



## SERVICE PLAN:

# EASTERN WHEATBELT HEALTH DISTRICT (2011/12 – 2021/22)

Endorsed June 2012

*Working together for a healthier **country WA***



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## SIGNATORY PAGE

To be completed by the Regional Director	
I certify that the <i>Service Plan</i> has been developed to my satisfaction, and that all project deliverables/requirements have been stated within the document.	
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## ACRONYMS

ACAT	Aged Care Assessment Team
ABS	Australian Bureau of Statistics
ALOS	Average Length of Stay
COAG	Council of Australian Governments
CSF	Clinical Services Framework
CSP	Clinical Services Plan
CSSD	Central Sterilising Services Unit
ED	Emergency Department
ERP	Estimated Resident Population
ESRG	Expanded Service Related Group
FESA	Fire and Emergency Services
FTE	Full Time Equivalents
GP	General Practitioner
HACC	Home and Community Care
HCN	Health Corporate Network
HIN	Health Information Network
HSSU	Hospital Sterilising Services Unit
ICT	Information Communication Technology
IDHS	Integrated District Health Service
MPS	Multipurpose Service
PATS	Patient Assisted Travel Scheme
RFDS	Royal Flying Doctor Service
SEIFA	Socio-Economic Indexes for Areas
SIHI	Southern Inland Health Initiative
SWWAML	South West WA Medicare Local
WGPN	Wheatbelt General Practitioner Network
WACHS	WA County Health Service

## KEY DEFINITIONS

**Ambulatory care** is a broad term that generally refers to the planned services provided to patients who are able to 'walk in and walk out' on the same-day. Ambulatory care services can include primary health care services, day surgery and outpatients (e.g. wound care and management).

**Ambulatory health care centre** refers to a health facility where ambulatory health care services are provided in close proximity to emergency department care and overnight inpatient admissions.

**Primary health care** is an aspect of ambulatory health care but is generally first level health care. The term is sometimes used interchangeably with the term primary care although primary care tends to refer to the clinical care provided by GPs. Primary health care gives priority to those most in need, maximises community and individual self-reliance and participation and involves collaboration with other sectors. It includes:

- Health promotion
- Illness prevention
- Clinical treatment and care of the sick
- Community development
- Advocacy and rehabilitation

Primary health care is provided by general practitioners; practice nurses; primary/community/child health nurses; pharmacists; dentists; allied health professionals; aged care workers, support workers; and many other providers across the local, state and federal government sectors, non-government organisations and the private sector.

**Primary health care centre** generally refers to a stand-alone health facility where primary health care services are provided. It would ideally be located in close proximity to emergency department and may be collocated with inpatient, outpatients, minor wound care and diagnostic services. A primary health care centre does not include day surgery services.

**Nursing posts** are generally located in small towns that do not have a hospital. Nursing posts are also a setting for primary health care services and visiting outpatient services and although they do not have a functioning emergency department, they do provide low level emergency care and stabilisation to patients prior to transferring to a more specialised health service when required.

A full glossary is listed at the end of this service plan.

# 1 EXECUTIVE SUMMARY

This Service Plan provides the strategic direction for service delivery for the WA Country Health Service's (WACHS) Eastern Wheatbelt Health District (referred to as *Eastern Wheatbelt*) for the next 10 years and informs the implementation plan for the State Government's \$565 million Southern Inland Health Initiative (SIHI). The Service Plan was developed via a comprehensive planning process as detailed in *Appendix A*.

The service planning process in the Eastern Wheatbelt has identified a number of opportunities to strengthen service delivery to meet the future needs of the catchment area for health services to achieve its prescribed role delineations within the *Western Australian (WA) Health Clinical Services Framework (2010-2020)*. These opportunities are outlined in this Service Plan. It is essential that this service plan is reviewed as facility planning progresses, new policies are introduced and the needs of the community change.

## Planning context

The Eastern Wheatbelt (district) includes the Australian Bureau of Statistics (ABS) statistical local areas (SLAs) and associated town sites of Bruce Rock, Corrigin, Kellerberrin, Merredin, Mt Marshall, Mukinbudin, Naremben, Nungarin, Quairading, Trayning, Westonia and Yilgarn.

The Eastern Wheatbelt is the catchment area for Merredin Hospital, which is regarded as the Integrated District Health Service (IDHS) for the district. There are seven multi-purpose service (MPS) sites/small hospitals and one nursing post within the Eastern Wheatbelt. These along with Merredin Hospital are the major focus for health service reform within this Service Plan.

## Key catchment area features influencing service delivery

The Department of Health and Ageing (2009) state that health systems with strong primary health care services are more efficient; have lower rates of hospitalisation; fewer health inequalities; and better health outcomes including lower mortality, than those that do not. For this reason, the key feature of this service plan and SIHI is to boost primary health care services to address the following features of the catchment area.

### Rural location

Given the rural location of the Eastern Wheatbelt, opportunities to utilise telehealth technologies and new workforce models for care provision and supervision will be required in the future to provide care closer to home.

### Population growth

Overall, the estimated population growth across the Eastern Wheatbelt is low and therefore future demands for acute inpatient beds will remain similar to the present day.

### Ageing population

However, the Eastern Wheatbelt has a high older population that will place added pressures on WACHS to provide primary health care services to manage chronic



health conditions and co-morbidities. Demand for high care residential aged care and dementia services are also likely to increase.

## Health status

Data from the WA Health and Wellbeing Surveillance System highlighted that there were a number modifiable risk factors within the Wheatbelt such as obesity and lack of physical activity that impacts on health status. There are also a significantly higher number of adults in the Wheatbelt with arthritis and asthma.

Almost nine in ten Wheatbelt residents utilised primary health care services in the past year. This provides opportunities for both health promotion and early intervention initiatives. The focus will need to be on reducing the modifiable risk factors and the range of needs of the people in the district: chronic disease, mental health, aged care, maternal, child, youth health, Aboriginal health, and dental health.

## Mortality

Mortality data for the Wheatbelt and Eastern Wheatbelt highlighted:

- There was no significant difference between the mortality rate (the number of deaths per 1,000 people) of all Wheatbelt residents compared with the State.
- Between 2003 and 2007, the leading cause of mortality in the Eastern Wheatbelt was diseases of the circulatory system, followed by neoplasms and injury and poisoning.
- Between 1998 and 2007, around two-thirds of Wheatbelt resident deaths under the age of 75 were classified as avoidable. Cancers and chronic conditions accounted for the majority of avoidable deaths including Ischaemic heart disease, lung cancer and suicide and self-inflicted injuries.

## Hospitalisations

Hospitalisation data for the Wheatbelt and Eastern Wheatbelt highlighted that between 2005 and 2009:

- Eastern Wheatbelt residents had a significantly higher hospitalisation rate when compared to all Wheatbelt residents and WA residents.
- The leading cause of hospitalisation of Eastern Wheatbelt residents was for factors influencing health status (which includes renal dialysis and chemotherapy), followed by diseases of the digestive system.
- *Diabetes and its complications* was the leading potentially preventable hospitalisation for both Aboriginal and non-Aboriginal Wheatbelt residents.

## Aboriginal people

Aboriginal people are over represented in mortality and hospitalisation statistics. This indicates the importance of providing culturally secure facilities and primary health care programs specific to the conditions and risk factors associated with Aboriginal people.

## Current service profile

The Eastern Wheatbelt includes the WACHS hospital and health services highlighted in Figure 1. These operate within a networked model of integrated care whereby

Merredin Hospital supports the MPS sites/small hospitals and nursing posts to deliver services to the catchment area, whilst referring patients where necessary to larger metropolitan hospitals.

Patients are referred to the most appropriately resourced and equipped health facility to meet their health care needs. The level of care provided by health facilities across the State is defined within the *WA Health Clinical Services Framework*. This framework also provides direction for the level of care required at Merredin Hospital in the future. Small country hospitals are not included in the *Clinical Services Framework* but it is assumed that the current services at these small sites will continue and respond to the needs of the local population.

The integrated care model is supported by local general practitioners (GPs), government and non-government services, private providers and not-for-profit agencies. This network of services provides a continuum of care for the 12,000 residents and visitors of the Eastern Wheatbelt.

**Figure 1: Current Eastern Wheatbelt network of WACHS emergency, acute and primary health care services (as of February 2012)**

Services provided	Nursing Post	Small Hospitals/ Multipurpose Sites							Merredin IDHS
	Mukinbudin	Bruce Rock	Corrigin	Kellerberrin	Kununoppin	Narembeen	Quairading	Southern Cross	
Emergency	✓	✓	✓	✓	✓	✓	✓	✓	✓
Elective surgery	✗	✗	✗	✗	✗	✗	✗	✗	✓
Admissions	✗	✓	✓	✓	✓	✓	✓	✓	✓
Planned births	✗	✗	✗	✗	✗	✗	✗	✗	✗
Antenatal & postnatal care	✓	✓	✓	✓	✓	✓	✓	✓	✓
Paediatrics	✗	✗	✗	✗	✗	✗	✗	✗	✓
Mental health (acute voluntary admissions)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mental health (acute involuntary admissions)	✗	✗	✗	✗	✗	✗	✗	✗	✗
Community mental health	✓	✓	✓	✓	✓	✓	✓	✓	✓
Community aged care	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hospice / palliative	✗	✓	✓	✓	✓	✓	✓	✓	✓
Outpatients	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oncology/chemotherapy	✗	✗	✗	✗	✗	✗	✗	✗	✗
Renal dialysis	✗	✗	✗	✗	✗	✗	✗	✗	✗
Rehabilitation	✗	✗	✗	✗	✗	✗	✗	✗	✓
Population health	✓	✓	✓	✓	✓	✓	✓	✓	✓
Residential aged care	✓	✓	✓	✓	✓	✓	✓	✓	✓



Source: Myhospital.gov.au (accessed 16 January 2012) and WACHS - Wheatbelt. Developed by Aurora Projects.



## Proposed strategic directions for service delivery

A review of the government policies, State Government commitments, drivers for change and stakeholder expectations within the Eastern Wheatbelt has identified the following strategic directions for service delivery for the Merredin Hospital, MPS sites/small hospitals and the Mukinbudin Nursing Post:

- Strengthen the integration of services across the continuum of care.
- Enhance demand management particularly in surgery and mental health.
- Focus on primary health care non-inpatient care.
- Deliver care closer to home.
- Improve Aboriginal health outcomes.
- Improve aged care services.
- Attract and retain a skilled workforce.
- Strengthen partnerships with primary care, private and not-for-profit providers.
- Utilise ICT advancements for better care.
- Create a safer environment for all.

