WESTERN HEALTH SERVICE PLANNING REVIEW

THE WILLIAMSTOWN HOSPITAL INTERIM SERVICE PLAN

June 2004

Table of Contents

Table of Contents 2
Executive Summary 6
1. Introduction 9
2. Health Planning Concepts and Methodology 13
2.1 Area Planning 13
2.2 Detailed Demand and Supply Forecasts 13
2.3 Health Service Trends 13
2.3.1 Length of Stay 13
2.3.2 Day Only Hospital Episodes 14
2.3.3 Demand Management 14
2.4 Modelling Demand and Supply 14
2.4.1 Demand 14
2.4.2 Supply 15
3. Demand and Supply Analysis 16
3.1. Catchment Demand 16
3.1.1 Western Health Catchment 16
Table 1. Western Health Facility Profile. 16
3.1.1.1 Demand by Statistical Local Area (SLA) 16
Table 2. Demand (Separations) by SLA, 2002/03. 16
Table 3. Proportion of Demand (Separations) Met by Hospital, 2002/03. 17
3.1.1.2 Demand by Specialty 17
Table 4. Demand (Separations) by Specialty, 2002/03. 18
3.1.2 The Williamstown Hospital Catchment 18
Figure 1. Distribution of Hobson’s Bay (C) – Williamstown Demand (Separations) across Western Region Hospitals, 2002/03. 19
Figure 2. Distribution of Hobson’s Bay (C) – Altona Demand (Separations) across Western Region Hospitals, 2002/03. 19
Figure 3. Distribution of Maribyrnong (C) Demand (Separations) across Western Region Hospitals, 2002/03. 19
3.1.2.1 Demand by Specialty 20
Figure 4. Comparison of Demand by SRG for Hobson’s Bay (C) – Williamstown, 2001/02 – 2002/03. 20
Figure 5. Percentage Change in Demand for Hobson’s Bay (C) – Altona & Maribyrnong(C), 2001/02 – 2002/03. 21

3.1.2.2 Demand by Age and Gender ... 22

Figure 6. Proportion of Demand by SRG by Age Group for Hobson's Bay (C) – Williamstown, 2002/03. ... 22

Figure 7. Proportion of Separations by SRG and Gender, 2002/03 ... 23

Table 5. Proportion of Emergency Admissions by Service Type, 2002/03 ... 24

3.1.2.4 Patient Flows and Self-Sufficiency ... 24

Table 6. Place of Treatment by Specialty for Williamstown Residents, 2002/03. ... 25

3.2 Service Supply ... 26

3.2.1 Supply by SLA ... 26

Table 7. Separations Supplied by The Williamstown Hospital by SLA, 2002/03. ... 26

3.2.2 Supply by Specialty Related Groups ... 26

Table 8. Multiday Separations by SRG, 2002/03 ... 26

Table 9. Sameday Separations by SRG, 2002/03 ... 27

Figure 8. Proportion of Multiday and Sameday Separations by SRG, 2002/03 ... 29

3.2.3 Supply Breakdown by Age and Gender ... 29

Figure 9. Separations by Age Group, 2002/03. ... 30

Table 10. Separations by Gender and Age, 2002/03 ... 30

3.2.4 Emergency Services ... 30

Table 11. Emergency Department Attendances by Western Health Campus. 30

Table 12. Triage Category by SLA, 2002/03. ... 31

Table 13. Total Presentations by Triage Category, 2002/03. ... 31

Figure 10. Triage Category by Age, 2002/03. ... 32

3.2.5 Theatre Utilisation ... 34

Figure 10. Theatre Sessions and Number of Cases per Session, 2003 ... 34

3.2.6 Waiting Lists ... 35

3.2.6.1 Elective Surgery Information System (ESIS) ... 35

Table 14. Urgency Categories ... 36

Figure 11. N Patients on Waiting List by Urgency Category, January 2004... 36

3.3 Projected Demand ... 37

3.3.1 Base Case Projections ... 37

Table 15. Projected Demand for Western Health Catchment to 2011/12 ... 37

3.3.1.1 Proportion of Emergency to Non-Emergency Admissions ... 37

Table 16. Non-Emergency Demand Projections by Age Group ... 37

Table 17. Emergency Demand Projections by Age Group. 39
3.4 Projected Supply 40
3.4.1 Base Case Projections 40
Table 18. Place of Treatment for Western Health Catchment Residents to 2011/12. 40
4. INTERIM SERVICE PLAN FOR THE WILLIAMSTOWN HOSPITAL 41
4.1 Strategic Service Recommendations 41
Table 19. Checklist. 41
4.2 Service Enhancement and Reconfiguration Options 42
4.2.1 Role Delineation 42
Recommendation 1: 42
4.2.2 Obstetric Services 42
Recommendation 2: 44
4.2.3 Emergency Department 45
Recommendation 3: 46
4.2.4 Theatre Suite & Theatre Utilisation 47
Table 20. Scenarios for Increased Per Annum Theatre Utilisation at TWH ... 47
Recommendation 4: 47
4.2.5 Surgical Services 47
Recommendation 5: 48
4.2.6 Medical Services 48
Recommendation 6: 48
4.2.7 Aged Care and Services for Older Women 48
Recommendation *7:* 48
4.2.8 Specialist Clinics and Ambulatory Care 49
Recommendation 8: 49
4.2.9 Workforce 49
Recommendation 9: 50
4.2.10 Financial Implications 50
4.2.10.1 Weighted Inlier Equivalent Separations (WIES) 50
Table 21. WIES allocation by Western Health Facility, 2001/02 – 2003/04 .. 51
Table 22. Comparison of Average WIES for Elective Separations at TWH, 2002/03 51
Appendix 1 52
Triage Categories 52

Appendix 2. 53
New South Wales Role Delineation Guidelines – Role Level 53

Executive Summary

This report presents an Interim Service Plan for The Williamstown Hospital (TWH).

A final Service Plan for The Williamstown Hospital will be undertaken as part of the Western Health Strategic Services Plan Review.

This Interim Report provides a preliminary analysis of The Williamstown Hospital and its services, addresses some issues of pressing concern, highlights possible directions that might be taken in addressing other issues, and makes a series of recommendations.

In summary, the Plan proposes a renewed role for The Williamstown Hospital, including the following changes:

a) expansion of elective surgery by up to 15%, an additional 1,000 operations;

b) introduction of an extended after hours GP clinic alongside the emergency department;

c). stronger emphasis on older women's health, particularly through new outpatient clinics; and

d). expand the midwife driven antenatal service to cover postnatal care.

The Plan also proposes consideration of a primary maternity care service at The Williamstown Hospital. This would involve the midwife caring for the woman during pregnancy, labour, birth and the postnatal period. Guidelines would ensure 24 hour / 7 day week access to emergency medical care when required.

Western Health will further investigate and develop this proposal, consulting widely to ensure high quality, safe maternity care.

Recommendations:

Role Delineation

Recommendation 1:

- That The Williamstown Hospital be operated as a Level 3 facility.
    - Level 3 Facility Guidelines:
        - Has 24hr access to medical staff on site or available within 10 minutes; consultation is available from other specialties; intermediate surgical procedures are performed on good or moderate risk patients regularly by a specialist surgeon. Has a nursing unit manager for the general ward.

Obstetric Services

Recommendation 2:

- That The Williamstown Hospital cease the provision of obstetrician-led obstetric services.
- That action be taken to plan for alternative services for TWH women likely to be affected by the cessation of obstetrician-led obstetric services.

- That efforts be made to ensure that each woman currently booked in for obstetric services at TWH is individually looked after in terms of arranging alternative service provision.
- That TWH provide antenatal and postnatal services managed from Sunshine Hospital, and greater concentration on women's health services, especially services for older women.
- That the recently established midwife-driven antenatal service provided at TWH by Sunshine Hospital be retained and expanded.
- That the provision of a primary maternity service based on a caseload midwifery model be further investigated and developed within Western Health, with the possibility of piloting at TWH, with the pilot to proceed only after adequate exploration of risks and development of appropriate risk mitigation strategies.

Emergency Department

Recommendation 3:

- That a preferred model for the operation of an emergency or urgent care service at Williamstown be developed consistent with the following parameters: extended hours; better physical facilities; shorter waiting times; and more appropriate staffing (eg. nurse practitioners and general practitioners).
- That consideration be given to an option of an after hours general practice while including a hospital operated daytime service.
- That GPs be permitted to bill the Commonwealth under Medicare and the hospital provide incentive payments or other support for participating GPs.
- That patient charges receive careful consideration to ensure that they are consistent with the local practice of GPs in the area to avoid attracting patients away from their regular GP.

Theatre Suite & Theatre Utilisation

Recommendation 4:

- That the size of the day surgery waiting area be expanded to accommodate future demand;
- That theatre utilisation be increased by 15% (18.5 additional sessions per month);
- That the acute observation and monitoring area be physically upgraded with the potential for further enhancement to reach the level of a high dependency unit and be incorporated adjacent to the post-operative recovery area.

Surgical Services

Recommendation 5:

- That TWH deliver more low acuity and low risk elective surgical services to its primary and secondary catchments as well as to residents of other areas of the broader Western Health catchment (e.g. in the specialties of ENT, general surgery, ophthalmology, urology and plastics).

Medical Services

Recommendation 6:

- That TWH's capacity to deliver medical services be strengthened;
- That TWH increase the number of elective general medical cases treated at the hospital (e.g. endocrinology, haematology, respiratory medicine, and rheumatology).

Aged Care and Services for Older Women

Recommendation 7:

- That TWH's role in meeting the broader need for aged care in the Williamstown area and in the region as a whole be further examined as part of the final Western Health report.
- That an examination of the possibility of TWH becoming a centre for services to meet, in a coordinated way, the needs of older women be considered further as part of the final Western Health report.

Specialist Clinics and Ambulatory Care

Recommendation 8:

- That the potential contribution of enhanced specialist services to the viability of the medical and surgical enhancements recommended, and as part of the hospital's contribution to the health of older women be considered further as part of the final Western Health report.
- That Dialysis services be better physically accommodated.

Workforce

Recommendation 9:

- That two registrar positions in each of surgery and medicine be established and maintained at TWH.
- That the GP VMO model be gradually phased out.
- That junior medical, nursing and allied health staff be rotated through all three Western Health hospitals.
- That the possibility of 'grandfathering' fee-for-service arrangements to existing recipients and introducing sessional payments for all new appointees be further examine as part of the final Western Health report.

1. Introduction

The consultants have been asked to develop and produce a Strategic Service Plan for Western Health (WH), including individual clinical service plans for WH facilities and an implementation plan, which will:

- Define the appropriate roles for WH and the individual WH facilities.
- Recommend an appropriate range, mix of services and models of care to meet the needs of the WH catchment and local facility catchments over the next 10 to 15 years.
- Advise on the optimal arrangements for the provision of services across facilities, which will maximise quality of care and efficiencies for service delivery.
- Advise on a broad implementation plan and key short, medium and long-term strategies, for moving WH toward the recommended service configurations.

Western Health

Western Health was formed in July 2000 following the restructure of the Health Care Networks across metropolitan Melbourne.

WH comprises three acute facilities: Sunshine Hospital, The Williamstown Hospital and Western Hospital. WH also manages a comprehensive Aged Care and Rehabilitation Service, which includes two nursing homes (Reg Geary House and Hazeldean), and DASWest Drug and Alcohol Services.

WH provides emergency, medical, surgical, aged care and sub-acute services. Western Health is also the main provider of drug and alcohol services for the western region, as well as providing for parts of the Barwon South Western and Grampian regions in rural Victoria.

WH in partnership with other service providers provides Mental Health Services and Renal Dialysis.

Sunshine Hospital

Sunshine Hospital is a 276 bed general hospital. The hospital recently underwent a major redevelopment which added adult acute services to its already well established comprehensive range of women's and children's services, sub-acute aged care, rehabilitation and palliative care services. The redevelopment completed in mid-2001, added a general emergency department, an intensive care and coronary care unit, operating theatres, a general acute medical unit and purpose built palliative care facility, as well as greatly expanding aged care and rehabilitation services.

Key services at Sunshine Hospital include child health, maternity services, special care nursery, emergency services, women's health services, aged care, rehabilitation, palliative care and mental health, acute medical and surgical services. The Sunshine emergency department has experienced significant growth over recent years and was the third busiest emergency department in Victoria during 2001/2002.

Western Hospital (Footscray)

Western Hospital is a 390-bed acute teaching and research hospital responsible for providing a comprehensive range of inpatient and outpatient acute health services.

Key services at the Western Hospital include acute medical and surgical services, intensive and coronary care, emergency services, renal services, specialist drug and alcohol services, aged care and palliative care.

The hospital currently conducts research in gastroenterology, colorectal cancer, emergency care, oncology, respiratory medicine and sleep disorders, and vascular surgery.

The Hospital has affiliations with The University of Melbourne Medical School for undergraduate medical training, and other universities for nursing and allied health. The Western Hospital emergency department also experienced significant growth over recent years.

Williamstown Hospital

The Williamstown Hospital is an 82-bed hospital offering a range of inpatient services including, general surgery, general medical, obstetrics and gynaecology, and allied health services.

Key services at The Williamstown Hospital include restricted hours emergency services, acute medical and surgical services, maternity services, aged care and rehabilitation and early parenting day stay centre.

