Dear Ministers

The Health Reform Committee has pleasure in submitting this report of the Committee's deliberation on the Western Australian public health system.

The Committee members would like to acknowledge the extraordinary level of assistance received in the report's preparation. We are particularly grateful for the contributions of:

- doctors, nurses and allied health professionals within the Western Australian health system
- interstate experts in specific clinical areas
- administrators both within Royal Street, Treasury and in the Area Health Services
- the Health Consumers' Council (WA)
- the media in providing a vehicle for debate on key topic areas, and
- the State Government in allowing the review to proceed in an open and transparent fashion.

The work of the Committee was overseen by a small team headed with leadership by Prudence Ford and comprising of team members Jodie South, Kate Bullen, Brett Bell, Jamil Khan, Vijaya Ramamurthy, Janice Cozens, Trish Hind, Samantha Bailey and Jennie Hoefgen. This team provided documentation, undertook and oversighed research, liaised with the clinical workforce and community and ensured a smooth administration process. Their work was of outstanding quality and the Health Reform Committee is greatly indebted to them.

Naturally, the content of the report is the collective responsibility of Committee members.

Yours sincerely

Health Reform Committee
Professor Michael Reid (Chair)
Mr Mike Daube, Director General, Department of Health, Western Australia
Mr John Langoulant, Under Treasurer, Department of Treasury and Finance
Ms Rita Saffioti, Director, Economic Policy Unit, Department of the Premier and Cabinet
Mr Danny Cloghan, Chief of Staff, Minister for Health
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The State Government appointed the Health Reform Committee in March 2003, reporting through the Minister for Health and the Treasurer, to the Expenditure Review Committee of Cabinet.

The Terms of Reference for the review required the Committee to develop a vision for the Western Australian health system while ensuring that the growth of the health budget was sustainable.

In undertaking the review, the Health Reform Committee:

- received a large number of public submissions
- held regular meetings with clinical groups and other key stakeholders
- engaged the Health Consumers’ Council (WA) to consult with members of the community
- released 12 discussion papers, and
- undertook reviews in areas of interest.

The need for change in the public health system is clear. Like many other health systems in Australia and internationally, Western Australia has:

- an ageing and growing population
- widening gaps in health status between the wealthy and the poor, and between the Aboriginal and non-Aboriginal population
- escalating demands for emergency care and hospital beds
- a substantial emphasis on tertiary hospital care to the detriment of secondary hospitals and population-based approaches
- projected workforce shortages
- rapidly changing demographics in the metropolitan area
- significantly increased requirements for mental health, aged care and rehabilitation services, and
- increasing difficulty in continuing to fund the escalating costs of the health system without severely compromising other responsibilities.

While the need for change is accepted by all, the risk is that incremental change will continue to suffice - for example, through refurbishing and expanding existing hospitals on their current inappropriate locations, unplanned and uncoordinated expansion of tertiary hospital services, paying lip service to the importance of primary and community-based care, or rewarding financial mismanagement through budget enhancements.

What is clear is that incremental reform is no longer the pathway to a financially sustainable vision for Western Australia. A fundamental reprioritisation of the public health system is needed, and should be carried out over the next decade, in a systematic and integrated way.

An increased focus on health promotion, improved interface between general practice and the public health system and enhanced community-based aged care, mental health and Aboriginal health services will not only improve the health status of Western Australians, but will reduce the growth in demand for hospital emergency care and beds. Much of the demand for hospital services is for conditions that are clearly preventable with appropriate health promotion and prevention strategies. Substantial investment in these strategies is warranted and necessary.
Investment is needed to assist people to navigate the health system. This includes both technology to facilitate the movement of information throughout the health system, such as electronic health records and unique patient identifiers, and in clinical guidelines to bring greater consistency to clinical practice.

Significant reconfiguration of hospital services in Western Australia is proposed. This is necessary to rectify historically poor planning decisions, to reflect rapidly changing demographics, to improve access to hospital care and to ease the burden and reduce dependency on tertiary hospitals.

In the country, the proposals enunciated in the 2003 'Country Health Services Review' to further develop multi purpose services, integrated district health services and regional hospitals, are fully supported.

In the metropolitan area over the next 10 years:

- Rockingham/Kwinana District, Joondalup Health Campus, Swan District and Armadale Kelmscott Memorial hospitals should be expanded to approximately 300 beds each
- other metropolitan hospitals should specialise in rehabilitation, mental health and aged care services
- there should be designation of two tertiary hospitals with one north and one south of the river, and
- the Women's and Children's Hospitals should be co-located with an adult tertiary hospital.

For reasons of safety, quality, workforce sustainability and efficiency some specialisation of tertiary services at each of the adult tertiary hospitals is proposed. Major trauma, neurosurgery and heart, lung and renal transplantation should not be duplicated.

Developing better links between the primary care and the hospital system, reconfiguring hospital services in Perth and limiting the proliferation of some clinical specialities will benefit both access to emergency departments and elective surgery waiting times.

This will be achieved through:

- better use of secondary (general) hospitals
- some separation of elective and trauma care, which will enhance both access to emergency departments and elective surgery wait times, and
- greater emphasis on primary and community care that will decrease demands on the hospital system.

The growth in health expenditure over recent years has averaged around 8.5% per annum, compared to a growth of around 5% for all other State Government agencies. This is unsustainable.

A multipronged strategy is urgently needed to ensure financial sustainability which:

- endeavours to keep people out of expensive hospital care through improved health promotion, prevention and community-based care
- shifts the balance from high cost tertiary care (about 80% of admissions to Perth's tertiary hospitals are for secondary type services and general hospital care1)
- improves clinical practices in hospitals - focusing on reducing length of stay, increasing day of surgery admissions, increasing day procedures and improved utilisation reviews, where clinically appropriate

1 Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.
• achieves greater efficiency in existing services such as pathology, pharmacy, food, procurement and the overall cost structure of hospitals, and
• improves the revenue base.

A vision for the health system which emphasises the continuum of care for people with chronic and complex conditions, provides a better interface between emergency departments and GPs and achieves improvements in Aboriginal health, mental health and aged care requires fundamental improvements in consultation and coordination with the Australian Government Department of Health and Ageing.

A much more interactive approach between the Australian Government and the Western Australian Department of Health is long overdue. It will enable joint planning, integrated services provision and pooled resources.

The Health Administrative Review Committee of 2001 established Area Health Services - the area concept should be preserved and enhanced through:

• devolution to Area Health Services of operational aspects of Aboriginal health, mental health, aged care, dental health and selected population health programs
• focusing Royal Street on policy, strategic planning, resource allocation, regulatory issues and performance management
• moving to a north/south of the river model in metropolitan Perth
• establishing formal linkages between the country and the metropolitan Area Health Services, and
• improving community participation in health planning.

Current accountability arrangements, mechanisms for fairly and effectively dispersing the total annual health budget (around $3 billion in 2003/04) and clinical governance arrangements are deficient and need to be addressed as a matter of urgency. Changes are not only warranted for financial sustainability but equally required for reasons of transparency and fairness. Performance agreements with Area Health Services, a transparent and fair resource allocation formula which rewards efficiency, improved reporting mechanisms and new clinical governance arrangements are recommended.

Achieving this vision will require considerable capital investment over the next 13 years. An investment in excess of $1.5 billion over this period will achieve the expansion of the secondary hospitals, reconfiguration of the tertiary hospitals, enhanced information technology and the reforms in the country. Efficiency reforms are designed to achieve an average two-percentage point per annum reduction in the growth of health expenditure over the next five years. Given the predicted growth of the health system such an achievement would be substantial and ensure that the system retains financial sustainability.

Finally the implementation of this strategy will require considerably more resources, time, effort and commitment than those used in the preparation of this report. A designated unit within the Department of Health is proposed, over-sighted by an External Reference Group reporting directly to the Minister for Health and the Treasurer. A continued involvement of the community and the clinical workforce in the implementation of these recommendations is as critical as it has been in the preparation of this report.

Specific recommendations are as follows:
The Need for Change

Recommendation 1

The health system of Western Australia should:

- promote and protect the health of the people of Western Australia
- reduce inequities in health status
- provide safe, high quality, evidence-based health care
- promote a patient centred continuum of care
- ensure value for money
- be transparent and accountable
- optimise the public/private mix
- be financially sustainable, and
- have a sustainable workforce.

Population Health, Primary and Community Care

Recommendation 2

A major, coordinated, long-term health promotion program which has an integrated lifestyle approach to prevent cardiovascular disease, cancer and diabetes should be implemented. This program should include a particular focus on Aboriginal communities.

This approach should entail close cooperation with non-government organisations and groups such as the Western Australian Divisions of General Practice network.

Recommendation 3

In view of the high utilisation of hospital beds by people who suffer falls, there should be a targeted health promotion and prevention program in this area.

Recommendation 4

A summit of primary care practitioners should be held to identify and develop opportunities for improved interface between GPs and community health personnel in both the public and non-government sectors. The summit should be jointly sponsored by the Department of Health, the Australian Government Department of Health and Ageing, and the Western Australian Divisions of General Practice network.
Recommendation 5

The technology and infrastructure available through the Health Call Centre should be used to:

- support the interface between GPs, community-based services and hospital care, and
- enable better monitoring and support of patients with chronic and complex conditions.

Recommendation 6

Western Australia should support the national call centre framework, and work with the Australian Government to use Western Australia’s current call centre infrastructure as part of the national call centre network.

Recommendation 7

Hospital discharge summaries should be sent to the treating GP either by fax or email within 12 hours of a patient’s discharge. This should become standard practice in all hospitals.

As electronic patient record systems are developed across the public hospital system, there should be collaboration with GPs to develop standardised electronic discharge summaries.

Recommendation 8

Early discharge programs which organise and coordinate self-management, home care, and community health support programs, should be extended and involve the non-government and GP sectors.

Recommendation 9

The Department of Health and the Western Australian Divisions of General Practice network should work collaboratively with the Australian Government to develop and implement comprehensive GP services at, or adjacent to, hospital sites in the metropolitan area.

Recommendation 10

Programs such as transitional care, post-acute home care packages, intermittent care and the residential care line should be expanded to reduce unnecessary hospital and residential care for older people.

These programs should be implemented as soon as possible once hospitalised older people have been assessed as requiring these services.
Recommendation 11

The Department of Health should continue to develop, with the Australian Government, alternative funding options which enhance flexible packages of care for the older person.

Recommendation 12

Recognising the importance of mental health and the projected growth in mental illness, a whole of government approach to mental health and mental illness is needed to provide a framework for action by government departments, the non-government sector and the community.

Recommendation 13

A major focus in the treatment of mental health should be in prevention and early intervention programs and services.

Recommendation 14

Initiatives aimed at improving community-based mental health care and the integration of these services with the hospital, mental health hostel and supported accommodation sector should be pursued.

Recommendation 15

A primary care strategy for Aboriginal people should be developed and implemented according to the informed preferences of the communities themselves and in collaboration with the Office of Aboriginal and Torres Strait Islander Health in the Australian Government Department of Health and Ageing. This strategy should emphasise the continued roll out of the Primary Health Care Access Program.

Recommendation 16

Recognising the need for coordination to improve child and maternal health, an inter-agency working group should be established to drive a new approach.

Recommendation 17

Evidence-based clinical guidelines should be developed and implemented, focusing in the first instance on the needs of patients with chronic and complex conditions. This development should involve a multi-disciplinary clinical team, both hospital and community-based, and consumers.
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<td><strong>The Department of Health should progressively implement a system-wide clinical information system which incorporates the public and private hospital, community health, primary care and mental health sectors.</strong></td>
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<td>This system would include electronic patient records, unique medical record numbers, and provider identification.</td>
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### Improving Access to Hospital Services

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<td><strong>The vision for country health services as outlined in The Country Health Services Review is endorsed.</strong></td>
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<tr>
<td><strong>Multi purpose services and integrated district health services should continue to be developed in collaboration with local service providers and the Australian Government to provide more comprehensive, accessible and sustainable health services to small rural communities.</strong></td>
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<td><strong>The proposal to develop regional hospitals into regional resource centres in Geraldton, Broome, Port Hedland, Kalgoorlie, Bunbury and Albany to provide more locally accessible hospital care, where clinically appropriate, is endorsed.</strong></td>
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<td><strong>Opportunities for telehealth to be a component of the integrated care system should continue to be explored. Further development will rely on clinical leadership and the availability of appropriate bandwidth and other infrastructure.</strong></td>
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<td><strong>The planning and provision of hospital and community-based services in the metropolitan area should be based upon integrated models of care for both north and south of the river. This north/south model is reflected in the recommended changes to the Department of Health’s organisational structure (refer to Recommendation 69).</strong></td>
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Recommendation 24

Rockingham/Kwinana District, Joondalup Health Campus, Swan District and Armadale Kelmscott Memorial hospitals should be expanded over the next 10 years to approximately 300 bed general hospitals.

This development will improve access to hospital care in high-growth metropolitan areas and reduce demands on the tertiary hospitals for general care.

Recommendation 25

Conjoint clinical staff appointments within Area Health Services will enable appointments to both a tertiary and general hospital. Such appointments will allow for additional capacity and complexity in general hospitals.

Recommendation 26

Other metropolitan hospitals should be reconfigured in the following manner:

Osborne Park and Bentley hospitals - dedicated sub-acute, aged care, rehabilitation and mental health facilities.

Royal Perth Rehabilitation Hospital, Shenton Park Campus - to be closed, with the acute rehabilitation services moved to the Northern Tertiary Hospital site and the non-acute rehabilitation services moved to Osborne Park, Fremantle and Bentley hospitals.

Woodside Maternity Hospital - to be closed once an appropriate replacement facility south of the river has been identified.

Graylands Selby-Lemnos Hospital - continues current role as the major mental health facility.

Kalamunda Hospital - sub-acute, aged care, rehabilitation, day surgery and support for community-based palliative care.

Recommendation 27

A new major tertiary hospital should be constructed to service the south of Perth and incorporate the tertiary clinical services of Fremantle Hospital together with designated clinical groups from Royal Perth and Sir Charles Gairdner hospitals. The preferred location for this hospital is at Murdoch, and planning should commence immediately.
Recommendation 28

With the development of the new Southern Tertiary Hospital, Fremantle Hospital should be reconfigured to provide rehabilitation, mental health and aged care services and primary/community care.

Recommendation 29

There should be one tertiary hospital in the Northern Area Health Service. This should be located on one site.

While there are strong arguments for consolidation to either the Royal Perth Hospital or the Queen Elizabeth II Medical Centre site, the preference is for this hospital to be located on the Queen Elizabeth II Medical Centre site. A focused and time limited community and clinical consultative process should occur and a detailed business case developed by September 2004, before the final decision is made.

Recommendation 30

To assist with the development of the new Northern Tertiary Hospital, a single management and clinical staffing structure across Royal Perth and Sir Charles Gairdner hospitals should be implemented along with the formal establishment of the Northern and Southern Area Health Services.

Recommendation 31

King Edward Memorial and Princess Margaret hospitals should be rebuilt and co-located with an adult tertiary hospital to gain significant clinical benefits. King Edward Memorial Hospital should be relocated within the medium term, and Princess Margaret Hospital rebuilt as part of a second phase, together with the Telethon Institute for Child Health Research.

The Women’s and Children’s Health Service should remain a separate and independent Area Health Service, and the two relocated hospitals should retain their current names.

Recommendation 32

A Medi hotel facility should be established in conjunction with a tertiary hospital with an evaluation of its effectiveness undertaken.
Specific Clinical Services

Recommendation 33

The Northern Tertiary Hospital should be designated as the State centre for major adult trauma, and Princess Margaret Hospital as the State centre for major paediatric trauma.

Emergency departments should be expanded in each of the four general hospitals to accommodate emergency adult and paediatric care, excluding only major trauma.

Recommendation 34

Cardiothoracic services should operate as an integrated service, reporting to a single head of department with common management and audit protocols and integrated on-call rosters. This approach should be reviewed once the new Southern Tertiary Hospital is operational.

The statewide Paediatric Cardiac Surgical Unit at Princess Margaret Hospital should continue.

Recommendation 35

The decision by the Department of Health to move to a single neurosurgery service is endorsed.

Recommendation 36

One tertiary hospital should be designated as the main tertiary site for haemodialysis services and act as the centre of excellence for the State.

Recommendation 37

Home and community-based renal haemodialysis should be expanded across the State, and satellite haemodialysis services should be provided in metropolitan and country centres.

These services should be developed under the umbrella of a statewide plan for renal haemodialysis services, which particularly addresses poor access by Aboriginal communities in rural and remote areas.

Recommendation 38

Pending the establishment of a single renal transplant service at the Northern Tertiary Hospital, the two existing transplant units should be merged into a single integrated service that reports to a single head of department with common management and audit protocols, and integrated on-call rosters.
Recommendation 39

Transplantation services for liver, heart and lung should continue as at present.

Recommendation 40

The proposal to establish a State Centre for Cancer Care to integrate and coordinate delivery of cancer care across the State is fully endorsed.

Recommendation 41

Purpose built facilities to provide for inpatient, day and ambulatory palliative care hospice services should be incorporated into the four designated general hospitals. These services should form an integrated network with existing community-based palliative care services, including supporting end of life care in residential aged care facilities.

Recommendation 42

The recommendations of the 'Western Australian Statewide Obstetric Services Review' are supported and should be implemented as part of the overall implementation of this report. These recommendations include:

- recognising King Edward Memorial Hospital as a centre of excellence that provides a statewide service, including policy advice, clinical guidelines and service coordination, and
- providing gynaecological and obstetrics care services at the four designated general hospitals.

Recommendation 43

Both the Northern and Southern Tertiary Hospitals, and Princess Margaret Hospital will need to be reconfigured with increased adult and paediatric ventilated intensive care beds, as recommended in the 'Development of a Five to Ten Year Plan for Intensive Care Services in Western Australia' review.

Recommendation 44

The level of outpatient services in the State's tertiary hospitals should be progressively decreased, with enhanced roles for the non-tertiary hospitals and private practice.
Recommendation 45
Routine elective surgery such as orthopaedics should be accommodated in the four general hospitals with strong links to the associated tertiary hospital.

Creating an Efficient System

Recommendation 46
Strategies to reduce the average length of stay for targeted hospital patient groups should be implemented. These strategies should focus on the key areas of chronic disease management, rehabilitation, aged care, mental health, and short stay surgical and non-surgical acute services, and be fully implemented within five years.

Recommendation 47
Targets should be established for improving rates of day of surgery admission and day procedures.

Recommendation 48
The recommendations and approaches outlined in the pathology, pharmacy and food services reviews are endorsed.

Recommendation 49
A single pathology service should be created within the metropolitan health services by 2005. This new service, headed by a Chief Executive, should deliver efficiencies while enabling the planned development of specialist services.

A Western Australian system-wide drug formulary and drug bar coding should be developed and implemented.

Hospital food services should be reformed by:
- implementing system-wide standards and performance indicators, and
- introducing a computerised food service system.

Recommendation 50
A dedicated group within HealthSupply WA in the Department of Health should be established to drive procurement reform. This group should include clinician involvement, and focus on key areas of product rationalisation and consolidation of contracting, tendering, distribution and warehousing services.
Recommendation 51

Oncology and sterile manufacturing should be reviewed within 12 months to improve efficiency in these services by realising economies of scale in production and distribution.

Developing a Sustainable Workforce

Recommendation 52

Staff throughout the public health sector should be offered opportunities to contribute to the development of a State health strategic plan.

Recommendation 53

The Western Australian public health system should support and reward innovation and continuous improvement.

Mechanisms to achieve this should include development of a dedicated innovations website and the establishment of both an innovations fund and an innovation awards program.

Recommendation 54

The Department of Health should develop its workforce planning tools and capacity in collaboration with the universities, colleges of TAFE, the Department of Education and Training and the Australian Government.

Recommendation 55

A health workforce strategic plan should be developed which aligns with the State health strategic plan.

Recommendation 56

Discussions should occur between the Department of Health, major private hospitals, clinicians, medical colleges and universities to consider new approaches to under-graduate and post-graduate medical training. This will ensure greater involvement of the non-tertiary public hospitals, private hospitals, and the primary care sector.
Recommendation 57

A senior adviser on allied health should be appointed to the Department of Health initially to assist with the development of a comprehensive strategy addressing allied health workforce issues.

Recommendation 58

Increased numbers of Aboriginal health professionals should be employed in the Western Australian public health system. Employment targets should be set in area performance agreements to achieve this (refer Recommendation 73).

Recommendation 59

Western Australia should establish a Strategic Medical and Health Research Policy Council and associated Research Development Unit to allow for a more collaborative and strategic approach to medical research in this State.

Recommendation 60

Clinical leadership in the change process should be appropriately recognised and supported. Cross-institutional clinical collaboratives should facilitate this leadership role.

Organisational Structure

Recommendation 61

The concept of Area Health Services should be retained and further developed.

Attention needs to be given to:

- better role definition between Area Health Services and the Royal Street office
- improving links between metropolitan and country Areas
- reconfiguring the metropolitan Area Health Services to a north/south Area model, and
- enhancing the Area Health Services responsibilities for the health of the population within their catchment Area.
Recommendation 62

The Department of Health’s Royal Street office should be responsible for coordinating system-wide policy and planning, allocating resources, managing the system’s regulatory framework, monitoring and evaluating performance, and ensuring the State Government’s financial, social and environmental aims for health are met.

Recommendation 63

The service delivery components of population health, aged care, dental health, mental health and Aboriginal health programs, which are currently provided by the Royal Street office, should as far as possible be devolved to the Area Health Services. The associated budgets allocated to these programs should also be devolved.

Recommendation 64

The role of Area Chief Executives should be focused on improving and maintaining the health of the Areas population and the management of all health services.

Recommendation 65

To clarify its role as an advisory body to the Director General of Health, the State Health Management Team should be renamed the State Health Executive Forum.

Recommendation 66

Formal links between the country and metropolitan Area Health Services, which ensure regional patients have timely access to tertiary health care and up to date professional expertise, should be clearly described.

The performance agreements of the metropolitan Area Chief Executives should explicitly include these linkages.

Recommendation 67

Community advisory committees should be established in the metropolitan and South West Area Health Services to enable local communities to contribute to decisions about service priorities and plans.
Recommendation 68

The Health Consumers’ Council (WA) should be asked to provide regular feedback on health system performance and major health system issues.

Recommendation 69

The Area Health Service structure should be modified as soon as possible to include only three metropolitan Area Health Services:

- a North Metropolitan Area Health Service responsible for the health needs of the population north of the Swan River
- a South Metropolitan Area Health Service responsible for the health needs of the population south of the Swan River, and
- a Women’s and Children’s Health Service.

Recommendation 70

The Women’s and Children’s Health Service should be responsible for coordinating and integrating a statewide service for the health needs of the State’s women and children.

This will involve collaboration and consultation with a range of service providers in order to provide for the health needs of women and children from prevention and early intervention all the way through to tertiary care.

Recommendation 71

The Department of Health should work to improve joint Australian/State Government planning and service provision, integrated models of care and pooled funding. The newly established Bilateral Working Group should be used as a vehicle to achieve this.

Accountability, Resource Allocation and Governance

Recommendation 72

The Department of Health should adopt a funding model of annually allocating health resources to Area Health Services which is population and output based. The model should:

- be based on the principle of fairness
- recognise the needs of specific population groups
- be transparent, and
- quarantine funds for designated services/programs such as Aboriginal health, mental health and population health.

This funding model should be developed throughout 2004 and implemented in 2005/06.
Recommendation 73

Comprehensive annual performance agreements between the Director General of Health and Area Chief Executives which specify targets for designated service priorities and financial outcomes should be implemented in 2004/05.

The same discipline should operate internally within the Royal Street office.

Recommendation 74

A statewide Clinical Governance Framework which involves the following four pillars should be implemented within two years:

- clinical audit
- clinical risk
- consumer values, and
- professional development and management.

Recommendation 75

A culture of continuous performance improvement that focuses on regular performance monitoring and benchmarking should be promoted.

Recommendation 76

An improved outcome statement, output structure and key efficiency and effectiveness indicators should be developed and used in the 2005/06 State budget.

These indicators should address clinical outcomes, quality, safety, equity, financial performance and workforce utilisation.

Recommendation 77

The Department of Health should produce a quarterly report card which gives the community and other stakeholders easy access to key statistics on health system performance.

Recommendation 78

The public health system’s data and information should be:

- consolidated into a central repository, to be managed by the Royal Street office. A review of the system’s current data sources and management should be undertaken within 12 months to achieve this, and
- enhanced to improve integrity, consistency and reliability as a matter of priority.
Cost and Benefits of Reform

**Recommendation 79**

Reforms in the following areas should be implemented to reduce the growth in the health expenditure over the next five years:

- avoiding unnecessary hospital admission by providing better integrated primary care services, and community and home-based care, particularly for older people and for people with chronic and complex conditions
- providing health care in the most appropriate setting including building the capacity of Perth's general hospitals, and providing dedicated sub-acute facilities to redirect non-tertiary work away from the tertiary hospitals
- reducing the average length of stay in hospitals to national benchmark levels in areas where this has currently not been achieved
- achieving national benchmarks in relation to rates of day surgery procedures and rates of day surgery admissions
- reducing the cost structure of hospital services through increasing efficiencies via better management, and
- increasing operational efficiency by providing modern, well designed hospital facilities.

**Recommendation 80**

There should be an ongoing program of analysis to identify cost drivers within hospitals, to:

- support managers in analysing costs and delivering improved efficiency, and
- enable the Royal Street office to undertake system-wide analysis of major areas of expenditure and cost growth.

**Recommendation 81**

The Department of Health should pursue revenue raising initiatives, which will increase the State health system's per capita 'own-source' revenue to the national average by 2006/07. This will include setting revenue targets for Area Health Services.

**Recommendation 82**

The capital investment required to achieve an average two percentage points per annum reduction in recurrent expenditure growth should be planned and developed with robust business cases for investment.

In turn, the State health system must plan and manage its service provision and reform agenda to meet this aim.
Implementation and Change Management

Recommendation 83

A Health Reform Action Plan and Communication Strategy should be developed by the Director General of Health for consideration by the Minister for Health and Expenditure Review Committee by 31 May 2004.

Recommendation 84

An external reference group with an independent chair should be established that reports to both the Minister for Health and the Treasurer, and externally monitors and reports on implementation of the reform agenda. There should be a consumer representative on this group.

Recommendation 85

A Health Reform Implementation Coordination Unit that reports directly to the Director General of Health should be created to encourage and have overall carriage of the reform implementation of this report. Designated implementation teams should be formed around specific report recommendations.

Recommendation 86

For the clinical reform strategies the principal advisory group to the Health Reform Implementation Coordination Unit should be the Clinical Senate.
Introduction

In June 2002, the Premier of Western Australia commissioned a Functional Review Taskforce to review the effective delivery of State Government priorities. This Taskforce provided its recommendations to the Expenditure Review Committee of Cabinet in December 2002.

In relation to health, it was apparent to the Taskforce that the public health system was under significant pressure to balance increasing service demands and consumer expectations, and expensive advances in technology within its budget limits. The Taskforce subsequently recommended the establishment of a steering committee to oversee and drive reform within the Western Australian health system. Reflecting that recommendation, the State Government appointed the Health Reform Committee in March 2003.

Membership of the Health Reform Committee included:

Professor Michael Reid (Chair)  
The George Institute for International Health, University of Sydney.

Mr Mike Daube  
Director General, Department of Health, Western Australia.

Mr John Langoulant  
Under Treasurer, Department of Treasury and Finance.

Ms Rita Saffioti  
Director, Economic Policy Unit, Department of the Premier and Cabinet.

Mr Danny Cloghan  
Chief of Staff, Minister for Health (from June 2003).

The Health Reform Committee’s Terms of Reference were to:

- develop a plan for the Western Australian health system that outlines the future strategic direction for the sector in the immediate and medium term, and
- identify a range of short and long-term strategies aimed at improving the quality of health services and the management of costs within the system, to ensure sustainable growth in the health budget and help the system achieve its strategic vision (full Terms of Reference are available at Appendix A).

The Health Reform Committee reported to the Expenditure Review Committee of Cabinet, through the Minister for Health and the Treasurer. The Health Reform Committee was given 12 months to complete its work and present its final report to the Minister for Health and the Treasurer in March 2004.

A number of strategies were adopted to fully consult with the community and key stakeholders during the review, including:

- calls for public submissions (505 submissions were received with the list of those making submissions at Appendix B)

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Mr David Inglis, Principal Policy Adviser, Minister for Health was a Health Reform Committee member from late April 2003 to June 2003.
regular meetings and consultations with clinical groups and other key stakeholders throughout the reform process
the engagement of the Health Consumers' Council (WA) to conduct consultation with members of the community
the release of 12 public discussion papers in October 2003, and
the conduct and release of other reviews in areas of interest.

During the past year, the Committee was briefed on a number of aspects of the Department's day-to-day operations. This included the monitoring of the 2003 Winter Strategy and the 2003/04 budget performance. Clearly, however the Committee's role was neither to manage the health system nor to address the myriad of day-to-day issues and problems facing the health sector in the short term. Rather, the focus was on ensuring the sustainability of the health system from 2004/05 onwards.

The challenge was to develop a strategic direction and a package of initiatives that would assist the health sector to manage demand in the future within available resources. Thus, while the report maps a range of strategies across the entire health continuum (from population health to tertiary hospital care), more emphasis has been given to the organisation of the high cost hospital sector.

This report sets out a clear vision for the Western Australian health system for the next 10 years and provides a broad 'road map' to achieve this vision. It has not been possible to consider in detail every activity or unit within the State's public health system, but the broad directions for the future are apparent from this report.

The need for change and the objectives underpinning such reform are explained in Chapter 1.

Chapter 2 focuses on improvements to population health and community-based services. Such strategies are important not only to maintain and improve the health of the population, but also to enable people to avoid or minimise costly hospital care. The key principles include:

- giving priority to population health initiatives
- measuring the impact of initiatives given that benefits are often long term, and
- identifying and quarantining funding.

Improving access to hospital services is examined in Chapter 3. Particular attention in this chapter is given to reconfiguring hospital services over the longer term to:

- rectify historically poor planning decisions
- provide for growth of population in the northern and southern extremes of the metropolitan area
- better link metropolitan hospital services with the country regional hospitals
- accommodate the growth in demand for hospital care, and
- improve hospital care closer to where people live and thus reduce unnecessary tertiary care.

Reconfiguration of a selected number of clinical services is proposed in Chapter 4 to enable optimal quality of care, provide clinical sustainability given workforce shortages and, in some cases, achieve economies of scale.