The priorities for service reform include:

- Support the greater integration of services by co-locating health services for primary health care and outpatients on the one health campus.
- Build a sustainable and safe GP led emergency model of care that includes an Emergency Department (ED) Nurse Practitioner (NP) for the district network of services, in response to the concern that the ED is currently used as a primary care service by the community.
- Develop community based primary health care type services and partnerships between providers to deliver specific strategies for the emerging demographics in the population (increased numbers of older people and a high proportion of Aboriginal people).
- Increase planned same-day visiting surgical services (elective day surgery) at Merredin Hospital as a strategy to provide care closer to home and reverse patient flows back from the metropolitan area to the Eastern Wheatbelt to support Merredin's surgical role delineation with the *WA Clinical Services Framework*.
- Increasing antenatal and postnatal services across the EWHD was seen as a key priority for the district.
- Improve communication between tertiary hospitals, community agencies, GPs and Eastern Wheatbelt hospitals to provide more integrated and coordinated health services.
- Provide culturally appropriate health services and facilities for the catchment area's Aboriginal population including (but not limited to) the recruitment of more Aboriginal people as both Aboriginal health workers and across the workforce more generally.
- Undertake district level workforce planning as a priority in order to address staff recruitment and retention issues including succession planning, staff accommodation, the need for more rigorous attraction and retention strategies, the ageing workforce and the need to 'grow your own' staff (attracting young local people into the health business across all sectors).

- Enhance telehealth and e-health technology across the continuum of care, aligning with the SIHI telehealth strategy to develop staff who are local 'expert telehealth users'.
- Review both emergency and non-urgent patient transport initiatives between sites.

The contents of this service plan details how these priorities were established.

## Translation of service requirements to service implementation and facility requirements

This service plan will also assist in informing the development of future business cases for the potential redevelopment of sites and services. Funding has already been allocated through the SIHI to provide incentives to attract and retain GPs and an emergency nurse practitioner to build a sustainable 24/7 emergency model for the district. Funding is also allocated to increase primary health care services in the district and to develop telehealth services, primarily in ED and for clinical consults.

The facility requirements are summarised in the recommendations section of this service plan. Capital funding has been allocated through the SIHI project (est. \$17.46 million) and WA Health Capital Expenditure Program (\$9.0 million) to redevelop the Merredin Health Campus with the focus of integrating primary health care services and upgrading the ED, inpatient unit, day procedures unit, medical imaging, administration and site service infrastructure.

Furthermore, SIHI's Stream 3 (Primary Health Care Demonstration Program) and Stream 4 (Small Hospital and Nursing Post Refurbishment Program) have funding allocated to selected health sites across the Wheatbelt, Midwest, South West and Great Southern regions. The implementation for these streams of work in the Eastern Wheatbelt has commenced.

**Table 1: Summary of preliminary facility needs for Merredin hospital**

Services	Current configuration	Future Configuration
<b>Ambulatory Health Care</b>		2 x chair public dental clinic 2 x chair renal dialysis Consult space for outpatients Multipurpose consult rooms Population health
<b>Acute Care Inpatient</b>	24 multiday beds: <ul style="list-style-type: none"> <li>• 22-bed general surgical and medical unit</li> <li>• 1-bed high care unit</li> <li>• 1-bed palliative care unit</li> </ul>	Dependent on consideration of reducing acute inpatient beds
<b>Emergency Department</b>	3 x Treatment Spaces (2 x emergency bays & 1 x procedure room)	3 x Treatment Spaces (2 x emergency bays & 1 x procedure room) Interview room with dual e-gress Designated triage area Consult rooms to be determined
<b>Theatres</b>	1 x theatre	1 x theatre



## 2 INTRODUCTION

This service plan, by the WA Country Health Service (WACHS), sets the strategic vision for the delivery of primary health care, emergency, acute, aged care, mental health and associated clinical and non-clinical services to 12,000 residents and visitors of the Eastern Wheatbelt Health District (Eastern Wheatbelt).

The service plan will also inform the \$565 million *Royalties for Region's Southern Inland Health Initiative (SIHI) Implementation Plan* (refer to Section 3.7.1). The *Implementation Plan* will contain a number of service reforms and capital works initiatives designed to enhance the sustainability, self-sufficiency and network of health services in the WACHS Wheatbelt, Mid-West, Goldfields, Great Southern and South West regions. This includes the Merredin Hospital which operates as an Integrated District Health Service (IDHS); multi-purpose service (MPS) sites/small hospitals; the nursing post; and associated government, non-government and private health services in the Eastern Wheatbelt.

The planning process undertaken to develop this service plan and the subsequent recommendations for service reform ensure that future service delivery to the Eastern Wheatbelt will:

- align with National and State policy and plans including the WA Health *Clinical Services Framework 2010 – 2020* (Department of Health 2010a);
- address the demographic and health needs of the community;
- meet the projected demand for health services;
- strengthen primary health care services;
- implement modern and best practice models of care;
- utilise contemporary health technologies; and
- be supported by contemporary healthcare facilities.

The service planning process undertaken to develop this service plan is detailed in *Appendix A*.

### 3 PLANNING CONTEXT AND STRATEGIC DIRECTIONS

#### 3.1 Overview of the Wheatbelt Health Region

The Wheatbelt extends from the coast north of Perth to the western boundary of the Goldfields and south from the Darling Scarp to the northern boundary of the Great Southern Region (see Figure 2).

The region has 45 local government areas and covers 154,862 square kilometres (Wheatbelt Development Commission, 2011).

Aptly named for its traditional industry, the Wheatbelt also has a diverse geographic profile ranging from pristine beaches to vast agricultural landscapes. The economy is based around the production fields of agriculture, fishing and mining, which are supported by the high availability of infrastructure such as water, transport and energy (Wheatbelt Development Commission, 2011).

Figure 2: Wheatbelt Region of Western Australia



Source: [www.wheatbelthealth.org.au](http://www.wheatbelthealth.org.au)

A characteristic of the Wheatbelt is its scattered population dispersion, which has hindered the development of an identifiable regional centre and resulted in the four sub-regional centres: Merredin, Moora, Narrogin and Northam (Wheatbelt Development Commission, 2011).

With its proximity to the metropolitan area, many of the bordering communities of the Wheatbelt are experiencing an influx of overflow population from the outer metro areas and those in search of a lifestyle change, without sacrificing access to metropolitan facilities (Wheatbelt Development Commission, 2011).

The Wheatbelt has historically been split into three health districts, but as the population is shifting towards the north-west of the region the Western Wheatbelt health district has been divided into the Coastal and Western Wheatbelt health districts, as shown in Figure 3.

The four health districts are defined by Statistical Local Areas (SLAs) as follows:

- *Eastern Wheatbelt Health District:* Bruce Rock, Corrigin, Kellerberrin, Merredin, Mount Marshal, Mukinbudin, Narembeen, Nungarin, Quairading, Trayning, Westonia and Yilgarn.
- *Southern Wheatbelt Health District:* Boddington, Brookton, Cuballing, Dumbleyung, Kondinin, Kulin, Lake Grace, Narrogin (Town and Shire), Pingelly, Wagin, Wandering, West Arthur, Wickiepin and Williams.
- *Coastal Wheatbelt Health District:* Chittering, Dandaragan and Gingin.
- *Western Wheatbelt Health District:* Beverley, Cunderdin, Dalwallinu, Dowerin, Goomalling, Koorda, Moora, Northam, (Town and Shire), Tammin, Toodyay, Victoria Plains, Wongan-Ballidu, Wyalkatchem and York.

**Figure 3: Wheatbelt health districts**

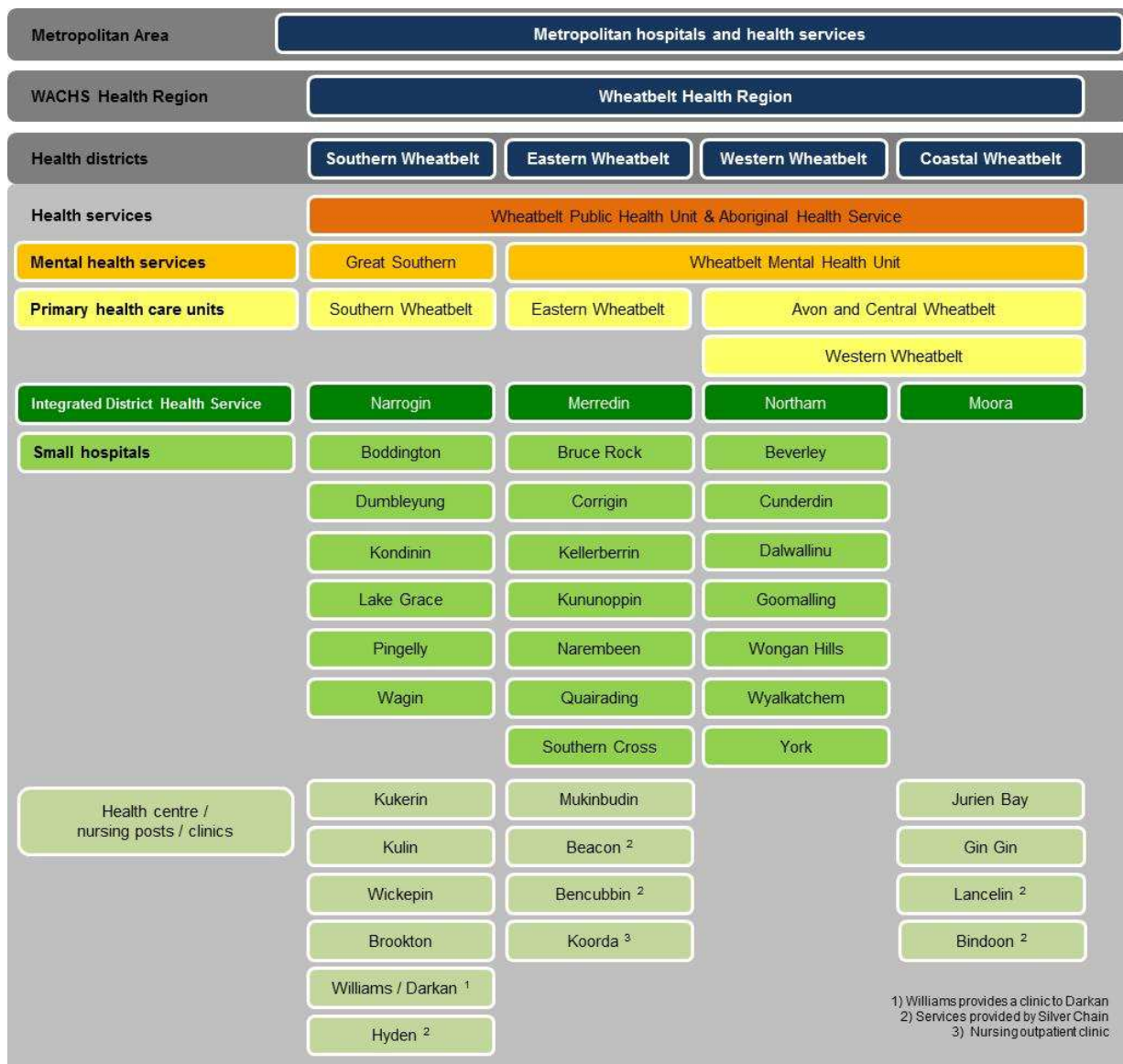


Source: DoH Epidemiology Branch, 2009a.