Reg Geary House

Reg Geary House is a 30-bed residential aged care facility located in Melton.

Hazeldean Nursing Home

Hazeldean Nursing Home is a 40 bed, aged care facility located Williamstown, in close proximity to Williamstown Hospital.

Context

The current Metropolitan Health Strategy is studying changing trends in services and key challenges facing the health system, including demand management, health system supply and capacity, and models of care. In addition, metropolitan Melbourne is experiencing a growing and ageing population, rapidly advancing technologies and new clinical practices, while the costs of new services are increasing.

The Strategy is seeking, among other things, to use long term forecasting of service demand and supply to determine capital developments and bed allocations across the metropolitan area. In addition, the Health Service has expressed a preference for the development of community-based ambulatory care services over hospital-based developments together with a reduction (using substitution and diversion) in unnecessary hospital admissions, and a commitment to the introduction of improved methods and facilities to care for older patients across the acute, sub-acute and community-based health system.

This process will inevitably lead to a redistribution of services at the regional or local level, and to changes in policy direction for specialist hospitals, together with the

setting of priority areas for the development of service planning frameworks for some specialty services and procedures.

In undertaking the Strategy and to produce services that are safe, of high quality, responsive to individual needs, timely, and efficient, the Health Service will have to concentrate on a number of key "levers", including information and communication systems; workforce planning and new workforce models, capital investment, a commonly-agreed change agenda, and more effective funding of services.

This Report has been written in the context of that Strategy, looking in particular at the potential, in Western Health, to add additional capacity to the system, particularly in areas with relatively poor local access to services, to redistribute and reconfigure existing capacity by making better use of existing facilities, to promote effective alternatives such community-based ambulatory care to reduce reliance on hospital services, and to improve service efficiency and enhance continuity of care.

Historical and Demographic Summary

Western Health was formed within the western suburbs of Melbourne on 1 July 2000. It links the services of three hospitals (Sunshine, Williamstown, and Western), DASWest Drug and Alcohol Services and a comprehensive Aged Care and Rehabilitation Service that includes two nursing homes (Reg Geary House in Melton and Hazeldean in Williamstown).

WH provides services to an area of 1335 square kilometres with a population of 553,000 people. Its primary catchment area covers the Brimbank, Hobsons Bay, Maribyrnong, Melton and Wyndham local government areas. Western Hospital also provides services to a significant number of residents of Moonee Valley, while Sunshine Hospital provides obstetric, gynaecology and paediatric services to the residents of Hume. WH provides emergency, medical, surgical, aged care and rehabilitation services, and is the main provider of drug and alcohol services for the western region, as well providing for the Barwon and Grampian regions in rural Victoria.

Approximately 33% of residents of the west are non-English speaking. Languages spoken other than English are predominantly Italian, Greek, and Maltese. At Western Hospital in Footscray, the most common interpreter services required are for Greek, Cantonese, Turkish, Arabic, Vietnamese, and Italian speaking patients.

The WH catchment is expected to see an increase in demand for ageing services, while the demand for acute services is expected to continue at Williamstown, Sunshine and Western Hospitals. The catchment population is likely to see a 13.5% increase in residents over 65 years of ages, and an 18% increase in residents under 14 years of age.

Western Melbourne has specific health issues. Years of life lost prematurely and years of life lived with disease or injuries indicate considerably worse health status for those residing in Melbourne's west. Life expectancy is significantly lower than the Victorian average in the local government areas of Brimbank, Melton, Hobsons Bay and Maribyrnong, particularly for males. Of the 78 local government areas in Victoria, three in the west fall in the worst 20 per cent in terms of health status.

The region has higher rates of cancer, cardiovascular disease, mental disorders (including drug use) and infectious disease. Maribyrnong is ranked worst in the state for cardiovascular disease and mental disorders. The west has a high concentration of industry, low socio-economic status, enormous cultural diversity, and a number of other significant risk factors affecting health.

Western Health employs around 3,800 full time and part time staff and has an annual budget of around $275 million.

2. Health Planning Concepts and Methodology

2.1 Area Planning

Planning for Western Health is guided by the policies and planning frameworks developed by the Department of Human Services (DHS) Victoria. Service plans are generally derived from a variety of sources to include:

- Objective data;
- Consultation; and
- Expert opinion.

It is the combination of these information sources that enables an appropriate interpretation of the requirements of the catchment.

2.2 Detailed Demand and Supply Forecasts

The approach used in this service plan combines population information and health service utilisation data to model the demand for services based on age, gender and service type. Having determined the service demand for the Western Health population (and more specifically that of TWH), the next step is to determine where that demand should be supplied giving consideration to:

- Appropriate levels of self-sufficiency and local access to services;
- Requirements for specialised services;
- Requirements to remain financially viable; and
- The role and market share of the health service.

2.3 Health Service Trends

Describing current and future patterns of health service utilisation is a major component of this service-planning project. Rapid change has been a consistent feature of the acute health sector for the past two decades. Changes have occurred in the areas of service delivery practices, policy, workforce and health financing.

2.3.1 Length of Stay

The number of days patients spend in hospital has been decreasing for a number of years. This trend has been in evidence across a wide variety of major conditions and surgical procedures. Declining length of stay can be attributed to:

- Minimally invasive operative techniques;
- Non-invasive operative procedures;
- Day of surgery admissions and peri-operative units;

- Improved anaesthesia;
- Better discharge planning and community based care options;
- Evidence based practice.

2.3.2 Day Only Hospital Episodes

The most significant changes in hospital utilisation have been manifested as sameday separations (hospitalisations that do not require an overnight stay). A wide variety of non-invasive surgical procedures now involve a day only hospital stay.

This trend continues to have a significant effect not only on the length of time it takes people to be treated but also on where they are treated.

2.3.3 Demand Management

The management of people at risk of admission to hospital has been responsible for substantial decreases in admission rates across a range of jurisdictions. These programs rely on better coordination and partnerships between primary and secondary service providers.

Shared care arrangements between primary care physicians and hospital providers feature strongly in demand management strategies. This is coupled with intensive surveillance and prevention programs for those patients who are known to be at high risk of recurrent admission.

The positive outcomes of demand management are not only associated with decreasing admission rates, but also in reducing the requirement for patients to be admitted to hospital in order to receive treatment for their condition.

2.4 Modelling Demand and Supply

Planning future hospital services requires quantification of activity based on population needs (demand) and how these needs are met (supply).

2.4.1 Demand

Demand is the volume and type of hospital services used by a given population, regardless of where these services are accessed. Demand for hospital services may vary across different populations as the health, age, gender and socioeconomic status of the population contribute to the level of demand.

Estimating future demand uses discharge rates and population projections for each combination of age, gender and specialty group to calculate the expected number of discharges and bed days the population will use in the future.

2.4.2 Supply

Supply is the volume and type of services provided by a health service agency or facility to hospital consumers, regardless of their place of residence. In a static system you would expect supply to keep pace with demand with patient flows within and between areas remaining unchanged, as would the public/private mix of services.

Health, however, is a dynamic system, where service providers need to monitor whether they are maintaining, increasing or losing their share of the total market (catchment demand).

3. Demand and Supply Analysis

This section of the report deals with the analysis of the types of services the residents of the catchment of Western Health require and have received in Victorian public hospitals during the period 2001/02 and 2002/03.

It also examines in more detail the types of inpatient services that have been supplied by TWH, and looks at future demand for public inpatient services from its primary and secondary catchments.

3.1. Catchment Demand

3.1.1 Western Health Catchment

The Williamstown Hospital is part of the Western Health catchment which comprises approximately 553,000 residents.

The profile of The Williamstown Hospital is presented below.

Table 1. The Williamstown Hospital Profile.

	The Williamstown Hospital
Location	Williamstown
N Acute Beds – lower - upper	24 20
N Subacute Beds	30
Nursing Home	30
Day Surgery	5
Renal Dialysis	5

3.1.1.1 Demand by Statistical Local Area (SLA)

In 2002/03 residents of western Melbourne accounted for a total of 152,798 public hospital separations. There has been an increase of 9% in demand for public hospital separations from 2001/02 to 2002/03. The service demand for the Western Health catchment as a whole is presented in the table below. The data shows that the greatest demand for service comes from the SLAs of Sunshine, Keilor and Maribyrnong.

Table 2. Demand (Separations) by SLA, 2002/03.

SLA Name	Elective	Emergency	Maternity	Newborn	Statistical	Grand Total
Brimbank (C) - Keilor	13,251	7,497	1,908	1,172	258	**24,086**
Brimbank (C) - Sunshine	13,671	8,556	1,862	1,083	368	**25,540**
Hobsons Bay (C) - Altona	9,456	4,867	935	689	218	**16,165**
Hobsons Bay (C) - Williamstown	5,073	2,835	323	277	184	**8,692**

Maribyrnong (C)	10,364	7,221	1,203	819	448	**20,055**
Melton (S) Bal	5,962	2,896	500	455	100	**9,913**
Moonee Valley (C) - Essendon	9,067	5,224	732	513	216	**15,752**
Moonee Valley (C) - West	6,035	3,423	477	313	152	**10,400**
Wyndham (C) - North	8,336	3,812	1,083	912	77	**14,220**
Wyndham (C) - South	1,080	647	185	169	10	**2,091**
Wyndham (C) - West	3,425	1,684	400	326	49	**5,884**
Grand Total	**85,720**	**48,662**	**9,608**	**6,728**	**2,080**	152,798

Table 3 shows where residents of the Western Health catchment go to receive health services. A significant proportion of the demand (78%) is met by facilities located in the Western Region of Melbourne, although not all of these are part of Western Health.

Table 3. Proportion of Demand (Separations) Met by Hospital, 2002/03.

Hospital Name	N Separations	% Total Demand
Western Hospital [Footscray]	32,224	21%
Royal Melbourne Hospital	29,206	19%
Sunshine Hospital	25,295	17%
Mercy Public Hospitals Inc [Werribee]	17,709	12%
Williamstown Hospital	7,986	5%
Royal Women's Hospital	6,199	4%
Royal Childrens Hospital [Parkville]	5,871	4%
St Vincent's Hospital Ltd	5,852	4%
The Alfred	3,224	2%
Mercy Hospital for Women	2,931	2%
Djerriwarrh Health Service [Bacchus Marsh]	2,833	2%
Peter MacCallum Cancer Institute	2,469	2%
The Royal Victorian Eye & Ear Hospital	2,075	1%
Austin Hospital	1,496	1%
Melbourne Extended Care and Rehabilitation Service	1,317	1%
Tweddle Child & Family Health Centre	944	1%
Other	5,167	3%
GRAND TOTAL	**152,798**	**100%**

3.1.1.2 Demand by Specialty

The highest levels of elective demand by Western Health residents are for:

- Renal Dialysis;
- General surgery;
- Oncology/Radiotherapy;

- Gynaecology;
- Gastroenterology.

This profile contrasts with that for emergency demand which mainly comprises the SRGs of cardiology, respiratory medicine, general medicine, gastroenterology, and general surgery.

Table 4. Demand (Separations) by Specialty, 2002/03.

Specialty	Elective	Emergency	Maternity	Newborn	Statistical	Grand Total
Cardiology	1,592	6,703			143	8,438
Cardio-Thoracic	325	129			1	455
Dental	851	218			1	1,070
Endocrinology	998	1,005			44	2,047
ENT	3,317	1,532			18	4,867
Gastroenterology	5,021	4,784	3		51	9,859
General Medicine	4,263	5,260	342		528	10,393
General Surgery	7,032	4,755	7		24	11,818
Gynaecology	5,504	446	2		3	5,955
Haematology	3,359	886			19	4,264
Neonatology	779	106		6,728		7,613
Nephrology	590	774	1		23	1,388
Neurology	1,349	3,328	3		146	4,826
Neurosurgery	294	685			5	984
NOT STATED	1	3				4
Obstetrics	2,268	1,121	9,246			12,635
Oncology/Radiotherapy	6,566	176				6,742
Opthalmology	2,454	236	1		2	2,693
Orthopaedics	3,695	3,712			202	7,609
Plastics	1,568	1,351	1		8	2,928
Psychiatry	3,483	2,383	2		362	6,230
Rehabilitation	2,105	10			260	2,375
Renal Dialysis	22,139	25				22,164
Respiratory	2,399	6,027			150	8,576
Rheumatology	463	705			28	1,196
Urology	2,747	2,037			56	4,840
Vascular	558	265			6	829
Grand Total	**85,720**	**48,662**	**9,608**	**6,728**	**2,080**	**152,798**

3.1.2 The Williamstown Hospital Catchment

An analysis of the demand and patient flow for the Western Health catchment leads to the conclusion that The Williamstown Hospital's primary and secondary catchments comprise:

- Primary catchment: = Hobson's Bay (C) – Williamstown
- Secondary catchment: = Hobson's Bay (C) – Altona
  = Maribyrnong (C)

Figure 1. Distribution of Hobson's Bay (C) – Williamstown Demand (Separations) across Western Region Hospitals, 2002/03.