Chapter 5 proposes strategies to achieve greater efficiencies in existing clinical and corporate services to constrain the predicted high growth in health expenditure.
Strategies to improve the morale, educational opportunities and leadership of the doctors, nurses and allied health workforce are examined in Chapter 6.

Chapters 7 and 8 deal with suggested organisational changes, accountability and governance arrangements, whilst Chapter 9 summarises how implementation of this report can provide a financially sustainable health system for Western Australia.

Finally, Chapter 10 recommends strategies for implementation of this report's findings.
Chapter 1
The Need for Change

Introduction

The need for change is very clear. While Western Australia has sustained a high quality, safe health system:

- the population is growing and ageing
- there are widening gaps in health status between the wealthy and the poor and between Aboriginal and non-Aboriginal people
- demands for emergency care and hospital beds are escalating
- there is substantial emphasis on tertiary hospital care to the detriment of secondary hospitals and population-based approaches
- workforce availability is a continuing issue
- the demographics of Perth’s population are increasingly focused to the north and south
- there will be significant increased requirements for mental health, aged care and rehabilitation services, and
- the capacity of the State Government to continue to fund the escalating costs of the health system without severely compromising other areas of government responsibility is increasingly limited.

It is clear that incremental change is no longer sufficient. A new vision is needed. This chapter elaborates this argument.

The Health System in Western Australia

Throughout Australia and the rest of the western world, public health systems are facing major challenges in attempting to sustain high quality services in an environment of increasing demand. The situation in Western Australia is no different.

As in other states and territories, Western Australia’s health system is a complex web of services, providers and funders. The Australian, State and local governments all play a part as does the private sector, the not-for-profit sector and individuals themselves. Detailed information on how the Western Australian health system is structured can be found in the booklet produced by the Health Consumers’ Council (WA) ‘Some things you might like to know about the WA Health System’.

Figure 1.1 below portrays a typical service delivery configuration and helps to show the large array of service providers and funders involved with health care.

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The Australian Government funds GPs and private specialists (through the Medicare Benefits Schedule), pharmaceuticals dispensed by community-based pharmacists (through the Pharmaceutical Benefits Scheme) and residential aged care, and shares funding with State Governments for the Home and Community Care Program. Local governments deliver a range of public health services (food and other environmental health services) and in some cases, particularly in rural areas, provide financial or in-kind assistance to GP services.

In 2002/03, the State Government provided $2.4 billion\(^2\), for the Western Australian health system enabling public health services to be provided through:

- Five tertiary hospitals:
  - Royal Perth Hospital (including Royal Perth Rehabilitation Hospital)
  - Sir Charles Gairdner Hospital
  - Fremantle Hospital (including Woodside Maternity Hospital)
  - King Edward Memorial Hospital, and
  - Princess Margaret Hospital.
- Eight public secondary hospitals in the metropolitan area:
  - Armadale Kelmscott Memorial Hospital
  - Bentley Hospital
  - Graylands Selby-Lemnos Hospital
  - Hawthorn Hospital
  - Kalamunda Hospital
  - Osborne Park Hospital
  - Rockingham/Kwinana District Hospital, and
  - Swan District Hospital.


\(^3\) This figure comprises the State Government contribution only.
Two privately-operated hospitals that provide services to public patients under contract from the Department of Health:
- Joondalup Health Campus, and
- Peel Health Campus.

Six regional resource centres/regional hospitals in rural and regional areas (Albany, Broome, Geraldton, Kalgoorlie, Port Hedland and Bunbury hospitals).

Twenty district health services/hospitals in rural and regional areas.

Forty-five small hospitals of which a proportion are multi purpose services.

More than 300 community-based and mental health facilities providing a variety of child and adolescent services, immunisation, school and community health services.

More than 250 non-government organisations and statutory authorities including St John Ambulance Association and the Royal Flying Doctor Service, that provide services under contract and grant arrangements.

The private sector plays a significant and complementary role in the provision of health services. There are 22 private hospitals in the metropolitan area and two outside; in Geraldton and Bunbury. There are 120 private licensed nursing homes throughout Western Australia with more than 6,000 beds.

The first contact many members of the community have with the health system is through their local GP. There are significant shortages of GPs practising in Western Australia. The Australian Institute of Health and Welfare states that in 2001, Western Australia had 103 GPs per 100,000 population compared to the national ratio of 112 per 100,000 population. Western Australia would require an additional 171 GPs even to meet national levels. A particular issue for Western Australia is the difficulty in attracting GPs to rural and remote areas of the State. GP shortages place additional strain on the State’s public health services.

In addition to utilising GP services many members of the community access private allied health services such as physiotherapy and speech pathology as well as private radiology and pathology services.

Population of Western Australia

In 2002, 1.9 million people were living in Western Australia, of whom 1.4 million were in the metropolitan area. This population is expected to grow to 2.4 million by the year 2016, a growth rate of 1.9% per annum which is above the national average of 1.1% per annum. This growth will be greater in the metropolitan area at 2.3% per annum.

Analysis of the proposed residential land releases by the Department of Planning and Infrastructure indicates that most growth will occur:

- in the north (Joondalup and further north with the release of 13,300 housing lots), and
- in the south (Rockingham and further south with the release of 17,200 housing lots).

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4 Information provided to Health Reform Committee by Health Care Division, Department of Health, 2004.
6 Ibid.
The areas of greatest population growth during the next 10 years, as shown in Figure 1.2, will be:

- the Peel and South West metropolitan region, including Rockingham and Kwinana (2.7% per annum)
- the Central region, including inner Perth, Subiaco and Cottesloe (2.5% per annum, off a low base, through urban infill), and
- the North metropolitan region (1.9% per annum).10,11

There is no doubt that the growing and ageing of Western Australia's population is a key factor to be considered in long-term planning for the health system.

Figure 1.2

Population projections for Perth metropolitan area

Source: 2001 ABS Census data; and 2011 Department of Planning and Infrastructure (2000) Population Projections

NB: These boundaries are from the Western Australian Planning Commission
Western Australia’s population is ageing\(^{12}\) similar to elsewhere in Australia. The proportion of the population aged 65 years and over is expected to grow from 11.2% in 2001 to 13.9% by 2016\(^{13}\).

**Figure 1.3**  
Population growth and demographic projection for Western Australia: 2001 – 2016  

![Graph showing population growth and demographic projection for Western Australia](Source: ABS 2001 Census and WA Planning Commission 2000)

Many diseases such as cardiovascular disease and cancer are more common with age, and older people use health services at a much higher rate than younger people. This is illustrated in Figure 1.4, which contrasts hospital beddays used by age categories. While comprising 11% of the population, those 65 years and over account for 29% of hospital admissions and 43% of total beddays\(^{14}\).

**Figure 1.4**  
Western Australian public hospital beddays: 2001/02  

![Graph showing Western Australian public hospital beddays](Source: Department of Health)

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\(^{14}\) Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.
Growth in Service Demand

As evident interstate and internationally, extraordinary pressures are being placed upon the State’s acute care services. In recent years, the community has expressed major concerns about issues such as ambulance bypass, crowded emergency departments and long wait times for elective surgery. At the same time, hospitals, in particular the metropolitan tertiary hospitals have had unsustainably high occupancy levels.

The system has made some significant changes to the provision of some services to accommodate this demand. For example, during the past decade there has been a major trend towards same day procedures, such as renal dialysis, and reduced length of stay for hospital inpatient services. Figure 1.5 shows that while same day procedures comprised 31.4% of total hospital procedures in 1993/94, this had increased to 47.1% by 2002/03\(^5\).

<table>
<thead>
<tr>
<th>Year</th>
<th>Multiday separations</th>
<th>Sameday separations</th>
</tr>
</thead>
<tbody>
<tr>
<td>240,000</td>
<td>200,000</td>
<td>160,000</td>
</tr>
</tbody>
</table>

Source: Department of Health

Reductions in patient length of stay in hospital, as demonstrated in Figure 1.6, over the past decade have counterbalanced the increasing number of admissions. However, it is evident, not just in Western Australia but throughout Australia, that potential for further major decreases in length of stay as a mechanism for hospital cost containment is limited\(^6\).

\(^5\) Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.

Given these significant trends in population growth, ageing, high occupancy and limited potential for reducing length of stay, the Department of Health modelled the future demand for hospital inpatient services. The methodology used in the model is described in detail on the Department of Health’s website at www.health.wa.gov.au.

The results from the modelling process are presented in Figure 1.7 and highlight significant issues for the public health system. The projected demand represents a ‘status quo’ projection in that it provides an indication of future demand levels, if current trends in activity and population were to continue with no changes in policy. It is emphasised that care is needed in interpreting the results as there are limitations in modelling of this nature. Such modelling does, however, provide useful guidance on the magnitude of likely activity growth and the components of that growth.
Demand for both inpatient and day/ambulatory services are forecast to grow substantially if current policies, practices and referral patterns continue. If no major reforms are implemented, total separations will continue to grow at an average of 4% per annum over the next 10 years. In spite of the 4% growth rate projected for separations, multiday beddays are projected to grow at only 2.6% per annum, reflecting an assumption that hospital throughput will be improved via further small reductions in length of stay and a continued move to sameday procedures. To state more bluntly, this increased demand would fill 1,400 multiday beds and 160 sameday beds by 2013/14.  

The expected dramatic growth in demand for hospital beddays, and hence hospital beds, is particularly evident in psychiatry where the additional demand will take up 315 beds by 2013/14, rehabilitation will take up 70 beds and maintenance, including care awaiting placement type patients and respite care, will take up 145 beds (see Figure 1.8). In addition the demand for hospital beddays, spanning 13 other specialty areas, will take up approximately 400 general medical beds.

![Figure 1.8](source: Department of Health)

With respect to sameday beds, Figure 1.9 shows as expected significant increase in demand for renal services. Projections indicate that if no reform initiatives are implemented, the additional demand will take up 30 sameday beds by 2013/14, reflecting the growing incidence of renal disease throughout western society. Renal services already dominate sameday services, currently accounting for 31% of all sameday procedures. The projected growth in this area is therefore of particular concern.

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17 Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.
18 This does not imply that additional beds are required as does not take into account the spare capacity in the system. Throughout this report, multiday beds are calculated at 90% occupancy for tertiary and 95% for all other hospitals.
19 Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.
20 Ibid.
21 Ibid.
23 Length of stay for sameday patients has been adjusted to account for varying rates of throughput. Sameday beds are calculated at 95% occupancy throughout this report.
24 Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.
One of the major pressures currently facing the public health system is the growing demand for emergency department services. Over the past five years, emergency department attendances at metropolitan public hospitals have grown by 11% from 242,000 in 1998/99 to 270,000 in 2002/03. This increasing demand on emergency departments reflects a number of factors including:

- **The impact of ageing of the population.** Older people often have greater health needs and tend to use emergency department services more. One in four Western Australians aged 65 years and over attended a metropolitan public emergency department during 2002/03.

- **Increasing incidence of mental illness.** Growing numbers of people with mental health problems are impacting on emergency departments as well as community and hospital inpatient services.

- **Shortages of GPs and other community-based services.** Western Australia has very limited after-hours GP services and after-hours access to diagnostic services such as pathology and radiology outside of hospital settings. This is in addition to GP shortages and reductions in the proportion of consultations that are bulk-billed.

- **Increasing incidence of chronic and complex conditions.** People with chronic and complex conditions such as asthma, heart disease, diabetes and cancer require regular medical attention. While these people will require a range of health services, not all of which are hospital based, due to the severity of their conditions they tend to have a high utilisation of emergency department services.

The evidence indicates that the Western Australian health system is experiencing a significant growth in demand for services and will continue to do so. Whilst there is a clear case to increase capacity overall, particular attention needs to be directed at people with chronic and complex diseases, and those requiring mental health, rehabilitation, renal and respiratory services. This has major implications for both population health and prevention programs (eg. 90% of type 2 diabetes is preventable) and hospital and community-based services.

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Technology and the Provision of Health Services

Rapid advances in technology over the past two decades have resulted in dramatic improvements in health care. Better medical imaging, keyhole surgery and improved drug therapies for diseases such as cancer and HIV are just a few examples of the technology driven changes in health care practice.

This has resulted both in increasing specialisation at one end of the spectrum and, at the other end, some procedures becoming safer, more routine and requiring less intensive hospitalisation.

The considerable benefits of technological growth have often been accompanied by substantial financial cost. The challenge for the future is to:

- carefully assess the cost/benefit of any new technology before it is introduced
- concentrate the use of high cost, highly specialised technology at selected sites to maximise workforce availability and skills development and make the most efficient use of equipment, and
- change work practices, clinical pathways and settings once the use of any particular technology becomes more routine.

The Role and Distribution of Health Services

Royal Perth Hospital was established in 1855 as Western Australia's first tertiary hospital. It was centrally located to enable fair access and to support the large inner metropolitan population. In 1958, Sir Charles Gairdner Hospital was established four kilometres from Royal Perth Hospital on the Queen Elizabeth II Medical Centre site with the intention of moving Royal Perth Hospital services to this new facility. The movement of these services never occurred.

Since then, Royal Perth and Sir Charles Gairdner hospitals have both grown considerably, developing relatively independent of each other. While opinions differ amongst clinicians, there is general agreement that there is some unnecessary duplication of services between the two sites and some unproductive rivalry exists. This situation and their close proximity has made system-wide planning difficult and has constrained the growth of Fremantle Hospital in the south.

While these two inner city metropolitan hospitals have grown considerably in size over the past 30 years, Perth's population has dispersed with major population growth in outer suburbs such as Joondalup and Rockingham. The Rockingham area is one of the biggest areas of population growth and yet still only maintains a small 67 multiday bed hospital with limited facilities.

Consequently, there is currently a mismatch between the distribution of hospital beds and the areas of major population growth. Thirty three per cent of all hospital beds in Western Australia are situated in the four inner metropolitan hospitals (Royal Perth, Sir Charles Gairdner, Princess Margaret and King Edward Memorial hospitals), only four kilometres apart. While there is a need to centralise major tertiary services due to their low volume and high cost, non-tertiary services, which make up the bulk of hospital services, should be provided closer to where people live.

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Less than one-fifth of hospital admissions in Perth tertiary hospitals are for tertiary or quaternary services. Good clinical practice results in all tertiary hospitals doing a significant proportion of secondary work. However because of the concentration of hospital beds in the large tertiary hospitals in Perth, the proportion of secondary work performed in these hospitals is higher than it needs to be. This suggests the expansion of some of the metropolitan secondary hospitals (to be known as general hospitals) and those in regional centres, and the enhancement of their role to provide safe, high quality, high volume clinical services should occur. This would enable some secondary services, currently centralised in the tertiary hospitals, to be moved out into the general hospitals. Benefits of improved costs and access coincide.

**Equity in Health and Health Care**

The preceding sections highlight the fact that the health system will need to change as a result of changing demographics, growing demand, the introduction of new technology and changes in patterns of health service delivery. However, there is another important reason for change. Evidence suggests the gap in health status between the healthiest and least healthy in Western Australia is substantial and widening.

There is no agreed, uniquely correct definition of equity in health care nor agreement as to just how important equity is, as a health care objective. The most common definitions are equal health, equal access (for equal need) and equal use (for equal need). Within these definitions, there are different interpretations (e.g. both access and need can be construed in different ways). Most countries seem to adopt a definition of equity of equal access for equal need.

In Western Australia, as with the nation as a whole, there are significant disparities and gaps in health status and access to health care between different population subgroups. Three such groups are particularly illustrative of the issues; Aboriginal people, those with mental health problems and people of lower socio-economic status. Enhancement of services to reduce inequalities are discussed further in this report.

Aboriginal health remains, as described by Phillip Ruddock a quarter of a century ago, ‘appalling’. What is more concerning is that this has been known for all the intervening years yet the gap between Aboriginal and non-Aboriginal health is worsening. For males in Western Australia the gap in life expectancy between Aboriginal and non-Aboriginal is 16.8 years and for females it is 15.7 years. There is also evidence that Aboriginal people have greater problems in making use of health services because of greater cultural barriers. This situation arises despite the fact that priority is claimed to have been given to Aboriginal health. It is clear that current policies are not working. Most fundamentally they are not working because:

- spending on Aboriginal health is both insufficient and not always effective
- existing services are not adequately culturally secure

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39 Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.
• there is insufficient recognition of the importance of dispossession and history more generally as social determinants of Aboriginal health, and
• there is most fundamentally a lack of listening to the voices of Aboriginal people in planning health services for them.

People of lower socio-economic status have worse health than others\textsuperscript{35}. In Western Australia, men aged 65 years and over of socio-economic disadvantage are 39\% more likely to suffer from respiratory disease and 37\% more likely to suffer from lung cancer than those of greater socio-economic advantage. Further, men aged 15-24 years of low socio-economic status are 103\% more likely to commit suicide than those of high socio-economic status\textsuperscript{36}. This has distinct links with mental health and Aboriginality, hence painting the picture that equity issues cannot be dealt with in isolation.

Equally disturbing, there is also evidence the gap in health status between the most and least disadvantaged has increased within Australia. For example, compared to those in the least disadvantaged group, the risk of cardiovascular disease mortality for males in the lowest socio-economic category was 65\% higher in 1985-87. By 1998-2000, this gap had widened to 110\% higher risk\textsuperscript{37}.

The inequities apparent in health status and access to health care deserve careful consideration and regular monitoring in the future. Appropriate strategies are needed to reduce such inequities within Western Australia.

**Financing the Health System**

In recent years, expenditure in the State health system has been growing on average by around 8.5\% per annum\textsuperscript{38}. This is significantly above the expense growth of around 5\% of all other general government agencies. It is also above the average annual growth in State revenue of 6.7\%, which in recent years has been underpinned by budget revenue measures and stronger than expected property market activity and higher oil prices\textsuperscript{39}. In 2003/04, projected total health expenditure of $3 billion\textsuperscript{40,41} in Western Australia accounts for around 24.6\% of total general government expenditure.

At the current growth rate, health expenditure would increase by around $2.8 billion over the next 10 years. This is consistent with national trends that indicate a $22 billion increase in national health expenditure over the next 10 years\textsuperscript{42}.

Growth in health expenditure of this order presents a particular challenge to the State Government, as it does to all governments nationally and internationally, to ensure health expenditure is well targeted and able to be funded in a sustainable manner.

\textsuperscript{37} Ibid.
\textsuperscript{39} Ibid.
\textsuperscript{41} This figure includes all funding contributions that comprise the total health budget.
To accommodate this level of growth in health expenditure, the State Government would be faced with the options of:

- significantly increasing its revenue base (e.g. increasing the tax burden on the community by raising taxes and charges), and/or
- reducing expenditure on other essential public services such as police, education and roads.

These options are clearly not sustainable in the long term. The only sustainable option is to constrain the growth in health costs to a level more aligned with the State’s capacity to fund these services by increasing the efficiency and effectiveness of health service delivery. The challenge is therefore to implement system-wide changes that will ensure the continuation into the future of sustainable, safe and high quality health service delivery at an affordable cost to government.

**The Approach in the Future**

Prior to considering the way forward, the Health Reform Committee believed it important to agree on a set of consistent, underlying objectives, to underpin both its work agenda and the final recommendations for change and reform. The objectives that were agreed upon are:

Promoting and protecting health
- To give priority to promoting and protecting the health of the people of Western Australia.

Reducing inequities
- To reduce inequities in health status and inequities in access to health care with particular focus on Aboriginal people, people with mental illness and the poor.

Provision of safe, high quality, evidence-based health care
- To provide safe, high quality health care, underpinned, by good evidence.
- To pursue a culture of continual improvement.
- To ensure appropriate care is provided in appropriate settings.

A patient centred continuum of care
- To ensure a patient focused, patient friendly health system.
- To enable a patient to move between the different levels of health care in a seamless and easy manner.

Value for money
- To ensure the use of health care resources is based on best value for money and allocated fairly.

Transparency and accountability
- To promote transparency and accountability to the community and to government.
- To promote a culture of ‘budgetary integrity’ as the defining objective in resource use.
- To put in place clear and robust accountability mechanisms, and ensure that these accountability mechanisms are adhered to.
Optimal public/private mix
- To ensure complementarity between the public sector and the non-government and private sectors.

Sustainability
- To ensure that funding and workforce requirements for the Western Australian health system are sustainable into the future.

It is evident from the analysis presented within this chapter that there is a plethora of issues and system pressures that need to be addressed in forming any long-term vision and plan for the Western Australia health system.

The picture is not all gloomy however as these issues and pressures are not unique to Western Australia. There is much evidence to suggest that significant opportunities exist, and that through a careful process of reform and improvement, the health system and community can achieve more sustainable and effective health care.

While the delivery of health care is an ongoing challenge for any government - with many competing priorities and continuing advances in technology and service provision - the strategic reforms recommended throughout the remainder of this report will provide fundamental underlying changes, which should position the system to be better able to manage the demand challenges that will arise into the future.

The overall thrust of the recommendations contained in the following chapters can be shown diagrammatically. Figure 1.10 shows that there is a need to work towards a system that:

- appears to the patient as a single unified health system, rather than comprising discrete, disconnected entities
- increasingly emphasises the importance of health promotion, early intervention and prevention programs, and
- provides care in the most appropriate setting, particularly through the development of both general and specialist secondary care hospitals.

Figure 1.10  Health service delivery – vision and strategic directions
Recommendation 1

**The health system of Western Australia should:**

- promote and protect the health of the people of Western Australia
- reduce inequities in health status
- provide safe, high quality, evidence-based health care
- promote a patient centred continuum of care
- ensure value for money
- be transparent and accountable
- optimise the public/private mix
- be financially sustainable, and
- have a sustainable workforce.
Chapter 2
Population Health, Primary and Community Care

The First Step in the Continuum for Care

For most people, the primary care sector is the first point of contact with the health care system. Individuals may see a GP, pharmacist, physiotherapist or community health nurse, among others. These health professionals provide both one-off acute services and ongoing care to ensure the maintenance and improvement of people’s health. In any one year, a significant percentage of the population do not require secondary or tertiary care services. Their only contact is with the primary care sector.

This sector is very fragmented and involves many players. For example, some of these players such as GPs and pharmacists, are individual practitioners operating in a competitive environment, and have their services subsidised by the Australian Government. Other services are provided by the State Government through hospital and community services, or by the non-government sector.

This diversity brings strength to the care and support system by balancing responsiveness with efficiency, but the weakness is that diversity makes coordination and integration very challenging. Different funding sources for these groups adds to the challenge of achieving cooperation.

Similarly, different funding sources, systems and priorities mean there is an even greater disconnection between primary care practitioners and the public hospital system.

This fragmentation not only reduces the quality of services for patients, but also often results in gaps between or duplication of services, and unnecessary hospitalisation. A strong primary care sector that is integrated within the broader health system can contribute significantly to reducing demand for inpatient care.

Poor coordination and communication across the primary care/acute care interface contributes to avoidable admissions, adverse events and poor patient outcomes. Care coordination is particularly important for those with chronic and complex conditions, those with mental illness, and the disadvantaged such as Aboriginal people and those from lower socio-economic groups.

The health system will therefore operate most efficiently, and provide more compassionate and flexible community-based services, when the components of the primary care sector:

- are focused on health promotion and early intervention
- support a patient-centred approach to health care
- have strong, clear links with each other and the broader health sector, and
- are focused on those with significant health needs, particularly older people, those with chronic and complex conditions and the most disadvantaged.

There is considerable support for and commitment to concepts of partnerships, collaboration and improved coordination in the primary/community care sector. However, efforts to date have been based on individuals or ‘pilot’ projects. It is critical that to achieve system-wide reform some key strategic approaches are implemented systematically. They will then deliver results in their own right and lay a solid foundation for continued reform.

To sufficiently recognise the importance of population health and primary care approaches, this chapter focuses on:

- an integrated and focused approach to health promotion
- general practice and community health interface (chronic and complex, maternal and child health)
- community sector (community health, GP and non-government organisations) interface with hospitals including:
  - standardised discharge planning summaries
  - early discharge programs involving the integration of the non-government sector and GPs, and
  - GP involvement in emergency demand management models
- reducing inappropriate hospital admissions for older people
- improved community-based mental health services
- coordinated and appropriate Aboriginal health services, and
- tools and techniques to support integration, including:
  - clinical guidelines, and
  - electronic medical records.

Health Promotion

Well targeted investment in early intervention and health promotion is a proven means of reducing the long-term burden of disease and demand pressures on the health system. The Australian Government report, “Returns on Investment in Public Health”, outlined the positive economic and health impact of a range of health promotion and early intervention strategies.

For example, the reduction in tobacco consumption by Western Australians over the past couple of decades is estimated to have saved at least 10,000 lives and around $50 million in hospital costs.

Heart disease, diabetes and falls are three of the biggest causes of hospitalisation in Western Australia. In 2002, there were 11,800 admissions for heart disease, 5,300 for diabetes and 12,100 for falls.

It is estimated that one in three people aged over 65 years and living in the community will fall each year. In Australia, as in a number of other countries, falls account for the largest proportion of all injury-related deaths and hospitalisation for older people. Around 10% of these falls result in serious injury such as a hip fracture or head injury. Of the remaining 90% of cases, some require attendance at an emergency department or a visit to a GP and some result in no physical injury. However, the fear of falling and the resultant reduction in physical activity may lead to further risks.

4 Ibid.
The cost of falls is difficult to quantify, and studies interstate and internationally are difficult to compare and results are inconsistent. However, the Injury Research Centre at the University of Western Australia, in collaboration with the Department of Health, has developed an injury cost database. Preliminary analysis suggests that the cost to the health system of accidental falls for people aged 65 years and over was $83 million in 2001/02. This cost includes GP consultations, pharmaceuticals and hospital treatment. Falls prevention programs can do much to reduce this cost and improve the quality of life for many older Western Australians.

The prevention of chronic diseases such as cardiovascular disease, cancers and type 2 diabetes should already be a high priority, and will be increasingly important in the future. These and other chronic diseases are currently responsible for around 70% of the total burden of illness and injury experienced by the Australian population. In addition, cardiovascular disease, cancer and injury account for around 70% of deaths.

The risk of these conditions and injuries increases with age, and without preventative interventions the number of expected admissions will increase in future years. Many chronic conditions share risk factors including obesity, inappropriate nutrition, insufficient physical activity and smoking.

Effective preventive action has the potential to improve health outcomes and quality of life, reduce inequalities in health, and minimise unnecessary demand for health care services therefore reducing costs. In fact, current evidence shows that around 90% of type 2 diabetes, more than half of all cancers and around 75% of cardiovascular disease can be prevented.

There is significant evidence within Australia and internationally that investment in health promotion, prevention and early intervention will reduce health costs and improve health status in the long term. Despite this, public health systems have traditionally ranked their priorities in favour of hospital and other intervention services, to the detriment of prevention, promotion and early intervention programs.

A greater focus on health promotion, prevention and early intervention will ultimately improve health outcomes in the future. The quarantining of a limited, but significant amount of funding is needed to support this shift in priorities.

Groups such as older people, those with chronic and complex conditions and those experiencing the greatest health inequality are likely to benefit the most from more targeted campaigns.

A comprehensive approach to chronic disease, prevention and management is also required to achieve optimal results. This will require an overarching, integrated framework for health promotion, prevention and early intervention campaigns. Within this framework discrete campaigns such as for tobacco, diet, physical activity and alcohol could still operate.

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3. Ibid.
The focus should thus shift to a coordinated lifestyle program, in accordance with the National Public Health Partnership, Chronic Disease Prevention Framework, focusing on key common risk factors. Such a targeted, coordinated lifestyle approach is fundamentally different to how health promotion, prevention and early intervention programs have been traditionally conceived and implemented.

**Recommendation 2**

*A major, coordinated, long-term health promotion program which has an integrated lifestyle approach to prevent cardiovascular disease, cancer and diabetes should be implemented. This program should include a particular focus on Aboriginal communities.*

*This approach should entail close cooperation with non-government organisations and groups such as the Western Australia Divisions of General Practice network.*

**Recommendation 3**

*In view of the high utilisation of hospital beds by people who suffer falls, there should be a targeted health and health promotion program in this area.*

**General Practice and Community Health**

Good health and well being in the early years of life provides a solid basis for maintaining good health throughout adulthood. Investment in child, maternal and adolescent health is therefore an important component of reducing the burden of disease in the future.

Recent surveys indicate that 86% of Western Australian children, as reported by parents, are in good health. Despite this, there are some areas of concern, including current indications that around 20% of children are overweight or obese. With obesity being a contributing factor to major diseases such as diabetes, heart disease and some cancers, this is particularly concerning.

Mental health problems in children and adolescents are also of concern with 17% of Western Australian children estimated to suffer from mental health problems. Evidence suggests that additional investment and effort in prenatal and antenatal services will deliver considerable long-term health improvements.

The number of premature births has risen considerably in recent years, placing significant immediate and long-term pressure on the health system. Pre-term babies often require expensive intensive care when first born and in many cases also have long-term health problems. Fifty per cent of extremely low birth weight babies now survive to be discharged from hospital. However, 15-20% of survivors have a major disability such as cerebral palsy, visual, auditory and/or intellectual impairment, and at least half the remainder have significant learning difficulties that result in ongoing costs to the health system and the broader community. Investment in good prenatal services such as lifestyle education can help reduce the risk of premature birth.

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17 Information provided to Health Reform Committee by Telethon Institute for Child Health Research, 2004.
At the other end of the spectrum, most older people living in the community rely on their GP for ongoing care and care coordination. For many of these people and their GPs, this is increasingly difficult as the demands on practitioner time increases, and GPs are unable to provide the service necessary.

The Australian Government has recognised this problem in recent years, and has introduced care coordination items into the Medicare Benefits Schedule and supported the introduction of practice nurses. More could be achieved if multi-disciplinary teams were established with State community health nurses and allied health staff working with local GPs. This would ensure that GPs are seen for what they are specifically skilled in and needed for, allowing much of the screening, ongoing monitoring advice and support to be provided by community health staff and practice nurses, potentially overseen by a nurse practitioner. Home care and home-based assessments, immunisations and patient education are some of the care items that could be taken over by nurses.

This model should have a significant impact on the ageing population. GPs and their support teams should have an increased presence in residential aged care facilities. This would reduce demand on emergency departments as this population cohort tends to comprise a large part of the ‘frequent flyers’ in the hospital system. This term describes people who have a need to use the public system frequently because of chronic and complex conditions.