### 3.2 WACHS Wheatbelt current services

The operational network of WACHS and Department of Health services that residents and visitors of the Wheatbelt, including the Eastern Wheatbelt can access are highlighted in the following sections and in Figure 4.

**Figure 4: Wheatbelt Health Region: Current operational network of WACHS and Department of Health services available**



Source: Aurora Projects. All Eastern Wheatbelt small hospitals are multi-purpose service (MPS) sites.





## 3.3 Eastern Wheatbelt profile of health services

### 3.3.1 Ambulatory health care services

*Ambulatory health care services* is a broad title that generally refers to the planned services provided to patients who are able to 'walk in and walk out' of a health service on the same day. This includes:

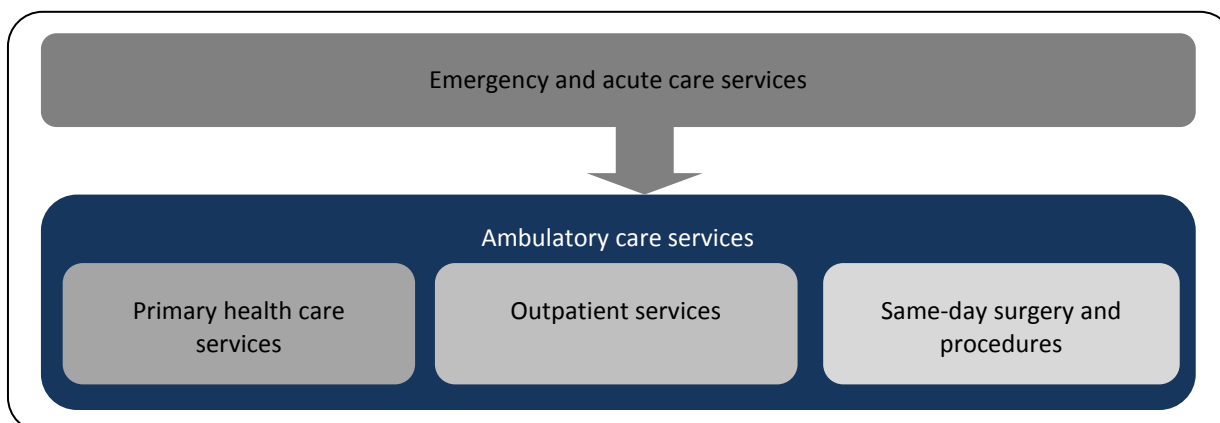
- Primary health care services which incorporates GPs, nurses, allied health professionals and other health workers, such as multicultural health workers and Aboriginal health workers, health education, promotion and community development workers. This encompasses population health (e.g. child health), community mental health, community aged care and Aboriginal health services.
- Same-day surgery and procedures.
- Visiting and permanent outpatient services.

Ambulatory health care services are often provided adjacent to emergency and acute services as shown in Figure 5. Ambulatory health care facilities are usually staffed by nurses, allied health and primary health personnel with procedural or specialist medical input provided in a planned and structured way. Depending on resourcing and availability, community based mental health services will provide varying levels of crisis/emergency response.

In the Eastern Wheatbelt, the following ambulatory health care services are provided by WACHS in partnership with services described in Section 5:

- *Primary health care services* include:
  - *Eastern Wheatbelt Primary Health Service* based in Merredin provides Aboriginal health, allied health, community health, and health promotion services from Merredin and outreach services are provided to all towns and schools in the district when required. Staff are also based at Mukinbudin Nursing Post and Koorda Health Service.
  - *Wheatbelt Public Health Unit* is based in Northam and provides outreach public health (including disease control, health promotion programs and project implementation), services to the entire Wheatbelt Health Region, including the Eastern Wheatbelt.
  - *Wheatbelt Aboriginal Health Service* is based in Northam and provides Aboriginal Health services from Northam and outreach services to all towns in the district based on need. They are also responsible for the delivery of Aboriginal health promotion, social work and *Bringing Them Home* counselling to the whole Wheatbelt region.
  - *Wheatbelt Mental Health Service* provides community and acute care services to the district with a team in the Eastern Wheatbelt.
- *Outpatient services* (face-to-face and telehealth) are provided at all Eastern Wheatbelt hospital and the Mukinbudin Nursing Post. The level and type of outpatient services available depends on the availability of permanent and visiting allied health staff and specialists.
- *Same day surgery* is only provided at Merredin Hospital.

**Figure 5: Illustration of ambulatory health care services**



Source: Aurora Projects.

### 3.3.2 Merredin Hospital

There is no Regional Resource Centre in the Wheatbelt Region, therefore the Merredin Hospital as the integrated district health service is the major health site for residents of the Eastern Wheatbelt (Department of Health, 2010a). Merredin Hospital:

- Provides a range of inpatient, ambulatory, emergency, medical, surgical, paediatric and mental health services to the Eastern Wheatbelt catchment population.
- Supports an integrated network of services at seven MPS sites/small hospitals and one nursing post site within the Eastern Wheatbelt.

The configuration of Merredin Hospital is shown below.

**Table 2: Merredin Hospital summary profile**

Department	Features
Emergency Department	3 x treatment bay 1x procedure room
Medical and surgical inpatient services	24 active beds (Accepts admissions for surgical and medical, maternity, paediatrics, and acute mental health (no authorised beds onsite). There are no dedicated same-day beds.
Residential aged care - Moorditj Mia Nursing Home Merredin MPS and Berringa Frail Aged Lodge	10 permanent high care beds and one respite bed (Moorditj Mia); 10 low care beds and one respite bed (Berringa).
Theatres	1 x theatre and a Hospital Sterilising Services Unit (HSSU).
Outpatients/Extended Care	A range of outpatient services are provided from Merredin
Aboriginal Health Service	Outreach service is provided to Merredin
Wheatbelt Mental Health Service	On-site (Merredin Hospital)
Eastern Wheatbelt Primary Health Service	Based in Merredin (Off-site)
Medical imaging	Ultrasound, Ortho-Pantomogram (OPG) and general x-ray.
Pathology	Collection and laboratory testing facilities available.
Pharmacy	Small pharmacy store in ward area.

Source: WACHS (February 2012)



Population health services (e.g. health promotion, Aboriginal health, allied and community health services) are provided across the district by the Eastern Wheatbelt Primary Health Service based in Merredin.

Patients who require acute and emergency care beyond the capacity of the Merredin Hospital and small hospitals are transferred to Perth metropolitan hospitals for care.

Clinical and non-clinical support services are described in Section 6.

### **3.3.3 Multi-purpose service (MPS) sites / small hospitals**

All the small hospitals in the Eastern Wheatbelt are MPS sites. This includes Bruce Rock, Corrigin, Kellerberrin, Kununoppin, Narembene, Quairading and Southern Cross. Merredin Hospital works within a network of seven MPS sites/small hospitals which all provide 24 hour emergency, aged care, hospice care, outpatient services and inpatient admissions.

The MPS program allows rural communities to pool Commonwealth and State health and aged care funds within a designated geographical area, creating opportunities to coordinate and appropriately target community health and aged care needs. Flexible aged care funding allows services to be provided either in a residential setting (usually, the hospital) or in the community in people's own home. The major objective of MPS is to improve the range of health and aged care services being offered in the community, to dispense with inflexible funding arrangements, to encourage community participation in service planning, and to improve quality of care.

The existing and future models of care for all these emergency, acute and ambulatory care services are described in Section 6.

### **3.3.4 Mukinbudin Nursing Post**

Merredin Hospital supports the nursing post situated in Mukinbudin. Services provided out of the nursing post include emergency, medical and outpatients services.

## **3.4 Organisational governance**

The Organisational Governance structure for the Eastern Wheatbelt is highlighted in *Appendix B*.

There are four structures for the District:

- *Operational structure* for acute, emergency, clinical support, non-clinical support and associated corporate functions (managed through the Operations Manager);
- *Corporate Services* structure (managed through the Corporate Services Director);
- *Mental Health Services* structure (managed through the Manager of WACHS Wheatbelt Mental Health); and
- *Population Health* (managed through the Manager of WACHS Wheatbelt Population Health).