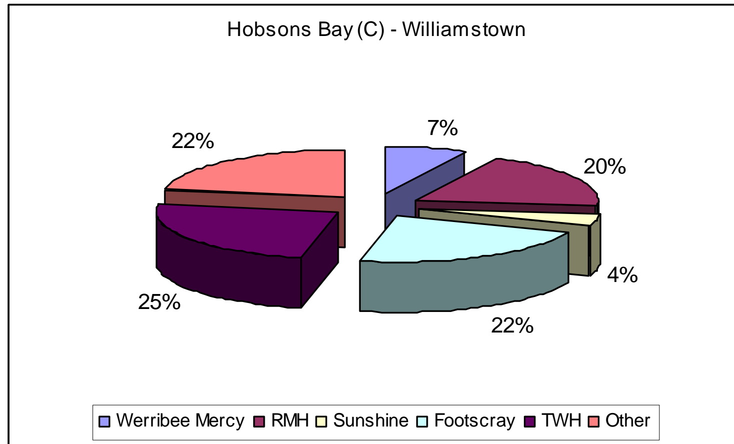


Figure 2. Distribution of Hobson's Bay (C) – Altona Demand (Separations) across Western Region Hospitals, 2002/03.

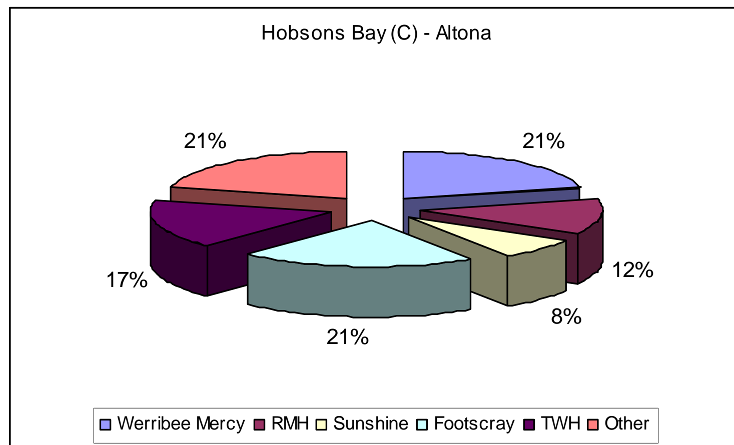
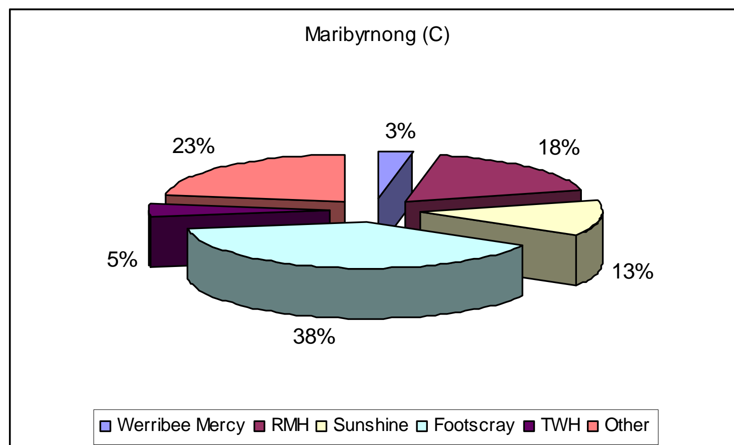
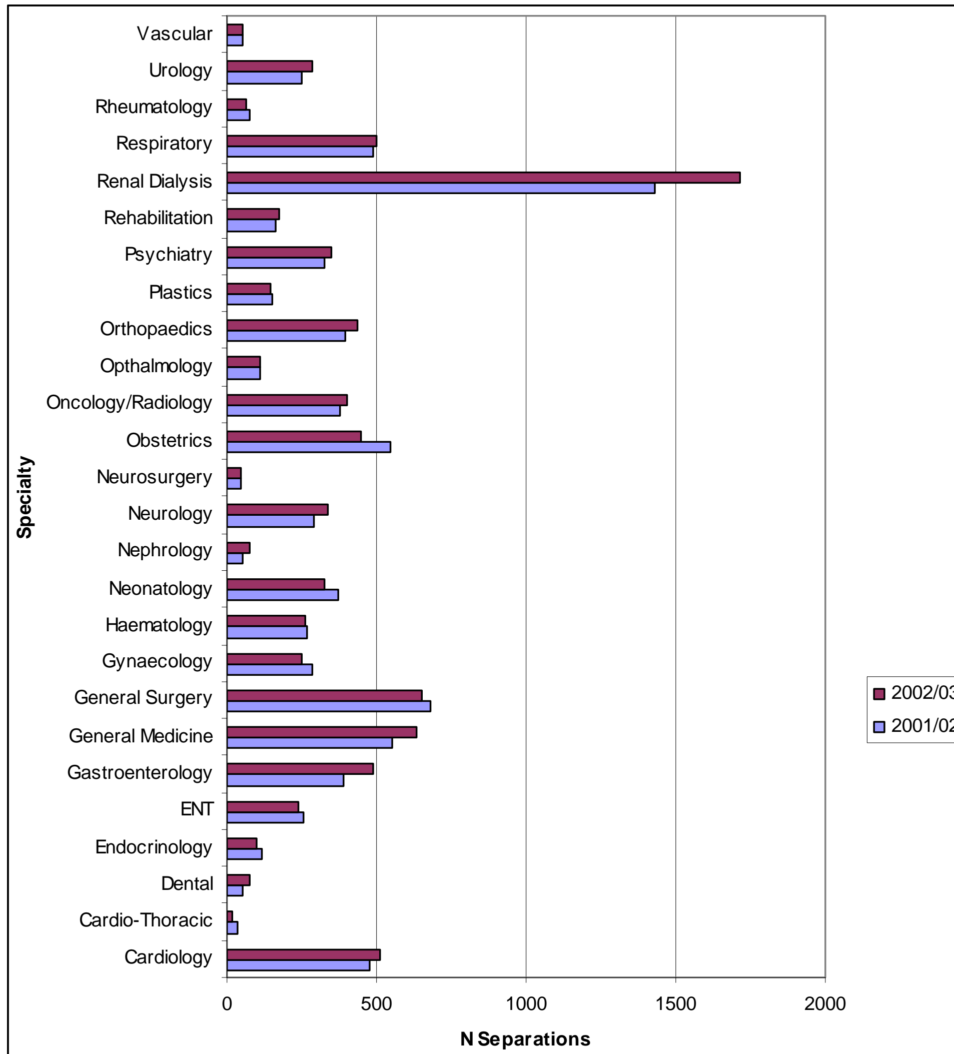


Figure 3. Distribution of Maribyrnong (C) Demand (Separations) across Western Region Hospitals, 2002/03.



3.1.2.1 Demand by Specialty

Figure 4. Comparison of Demand by SRG for Hobson's Bay (C) – Williamstown, 2001/02 – 2002/03.

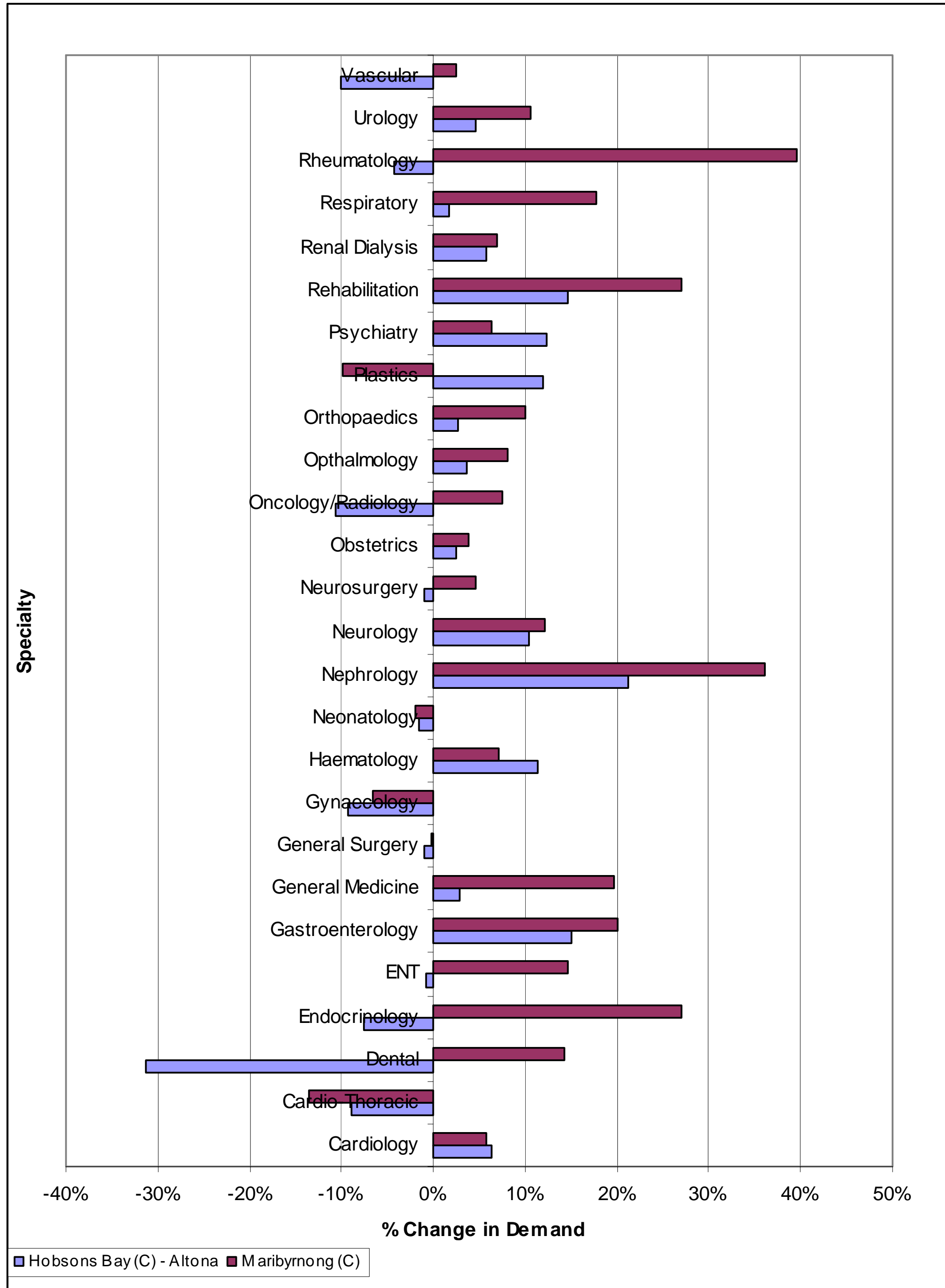


Comparison of levels of demand for 2001/02 and 2002/03 for TWH's primary catchment has shown a significant increase in demand in the following specialty groups:

- Renal Dialysis;
- General Medicine;
- Gastroenterology;
- Cardiology;
- Urology

A number of specialties have also experienced decreased demand, the most significant of these are Obstetrics, Neonatology, Gynaecology and General Surgery.

Figure 5. Percentage Change in Demand for Hobson's Bay (C) – Altona & Maribyrnong(C), 2001/02 – 2002/03.



3.1.2.2 Demand by Age and Gender

Figure 6. Proportion of Demand by SRG by Age Group for Hobson's Bay (C) – Williamstown, 2002/03.