**Primary Health Partnerships**

In conjunction with General Practice Divisions of Western Australia and the Australian Government Department of Health and Ageing, the Department of Health has developed 10 regional Primary Health Partnerships between Population Health Units (in both hospitals and the community) and the Western Australian Divisions of General Practice network. The purpose of these partnerships is to improve collaboration between GPs and other primary health care providers, particularly in relation to planning, information sharing and needs assessment for patients.

**Recommendation 4**

* A summit of primary care practitioners should be held to identify and develop opportunities for improved interface between GPs and community health personnel in both the public and non-government sectors. The summit should be jointly sponsored by the Department of Health, the Australian Government Department of Health and Ageing, and the Western Australian Divisions of General Practice network.*
Community Sector Interface with the Hospital System

Health Call Centre

Since it was launched in 1999, the Western Australian Health Call Centre has achieved strong community support, receiving more than 200,000 calls per annum\(^{19}\). It has demonstrated its ability to play a role in assessing client needs, determining appropriate pathways, providing case management support and coordinating services.

Operating 24-hours-a-day, 7-days-a-week and staffed by experienced registered nurses and other health professionals, the Health Call Centre is well placed to provide a pivotal role in supporting primary care services and managing patients in the community.

Although GPs have a significant role to play in determining and coordinating care outside of hospitals, they do not have the resources or time to provide the level of support needed by some patients.

Most people receive direct medical care, including regular visits to health services less than 10 times a year and are left to manage the rest of the time on their own\(^{20}\). Developing a strong proactive support infrastructure using Health Call Centre services integrated with other community services, home telemetry technology and self-monitoring equipment, will help fill these gaps.

For people recovering from a serious illness or with chronic health problems, an integrated approach will improve compliance with treatment and keep people much happier at home for longer. This will not only aid care and recovery, but also save money from reduced re-admissions, emergency department presentations or hospitalisation.

Through a tripartite agreement between the Health Call Centre, the patient and the GP, the Health Call Centre could be extended to provide:

- a support service for people who are getting older and may need increased contact to monitor their health or need community support services to remain at home
- monitoring of 'at risk' patients either recovering from illness or with chronic diseases to detect if their status has changed or deteriorated so help can be initiated at an early stage before complications arise, and
- monitoring of patients discharged from hospital or undergoing treatment to ensure their recovery is proceeding as expected. This would allow early adjustment to treatment plans in consultation with the medical practitioner.

The 24-hour coverage and easy access to Health Call Centre services will provide patients with reassurance and confidence in the health care they are receiving, and will improve the continuity and consistency of care provided to at risk patients or those needing ongoing care and support.

The Health Call Centre, through programs such as HealthDirect\(^{21}\) has emerged as a central point of contact for members of the community looking for health advice and information, particularly after hours or in locations where there are few health services available.

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\(^{21}\) HealthDirect is a free 24 hour, 7-days a-week health advice line.
Although some links and relationships with primary care services have already been formed, there are opportunities to develop stronger direct links with GPs and other community-based providers. HealthDirect currently refers and provides patients with information about available services.

Establishing a mechanism where the Health Call Centre can make direct appointments to a GP practice or after-hours clinic at the point of contact will enhance these relationships. It will also strengthen the Health Call Centre’s role in managing demand across the system by directing patients to the most appropriate level of care. Any developments in this area will require careful planning to ensure they do not adversely impact on GP workloads particularly in areas of GP shortage.

**Recommendation 5**

The technology and infrastructure available through the Health Call Centre should be used to:

- support the interface between GPs, community-based services and hospital care, and
- enable better monitoring and support of patients with chronic and complex conditions.

The Australian Government and State/Territory officials involved in call centre enhancement have proposed the development of a national health call centre framework aimed at providing national call centre coverage.

Under the framework, a consistent approach to triage and medical advice would be introduced nationwide, as well as national governance arrangements and the opportunity to realise economic efficiencies from aggregating some call centre services.

The national framework would provide call centre bases around the country that cater for specific geographical regions. For example, a call centre could be located in Western Australia and service this State as well as South Australia and the Northern Territory.

Western Australia is well placed to provide a call centre service under the proposed national framework. The State’s call centre infrastructure and services are well established and have provided efficient, uninterrupted health advice over the past four years.

**Recommendation 6**

Western Australia should support the national call centre framework, and work with the Australian Government to use Western Australia’s current call centre infrastructure as part of the national call centre network.

**Standardised Discharge Summaries for GPs**

For those patients who attend a hospital either by presenting at an emergency department or being admitted for a day only or multiday procedure, it is important that their GP receives a discharge summary. Timely and accurate discharge summaries enable better care coordination and lessen the likelihood of hospital re-admission.
Western Australian tertiary hospitals currently aim to send discharge information to GPs. However, the provision of these summaries is patchy across the system with no comprehensive standard procedure in place. There is evidence that GPs are dissatisfied with current hospital discharge summaries\(^\text{22}\).

There are three key elements in improving the discharge summary regime:

- The summaries must be provided in a timely fashion to treating GPs as patients often experience most problems in the first 24 hours after discharge.
- The GP must be confident of receiving a discharge summary for all patients. The provision of summaries should be mandatory and not dependent on the willingness of the individual hospital, clinician or unit to provide it.
- Discharge summaries need to be standardised to ensure they are complete but concise.

The first step in improving these elements is to ensure that summaries are provided as standard practice and within 12 hours of discharge to any treating GP who can receive them by fax or electronic means.

Where discharge summaries are to be sent electronically, appropriate security protocols to protect patient confidentiality will need to be in place.

To develop a standardised discharge procedure, collaboration will be required with key stakeholders, including discharge staff in hospitals and local Divisions of General Practice, to determine what information should be provided for different categories of patients. The State and Australian governments should also coordinate their information requirements and consider the implications for information technology systems for GPs. Confidentiality will be an important factor in this exchange of information.

**Recommendation 7**

*Hospital discharge summaries should be sent to the treating GP either by fax or email within 12 hours of a patient's discharge. This should become standard practice in all hospitals.*

*As electronic patient record systems are developed across the public hospital system, there should be collaboration with GPs to develop standardised electronic discharge summaries.*

**Early Discharge Programs Involving the Integration of the Non-Government Sector and GPs**

The Western Australian public health sector interacts with more than 250 non-government organisations that provide health and health-related services\(^\text{23}\). It is therefore essential that a solid interface between these organisations and the public health system is established and maintained.

Initiatives are being implemented in many areas to help enhance the integration between some of these non-government and hospital services. These approaches need a more systematic development. For example, Fremantle Hospital currently operates an information database that links with Silver Chain services in that region. This enables home-support services to be well organised, targeted to identified needs, and complementary to hospital services provided to the patient. It also provides all health workers involved in the patient’s care with comprehensive information on the current package of health services received by the patient.

\(^{22}\) Preen D., and Bailey B. *Quality links clinical trial smoother transition from hospital to home.* Perth: General Practice Divisions of Western Australia Ltd, 2002.

\(^{23}\) Information provided to Health Reform Committee by Corporate and Finance Division, Department of Health, 2003.
Recommendation 8

*Early discharge programs which organise and coordinate self-management, home care, and community health support programs, should be extended and involve the non-government and GP sectors.*

**A Role for GPs in Emergency Demand Management**

One of the most immediate issues facing the system is pressure on emergency departments. Rising attendances at emergency departments combined with increased admissions to hospital from emergency departments have resulted in emergency department congestion, ambulance diversion and excessive time delays in treatment for non-urgent patients.

In Perth suburban hospitals, level 4 and 5 triage categories (ie. those who should be seen within one hour and two hours respectively) accounted for more than 50% of all presentations\(^{24}\).

The problem has been exacerbated by the shortfall in GP hours of service provision (both related to the number of GPs as well as the number of hours worked in general practice for each GP), the decline in bulk-billing and after hours service provision, and, in some cases, closure of GPs’ books to new patients. It is important to note that the reduction in bulk-billing and after hours service provision is directly related to the unsustainability of these services under the current Medicare arrangements. That is, bulk-billing results in too little income to sustain the general practice workforce during work hours and even less income after hours.

There is evidence that GPs can and do manage patients with conditions equivalent to some of the less urgent patients seen in emergency departments and that opportunities may exist to substitute care between casualty services provided by GPs and those provided in emergency departments\(^{25}\).

As part of a broader strategy to address pressures on emergency departments, a number of States are developing hospital based GP clinics either for after hours presentations and/or for daytime presentations. In a number of instances, these clinics have been based in or near the hospital emergency department. In Western Australia, the development of such models would need to examine the most appropriate hours of service required, in consultation with local GPs, the community, the hospitals and other stakeholders. Also, good communication between any such service and the patient’s regular GP needs to occur to ensure continuity of care and to reduce duplication of care. Clearly, developmental work in this area would also need to clarify State and Australian Governments roles and responsibilities.

A submission provided to the Health Reform Committee by the General Practice Divisions of Western Australia\(^{26}\), indicated their commitment to working with the Department of Health to find innovative ways to involve GPs as part of an overall approach to dealing with system-wide demands, including reducing hospital demand.

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\(^{24}\) Topas database, Department of Health, 2004.


\(^{26}\) General Practice Divisions of Western Australia submission to Health Reform Committee.
Recommendation 9

The Department of Health and the Western Australian Divisions of General Practice network should work collaboratively with the Australian Government to develop and implement comprehensive GP services at, or adjacent to, hospital sites in the metropolitan area.

Reducing Inappropriate Hospital Admissions for Older People

The Western Australian population is ageing with 11.2% of people currently aged 65 years and over. This proportion will increase to 13.9% by 2016. The older population itself is also ageing, with an increasing proportion of the 65 plus age group being aged 75 years and over.

Use of health services increases significantly with age, especially for older people with chronic illness and/or complex care needs. Seventy-two per cent of all public hospital beddays are used by 22% of the population and one in three of these frequent users are aged 75 years and over.

The health care needs of the older person impact significantly on the acute hospital sector, and on other health services such as GPs, community-based home care and allied health services. A continuum of service provision across the community, acute hospital care and aged care sectors is therefore vital to delivering high quality health services to older people.

Care Awaiting Placement and Intermittent Care

The Department of Health incurs significant costs associated with older people who should be in residential care yet are remaining in acute hospital beds. During 2002/03, around 4% of all public hospital beds were occupied by Care Awaiting Placement patients. This costs the public hospital system approximately $32 million per annum.

A number of initiatives aimed at reducing unnecessary residential and hospital care for the older person need to be further pursued, including:

- the provision of additional Care Awaiting Placement beds aimed at reducing the use of acute hospital beds as residential aged care beds
- the introduction of transitional care that provides finite residential care with a rehabilitation focus. The main aim is to reduce length of stay in the acute sector, and reduce demand for long-term care by increasing patient functional and cognitive ability and independence
- elderly post-acute services and home care packages. These provide therapy and home-based services to allow older people to return home after an acute illness earlier than would otherwise be possible, and are aimed at reducing length of stay in hospital and preventing re-admission, and
- intermittent care that provides short-term interventions for older people who require additional support to remain in, or return to, their own homes. It targets older people with chronic disease and/or complex needs, and focuses on rehabilitation and home support.

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31 Information provided to Health Reform Committee by Health Care Division, Department of Health, 2004.
These programs generate significant savings to the public hospital system. In 2002/03, the estimated savings were approximately $28 million with this figure to increase to approximately $37 million in 2003/04\textsuperscript{32}. More of these programs are needed.

**Pathways Home Program**

The Pathways Home program is aimed at ensuring that appropriate care and services are available to support the transition of patients from the hospital to their home.

The centrepiece of this joint State/Australian Government proposal is the construction, in both the southern and northern metropolitan regions, of dedicated sub-acute care facilities with a strong focus on rehabilitation and step-down services for older Western Australians.

The program focuses on the special needs of older Western Australians who require care as a result of chronic disease, co-morbidities, or mental health problems, and who would benefit from the provision of services through community-based rehabilitation.

**Residential Care Line**

The Residential Care Line is a recent initiative that provides 24-hours-a-day, 7-days-a-week advice/support to registered nurses in residential aged care facilities to enable them to better manage the medical condition of patients, thus reducing the risk of hospital admission.

As well as using registered nurses to provide telephone advice, this initiative can trigger referrals to other appropriate services eg. Hospital in the Home, thus reducing transfers to an emergency department.

The Residential Care Line was trialled in five metropolitan nursing homes but will be rolled out to include all aged care facilities in the metropolitan area. The trial data indicates that up to 2,000 emergency presentations will be avoided each year if comprehensive metropolitan coverage occurs\textsuperscript{33}.

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**Recommendation 10**

*Programs such as transitional care, post-acute home care packages, intermittent care and the residential care line should be expanded to reduce unnecessary hospital and residential care for older people.*

*These programs should be implemented as soon as possible once hospitalised older people have been assessed as requiring these services.*

**Recommendation 11**

*The Department of Health should continue to develop, with the Australian Government, alternative funding options which enhance flexible packages of care for the older person.*

\textsuperscript{32} Information provided to Health Reform Committee by Health Care Division, Department of Health, 2004.

\textsuperscript{33} Ibid.
Mental Health

Recent information indicates that almost one in five (19%) Western Australians have a mental disorder, with this expected to grow in the future34. Associated with this growing burden of disease and the resulting reduced quality of life for people with a mental illness is a growing cost to the community through direct care and support services and reduced productivity. For the health sector the impact of mental illness is very significant and currently it accounts for around 20% of the total health costs in Australia35.

Mental illness is an issue which extends well beyond the health sector. It impacts on most areas including education, welfare, justice and the business sector. People with a mental illness may find difficulty learning at school, university or TAFE. They may find it difficult to participate in the workforce and to interact with their family and others in the community.

With the anticipated growth in mental illness over the next decade, it will become even more important to have a coordinated, multi-sectoral approach which should involve government, the private sector, the community, carers and people with mental illness.

For the health sector, the response required spans the continuum of care from health promotion and prevention through to tertiary and forensic inpatient care. This report cannot describe in detail the health service approach required but it highlights the need for increased emphasis on mental health promotion and early intervention strategies and community mental health services while recognising the need for increased inpatient facilities over the next decade.

The 1992 National Mental Health Strategy aimed to promote the mental health of the Australian community and to prevent the development of mental disorders where possible. In view of this, the 'National Action Plan' was endorsed in July 1998 and provided a strategic agenda and plan for mental health promotion and illness prevention36.

Despite this, there has been limited investment in mental health promotion, illness prevention and early intervention strategies that would reduce the disease burden. Only 1.3% of the total mental health budget in Western Australia was directed to these strategies in 2000/0137.

An important feature of the National Mental Health Strategy, as well as the soon to be released Western Australian’s State Mental Health Strategic Plan 2004-2008, is the move towards integrated care, and the careful redistribution of resources from the provision of inpatient mental health care to services that are established to provide care in a community setting.

Under this strategy, there has been an increased emphasis on community-based care, decreased reliance on stand-alone psychiatric hospitals and mainstreaming of acute psychiatric beds into general hospitals. While Western Australia has achieved some progress in this area, there are still substantial reforms to be progressed.

'The Western Australian Mental Health Promotion and Illness Prevention Policy' released in 2002 outlines a number of key areas for the State, including:

- reducing risk in children with a mentally ill parent
- early intervention in psychosis
- facilitating community access to information and referral
- specific focusing on the prevention of and early intervention in depression, and
- integrating mental health into primary, secondary and tertiary education.

These priorities focus on prevention, early intervention and community-based care. The aim is to reduce the incidence of mental illness in the future, and where possible, manage mental illness in the community.

To achieve better integration of community mental health services, key strategies should be pursued, including:

- enhancing access to acute and intensive community mental health services for children and adults. These services provide emergency assessment, ongoing treatment, rehabilitation services and help in liaising with GPs
- improved access to programs for Aboriginal people and their communities, particularly in rural and remote areas, that support the 'National Framework for Aboriginal and Torres Strait Islander Emotional and Social Wellbeing'38
- the development of community-based intermediate care options in all metropolitan mental health services. These should be clinically staffed with the aim of stabilising people so that they can return home. This would minimise re-admissions to acute services and reduce the high use of mental health inpatient services
- increasing the number and range of community-based mental health rehabilitation services that are a vital component to recovery. This includes programs such as:
  - assertive case management
  - pre-vocational skills development
  - social and recreation opportunities
  - advocacy and community development to increase access to mainstream services, and
  - a range of housing options and support, and
- creation of a community-based consultation/liaison program for people with dual disabilities (mental illness and acquired brain injury or intellectual disability) who have severe behavioural problems and would benefit from a joint approach to care involving specialist mental health interventions.

Initiatives in the 'Mental Health Promotion and Illness Prevention Policy' outline the benefits of statewide coordination. Community, cross-government and non-government partnerships and relationships that will enhance mental health promotion and illness prevention should be fostered, with an emphasis on coordination of service delivery and policy implementation.

Recommendation 12

Recognising the importance of mental health and the projected growth in mental illness, a whole of government approach to mental health and mental illness is needed to provide a framework for action by government departments, the non-government sector and the community.

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Recommendation 13

A major focus in the treatment of mental health should be in prevention and early intervention programs and services.

Recommendation 14

Initiatives aimed at improving community-based mental health care and the integration of these services with the hospital, mental health hostel and supported accommodation sector should be pursued.

Aboriginal Health

Improving Aboriginal health is one of the priorities nationally and for the Department of Health and the State Government. Yet too little has been achieved when so much is achievable given good will, resources and a capacity to listen to the Aboriginal people. The existing inequities in health status and in access to health care are untenable.

A strong primary health care approach has been recognised both in Australia and internationally as a cornerstone for improving Aboriginal health. Primary health care should be a vehicle for addressing the range of complex, chronic diseases evident in Aboriginal communities.

"Chronic disease is of particular importance in Aboriginal communities across Western Australia given the increasing prevalence and patterns of disease. Co-morbidity is the norm rather than the exception: up to 25% of the adult Aboriginal population have diabetes, usually co-existent with one or more of nephropathy, hypertension and dyslipidaemia.

As indicated previously in this chapter, lifestyle is a risk factor for many chronic diseases. Many lifestyle factors, such as unsafe alcohol use and tobacco smoking, are more common among Aboriginal people than non-Aboriginal people. Evidence suggests that elimination of these lifestyle risk factors could have a profound impact on the average life expectancy for Aboriginal people.

In addition, child and maternal health is significantly poorer for Aboriginals than for non-Aboriginals with infant mortality rates three times higher for Aboriginals than for non-Aboriginals, and the incidence of neonatal deaths being more than twice as high in Aboriginal communities. A focus on maternal health from conception onwards is vital to help improve the outcomes for Aboriginal infants and therefore improve the long-term health status of Aboriginal communities.

40 Kimberley Aboriginal Medical Service submission to Health Reform Committee.
41 Ibid.
44 Telethon Institute for Child Health Research submission to Health Reform Committee.
45 Ibid.
For most Aboriginal people, particularly those living in rural and remote areas, primary health care is provided through Aboriginal Medical Services or through State public hospitals. Where the State Government has provided these services, it has done so in the absence of GPs and other private or community-based providers. State hospitals are geared to provide acute and generally one-off episodes of care. They do not have the systems (eg. follow up, ongoing monitoring, protocols for opportunistic screening, active recall) to deliver comprehensive primary health care.

The Australian Government’s Primary Health Care Access Program (PHCAP), established in Western Australia through an Australian/State Government memorandum of understanding, is designed to address these issues and has the following objectives:

- increasing the availability of appropriate primary health care services where they are currently inadequate
- reforming the local health system to better meet the needs of Aboriginal people, and
- empowering individuals and communities to take greater responsibility for their own health.

The establishment of PHCAP sites requires joint planning and partnerships between Aboriginal communities, local health care providers, the State Government and the Australian Government Department of Health and Ageing. There are currently two sites in Western Australia, both in the Kimberley region, being implemented under PHCAP. While PHCAP offers a significant opportunity to address the health needs of Aboriginal people, it needs significant commitment to joint planning and to reassessing the way the Department of Health delivers services in these communities.

Successful roll out of PHCAP to the two pilot sites and to other communities will require:

- a commitment from the Department of Health to joint (regional and local) planning collaboratives
- working with individual communities before the roll out to undertake any necessary community capacity building, and
- decisions about the level and nature of State participation (eg. should the existing medical officers who currently provide booked outpatient GP services be included in the pool).

**Recommendation 15**

A primary care strategy for Aboriginal people should be developed and implemented according to the informed preferences of the communities themselves and in collaboration with the Office of Aboriginal and Torres Strait Islander Health in the Australian Government Department of Health and Ageing. This strategy should emphasise the continued roll out of the Primary Health Care Access Program.

A history of dispossession of land and culture has resulted in the following which have in turn lead to the poor health status of Aboriginal people:

- lower household weekly income per capita
- lower participation rates in compulsory schooling, and post-school education and training
- higher rates of imprisonment, and
- barriers to access mainstream health services.
The development of a proposed State strategy to provide a whole of government blueprint that effectively integrates programs, services and funding arrangements, in partnership with Aboriginal people\(^46\), is clearly an important step towards addressing the social determinants of health for Aboriginal people.

However, many of the barriers to access health services are within the purview of the health system to address.

Barriers to access mainstream health services may result from language difficulties, transport inadequacies, lack of understanding of Aboriginal culture or racism. Many Aboriginal people find that Aboriginal community controlled organisations have a greater understanding of their culture, circumstances and complex health needs, and are therefore more responsive\(^47\).

Aboriginal Community Controlled Health Services are a very important component of a health system for Aboriginal people. If there are concerns about the accountability of such services (and there has been some discussion about this in Western Australia in recent times) then these concerns must be addressed so that all parties can move forward positively and confidently.

The Western Australian Department of Indigenous Affairs is undertaking development of an Indigenous Governance Strategy for Western Australia in recognition of the "importance of good governance as a platform to address the social disadvantage faced by most Indigenous communities"\(^48\). This work also recognises the burden placed on Aboriginal communities to manage a highly complex financial and legal framework, often without any support mechanisms or without sufficient access to specialist expertise.

The Department of Health and Western Australian Aboriginal community controlled health organisations should participate in this initiative with a view to altering the governance and accountability arrangements for funded Community Controlled Health Organisations if required, and to providing the necessary resources and training to meet governance requirements.

The Next Generation

The pathways to many diseases later in life appear to commence either during pregnancy or in early childhood. There is increasing evidence that environmental factors during pregnancies as well as in early childhood can influence the occurrence of physical problems. These range from the obvious such as birth defects, cerebral palsy and neural tube defects to diseases and conditions appearing much later in life such as type 2 diabetes, cardiovascular disease, and mental illness\(^49\).

Child and maternal health is of particular concern in Aboriginal communities, with infant mortality rates for Aboriginal children three times higher than for non-Aboriginal children\(^50\). Incidences of defects such as neural tube defects are also twice as prevalent in Aboriginal children than in non-Aboriginal children\(^51\).

Factors such as limited access to health services, poor education and lower socio-economic status for Aboriginal children hinder improvement in related child and maternal health.


\(^{49}\) Information provided to Health Reform Committee by Telethon Institute for Child Health Research, 2004.


\(^{51}\) Information provided to Health Reform Committee by Telethon Institute for Child Health Research, 2004.
The development of behaviours that influence a range of diseases and problems are laid down in the early years of life. These include:

- nutritional and exercise patterns resulting in unprecedented levels of obesity throughout life. This increases the risk of many diseases such as type 2 diabetes and heart disease
- substance abuse, and
- antisocial or psychopathic behaviours that lead to mental illness, poor education outcomes, suicide, unemployment and criminal behaviour.

Positive behaviours such as avoiding these risk factors and participating in a healthy lifestyle are more easily learnt and adhered to if taught early in life.

Investment in maternal and child health can prevent, or minimise the impact of many diseases. A focus is therefore needed on the provision of maternal and child health services, education and the promotion of healthy lifestyles.

While the health system plays a vital role in the promotion of child and maternal health, it cannot tackle this in isolation. The health and wellbeing of children as well as pregnant women depends on a range of factors including education, social support and socio-economic status.

State Government agencies, together with local governments need to work together to improve maternal and child health, with a comprehensive lifestyle strategy which addresses major environmental factors.

Such collaboration was a key recommendation of the Gordon Inquiry\(^2\), resulting in the establishment of an inter-agency Senior Officials Group. This group was charged with working together to implement the recommendations of the Inquiry and to reduce domestic violence and child abuse, particularly in Aboriginal communities.

A similar collaborative approach to improving child and maternal health is needed.

**Recommendation 16**

*Recognising the need for coordination to improve child and maternal health, an inter-agency working group should be established to drive a new approach.*

**Tools And Techniques To Support Integration**

**Evidence-based Clinical Guidelines**

A major part of any clinical governance system is the development and implementation of evidence-based clinical guidelines.

Clinical guidelines can play a major role in improving the quality and efficiency of patient care, and in bringing consistency in clinical practices across different sites.

Specifically, clinical guidelines involve the 're-engineering' of the clinical and administrative processes associated with admitting, caring and discharging of patients. By examining process flows and reducing duplication and errors, the 'pathway' for a patient is optimised and greater efficiency and quality of care is achieved.

The Western Australian health system has been active in implementing clinical guidelines in its hospitals with numerous different guidelines currently in place. However, there has been less attention paid to clinical guidelines before patients reach a hospital and after they are discharged.

The need for clinical guidelines outside hospital settings is most apparent for those patients who are 'frequent flyers'. The extension of clinical guidelines to community-based settings will, if uniformly adopted, contribute to reductions of unnecessary or inappropriate hospital admission and re-admission.

These clinical guidelines should be publicly available on the Department of Health's website to allow patients and clinicians to access the information.

**Recommendation 17**

*Evidence-based clinical guidelines should be developed and implemented, focusing in the first instance on the needs of patients with chronic and complex conditions. This development should involve a multi-disciplinary clinical team, both hospital and community-based, and consumers.*

**Electronic Medical Records**

Medical records in the State hospital system are typically held as hard copies, a practice that hampers the retrieval and flow of information. Medical records held by other providers such as GPs can be either paper based or electronic, but there is currently no system that enables an easy exchange of relevant information between the community and hospital systems.

Improved information flow between the hospital system and other service providers such as GPs and community-based services improves the efficiency, quality and safety of health services as it reduces duplication of diagnostic testing as well as adverse events.

While a complete strategy to address these issues may take several years, there are a number of initiatives in the short to medium-term that are steps along the way and will deliver benefits in their own right.

**Unique Medical Record Number**

Patients admitted to metropolitan public hospitals in Western Australia are allocated a unique medical record number that is used for future admissions to track medical progress. At present, patient medical records are stored as hard copies as there are limited electronic records in the public health system. These unique medical record numbers should be implemented in the community and mental health sectors, and in country hospitals. This would be a step towards providing a locally responsive, clinically-integrated system that focuses on providing continuity of care for patients, and bringing care closer to home.
This initiative can be implemented using a two-staged approach. Firstly, existing paper-based medical records could be converted to electronic records. The unique medical record numbers and electronic systems could secondly be implemented throughout the public sector health system of Western Australia.

Secure Patient Data Transfer for Integrated Chronic Disease Management

Integrated, patient-focused care for people with chronic diseases can be enhanced by applying the Health Insurance Commission's Public Key Infrastructure encryption methodology to transfer patient data between GP surgeries and selected primary health and acute care units that cover the spectrum of care for chronic disease management. The encryption to be used is supplied free of charge by the Health Insurance Commission as part of the Australian Government's Gatekeeper initiative.

Recommendation 18

The Department of Health should progressively implement a system-wide clinical information system which incorporates the public and private hospital, community health, primary care and mental health sectors.

This system would include electronic patient records, unique medical record numbers, and provider identification.
Chapter 3
Improving Access to Hospital Services

Introduction

The majority of Western Australians who need hospital services require secondary level care as distinct from high cost teaching hospital tertiary care. More commonly needed services such as general surgery, general medicine, obstetrics and hospital-based mental health services need to be accessible and provided closer to home (see Appendix C for definitions of different levels of care).

Similarly, in rural and remote towns access to aged care, mental and community health services, and other allied health personnel are important to complement acute care.

More care can now be provided safely in non-tertiary settings due to improvements in medical technology and practice, and drug therapy. Conversely, technology and knowledge growth has resulted in increasing specialisation at the low volume, highly technical end of the continuum of care.

The planning of new health services needs to reflect where the State's population growth is occurring and its changing demographics to improve access to hospital care. Clinical benefits and economic sustainability coincide in both developing more accessible secondary level care while increasingly focusing tertiary hospitals on specialised care.

Providing care in the most appropriate setting means concentrating the use of tertiary services for specialist type services while expanding and fully using the capacity of the regional and metropolitan general hospitals and providing access to a range of special purpose facilities and services such as Medi hotels and Hospital in the Home.

This chapter deals largely with access in geographical/distance terms. However, it is important to recognise that access should be seen more broadly as being about barriers to use, as perceived by the potential patient. This wider definition then allows issues of cultural barriers to be included which are especially important for Aboriginal people. Services which are 'culturally secure' for Aboriginal people are ones where the cultural barriers for them are no greater than for non-Aboriginal people. Too often in Western Australia (and the rest of Australia) services fall well short of being culturally secure. The Committee has identified this as one of the most important sources of inequity in the Western Australian health system. If progress is to be made in improving Aboriginal health then improved access for Aboriginal people to hospital care must be a priority.

Multi Purpose Services and Integrated District Health Services

Multi purpose services have been developed in 28 rural communities during the past decade. These services have provided the opportunity to pool Australian and State Government health and aged care funds within regional areas, and to use these funds flexibly to best cater for community needs.
The majority of small towns in regional Western Australia (e.g., those with populations between 1,000 and 4,000 residents) would benefit from moving to a multi-purpose service model of service delivery. This model improves provision of local community and aged care in conjunction with often under-utilised acute care. In collaboration with the Australian Government and General Practice, the multi-purpose service arrangements should be further developed to provide integrated primary care, emergency access, and community-based general health, mental health and aged care services. Some residential aged care and other services could also be included where necessary.

The Country Health Services Review\(^1\) recommended that integrated district health services should be formed in towns with populations of between 4,000 and 12,000 residents. The scope and function of an integrated district health service would vary according to the size of the town. The provision of integrated health services will enhance long-term sustainability and allow for continued access to services within the districts by consolidating or pooling health resources.

The continuing development of the multi-purpose service model and movement towards integrated district health services aligns with the vision for country health services as outlined in The Country Health Services Review. This vision is endorsed by the Health Reform Committee.