### 3.5 National and State health policies

The strategic direction for service delivery to the Eastern Wheatbelt within this service plan considered the recommendations of National, State and local government policies as outlined in Table 3. Further background information regarding these policies can be found at <http://www.wacountry.health.wa.gov.au/index.php?id=445>

**Table 3: Major Commonwealth and State policies and strategic frameworks**

Policy	Policy Implications for the Eastern Wheatbelt Service Plan
<b>Commonwealth Policy</b>	
<p><b>Council of Australian Government's (COAG) National Health Reform Agreement (2011) including Local Health Networks and Medicare Locals</b></p>	<p>In August 2011, all States and Territories agreed to the <i>COAG National Health Reform Agreement</i> which will deliver major reforms to the organisation, funding and delivery of health and aged care. The Agreement sets out the shared intention of the Commonwealth, State and Territory governments to work in partnership to improve health outcomes for all Australians and ensure the sustainability of the Australian health system. The reforms will achieve better access to services, improved local accountability and transparency, greater responsiveness to local communities and provide a stronger financial basis for our health system into the future.</p> <p>Local Health Networks and Medicare Locals are being established to locally manage public hospital health services and primary health care services respectively.</p> <p><a href="http://www.coag.gov.au/docs/national_health_reform_agreement.pdf">www.coag.gov.au/docs/national_health_reform_agreement.pdf</a></p>
<p><b>National Partnership Agreement Closing the Gap in Indigenous Health Outcomes (2009)</b></p>	<p>Service planning enables key strategies within the <i>Western Australian Implementation Plan</i> to be achieved including strong collaboration of ambulatory care services for the district.</p>
<p><b>Rural Cancer Units</b></p>	<p>The Commonwealth have endorsed providing \$22.091 million of infrastructure funding over three years (2010/11 – 2012/13) to develop a multi-site rural cancer centre and patient accommodation located in four WACHS regions.</p> <p>No provisions have been made to include chemotherapy services from Merredin however, under this plan, by 2013/14 Northam will have a five chair, one bed chemotherapy unit and Narrogin will have a three chair chemotherapy unit. In addition, both Northam and Narrogin will provide patient and carer accommodation for overnight stays.</p> <p>Funding has also been provided to St John of God to expand their rural cancer centre in Bunbury.</p>
<p><b>National Primary Health Reform Program</b></p>	<p>As part of the National Health and Hospitals Reform Agenda, the Commonwealth Department of Health and Ageing has outlined the national reform agenda for primary health care services in Australia which includes:</p> <ul style="list-style-type: none"> <li>• Better integration of services</li> <li>• Access to multiple primary health professionals at one site</li> <li>• Co-location of services to improve accessibility for small communities.</li> </ul> <p>SIHI provides the opportunity to implement this reform in the Wheatbelt. It will result in a strengthening of primary health services that integrate with GPs and other non WACHS primary care services. This will enhance early intervention, prevention and health promotion type services to better detect and manage chronic conditions in the community. Co-location of primary health services offers the opportunity for improved economies of scale and efficiencies, integrated systems and promotion of a 'working together' approach to address complex issues within the community.</p>



Policy	Policy Implications for the Eastern Wheatbelt Service Plan
<b>State Government Policy</b>	
<b>WA Health Strategic Intent 2010-2015 (2010)</b>	<p>This document has a number of overarching goals for WA Health to build <i>healthier, longer and better quality lives for all Western Australians</i>. The intention of this Service Plan is to align with these overarching goals within this policy. Refer to:  <a href="http://www.health.wa.gov.au/about/docs/WAHealth_Strategic_Intent_2010_2015.pdf">www.health.wa.gov.au/about/docs/WAHealth_Strategic_Intent_2010_2015.pdf</a></p>
<b>WA Health Clinical Service Framework 2010-2020 (2010)</b>	<p>This Policy stipulates that Merredin Hospital provide Level 2 – 4 health services (as per pp. 24-5).</p> <p>Service planning utilises this State policy to understand the level of service delivery as an IDHS and the level of integration required with other Wheatbelt and metropolitan hospitals. Refer to:  <a href="http://www.health.wa.gov.au/publications/documents/CLINICAL_SERVICES_FRAMEWORK_WEB.pdf">www.health.wa.gov.au/publications/documents/CLINICAL_SERVICES_FRAMEWORK_WEB.pdf</a></p>
<b>WA Health, Greening Health, Building and Renovations</b>	<p>Service reform provides an opportunity to maximise environmental safety and energy efficiencies which will address climate change issues and support actions to reduce WA health's environmental footprint. The full implications of this policy are available on the WA Health Intranet site. Go to: <a href="http://greeninghealth/1/31/2/building_and_renovations.pm">greeninghealth/1/31/2/building_and_renovations.pm</a></p>
<b>WA Health Telehealth Strategic Direction (yet to be published)</b>	<p>A major initiative of health service reform is to enhance Telehealth facilities in health services to enable efficiencies to be gained in providing patient assessment and care; staff training; and patient-to-practitioner communication.</p>
<b>WA Health Network Models of Care (ongoing)</b>	<p>Service planning offers the opportunity to create facilities that best support the delivery of modern models of care as developed by the Network. The published models of care are found at <a href="http://www.healthnetworks.health.wa.gov.au/modelsofcare">www.healthnetworks.health.wa.gov.au/modelsofcare</a></p>
<b>Mental Health 2020: Making it personal and everybody's business (Strategic Policy)</b>	<p>The WA Government's ten year strategic policy for mental health, <i>Mental Health 2020: Making it personal and everybody's business</i>, provides a whole of government and community approach and sets out three key directions:</p> <ul style="list-style-type: none"> <li>• person centred supports and services (giving individuals increased choice, flexibility and control of the services they receive);</li> <li>• connected approaches (between public and private mental health services and the range of formal and informal supports, services, and community organisations); and</li> <li>• balanced investment (provide a full range of support and services from promotion, prevention and early intervention to treatment and recovery).</li> </ul> <p>The policy outlines nine action areas: planning, services working together, accommodation, getting help early, specific at risk populations, justice, preventing suicide, maintaining a sustainable workforce, and a high quality mental health system.</p> <p>For more information go to: <a href="http://www.mentalhealth.wa.gov.au/Libraries/pdf_docs/Mental_Health_Commission_strategic_plan_2020.sflb.ashx">www.mentalhealth.wa.gov.au/Libraries/pdf_docs/Mental_Health_Commission_strategic_plan_2020.sflb.ashx</a></p>
<b>WA Health Redundancy and Disaster Planning Guidelines (2008)</b>	<p>Merredin Hospital will comply as a Group 3 facility for Redundancy and Disaster Planning as per these Guidelines:  <a href="http://www.public.health.wa.gov.au/cproot/2540/2/Redudancy%20and%20Disaster%20Planning.pdf">www.public.health.wa.gov.au/cproot/2540/2/Redudancy%20and%20Disaster%20Planning.pdf</a></p>
<b>WACHS Policy</b>	
<b>WACHS Strategic Plan, Revitalising Country Health Service 2009-2012 (2009)</b>	<p>Service reform enables WACHS to achieve many of the key action areas within this strategic plan for the eastern Wheatbelt community. Refer to: <a href="http://www.wacountry.health.wa.gov.au/uploaddocs/booklet%20final.pdf">www.wacountry.health.wa.gov.au/uploaddocs/booklet%20final.pdf</a></p>

Policy	Policy Implications for the Eastern Wheatbelt Service Plan
<b>Operational Plan 2011/12 WA Country Health Service</b>	This <i>Operational Plan</i> actions the <i>Strategic Plan</i> , providing practical direction for WACHS operations across the State.
<b>WA Country Health Services Human Resources Strategic Directions Framework (2011)</b>	Human Resources Priorities Plan for 2011/12 will be developed as an outcome of WACHS endorsing this framework. Workforce development within the Eastern Wheatbelt should engage in this process to improve the attraction and retention of a skilled workforce.
<b>Aboriginal Employment Strategy 2010-2014</b>	This strategy advocates for more Aboriginal people to be employed in all levels of the organisation as a strategy to make services more culturally secure.
<b>WACHS Renal Dialysis Plan</b>	This plan identifies the need for renal satellite outreach dialysis or community supported dialysis services (small satellite services) in the Wheatbelt to enable care closer to home. two renal chairs are planned for Merredin.
<b>WACHS ED Services Planning and Facility Design Principles and Benchmarks</b>	Calculation of the required number of treatment bays to manage future demand is based on the benchmarks published in this document.

### 3.6 Local planning initiatives

The SIHI and service reform initiatives outlined in this service plan have evolved from the previous planning initiatives for the Wheatbelt Region as follows.

#### 3.6.1 Wheatbelt Health Memorandum of Understanding (2006)

The *Wheatbelt Health Memorandum of Understanding Group* (Health MOU group) was formed in 2006 and is a partnership between the WACHS Wheatbelt, Wheatbelt General Practice Network, Avon Midland, Central and Great Eastern Country Zones and the Wheatbelt Development Commission, that have come together to improve health service delivery in the Wheatbelt.

This partnership provides an avenue for all levels of Government to work together to address the delivery of health services in a contemporary environment. The principals of the MOU agreement are:

- The parties commit to frequent and productive communication and consultation on matters relating to health service provision for Wheatbelt communities.
- The parties commit to engaging communities in the planning and delivery of health services in their communities.
- The parties recognise the regional development impacts of health service delivery within the Wheatbelt.
- The parties recognise the importance of new and innovative health service delivery models and methods.

In March 2009 the Health MOU group engaged MMT Consultancy Services to undertake the Wheatbelt Health Planning Initiative project. The project incorporated past health papers and reviews and undertook extensive consultation across the Wheatbelt community to inform future health planning for the Wheatbelt WACHS region. Four community booklets were compiled to provide the Wheatbelt community with information about the current health issues facing rural communities. The information collected from the community consultations, written submissions and stakeholder meetings was used to compile the

Wheatbelt Health Planning Initiative Report of Consultations August 2009. For further information go to: [www.wheatbelt.wa.gov.au/projects/wheatbelt-health-planning](http://www.wheatbelt.wa.gov.au/projects/wheatbelt-health-planning)

### **3.6.2 Wheatbelt Clinical Services Plan (2008)**

The Wheatbelt Clinical Services Plan is one of seven plans that the WACHS initiated to set strategic directions for health care services in regional WA.

The overarching strategies for service delivery, as outlined in the WACHS – Wheatbelt Clinical Services Plan include:

- A review of the funding for the region to recognise the population growth and dependency ratio;
- The provision of reliable medical cover and alternative models of service delivery to address workforce shortages;
- Workforce strategies to develop and implement paraprofessional support roles for acute care, community health, mental health and aged care;
- The implementation of an ambulatory care model to reduce inpatient demand and strengthening primary health care;
- Effective change management that focuses on integration of services and capacity building;
- Enhancing access to services through information and communications technology; and
- Increasing the capacity of the IDHS to become hubs for the delivery of sustainable and safe health services.

### **3.6.3 Wheatbelt Aboriginal health planning (2008 - ongoing)**

The *Wheatbelt Aboriginal Community Engagement Project* identified the following key findings and recommendations:

- Community engagement findings as summarised by the Wheatbelt Aboriginal Health Team four areas:
  - Wheatbelt Aboriginal communities were most concerned with diabetes, alcohol and drug abuse, oral health, social / emotional wellbeing and vision.
  - The Aboriginal community had significant concerns with their ability to access health services and specialist appointments, as well as access to prescription medicine.
  - The majority of health services were delivered through the emergency department of rural hospitals.
  - Culturally appropriate communication and health care were an important factor in health service delivery for the Aboriginal community.
- The *Wheatbelt Aboriginal Community Engagement Project* identified the following recommendations:
  - Focus attention on the social and emotional wellbeing of the community, grief and loss within the family and wider community and its impact on mental health (relates to key finding #1).