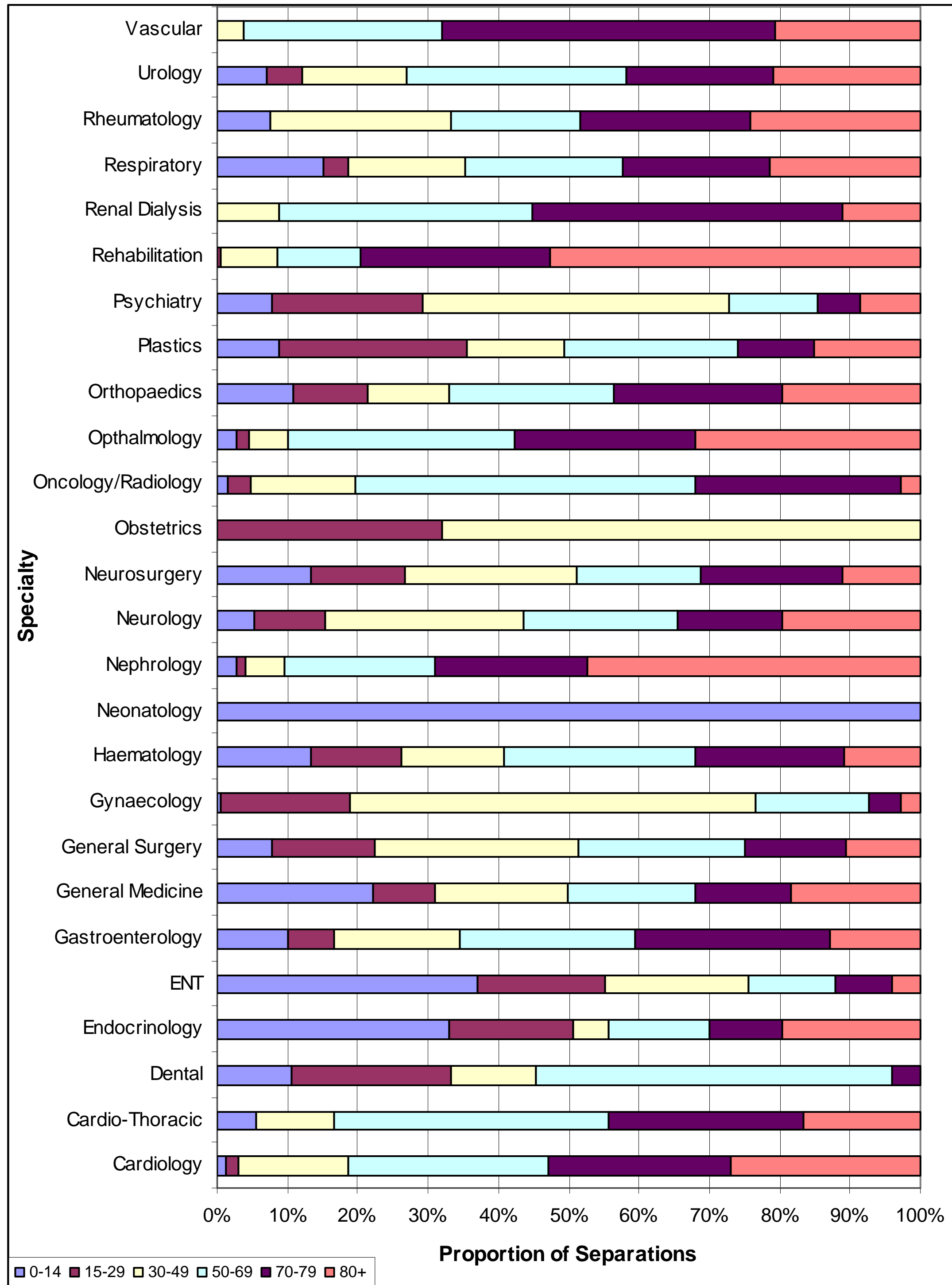
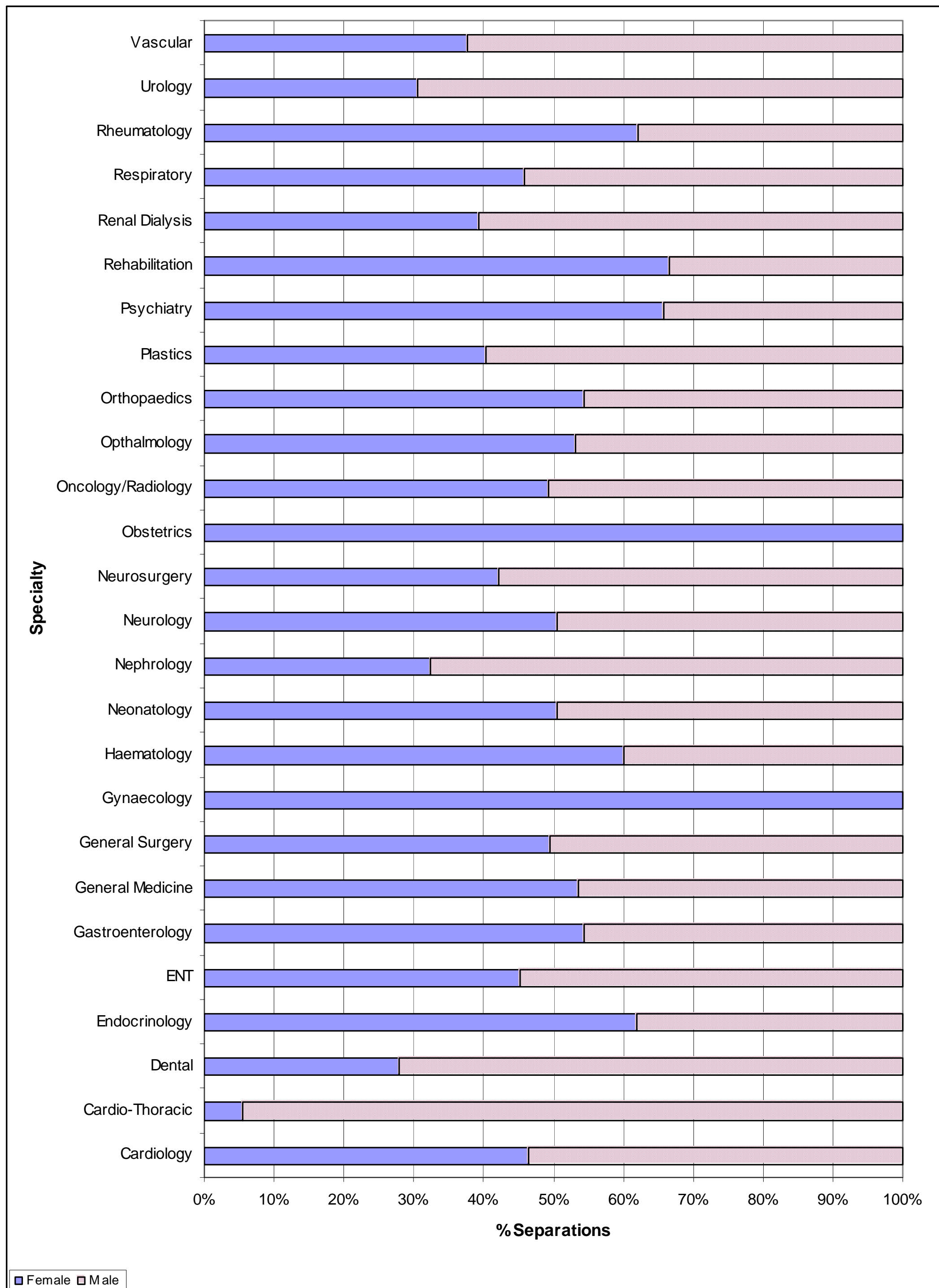


Figure 7. Proportion of Separations by SRG and Gender, 2002/03.



3.1.2.3 Elective versus Emergency Demand

Table 5. Proportion of Emergency Admissions by Service Type, 2002/03.

Statistical Local Area	Service Type	Separation Type		Emergency Admissions	Grand Total
		Elective	**Emergency**	%	
Hobsons Bay (C) - Altona	Medical	5,687	4,081	42%	9,768
	Other	711	218	23%	929
	Surgical	3,058	568	16%	3,626
Total:		**9,456**	**4,867**	**34%**	**14,323**
Hobsons Bay (C) - Williamstown	Medical	3,513	2,419	41%	5,932
	Other	326	100	23%	426
	Surgical	1,234	316	20%	1,550
Total:		**5,073**	**2,835**	**36%**	**7,908**
Maribyrnong (C)	Medical	6,515	6,292	49%	12,807
	Other	1,114	250	18%	1,364
	Surgical	2,735	679	20%	3,414
Total:		**10,364**	**7,221**	**41%**	**17,585**
Grand Total		**24,893**	**14,923**	**37%**	**39,816**

3.1.2.4 Patient Flows and Self-Sufficiency

It is to be expected that not all residents will receive their treatment from the health service located in their catchment area. The reasons for this include:

- The proximity of other large health services offering a wide range of services;
- Historical preferences of hospital users;
- A limited range of services available locally;
- Patient is privately insured;
- Natural flows as a result of transport routes;
- Local clinician preferences and referral patterns.

Table 6. Place of Treatment by Specialty for Williamstown Residents, 2002/03.

Specialty	TWH	Western Footscray	Sunshine	Total Western Health	Public Self-Sufficiency	RMH	Werribee Mercy	Royal Women's	PMCI	Total	Other Hospitals	Grand Total
Cardiology	154	233	6	393	30%	61	2		3	66	54	513
Cardio-Thoracic		2		2	0%	15				15	1	18
Dental	14	2	2	18	19%	3	10			13	44	75
Endocrinology	17	25		42	18%	6	9	10		25	30	97
ENT	117	31	23	171	49%	8	6		2	16	54	241
Gastroenterology	98	172	16	286	20%	29	16	1	8	54	147	487
General Medicine	209	173	44	426	33%	35	12		17	64	144	634
General Surgery	287	142	18	447	44%	28	19	8	43	98	104	649
Gynaecology	152	5	17	174	61%		10	44		54	20	248
Haematology	45	78	1	124	17%	34			20	54	82	260
Neonatology	94		25	119	29%		19	75		94	112	325
Nephrology	16	42	3	61	22%	5		1		6	7	74
Neurology	78	117	11	206	23%	84	3		3	90	44	340
Neurosurgery	8	12	1	21	18%	11				11	13	45
Obstetrics	136	2	43	181	30%	1	22	124		147	119	447
Oncology/Radiology		260		260	0%	37	1		46	84	60	404
Opthalmology		14	19	33	0%	5				5	71	109
Orthopaedics	117	152	19	288	27%	23	3		15	41	107	436
Plastics	43	44	7	94	29%	8	8		7	23	29	146
Psychiatry	98	56	33	187	28%	21	59			80	81	348
Rehabilitation	126	1	31	158	71%					0	19	177
Renal Dialysis		4		4	0%	1262	412			1674	39	1717
Respiratory	129	239	32	400	26%	13	3		5	21	80	501
Rheumatology	13	29	2	44	20%	6			4	10	12	66
Urology	140	77	6	223	50%	10	7	2	4	23	36	282
Vascular	11	31		42	21%	7				7	4	53
Grand Total	2,102	1,943	359	4,404	24%	1,712	621	265	177	2,775	1,513	8,692

Self-sufficiency is a measure of the facilities capacity to provide services to the residents of its local catchment. The analysis of patient demand indicated that 152,798 hospital separations were delivered to residents of the Western Health catchment. 65,505 or 42.8% of these separations were delivered by Western Health facilities. 42.8% represents a low level of self-sufficiency.

The Williamstown Hospital supplied 24% of the demand from its primary catchment, and 21% of demand from the secondary catchment. These levels of self-sufficiency are very low. However, they have to be taken in the context of the role delineation of the hospital and the types of services that are needed by the catchment.

3.2 Service Supply

In 2002/03 TWH supplied a total of 8,975 separations. The services supplied by TWH accounted for 11.4% of the total number of separations supplied by Western Health.

3.2.1 Supply by SLA

89% of all services provided at TWH are to residents of the Western Health catchment, and 53% of these residents live in the Hobsons Bay SLAs.

Table 7. Separations Supplied by The Williamstown Hospital by SLA, 2002/03.

SLA Name	N Separations	% Total Separations
Brimbank (C) - Keilor	396	4%
Brimbank (C) - Sunshine	578	6%
Hobsons Bay (C) - Altona	2,710	30%
Hobsons Bay (C) - Williamstown	2,102	23%
Maribyrnong (C)	931	10%
Melton (S) Bal	119	1%
Moonee Valley (C) - Essendon	112	1%
Moonee Valley (C) - West	141	2%
Wyndham (C) - North	544	6%
Wyndham (C) - South	126	1%
Wyndham (C) - West	227	3%
CATCHMENT TOTAL	**7,986**	**89%**
Total Other SLAs	989	11%
TOTAL TWH	**8,975**	**100%**

3.2.2 Supply by Specialty Related Groups

Almost half of the separations supplied at TWH were for sameday procedures (n=4,277, 47.6%). The Specialty Related Group (SRG) profile for both multiday and sameday separations is presented as follows.

Table 8. Multiday Separations by SRG, 2002/03

SRG	Multiday Separations	
	N	**% Total Multiday Volume**
Cardiology	208	4

Dental	1	0
Endocrinology	35	1
ENT	471	10
Gastroenterology	184	4
General Medicine	214	5
General Surgery	711	15
Gynaecology	336	7
Haematology	63	1
Neonatology	444	9
Nephrology	33	1
Neurology	77	2
Neurosurgery	6	0
Obstetrics	535	11
Oncology/Radiology	1	0
Ophthalmology		0
Orthopaedics	290	6
Plastics	42	1
Psychiatry	36	1
Rehabilitation	364	8
Respiratory	254	5
Rheumatology	21	0
Urology	345	7
Vascular	27	1
GRAND TOTAL	**4,698**	**100**

Approximately 53% of all multiday separations for TWH can be accounted for by 5 SRGs. The highest volume multiday SRGs include general surgery, obstetrics, ENT, neonatology and rehabilitation.

As evidenced from the data presented below, the highest percentage of sameday volume occurs in the SRGs of gynaecology, general surgery, general medicine and urology.

