George, 40% were from CSAHS and 39% from SWSAHS. They were regarded mainly as 'natural flows'.

'Qualified neonate', 'non-specialty surgery' and 'ENT' were the top SRGs for these planned inflows, accounting for 34%, 21% and 11% respectively of the planned inflow total.

There are no plans to include paediatrics in the 2001/2002 Flow Transition Pool, but staff at the Sydney Children's Hospital may be involved in negotiations with the New Children's Hospital at Westmead in the future.