- Address alcohol and drug abuse within the Wheatbelt Aboriginal community (relates to key finding #1).
- Ensure the community can access medical services and sensory health – vision and hearing. This includes addressing the barriers of cost and travel (relates to key finding #2).
- Advocate and seek affordable pharmaceutical access for the community (relates to key finding #2).
- Place priority on oral health and dental services to ensure access to these services occurs within the Wheatbelt (relates to key finding #1).
- Address chronic diseases, particularly diabetes and kidney disease within the community (relates to key finding #1).
- Ensure cultural security for Aboriginal people across the entire range of health services including general practice, specialist care, acute care and population health services (relates to key finding #4).
- Address health issues which are likely to lead to presentation at hospital emergency departments, particularly injury and acute exacerbations of chronic conditions (relates to key finding #3).
- In addition to the above priorities, common themes raised during the community consultation support the need the following recommendations:
  - Implement programs for early year’s health including parenting, early education and access to child health within the region.
  - Highlight the impacts of youth disengagement within the Aboriginal community and address the ripple effects this has on health and wellbeing.
  - Seek additional funding and coordinate cross agency programs, research and activities to address the community’s concerns and issues in regards to health services and transport within the Wheatbelt for Aboriginal communities.
  - Improve the promotion of existing services to the local Aboriginal people.
  - Promote to and support training for local Aboriginal people in health areas.

WACHS Wheatbelt in line with state-wide strategy was integral in developing and establishing the Wheatbelt Regional Aboriginal Health Planning Forum. As part of the preparations for the COAG funding submission, this planning forum completed an extensive community consultation of its own, with the information from the community, consumers, WACHS and other key stakeholders used to develop the Wheatbelt Aboriginal Health Plan. The *Wheatbelt Aboriginal Health Plan 2010* identified the following 12 priority health service delivery issues:

- Social and emotional wellbeing, grief and loss, mental health.
- Smoking, alcohol and drug abuse.
- Medical service access and sensory health – vision and hearing.
- Affordable pharmaceutical access.
- Oral health & dental services.
- Chronic diseases – diabetes (includes podiatry), kidney disease, asthma, cardiovascular disease, cancer.
- Youth disengagement, and associated poor sexual health.



- Early years – parenting, early education, access to child health.
- Injury, community based first aid skills.
- Aged care, respite and dementia.
- Transport and accommodation to attend medical appointments.
- Cultural security across the spectrum of health services.

These issues and recommendations highlighted in the engagement project and health plan have been captured in the recommendations of consequent State Government policies and this service plan where possible. For example, this service plan documents the need to increase the availability of renal dialysis services for the local catchment as per the *Clinical Services Framework* and recommends a number of strategies to address the primary health care and mental health care concerns of the Aboriginal community. Refer to Section 5 for more information.

Ongoing service planning should continue to reference these two documents to ensure Aboriginal health services are culturally secure and meeting the needs of the local community.

### 3.6.4 Wheatbelt Emergency Services Review 2010

An independent review of emergency services in the Wheatbelt was completed in October 2010. The review concluded that the historical model of service delivery is not sustainable given the inconsistent medical/GP availability, variable medical and nursing competency, unclear referral and escalation pathways, and limited utilisation of new technologies and workforce models.

The review recommended that a coordinated, tiered and integrated response to emergency service delivery was required to improve emergency care to Wheatbelt residents and ensure people were referred to the most appropriate location for care. A hub and spoke model where Northam, Narrogin and Merredin hospitals have sufficient resources to provide 24/7 emergency services by competent and supported medical staff in the hub emergency department, as well as telephone medical support to peripheral sites.

Recommendations also included ensuring Wheatbelt residents are informed of where they can obtain essential medical services and that essential support services, such as pathology, radiology and telehealth are available.

This review and its recommendations are fundamental to the future model of emergency and primary health care in the region.

### 3.6.5 Wheatbelt Indigenous Services Assessment (WISA) Project

The Wheatbelt Development Commission in partnership with the Department for Indigenous Affairs completed the *Wheatbelt Indigenous Services Assessment (WISA) Project* in early 2010; a mapping and gap analysis of services accessed by Aboriginal people in the Wheatbelt region of Western Australia.

While many issues and gaps were identified, the following two findings are considered key in understanding the current issues, and planning future service design and delivery:

- Services that involve Aboriginal people in the design and delivery of the service, in partnership with facilitating agencies, are achieving the greatest results. That is, more people are using the services, are satisfied with the results and recommend the services to others.

- Aboriginal people view all services as inter-related, including with the broader community. Effective service delivery reform is most likely if this view is accepted and practically implemented. Very strong links and inter-relationships were identified between all the services and Aboriginal people consistently stressed the importance of these inter-relationships and the role of the general community in discussions and meetings.

The Draft Report contained the following health recommendations:

- A larger regionally collaborative approach to mental and emotional wellbeing issues should be developed by agencies including: explore a regional proposal for services delivery that combines the resources and assets of each; engage with the regional Aboriginal community; and co-design and co-deliver culturally secure and effective services for specific target areas.
- The primary and general health issues and gaps of the report should be analysed and an implementation plan be developed through an extensive consultative process with the regional Aboriginal community; that reviews outcomes of recent COAG funding; includes exploration of ways to increase Aboriginal people's involvement in their health service delivery; supports additional Aboriginal health professional training and appointments; and · explores the development of a regional Aboriginal health service, designed specifically for the Wheatbelt, working through the sub-regional centres.

## 3.7 Existing Federal or State Government Commitments

### 3.7.1 Southern Inland Health Initiative

The \$565M *SIHI* project aims to work with the Commonwealth to reform and improve access to health care for all residents of the Southern Inland area of Western Australia over the next five years. This area encompasses the Wheatbelt, Midwest, South West, Great Southern and Goldfields health regions.

This service plan and accompanying service planning process is a direct outcome of the SIHI announcement by State Government. The service plan aims to inform the SIHI Implementation Plan which will recommend the best strategy for investing funds from the State Government's *Royalties for Region Scheme* which includes:

- \$240 million investment in health workforce and services over four years.
- \$325 million in capital works over five years.

The Department of Health (2011) states, the SIHI will dramatically improve medical resources and 24 hour emergency coverage, whilst boosting primary health care service delivery via the implementation of six streams of work. The streams are highlighted below with the allocations made for the Eastern Wheatbelt to achieve the intention of the Stream.



**Table 4: SIHI overview and related plans for the Eastern Wheatbelt**

Stream (Total Southern Inland Area)	Allocations for Eastern Wheatbelt
<p><b>1. District Medical Workforce Investment Program</b> (\$182.9 million) to significantly improve medical resources and 24 hour emergency response across the districts.</p>	<p><i>Allocation of recurrent funding to provide 24 hour emergency response.</i></p>
<p><b>2. District Hospital and Health Services Investment Program</b> (\$147.4 million) to provide major upgrades at Northam, Narrogin, Merredin, Katanning, Manjimup (Warren Hospital) and Collie.</p> <p>Recurrent funding of \$26 million will also be provided under this program to boost primary and ambulatory health care services across each district.</p>	<p><i>Allocation of \$17.46M (capital funding)<sup>#</sup> towards construction of a new Integrated Primary Health Centre (to co-locate mental health, primary health, allied health and medical offices). Funding also allocated for upgrades to engineering and site services, ED expansion and refurbishment (including new ambulance entrance), inpatient areas refurbishment, upgrades to operating theatre and minor upgrade to non-clinical support areas. Refurbishment of existing Hospital Sterilising Services Unit (HSSU), medical imaging, front entry and administration area.</i></p> <p><i>Funding allocated to boost primary and ambulatory health care services.</i></p>
<p><b>3. Primary Health Care Demonstration Program</b> (\$43.4 million) will provide communities with the opportunity to re-examine how health services are delivered in their districts. Funding will be made available to boost primary and ambulatory health services for communities that opt in.</p>	<p><i>Opportunity available for small hospitals to be converted to Primary Health Care Centres with adjacent Emergency Department (removing the inpatient functions).</i></p> <p><i>Scope of work for Eastern Wheatbelt to be determined.</i></p>
<p><b>4. Small Hospital and Nursing Post Refurbishment Program</b> (\$108.8 million) will provide a capital works program for small hospitals and nursing posts to be refurbished or, if required, rebuilt to enable delivery of health care services that will match the needs of their communities.</p>	<p><i>Scope of work for Eastern Wheatbelt to be determined.</i></p>
<p><b>5. Telehealth Investment</b> (\$36.5 million) will introduce innovative e-technology and increased use of telehealth technology across the region, including equipment upgrades.</p>	<p><i>Allocation of funding for procurement of equipment and FTE to enhance technology for patient care, staff supervision, training and consultation. Includes procurement of fixed telehealth units in emergency departments.</i></p>
<p><b>6. Residential Aged Care and Dementia Investment Program</b> (\$20 million) will provide incentive for private providers to expand options for residential aged care and dementia care across the Southern Inland area.</p>	<p><i>Scope of work for Eastern Wheatbelt to be determined.</i></p>

<sup>#</sup> Excludes the \$9M from the WA Health Capital Expenditure Program.



### 3.7.2 SuperTowns

SuperTowns is a Royalties for Regions initiative to encourage regional communities in the southern half of the state to plan and prepare for the future so they can take advantage of opportunities created by WA's population growth.

The Wheatbelt towns of Northam, Boddington and Jurien Bay have been selected as SuperTowns based on their potential for population growth; economic expansion and diversification; strong local governance capabilities; and their potential to generate net benefits to WA. Refer to *Appendix C* for more information.

## 3.8 Strategic directions for service delivery

A review of the Government policies, local planning initiatives, drivers for change and stakeholder expectations within the Eastern Wheatbelt has identified the following strategic directions for service delivery for the Merredin Hospital, Eastern Wheatbelt MPS sites/smaller hospitals and nursing posts:

- Strengthen the integration of services across the continuum of care.
- Enhance demand management particularly in surgery and mental health.
- Focus on non-inpatient care.
- Deliver care closer to home.
- Improve Aboriginal health outcomes.
- Improve aged care services.
- Attract and retain a skilled workforce.
- Strengthen partnerships with primary care, private and not-for-profit providers.
- Utilise Information and Communication Technology (ICT) advancements for better care.
- Create a safer environment for all.