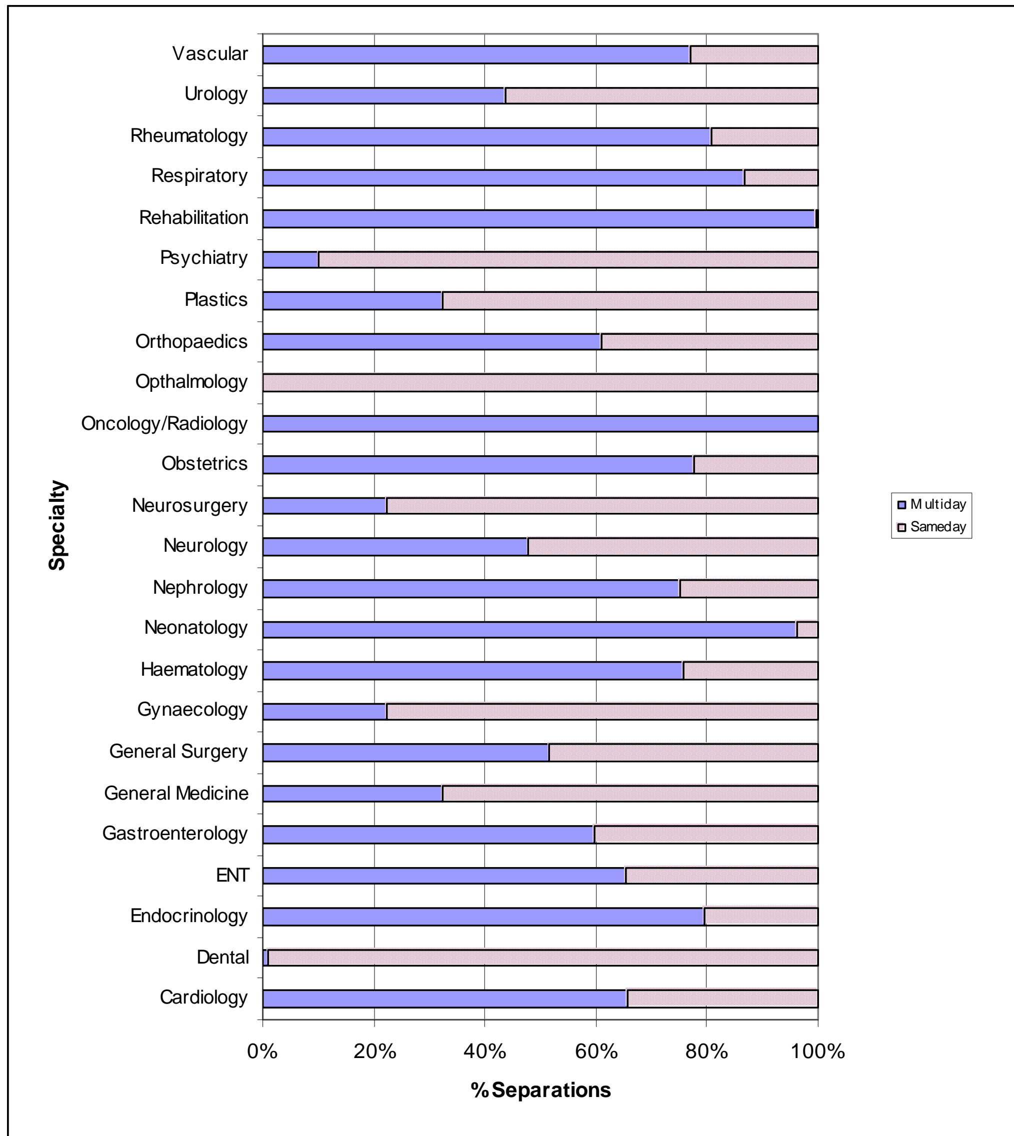
Table 9. Sameday Separations by SRG, 2002/03

	Sameday Separations	
SRG	**N**	**% Total Sameday Volume**
Cardiology	109	3
Dental	99	2

Endocrinology	9	0
ENT	249	6
Gastroenterology	124	3
General Medicine	448	10
General Surgery	669	16
Gynaecology	1,160	27
Haematology	20	0
Neonatology	17	0
Nephrology	11	0
Neurology	84	2
Neurosurgery	21	0
Obstetrics	154	4
Oncology/Radiotherapy		0
Ophthalmology	10	0
Orthopaedics	186	4
Plastics	88	2
Psychiatry	320	7
Rehabilitation	1	0
Respiratory	39	1
Rheumatology	5	0
Urology	446	10
Vascular	8	0
GRAND TOTAL	**4,277**	**100**

An examination of the proportion of sameday to multiday separations by SRG for TWH can be seen in the Figure below.

Figure 8. Proportion of Multiday and Sameday Separations by SRG, 2002/03



3.2.3 Supply Breakdown by Age and Gender

The age profile for people who received a service from TWH is presented in Figure 9, with more than 30% of all separations being attributed to people aged 30-49.

Figure 9. Separations by Age Group, 2002/03.

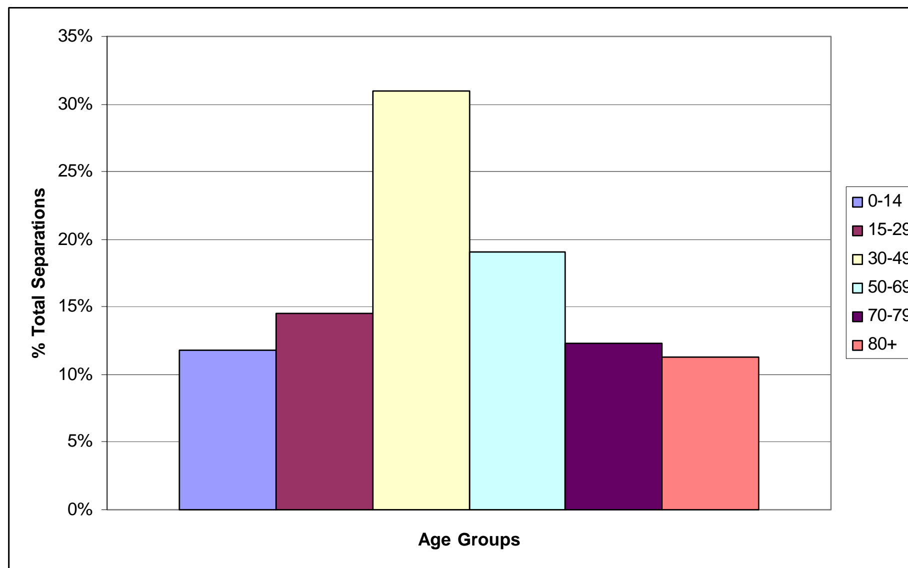


Table 10. Separations by Gender and Age, 2002/03

Age Group	% Female	% Male
0-14	47%	53%
15-29	77%	23%
30-49	76%	24%
50-69	58%	42%
70-79	49%	51%
80+	66%	34%
Total	**65%**	**35%**

Overall, women received 65% of all services delivered by TWH. A comparison of the split for each of the age groups by gender shows that the highest number of separations were for women aged 15-29, 30-49 and 80+, while the highest levels of utilisation for males were for those aged between 0-14, and 70-79 years.

3.2.4 Emergency Services

The distribution of emergency department attendances by campus is presented in the table below. The most significant per annum growth has been at Sunshine Hospital and TWH. 88% of all emergency department attendances at TWH were by residents of the local catchment, with 47.5% of these patients coming from Williamstown.

Table 11. Emergency Department Attendances by Western Health Campus.

	2001/02	2002/03	% Change
Williamstown Hospital	19,017	21,534	13%
Western Hospital [Footscray]	31,063	32,377	4%
Sunshine Hospital	47,738	54,193	14%

Table 12. Triage Category by SLA, 2002/03.

SLA Name	Triage Category						Grand Total
	1	2	3	4	5	6	
Hobsons Bay (C) - Altona	1	90	966	3301	2766		7124
Hobsons Bay (C) - Williamstown	6	111	1329	4731	4054	3	10234
Maribyrnong (C)		6	188	730	641		1565
Grand Total	7	207	2483	8762	7461	3	18923

Further examination of the triage categories (See Appendix 1) for TWH indicated that 86% of attendances were allocated to triage categories 4 and 5.

Table 13. Total Presentations by Triage Category, 2002/03.

	Triage Category						Grand Total
	1	2	3	4	5	6	
Total Presentations	8	242	2,817	10,004	8,460	3	21,534
Percent	0%	1%	13%	46%	39%	0%	100%

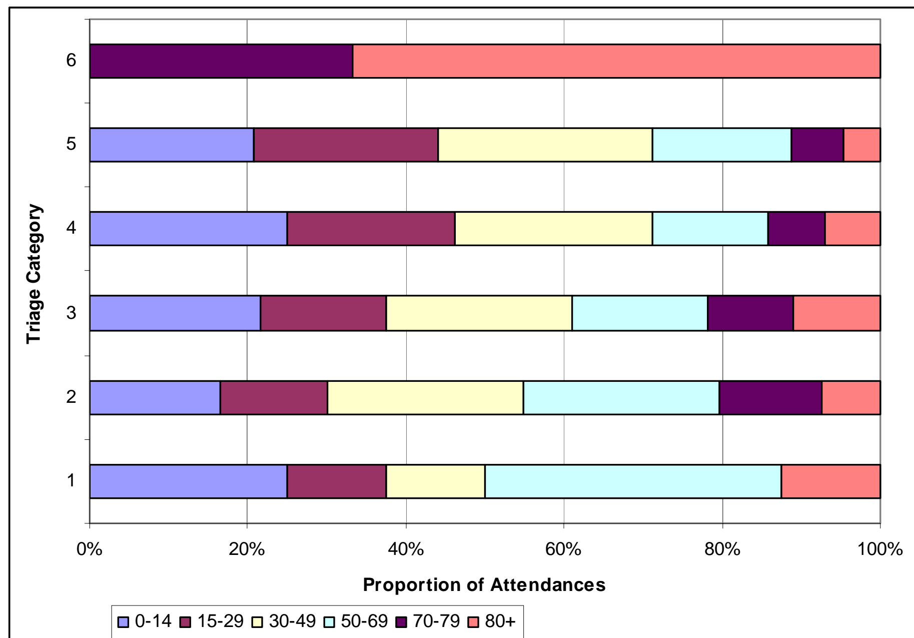
Table 14. Admissions from Emergency Department at TWH, 2002/03.

	Triage Category						**Total**
	1	**2**	**3**	**4**	**5**	**6**	
Total Presentations	8	242	2,817	10,004	8,460	3	21,534
N Admitted	1	52	619	721	141	0	1,534
Percent Admitted	13%	21%	22%	7%	2%	0%	7%

Table 14 shows that the highest proportion of admissions from ED occur for category 2 and 3 presentations. The overall percentage of admissions from ED at Williamstown is 7% of all presentations.

The distribution of age groups across each of the triage categories does not show a great deal of variation for categories 3, 4 and 5.

Figure 10. Triage Category by Age, 2002/03.



98% (21,037) of all emergency attendances at TWH were treated there and not referred on to another facility. Of the 2% who were transferred to another acute health care facility, 61% went to Western Hospital Footscray and Sunshine Hospital, and another 14% went to the Royal Children's Hospital in Parkville.

Primary Care Type (PCT) patient presentations to the ED are presented in the figures below. There has been a 23% increase in the number of PCT presentations over the period 2000/01 to 2002/03. Attendance levels are highest on Sunday and Monday (Figure 12), and are concentrated between the hours 8am and 12pm (Figure 13).

Figure 11. Growth in Primary Care Type Patient Presentations by Williamstown and Altona Residents, 2000/01 to 2003/04.

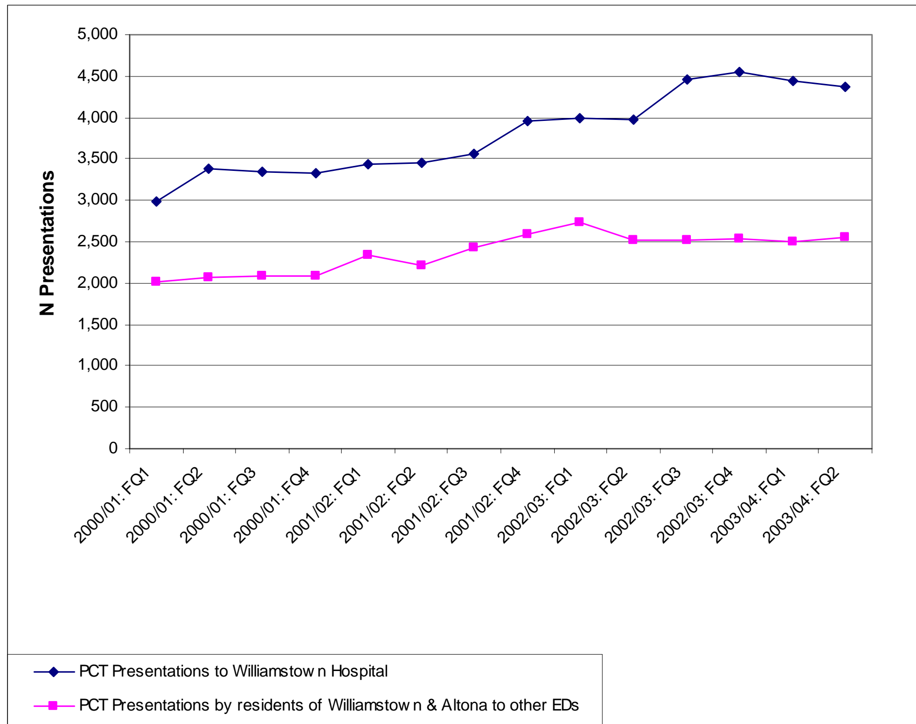


Figure 12. PCT Presentations at Williamstown by Day of the Week, 2000/02 – 2003/04.