### Recommendation 19

**The vision for country health services as outlined in The Country Health Services Review is endorsed.**

### Recommendation 20

**Multi-purpose services and integrated district health services should continue to be developed in collaboration with local service providers and the Australian Government to provide more comprehensive, accessible and sustainable health services to small rural communities.**

### Country Regional Facilities

Over the past decade people requiring hospital care have become increasingly dependent on the larger regional hospitals. However, a significant number of country patients are still transferred to Perth, usually to a tertiary hospital, for health care that could be safely provided in the regional hospitals. The reasons for this are complex and could include the inability of regional centres to attract an adequate or appropriate clinical workforce, or because of historical transfer patterns. The Royal Flying Doctor Service, for instance, sometimes flies patients to Perth because there is no orthopaedic surgeon providing a regional service to the Gascoyne, Pilbara or Kimberley regions.

The development of regional resource centres has been proposed to address these issues. This would help retain within the regions secondary level acute care activity, limiting, as much as clinically appropriate, the need for patient transfers to Perth for reasons other than tertiary level care. Regional resource centres will be developed in Albany, Broome, Geraldton, Kalgoorlie, Port Hedland and Bunbury. In line with capital works commitments, Geraldton will be the first regional resource centre to be rebuilt followed by Port Hedland.

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These regional centres will be part of a 'hub and spoke' model where smaller regional hospitals feed into designated regional centres.

**Recommendation 21**

The proposal to develop regional hospitals into regional resource centres in Geraldton, Broome, Port Hedland, Kalgoorlie, Bunbury and Albany to provide more locally accessible hospital care, where clinically appropriate, is endorsed.

**Telehealth**

Telehealth is fast becoming part of mainstream services meeting the health needs of people living in rural and remote areas around the world.

The clinical applications of telemedicine technologies include the:

- initial, urgent evaluation of patients for triage, stabilisation, transfer and disposition
- supervision of primary care given by non-physician providers, or given in the temporary absence of the physician
- one-time or continuing provision of specialty care where no specialist is available
- provision of consultation, including second opinions
- monitoring of chronic disease, and
- use of remote information and decision-analysis resources to support or guide care for specific patients.

The Western Australian telehealth project has invested in telecommunications and information technology infrastructure to optimise the quality, range and accessibility of health services.

Examples of the benefits gained through this project include:

- a tertiary hospital in Perth can link with medical staff at two regional centres via videoconference
- rural GPs can have meetings via videoconference with multidisciplinary teams at tertiary hospitals in Perth to plan the discharge of older people keen to return home to the country
- clinicians in remote regional centres can videoconference with the Royal Flying Doctor Service to manage emergency cases while awaiting patient transfer, and
- Aboriginal patients and their accompanying health workers can have a clinical consultation with a specialist in Perth through videoconference.

An interstate example of a successful telehealth model is the New South Wales Health Virtual Critical Care Unit model\(^2\). In collaboration with the Wentworth Area Health Service and NSW Health, the CSIRO has developed a Virtual Critical Care Unit that allows a specialist intensivist located at one hospital to supervise a resuscitation team located at a peripheral hospital.

This Virtual Critical Care Unit is designed so that all information required by the intensivist to make judgements on patient treatment is available in real time, as if he or she were present at the peripheral hospital. The system is designed to be robust, fault-tolerant and easy to use in the highly stressful atmosphere of the emergency department.

Telemedicine has already changed the practice of cardiology, pulmonology, cardiothoracic surgery and critical care medicine internationally. Interactive transmission of text, data and images has facilitated long distance consultation, and permitted clinical diagnosis and management to occur cooperatively between urban specialists and rural generalists, and between national and international colleagues.

Telemedicine needs to be further developed as virtual care for the State’s remote communities similar to models being practiced nationally and internationally. Future initiatives should include the provision of clinical care to patients with chronic and complex conditions in their own homes via telehomecare.

Opportunities for clinicians to develop new skills through joint research and collaboratives are needed. Maximum use of the technology by private clinicians will also require additions to the Medical Benefits Schedule by the Australian Government to ensure fair remuneration for the provision of telemedical care.

Telemedicine should also link with the development of the statewide integrated services as outlined in this report. Clinical leadership is required to progress the clinical applications of telehealth. Investment in appropriate bandwidth and infrastructure will additionally be required.

**Recommendation 22**

*Opportunities for telehealth to be a component of the integrated care system should continue to be explored. Further development will rely on clinical leadership and the availability of appropriate bandwidth and other infrastructure.*

**Metropolitan Perth**

The existing geographic Area Health Service boundaries in Perth are based around the location of three adult tertiary hospitals (Royal Perth, Sir Charles Gairdner and Fremantle hospitals). The boundary configuration is somewhat artificial, reflecting as it does the clustering of the two major tertiary hospitals in central Perth and that of Fremantle on the coast. The current Area structure does not describe defined population groups.

There is considerable logic in moving from this configuration to a north/south model that:

- better reflects the north/south geography of the metropolitan area
- is responsive to population growth in the north and south of the metropolitan area, and
- contains a sufficiently large population to enable comprehensive planning and provision of health services.
Recommendation 23

The planning and provision of hospital and community-based services in the metropolitan area should be based upon integrated models of care for both north and south of the river. This north/south model is reflected in the recommended changes to the Department of Health’s organisational structure (refer to Recommendation 69).

The following sections outline a vision for the provision of general and tertiary hospitals in line with the north/south model.

Metropolitan General Hospitals

General hospitals allow patients to be treated close to the communities in which they live, and removes the need to regularly travel long distances for treatment. Expanding the role of general hospitals within the metropolitan area to provide safe and high quality, high volume clinical services is significant for the sustainability of the public health system. This enhanced role for general hospitals will also help clarify the role of the tertiary hospitals.

While some complex services like neurosurgery, cardiac surgery and major trauma should be provided in tertiary hospitals, for safety and quality reasons, general surgery, orthopaedics, other trauma, cardiology, general medicine, obstetrics and general paediatrics can be provided safely in suburban general hospitals.

As one example, renal dialysis services in Perth are predominantly provided in tertiary hospitals. Each tertiary hospital provides in-centre haemodialysis, supports at least one urban and one rural satellite centre (Royal Perth Hospital supports three urban and three rural centres), and supports metropolitan and remote continuous ambulatory peritoneal dialysis. The need to shift a proportion of these services to community and home-based settings was highlighted in the discussion paper on Options for Clinical Services. Where hospital-based services are required, many of these should be provided outside tertiary hospitals.

At present, more than 80% of admissions to tertiary hospitals in Perth are for secondary care. Many (but not all) of these patients could be treated in larger general hospitals.

There is a significant difference in the cost of providing services between tertiary and general hospitals. The average cost per bedday in Perth’s tertiary hospitals is around $1,100 compared to $720 in general hospitals. Clearly this cost differential reflects the different acuity of some of the patients and a variety of other factors.

Increasing specialisation of tertiary and quaternary services at the tertiary hospitals is likely to increase the bedday costs in these facilities while the introduction of a teaching and research role for the general hospitals is also likely to increase their bedday costs. However, the relative cost differential between tertiary and general hospital bedday costs will remain significant.

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4 Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.
5 Information provided to Health Reform Committee by Corporate and Finance Division, Department of Health, 2004.
A ring of four hospitals around the metropolitan area should be expanded to accommodate additional capacity and complexity to improve community access to hospital care and to accommodate Western Australia's population growth and changing demographics. The four hospitals to be involved are Rockingham/Kwinana District, Joondalup Health Campus, Swan District and Armadale Kelmscott Memorial hospitals. It is proposed their bed size is increased to around 300 beds each with appropriate supporting infrastructure (emergency departments, diagnostic facilities, theatres), as hospitals of this size have been shown to run at optimal efficiency with the ability to support an emergency department.

These key general hospitals will provide a comprehensive range of core clinical services and be staffed by appropriately skilled clinicians. To facilitate this, Area Health Service based appointments are proposed whereby medical specialists will be appointed to both the Area's tertiary and general hospitals.

**Recommendation 24**

*Rockingham/Kwinana District, Joondalup Health Campus, Swan District and Armadale Kelmscott Memorial hospitals should be expanded over the next 10 years to approximately 300 bed general hospitals.*

*This development will improve access to hospital care in high-growth metropolitan areas and reduce demands on the tertiary hospitals for general care.*

**Recommendation 25**

*Conjoint clinical staff appointments within Area Health Services will enable appointments to both a tertiary and general hospital. Such appointments will allow for additional capacity and complexity in general hospitals.*

**Metropolitan Special Purpose Facilities**

As highlighted in Chapter 1, the significant growth in demand for health care over the next decade and beyond will be driven by mental health, aged care and rehabilitation. The vast majority of this care will be provided in community settings. As with other areas, this will provide a challenge for both the Australian and Western Australian Governments.

For hospital care, without careful planning, there is a risk that patients will increasingly present to tertiary hospitals or the acute wards of general hospitals. These are often expensive and inappropriate care settings for these patients. This is an existing issue with secondary care being provided in Perth's tertiary hospitals.

It is proposed that designated facilities that allow patients to be treated in a less acute setting in a facility specially designed to accommodate their post operative or rehabilitation needs should exist.

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Both Bentley and Osborne Park hospitals currently provide mental health and aged care services. As the four general hospitals are enhanced, the general and sub-specialist medicine, general surgery and obstetrics and gynaecology work currently done at Bentley and Osborne Park should be transferred to these four hospitals. Both Bentley and Osborne Park should be developed through the next decade with increased capacity to focus on rehabilitation, aged care and mental health services that serve the south and north metropolitan areas respectively. The current day surgery ambulatory care roles of these two hospitals should be expanded over the same timeframe.

As proposed in the "Western Australian Statewide Obstetric Services Review", Woodside Maternity Hospital, with only 20 obstetric beds, should be closed with obstetric care more appropriately provided in the expanded general hospitals.

Similarly, the small volume of obstetric work undertaken at Kalamunda Hospital should be transferred to the general hospitals (with most probably transferring to Swan District Hospital). Kalamunda Hospital should be redeveloped to focus on sub-acute care, aged care, rehabilitation and day procedures. Local GPs already play a major role in the hospital and provide a strong link between hospital and community/home-based care. With GP support and a focusing of allied health and community nursing services it will be possible to provide improved sub-acute and rehabilitation services to enable many older people to return to their homes or to care in a community setting following an acute episode. The hospital facilities could also be used as a component in a coordinated community-based, GP supported palliative care service.

The Graylands Selby-Lemnos Hospital should continue to provide acute mental health services for the State. There may be a need for a small expansion in acute, secure accommodation at Graylands Selby-Lemnos Hospital over the next decade, but otherwise the services provided there will be supported and complemented by Bentley, Fremantle and Osborne Park hospitals. Acute mental health services will be provided at the four redeveloped general hospitals.

The Royal Perth Rehabilitation Hospital at Shenton Park provides both acute rehabilitation (spinal, trauma), and long-term rehabilitation care for patients such as those with acquired brain injury or for amputees, together with elective orthopaedic surgery and renal dialysis. The elective orthopaedic surgery and renal dialysis should be progressively transferred to the general hospitals as their capacity increases.

Significant parts of the Shenton Park campus are old, not suitable for the provision of modern rehabilitation services, and would require extensive redevelopment. The separation of acute rehabilitation services from an acute hospital site also has inherent inefficiencies for staff.

It is proposed that new purpose built acute rehabilitation services should be co-located with the Northern Tertiary Hospital while the remaining rehabilitation beds and facilities should be incorporated into further development of Bentley, Fremantle and Osborne Park hospitals. The Royal Perth Rehabilitation Hospital should then be closed.

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Recommendation 26

Other metropolitan hospitals should be reconfigured in the following manner:

Osborne Park and Bentley hospitals - dedicated sub-acute, aged care, rehabilitation and mental health facilities.

Royal Perth Rehabilitation Hospital, Shenton Park Campus - to be closed, with the acute rehabilitation services moved to the Northern Tertiary Hospital site and the non-acute rehabilitation services moved to Osborne Park, Fremantle and Bentley hospitals.

Woodside Maternity Hospital - to be closed once an appropriate replacement facility south of the river has been identified.

Graylands Selby-Lemnos Hospital - continues current role as the major mental health facility.

Kalamunda Hospital - sub-acute, aged care, rehabilitation, day surgery and support for community-based palliative care.

Tertiary Care

Tertiary care in Western Australia is provided through four adult hospitals and one children's hospital. As discussed earlier, these hospitals provide a significant proportion of the acute, hospital-based treatment in the State, much of which is neither tertiary nor highly specialised.

Discussion over the course of this review, and in preceding years, has centred around:

- the role of Western Australia's tertiary hospitals and their future development
- the difficulties caused by their close physical proximity to one another, particularly in the case of Royal Perth and Sir Charles Gairdner hospitals
- whether and to what extent there is unnecessary duplication of services
- the need to ensure tertiary hospital services in the south metropolitan area (Fremantle Hospital) are able to develop given the 'weight' in central Perth (Royal Perth and Sir Charles Gairdner hospitals), and
- the future roles of King Edward Memorial and Princess Margaret hospitals in developing specialist services for women and children.

Having considered a significant amount of clinical opinion and weighed the benefits of various options, including the status quo, a north/south model is proposed as the best long-term solution to tertiary care in Perth. Under this model, there would be one tertiary hospital north of the river and one south.

This option has received much support from clinicians through the consultation process undertaken over the past year. This model best fits with the north/south orientation of Perth, corresponds with future population growth and addresses the issue of Royal Perth and Sir Charles Gairdner hospitals.
To ensure that both the Northern and Southern Tertiary hospitals can provide the appropriate range of clinical services, maintain staffing levels, manage sensible rosters and avoid unhealthy competition, there should be an overarching tertiary/quaternary service planning process. Initially this process, which should be clinician lead and developed in collaboration with clinicians across all current tertiary sites and across all specialty groups, should concentrate on the specification of services to be provided in the Northern and Southern Tertiary hospitals. This report provides the foundation for that work. This tertiary/quaternary service plan should guide the appointment of clinical staff, the acquisition and replacement of equipment etc. It should prevent idiosyncratic growth in any particular specialty, uncoordinated and unplanned developments and unhealthy competition for scarce resources.

Southern Tertiary Hospital

Fremantle Hospital is currently the tertiary hospital serving the southern metropolitan area. It has some 390 multiday acute and mental health beds and 51 same day beds on a site that is in the north west corner of the catchment population. Much of its infrastructure needs renovation because of age and the impact of salt air on the building fabric. The site is badly set-up as a result of unplanned growth over previous decades and does not lend itself to expansion.

With some population growth in the south coastal strip and the need to attract a range of specialists, it is proposed to build a new tertiary hospital on a green fields site at Murdoch. This new hospital, of some 600 beds, would be serviced by excellent transport links via the freeway and the new southern rail line, and good road access from Jandakot Airport for the Royal Flying Doctor Service.

Access to a major private hospital on an adjacent site such as St John of God Murdoch, would assist in ensuring complementary public and private services. Support for this option has been strong during the consultation process, and clinicians believe this is the best option for providing access to tertiary services for the population south of the river.

Until the commissioning of the new hospital, it is recommended that Fremantle Hospital continue to undertake its existing role. Once the Southern Tertiary Hospital is commissioned in Murdoch, tertiary care services from Fremantle Hospital can be relocated there together with other clinical groups from Royal Perth or Sir Charles Gairdner hospitals in accordance with the tertiary/quaternary service plan.

Some level of hospital services should be retained at Fremantle. These should include sub-acute services, rehabilitation and mental health services, and aged and community care.

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Recommendation 27

*A new major tertiary hospital should be constructed to service the south of Perth and incorporate the tertiary clinical services of Fremantle Hospital together with designated clinical groups from Royal Perth and Sir Charles Gairdner hospitals. The preferred location for this hospital is at Murdoch, and planning should commence immediately.*

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Recommendation 28

*With the development of the new Southern Tertiary Hospital, Fremantle Hospital should be reconfigured to provide rehabilitation, mental health and aged care services and primary/community care.*
Northern Tertiary Hospital
The discussion paper on Options for Clinical Services highlighted the considerable rivalry that has existed between Perth's tertiary hospitals, especially between Royal Perth and Sir Charles Gairdner hospitals.

Fremantle Hospital, as the major provider of health care in the southern metropolitan area, has suffered under the weight of these two northern hospitals. There is a need to facilitate the development of the Southern Tertiary Hospital, and to rectify the ongoing difficulties caused by the close proximity of sometimes unnecessarily duplicated services at Royal Perth and Sir Charles Gairdner hospitals.

It is proposed that there be only one major tertiary hospital north of the river. There are two options for the final arrangement of Royal Perth and Sir Charles Gairdner hospitals:

- Option 1 would be to provide one tertiary hospital across the two sites of Royal Perth and Sir Charles Gairdner hospitals.
- Option 2 would be to select either the Royal Perth Hospital site or the Queen Elizabeth II Medical Centre site as the preferred location of the Northern Tertiary Hospital.

The Health Reform Committee consulted with senior clinicians who expressed clear support for a single tertiary hospital north of the river in tandem with a new tertiary hospital south of the river. The clinicians emphasised the difficulty in managing and providing clinical services across two geographic sites. Their preference was Option 2.

There are strong arguments in favour of both the Royal Perth Hospital and the Queen Elizabeth II Medical Centre campus being the preferred site for the new Northern Tertiary Hospital. On balance, the Queen Elizabeth II Medical Centre site is preferred. This preference is based on the following points:

- it is geographically close to and has with strong ties with the University of Western Australia
- the Oral Health Centre of Western Australia and the University of Western Australia Dental and Medical Undergraduate Schools are on the campus
- the State Government has already announced Sir Charles Gairdner Hospital as the place for the State Cancer Centre
- the submission from the Women’s and Children’s hospitals identified the Queen Elizabeth II Medical Centre site as their preferred site for relocation
- there is a close geographic link with a large private hospital (Hollywood Private Hospital)
- the Lions Eye Institute and the Niche building that houses health-related community groups are already co-located on the Queen Elizabeth II Medical Centre site as is Crawford Lodge
- the land is large enough to accommodate both the Women’s and Children’s hospitals and relocated clinical services from Royal Perth Hospital
- the infrastructure at Sir Charles Gairdner Hospital was originally designed for a larger facility
- much of the infrastructure on the site is newer than that at the Royal Perth Hospital, and
- the site already houses the cyclotron and the State’s PET machine in purpose designed facilities.

It is important to note that if this option is pursued, an inner city see and treat centre would be established at the existing Royal Perth Hospital site.

Arguments in favour of developing the Northern Tertiary Hospital on the Royal Perth Hospital site include:

- the site has a long and distinguished history (regardless of which site is preferred, there are strong arguments for retaining the name Royal Perth Hospital)
• it is located in the centre of the city with good public transport
• some of its buildings are only 20 years old (although others are significantly older and require major refurbishment), and
• there is sufficient land available to accommodate a larger hospital.

This list is by no means comprehensive and the Committee recognises that further consideration and consultation is required in this area. It is proposed that further consultation occur with community and staff at both hospitals and a more detailed feasibility study of each site should be done to inform the final decision. That decision should be reached and announced as soon as possible, but not later than six months. It is emphasised that any reconfiguration of Royal Perth and Sir Charles Gairdner hospitals to a single site will take a number of years.

It is proposed elsewhere in this report that the Area Health Service configuration be changed to a north/south model. Within the Northern Area, a single management structure should be put in place across the Royal Perth and Sir Charles Gairdner hospitals to enable the progressive move to a single campus.

**Recommendation 29**

*There should be one tertiary hospital in the Northern Area Health Service. This should be located on one site.*

*While there are strong arguments for consolidation to either the Royal Perth Hospital or the Queen Elizabeth II Medical Centre site, the preference is for this hospital to be located on the Queen Elizabeth II Medical Centre site. A focused and time limited community and clinical consultative process should occur and a detailed business case developed by September 2004, before the final decision is made.*

**Recommendation 30**

*To assist with the development of the new Northern Tertiary Hospital, a single management and clinical staffing structure across Royal Perth and Sir Charles Gairdner hospitals should be implemented along with the formal establishment of the Northern and Southern Area Health Services.*

In the long term (the next 20 years), a third adult teaching hospital will probably be justified in the northern corridor of the metropolitan area.

**Women's and Children's Hospital**

It is widely acknowledged that the special health needs of women and children requires dedicated services, funding and specialist staff.

Establishing centres of excellence for the provision of these services ensures that safe, high quality paediatric, obstetric and gynaecological care will be available for the community. In Western Australia such centres of excellence are located at Princess Margaret and King Edward Memorial hospitals. It is important that these centres of excellence are maintained.
As centres of excellence, these hospitals are not the only providers of women’s and children’s health services. Paediatric, obstetric and gynaecology services are also being provided at each of the general hospitals and some regional centres. Princess Margaret and King Edward Memorial hospitals play an important role in coordinating and integrating paediatric, gynaecology and obstetric services across the State, and this should be continued and enhanced. A networked service model of this nature ensures effective use of the available health workforce and provides for improved staff training and development opportunities.

While the maintenance of Princess Margaret and King Edward Memorial hospitals as separate identities is supported, significant benefits can be gained from co-locating these two hospitals with an adult tertiary hospital.

A submission received from the Women's and Children's Health Service through the public consultation process supported the co-location of the King Edward Memorial and Princess Margaret hospitals with an adult tertiary hospital. Submissions from clinicians at both hospitals indicated a preference for co-location to the Queen Elizabeth II Medical Centre site. The argument put forward was that co-location would better allow for the provision of acute services for women and provide better access to diagnostic services. Access to critical care and adult specialties would also be improved.

A further submission from the Clinical Staff Association at Princess Margaret Hospital acknowledged the benefits in this proposal.

"There are strong arguments for co-locating all neonatal and high risk obstetric facilities. There are similar arguments for co-locating neonatal services with the major paediatric centre. The current geographic separation of the larger neonatal nursery at King Edward Memorial Hospital from the children’s hospital may not allow optimal… care of pre-term neonates. Other areas such as genetics, that currently service both the women's and children's hospitals, could benefit to a certain extent from co-location of both hospitals on the one site."

However the same submission cautions that:

- access for children to diagnostic and other equipment could be jeopardised if the equipment is shared with an adult hospital
- specialised paediatric skills in areas such as pathology may be reduced if combined with an adult hospital, and
- the loss of a separate identity for the children’s hospital may reduce the focus on child health.

While there was general support from senior doctors and nurses at King Edward Memorial and Princess Margaret hospitals to co-locate with a major adult hospital, they stressed that:

- they wished to retain their separate physical identities
- the Women's and Children's Area Health Service should be retained, and
- women's and children's services should not be subsumed by the co-located adult tertiary service.
On balance, the co-location of both King Edward Memorial and Princess Margaret hospitals with an adult tertiary hospital is supported as it would:

- provide better clinical services for women, including better access to critical care and diagnostic services
- increase access to research and training that will assist in the provision of high quality, evidence-based care
- allow for more integration between women's and children's services eg. between gynaecological services and neonatal and antenatal services
- allow for better integration between women's and children's services and general adult tertiary services eg. between adolescent and adult services
- allow for improved coordination of women's and children's health services across the State, and
- provide new, modern facilities that overcome the current capital maintenance and site constraint issues at the existing hospitals.

With regard to the last point, both the King Edward Memorial and Princess Margaret hospitals are in need of significant capital investment in the medium term, for maintenance and upgrade of facilities. The planned capital investment on renovations and maintenance would be better directed towards the construction of new purpose built buildings that could be specifically designed around the more integrated women's and children's health service being proposed.

While the co-location of King Edward Memorial and Princess Margaret hospitals with an adult tertiary hospital is recommended, further consultation with the community and clinicians should occur before a decision is made as to the most appropriate location.

It is recognised that the relocation of these hospitals would take years to fully plan and implement. As there are strong clinical benefits to be gained from co-locating King Edward Memorial Hospital with an adult tertiary hospital, and King Edward Memorial Hospital is in more urgent need of capital investment, the relocation of this hospital could occur first with the relocation of Princess Margaret Hospital as a second phase of development. Planning for the relocation of Princess Margaret Hospital would also recognise the needs of the Telethon Institute for Child Health Research to retain the strong clinical and research links and support the process of transferring research findings into clinical practice.

**Recommendation 31**

*King Edward Memorial and Princess Margaret hospitals should be rebuilt and co-located with an adult tertiary hospital to gain significant clinical benefits. King Edward Memorial Hospital should be relocated within the medium term, and Princess Margaret Hospital rebuilt as part of a second phase, together with the Telethon Institute for Child Health Research.*

*The Women's and Children's Health Service should remain a separate and independent Area Health Service, and the two relocated hospitals should retain their current names.*
Medi Hotels
Medi hotels can provide supported overnight accommodation for patients during or prior to treatment, tests and surgery. Medi hotels are best suited to patients who are generally self sufficient in terms of their care and medication, such as those who may require tests over a period of days and may need monitoring, but not acute care. Medi hotels are staffed by a small group of nurses who arrange for a hospital transfer if emergency care is required.

Since Medi hotels are an alternative to hospitalisation, bed costs are much lower than a conventional acute hospital bed. In addition, the quality of comfort and care for both the patient and family is generally much higher than in a tertiary or general hospital. Medi hotels have been in operation in the eastern states and internationally for some years. The majority of these are privately operated.

It is estimated that around 10% of patients could be suitable for admission into a Medi hotel. The main specialist health services that could make use of a Medi hotel include obstetrics and gynaecology, general surgery, and general and geriatric medicine.\(^\text{10}\)

Recommendation 32

A Medi hotel facility should be established in conjunction with a tertiary hospital with an evaluation of its effectiveness undertaken.

A summary of the proposed changes to existing hospital service configurations is shown in the following graphics.

Figure 3.1
Current metropolitan public hospital configuration

Legend
- Tertiary Hospitals
- Secondary Hospitals

- Joondalup Health Campus: 225 beds
- Osborne Park Hospital: 180 beds
- KEMH: 197 beds
- RPH Rehab: 190 beds
- PMH: 201 beds
- SCGH: 498 beds
- RPH: 561 beds
- Swan District Hospital: 149 beds
- Kalamunda Hospital: 53 beds
- Rockingham/Kwinana District Hospital: 67 beds
- Woodside Maternity Hospital: 22 beds
- Graylands Selby–Lemnos Hospital: 199 beds
- Armadale Keimscott Memorial Hospital: 125 beds
- Bentley Hospital: 199 beds

Source: Department of Health
Figure 3.2
Metroplitan public hospitals in the future

Legend
- Tertiary Hospitals
- Specialist Hospitals
- General Hospitals
- Closed Hospitals

Notes:
1. These maps refer to multiday beds only.
2. The future plan assumes consolidation of Royal Perth Hospital and Sir Charles Gairdner Hospital on the Queen Elizabeth II Medical Centre. Also, this plan assumes that Women’s and Children Health Service will move to the Queen Elizabeth II Medical Centre.
Introduction

During the preparation of this report, a series of discussion papers were released on specific aspects of health care delivery in the State. The discussion paper attracting the most interest, debate and feedback was that which reviewed the current arrangements for a selected range of clinical services.

The major finding of this discussion paper, authored by respected external clinicians, was that there is a degree of unnecessary clinical duplication across three of the adult tertiary hospital sites, and that alternative arrangements were recommended for reasons of safety, quality, workforce sustainability and/or efficiency.

The authors of this discussion paper based their findings on the current configuration and location of the State's tertiary hospitals. The adoption of a north/south split in the metropolitan area with one tertiary hospital located in each region requires the distribution of clinical services to be revisited.

If the Northern Tertiary Hospital consolidates clinical services on one campus, the clinical specialties currently located at both Royal Perth and Sir Charles Gairdner hospitals would become a single service. This could be achieved by:

- the two clinical groups joining to form one unit, and/or
- one of the clinical groups being relocated to the new Southern Tertiary Hospital.

The vast majority of clinical services would still be consolidated to one of the two sites even if it is decided to retain two campuses and one management model.

Thus, many of the issues identified in the 'Options for Clinical Services Discussion Paper' will be resolved should the recommendation to move to a north/south model be adopted.

A comprehensive range of clinical services will be provided in both of the two new adult tertiary hospitals. Nevertheless, some specialisation of quaternary services at one hospital is still warranted for reasons of quality and clinical sustainability.

Trauma Services

There is currently no formal differentiation of trauma services between Perth’s tertiary hospitals, other than Princess Margaret Hospital, which is the designated provider of paediatric trauma services.

Three of the four adult tertiary hospitals (Royal Perth, Sir Charles Gairdner and Fremantle hospitals) provide trauma services. Royal Perth Hospital is the largest provider of major trauma with 350 cases a year. In addition, five secondary hospitals also provide trauma services of varying complexity.
Major trauma relates to an injury that is a matter of life or limb. The survivors of a high-speed car crash is an example of those usually considered to have sustained major trauma. However, a person who falls from a house ladder and fractures a leg would not usually be considered to have sustained major trauma.

Evidence indicates that a ‘Major Trauma Service’\(^3\) in Australia is likely to be most safe, effective and sustainable when it manages between 400 to 600 serious injuries\(^4\) per annum, within a total catchment population of up to two million. The designation of a Major Trauma Centre is warranted on this basis.

### Recommended Configuration

Both the adult and paediatric Major Trauma Centres should be located as close as possible to the ‘centre’ of the population they serve (in this case the whole of Western Australia). As the new Northern Tertiary Hospital will be located on either the Queen Elizabeth II Medical Centre site or the site of the existing Royal Perth Hospital, it will be closer to the population centre than the new Southern Tertiary Hospital.

Principally for this reason, it is proposed that the Northern Tertiary Hospital is designated as a Major Adult Trauma Centre and Princess Margaret Hospital as a Major Paediatric Trauma Centre with these hospitals becoming:

- centres of excellence for trauma management of adults and children, leading and supporting the delivery of trauma services across the State
- the central hub of an integrated trauma services network responsible for continually improving trauma care delivery systems and providing expert advice on trauma management, and
- statewide providers of major trauma care for patients either living within the hospitals catchment area, referred from other hospitals with trauma services, or transported or retrieved by air.

As the four general hospitals are developed, their emergency department areas will expand together with other clinical facilities such as operating theatres, beds and diagnostics. These hospitals will undertake the following roles as a result:

- continue to provide the full range of treatment for accident and emergency care with the exception of major trauma
- stabilise major trauma patients who cannot be transported directly to a Major Trauma Centre within the required time limits
- provide definitive care to a very limited number of major trauma patients
- provide a support role to the Major Trauma Centres in times of high demand
- participate in system-wide education, quality and performance monitoring, and undertake research, and
- receive major trauma patients who self present, and arrange for immediate transfer to the Major Trauma Centre.