## 3.9 Key drivers for change

The catchment population, current and projected activity data, and qualitative information have been analysed, with consideration of the planning context outlined above, to identify the following key drivers for developing future models of care and service delivery strategies for WACHS Eastern Wheatbelt:

### Service strengths to maintain

- Willingness to look at how to deliver services more efficiently in an integrated way across the District from GPs services through to ED and primary health care services.
- Committed, experienced and passionate management and staff.
- Good teamwork evident within all areas.
- Good level of co-operation between GPs and ED.
- Primary health care services strong on holistic approaches to care.



- Great opportunities to further integrate primary health care services.
- Mental Health Service provides a good standard of care for non-acute patients.
- Telehealth and e-health technology generally was seen as a key enabler to the ongoing enhancement of all health services. Telehealth was seen as a way to increase access and support for training and professional supervision.
- Kelleberin Hospital has a Family Care Unit, which is a self-contained unit that accommodates patients requiring palliative care, postnatal support and or rehabilitation and could be used as a model for other Eastern Wheatbelt hospitals to replicate.
- Primary care provides a number of lifestyle programs with and for the community.
- High immunisation rates for children.
- COAG Closing the Gap funding for Aboriginal health utilised well. The Wheatbelt Aboriginal Health Services provides services to the Eastern Wheatbelt.
- Digital Medical Imaging is being implemented across Eastern Wheatbelt sites.

## Identified service issues

### Primary health care

#### **Maternal and child health:**

- Lack of support for new mothers. For example there are no antenatal/parenting courses in town or lactation consultants.
- There is an increasing incidence of postnatal depression in the Eastern Wheatbelt.

#### **Aged care, Aboriginal health and chronic disease:**

- Limited access to primary health care services: GPs, drug and alcohol services, preventative dental and support workers. Limited access impacts on emergency and acute services.
- Recognition that the emerging demographic in the population (increased numbers of older people and a high proportion of Aboriginal people) means that there is a need for community based primary health care type services to provide specific strategies for these population cohorts.
- Limited access to primary health care services impacts on emergency and acute Recommended strategies for service reform services.
- There is a need for a greater focus on chronic disease management in the community and the development of new models of care.
- There is limited uptake of HACC services by Aboriginal families across the region.
- Growing need for transitional and home based support from acute to community/home.
- More resources are needed to conduct more timely aged care assessments in the hospitals and the community. At least one extra FTE required.
- Community packages available but not fully funded and not a flexible service.
- There is no Silver Chain service in Merredin.



- The *2010 Wheatbelt Aboriginal Health Plan* identifies 12 priority health service delivery issues for the Wheatbelt:
  - Social and emotional wellbeing, grief and loss, mental health,
  - Smoking, alcohol and drug abuse,
  - Medical service access and sensory health – vision and hearing,
  - Affordable pharmaceutical access,
  - Oral health & dental services,
  - Chronic diseases – diabetes (includes podiatry), kidney disease, asthma, cardio-vascular disease, COPD, cancer,
  - Youth disengagement, and associated poor sexual health,
  - Early years – parenting, early education, access to child health,
  - Injury, community based first aid skills,
  - Aged care, respite and dementia,
  - Transport and accommodation to attend medical appointments, and
  - Cultural security across the spectrum of health services.

These priorities are not ranked as all have the potential to have significant impact on the health of individuals, families and communities. Most of these priorities have direct links to the COAG National Partnership Agreements on Indigenous Health.

- Sustaining the delivery of some population health programs is often dependent on the skills and availability of one staff member. If the skilled staff member leaves or is absent from the service then often the service will cease to operate (e.g. diabetes education, asthma education).

***Health promotion, allied health and oral health:***

- Limited dental services available. Only one private dentist and one dental chair is available in town. School dentist, hygienist and therapist available for school children.
- No social work service available.

***Community-based mental health / alcohol and drug:***

- There is an increasing level of patients with mental health and drug and alcohol co-morbidities and other psycho-social issues.
- There is no supported accommodation for people with a mental illness in the Eastern Wheatbelt. Supported accommodation across the age spectrum is required.
- Holyoake visiting services are limited in their capacity to adequately manage demand for alcohol and other drug services beyond court mandated referrals.
- Currently there is only one Child and Adolescent Mental Health Service (CAMHS) staff based at Merredin to cover the entire Eastern Wheatbelt and only 0.1 FTE per month for a child psychologist via video-conference for the entire Wheatbelt.
- Specific services are required to meet the needs of the elderly, young people, new mothers and people affected by drug and alcohol use.



### *Outpatients*

- There is demand for child development, rehabilitation, ADL assessment and equipment/home installation and modification assessments and prescriptions.
- Referrals for occupational therapy, particularly for hand therapy is increasing.
- Delivery of diabetes education and podiatry services could be strengthened.

### *Emergency department*

- Through SIHI, there will be 24-hour 7-day per week coverage by GPs at Merredin ED with 12 hour on site and 12 hour close on call (within 10 minutes). However, there are difficulties in recruiting and retaining GPs in the smaller communities.
- The ED is often used as a primary health care service by the community due to the limited number of GPs and other primary health care services such as, drug and alcohol services, mental health, community health, dental and community based care.
- Southern Cross small hospital needs telehealth support in the ED as there is lots of mining activity in the district and no 24/7 GP.
- There are no security services and no secure rooms to accommodate violent or aggressive mental health patients presenting with drug and/or alcohol problems to the ED.
- Current policy states that when there is no doctor rostered on at a hospital, all inpatients must be transferred to a hospital with a doctor rostered on. This is creating a lot of perceived unnecessary patient movement and work for staff.
- There is limited support/ consultation from metropolitan health services with regards to emergency patient transfers. A Clinical Coordination Project is underway to develop sustainable models for patient transport in collaboration with St John Ambulance and RFDS.

### *Inpatient services*

- Very low acute bed occupancy now (4.6 out of 24 acute beds occupied on average on any day) and this trend is anticipated to continue into the future even with a modestly increasing population – up to 11 beds by 2021.
- High proportion of low acuity presentations to hospital are not seen by a doctor due to limited availability of GPs.
- Gaps in visiting specialists: ENT, ophthalmology, cardiology, gerontology, psychiatry, psychogeriatrician and paediatric services.
- Eastern Wheatbelt requires access to more specialists including: Ear, Nose and Throat (ENT) specialist, Ophthalmologist, General Surgeon, Anaesthetist, General Physician, Psychiatry, Cardiologist, Gerontologist, Psychogeriatric services, paediatric referral pathways and audiology for paediatrics.
- Discharge planning from metropolitan hospitals is not always taking into account where patients live and services available in that area.
- Potential increase on service demand with the projected increase in activity at Eastern Wheatbelt small hospitals.
- Medical records issues: each hospital having their own, duplicate files for the one patient, files being signed out not returning.

- Lack of equipment to accommodate bariatric inpatients across the Eastern Wheatbelt.
- Renal dialysis is an area of rapid growth due to the ageing of the population, the increased use of hypertension medication, the increase in diabetes and the high prevalence within the Aboriginal population.
- Merredin has not been able to provide a Level 3 surgical service for several years due to workforce issues and the risk of not being able to sustain a safe surgical service.
- Merredin has only one theatre and will require a second theatre and additional surgical and anaesthetic capacity to meet the *Clinical Services Framework* role delineation sustainably and reliably. This is unlikely in the foreseeable future due to the limited availability of the GP proceduralist workforce. Opportunities to safely increase planned ambulatory care visiting surgical services (elective day surgery) at Merredin is supported by clinicians as a key strategy to promote care closer to home.
- The need to provide increased antenatal and postnatal services at across the district is a key priority as there are limited midwife services available resulting in increased risks for the birthing process, screening for foetal development, post natal depression screening and limited post natal follow up.
- The *Closing the Gap* funded Aboriginal midwife service is receiving pressure from GPs to provide services to non-Aboriginal mothers.
- There are instances where mothers go home with no postnatal care due to lack of communication from the delivering hospital.
- Due to the number of births in the district the requirement by APHRA for midwives to attend a prescribed number of births may result in a reduction in the number of midwives for the area.
- There are barriers to practice as a midwife, particularly concerning on-going training which is difficult to obtain in country areas.
- Some women do not want to birth away from home, and present to ED during labour.
- No phototherapy or tube feeds and limited access to neonatal resuscitation staff.
- The estimated demand for paediatric services is not increasing primarily due to the ageing population in the Eastern Wheatbelt. However, where possible, skill levels should be improved in order to provide as much paediatric care locally as possible.
- Increasing level of need and unmet demand for acute mental health patients and those requiring inpatient and sub-acute services.
- No specific services to meet the needs of drug and alcohol affected people.
- Mental health crises are a struggle to manage due to lack of secure facilities, security services and acute mental health services.
- Mental health services are only available during office hours – there is no on-call service and 90% of mental health patients present after hours.
- There is no dedicated non authorised inpatient mental health facility in the Wheatbelt.
- Further education required in the management of acute conditions in cancer/palliative care patients.
- Limited communication from private cancer care providers to the district.
- There is a need to establish the Cancer and Palliative Care Network Model of Care for WA locally.





- There is an increasing level of need and unmet demand for people requiring sub-acute care.
- There are some gaps in the current delivery of occupational therapy services.

### *Residential aged care*

- Lifestyle activities for aged care residents in the small hospitals are limited.
- Limited access to retirement village accommodation and high care beds.
- There are no available dementia specific residential care facilities in the Eastern Wheatbelt. However, the residential aged care and dementia investment program of the SIHI will help to alleviate the shortfall in aged care places through incentives offered to private providers to expand services in the area.
- There are no sub-acute aged care services.
- More community meeting/respice/hostel places are needed.