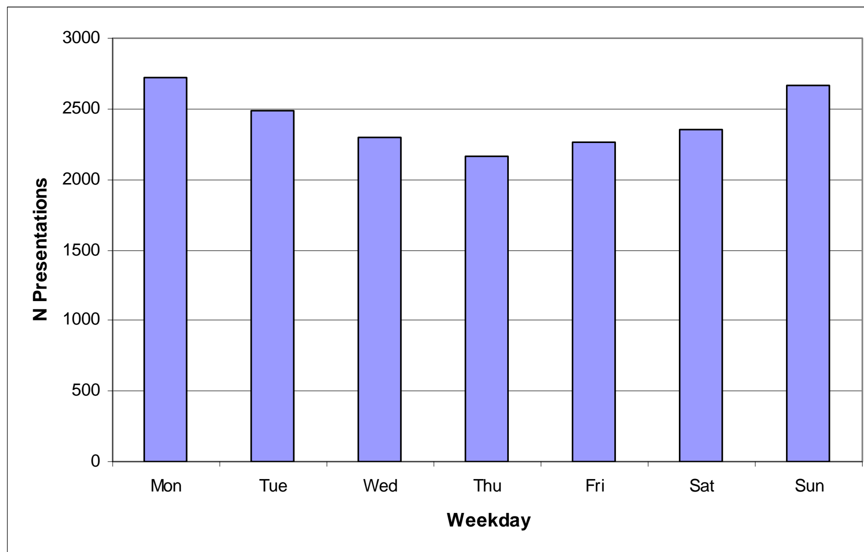
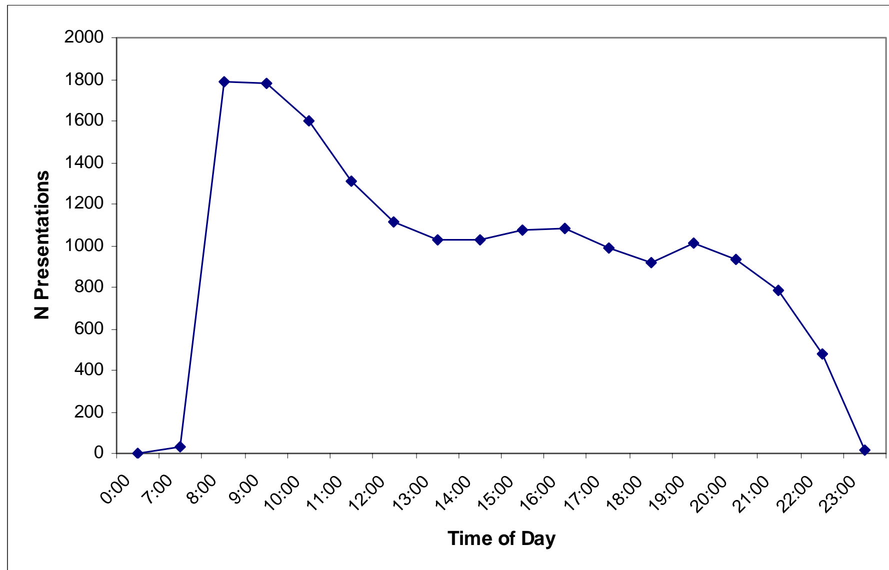


Figure 13. PCT Presentations at Williamstown by Time of Day, 2000/01 – 2003/04.

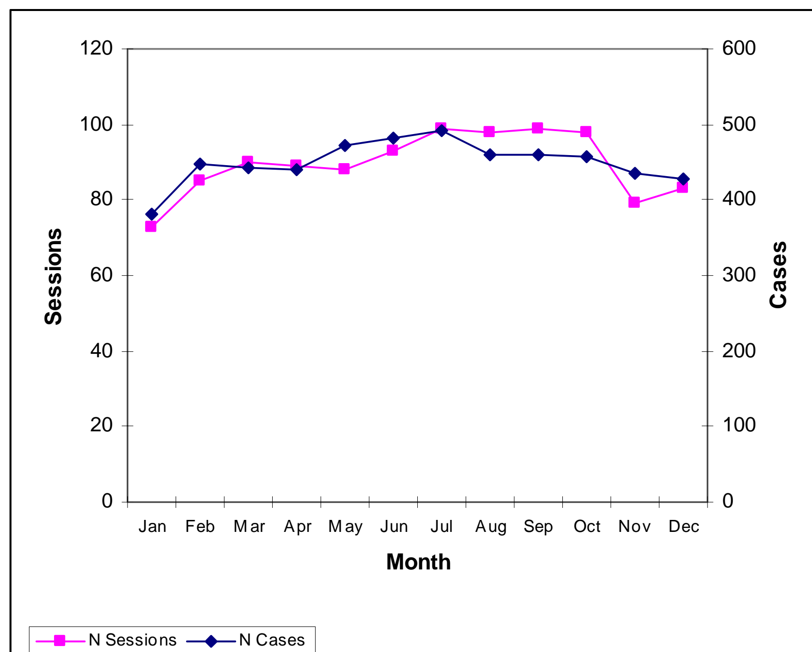


3.2.5 Theatre Utilisation

TWH has an operating suite, comprising three operating theatres, stage 1 and 2 recovery areas, and a small day surgery waiting area.

During 2003 there were 120 theatre sessions available at TWH each month. Examination of the data for the 2003 calendar year revealed that monthly utilisation ranged from 61 to 82.5 percent, averaging out annually at 75%.

Figure 14. Theatre Sessions and Number of Cases per Session, 2003



There was some variation in the pattern of theatre utilisation in respect to the number of cases that were processed during the sessions. One might speculate that where there were more sessions for fewer cases, the complexity of the cases may have been higher. Where larger numbers of cases were processed in fewer sessions, may indicate that the case complexity was lower.

In a snapshot view of theatre activity for July 2003 to January 2004, the following themes were apparent:

- Theatre sessions consistently started 30 to 60 minutes late;
- Total daily % session utilised ranged between 21% and 67%;
- Theatre 1 was utilised less than theatres 2 and 3.

3.2.6 Waiting Lists

3.2.6.1 Elective Surgery Information System (ESIS)

In 1997 the Department of Human Services (DHS) Victoria introduced the Elective Surgery Information System (ESIS) to provide electronic patient level waiting list information. ESIS has replaced its former paper-based system.

Information collected for ESIS includes:

- Public patients waiting for a state or national reported procedure;
- Public patients waiting for a procedure reported to ESIS (i.e. a procedure listed in the Principal Prescribed Procedure (PPP) list from the '500' range);
- Privately insured patients waiting for a state and national reported procedure where the treatment of the privately insured patient uses resources that would otherwise be available for the treatment of non-insured patients, and
- Privately insured patients waiting for a procedure reported to ESIS (i.e. a procedure listed in the Principal Prescribed Procedure (PPP) list from the '500' range where the treatment of the privately insured patient uses resources that would otherwise be available for the treatment of non-insured patients).[1]

Western Health participates in the ESIS data collection as they provide elective surgery separations totalling more than 3000 Weighted Inlier Equivalent Separations (WIES) per annum. The patients on the waiting list for elective surgery have been categorised according to the urgency associated with their procedure.

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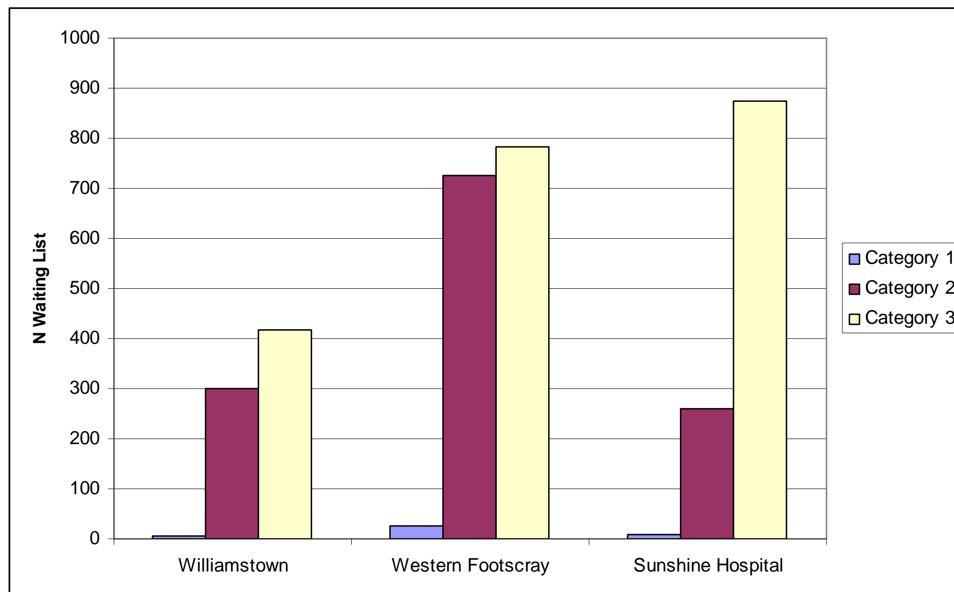
[1] Department of Human Services Victoria (2003). Elective Surgery Information System (ESIS) User Manual, Sixth Edition, July 2003.

Table 15. Urgency Categories

Code/Category	Descriptor	Description
1	URGENT	Admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency.
2	SEMI-URGENT	Admission within 90 days desirable for a condition causing some pain, dysfunction or disability but which is not likely to deteriorate quickly or become an emergency.
3	NON-URGENT	Admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, which is unlikely to deteriorate quickly, and does not have the potential to become an emergency.

The total number of patients currently on the Western Health waiting list is presented below. Consistent with DHS guidelines, there are very few Category 1 patients awaiting treatment at any of the Western Health facilities.

Figure 15. N Patients on Waiting List by Urgency Category, January 2004.



Western Hospital Footscray and The Williamstown Hospital have a higher proportion of Category 2 to Category 3 patients on the waiting list when compared to Sunshine Hospital.

3.3 Projected Demand

Projections of future service demand help to determine the appropriate service mix, bed numbers and configuration of TWH. The projections of future demand are based on an analysis of historical activity in conjunction with technological developments,

3.3.1 Base Case Projections

Projected demand for services from the Western Health catchment have been calculated to 2011/12 using the Hardes Model. These projections show that the highest proportion of demand will be for sameday services, increasing from 56.7% in 2001/02 to 62.6% in 2011/12. The projections also indicate a progressive decline in the average length of stay for both tertiary and non-tertiary separations.

Table 16. Projected Demand for Western Health Catchment to 2011/12.

Projected Demand	Year	Day only	Non-tertiary	Tertiary	Total
Separations	2001_02	96,261	63,623	10,006	169,890
	2006_07	117,516	66,774	11,156	195,447
	2011_12	138,522	70,612	12,271	221,406
ALOS	2001_02	1.0	5.5	8.7	3.1
	2006_07	1.0	5.3	8.2	2.9
	2011_12	1.0	5.1	7.9	2.7
% Stay Type	2001_02	56.7%	37.4%	5.9%	100.0%
	2006_07	60.1%	34.2%	5.7%	100.0%
	2011_12	62.6%	31.9%	5.5%	100.0%

3.3.1.1 Proportion of Emergency to Non-Emergency Admissions

Table 17. Non-Emergency Demand Projections by Age Group.

0-14 Years	Year	Day only	Non-tertiary	Tertiary	Total
Separations	2001_02	5,223	7,045	478	12,746
	2006_07	5,492	6,427	493	12,412
	2011_12	5,928	6,108	514	12,549
ALOS	2001_02	1.0	3.5	16.4	2.9
	2006_07	1.0	3.1	15.6	2.7
	2011_12	1.0	2.8	15.1	2.5
% Stay Type	2001_02	41.0%	55.3%	3.8%	100.0%
	2006_07	44.2%	51.8%	4.0%	100.0%
	2011_12	47.2%	48.7%	4.1%	100.0%

15-69 Years	**Year**	**Day only**	**Non-tertiary**	**Tertiary**	**Total**
Separations	2001_02	61,351	24,393	3,479	89,223
	2006_07	73,645	24,595	3,841	102,081
	2011_12	86,206	25,172	4,194	115,572
ALOS	2001_02	1.0	4.4	6.6	2.2
	2006_07	1.0	4.3	6.8	2.0
	2011_12	1.0	4.2	6.5	1.9
% Stay Type	2001_02	68.8%	27.3%	3.9%	100.0%
	2006_07	72.1%	24.1%	3.8%	100.0%
	2011_12	74.6%	21.8%	3.6%	100.0%

70+ Years	**Year**	**Day only**	**Non-tertiary**	**Tertiary**	**Total**
Separations	2001_02	17,081	6,775	2,388	26,244
	2006_07	23,120	7,727	2,738	33,584
	2011_12	28,414	8,774	3,069	40,257
ALOS	2001_02	1.0	12.9	7.3	4.7
	2006_07	1.0	12.8	7.2	4.2
	2011_12	1.0	12.5	6.9	3.9
% Stay Type	2001_02	65.1%	25.8%	9.1%	100.0%
	2006_07	68.8%	23.0%	8.2%	100.0%
	2011_12	70.6%	21.8%	7.6%	100.0%

A dip in the demand for non-emergency admissions for residents aged 0-14 has been projected in 2006/07, and the level of demand will continue to be lower in 2011/12 than in 2001/02. This is in stark contrast to the projected increase in separations over the projection period for 15-69 year olds (29%) and 70+ (53%).

The proportion of sameday services is significantly higher for the 15-69 and 70+ age groups, although all groups will experience an increase in sameday services to 2011/12. It is also worth noting that the projected proportion of tertiary demand is much higher (almost double) in the 70+ age group when compared to the other two age groups.

A similar pattern emerges in the proportion of tertiary emergency demand by age, with the 70+ age group experiencing much higher levels than the other two age groups. This can be seen in the table below.

Table 18 also shows that the proportion of day only demand is significantly lower for emergency admissions.

Table 18. Emergency Demand Projections by Age Group.