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\(^4\) Referring to injuries with an injury severity score of greater than 15.
Expected Benefits for the Community

**Better Patient Care**
The role differentiation and networking of trauma services across the State will lead to better service quality and safer patient care.

Major trauma patients would be taken immediately to the Major Trauma Centre under the recommended hospital configuration. This would ensure that from the time of admission, the patient receives a level of care that is highly specialised with access to multi-disciplinary clinical teams who have the capacity to undertake the sophisticated medical and surgical interventions required.

**Better Recognition of Differing Patient Needs**
Role differentiation and networked trauma services would help to reduce the silos between hospitals and ensure the deployment of clinical workforce and equipment occurs in a manner that reflects patient need.

Highly specialised clinicians and medical equipment would be based at the Major Trauma Centre to reflect the fact that patients arriving there would be the most severely injured of all trauma cases at any one given time. A less specialised level of care would be provided at other emergency departments, so that across the State all trauma patients are able to access a level of care that is appropriate to their level of injury.

**Pre-hospital Triage**
Establishing a Major Trauma Centre configuration will require implementing a best practice pre-hospital triage system to ensure that major trauma patients are able to reach the centre with as little delay as possible.

The objective of a pre-triage system is to consistently get the right patient to the right hospital in the right amount of time.

Mechanisms and protocols need to be established to provide ambulance drivers with the assurance that the major trauma centres will remain responsive to the receipt of major trauma patients on a 24-hours-a-day, 7-days-a-week basis.

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**Recommendation 33**

*The Northern Tertiary Hospital should be designated as the State centre for major adult trauma, and Princess Margaret Hospital as the State centre for major paediatric trauma.*

*Emergency departments should be expanded in each of the four general hospitals to accommodate emergency adult and paediatric care, excluding only major trauma.*
Cardiac Surgical Services

Three public tertiary hospitals (Royal Perth, Sir Charles Gairdner & Fremantle hospitals) provide adult cardiac surgical services with Sir Charles Gairdner Hospital being the largest provider, performing 300 surgeries a year\(^5\). Princess Margaret Hospital is the designated provider of paediatric cardiac surgical services. Some private hospitals also provide cardiac surgical services.

Cardiac surgery includes a number of procedures - coronary artery bypass graft or bypass surgery, cardiac valve replacement or repair, repair of left ventricular aneurysm, and repair of aortic pathology (congenital conditions)\(^6\).

Evidence shows that a cardiac surgical unit is likely to be most safe, effective and sustainable when it manages around 800 cases per year with each surgeon seeing at least 200 cases each\(^7\). The national average caseload for cardiac surgical units is currently between 400 and 500 cases.

Heart bypass surgery has been in decline across Australia since 1996 due primarily to the increasing use of new clinical technology. The number of heart bypass surgeries within Western Australia has dropped from 1,300 to 900 cases over the past decade with this trend predicted to continue\(^8\).

The discussion paper on Options for Clinical Services proposed that three units should be reduced to one, and that adult cardiac surgical services should only be provided at Royal Perth Hospital.

Following the release of this discussion paper, strong representations (by both the community and health workers) were made to move to a single service across more than one site rather than to consolidate to one site. Given that the impact of a north/south model would effectively reduce the provision of cardiothoracic services to two sites, the representation made by the majority of cardiothoracic surgeons for a single management structure is accepted. The arrangement could be reviewed once the new Southern Tertiary Hospital is operational to determine whether the original proposal of one site is preferred or whether there should be two adult sites; one at each of the Northern and Southern Tertiary Hospitals.

A director of the integrated unit should be appointed as soon as possible. A Western Australian Cardiac Services Advisory Group should be formed following this appointment. The group would act as a collaboration of clinicians who are involved in delivering cardiology as well as cardiac and thoracic surgery services across the State.

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\(^6\) Cardiac Care Network of Ontario. CCN consensus panel on cardiac surgical services: final report and recommendations April 1998. @ http://www.ccn.on.ca/publications/surg-xs.html (accessed on December 08, 2003).


Cardiothoracic services should operate as an integrated service, reporting to a single head of department with common management and audit protocols and integrated on-call rosters. This approach should be reviewed once the new Southern Tertiary Hospital is operational.

The statewide Paediatric Cardiac Surgical Unit at Princess Margaret Hospital should continue.

Neurosurgical Services

Neurosurgical services are independently provided by both Sir Charles Gairdner and Royal Perth hospitals with Sir Charles Gairdner Hospital being the largest provider performing more than 1,000 surgeries a year. Princess Margaret Hospital is the designated provider of paediatric neurosurgical services.

Pending the final determination regarding the location of the Northern Tertiary Hospital, the two independent adult neurosurgery units at Sir Charles Gairdner and Royal Perth hospitals should be managed as a single service with a single head of department. The Department of Health has decided to move to a single neurosurgery service.

In the long term, the appropriate configuration of neurosurgical services between the Northern and Southern Tertiary Hospitals will need to be determined as part of the clinical services planning for tertiary/quaternary services and the Southern Tertiary Hospital.

Paediatric neurosurgical services will continue to be delivered at Princess Margaret Hospital.

Renal Haemodialysis Services

Haemodialysis services are provided from four tertiary hospitals - Royal Perth, Sir Charles Gairdner, Fremantle and Princess Margaret hospitals. Satellite haemodialysis centres have additionally been established at:

- Joondalup, Shenton Park, Midland, Armadale, Melville and Peel in the metropolitan area, and
- Geraldton, Kalgoorlie, Bunbury, Albany, Port Hedland and Broome in country areas.

Information regarding these services provided at the metropolitan locations is provided below.

One tertiary hospital should be designated as the main tertiary site for haemodialysis services and act as a centre of excellence for the State. The Health Reform Committee’s preference is that this responsibility should rest with the Southern Tertiary Hospital in the medium to long term.

In line with its designation as the State’s Major Trauma Centre, the Northern Tertiary Hospital should maintain only a limited haemodialysis service for more acute and complex patients.

In addition, a networked and integrated statewide service delivery framework should be implemented where the tertiary service acts as a central hub for haemodialysis services across the State, and is networked to other delivery sites, the four key general hospitals and satellite centres. Home and community-based haemodialysis would also be expanded under this framework.

Unfortunately, access to services for people with renal disease living in rural and remote areas of Western Australia is poor. Home-based dialysis should be extended to provide services in people’s homes whenever possible. This is especially important for rural and remote areas and for Aboriginal patients to ensure equity of access. Aboriginal people from Western Australia have a 13.4 times higher incidence of end stage renal disease than other Western Australians. The highest incidence is among Aboriginal people from remote areas who rate up to 30 times higher than the total national incidence.

To enhance delivery of haemodialysis services in rural and remote areas, it is recommended that formal links be established between regional centres and the centre of excellence at one of the tertiary hospitals. Planning of rural and remote service provision should be integrated with planning of metropolitan service provision, so that a true statewide view is achieved.

A statewide service plan for renal haemodialysis services should be developed to include strategies that enhance links with regional service centres and expand home and community-based renal haemodialysis.

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**Figure 4.1**

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</tbody>
</table>

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Recommendation 36

One tertiary hospital should be designated as the main tertiary site for haemodialysis services and act as the centre of excellence for the State.

Recommendation 37

Home and community-based renal haemodialysis should be expanded across the State, and satellite haemodialysis services should be provided in metropolitan and country centres.

These services should be developed under the umbrella of a statewide plan for renal haemodialysis services, which particularly addresses poor access by Aboriginal communities in rural and remote areas.

Renal and Other Transplant Services

Renal transplantation services are provided by Royal Perth and Sir Charles Gairdner hospitals.

Both Royal Perth and Sir Charles Gairdner hospitals transplant units have shown good clinical results that are comparable with other Australian jurisdictions. However, patient throughput at both sites is lower than the national annual average.

Some of the service issues apparent at this time include:

- the current services are poorly coordinated and there is a lack of common medical and surgical protocols. There is a need for central clinical coordination of renal transplantation, and
- there is insufficient surgical staff to cope with multi-organ retrievals and subsequent organ implantation and logistical challenges exist in obtaining theatre access for multi-organ retrieval and potential subsequent transplantation.

Recommended Configuration

Renal transplant services should continue to be provided by both Royal Perth and Sir Charles Gairdner hospitals, but pending the establishment of the Northern Tertiary Hospital, that the two transplant units should be merged into a single integrated service. This service would report to a single head, with common management and audit protocols, and integrated on-call rosters. Renal transplant services should also be established at the Southern Tertiary Hospital.

Transplantation services for liver, heart and lung should continue as at present.
It is anticipated that unification of the renal transplant units into a single service will enable:

- better organisation of on-call rosters
- greater collaboration between nephrologists and development of common clinical standards and protocols, and
- better flexibility in terms of access to operating theatres and support resources, particularly in the event of multi-organ retrieval and transplantation.

**Recommendation 38**

*Pending the establishment of a single renal transplant service at the Northern Tertiary Hospital, the two existing transplant units should be merged into a single integrated service that reports to a single head of department with common management and audit protocols, and integrated on-call rosters.*

**Recommendation 39**

*Transplantation services for liver, heart and lung should continue as at present.*

**Cancer Services**

Overall, State outcomes for cancer care are good. However, there is fragmentation in cancer service delivery whereby tertiary and secondary level hospitals have developed cancer care services independently of each other.

The two major tertiary hospitals have competitive models of care with little tumour sub-specialisation in some types of cancers. Tumour caseloads at each hospital are currently inadequate to develop optimal sub-specialisation.

*“Centres of excellence are an excellent idea - reduce duplication, reduce competition, promote new research and improve the standard and quality of care”*

- Anonymous

In terms of radiotherapy services, there is one private (Royal Perth Hospital) and one public radiotherapy service provider (Sir Charles Gairdner Hospital), with a highly competitive, rather than collaborative, approach between them. Waiting times for the public provider are quite long.

Past trends indicate that around 3,800 patients need radiotherapy services each year\(^1\) in Western Australia. To accommodate this level of demand, additional linear accelerators are needed. The State Government has recognised this need by recently approving the purchase of two new linear accelerators to operate at Sir Charles Gairdner Hospital.

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A more integrated statewide cancer service was proposed in the discussion paper on Options for Clinical Services\(^\text{13}\), and to this end, the State Government has already announced the establishment of a State Centre for Cancer Care at Sir Charles Gairdner Hospital. This centre will be linked with other metropolitan and regional service providers through an integrated service model of care. The State Centre for Cancer Care will include on-site ambulatory radiotherapy, medical oncology, haematology, day surgery, diagnostic imaging and blood taking.

**Recommendation 40**

*The proposal to establish a State Centre for Cancer Care to integrate and coordinate delivery of cancer care across the State is fully endorsed.*

**Palliative Care**

Palliative Care services are provided in the community as well as in a hospital setting. Community-based palliative care services include those provided in the home and in residential hospices, and are predominantly provided by the non-government health sector (eg. Silver Chain). Hospital-based palliative care services are mainly provided in the State’s tertiary hospitals.

**Recommended Configuration**

Home-based palliative care services provided by the non-government sector are well established and should continue in their current form. With respect to residential care and hospital-based palliation, services could be reconfigured in a manner more beneficial to patients.

A recent study in the United Kingdom that has been replicated in Western Australia indicated that at any point in time, around 10% of patients in tertiary hospitals are receiving palliation\(^\text{14}\). While some palliative treatment requires an acute hospital setting, for the large proportion of patients a tertiary hospital is not the most comfortable or appropriate setting for end-of-life care.

Purpose built palliative care facilities attached to general hospitals would provide the level of flexibility required for palliation services. Such facilities would enable the provision of day care, residential and respite care, and day procedures all in a setting designed to cater for the special needs of patients nearing the end of their life. The co-location of these facilities with the proposed four general hospitals would ensure acute services are readily available when required.

**Expected Benefits for the Community**

Purpose built palliative care facilities attached to general hospitals would enable:

- patients to receive end-of-life care and treatment in more comfortable, appropriate settings, whilst still ensuring acute services are readily available if required
- demand on tertiary hospital beds to be reduced, and
- the current shortage of residential palliative care beds, at present provided by the non-government sector, to be overcome.

\(^{13}\) Ibid.

Recommendation 41

Purpose built facilities to provide for inpatient, day and ambulatory palliative care hospice services should be incorporated into the four designated general hospitals. These services should form an integrated network with existing community-based palliative care services, including supporting end of life care in residential aged care facilities.

Women's Clinical Services

The recommendations contained within this section are based on the 'Western Australian Statewide Obstetric Services Review' undertaken in 2003.

King Edward Memorial Hospital is the biggest provider of gynaecology and obstetric services in the State. A range of secondary and regional hospitals also deliver these services. There is little integration or coordination of services across the State with each hospital operating fairly independently.

In line with the recommendations contained in the 'Western Australian Statewide Obstetric Services Review', it is recommended that a State obstetrics service be established at King Edward Memorial Hospital. The State obstetrics service would act as a centre of excellence responsible for coordinating and integrating gynaecology and obstetric services across the state through an integrated service model of care.

Gynaecology and obstetric services will continue to be located at general and regional hospitals, but these centres will be networked to the State obstetrics service and thus have direct access to highly specialised expertise.

Expected Benefits for the Community

Higher Quality and Efficient Services
The recommended model will enable more effective use of available obstetricians, anaesthetists, paediatricians, midwives and the allied health workforce because it is based on only four key general hospitals in the metropolitan area.

Fewer units that are fully staffed will be able to service greater patient throughput, with minimal adjustments to staffing ratios.

King Edward Memorial Hospital will be able to provide greater support to rural areas.

Better Training and Development Opportunities
Training and development is hampered at the present time, because of the shortage of obstetric practitioners across the State.

With a smaller number of gynaecology and obstetrics units, staffing rosters will be more flexible, creating more opportunities for training and development. Busy units that operate to full capacity will also provide greater professional development through caseload volumes and diversity.

Recommendation 42

The recommendations of the ‘Western Australian Statewide Obstetric Services Review’ are supported and should be implemented as part of the overall implementation of this report. These recommendations include:

- recognising King Edward Memorial Hospital as a centre of excellence that provides a statewide service, including policy advice, clinical guidelines and service coordination, and
- providing gynaecological and obstetrics care services at the four designated general hospitals.

Intensive Care Services

Intensive care units (ICU) are located within hospitals throughout Western Australia but are found mainly in the metropolitan area. The units are located in both public and private sector facilities with the highest level of care being provided in the metropolitan area by tertiary hospitals.

Royal Perth, Sir Charles Gairdner and Fremantle hospitals provide high level adult ICU services, while Princess Margaret and King Edward Memorial hospitals both provide high level neonatal ICU facilities. Major ICU services are also provided at two of the larger private sector hospitals; Mount Hospital and St John of God Subiaco.

Western Australia has the lowest rate of ventilated ICU beds per capita compared to all the other states\(^{16}\). While the system has still been able to meet the demand for services to date, there is now constant pressure on ICU beds in the public sector with high occupancy rates and for the future a risk of ICU bypass.

In addition, demand for ICU services is expected to continue to increase, reflecting the predicted growth and ageing of the population.

Recommended Configuration

The ‘Development of a Five to Ten Year Plan for Intensive Care Services in Western Australia’ review\(^{17}\) recommends a significant increase in both adult and paediatric ventilated beds.

Distribution of Additional ICU Beds

The reconfiguration of the intensive care beds will underpin changes to some other clinical services as described above.

The actual distribution of the additional ICU beds within the system should therefore be determined in view of the recommended hospital and clinical service reconfigurations.

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\(^{17}\) Ibid.
Recommendation 43

Both the Northern and Southern Tertiary Hospitals, and Princess Margaret Hospital will need to be reconfigured with increased adult and paediatric ventilated intensive care beds, as recommended in the 'Development of a Five to Ten Year Plan for Intensive Care Services in Western Australia' review.

Mental Health Services

There is escalating demand for mental health inpatient services in Western Australia.

To address this growing inpatient demand, strategic directions aimed at improving the efficient operations of mental health services, delivering optimal patient outcomes, and promoting greater integration between mental health services and the wider health system need to be advanced simultaneously. These include strategies such as expansion of emergency mental health services, and community-based clinical and rehabilitation services.

Additional beds will be required at some of the general hospitals and specialist hospitals. Not only will these hospitals provide inpatient mental health services closer to where people live, but they should also provide a range of mental health services that are well integrated with the community and tertiary sector.

Graylands Selby-Lemnos Hospital is well placed to provide acute mental health support for clinicians in rural and remote Western Australia whose patients would otherwise be transferred to Perth for treatment. This role for the hospital would offer a link between metropolitan and rural health services, and provide services to patients closer to where they live.

Outpatient Services

Western Australia still runs very large outpatient services in its tertiary hospitals unlike other states in Australia. In 2001/02, Western Australia reported 3.2 million occasions of outpatient service in the metropolitan area. Of these, around 70% were provided in tertiary hospitals.

Although these tertiary hospitals provide a high level of outpatient service, they are costly, difficult to access and time inefficient. Part of the new vision for health will involve shifting a significant proportion of these clinics to the general hospitals and clinicians’ rooms. This will provide outpatient services at a larger number of sites, thus will improve access. They will be closer to where people live and directly linked with the general hospitals. This will result in better integration with local GPs, and provide a higher level of service in the community with better communication between all providers of care. This will have obvious benefits for both patients and the community.

Later in this report, it is proposed that arrangements which are common in other states to improve revenue from outpatient services, are also adopted here.

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Recommendation 44

*The level of outpatient services in the State's tertiary hospitals should be progressively decreased, with enhanced roles for the non-tertiary hospitals and private practice.*

Impact on Emergency Department Access and Elective Surgery

The changes outlined in this and the preceding chapters will provide Western Australians with better access to appropriate hospital emergency care. The changes will also contribute to an improved journey through emergency departments by reducing overcrowding and exit block.

Improving primary care and GP services will help to facilitate these positive outcomes. The enhanced role of general hospitals will play a critical part in improving access to emergency services. These general hospitals will not only include large emergency departments, but also provide paediatric and obstetric services to the local community with strong support from networked tertiary hospitals.

Major trauma cases will proceed directly to the Major Trauma Centre. All other emergency cases, including children and obstetrics, will be stabilised and transferred to the appropriate hospital.

The proposed changes should also impact beneficially on waiting times for elective surgery. The development of four general hospitals will allow a significant proportion of elective surgery to be performed in these hospitals. The hospitals would be staffed with medical specialists with joint appointments to a designated and tightly linked tertiary hospital. These specialists would perform elective surgery in the general hospital without the bed pressure created by large tertiary hospitals.

Patients requiring more complex surgery or with associated complex medical problems will be directed to a tertiary hospital.

Elective orthopaedic surgery of a complex nature or patients with associated medical conditions are examples where surgery will be performed at tertiary hospitals. Less complex elective orthopaedic surgery would be progressively focused at the four general hospitals.

This will involve a phased redistribution of routine elective orthopaedic surgery from Royal Perth, Sir Charles Gairdner, Fremantle and Royal Perth Rehabilitation hospitals to the four general hospitals as facilities develop.

Recommendation 45

*Routine elective surgery such as orthopaedics should be accommodated in the four general hospitals with strong links to the associated tertiary hospital.*
Introduction

Business and clinical practices are constantly evolving and improving. A challenge for the Western Australian health system, like all health systems, is to keep up with these changes and continuously evolve to align with current corporate and clinical best practice.

This chapter focuses on some key areas where it is believed significant efficiency gains could be made in the short to medium term.

Clinical Practice

Reducing Average Length of Stay

In recent years, advances in technologies and changes in clinical practice have reduced the length of stay in hospital for many procedures. These reductions have occurred without jeopardising the safety and quality of services. An example of this can be seen over the past 10 years with the average length of stay for a person receiving a knee replacement dropping from 16 to nine days. In fact, length of stay in some areas has been reduced to the extent where the procedure is now undertaken on a same-day basis. Figure 1.5 in Chapter 1 shows the extent of growth in same-day procedures.

It is recognised, however, that the potential for further substantial reductions in length of stay without compromising clinical care is limited. An approach targeted at specific reasons for hospital admission is now more appropriate.

The overall imputations of these efficiency gains in the form of their impact on the anticipated growth of hospital beds and the health budget are discussed in Chapter 9.

Western Australia achieved or exceeded the national benchmark for length of stay for many clinical conditions. An example is if a person is over the age of 54 and requires treatment for a hip replacement (fractured neck of femur), on average that person would only need to stay in hospital for 6.8 days in Western Australia compared to the national average of 9.1 days.

However, there are other areas where Western Australia is below national benchmarks and needs to work towards reducing length of stay. These areas include rehabilitation, cardiac procedures and treatment for ulcers.

A range of strategies can be implemented aimed at reducing length of stay and moving Western Australia towards national length of stay benchmarks in selected clinical procedures. These include:

3. Ibid.
implementing initiatives such as clinical pathways, early discharge and home support
- undertaking a higher proportion of surgical procedures that are currently multiday services as a same day service
- further developing hospital outreach services, Hospital in the Home and early discharge programs
- implementing in-hospital geriatric assessment units and improving coordination of continuum of care
- implementing early discharge using self-management, home care and community health programs, and
- expansion of post discharge, community-based and acute care rehabilitation services.

Increase Rates of Day of Surgery Admission
Day of surgery admission is a practice where a patient is admitted to hospital on the same day as they have their surgery with the intention of staying at least one night afterwards. Admitting patients on the day of surgery means that unnecessary days in hospital before surgery are avoided, thereby relieving pressure on the hospital. It is frequently more convenient for the patient, their carer and family.

Day of surgery admission is common practice for many procedures in eastern states and international hospitals. While Western Australia has began moving towards this practice, a more consistent approach across the system is required.

Increase Rates of Day Procedures
Day procedures involve the patient being admitted, having a surgical procedure, and discharged all on the same day. There are some procedures where this service could be expanded.

In particular, interstate and international evidence indicates that in areas such as tonsillectomy, hernia repair, removal of breast lump and bronchoscopy, day of procedure surgery is not only appropriate, but standard clinical practice.

Utilisation Review Techniques
Utilisation review techniques assist in judging the appropriateness of admissions and length of stay in hospitals. Implementation of utilisation review techniques by hospitals may be effective in improving admission and discharge practices, and can assist in reducing inappropriate admissions and late discharges. This may lead to a reduction in bed days and therefore potentially free up acute beds.

Areas of Focus
The average length of stay demand management strategies focus on the key areas of short stay surgical and non-surgical, rehabilitation, chronic and complex care and mental health. This impacts on 40% of all hospital separations.

Acute Care: Short Stay Surgical
For selected elective surgical procedures 75% of cases with usual lengths of stay (LOS) less than 14 days should be targeted for conversion from multiday to same day.

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6 Information provided to Health Reform Committee by Strategic Planning Directorate, Department of Health, 2004.
The average length of stay (ALOS) for short stay (2-7 days) elective surgical cases should be reduced by one day by increasing day of surgery rates in conjunction with pre-admission assessment and early discharge programs. On the basis of these same strategies, the ALOS of longer stay (8-13 days) elective surgical cases should be reduced by three days.

**Acute Care: Short Stay Non-Surgical**
For all non-surgical cases with LOS between 2-7 days, excluding chronic disease and mental health, ALOS should be reduced by one day by establishing hospital outreach, Hospital in the Home and early discharge programs.

For all non-surgical cases, with LOS between 8-13 days excluding chronic disease and mental health, ALOS should be reduced by three days by implementing in-hospital geriatric assessment units and improving coordination of the continuum of care.

**Sub-Acute Care: Chronic Disease Management**
For selected conditions with the respiratory, cardiovascular, diabetes and renal failure chronic disease groups, ALOS should be reduced by one day where the usual LOS is 2-7 days, and by three days where the usual LOS is 8-13 days. This will be achieved by introducing early discharge self-management, home care and community health programs.

**Sub-Acute Care: Rehabilitation**
For cases identified as requiring rehabilitation, ALOS should be reduced by three days where the usual LOS is 14-28 days, and by 10 days where the usual LOS is 29 days or more. This will be achieved through the introduction/expansion of acute care and post discharge, community-based rehabilitation programs.

**Sub-Acute Care: Aged Care**
For aged care7, excluding rehabilitation patients, ALOS should be reduced by three days where the usual LOS is 14-28 days, and by 10 days where the usual LOS is 29 days or more. This will be achieved by implementing early discharge supported by self-management, visiting home care and community health programs.

**Mental Health Care: Non-Acute**
For non-acute psychiatric patients, ALOS should be reduced by 20% by relocating service provision into community-based mental health services and expanding intermediate care rehabilitation services.

**Mental Health Care: Acute**
For acute psychiatric patients with an alcohol and other drugs diagnosis, ALOS should be reduced by 10% through enhanced case management and discharge planning.

For acute forensic psychiatric patients, ALOS should be reduced by two days where the usual LOS is 1-13 days, by three days where the usual LOS is 14-28 days, and by eight days where the usual LOS is 29 days or more. This will be achieved through the establishment of intermediate care units in prisons.

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7 Aged 65 years and over years for non-Aboriginal and 45 years and over years for Aboriginal.
For older people who are acute psychiatric patients, ALOS should be reduced by two days where the usual LOS is 1-13 days, by three days where the usual LOS is 14-28 days, and by eight days where the usual LOS is 29 days or more. This will be achieved by providing intermediate care, intensive day hospital, rehabilitation and community services, improved access to specialist clinical support for older people with dementia, and provision of consultation/liaison services to geriatric and medical/surgical wards of general hospitals and psychiatric units.

For adult (those aged 18-64 years) acute psychiatric patients, ALOS should be reduced by two days where the usual LOS is 1-13 days, by three days where the usual LOS is 14-28 days, and by eight days where the usual LOS is 29 days or more. This will be achieved by providing intermediate care, intensive day hospital, rehabilitation and community services.

For child and adolescent (those aged 0-17 years) acute psychiatric patients, ALOS should be reduced by two days where the usual LOS is 1-13 days, by three days where the usual LOS is 14-28 days, and by eight days where the usual LOS is 29 days or more, through early discharge planning.

**Recommendation 46**

*Strategies to reduce the average length of stay for targeted hospital patient groups should be implemented. These strategies should focus on the key areas of chronic disease management, rehabilitation, aged care, mental health, and short stay surgical and non-surgical acute services, and be fully implemented within five years.*

**Recommendation 47**

*Targets should be established for improving rates of day of surgery admission and day procedures.*

**Hospital Efficiencies**

Clinical support services represent the hidden side of health service provision. While not seen by patients, they are important in providing high quality, safe health services. These services are also considerable drivers of quality, safety and increasing costs in the provision of health services.

A sample of these support services with the potential for improving efficiency were examined as part of the review. These were:

- pathology services
- pharmacy services, and
- hospital food services.

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Pathology
Public pathology services in Western Australia are delivered by four separately managed services: the PathCentre, Royal Perth Hospital, Fremantle Hospital, and King Edward Memorial Hospital/Princess Margaret Hospital. These deliver services that include routine, high volume diagnostic testing, specialist and complex testing, and teaching and research.

In terms of relative size:

- The PathCentre employs 690 full-time equivalent (FTE) staff and is revenue funded under a fee for service model. Expenditure on its services in 2002/03 was $62 million.
- Royal Perth Hospital’s Division of Laboratory Medicine employs 253 FTE staff. Expenditure on its services was $24 million in 2002/03.
- The combined pathology service at King Edward Memorial and Princess Margaret hospitals employs 132 FTE staff. Expenditure on its services was $10 million in 2002/03.
- Fremantle Hospital’s pathology department employs 88 FTE staff. Expenditure on its services was $8 million in 2002/03.

As a component of the Health Reform Committee’s work agenda, a review of the provision of public pathology services in Western Australia was undertaken. This review, a copy of which is available on the Western Australian Department of Health website9, argued the need to reorganise pathology services in this State to ensure financial sustainability and improved quality10.

Reform strategies included:

- better demand management by reducing inappropriate testing through the use of funding incentives and education of clinical staff
- rationalising services by reducing costs through better matching of capacity and demand, and eliminating inappropriate duplication
- taking a planned approach to the development of specialist services, and
- achieving economies of scale in equipment procurement and purchasing consumables.

These strategies require effective coordination among the services and strong and accountable management to be successful. This can be best achieved by bringing existing services into a single organisation under a unified management structure with clearly defined accountability to the broader health system. The single pathology service model recommended in the review is supported.

The review estimated that a 10% reduction in costs is achievable over three years without compromising quality in service delivery if a single service model is adopted. This equates to a saving of about $10 million over three years.

Achieving these savings will require vigorous pursuit of opportunities to rationalise services, better management of demand for pathology services, implementing new funding models, and more effectively coordinating the obtaining of equipment and consumables.

9 www.health.wa.gov.au
This single service model needs to:

- be clearly aligned with the Area Health Service model and answer to and be controlled by the Area Health Service Chief Executive whose services provide most of the funding
- support on-site clinical interfaces to develop centres of excellence and research
- continue the excellent services to country areas
- ensure demand management by offering financial incentives and effective education programs, and
- manage costs firmly and ensure regular benchmarking with private sector costs, and other public sector services and jurisdictions.

**Pharmacy**

As with pathology, a separate review of hospital pharmacy services was undertaken. The review is also available on the Western Australian Department of Health website.

The review proposed a three-year agenda of change spanning 32 recommendations of which 10 are identified as high priority, requiring a strong commitment of investment from the Department of Health to achieve the preferred outcomes. While it is difficult to offset costs in terms of definite savings, it has been estimated an ongoing investment of under $3 million combined with an initial injection of capital/‘one-off’ payments of around $10 million to implement the 10 high priority recommendations, has the potential to save the health system upwards of $19 million per annum. This would occur as a result of pharmacists initiating changes to drug usage and management, impacts on length of stay, re-admission, lab testing and medical procedures.11

Workforce issues such as the quantum and skill mix are of paramount concern across public pharmacies. Pharmacists are to be commended on their attempts to manage change processes and increasing expectations from hospital administrators, medical staff and the community in the critically important area of medication management. However, pharmacists are mainly engaged in supply and micro-management issues at the expense of much needed professional and clinical activities. This is partly due to the lack of non-professional staff working in pharmacies.

With respect to the pharmacist workforce an alternative approach is proposed that:

- would increase the number of pharmacy technicians, and
- redefines support roles in the provision of clinical pharmacy services.

Pharmacy practice is heavily dependent on information technology and support. There are significant gaps in this area that hinder reporting and clinical practice opportunities. An electronic formulary incorporating links to both clinical and operational guidelines is required to establish effective medical communication between metropolitan and regional areas for improved professional and economic outcomes.