### *Clinical support services*

- Additional demands may be placed on support services if the SIHI increases activity in the emergency departments and the number of specialists. This is an issue particularly for after hours and weekend rostering. Extra FTE may be required.
- There is no capacity to look at x-rays on a computer in ED at Merredin Hospital.
- Medicare rebates are in jeopardy if the Eastern Wheatbelt sites do not move to digital medical imaging.
- No on-site pharmacist in Merredin meaning certain medications are not readily available if required.
- Metropolitan hospital transfer patients with non-standard medications and do not check to see if they are available at Merredin Hospital.
- Pharmacy has non-packing days.
- PathWest does not provide 24 hour scientist coverage at Merredin Hospital.
- There is a plan to close Merredin Hospital's Hospital Sterilising Services Unit (HSSU) and to use Northam's HSSU instead; however current specialists say they will not practice at Merredin if the HSSU closes. This is due to delicate equipment having to be transferred to and from Northam and Perth with the potential for damage, delays and a lack of FTE to support this process.
- Lack of a regional infection control position and the current role is not formalised, leading to lack of recognition and low profile for the infection control position. There is no backfill provided for infection control.

### *Non-clinical support services*

- Corporate and ICT regional models are not resourcing the Eastern Wheatbelt efficiently or effectively (e.g. additional human resource and occupational health and safety support required is the Eastern Wheatbelt).
- If the ICT system crashes at Merredin Hospital it will take 30-45 minutes to have ICT support on the ground due to the service being based at Kellerberrin.

- Simple engineering and maintenance tasks are being performed by skilled engineering and electrician personnel.
- Courier service for the supply department has a 1-2 day delay.
- Lack of training in IT related medical software and/or lack of support from manufacturers of medical equipment.
- Lack of IT resources for e-learning (e.g. no flash/media player and no hot desks or shared computers).
- Eastern Wheatbelt hospitals have different drivers making information sharing harder.
- Differing versions of Microsoft Office on hospital computers.
- Corporate and ICT regional models are not resourcing the Eastern Wheatbelt efficiently or effectively.
- Video conferencing equipment is old and unreliable.
- Tertiary hospitals need to take up teleconferencing.
- Lack of mobile phone coverage across the Eastern Wheatbelt.
- Lack of staff training with respect to video-conferencing.
- The lack of a single integrated electronic record was seen as a significant barrier to developing improved operational models of care across the region and the district.
- Need for wireless technology across all the hospital sites.

### *Workforce and attraction issues*

- There have been challenges for several years in filling vacant allied health positions across the health district and region, resulting in periods of times when some types of allied health services are not provided. All clinical groups raised this issue and the impact it has on the provision of inpatient and community allied health programs.
- ICT staff are employed on three month contracts which are sometimes not renewed leading to an unstable workforce.
- Technological changes and upgrades occur too fast for ICT staff to learn and then train and support other staff.
- Difficulty in recruiting and retaining staff due to salary inequities between region and Perth.
- Low activity at smaller MPS sites can reduce opportunities to build skills and sustain services (e.g. medical imaging).
- Back-filling for leave, travel and training is problematic for service sustainability (e.g. ultrasound).
- Standard of housing and incentives limits workforce attraction.
- Access to a range of professional supervision is limited.

### *Patient transport*

- Challenges exist with patient transport between sites, both emergency and non-urgent. Mental health patient transfers were particularly highlighted as a concern as they take hospital, police and ambulance staff out of the district for extended periods of time, thereby reducing the service capacity of the district until they get back.

- Mental health transfers from Merredin to Northam or Perth, involves clinical staff, ambulance, WA Police and at times the RFDS. Merredin police average two escorts to Perth per month. Merredin does not have the resources to manage violent and/or aggressive psychiatric patients. All road transfers to Perth require two police officers, one escorting the patient and one following in a police vehicle. This takes personnel and volunteers out of the region for at least five hours.
- St John Ambulance experience transfer issues as they cannot transfer patients further than 200km due to lack of ambulance coverage in town and lack of volunteers. Sedated patients require a qualified paramedic to be present which is a rare area of expertise in rural areas. Recruiting and retaining volunteer ambulance officers is difficult.
- Limited access to transport reduces presentations to health services locally, regionally and to the metropolitan area.

### *Facility issues*

- Flow through the ED at Merredin Hospital is unsuitable.
- There is a need for a multipurpose room with dual egress, duress and video conference facilities that could accommodate patients at risk to self and others across all Eastern Wheatbelt sites.
- There is no waiting area for Medical Imaging at Merredin Hospital.
- No dedicated training room at Merredin Hospital.
- Office capacity for non-clinical support staff is limited and does not support functions and can pose a risk to staff health and safety.
- Current facilities are not designed for efficient telehealth and ehealth services (e.g. telehealth is largely immobile and located away from patient assessment areas).
- Merredin server room is inadequate and need re-cabling.
- Medical equipment cannot be supported by ICT (e.g. Digital Medical Imaging).
- Upgrades to non-clinical support services required (e.g. laundry, kitchen, administration and stores).
- Laundry requires upgrades to water supply to increase the working capacity of the service.
- The extra workshop is currently being used for storage.
- Lack of storage and functionality concerning the service/supply area.
- The current air change system is not coping.
- The current area water supply contains too much calcium and water quality is not good.
- Back-up generator is not big enough and does not cover essential services.
- Security upgrades required across the sites.

## Key priorities identified by providers and stakeholders

A series of consultative workshops with service providers and external stakeholders has identified a series of specific issues which are impacting on health service provision in the region. Key issues (in no particular order) identified at workshops that were most common amongst groups included:

- Collocation of ambulatory health care services. Establish a 'one stop shop' for all ambulatory type health services as a way of integrating operations and assisting the patient to navigate the continuum of care, particularly for those patients presenting with multiple co-morbidities.
- Models of care for priority groups. Introduce models of care that improve access to services for groups who have difficulties accessing acute and primary health care services (e.g. rural and remote communities; elderly; young mothers; Aboriginal communities and those living with a disability).
- Enhance Aboriginal health initiatives. Consistent with 'Closing the Gap' and other local priorities, build the capacity of Aboriginal health initiatives by attracting and retaining positions and leadership roles for Aboriginal people.
- Enhance telehealth technologies. Working with the WACHS SIHI, utilise telehealth and other technologies to increase the level of training and education opportunities available for staff. In addition telehealth and other technologies will be employed to improve patient care via access to specialists.
- Explore initiatives to improve patient and consumer transport options. There is a current challenge with patient transport for both emergency and non-urgent care with poor public transport options and the inability to access Patient Assisted Travel Scheme (PATS) funding.
- Increase capacity for elective surgery. Increase planned ambulatory care surgical services (elective day surgery) at Merredin as a key strategy to promote care closer. Utilise the SIHI project to increase the number of visiting specialists / proceduralists to achieve this.
- Integrate electronic medical records. The lack of a single integrated electronic record system was seen as a significant barrier to developing improved operational models of care across the region and the district.
- Strengthen communication networks between the community and between health care providers. To enhance the community's awareness and access to the various programs available; and to reduce duplication and inefficiencies in service provision.
- Undertake district level workforce planning. As a priority in order to sustain service delivery, there was a need to have a region wide workforce plan that addresses issues such as attraction and recruitment strategies, staff accommodation issues, professional supervision, staff training (mandatory and clinical) and Occupational Health and Safety.
- Provision of staff accommodation on-site. Pending changes and improvement as the new Government Regional Officers Housing (GROH) process, it was identified that self-contained motel style accommodation for all health service transient staff, short term contracts, locums and students is required on-site at Merredin.



### 3.10 Service reform priorities

The service reform priorities for Eastern Wheatbelt include:

- Support the greater integration of services by co-locating local health services for primary health care and outpatients on the one health campus.
- Build a sustainable and safe GP led emergency model of care that includes an Emergency Department (ED) Nurse Practitioner (NP) for the district network of services, in response to the concern that the ED is currently used as a primary care service by the community.
- Develop community based primary health care type services to provide specific strategies for the emerging demographics in the population (increased numbers of older people and a high proportion of Aboriginal people).
- Increase planned same-day surgical services (elective day surgery) at Merredin Hospital as a key strategy to promote care closer to home and reverse patient flows back from the metropolitan area to the Wheatbelt in line with the *Clinical Service Framework's* role delineation.
- Improve communication between tertiary hospitals, community agencies, GPs and Eastern Wheatbelt hospitals to provide more integrated and coordinated health services.
- Provide culturally appropriate health services and facilities for the catchment area's Aboriginal population including (but not limited to) the recruitment of more Aboriginal people as both Aboriginal health workers and across the workforce more generally.
- Undertake district level workforce planning as a priority in order to address staff recruitment and retention issues including succession planning, staff accommodation, the need for more rigorous attraction and retention strategies, the ageing workforce and the need to 'grow your own' staff (attracting young local people into the health business across all sectors).
- Enhance telehealth and e-health technology across the continuum of care, aligning with the SIHI telehealth strategy to the develop staff who are local 'expert telehealth users'.
- Review both emergency and non-urgent patient transport initiatives between sites.

## 4 DEMOGRAPHY AND HEALTH NEEDS

The future models of care delivered in the Wheatbelt will need to be responsive to the needs of the local catchment area and the social and economic realities within which services operate, including the availability of the resident or visiting workforce. This section provides an overview of the catchment area of the region, along with a description of the health status, demography and other factors that influence the health status of local residents. This information on the population's health needs informs the types and locations of services required in the Wheatbelt over the next 10 to 20 years.

### 4.1 Demography

The demography of the Wheatbelt region will influence the type of services and the models of care delivered at health campuses across the region. This section highlights the population growth, gender, age distribution and cultural diversity of the region that will need to be considered in determining the future Wheatbelt models of care, types and location of services.

#### 4.1.1 Population and population growth

The Australian Bureau of Statistics (ABS, 2011) estimated resident population (ERP) of the Wheatbelt health region grew by 5% over the last five years, to 77,227 in 2010. This increase was markedly less than the 14% for the State. The Eastern Wheatbelt decreased in population slightly (-1%).

The ABS population projections (2010) estimate the region's population to increase by 14,000 (18%), from 80,166 in 2011 to 94,225 in 2021, as shown in the table below. This level of growth is slightly lower than the expected 20% growth for the State for the same time period.

Eastern Wheatbelt is expected to grow by 13% with an average growth rate of 1% per year.

**Table 5: Eastern Wheatbelt: Estimated resident population (2010) and population projections (2011 to 2021)**

Area	2010 ERP	Population projections			Growth (2011-2021)	Average annual growth
		2011	2016	2021		
Eastern Wheatbelt	12,584	13,593	14,483	15,353	13%	1%
<b>TOTAL WHEATBELT</b>	<b>77,227</b>	<b>80,166</b>	<b>87,080</b>	<b>94,225</b>	<b>18%</b>	<b>2%</b>

Source: ABS 2010 ERP and ABS Series B+ projections.