0-14 Years	Year	Day only	Non-tertiary	Tertiary	Total
Separations	2001_02	1,482	3,061	240	4,783
	2006_07	1,568	2,930	267	4,766
	2011_12	1,734	2,814	293	4,841
ALOS	2001_02	1.0	2.4	8.0	2.2
	2006_07	1.0	2.3	7.8	2.2
	2011_12	1.0	2.2	7.2	2.1
% Stay Type	2001_02	31.0%	64.0%	5.0%	100.0%
	2006_07	32.9%	61.5%	5.6%	100.0%
	2011_12	35.8%	58.1%	6.0%	100.0%
15-69 Years	**Year**	**Day only**	**Non-tertiary**	**Tertiary**	**Total**
Separations	2001_02	8,460	14,223	1,844	24,527
	2006_07	10,305	15,837	2,012	28,154
	2011_12	12,144	17,233	2,141	31,517
ALOS	2001_02	1.0	4.5	10.1	3.7
	2006_07	1.0	4.0	9.0	3.3
	2011_12	1.0	3.8	8.8	3.1
% Stay Type	2001_02	34.5%	58.0%	7.5%	100.0%
	2006_07	36.6%	56.3%	7.1%	100.0%
	2011_12	38.5%	54.7%	6.8%	100.0%
70+ Years	**Year**	**Day only**	**Non-tertiary**	**Tertiary**	**Total**
Separations	2001_02	2,664	8,126	1,577	12,367
	2006_07	3,386	9,259	1,805	14,450
	2011_12	4,097	10,512	2,061	16,670
ALOS	2001_02	1.0	7.2	11.4	6.4
	2006_07	1.0	6.1	9.9	5.4
	2011_12	1.0	5.6	9.3	4.9
% Stay Type	2001_02	21.5%	65.7%	12.8%	100.0%
	2006_07	23.4%	64.1%	12.5%	100.0%
	2011_12	24.6%	63.1%	12.4%	100.0%

3.4 Projected Supply

3.4.1 Base Case Projections

The projections presented in the table below indicate where residents of the Western Health catchment will go to receive health services. Very little change in place of treatment is indicated between 2006/07/ and 2011/12.

Table 19. Place of Treatment for Western Health Catchment Residents to 2011/12.

Projected Supply Year	Place of Treatment	Day only	Non-tertiary	Tertiary	Total
2006_07	Western Hospital	12.7%	19.9%	23.2%	15.7%
	Western Sunshine	9.1%	19.7%	4.7%	12.5%
	Williamstown	2.9%	5.8%	2.3%	3.9%
	Royal Womens	2.1%	3.7%	1.0%	2.6%
	Royal Childrens	2.0%	3.3%	4.3%	2.6%
	Peter MacCallum	1.3%	0.5%	2.5%	1.1%
	Werribee Mercy	5.2%	5.6%	0.7%	5.1%
	Royal Melbourne	22.5%	7.8%	16.7%	17.1%
	St Vincents	2.7%	2.2%	3.6%	2.6%
	Other	9.7%	11.2%	10.2%	10.2%
	Interstate Public	0.1%	0.2%	0.1%	0.1%
	New Hospital	0.2%	0.2%	0.6%	0.2%
	Private	29.6%	19.9%	30.2%	26.3%
	Total	100.0%	100.0%	100.0%	100.0%
2011_12	Western Hospital	12.8%	20.6%	23.2%	15.8%
	Western Sunshine	8.6%	19.2%	4.7%	11.8%
	Williamstown	2.8%	5.6%	2.3%	3.7%
	Royal Womens	1.8%	3.2%	0.9%	2.2%
	Royal Childrens	1.8%	3.1%	4.2%	2.3%
	Peter MacCallum	1.4%	0.5%	2.3%	1.2%
	Werribee Mercy	5.9%	6.2%	0.8%	5.7%
	Royal Melbourne	22.8%	7.9%	16.7%	17.7%
	St Vincents	2.8%	2.2%	3.7%	2.6%
	Other	9.5%	11.1%	9.8%	10.1%
	Interstate Public	0.1%	0.2%	0.1%	0.1%
	New Hospital	0.3%	0.4%	1.1%	0.4%
	Private	29.4%	19.7%	30.3%	26.4%
	Total	100.0%	100.0%	100.0%	100.0%
2006_07	All - Total Sepns	117,516	66,774	11,156	195,447
2011_12	All - Total Sepns	138,522	70,612	12,271	221,406

4. INTERIM SERVICE PLAN FOR THE WILLIAMSTOWN HOSPITAL

4.1 Strategic Service Recommendations

This Interim Service Plan is based on a review of The Williamstown Hospital in Western Melbourne, conducted in February 2004 by Banscott Health Consulting Pty Ltd.

One of the requirements of this project is to consider and provide advice on the future configuration of acute and sub-acute services.

A number of options that were derived from the consultation phase of the project will be addressed in this section. A checklist of factors affecting the assessment of these options included:

Table 20. Checklist.

Factor	Interpretation
Access	Is access to services improved by the option?
Equity	Will the option result in more equitable distribution of resources and services in the Western Region?
Clinical Integrity	Does the proposal make sense from a clinical perspective? Are the core clinical services configured in an appropriate way to ensure support for the planned services?
Continuum of Care/Substitution	Are the services designed to offer a “seamless” transition from the community/primary sectors to the acute and subacute streams of care?
Linkages	Will the proposal promote service linkages between individual services in the Western Region and between specialties and care streams?
Workforce, workplace culture and linkages	Will the option enhance the ability to recruit and maintain a skilled workforce? Will workplace culture be affected and enhanced?
Capital Cost & Functionality	Are the capital resources available to complete the option under consideration? What functional enhancement does the capital proposal offer?
Logistics and feasibility	Is the proposal feasible, practical and able to be operationalised and achieved within a reasonable timeframe?

4.2 Service Enhancement and Reconfiguration Options

4.2.1 Role Delineation

One of the key issues associated with planning service delivery at The Williamstown Hospital is to determine an appropriate role for it as part of the Western Health Service.

TWH functioned as a community hospital for a number of years prior to becoming part of the Western Health Service.

The New South Wales Role Delineation Guide can be applied (See Appendix 2) to allocate role level to a facility or service. The Guide differentiates clinical service levels on a scale of 1 (least complex) to 6 (most complex). Clinical specialties are defined by such factors as staff profile, minimum safety standards, complexity of service, and risk levels of patients. This concept needs to be applied to TWH in conjunction with activity projections and other forecast changes in service mix.

The consultants believe that TWH should operate as a Level 3 status facility, offering a range of low acuity surgical and medical procedures.

If acuity is maintained at level 3 there is no case for the provision of an intensive care unit at TWH. However, an increased volume of elective work may make a case for a High Dependency Unit or enhanced and monitoring capacity. This will be addressed as part of the wider Service Planning exercise for Western Health.

Recommendation 1:

- That The Williamstown Hospital be operated as a Level 3 facility.

4.2.2 Obstetric Services

One of the key issues raised during the preliminary phase of the review was the future of obstetric services at TWH.

TWH has a low volume of births per annum (N=460). The Australian College of Obstetricians and Gynaecologists benchmarks suggest that a service needs approximately 1,000 births per annum to be considered viable. Although TWH had attempted to increase the number of births at the hospital during 2002 and 2003, the demographic profile of the area was not going to make this a reality. Declining fertility rates, and patterns of obstetric patient flow have contributed to the small number of births at TWH. The primary catchment only generated a total 447 births for 2002/03 and 30% of these occurred at TWH (See Table 21). Obstetric patient flows from Williamstown and Altona are presented in Table 22.

Table 21. Obstetric Demand and Supply, 2002/03.

SLA Name	Total Demand	TWH Supply	% Self-Sufficiency
Hobsons Bay (C) - Altona	1192	250	21%
Hobsons Bay (C) - Williamstown	447	136	30%
Maribyrnong (C)	1579	74	5%
Grand Total	**3218**	**460**	**14%**

Table 22. Obstetric Patient Flows, 2002/03

SLA Name	Djerriwarrh	Werribee Mercy	RMH	RWH	Sunshine	Western Footscray	TWH	Total
Hobsons Bay (C) - Altona	2	297		310	237	2	250	**1098**
Hobsons Bay (C) - Williamstown	2	22	1	124	43	2	136	**330**
Maribyrnong (C)	1	27	1	570	622	17	74	**1312**
Grand Total	**5**	**346**	**2**	**1004**	**902**	**21**	**460**	**2740**

Approximately 42% of deliveries at TWH are by caesarean section, compared to a Victorian average of 27%. Practicing defensively, obstetricians have chosen to perform caesarean sections to limit risk arising out of hours when there is no anaesthetist available. The obstetricians have stated that this approach is their response to increased risk of liability.

Even if one puts to one side the issue of patient safety, there is the significant issue of adequate anaesthetic cover. At TWH the provision of obstetric services has been complicated by an inadequate after hours anaesthetic service. Three options have been considered to address this problem:

- To provide anaesthetic cover from Footscray Hospital on a sessional out of hours roster basis. This option is likely to have adverse financial and service impact costs for Western Health.
- To provide out of hours anaesthetic cover on a fee for service basis. This option is not likely to attract anaesthetists unless it was to be required as a condition of doing fee for service during day hours. This in turn would have serious consequences in terms of consistency across the region and the State.
- To arrange for patient transfer to Sunshine Hospital where birth was likely out of hours. This would have an attendant increase in risk to the patient.

All of the factors presented above have a significant impact on determining the future of obstetric services at TWH. Complete cessation of obstetrician-led obstetric services at TWH will result in the need to relocate current obstetric caseloads from TWH along the following lines:

- >60% to Werribee-Mercy Hospital. Such an increase will not put undue pressure on that hospital, but will rather enable it to become more viable in terms of numbers. The provision of a viable anaesthetic service there should be assured.
- <30% to Royal Women's Hospital.

- <5% to Sunshine Hospital.
- <5% to Freemasons Hospital and to other private hospitals.

Importantly, efforts should be made to ensure that each woman currently booked in for obstetric services at TWH is individually looked after in terms of arranging alternative service provision.

4.2.2.1 Primary Maternity Care

The women of Williamstown do need to have access to high quality safe maternity care. Sunshine Hospital has recently established a satellite midwife-driven antenatal service at TWH. This service should be retained and expanded to include postnatal care.

One proposal for consideration is the establishment of a primary maternity care service at Williamstown, based on extending the scope of midwives to include labour and birth. This would involve the midwife caring for the woman during pregnancy, labour, birth and the postnatal period. This could either be “one-on-one” (caseload) midwifery or a service based on a small team of midwives. Close collaboration with medical providers is integral to the success of this model.

This model is in line with consumer expectation and the evidence on improved outcomes and improved satisfaction with care provided in this way. The Victorian Maternity Performance Indicator risk adjusted data for 2001 and 2002 demonstrates that intervention rates are significantly lower in services that provide this or a similar type of model.

The model would use consultation and referral guidelines to ensure 24 hour / 7 day week access to emergency medical care when required. One option would be to develop referral mechanisms to Sunshine Hospital, along the lines of the Ryde Hospital model in NSW. The development of this model would require close consultation with the relevant professional colleges to ensure the protocols for referral are appropriate and supported. The Department’s Maternity Services Advisory Committee could be asked to oversee a consultation process and evaluate it implementation and outcomes to ensure a safe and effective service.

To address local catchment needs, TWH should:

- Provide antenatal and postnatal services managed from Sunshine Hospital, with the potential to draw women to Sunshine Hospital over time.
- Have greater concentration on women’s health services, especially services for older women.

Recommendation 2:

- That The Williamstown Hospital cease the provision of obstetrician-led obstetric services.
- That action be taken to plan for alternative services for TWH women likely to be affected by the cessation of obstetrician-led obstetric services.
- That efforts be made to ensure that each woman currently booked in for obstetric services at TWH is individually looked after in terms of arranging alternative service provision.

- That TWH introduce antenatal and postnatal services managed from Sunshine Hospital, and have greater concentration on women's health services, especially services for older women.
- That the recently established midwife-driven antenatal service provided at TWH by Sunshine Hospital be retained and expanded.
- That the provision of a primary maternity service based on a full caseload midwifery model (including antenatal, labour, birth and postnatal care) be further investigated and developed within Western Health, with the possibility of piloting at TWH, with the pilot to proceed only after adequate exploration of risks and development of appropriate risk mitigation strategies.

4.2.3 Emergency Department

The Emergency Department has 5 spaces, including 1 resuscitation bay, and operates in a difficult to access environment that affects patient flows. Ambulance access is poor. The reception and triage area is located in a corridor between the ED and medical records.

The service operates from 8am until 11pm. It is not known what potential patients do after 11pm. It should be noted that, across Melbourne, 17% of primary care type patients use hospital Emergency Departments between midnight and 6am, and 42% use them between 6pm and midnight. It is likely that the community does not have convenient after-hours access to primary care services linked directly to pathology and radiology that is available in hours at TWH.

The majority of patients who attend are category 4 and 5, and are from Williamstown and Altona (N=14,852, 85.5%). 88.1% of all presentations for 2001/02 & 2002/03 at TWH fit the DHS and Divisions of General Practice definition of primary care type patients (PCT). Salaried specialist medical staff provides the service.