Implementation of the review’s recommendations will see a greatly enhanced pharmacy service. The present service is meeting supply functions, but is not working towards or positioned to address the expectations of community and administrators that have changed over recent years in respect to the management of the high risk area of drugs in hospitals. There is significant room for improvement, particularly in strategic direction and vision through improved policy and planning, and more efficient financial management and monitoring of therapeutic outcomes. The review’s recommendations are endorsed.

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Food Services

Metropolitan hospitals in Western Australia produce approximately 3.4 million meals per annum and country hospitals produce a further 1.2 million meals.

The provision of food services across health services is complex, both in terms of size and the type of facilities, and in meeting the dietary and nutritional needs of patients. A review was undertaken to assess whether improvements could be made to existing arrangements.

Food service operations in public hospitals are predominantly managed on a site-by-site basis. The larger tertiary hospitals have mainly adopted cook-chill systems with a large portion of food being sourced from external suppliers. The smaller sites and country hospitals have generally maintained cook-fresh systems.

These services are generally performing well. However, there are some areas where improvements could be made to provide better services for patients and to improve efficiency.

Metropolitan hospitals should retain the current production systems at all sites except for Graylands Selby-Lemnos Hospital who should discontinue on-site production and purchase prepared food from external suppliers.

Standardisation of menus, dietary requirements, portion sizes and product specifications across metropolitan public hospitals will allow greater consistency and quality control. This is likely to result in increased patient satisfaction.

It is estimated that $1 million per annum can be saved through food cost and labour efficiencies. In the first year, approximately $1 million in capital investment will be required to implement these changes. Savings from initiatives are expected to be ongoing.

There is a need to develop a range of system-wide standards and performance indicators, including to:

- develop and standardise two menu cycles; a seven day short stay and 21 day long stay cycle
- develop common special diet and nutritional protocols to simplify processes and maximise consistency with main menu lines
- develop a common computerised food services system for larger sites incorporating menus, patient and meal tracking, and dietetics
- develop and standardise portion sizes, protein content and recipes, and
- develop common key performance indicators including meal counts, food and labour costs, and waste measures.

These strategies are expected to lead to better food contracts with possible savings in the order of 3-5% on food costs, or around $400,000 per annum.

A mechanism for ongoing review and reporting to maintain and improve on the current levels of efficiency will be needed. This ongoing system-wide review and development of food services would be achieved through a food services collaborative group reporting to an executive sponsor and State Health Management Team.

Recommendation 48

The recommendations and approaches outlined in the pathology, pharmacy and food services reviews are endorsed.

Recommendation 49

A single pathology service should be created within the metropolitan health services by 2005. This new service, headed by a Chief Executive, should deliver efficiencies while enabling the planned development of specialist services.

A Western Australian system-wide drug formulary and drug bar coding should be developed and implemented.

Hospital food services should be reformed by:

- implementing system-wide standards and performance indicators, and
- introducing a computerised food service system.

Hospital Cost Drivers

To assist in gaining a better understanding of hospital cost structures in the Western Australian context, a review of the cost drivers and their inter-relationship with the total cost growth at Royal Perth Hospital was commissioned. Preliminary results, based on an analysis of the last three financial years, indicate substantial growth in salaries and wages and the cost of medical, surgical and diagnostic supplies. A proportion of this growth is not attributable to the growth in admissions, the increasing complexity of care or movements in award wages.

In Figure 5.1, there are a number of areas of particular interest. The first is the unaccounted growth in FTE's and the growth in agency costs. The high cost of agency nurses is being targeted statewide by strategies such as NurseWest and attraction of permanent nurses. Further work is warranted to extend the Royal Perth Hospital analysis to other Western Australian hospitals and to explore benchmarking between Western Australian hospitals and comparative interstate facilities.
In parallel with the study at Royal Perth Hospital, the Committee considered work which aimed to financially model a tertiary hospital through building up costs on an activity and ward basis. Once this model is fully developed and validated it will provide a useful tool in benchmarking like hospitals, assessing the impact of proposed efficiency measures and establishing the expected operating costs of new purpose designed facilities.

Consideration of the preliminary output of both projects indicated that with accurate reporting, analysis and strong management, reduction in the growth in hospital costs through improved efficiency is possible.

**New Hospital Facilities**

The delivery of hospital care has changed significantly over the past 20 years. However, this progress has not always been accompanied by corresponding changes in the design and physical layout of hospital facilities. For example, the location of ICUs close to operating theatres, or of the radiology department close to the emergency department have obvious advantages. However these benefits are not always reflected in the historical design of Western Australian tertiary hospitals. It is not surprising that inherent inefficiencies in the use of physical assets and workforce have resulted.

While clinicians and health administrators have been trying to overcome these issues through expensive capital additions and alterations, the end result has often been a compromised facility that does not operate at ideal efficiency. Almost all the major tertiary hospitals in Perth contain examples of such adjustments.

Rather than continue with a piecemeal approach to investing in new infrastructure, a more strategic approach can generate significant long-term efficiency gains for the health system.
Evidence suggests it is much more economical to invest in replacement hospital infrastructure, rather than directing resources towards improving and modifying existing facilities. Research, particularly in the United States, has indicated there is an increased trend for organisations to move towards total facility replacement. The replacement approach also minimises disruption as it allows existing facilities to deliver health care in a business as usual fashion during the construction period.

In particular, building a replacement facility can unify services that have historically operated on a fragmented basis. In 1997, the South Eastern Sydney Area Health Service relocated its Royal Women’s Hospital from Paddington to the Prince of Wales Hospital at Randwick. Before relocating, the Royal Women’s Hospital did not have access to ICUs or more sophisticated radio diagnostic facilities, and therefore had major issues with providing high quality safe services to its patients. Whenever these services were needed the patients would be shifted to the Prince of Wales Hospital, thereby creating risks in the quality of care. These risks have been removed with the building of the replacement facility at the Prince of Wales Hospital.

The building of a new Southern Tertiary Hospital, the reconfiguration of Royal Perth and Sir Charles Gairdner to one campus and the development of replacement facilities for King Edward Memorial and Princess Margaret hospitals will be important steps towards creating a more efficient health system.

**Procurement**

The health sector is the largest State Government purchaser of goods and services, totalling around $573 million per year. Of this, Health spends around 55% on goods, 20% on period or standing contracts, and 25% on other services.

As expected, Health accounts for 99% of all government expenditure on medical, dental and veterinary equipment and supplies. However, Health is also a dominant purchaser in many other areas including:

- office products - accounting for 22% of State Government expenditure
- cleaning products - accounting for 69% of State Government expenditure
- toiletries - accounting for 57% of State Government expenditure
- food and beverages - accounting for 49% of State Government expenditure
- non-clothing textiles - accounting for 56% of State Government expenditure, and
- containers, packaging and other goods - accounting for 46% of State Government expenditure.

With such a large investment in procurement of health services, it is understandable that the State Government is keen to realise economies of scale and efficiencies in this sector.

The main areas of reform in health procurement are:

- consolidation of several procurement services into a single entity
- product rationalisation, and
- realising efficiencies in tendering and contracting services.

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13 Block H; Facility renovation or replacement depends on care delivery, service vision. Managed Healthcare Executive, pp 30-32 @
14 Verbal communication with Royal Women’s Hospital SESAHNS NSW Health, 2004.
16 Ibid.
A major achievement for the Department of Health has been the consolidation in 2002 of its five supply services into one single service known as HealthSupply WA.

While the establishment of HealthSupply WA was a positive first step, there has been some loss of momentum in relation to consolidating services under this single supply entity and driving serious reform in the area of product rationalisation.

The State Government expects to save around $100 million on procurement reform, of which $25 million is expected from the Department of Health (with the health sector currently making up around 25% of the State’s total budget). The Department of Health has only identified around $5-10 million in savings to date, falling considerably short of State Government expectations.

In order to achieve the targeted savings, the health sector needs to focus on:

- realising the true benefits of a single supply service by consolidating/rationalising contracting, tendering, distribution and warehousing services, and
- the rationalisation of products.

Product rationalisation will not only be a major driver for achieving the targeted $25 million of savings, but will also lead to quality and safety improvements.

**Recommendation 50**

_A dedicated group within HealthSupply WA in the Department of Health should be established to drive procurement reform. This group should include clinician involvement, and focus on key areas of product rationalisation and consolidation of contracting, tendering, distribution and warehousing services._

**Further Work**

All clinical and corporate support areas, and business and clinical practices should be reviewed periodically to ensure efficiency, safety and quality, and good integration with clinical and other support services.

It is recommended that periodic reviews be undertaken in all areas, along the lines of the reviews in the above areas. Oncology and sterile manufacturing services should be a priority as the Health Reform Committee believes there are significant efficiencies to be realised in these areas.

**Recommendation 51**

_Oncology and sterile manufacturing should be reviewed within 12 months to improve efficiency in these services by realising economies of scale in production and distribution._
The Current Workforce

Some 30,000 individuals, approximately 3.5%1 of the State’s workforce, make up the public health sector workforce. They include a wide range of callings in professional, administrative, clerical, technical and supervisory roles.

The vision for this workforce is that it is motivated, passionate about what it does, actively seeks opportunities for continuous improvement in service delivery, embraces teamwork, and shares a common set of values and sense of direction. To better achieve this will require a sustained focus over the next few years on:

- improving morale
- enhancing workforce planning
- improving attraction and retention
- promoting research, and
- developing leadership, particularly in clinical fields.

Each of these issues are considered in turn.

Improving Morale

Workplace morale and culture are influenced by many factors. Among the strongest influences are the day-to-day relationships between staff members, between staff and managers, and the level of communication allowing information and feedback to flow throughout the organisation.

A preferred culture would have:

- a system-wide focus on promoting better health and good health care
- an environment of transparency, value, trust and learning through value-based leadership and creativity, and
- a collaborative, friendly and supportive environment based on mutual respect.

Some issues that have a direct impact on staff morale have already been addressed. These include the establishment of the State Health Advisory Committee on Family Friendly Initiatives and the ‘Nursing Hours Per Patient Day’2. However, more needs to be done.

Staff are keen to know the future direction of the system and to understand how their work contributes to that direction. The Department of Health will need to develop a State health strategic plan to begin the process of implementing the vision outlined in this report. If that plan is developed with the cooperation and involvement of people in the health system, the shared sense of ownership that will result will have a significant impact on morale.

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A collaborative, clinician-led approach to service development and redesign, as advocated in this report, will also contribute.

One avenue for improving morale in the system is to recognise achievements and support, and encourage new ideas. This not only impacts on morale, but should also result in improved ways of doing business or delivering services.

There is greater scope for supporting innovation and recognising achievement. Formal mechanisms for the health system to support and reward innovation and continuous improvement are needed.

*Dedicated Website for Continuous Improvement and Innovation*

A dedicated website would serve as a means of both publicly acknowledging the efforts of innovators in the system, and providing easy dissemination of information on innovations being developed and/or implemented in the system.

*An Innovations Fund*

Lack of seed funding can be an obstacle to innovation. Establishing an innovations fund would provide some encouragement for innovators. Similar funds operate within many government agencies throughout Australia.

*Innovations Awards Program*

Innovation awards programs for the public sector have been growing rapidly over the past decade throughout Australia and internationally. They have proven to be an important catalyst for increasing interest in public sector innovation, and help to generate a positive view of the public sector and promote morale. The programs provide a forum for recognising achievements and fostering a culture of continuous improvement.

One of the best known award programs in the United States of America is the Ford Foundation’s Innovations in American Government program administered by Harvard University's Kennedy School of Government. Local examples include the prestigious Baxter Health Care Awards in New South Wales, and the Western Australian Premier’s Awards.

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**Recommendation 52**

*Staff throughout the public health sector should be offered opportunities to contribute to the development of a State health strategic plan.*

**Recommendation 53**

*The Western Australian public health system should support and reward innovation and continuous improvement.*

*Mechanisms to achieve this should include development of a dedicated innovations website and the establishment of both an innovations fund and an innovation awards program.*
Enhancing Workforce Planning

Workforce planning is about getting the right people with the right skills in the right place at the right time, and enhancing the capacity of existing staff. Approaches in workforce planning in past decades, nationally as well as locally, have resulted in some severe shortages in several health occupational categories.

Workforce planning in the Western Australian public health system has suffered both from lack of strategic direction and a service plan that sets out service developments and configurations on a medium to long-term basis.

This problem has been compounded by the fragmented nature of the system resulting in multiple employing bodies, and is still hindered by different human resource management systems. Different definitions and incompatibility of data make it almost impossible to even get an accurate and complete picture of the workforce. The Department of Health’s human resource management system needs replacing, and restructuring is needed in human resources support services.

Workforce planning goes beyond data with the need to consider work practices, service planning, work design, role development, attraction and retention and safe working hours. Links between workforce planning and the State’s strategic plan needs to be explicit. Workforce planning should be performed collaboratively with universities, colleges of TAFE, the Department of Education and Training, and the Australian Government.

The Department of Health requires a health workforce strategic plan that aligns with the overarching State health strategic plan. The health workforce strategic plan should clearly outline how the health workforce will move forward to achieve the Department of Health’s overall strategic goals.

Recommendation 54

The Department of Health should develop its workforce planning tools and capacity in collaboration with the universities, colleges of TAFE, the Department of Education and Training and the Australian Government.

Recommendation 55

A health workforce strategic plan should be developed which aligns with the State health strategic plan.

Improving Attraction and Retention

There will be shortages of doctors, nurses and allied health staff in critical areas over the next 10 years. This analysis assumes current roles, responsibilities, work practices and known numbers of undergraduate training places.

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These shortages result from:

- too few people graduating from undergraduate courses
- in some cases, high turnover due to low morale and stress, and
- the ageing of the health workforce.

A multi-faceted strategy has been put in place over the past few years to address the critical shortage of nurses in the Western Australian public system.

This strategy has included:

- campaigns to attract people into the nursing profession
- improved training and incentives for retraining
- increased opportunities for professional development of existing nurses, including leadership and nurse practitioner roles, and
- the introduction of ‘Nursing Hours per Patient Day’ arrangements to ensure appropriate nursing workloads.

Without compromising the momentum achieved in nursing, there is now a need to focus on the attraction and retention of other aspects of the workforce.

**Medical Workforce**

Western Australia has a lower number of specialists per 100,000 population than the national average, recording a ratio of 74.3 compared to the national ratio of 88.2. Shortages are particularly evident in the areas of anaesthetics, psychiatry and emergency medicine.

This situation is being addressed in part through the recruitment of overseas trained doctors and by an increase in allocated places for undergraduate and postgraduate entry by the Australian Government. The increase in allocated places is welcome, and will have significant implications for the public health system through increasing:

- the number of students
- the numbers of doctors in their Post-Graduate Year 1 and Post-Graduate Year 2, and
- the number of registrars requiring experience and supervision in the public health system.

While this increase should assist with the supply shortage, it will place an additional burden on senior doctors and consultants in the health system. The placement of these trainees will be a challenge for the State, and will require a reassessment of the current approach to provide them with relevant and high quality training opportunities without distorting the efficient delivery of health services.

In line with the thrust of this report, more training should be provided outside the tertiary hospitals in the four general hospitals, specialist metropolitan hospitals and in primary care settings. Once these non-tertiary hospitals are fully developed, they will provide the bulk of acute treatment, elective surgery, and rehabilitation and sub-acute care which will provide the core training ground for doctors of the future. Increases in the number of registrars will also greatly assist those hospitals to provide services on a 24-hour basis.

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*Nurses play a key role in improving and maintaining high standards of care which requires a true partnership with other clinicians. The local nursing leadership in this area needs to be recognised as being pivotal to the success of the unit.*

- Tanya Basile
  SCGH

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The State Government has traditionally played the major role in Post-Graduate Year 1 and Year 2 training. If the health system is to continue to be a mixed public/private system, private hospitals that benefit from significant public investment may need to play a greater role. This issue requires further discussion and collaboration between private hospitals, the education sector, and the State and Australian Government in terms of planning for future service and workforce requirements and achieving mutually acceptable arrangements for training.

**Recommendation 56**

*Discussions should occur between the Department of Health, major private hospitals, clinicians, medical colleges and universities to consider new approaches to under-graduate and post-graduate medical training. This will ensure greater involvement of the non-tertiary public hospitals, private hospitals, and the primary care sector.*

**Allied Health Professionals**

Allied health covers professional categories including audiologists, dietitians, pharmacists, occupational therapists, medical imaging technologists, orthotists, psychologists, physiotherapists, podiatrists and speech pathologists.

There are currently shortages in most areas of allied health with vacancy rates of 12.7% in podiatry, 11% in clinical psychology, 9.6% in medical imaging and radiology, 6.7% in occupational therapy and 6.2% in physiotherapy. There is an equally disturbing high turnover rate in allied health, estimated at 30% per annum during 2001.

The supply and demand issues vary according to the particular profession. One example is provided by podiatry. Western Australia’s only podiatry course, at Curtin University of Technology, has recently ceased to offer undergraduate placements and the university is expected to close its Department of Podiatry in the near future.

As with nursing, a comprehensive workforce planning and attraction and retention strategy is needed to address these allied health issues.

Elements of this strategy might include:

- visible allied health leadership
- improved marketing of allied health as a desirable career
- improved allied health workforce planning
- greater flexibility of working conditions and career paths
- improved models of service delivery for rural and remote professionals, and
- greater opportunities for allied health research.

The Department of Health currently lacks a focal point for any discussion, or for mobilising action, around allied health. Submissions and representations from the allied health workforce argue that there needs to be a designated adviser to address this issue.

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Recommendation 57

A senior adviser on allied health should be appointed to the Department of Health initially to assist with the development of a comprehensive strategy addressing allied health workforce issues.

Aboriginal Health Workforce

Experience suggests that increases in the number of Aboriginal health professionals will contribute to improved health outcomes. However, the workforce in the public hospital and community health sector remains overwhelmingly non-Aboriginal even in regions where a significant proportion of the client base is Aboriginal.

While the employment of more Aboriginal health service staff in regions with large numbers of Aboriginal people has been a government objective for many years, this has proven difficult to implement. More needs to be done.

Barriers to the training and accreditation of Aboriginal health workers need to be examined and overcome. Greater use of Aboriginal health workers in hospital wards and outpatient clinics needs to be encouraged and barriers to achieving this need to be recognised and addressed. Targets for the employment of Aboriginal health workers should be one of the performance measures for management teams, particularly in regional areas.

Recommendation 58

Increased numbers of Aboriginal health professionals should be employed in the Western Australian public health system. Employment targets should be set in area performance agreements to achieve this (refer Recommendation 73).

Promoting Research

One of the key avenues for attracting and retaining good clinical staff is to provide them with access to and support for clinical research. A detailed assessment of clinical research needs in Western Australia and the vision for the future was described in the discussion paper ‘Options for Clinical Services’7. This vision is endorsed.

There is a rich pool of research talent in Western Australia with prominent individual research groups. However, as is the case of many clinical services, there is a degree of fragmentation and difficulties in achieving the critical mass essential for research in an increasingly competitive environment.

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Two main challenges are evident:

- the challenge for the research community to exploit the advantages of cross-institutional networks and collaboratives, and
- the challenge for the funding authorities to view research as a long-term asset rather than a short-term funding liability.

Strategies should be pursued to meet these challenges and ensure an efficient, productive and sustainable research sector in the future. These strategies should focus on:

- the formation of a Strategic Medical and Health Research Policy Council and associated Research Development Unit. This would allow the use of current human and physical resources in a more collaborative manner and thus improve efficiency. It would also transform the metropolitan area into a hub of research excellence. This evidence should have close links with the Premier’s Science Council.
- the Western Australian Institute for Medical Research providing a useful model for such development by evolving from an informal collaborative network towards an incorporated entity.
- ensuring funds used for the support of teaching, training, development and research are clearly identified and distinguished from other intangible costs in tertiary hospitals, and
- creating more opportunities for medical staff to engage in research activities within the public health system.

**Recommendation 59**

*Western Australia should establish a Strategic Medical and Health Research Policy Council and associated Research Development Unit to allow for a more collaborative and strategic approach to medical research in this State.*

**Developing Leadership**

Any future health reform process must capitalise on the people and leadership assets within the industry to succeed. The reform agenda represents an opportunity to engage both clinicians and non-clinicians in leadership strategies. These strategies would be used to drive system-wide reforms and develop a collaborative, friendly environment based on mutual respect with a strong client focus.

It is therefore imperative that clinicians are engaged to lead and support this reform. To take up these leadership positions, clinicians need:

- support and time to be fully involved in service redesign
- investment in development programs
- financial recognition for the time and effort in leading redesign, and
- an understanding of the value of multi-disciplinary teams.
Throughout the implementation of this report, there will need to be mechanisms put into place so that clinicians can drive and lead clinical change. One such mechanism is clinical collaboratives. A collaborative brings together a group of clinicians to work through a specific clinical reform challenge. For example, Queensland has clinical collaboratives in cardiac surgery, outpatient rehabilitation, emergency medicine, paediatric day surgery, renal and stroke care. New South Wales has established a clinical collaborative to facilitate the redesign of its emergency care services.

The collaborative methodology was initially developed by the Institute of Healthcare Improvement in Boston, United States of America, in their Breakthrough Series 1995. It has since been applied across a wide range of national and international health care systems.

Collaborative groups generally use workshops and informal meetings to design reforms, develop implementation and change management processes, and to identify key performance indicators for assessing the success of reforms once implemented.

The collaborative group also coordinates the implementation phase, providing the training and education, peer support and other resources required by implementing sites.

These collaboratives have the advantage of cutting across different clinical disciplines and hospital sites so that any reform or improvement is more likely to be replicated on a statewide basis. Collaboratives can also involve clinicians from other jurisdictions which can be particularly effective where another jurisdiction has already implemented reform.

Recommendation 60

Clinical leadership in the change process should be appropriately recognised and supported. Cross-institutional clinical collaboratives should facilitate this leadership role.

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Introduction

This chapter examines the organisational implications of implementing the recommendations of this review with particular attention to:

- the relationship between the Royal Street office of the Department of Health and Area Health Services, and
- the relationship between the Australian and State Governments.

The Health Administrative Review Committee Reform

The Area Health Service organisational structure is relatively new, having been implemented in 2001 following State Government endorsement of recommendations contained in the Health Administrative Review Committee (HARC) report.

Prior to the HARC report, the public health system was highly fragmented with 47 individual hospital boards being responsible for governing the delivery of health services in this State.1

The current management structure is much more integrated and is framed around an Area based health service delivery structure. Rather than the 47 hospital boards, there are now six Area Health Services responsible for servicing the health needs of specific Area populations. These Areas are the:

- North Metropolitan Area Health Service
- South Metropolitan Area Health Service
- East Metropolitan Area Health Service
- Women's and Children's Health Service
- WA Country Health Service, and
- South West Area Health Service.

The population catchment of the Women's and Children's Area Health Service is the totality of the State.

Each of these Area Health Services has a Chief Executive as a budget holder who reports to the Director General of Health. A State Health Management Team comprising the Director General, the Area Chief Executives, and the Royal Street office Executive provides a forum for discussion on system-wide administrative issues. As a recent innovation, the Clinical Senate was established comprising senior clinicians from within and outside the public health system. This Senate facilitates system-wide debate on clinical services.

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Beyond the Health Administrative Review Committee Reform

Although considerable progress has been made since 2001, full implementation needs to be viewed as a medium-term objective. Several more years of commitment from all stakeholders will be required before the new structure is fully operational and its potential fully realised.

The end result of such commitment is clearly evident within the New South Wales health system. Although Area boundaries and numbers of Areas have changed, the Area Health Service structure in New South Wales has been in place for more than a decade, and is recognised as providing an efficient and effective structure for delivering health services.

Having been in place in Western Australia for two years, it is worthwhile to take stock of the Health Administrative Review Committee’s implementation, and to identify where refinements could be made. These refinements include:

- needing better role definition between the six Area Health Services and the Royal Street office
- while the State Health Management Team provides a common forum for debating system-wide administrative issues, its status as a management/decision making authority requires clarification
- links between metropolitan-based services and the country health services need to be further developed and enhanced
- seeking more input from the community on health policy issues, and service planning and delivery, and
- adjusting the current metropolitan Area Health Service structure to reflect the shift to a north/south Area model.

**Recommendation 61**

The concept of Area Health Services should be retained and further developed.

Attention needs to be given to:

- better role definition between Area Health Services and the Royal Street office
- improving links between metropolitan and country Areas
- reconfiguring the metropolitan Area Health Services to a north/south Area model, and
- enhancing the Area Health Services responsibilities for the health of the population within their catchment Area.

**Directions for Change**

The diagram below shows the improvements and refinements considered necessary over the next few years to ensure the new organisational structure is successfully implemented.
Better Role Differentiation

Greater Devolution of Planning and Decision Making to Area Health Services

To ensure Area Health Services are positioned to be responsible for all the health needs of their catchment population, there should be greater devolution of service planning and delivery to the Area Health Services. These changes should be accompanied by strengthening the strategic role of the Royal Street office of the Department of Health.

Under existing arrangements, operational aspects of mental health, Aboriginal health, aged care, dental health, population health, and management of non-government organisation contracts are undertaken by the Royal Street office. These should be devolved to Area Health Services where possible.

In broad terms, the roles of the Royal Street office should be:

- strategic health policy development and coordination
- strategic planning on a statewide basis
- effectively, equitably and transparently allocating resources to Area Health Services
- developing and managing the regulatory framework
- monitoring and evaluating the performance of Area Health Services and the health system in general
- ensuring the financial, social and environmental aims of the State Government, in relation to Western Australia’s health system, are met
- liaising with other State Departments such as the Department of the Premier and Cabinet and the Department of Treasury and Finance
- provision of some statewide services, and
- legal and legislative services.
In broad terms, the roles of the Area Health Services should be:

- planning services to meet the health needs of their local populations
- effectively managing and allocating the financial resources of the Area to meet population health needs
- managing the capital resources of the Area
- managing and maintaining human resources within the Area to ensure a sufficient and appropriate workforce to meet the health needs of the local population
- working with GPs, private hospitals, non-government organisations and other health service providers and agencies to ensure the effective delivery of services, and
- liaising with the local community to ensure consumer and community input into planning and service delivery.

**Recommendation 62**

The Department of Health's Royal Street office should be responsible for coordinating system-wide policy and planning, allocating resources, managing the system's regulatory framework, monitoring and evaluating performance, and ensuring the State Government's financial, social and environmental aims for health are met.

**Recommendation 63**

The service delivery component of population health, aged care, dental health, mental health and Aboriginal health programs, which are currently provided by the Royal Street office, should as far as possible be devolved to the Area Health Services. The associated budgets allocated to these programs should also be devolved.

*Area Chief Executives: Refocusing on the Needs of Area Populations*

In line with the vision of a health system with a stronger focus on population health, an Area based organisational structure ensures Area Chief Executives plan and manage health service delivery around the broad health needs of catchment populations. This will deliver a more balanced and holistic health service that meets not only the tertiary health care needs of the population, but also primary and intermediate health care needs.

The Area Chief Executive of each Area Health Service is also the head of one of the three tertiary hospitals under existing arrangements. Tertiary hospitals are large and complex organisations with budgets amounting to hundreds of millions of dollars. While this current dual management role may seem cost effective, the demands of managing a major tertiary hospital is preventing these Chief Executives from focusing on the broader health needs of the Area population.
A more strategic and holistic view of Area Health Service delivery is likely to come only with some reduction of the Chief Executives tertiary hospital management responsibilities. The preferred option is to separate the management of Area Health Services and tertiary hospitals, whereby the Area Chief Executive would be accountable for maintaining the health of the Area’s population together with managing and coordinating all health services. A separate manager would oversee the administration of the tertiary hospital.

Recommendation 64

The role of Area Chief Executives should be focused on improving and maintaining the health of the Areas population and the management of all health services.

The Role of the State Health Management Team

The State Health Management Team provides a unifying link between executive management within the Area Health Services and the Royal Street office. This has been particularly important in moving from a fragmented system characterised by a distinct gap between the health services and the Department to a more unified approach.

State Health Management Team meetings can be a useful forum for discussing and debating policy, planning and administrative issues that have system-wide impact. The State Health Management Team is particularly well placed to facilitate policy and administrative reform, and continuous improvement across the system by enabling the sharing of expertise and a collaborative approach to change management issues that arise.

Partly because of the incorporation of the word ‘management’ in the title, there has been some confusion within the system as to whether the State Health Management Team is a decision making group or an advisory body. This has resulted in potential delays in the decision making process and perceptions of blurred accountability.

The State Health Management Team would be more effective if its role was clarified to be seen as an advisory body to the Director General of Health, rather than being jointly responsible and accountable for overall management of the health system.

Recommendation 65

To clarify its role as an advisory body to the Director General of Health, the State Health Management Team should be renamed the State Health Executive Forum.

Better Metropolitan and Country Links

Effective links between country and metropolitan health services are a vital component of any integrated and unified health system.
In Chapter 3 a proposal was outlined to improve access to health services by developing regional resource centres aimed at strengthening the quality and scope of health care available locally for country people.

Notwithstanding this initiative, there will always be a need for some patients to be transferred to metropolitan health services particularly for specialised tertiary sector care such as coronary artery bypass surgery, extensive burns treatment and some paediatric services.

Regional health service providers also need to access the diagnostic and treatment expertise provided by specialists and medical practitioners based in metropolitan tertiary hospitals. As an example, rural health professionals often need to seek a second opinion or other professional support from their peers.

Strong links between country and metropolitan Area Health Services are thus essential to ensure country patients have timely access to tertiary health care and up-to-date professional expertise.

A further issue is that of patient referrals. Rural doctors often need to refer patients to specialists within the metropolitan area. While some doctors have well established referral mechanisms in place for common conditions, this is not the case for all rural doctors and conditions. More formalised links with metropolitan Area Health Services would provide a consistent mechanism for referrals to tertiary services for all rural doctors under all health conditions.

There are existing links between metropolitan tertiary hospitals and rural health services such as clinical support being provided to the Kimberley Satellite Dialysis Unit by a nephrologist at Royal Perth Hospital. Some are formal health service-to-service relationships and some are based on individual clinician-to-clinician referral patterns and relationships.

However these arrangements, while laudable, do not comprehensively address the needs of rural health services for:

- professional development and support for their clinicians
- assistance with relief staff
- referral pathways for rural patients in the absence of an individual clinician’s personal knowledge of metropolitan consultants and facilities among others, and
- providing a solid basis for establishing formal rotations to regional hospitals.

With the creation of the north/south Area Health Services in the metropolitan area, the following formal links are proposed.
Recommendation 66

Formal links between the country and metropolitan Area Health Services, which ensure regional patients have timely access to tertiary health care and up to date professional expertise, should be clearly described.

The performance agreements of the metropolitan Area Chief Executives should explicitly include these linkages.

Enhanced Community Input

Health service delivery has become significantly more complex and long term in nature over the past 20 years with the advancing of medical technology, an ageing population and rising demand for services.

In this challenging environment the community, being a major ‘funder’ of the public health system, can play a vital role in assisting the system to identify priorities for health expenditure and better ways of delivering services.

The importance of having community input into planning and policy decisions has already been recognised within WA Country Health Services who have established a number of Country District Health Advisory Councils. These councils are aimed at encouraging consumer and community participation at local, district and statewide levels.

Significant benefits would be gained from now extending this model statewide. Such a model would provide a crucial mechanism for enabling informed community debate and discussion about public health planning and policy directions.

Community-based forums would provide advice to the appropriate Area Chief Executive on expectations and priorities for delivery of health services, incorporating and supporting:

- assessed community needs
- evidence-based practice in health care
epidemiological and demographic trends, and contemporary, relevant research.

These forums could also be used to seek community feedback on health promotion and prevention initiatives that are designed to sustain and enhance the general well being and health of the community in the long term.

The composition of a community-based forum should represent a cross section of interests across the community. Members would normally be leaders in their respective occupations and may represent fields such as:

- consumers, including carers
- primary health care
- research and academia
- health industry staff
- private sector, and
- prominent and active members of the local community.

The composition and specific role of each community forum should be tailored for each Area Health Service so that it best meets the needs of the Area catchment population.

**Recommendation 67**

*Community advisory committees should be established in the metropolitan and South West Area Health Services to enable local communities to contribute to decisions about service priorities and plans.*

A more formalised role for the Health Consumers' Council (WA) would be another means of ensuring that consumer views are considered when planning and managing the delivery of public health services. The Health Consumers' Council (WA) was appointed by the Health Reform Committee to coordinate a public consultation process on discussion papers released during the Health Reform Committee's review.

The Health Consumers' Council (WA) should facilitate regular community feedback on health system performance and policies.

**Recommendation 68**

*The Health Consumers' Council (WA) should be asked to provide regular feedback on health system performance and major health system issues.*

**Streamlined Metropolitan Area Health Service Structure**

Boundaries for the existing metropolitan Area Health Services have been determined primarily around the location of the major tertiary hospitals rather than being based on defined populations.
Recommendations have been made in this report to move to a north/south planning model for the metropolitan area. In line with this approach, the number of Area Health Services should be restructured from four to the following three; Northern Metropolitan Area Health Service, Southern Metropolitan Area Health Service and Women's and Children's Area Health Service.

The Swan River provides a natural starting point for the boundary between the northern and southern metropolitan areas. In line with the greater devolution to Area Health Services outlined earlier in this chapter, the Northern and Southern Metropolitan Area Health Services would each have responsibility for their population health, community health and community-based mental health services.

The hospitals in the Northern Metropolitan Area would be:

- the Northern Tertiary Hospital
- Joondalup Health Campus
- Swan District Hospital
- Graylands Selby-Lemnos Hospital
- Inner City Primary Care/Injury Centre
- Kalamunda Hospital, and
- Osborne Park Hospital.

The hospitals in the Southern Metropolitan Area would be:

- the Southern Tertiary Hospital
- Armadale Kelmscott Memorial Hospital
- Rockingham/Kwinana District Hospital
- Bentley Hospital
- Fremantle Hospital, and
- Peel Health Campus.

If the recommendation is accepted to move to a north/south model, the Area Health Services should be reconfigured as soon as possible to enable a smooth transition to the new arrangements.

This reconfiguration will obviously have an impact on staff, both clinical and administrative, who have invested time and effort over the past few years in implementing the current area structure and developing networks to support it.

**Recommendation 69**

_The Area Health Service structure should be modified as soon as possible to include only three metropolitan Area Health Services:_

- a North Metropolitan Area Health Service responsible for the health needs of the population north of the Swan River
- a South Metropolitan Area Health Service responsible for the health needs of the population south of the Swan River, and
- a Women’s and Children’s Health Service._
Women’s and Children’s Health Service
In addition to providing health care at King Edward Memorial and Princess Margaret hospitals, the Women’s and Children’s Health Service has an important role to play across the State. This role includes linking rural and metropolitan service providers, clinical and professional support, coordinating statewide clinical education and training, evaluating models of care, and circulating guidelines and quality assurance activities.

While there are some good examples of this linkage and coordination of women’s and children’s services throughout the system, significant gaps remain. An example of this exists where Princess Margaret and King Edward Memorial hospitals currently have very little input into community-based services in the form of policy and clinical guidelines.

A much clearer statewide role for the two hospitals is proposed. In addition to remaining the major providers of paediatric and women’s care in the State, these hospitals should support obstetric, gynaecology and paediatric services at the general and country hospitals via the provision of treatment guidelines and training. This would include staffing Princess Margaret and King Edward Memorial hospitals with specialist staff who have joint appointments. Registrar and resident medical staff should rotate from these hospitals to regional and country areas.

A small but essential component of the Women’s and Children’s Health Service would be to provide guidelines and policy in the areas of community health, health promotion and prevention, particularly where it concerns the needs of children. These guidelines would be developed and implemented in association with a vast array of associated groups and institutions.

**Recommendation 70**

The Women’s and Children’s Health Service should be responsible for coordinating and integrating a statewide service for the health needs of the State’s women and children.

This will involve collaboration and consultation with a range of service providers in order to provide for the health needs of women and children from prevention and early intervention all the way through to tertiary care.

**Australian/State Government Relationships**

The joint responsibility and funding arrangements between the Australian and State governments in relation to health has often led to territorial behaviour, which is unproductive and in some cases counter productive.

The main issues and limitations of current Australian/State Government arrangements relating to the funding and delivery of health services are outlined as follows.

**Coordination of Care between Treatment Levels**

Broadly speaking, the Australian Government is responsible for the provision of primary and aged care services while the State Government is responsible for the provision of hospital and other acute services, and community and public health services. This division of responsibility creates difficulties in coordinating care between treatment levels.
Duplication of Services/Gaps in Service Delivery
As each government plans their services in isolation of the other, there is potential for duplication of services in one area while creating deficits in another. There is also a significant amount of bureaucratic duplication with both the Australian and State governments undertaking needs analyses, policy development, program evaluations and reviews of various aspects of the health care system in each state.

Potential for Cost Shifting
The current split system for funding and providing health services encourages governments and service providers to focus on who is responsible for a given health service rather than the best means of providing that service. A great deal of energy and resources is expended in attempting to shift costs towards other parties. These resources could be better used to provide services.

Lack of Long-Term Comprehensive Planning
The current division of funding and service responsibilities limits planning options and stifles innovation. Each government and service provider can only plan for the services they are responsible for, even though a different configuration may be more effective or efficient.

Health Workforce
The health sector is currently experiencing significant workforce problems which are difficult to address due to the complex mix of roles and responsibilities of different governments involved in planning, educating, training, registering and employing the health workforce.

Multiple Funding and Accountability for Some Organisations
In a number of health program areas (such as Aboriginal health), funding and service provision are provided by a range of organisations, including the Australian, State and local governments, and the non-government organisation sector. Each of the organisations have their own set of outcomes and require adhesion to their own accountability framework. This creates complication and often duplication, and can lead to conflicts of interest within these program areas. This uncoordinated approach is ultimately inefficient and counter productive to good health care.

Improved Australian/State Government Arrangements
Arising from the Health Reform Committee's review, the Department of Health has recently formed a Bilateral Working Group with the Australian Government Department of Health and Ageing. This group has been set up to improve communication, and to identify opportunities for the two levels of government to work more cooperatively. This working group will also act as a vehicle for addressing 'road blocks' in the development and implementation of solutions.

Western Australia has the potential to gain a great deal from working more collaboratively with the Australian Government, including:

- improved service planning
- collaborative service provision
- possible joint pooling of resources
- strengthened communication and information exchange, and
- better coordination of health workforce education and training.
Practical operational initiatives should also be pursued such as:

- more formal networking of community health nurses (State funded) and GPs (Australian Government funded) with the HealthDirect call centre to deliver primary care for people with chronic and complex conditions
- improving the interface between primary medical care and the hospital system, and
- better managing aged care patients within the community, hospital and nursing home environment.

**Recommendation 71**

The *Department of Health should work to improve joint Australian/State Government planning and service provision, integrated models of care and pooled funding. The newly established Bilateral Working Group should be used as a vehicle to achieve this.*
Chapter 8
Accountability, Resource Allocation and Governance

The Current System

Current accountability arrangements, mechanisms for resource allocation and clinical governance within the Department of Health are deficient and need to be addressed as a matter of priority. The following are some examples:

- The health system has not had a good track record in recent years in remaining within its annual budget, making it necessary for the State Government to provide supplementary funding of around $60 million each year over the past few years. These annual budget overruns have significantly hampered the State Government's ability to fund other public services. Tighter management of budgets with more effective cost control mechanisms are urgently required.
- Annual service and financial plans that outline financial and performance targets for Area Health Services appear divorced from everyday planning and financial management decisions. Mechanisms are required to make health managers more accountable for delivering the financial and performance results sought by the State Government.
- Annual funding allocations to the Area Health Services are historically determined. Poor performance is rewarded and there are no incentives for efficiency.
- Management of data within the health system is in urgent need of improvement, with evidence of multiple data systems and owners.
- The performance information reported through State budget papers and annual reports should be made more relevant and meaningful to assist public and parliamentary scrutiny. Key performance indicators need to be better aligned with national indicators so that Western Australian outcomes can be more readily benchmarked to other states.
- Other than the annual report and State budget papers, there are no other mechanisms to allow the Western Australian community to evaluate health system performance on an ongoing basis through the year. As a result, the community must often rely upon ad hoc media reports and other informal feedback to gauge how well the health system is performing.
- Resource allocation appears heavily focused on funding acute services delivered by the major tertiary hospitals. While it is important to allocate funds to these services, current resource allocation often allocates funds to tertiary services at the detriment of non-tertiary, mental health and community services.
- Current clinical governance arrangements are fragmented with individual institutions tending to adopt their own set of clinical policies and guidelines.

Many of these issues were clearly highlighted by the review commissioned by the Health Reform Committee on the financial performance of Royal Perth Hospital. A number of serious concerns were identified:

- a lack of activity based budgeting across the State health system
- a lack of systemic cost analysis, including long-term and trend analysis

- a lack of meaningful key performance indicators, and other management information and reporting
- problems with reporting systems and data integrity, and
- lack of long-term planning and forecasting.

The Committee recognises that a number of these concerns are underpinned by the fragmented financial systems which currently operate within the sector. However, while a consolidated financial system will solve some of these issues, there remains concerns around the lack of planning, financial analysis, cost driver control and accountability controls.

The next stage of this work should be progressed to further explain cost drivers and develop analytical tools for the hospital system (refer to Recommendation 80).

**Directions for Change**

To improve the deficiencies highlighted above, a robust accountability and performance management framework is required.

The diagram below illustrates the key areas of accountability which collectively ensure that the system expends its dollars on agreed health service priorities, in an efficient manner and in line with strategic directions. It highlights the Department of Health's role in developing and implementing an accountability framework which:

- clearly states the strategic goals of the health system and the outputs required of the health sector
- provides a set of key performance indicators for the sectors to monitor and report performance
- provides mechanisms for performance to be reported to key stakeholders, including the State Government and the community
- provides mechanisms to hold the system, and individuals within the system, accountable for both financial and non financial performance, and
- allocates resources in line with agreed outputs.

**Figure 8.1** Key accountability areas
This report provides the first component of a strengthened accountability framework that represents a strategic vision for the Western Australian public health system.

The next steps involve turning this vision into a reality. This involves making sure that senior executives and staff within the system are aware of the system's priorities and the standards they are expected to meet, as well as ensuring there is a clear and transparent process in place for holding them accountable for their performance.

A culture of accountability should be a feature of the health system in the future, and should focus on:

- continuous improvement in clinical outcomes and the patient's experience
- stewardship of financial and physical resources, and
- continuous improvement in workforce management.

Each person in the health workforce has a role to play in the cycle of accountability. Each person makes decisions everyday about the use of resources such as staff time, dollars and asset use. These decisions need to be made against the backdrop of the allocated budget and the desired clinical outcomes.

To support this culture of accountability a number of inter-related strategies are needed such as:

- a resource allocation model which reflects the strategic directions
- a system of performance agreements throughout the organisation which outline priorities and expectations
- clear clinical governance
- improved performance monitoring and benchmarking
- improved performance reporting
- more transparent mechanisms to report performance to the community, and
- robust information management systems to support the framework.

**Improved Resource Allocation Model**

Resource allocation is the mechanism by which the annual recurrent funds allocated to the Department of Health are distributed to Area Health Services. The existing arrangements of historical funding are clearly deficient. A resource allocation approach that is fair, supports the Area Health Service structure, promotes transparency and accountability, and enables protection for vulnerable groups is essential. It will provide certainty and predictability in managing budgets and be a key lever for facilitating the strategic objectives of the health system. The health service directions and desired health outcomes outlined in this report should be reflected in the resource allocation process.

The experience across Australia and internationally indicates models which are population and diagnostic related group output based are the most common and effective approaches.

The most appropriate resource allocation model for Western Australia is one based on a single tier model that recognises the distinction in functions between statewide program management and Area Health Service delivery.

"An effective resource allocation model is the fundamental tool necessary to address the inequities in health status in Western Australia."

- WACHS Kimberley Health Region
To this end, it is proposed the budget be divided into the following five distinct blocks:

- Statewide services are delivered to the whole State population by designated Area Health Services such as Women's and Children's Health Service and designated tertiary/quaternary services.
- Hospital services are provided to the local catchment population by Area Health Services such as admitted patient services.
- Population health services are provided to the local catchment population by Area Health Services such as community health services.
- Statewide (not distributed) programs are delivered to the whole State population by central office program managers such as ambulance services.
- Corporate and policy services are delivered to all Area Health Services and program managers by central office program managers such as information technology and communication services.

It is initially proposed the Area Health Services hospital allocations be output based while Area community health services be population based, with the population size to be weighted for a variety of factors such as age, Aboriginality and socio-economic differentials. Allocations for statewide services would be a mixture of output and program funding.

There are some particular challenges in developing a resourcing model that works in the Western Australian context of a relatively small population dispersed over a wide geographic area and with a major concentration of people and services in the capital city. The reconfiguration of the metropolitan Areas into a north/south model will impact on developing the most appropriate model.

In the development of the improved resource allocation model, special attention should also be directed towards:

- the impact of patients crossing Area boundaries to access services
- the level of expenditure on teaching, training, research and development activities
- accommodating the complementary role of the non-government sector
- major funding contracts such as those underpinning the Joondalup and Peel Health campuses, and the State Government's agreement with the Department of Veterans' Affairs, and
- Area needs analysis and accurate demographic information to ensure the process works fairly and with equity.

Business rules need to be established to encourage positive and proactive behaviour in the management of funds, and to minimise transaction costs in the operation of the resource allocation model.

**Recommendation 72**

The Department of Health should adopt a funding model of annually allocating health resources to Area Health Services which is population and output based. The model should:

- be based on the principle of fairness
- recognise the needs of specific population groups
- be transparent, and
- quarantine funds for designated services/programs such as Aboriginal health, mental health and population health.

This funding model should be developed throughout 2004 and implemented in 2005/06.
Performance Agreements

An annual resource agreement is signed between the Treasurer, the Minister for Health and the Director General of Health, along with an annual performance agreement that is signed between the Minister for Health and the Director General of Health. These agreements set targets and expectations concerning financial and service delivery outcomes at a system-wide level.

These two agreements are not, however, mirrored in performance agreements between the Director General and the Chief Executives of Area Health Services.

Area Chief Executive/Director General performance agreements should ideally be the result of negotiations by which the State Government priorities are laid out with budget allocations, and considered alongside local health service priorities. Without these agreements, there is a risk the planning and service delivery activities of the Area Health Services will not align with the financial and service outcomes committed to by the Director General. This circumstance would not be consistent with government priorities and plans.

Annual performance agreements should be implemented between the Director General and Chief Executives of the Area Health Service commencing in 2004/05. These performance agreements should:

- be available for public scrutiny
- be used proactively by the Director General to manage and drive performance and continuous improvement within the health system
- facilitate agreement on the annual funding to be made available and the service outcomes to be delivered, and
- be based on reliable and relevant performance and financial targets.

Performance agreements between the Director General, the two Deputy Director Generals and the Executive Director, Population Health, should reflect the outcomes required from their policy, planning, regulatory and monitoring roles.

Recommendation 73

Comprehensive annual performance agreements between the Director General of Health and Area Chief Executives which specify targets for designated service priorities and financial outcomes should be implemented in 2004/05.

The same discipline should operate internally within the Royal Street office.

Better System-wide Clinical Governance

Clinical governance is essentially about the quality and safety of patient care, and how to ensure this is continuously monitored and improved. A system-wide clinical governance framework consists of a range of policies, toolkits, information systems and strategies all aimed at encouraging excellence through better clinical practice.
The scope of a clinical governance framework can be fairly broad covering things like the implementation of evidence-based clinical pathways, quality monitoring and benchmarking systems, promotion of research and development activities and implementation of regular clinical audits. Clinical governance frameworks are also used to bring about a more patient-focused culture within health systems.

The aim of clinical governance is to secure better quality care from taxpayer dollars spent on healthcare services. It is also designed, through better accountability, to improve the confidence patients and the members of the community have in the safety and quality of services delivered by the public health system.

The main principles of clinical governance are:

- a coherent approach to quality improvement
- clear lines of accountability for clinical quality systems
- effective processes for identifying and managing risk and addressing poor performance, and
- changing the culture of health system providers to one where openness and participation are encouraged, where people learn from failures, blame is the exception rather than the rule, and where good practice and new approaches are freely shared and willingly received.

The Department of Health has recently established a Western Australia clinical governance framework to support a statewide approach to clinical governance. It will help ensure the entire health system is operating under a clear and known set of clinical policies, guidelines and practices.

Implementation of the new framework will take time and will require strong support from Area Health Services and clinicians. The uniformity in clinical standards and practices is vital to assure the Western Australian community that they will receive the same high standards of clinical care wherever they are treated in the public system.

**Recommendation 74**

A statewide Clinical Governance Framework which involves the following four pillars should be implemented within two years:

- clinical audit
- clinical risk
- consumer values, and
- professional development and management.

**Performance Monitoring and Benchmarking**

Implementation of a robust accountability framework would not be complete without formal processes to regularly monitor performance.

While there were many examples of high quality information being published externally, this information is not always used by people within the health system to improve performance.

The system should actively promote a culture of continuous performance improvement by implementing systems and processes to enable:
• regular performance monitoring
• regular benchmarking, both within the system and against external providers, and
• strategies to be developed in a timely manner to address identified performance gaps.

To progress the above, it is proposed a project team be appointed to identify the specific process and system reforms. This should be completed by September 2004.

Recommendation 75

A culture of continuous performance improvement that focuses on regular performance monitoring and benchmarking should be promoted.

Improved Performance Reporting

Three main forms of performance reporting undertaken by the Western Australian health system at this time are:

• State budget papers with annual performance targets for services (outputs) to be delivered
• annual reports with key effectiveness and efficiency indicators to show how well performance targets are met, and
• benchmarking information as provided to national organisations such as the Australian Institute of Health and Welfare, the Productivity Commission and the National Hospital Cost Data Collection.

Review of this performance reporting showed there is considerable scope to improve the present classification of services, outputs, and key effectiveness and efficiency indicators to make performance reports more relevant and meaningful.

Greater consistency should also be achieved by adopting national performance frameworks, and giving recognition to best practice developments occurring in other jurisdictions. Examples of this include Queensland Health working towards the implementation of a balanced scorecard for the health system and NSW Health developing a set of dashboard indicators.

The outcome and output structure reported by the Western Australian health system should be reviewed as soon as possible. It is particularly important to achieve consistency between the performance reporting framework, the governance structure with budget holders, and accountability mechanisms to be adopted such as performance agreements.

A complete review is required of key performance indicators, and of the information systems and processes being used to prepare such performance information in the medium term. The challenge will be to identify a common group of key performance indicators that provide the best measure of health system performance for both internal and external stakeholders.
Recommendation 76

An improved outcome statement, output structure and key efficiency and effectiveness indicators should be developed and used in the 2005/06 State budget.

These indicators should address clinical outcomes, quality, safety, equity, financial performance and workforce utilisation.

Regular Performance Reports for the Community

Regular reporting on performance issues would give members of the community and the State Government a formal report card on system performance, rather than having to rely on media reports and informal feedback.

An example should see the community able to have regular access to performance information such as system response times to emergency cases, elective surgery waiting time statistics and numbers of adverse events.

For years, the Victorian Department of Human Services has issued a quarterly hospital services report, available in hard or electronic copy, that keeps the public informed on key hospital statistics.

The Western Australian health system should produce a similar quarterly performance report. Key indicators reported should include:

- emergency department waiting times
- wait times for common surgical procedures
- wait times for life saving surgery, and
- financial performance against budget.

Recommendation 77

The Department of Health should produce a quarterly report card which gives the community and other stakeholders easy access to key statistics on health system performance.

Better Information Management and Systems

Underlying any robust accountability framework is an information management policy framework and information systems.

The Health Reform Committee’s review indicated there are no clear system-wide policies for managing information, with multiple data owners and systems. There needs to be better system-wide access to health information, clarity over who is responsible for collecting and maintaining that information, and certainty about the integrity of data.

Data reliability, integrity and consistency are major concerns within the system. Data sets are fragmented and there is no system-wide framework for ensuring integrity of data. Many data sources are therefore considered unreliable, both by internal and external users.
However, Western Australia has some considerable advantages compared to other States in its ability to link its Hospital Morbidity Data System to the Australian Government’s Medicare Benefits Schedule and Pharmaceutical Benefits Schedule databases. Unfortunately, the combined impact of other databases within the system not being as robust and the inability or unwillingness within the system to share data, hinders the system’s policy, planning and accountability functions. All data sources within the system need to be made available to the Royal Street office to enable solid system wide policy and planning to occur. This data should also be used to enhance quality by monitoring clinical trends.

A comprehensive review of the Department of Health’s data sources and management is needed. As a result of this review, an information management policy framework should be completed by November 2004. This policy should assign single owners for all items of data, and outline processes for collection, management and reporting of that data.

A business case supporting the framework should also be developed by November 2004. A project team, with strong Area Health Service representation, should be appointed to support the Information Policy Directorate within the Department of Health to undertake this task.

**Recommendation 78**

The public health system’s data and information should be:

- consolidated into a central repository, to be managed by the Royal Street office. A review of the system’s current data sources and management should be undertaken within 12 months to achieve this, and
- enhanced to improve integrity, consistency and reliability as a matter of priority.
The Current Arrangements

Along with health systems interstate and internationally, the Western Australian health system has struggled to control the growth in health costs. These costs have grown well in excess of general inflation, the growth in other essential services and the State’s underlying revenue growth, as noted in Chapter 1.

In recent years, growth in health sector expenditure in Western Australia has averaged around 8.5% \(^1\). In this, Western Australia is not unique with all other State health agencies showing an average rate of expenditure growth in excess of 6% per annum. This expenditure growth in Western Australia, similar to other States, has risen over the last few years as can be seen in Figure 9.1.

Over the past 5 years, actual health expenditure has exceeded budgeted expenditure by an average of around $60 million per year\(^2\). Not only is the quantum of the current growth rate unsustainable, but the uncertainty and fluctuations in the budget within and between years is highly undesirable for both the State Government and the health system.

The health system’s current resource allocation and budget management systems have a number of significant deficiencies. One of the most critical is that they are not integrated with a clear planning framework. A financially sustainable health system is one based on comprehensive planning and clear objectives that extend over a number of years. When such practices are in place a multi-year funding approach can be implemented, that both mitigates the growth in costs and increases revenue, in a predictable way. Equally as important, is the need for appropriate management, accountability and governance arrangements. These are dealt with in Chapter 8.


\(^2\) Ibid.
Modelling the Cost of the System

A robust financial plan, detailing the required initial investment and estimated efficiencies, was needed to underpin the recommendations to enable the State Government to consider the proposed strategic vision and recommended service configuration. A cost model was developed to support this financial plan.

As with the hospital activity model described in Chapter 1, the financial model was used to project a future scenario of the health system based on current expenditure trends (i.e. the 'status quo' result). All the proposals outlined in this report were then analysed using the model to predict their impact on expenditure growth relative to the base case 'status quo' scenario. The focus in developing this cost model was to develop a robust link between activity (ranging from health promotion through to tertiary care) and expenditure. A description of the model and the assumptions underpinning it are available at www.health.wa.gov.au. As emphasised previously in Chapter 1, care is needed in interpreting the results, as there are limitations in modelling of this nature. Such modelling does, however, provide useful guidance on the magnitude of the likely costs and savings of the reform proposals.

While the model provided a solid base to cost the recommendations of the Committee, it should be further developed to enable use as a budget management and planning tool for the Department Executive and Area Health Services. In particular, further refinement of the financial model should take place to improve the methods for attributing costs to activities as well as breaking down the modelling from a statewide to Area Health Service level.

The reform package consists of three areas where expected financial benefits can be realised. These are better management of demand for health services, achievement of cost efficiencies and optimisation of the Department of Health’s revenue base. Capital investment is required to achieve some of these savings.

Better Managing Demand and Cost Efficiencies

Demand for hospital care services should be positively offset in the medium to long term by the growth in recommended investment in health promotion and early intervention approaches relating to chronic disease and falls among older people. While evidence suggests such strategies deliver significant benefits, it is difficult to quantify these benefits with a significant degree of confidence. Therefore these benefits have not been included in the modelling results.

Other demand management strategies raised in this report include:

- reducing unnecessary hospital admissions, through providing better integrated primary care services, and community and home-based care, particularly for older people and for people with chronic and complex conditions
- providing health care in the most appropriate setting, including building the capacity of Perth’s general hospitals, and providing dedicated sub-acute facilities to redirect non-tertiary work away from the tertiary hospitals, and
- reducing the average length of stay in hospitals and increasing the day of surgery admissions to national benchmark levels in areas where this has currently not been achieved and is clinically appropriate.

3 Details of these initiatives can be found in Chapters 2, 3 and 5.
These strategies result in both clinical and economic improvements in the system.

These reforms are estimated to save some 355,000 beddays or 13% of the total beddays predicted under the ‘status quo’ scenario in 2008/09. For these strategies to be successful, they need to be supported by a reinvestment into health promotion and early intervention, and community health and other community-based services. It is estimated that the level of investment needed is around $85 million each year. This has been quantified based on the experience of Eastern States’ health systems which have pursued similar reforms. Despite this level of reinvestment, major savings would still be realised as the community-based strategies are significantly cheaper than hospital care.

The net savings from better managing demand amount to around $290 million per annum by 2008/09 and $535 million per annum by 2013/14.

Specific hospital cost efficiencies have been identified following reviews into pathology, pharmacy and food services.

The pathology review identified savings by bringing existing services into a single organisation under a unified management structure. The food review identified further areas where savings could be realised, but noted this would require a one-off capital investment of $1 million prior to these savings being achieved. Implementation of the pharmacy review findings are estimated to deliver savings by 2006/07, however these are reliant on pharmacists initiating changes to drug usage and management, as well as changes to length of stay, re-admission, lab testing and medical procedures. These savings require ongoing investment of $3 million a year and a one-off capital investment of $10 million.

The combined total estimated recurrent savings for the strategies is $22 million in 2008/09, and $28 million in 2013/14.

More generally the work outlined in Chapter 5 of this report indicates that there is scope for further efficiencies in hospital operating costs.

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4 Results produced from the Health Reform Committee’s cost model.
Recommendation 79

Reforms in the following areas should be implemented to reduce the growth in health expenditure over the next five years:

- avoiding unnecessary hospital admission by providing better integrated primary care services, and community and home-based care, particularly for older people and for people with chronic and complex conditions
- providing health care in the most appropriate setting including building the capacity of Perth’s general hospitals, and providing dedicated sub-acute facilities to redirect non-tertiary work away from the tertiary hospitals
- reducing the average length of stay in hospitals to national benchmark levels in areas where this has currently not been achieved
- achieving national benchmarks in relation to rates of day surgery procedures and rates of day of surgery admissions
- reducing the cost structure of hospital services through increasing efficiencies via better management, and
- increasing operational efficiency by providing modern, well designed hospital facilities.

Recommendation 80

There should be an ongoing program of analysis to identify cost drivers within hospitals, to:

- support managers in analysing costs and delivering improved efficiency, and
- enable the Royal Street office to undertake system-wide analysis of major areas of expenditure and cost growth.

Improving Revenue Generation

Quality clinical care and free public health services are fundamental principles underpinning the provision of health services in Western Australia.

As demonstrated in Figure 9.2, the Western Australian health system’s performance in raising own-source revenue is lower than most other states. In fact, it is less than half that raised by Victoria on a per capita basis. This is particularly relevant as Western Australia has the highest rate of private health insurance per capita in Australia. Own-source revenue refers to monies received via means other than government sources, for example from private patients and from private industry. Increasing revenue will allow more flexibility to expand health services and offset continually escalating costs.

If Western Australia were to raise revenue at only the national average rate, then in 2001/02 Western Australia would have had around an additional $50 million per annum available.

A range of strategies need to be implemented by the Department of Health to improve revenue generation. Increases in patient co-payments are not recommended. The focus should be on maximising revenue from the private sector and other government sources.

Recent inquiries by the Public Accounts Committee and the Health Insurance Commission have created a level of anxiety and uncertainty in the system with regard to revenue opportunities. Very clear guidelines are needed that are supported by the Health Insurance Commission with implementation support provided to clinicians and health services involved.

The following strategies should be implemented:

**Private Patients**
- Increase the number of patients with private health insurance who elect to be treated as private inpatients in public hospitals.
- Private billing for privately referred non-inpatients by hospital specialists with rights of private practice.
- Hospital charges to cover facility and equipment used by hospital specialists when treating privately referred non-inpatients.

**Fees and Charges**
- Expand the Pharmaceutical Benefits Scheme reform across Western Australia.
- Reform of existing recovery mechanisms for non-public patients by:
  - moving towards a four band charging system for same-day surgical procedures, and
  - improving fee collection and cost recovery for ineligible patients.