The absence of an intensive care unit and a full range of support services will continue to limit the type of emergency patients that can be safety treated at TWH. Its size and the proximity of other major hospitals do not justify the further development of critical care services on site.

High utilisation of the service suggests it is important to the local community to maintain it, and in the consultants' view it should be enhanced through

- extended hours;
- better physical facilities;
- shorter waiting times;
- more appropriate staffing (eg. Nurse practitioners and general practitioners).

Such enhancement should not attract people away from their normal general practitioner and ensure continuity of care for the patient.

Options that should be considered for the longer term are outlined below:

Option 1 – maintain the status quo but with enhanced hours and physical facilities. While this option would continue the current staffing model, it will be difficult to attract additional appropriate staff for the extended hours at a reasonable cost.

Option 2 – change the ED into a 24-hour general practice clinic. This option would see a competing general practice established in Williamstown and so would not be supported by the local GP community. It would be difficult to find after hours staffing and would detract from family GP services and potentially reduce continuity of care. It is not the role of an acute hospital to substitute for local primary care providers.

In addition, in 2002/03 there were 3,067 category 1 to 3 patients attending TWH, and a total of 1,534 people admitted from the ED at TWH. These people would need to be cared for elsewhere.

Option 3 – upgrade facilities to enable after hours general practice while continuing a hospital operated daytime service. The current physical location of medical records would need to be redeveloped to accommodate the general practice clinic, utilising the existing central triage point. This development would require the support of local GPs, probably working on a rostered basis and perhaps granted additional admitting rights at TWH.

GPs should be permitted to bill the Commonwealth under Medicare and the hospital should provide incentive payments or other support for participating GPs. The Commonwealth would need to support this arrangement by removing any doubt about its legality. Costs could thus be shared between the Commonwealth and State.

Collocated clinics have operated in Frankston for many years and have recently been established in Dandenong.

Patient charges would need careful consideration to be consistent with the local practice of GPs in the area to avoid attracting patients away from their regular GP. Frankston and Dandenong charge small co-payments consistent with charges levied by the local GPs.

The availability and cost of after-hours pathology and radiology would need to be resolved for any of the above options. Radiology is likely to be the most difficult and consideration should be given to a networked approach through the use of modern technologies (such as picture archiving communication system - PACS).

Recommendation 3:

- That a preferred model for the operation of an emergency or urgent care service at Williamstown be developed consistent with the following parameters: extended hours; better physical facilities; shorter waiting times; and more appropriate staffing (eg. nurse practitioners and general practitioners).
- That consideration be given to an option of an after hours general practice while including a hospital operated daytime service.
- That GPs be permitted to bill the Commonwealth under Medicare and the hospital provide incentive payments or other support for participating GPs.
- That patient charges receive careful consideration to ensure that they are consistent with the local practice of GPs in the area to avoid attracting patients away from their regular GP.

4.2.4 Theatre Suite & Theatre Utilisation

Demand projections indicate that there will be an increasing need for sameday procedures. The waiting area for day surgery will need to be expanded to accommodate increased patient volume.

Currently theatres are utilised at 75% of their capacity. Some scenarios for increased theatre utilisation are presented below. Incremental percentage increases show that if utilisation was increased by 15% on current rates (Scenario 2), throughput could increase by approximately 93 cases per month, or 1,115 cases per annum.

Contingent upon our other recommendations, any increase in theatre utilisation and in throughput of elective surgery will require the capacity to observe and monitor patients during recovery.

Table 20. Scenarios for Increased Per Annum Theatre Utilisation at TWH

	2003	Scenarios			
	Current	**1**	**2**	**3**	**4**
Total Sessions Available	1,440	1,440	1,440	1,440	1,440
N Sessions Used	1,074	1,224	1,296	1,368	1,440
% Utilisation	75%	85%	90%	95%	100%
N Cases Processed	5,396	6,150	6,511	6,873	7,235
Variance in N Cases		754	1,115	1,477	1,839

Recommendation 4:

- That the size of the day surgery waiting area be expanded to accommodate future demand;
- That theatre utilisation be increased by 15% (18.5 additional sessions per month);
- That a patient observation and monitoring area be incorporated into TWH.

4.2.5 Surgical Services

Improved utilisation of the theatre suite will positively influence the capacity of TWH to provide more elective surgical services to its primary and secondary catchments as well as to residents of other areas of the broader Western Health catchment.

The aim should be to increase Category 3 elective surgery throughput at TWH thereby decreasing the size of the waiting lists across Western Health, and taking some of the pressure of Western Hospital and Sunshine Hospital. The extent of any increase will depend upon an analysis across Western Health, and will require a consideration of existing capacity and implementation of any necessary modifications. This analysis and consideration will be addressed in the Final Report for Western Health.

It is proposed that TWH take the role of a low acuity, low co-morbidity elective surgery facility servicing the residents of the broader Western Health catchment, and focussing on the specialties of ENT, general surgery, gynaecology, orthopaedics, plastics and urology. This is consistent with the current specialty profile, and makes an appropriate match between the hospital's level of surgical capacity and the nature of the surgery required.

Recommendation 5:

- That TWH deliver more low acuity, low risk elective surgical services to its primary and secondary catchments as well as to residents of other areas of the broader Western Health catchment.

4.2.6 Medical Services

Maintenance of the TWH's existing surgical activity, and any increase in that capacity and throughput and/or range, will require the strengthening of the hospital's delivery of medical services.

Further, there is scope to increase the number of elective general medical cases treated at the hospital, eg endocrinology, respiratory medicine, rheumatology, cardiology etc.

To achieve appropriate support for the envisaged surgical cases and to cater for the increase in general medical admissions, it is essential that the position of rostered physician be maintained.

Recommendation 6:

- That TWH's capacity to deliver medical services be strengthened;
- That TWH increase the number of elective general medical cases treated at the hospital.

4.2.7 Aged Care and Services for Older Women

The Geriatric Evaluation and Management Unit at TWH is working effectively against DHS benchmarks. There is, however, scope to examine the broader need for aged care in the Williamstown area and in the region as a whole.

TWH's role in the meeting of this need will be further examined as part of the final Western Health report.

Given the demographics of the Williamstown area and the need for better provision of services to assist the health care of older women in particular, the consultants see scope for examination of the possibility of TWH becoming a centre for services to meet, in a coordinated way, the needs of older women (eg in neurology, continence, etc).

This aspect, too, will be considered further as part of the final Western Health report.

Recommendation *7:*

- That TWH's role in meeting the broader need for aged care in the Williamstown area and in the region as a whole be further examined as part of the final Western Health report.

- That an examination of the possibility of TWH becoming a centre for services to meet, in a coordinated way, the needs of older women be considered further as part of the final Western Health report.

4.2.8 Specialist Clinics and Ambulatory Care

In achieving an appropriate balance between medical and surgical activities at TWH, and in promoting a greater emphasis on medical inpatient services, the consultants are considering the value that might be added by the introduction of a wider range of specialist clinics at TWH.

The consultants recognise the potential contribution of such enhanced specialist services to the viability of the medical and surgical enhancements recommended, and as part of the hospital's contribution to the health of older women (particularly in fields such as mobility, continence, pain management, prevention of falls, etc).

This matter will be considered further as part of the final Western Health report.

Dialysis services should continue to be offered at TWH, but should be better accommodated.

Recommendation 8:

- That the potential contribution of enhanced specialist services to the viability of the medical and surgical enhancements recommended, and as part of the hospital's contribution to the health of older women be considered further as part of the final Western Health report.
- That Dialysis services be better physically accommodated.

4.2.9 Workforce

The proposed increase in volume of surgical and medical patients highlights the need to ensure that appropriate levels of medical and nursing support are available at TWH. At present, there is one surgical registrar. This would be insufficient for the enhancements proposed.

The consultants are of the view that, given the directions outlined in this preliminary study, there is a need to maintain two medical registrars at the hospital, and to increase to two the number of surgical registrars employed.

In addition, it is clear at present that the notion of streaming and of employment by Western Health is paid lip service only in some parts of TWH, and is given insufficient weight by sectors of Western Health generally. This is particularly the case in the allied health areas. If the concept of multi-campus delivery of coordinated health care is to be realised, this situation must change.

Allied health staff should be rotated through all three Western Health hospitals to ensure their exposure to more complex levels of patient care, and agreement to the possibility of rotation should be part of the conditions of employment of all staff in Western Health hospitals.

Rotation, at least on a sessional basis, will also play a key role in enabling TWH to increase its theatre utilisation rates, and increase the provision of a range of elective surgery. This will, however, throw into relief the problem of sessional payment versus fee-for-service payment (current used at TWH).

Coexistence of the two methods of payment in one region, let alone in one hospital, would be an unhappy situation, leading to frustration and ongoing difficulty. At the same time, to remove an existing and longstanding benefit (viz. fee-for-service payments to surgeons at TWH) would not be practical.

The consultants see 'grandfathering' of fee-for-service to existing recipients and introducing sessional payments for all new appointees as a possible solution to this dilemma.

The consultants will further examine this issue as part of the final Western Health report.

Recommendation 9:

- That two registrar positions in each of surgery and medicine be established and maintained at TWH.
- That the GP VMO model be gradually phased out.
- That junior medical, nursing and allied health staff be rotated through all three Western Health hospitals.
- That the possibility of 'grandfathering' fee-for-service arrangements to existing recipients and introducing sessional payments for all new appointees be further examine as part of the final Western Health report.

4.2.10 Financial Implications

4.2.10.1 Weighted Inlier Equivalent Separations (WIES)

Western Health WIES targets for 2002/03 were set at 56,912. It did not reach this target, falling short by approximately 1,700 WIES.

The 2003/04 WIES target set for Western Health by the Department of Human Services is 57,945.

The breakdown of allocation of WIES across the three hospital facilities comprising Western Health is presented below.

Table 21. WIES allocation by Western Health Facility, 2001/02 – 2003/04

Hospital	2001/02			2002/03			2003/04	
	Target	Actual	Variance	Target	Actual	Variance	Target	YTD Actual[2]
Sunshine					15,338			
Western Footscray					33,603			
Williamstown				6,612	6,271	-341	6,351	3,599
WESTERN HEALTH				**56,912**	**55,212**	**-1,700**	**57,945**	

TWH did not meet its 2002/03 WIES target. The 2003/04 target put forward by Western Health sees a reduction of 261 WIES on the 2002/03 target.

Table 22. Comparison of Average WIES for Elective Separations at TWH, 2002/03

	Multiday Elective		Sameday Elective		Total Elective
	Separations	Av WIES	Separations	Av WIES	Av WIES
Williamstown	2065	1.13	3696	0.38	0.65

As is to be expected, the average WIES for sameday procedures is less than half that for multiday procedures. The total average WIES generated per theatre session for the 2003/04 period YTD has been calculated to be 3.68.

Extrapolating on the earlier data regarding theatre utilisation and increased throughput, an additional 1,115 cases per annum, with an average WIES of 0.65 per case = 724.75 WIES.

This number of WIES is very close to that generated by TWH for obstetric and neonatal services. In 2002/03 a total of 724.85 WIES were generated at TWH from obstetrics (563.93) and neonatology (160.92).

An assessment of the proportion of obstetric and neonatal separations (and WIES) that will flow out of Western Health will inform the modelling for overall WIES required by TWH, if increases in elective surgery were to be implemented. The additional cost of the new obstetrics service model to be examined will also need to be funded.

[2] YTD Actual as at 31 January 2004.

Appendix 1.

Triage Categories

Classification of urgency according to need for medical and nursing care, using the Australasian College for Emergency Medicine National Triage Scale.

Triage Category	Description
1	Resuscitation
2	Emergency
3	Urgent
4	Semi-urgent
5	Non-urgent
6	Dead on arrival

Appendix 2.

New South Wales Role Delineation Guidelines – Role Levels

Role Level	Features
1	No on-site medical staff for emergencies; registered nurse in charge of each shift; minor procedures performed under local anaesthetic in procedures room; management and appropriate referral by a medical practitioner.
2	As Level 1 plus, provide non-emergency GP services and a rural trauma service; has resuscitation and limited stabilisation capacity prior to referral to a higher level of care; general physician consultation is available; minor surgical procedures on good risk patients with anaesthesia given by an accredited practitioner in anaesthetics; general surgeon is available for consultation.
3	As Level 2 plus, has 24hr access to medical staff on-site or available within 10 minutes; consultation is available from other specialists; intermediate surgical procedures are performed on good or moderate risk patients regularly by a specialist surgeon. Has a nursing unit manager for the general ward.
4	As Level 3 plus, has a full-time director of emergency services; experienced medical officers and nurses are on-site 24 hours. Specialists in general surgery, anaesthetics, orthopaedics, paediatrics and medicine are on call 24hrs; has a medical registrar and on-site allied health staff.
5	As Level 4 plus, manages all emergencies; has designated Registrars at specialty level and has a full-time Director with specialist qualifications in emergency medicine and senior medical officers on-site 24hrs; sub-specialists are available for consultation; full range of major diagnostic and treatment procedures on good, moderate and bad risk patients are performed regularly by specialist surgeons.
6	As Level 5 plus, has neurosurgery on-site and rapid access to cardio-thoracic surgery; sub-specialists are available on-site or on call 24hrs; has a designated supra-regional retrieval service, divisions of medicine and surgery, a medical registrar on site 24hrs, a teaching and research role and designated allied health staff.