**Other Strategies for Consideration**
- Extending/increasing commercial type activities such as charging for medical reports for legal and insurance purposes.
- Renting/leasing of facilities and clinical resources.
The Department of Health is currently pursuing the development of business cases to expand the levels of revenue that can be raised. Initial indications suggest that by 2006/07, $50 million of additional revenue can be generated each year by implementing the above strategies. To achieve this, revenue targets will need to be set for each Area Health Service. It should also be noted the financial benefits from some of the revenue reforms might not be immediately realised, as many of these reforms will be progressively implemented over three to five years.

**Recommendation 81**

*The Department of Health should pursue revenue raising initiatives, which will increase the State health system’s per capita ‘own-source’ revenue to the national average by 2006/07. This will include setting revenue targets for Area Health Services.*

**Capital Requirements**

The capital asset base of the Department of Health is large and diverse. Buildings and equipment in the system have a replacement value of some $3.4 billion.

The direct operating costs of these assets is approximately $31 million per annum of which energy cost, totalling some $25 million per annum, is the largest component. The Department of Health’s operating budget also sustains significant impost arising from building and equipment maintenance, and building component replacements.

**Major Capital Program**

Achievement of the health reform vision requires significant capital investment to reap returns in better health service delivery and operating efficiencies.

Significant enhancement of information technology, business practices and associated systems will be required to underpin some of the recommendations in this report. These recommendations include implementing an electronic patient record system, and a range of clinical support systems (eg. pharmacy). Outcomes from these initiatives will include improved patient care, better access to high quality data for reporting and analysis of cost drivers, greater accountability and transparency when reporting to the State Government and the community, and assisting managers to manage the system.

As discussed in Chapter 3, significant capital investment is needed in the four designated general hospitals to manage the increase in capacity as growth in service demand is taken up, and as services are increasingly provided from these hospitals rather than the tertiary facilities.

Significant capital investment will also be required to reconfigure Royal Perth and Sir Charles Gairdner hospitals and in building the new Southern Tertiary Hospital. It is expected that efficiency savings will be realised from operating well designed, modern facilities.

Fremantle Hospital will require significant capital maintenance over the next few years. Similarly, the building infrastructure at both King Edward Memorial and Princess Margaret hospitals will require compliance upgrades, and incur increasing maintenance costs to support their clinical functions. A rebuild of these facilities as proposed on an adult tertiary hospital site would prevent the need for these maintenance expenditures. The investment in new co-located facilities will result in improved clinical outcomes and more efficient operations rather than expending dollars on patching up the current inefficient facilities.
In country Western Australia, continuing investment will be required in developing regional resource centres and increasing the primary care focus of smaller facilities.

The current estimated capital requirement, over and above the existing program, is in excess of $1.5 billion over 13 years. This includes:

- expansion to create general hospitals - Rockingham/Kwinana District Hospital, Joondalup Health Campus, Swan District Hospital and Armadale Kelmscott Memorial Hospital
- new Southern Tertiary Hospital
- Northern Tertiary Hospital – consolidation of Royal Perth Hospital and Sir Charles Gairdner Hospital on to one site
- King Edward Memorial Hospital – relocation to adult tertiary site
- Princess Margaret Hospital – relocation to adult tertiary site
- Fremantle Hospital - sub-acute, rehabilitation and mental health
- Osborne Park and Bentley hospitals - sub-acute and rehabilitation
- Perth City Hospital on Royal Perth Hospital site (if Northern Territory Hospital on QEII site)
- regional developments at Hedland, Broome and Albany, and
- information technology and communication infrastructure.

The delivery of this capital investment plan is essential to the realisation of the recurrent savings identified above, particularly in regard to demand management.

Given the overall size of the State Government's current investment in health service buildings and equipment, and the proposed additional investment underpinning this report, there is a need for:

- robust asset management systems
- standardised depreciation policies, and
- transparent, criteria-based planning for equipment replacement and for managing the introduction of new technologies.

**Recommendation 82**

*The capital investment required to achieve an average two percentage points per annum reduction in recurrent expenditure growth should be planned and developed with robust business cases for investment.*

*In turn, the State health system must plan and manage its service provision and reform agenda to meet this aim.*
The Costs and Benefits of the Reform Package

After combining the expenditure and revenue reform strategies, it is estimated that implementation as outlined in this report will enable an average of around two percentage points per annum reduction in the projected growth in net health expenditure over the next five years.

Capital investment is required to produce these recurrent savings and to ensure a long-term reduction in cost. It is worth noting that considerable investment would be required to maintain current levels of service delivery, regardless of any reform strategies implemented. Although the model has the capacity to factor in asset sales, for conservative purposes, this information has not been included.

The delivery of a financially sustainable public health system requires a multi-dimensional strategy to better manage demand, achieve cost efficiencies and increase revenue. Each strategy outlined in this report and included in the cost model has been designed and tested against the objectives outlined in Chapter 1.

In general, conservative estimates of savings and realistic estimates of costs for each strategy were factored into the cost model to ensure the financial outcome is deliverable.
Chapter 10
Implementation and Change Management

Background

Much ground has been covered over the past 12 months in developing a vision for health services in Western Australia. It is critical that the momentum the Health Reform Committee's review has generated is not lost in moving into the implementation phase.

It became apparent very early in the review that many members of the community, the clinical workforce and other stakeholders were sceptical that this report's recommendations would be adopted and/or translate into actual reform. This scepticism, and sometimes cynicism, stems from the fact that the Western Australian health system has been subjected to numerous reviews over the past two decades, with many of these, for one reason or another, failing to be implemented.

This chapter presents a recommended approach to managing the ‘implementation journey’ and the change management challenges that will no doubt arise. In particular, this chapter proposes a rigorous accountability and monitoring framework to enable interested stakeholders to be informed of progress, and to assess the ultimate realisation of benefits in the form of improved safety, quality, equity, efficiency and sustainability of the State's health system.

Planning the Implementation Phase

The implementation phase will be a challenging and resource intensive one given the scale of reforms involved, and the 10-15 year planning cycle around which the vision for the health system has been framed.

Planning and managing such a large undertaking will require careful consideration. The need for strong leadership and continuing management support from the health system executive cannot be stressed enough.

Health Reform Action Plan and Communications Strategy

A critical first step for the implementation process is the development of a detailed action plan. The plan will outline priorities, timeframes, key milestones, including development of business cases, and end deliverables for each of the recommendations endorsed by the State Government. The plan should also include the key performance indicators to be used to assess the successful implementation of initiatives.

In scheduling different reform projects, it will be important to strike a balance between achieving short-term deliverables and building up work in progress for long-term deliverables. Short-term deliverables can foster confidence in the reform process by enabling stakeholders to see some tangible results from the efforts being made.

The Health Reform Action Plan should be finalised for consideration by the Minister for Health and the Expenditure Review Committee no later than 31 May 2004.
Communication on the progress of reforms is critical. This will ensure the system is engaged and has an opportunity to contribute to implementation decisions.

A strategic and structured approach to communication is recommended with consideration given to options such as:

- a dedicated public website for health reform, including progress updates
- global e-newsletters to staff
- statewide quarterly briefings from the Director General of Health
- regular face-to-face forums to update and consult with staff and members of the community regarding reform initiatives, and
- appointment of liaison officers for each Area Health Service.

The action plan should incorporate a detailed communication strategy.

**Recommendation 83**

*A Health Reform Action Plan and Communication Strategy should be developed by the Director General of Health for consideration by the Minister for Health and Expenditure Review Committee by 31 May 2004.*

**Managing the Implementation Phase**

A formal framework is recommended to manage and drive the implementation process. This is described in Figure 10.1.
A Health Reform External Reference Group

Due to the complexity of this reform process and the major investment involved, an external reference group should be established to externally monitor and advise the State Government on the progress of implementation. This should be a high level group with membership including the Director General of Health, the Under Treasurer and an independent chair reporting to both the Minister for Health and the Treasurer. A consumer representative is also proposed.

The external reference group should provide the State Government with an ongoing evaluation of the effectiveness of implementation, and should highlight major risks or gaps in the process.

**Recommendation 84**

*An external reference group with an independent chair should be established that reports to both the Minister for Health and the Treasurer, and externally monitors and reports on implementation of the reform agenda. There should be a consumer representative on this group.*

A Health Reform Implementation Coordination Unit

The implementation of this report's recommendations should be part of the core business of the Royal Street office and Area Health Services. This process should be guided and coordinated by a dedicated implementation coordination unit located at the Royal Street office. This unit would have a limited lifespan aligned with the implementation timeframe. A senior executive should head this unit and become a member of the Department's Executive during the implementation process.
By way of example, the New South Wales Government established a Government Action Plan Implementation Unit to deliver its plan for health. The South Australian Government has similarly created an implementation unit to progress recommendations proposed in its Generational Health Review.

The implementation coordination unit would facilitate, coordinate and monitor the implementation of the Health Reform Action Plan and report directly to the Director General of Health. This would ensure the reform process maintains a high profile within the system and has the necessary executive support.

The Establishment of Multi-disciplinary Implementation Teams
Under the direction of the Director of the Health Reform Implementation Coordination Unit, specific teams should be formed for each major reform. Separate implementation teams would probably be required for reform in the areas of trauma services, cardiac services, and for performance agreements. Team membership should be according to the content of the reforms. As an example, it is envisaged that clinical reform teams might be co-chaired by a doctor and nurse.

Recommendation 85

A Health Reform Implementation Coordination Unit that reports directly to the Director General of Health should be created to encourage and have overall carriage of the reform implementation of this report. Designated implementation teams should be formed around specific report recommendations.

The involvement of the recently created Clinical Senate is critical to implementation. The Senate should have a role in advising on clinical reforms as part of its work program.

It is important to conceptualise innovative models for advancing the reform agenda. The clinical collaboratives recommended in Chapter 6 provide such a model.

Recommendation 86

For the clinical reform strategies the principal advisory group to the Health Reform Implementation Coordination Unit should be the Clinical Senate.

A Key Advisory Role for the Community
It is important for the community to also have an ongoing voice throughout the implementation phase. This will ensure that implemented reforms reflect patient needs and community priorities.

The Health Consumers' Council (WA) is Western Australia's peak body for representing and protecting the right of the community to have fair access to safe high quality health services. The Health Consumers' Council (WA) would be an ideal organisation to advise on community and patient needs, and provide an ongoing link with the community through the implementation phase.
Legislative Issues
Legislation underpinning the operations of the Western Australian health system is both complex and diverse. It is quite likely that various legislative amendments will be required to enable the progressing of a number of the recommended reforms. A proactive approach to managing any legislative hurdles will be necessary especially where the passing of legislation may impact upon reform timeframes.
Health Reform Committee

Terms of Reference

The Committee’s task is to:

1. develop a plan which will include implementable strategies to:
   - improve the quality of health services
   - manage costs of the system to ensure sustainable growth in the health budget.

2. focus on objectives / strategies which will:
   - improve the health services and health outcomes of Western Australians
   - ensure quality of care
   - increase effectiveness and efficiency of clinical services
   - ensure transparency and accountability of the health sector to government and the community
   - enhance management and informal systems to support clinical and corporate best practice
   - address State/Commonwealth issues.

The plan produced by the committee will include implementation schedules with timeframes, change management strategies, key milestones and performance targets.

The Committee will also ensure tangible evidence of the change program through the implementation over the life of the Committee, of a number of reform initiatives.

The Committee will undertake consultation with key stakeholders as necessary.

The Committee will report through the Minister for Health and the Treasurer to the Expenditure Review Committee. Its first report to these Ministers should be no later than one month following its establishment, detailing how it purposes to approach each term of reference. It should report regularly thereafter at a time agreed with the Ministers.

The Committee will complete its work within 12 months and will present a final report to the Minister for Health and the Treasurer on completion.
Consultation

The Health Reform Committee's initial report to the State Government outlining the reform agenda and associated work program was presented to the Expenditure Review Committee in mid-June 2003. This initial report outlined the Health Reform Committee's commitment to undertaking its work in full consultation with local clinicians, the community and other major stakeholders. The major areas of consultation are detailed below.

Public Submissions

The Health Reform Committee conducted two separate public submission processes:

1. A call for public submissions was placed in the West Australian in June 2003 based on the Health Reform Committee's Terms of Reference. A total of 28 submissions were received with comments predominantly from within the health industry.

2. The Health Reform Committee released a series of discussion papers on 27 October 2003 with the aim of generating community debate. Public submissions were due on 5 December 2003 with 477 received from a range of stakeholders including:

- Advance Life Ambulance Service
- Aged and Community Services
- Australian Government Department of Health and Ageing
- Australian Medical Association (WA)
- Australian Physiotherapy Association WA Branch
- Armadale Health Service
- Australian Society for Geriatric Medicine Western Australia Division
- Australasian College for Emergency Medicine
- Australian College of Health Service Executives
- Australian Health Promotion Association
- Cancer Control Implementation Committee
- Cancer Foundation of Western Australia Inc
- Canning Division of General Practice
- Christian Science Committee on Publication for WA
- City of Gosnells
- City of Mandurah
- Clinical Senate
- Community Midwifery WA Inc
- Council of Official Visitors
- Critical Care Council
- Curtin University of Technology
- CVA Group Pty Ltd
- Department of Health
- Department of the Premier and Cabinet
- Drug and Alcohol Office
• East Metropolitan Health Service
• Edith Cowan University
• Emergency Services Reference Group
• Fitzroy Valley Community Health
• Fremantle Hospital and Health Service
• Gosnells Women's Health Service Inc
• General Practice Divisions of WA
• Great Southern Public Health Service
• HBF
• Health Information Management Association of Australia WA Branch
• Injury Control Council of Western Australia
• InfraPsych Australia Pty Ltd
• Kalgoorlie Regional Hospital
• Kimberley Health Region
• Lions Ear and Hearing Institute
• Lower Great Southern Health Service
• Men's Advisory Network
• Murdoch Community Hospice
• National Heart Foundation of Australia WA
• Ngala Family Resource Centre
• North Metropolitan Health Service Population Health Program
• North Metropolitan Health Service
• Nurses Board of WA
• Office of the Auditor General
• Osborne Division of General Practice
• Osborne Park Hospital
• PathCentre
• Palliative Care Advisory Group
• Physical Activity Taskforce
• Queen Elizabeth II Medical Centre
• Royal Australasian College of Surgeons WA Trauma Subcommittee
• Royal Flying Doctor's Service
• Royal Perth Hospital
• Shire of Broome
• Shire of Derby
• Shire of Dumbleyung
• Shire of Gnowangerup
• Shire of Kondinin
• Shire of Moora
• Silver Chain Nursing Association
• Sir Charles Gairdner Hospital
• South Metropolitan Health Service
• South West Aboriginal Land and Sea Council
• St John of God Hospital
• Telethon Institute for Child Research
• University of Western Australia
• WA Aged Care Advisory Council
• WA Health Promotion Foundation
• WA Local Government Association
• Western Australian Institute for Medical Research
• West Australian Clinical Oncology Group
• Wheatbelt Development Commission, and
• Women’s and Children’s Health Service (KEMH/PMH).

Anonymous and individual submissions were also received.

Clinician Reference Group
A reference group of clinicians was established early in the process. The group met informally and provided a useful forum for debating particular issues, gaining local views and attaining clinical advice. On average, the group met every second month with a total of five meetings being held. The group comprised of:

• David Andrews
• Paul Carman
• Harry Cohen
• David Fletcher
• Peter Goldswain
• David Hillman
• Brian Hutchison
• Brian Lloyd
• Michael McComish
• Mark Newman
• Teik Oh
• John Olynyk
• Brad Power
• Mark Rooney
• DJ Russell-Weisz
• Christobel Saunders
• Moira Sim
• Peter Sprivilus
• Shiong Tan, and
• Simon Towler.

Health Consumers’ Council (WA)
The Health Reform Committee contracted the Health Consumers' Council (WA) to undertake community consultation on the Committee’s 12 discussion papers. Consultation was within the metropolitan and country areas, including specific Aboriginal consultation.

A total of 231 community members participated in the consultations with 108 attending consultation meetings and 123 providing written submissions. Consultations were undertaken during November and December 2003 in the following locations:
• Albany
• Broome
• Bunbury
• Coolgardie
• Esperance
• Joondalup
• Kalgoorlie
• Karawang
• Karratha
• Leonora
• Mandurah
• Menzies
• Midland
• Morapoi
• Mt Margaret
• Mulga Queen
• Norseman
• Northam
• Perth, and
• Rockingham.

The Health Consumers' Council (WA) has provided a full report detailing the results of the consultation.

Clinical Consultation
Extensive consultation was undertaken throughout the review process. Many local doctors, nurses and allied health representatives were consulted, particularly on clinical options and workforce issues.

The clinicians involved in the consultation process represented a variety of health services and specialties. Consultations varied from one-on-one meetings to large groups. Following the release of the Health Reform Committee’s 12 discussion papers, three specific clinical consultations were undertaken as follows:

- meeting with nurses
- meeting with allied health professionals, and
- a clinical senate two-day workshop.

These consultations focused on the Health Reform Committee's discussion papers.

Key Stakeholders
Throughout the consultation process, the Health Reform Committee engaged a number of key stakeholders including:

- Allied Health Taskforce
- General Practice Division of Western Australia
- Health Consumers’ Council (WA)
- Population Health Advisory Council
- Royal Flying Doctor’s Service
- St John Ambulance
Many stakeholders were involved in multiple consultations, demonstrating the considerable impact of this review.

Regular updates were provided to the Department of Health’s State Health Management Team. In addition, regular informal meetings were held with Area Chief Executives, to keep them informed of the review process, and also to seek their input.

Industry Consultation
Department of Health staff were kept informed throughout the reform process. A series of global emails were sent to staff keeping them updated of progress and key milestones. In addition, a website dedicated to the Health Reform Committee was established, and is accessible via the Intranet and the Internet.

In response to the release of the Health Reform Committee’s discussion papers, Department of Health staff were invited to attend a presentation by Professor Michael Reid. Videoconferencing was offered for rural sites.

Role Differentiation Project
Role Differentiation was a fundamentally important component of the work of the Health Reform Committee. The Role Differentiation project aimed to develop the most clinically and economically appropriate model for the organisation and delivery of hospital services in Western Australia to meet the current and future health needs of Western Australians.

The Committee engaged six consultants to collectively form a project team to progress work on the role differentiation project, resulting in the release of the Options for Clinical Services’ discussion paper.

- Michael Ward
- David E Theile
- Stephen Deane
- Jim Bishop
- John Chalmers
- Alan Cass

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Performance Agreements Project
The performance agreements project was undertaken as part of the overall analysis of an accountability framework. The Health Reform Committee engaged Jim Pearse, Director of Health Policy Analysis Pty Ltd, to prepare a discussion paper regarding performance agreements.

The discussion paper examined the ability to expand the current resource agreement and to develop comprehensive performance agreements between the Director General and the nine budget holders.

Financial Sustainability Project
The basis of this project was to develop a cost model to ensure all recommendations endorsed by the Health Reform Committee were fully costed and financially sustainable. This was a particularly difficult task considering the timeframe available and that there was no model of this nature available for the unified Western Australian health system. The Health Reform Committee engaged Hall Chadwick to provide consultancy services to effectively build this cost model.
Different Levels of Care

Tertiary Care
- Tertiary care is comprised of services to meet the demand of highly selective patients who are suffering from unusual conditions and hence are few in numbers.
- The services would result in specialised referral hospitals equipped with diagnostic and treatment facilities not generally available at hospitals other than primary tertiary hospitals or trauma centres, or by (teams of) doctors who are uniquely qualified to treat unusual disorders that do not respond to therapy that is generally available as general medical services.
- Tertiary care may include, but is not limited to, services provided by state-designated trauma centres, a burn centre, trauma surgery, neurosurgery, cardiothoracic surgery, organ transplant, paediatric surgery, magnetic resonance imaging and positron emissions tomography.

- A typical tertiary/quaternary specialist referral hospital will:
  - provide those services requiring highly specialised skills, technology and support services to residents of Western Australia
  - ensure a critical mass of patients and resources needed to make such services safe and of high quality, according to the accepted standards
  - cater for a population of 500,000 to 1 million
  - have centres of excellence, research and development
  - facilitate teaching placements in medicine, nursing and allied health for Western Australia
  - play a leading role in improving clinical governance, including clinical pathways, system processes and collaboratives
  - provide a leadership role for integrated clinical services, and
  - achieve an increase in same day procedures and surgery by establishing ambulatory care facilities (surgicentres) and support facilities like Medi hotels.

Secondary Care
A typical community general hospital providing secondary care will:

- have the following clinical services and facilities:
  - emergency departments
  - 24-hour anaesthetic cover
  - high dependency units
  - general surgery capacity (including day surgery)
  - obstetric services
  - general medical and geriatric services
  - general paediatrics
  - some rehabilitation and mental health services
  - centres for diagnostics, treatment and ambulatory care

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2. The term 'general hospital' highlights 'community' focus rather than the 'clinical' focus implicit in 'secondary hospital'. The name suggested here for these hospitals is tentative.
• cater for a population of between 200,000 and 300,000
• deal with 60% of the medical needs of its catchment population
• have a bed capacity between 200 to 400 with an average capacity of 300 beds
• compensate for bed capacity by doing more clinical work on ambulatory bases, and as outreach activity
• attract and manage between 20,000 and 40,000 emergency cases annually in its emergency departments. This standard will be further fine tuned through local research, but the standard is being drawn from a UK model that advocates a throughput of 35,000 emergency cases a year for a 300 bed facility
• have three distinct co-located services. These are acute inpatient, sub-acute, and ambulatory care comprised of diagnostic and treatment centres (eg. surgicentres)
• provide less expensive accommodation to appropriate patients like Medi hotels and hostels, and ensure increased throughput particularly for the ambulatory care stream of services
• have its clinical services linked with centres of excellence (wherever relevant) through development of integrated clinical services
• be used for placements and appointments for the purpose of training of more specialised medical workforce by allowing the clinical staff of the tertiary hospitals to be involved in elective work, and
• develop collaboratives, joint research and development activities or other appropriate means to strengthen clinical governance.

Sub-acute Care\textsuperscript{3}

Sub-acute care is comprehensive inpatient care designed for someone who has an acute illness, injury or exacerbation of a disease process. It is goal oriented treatment rendered immediately after, or instead of, acute hospitalisation to treat one or more specific active complex medical conditions, or to administer one or more technically complex treatments in the context of a person’s underlying long-term conditions and overall situation.

A typical sub-acute facility, whether discretely located or co-located within a hospital, will:

• offer a wide variety of medical, rehabilitative, and therapeutic services at comparable quality to hospital services. These may include pre and post-operative care, rehabilitative care, Care Awaiting Placement (including transitional beds), respite care beds and palliative care beds
• provide care that is generally more intensive than traditional nursing facility care, but less than acute care. It will require frequent (daily to weekly) recurrent patient assessment, and review of the clinical course and treatment plan for a limited (several days to several months) time period until the condition is stabilised or a predetermined treatment course is completed
• not depend heavily on high technology monitoring or complex diagnostic procedures
• require the coordinated services of an inter-disciplinary team, including physicians, nurses and staff from other relevant professional disciplines who are trained and knowledgeable, to assess and manage specific conditions and perform the necessary procedures
• provide care as part of a specifically defined program, regardless of the site, and
• provide treatment for brain and spinal cord injuries, neurological and respiratory problems, cancer, stroke, AIDS, and head trauma. In addition some selective cases with chronic and complex conditions may also be provided medical treatment in these facilities.


Different Levels of Care

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Telehealth

- Telemedicine can be defined as the remote provision of health care through the use of advanced telecommunications technologies that transcend barriers of time, space, society, or culture.
- Telemedicine technologies vary from simple devices (telephone, radio, and other voice modalities; fax; Internet phone/picture transmission; and stored and forwarded computerised data and images) to more complex communication techniques (broadcast/compressed video, full-motion video, and virtual reality).
- Special remote control devices and surgical robotics are being extensively researched for use in Telemedicine.

Allied Health - includes disciplines such as physiotherapy, occupational therapy, clinical psychology, speech pathology, social work, nutrition and dietetics, podiatry, audiology, orthotics and prosthetics, and orthoptics.

Ambulance bypass - hospital emergency departments are bypassed by ambulances when the emergency department has reached maximum capacity and the treatment of patients already in the emergency department could be significantly compromised by the ambulance arrival of additional patients requiring emergency treatment. Ambulance bypass does not apply to life threatening urgent cases, which are always taken to the nearest hospital.

Ambulatory care - medical care including diagnosis, observation, treatment and rehabilitation that is provided on an outpatient basis. Ambulatory care is given to persons who are able to ambulate or walk about.

Average length of stay - the average number of days a patient might expect to spend in hospital for a particular procedure or diagnosis.

Bedday - the occupancy of a hospital bed by an inpatient for up to 24 hours.

Burden of disease - a method developed by the World Health Organisation for estimating a high level measure of the health of a community by taking into account the amount and type of disease and injury and their causes.

Care Awaiting Placement patients - elderly hospitalised patients awaiting hostel or nursing home placement.

Chronic - comes from the Greek chronos, time and means lasting a long time.

Co-morbidity - the co-existence of two or more disease processes.

Continuum of care - the aim of continuum of care is to provide a seamless transition for individuals from community to hospital and back to the community.

Elective surgery - surgery that is subject to choice (election). The procedure is beneficial to the patient but does not need be done at a particular time as opposed to urgent or emergency surgery.

Encryption methodology - procedures around the transfer of information into an unreadable form for the purpose of making the information unintelligible to unauthorised users.

Epidemiology - the study of the incidence and distribution of diseases, and of their control and prevention.

Inpatient - persons who have been formally admitted to hospital for care and/or treatment.
**Intermittent care** - temporary or respite care for individuals with disabilities, illnesses, dementia or other health concerns to give relief to caregivers from the demands of ongoing care.

**Major trauma** - refers to a serious or critical bodily injury, wound, or shock.

**Medi hotel** - provides supported overnight accommodation and hotel type services for patients and their families during or prior to treatment, tests and surgery. This facility is best suited to patients who are generally self sufficient in terms of their care and medication, as the hotel is staffed by only one nurse, who will arrange for hospital transfer if emergency care is required.

**Multiday separation** - a multiday separation results when an inpatient is admitted and separated on different calendar days.

**Nurse practitioner** - a registered nurse who has acquired the expert knowledge base, complex decision making skills and clinical competencies for expanded practice.

**Occupancy levels** - number of patient days provided by a hospital expressed as a percentage of the total number of bed days potentially available at that hospital.

**Older Person** - a person aged 65 years and over.

**Practice nurse** - a registered nurse who works in a general practice setting.

**Primary care** - the medical care a patient receives upon first contact with the health care system, before referral elsewhere within the system.

**Quaternary** - this category is usually reserved for the most specialised care. These services are provided with access to specialist medical, nursing and allied health staff, and supported by round-the-clock diagnostic imaging and pathology services.

**Sameday separations** - a sameday separation results when an inpatient is admitted and separated on the same calendar day. It includes inpatients that are transferred to another hospital or inpatients who died on the day of admission.

**Secondary** - secondary health care is generally provided to patients with conditions which require specialised professional skills and facilities for more complex treatment.

**Separation** - a separation is a discharge, transfer or death of a patient.

**Summary Speciality-Related Groups** - a classification of clinical specialities based on Diagnosis Related Groups (DRGs) and other diagnosis, operation and type of care (eg. acute/non-acute) information.

**Step down services** - hospital beds or facilities with specialised staff and equipment to care for patients who no longer need coronary or intensive care but are not yet ready to move to a general hospital ward.

**Sub-acute** - rather recent onset or somewhat rapid change. Designates the mid-ground between acute and chronic.
**Tertiary** - tertiary health care is provided to people with less common conditions or those who require complex and costly forms of diagnosis and treatment.

**Transitional care** - the transfer of patient care and information between settings, health professionals and services.

**Triage** - the process of sorting people attending emergency departments based on their need for immediate medical treatment as compared to their chance of benefiting from such care.

**Weighted separation** - a measure of the total resource consumption of a patient based on their diagnosis and time spent in hospital.

**Western Australian Division of General Practice network** - refers to the 14 Divisions of General Practice in Western Australia and their peak body, General Practice Division of Western Australia Ltd.
### Appendix E
### List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>ACHSE</td>
<td>Australian College of Health Service Executives</td>
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<tr>
<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<tr>
<td>ALOS</td>
<td>Average Length of Stay</td>
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<tr>
<td>CE</td>
<td>Chief Executive</td>
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<tr>
<td>CSIRO</td>
<td>Commonwealth Scientific and Industrial Research Organisation</td>
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<tr>
<td>DOH</td>
<td>Department of Health</td>
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<tr>
<td>FTE</td>
<td>Full Time Equivalent</td>
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<tr>
<td>GP</td>
<td>General Practitioner</td>
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<tr>
<td>HARC</td>
<td>Health Administrative Review Committee</td>
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<tr>
<td>HCC</td>
<td>Health Consumers' Council (WA)</td>
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<tr>
<td>HDWA</td>
<td>Health Department of Western Australia</td>
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<tr>
<td>HIC</td>
<td>Health Information Centre, Department of Health</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency virus</td>
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<tr>
<td>HMDS</td>
<td>Hospital Morbidity Data System</td>
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<tr>
<td>HRC</td>
<td>Health Reform Committee</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>KEMH</td>
<td>King Edward Memorial Hospital</td>
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<tr>
<td>LOS</td>
<td>Length of Stay</td>
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<tr>
<td>NATSIHC</td>
<td>National Aboriginal and Torres Strait Islander Health Council</td>
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<tr>
<td>PET</td>
<td>Positron Emission Tomography</td>
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<tr>
<td>PHCAP</td>
<td>Primary Health Care Access Program</td>
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<tr>
<td>PMH</td>
<td>Princess Margaret Hospital</td>
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<tr>
<td>QEII</td>
<td>Queen Elizabeth II Medical Centre</td>
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<tr>
<td>RPH</td>
<td>Royal Perth Hospital</td>
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<tr>
<td>SCGH</td>
<td>Sir Charles Gardiner Hospital</td>
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<tr>
<td>SHMT</td>
<td>State Health Management Team</td>
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<tr>
<td>TAFE</td>
<td>Training and Further Education</td>
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<tr>
<td>WCHS</td>
<td>Women's and Children's Health Service</td>
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A Healthy Future for Western Australians

Report of the Health Reform Committee

March 2004

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