NOTE: There is a noticeable difference between the 2010 ERP (ABS, 2011) and 2011 projections (ABS 2010b) for the Eastern Wheatbelt (8%).

### 4.1.2 Gender distribution

In the 2010 ERP (ABS, 2011) there were slightly more males than females in the Wheatbelt region (52% compared with 48%) and this gender imbalance is projected to remain in the future (ABS, 2010), as shown in the next table.

**Table 6: Eastern Wheatbelt: Estimated resident population (2010) and population projections (2011 to 2021), by gender**

Area	Gender	2010 ERP	Population Projections			Growth (2011-2021)	Average annual growth
			2011	2016	2021		
Eastern Wheatbelt	Female	5,952	6,404	6,832	7,266	14%	1%
	Male	6,632	7,189	7,650	8,087	12%	1%
<b>TOTAL WHEATBELT</b>	<b>Female</b>	<b>36,949</b>	<b>38,254</b>	<b>41,621</b>	<b>45,117</b>	<b>18%</b>	<b>2%</b>
	<b>Male</b>	<b>40,278</b>	<b>41,912</b>	<b>45,459</b>	<b>49,109</b>	<b>17%</b>	<b>2%</b>

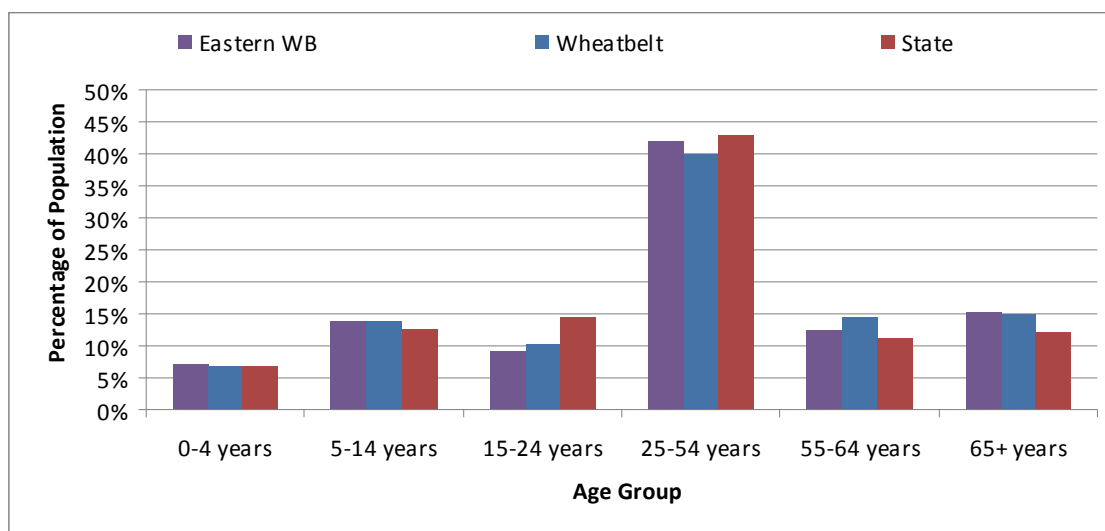
Source: ABS 2010 ERP and ABS Series B+ projections.

### 4.1.3 Age distribution

In the 2010 ERP (ABS, 2011) the Wheatbelt region had an older age distribution when compared to the State. In the Wheatbelt 15% of the population are aged 65 years and over, compared with 12% in the State.

The dependency ratio is a ratio of those typically not in the labour force to those in the labour force and is calculated by dividing the number of people under 15 or over 64 years of age by the number of people aged 15 to 64 years. In the 2010 ERP the dependency ratio of the Eastern Wheatbelt was greater than that of the State (0.57 compared with 0.46) and is anticipated to increase to 0.60 in 2021.

**Figure 6: Eastern Wheatbelt: Age distributions compared with the State (2010 ERP)**



Source: ABS 2010 ERP.

The proportion of residents who are aged 70 years and over is anticipated to increase from 10% in 2010 (ABS, 2011) to 12% in 2021 (Department of Health, 2010b). With this increase

there will be an additional 4,000 older adults aged 70 years and over between 2011 and 2021, as shown in the next table.

**Table 7: Eastern Wheatbelt: Older adult estimated resident population (2010) and population projections (2011 to 2021)**

Area	Age	2010 ERP	Population Projections			Growth (2011-2021)	Average annual growth
			2011	2016	2021		
Eastern Wheatbelt	70-84 yrs	1,170	1,077	1,182	1,398	30%	3%
	85 yrs+	235	226	282	329	46%	4%
	<i>Total</i>	<i>1,405</i>	<i>1,303</i>	<i>1,464</i>	<i>1,727</i>	<i>33%</i>	<i>3%</i>
<b>TOTAL WHEATBELT</b>	<b>70-84 yrs</b>	<b>6,397</b>	<b>6,477</b>	<b>7,798</b>	<b>9,806</b>	<b>51%</b>	<b>4%</b>
	<b>85 yrs+</b>	<b>1,303</b>	<b>1,275</b>	<b>1,622</b>	<b>1,930</b>	<b>51%</b>	<b>4%</b>
	<b>Total</b>	<b>7,700</b>	<b>7,752</b>	<b>9,420</b>	<b>11,736</b>	<b>51%</b>	<b>4%</b>

Source: ABS 2010 ERP and ABS Series B+ projections.

NOTE: In some instances the 2010 ERP is already greater than the 2011 projection.

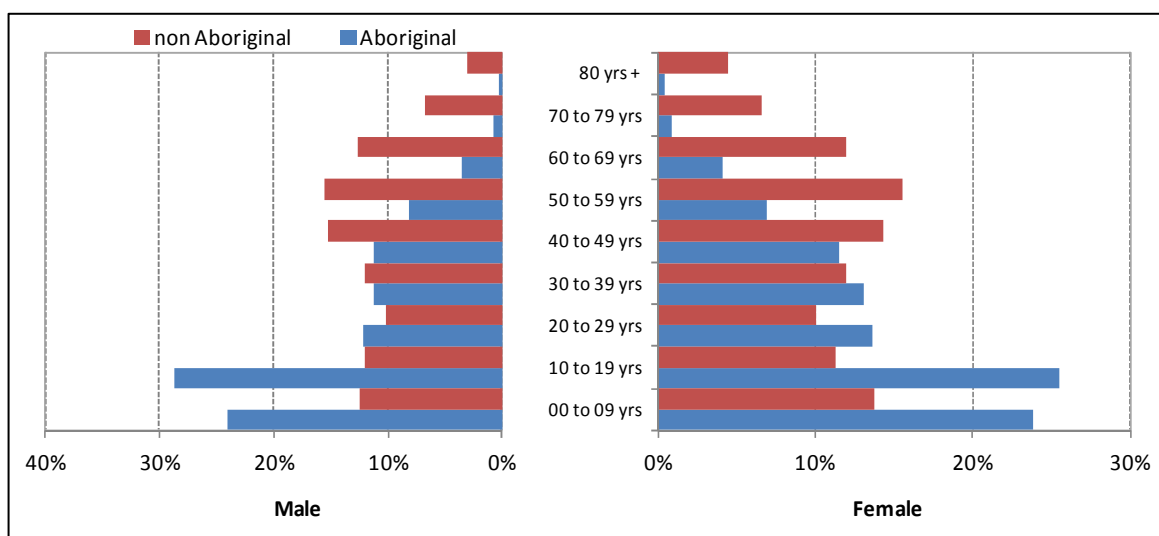
#### 4.1.4 Cultural diversity

##### Aboriginal people

In the 2006 Census 6% of Eastern Wheatbelt 4% of Wheatbelt residents (3,062) identified themselves as being of Aboriginal descent which was slightly higher than the State proportion of 3% (ABS, 2006a). The SLA with the greatest proportion identifying as Aboriginal was Quairading (12%) (ABS 2006a).

The Aboriginal Wheatbelt population has a slightly greater proportion of females than the non-Aboriginal population (50.6% compared with 47.7%) and a much younger age structure, as shown in the next figure.

**Figure 7: Wheatbelt region by Aboriginality, 2010**



Source: Estimated by the Epidemiology Branch, Public Health Division, Department of Health.





## *Ethnicity*

In the 2006 Census, 13% of the Wheatbelt residents reported being born overseas (ABS, 2006a). This proportion was less than half that of the state (27%). The Eastern Wheatbelt had the lowest proportion of Wheatbelt districts (10%). Half (50%) the Wheatbelt residents born overseas were born in the United Kingdom (ABS 2006a).

### **Demography - Implications for service planning:**

#### *Population growth*

Over the last five years (2005 to 2010) the population of the Eastern Wheatbelt has reduced slightly whilst there has been growth at a regional and State level. Future growth in the district is also expected to be low. Therefore there are no plans to dramatically increase the capacity of acute services in the future.

#### *Age distribution*

The Eastern Wheatbelt is an ageing population with a high dependency ratio. The ageing population will place added pressures on health services to manage health conditions commonly seen in older adults and indicates an increasing need for community, primary health (chronic conditions) and residential aged care services.

With the Eastern Wheatbelt's older population, SIHI's residential aged care and dementia investment program will be particularly important for providing the residential aged care and dementia services required to meet demand in the region in the future.

#### *Aboriginality and ethnicity*

The Aboriginal population of the Eastern Wheatbelt has a much younger age structure than the non-Aboriginal population. Nearly half the Aboriginal population is aged under 20 years of age compared with a quarter for the non-Aboriginal population. This differing age structure will need to be taken into account in the planning of primary health and acute services and programs for young Aboriginal families. Furthermore, the area of greatest need for Aboriginal health services appears to be the Quairading area where 12% of the population identify as being of Aboriginal descent.

Aboriginal Wheatbelt residents have a greater need for health care services compared with their non-Aboriginal counterparts. Future services and facility planning needs to ensure culturally secure services and facilities are available for Aboriginal residents to ensure care is provided in the right setting.

## 4.2 Determinants of Health

There are many factors that influence a person’s health, including genetics, lifestyle and environmental and social factors. These factors may have a positive or a negative impact (Joyce and Daly, 2010). The following section describes the current health status of the region and summarises the factors (or determinants of health) that will influence the health status of residents now and into the future.

- Level of disadvantage experienced in the community (according to the Socio-Economic Indexes for Areas).
- Level of remoteness experienced by the area (according to the Accessibility Remoteness Index of Australia).
- Lifestyle behaviours.

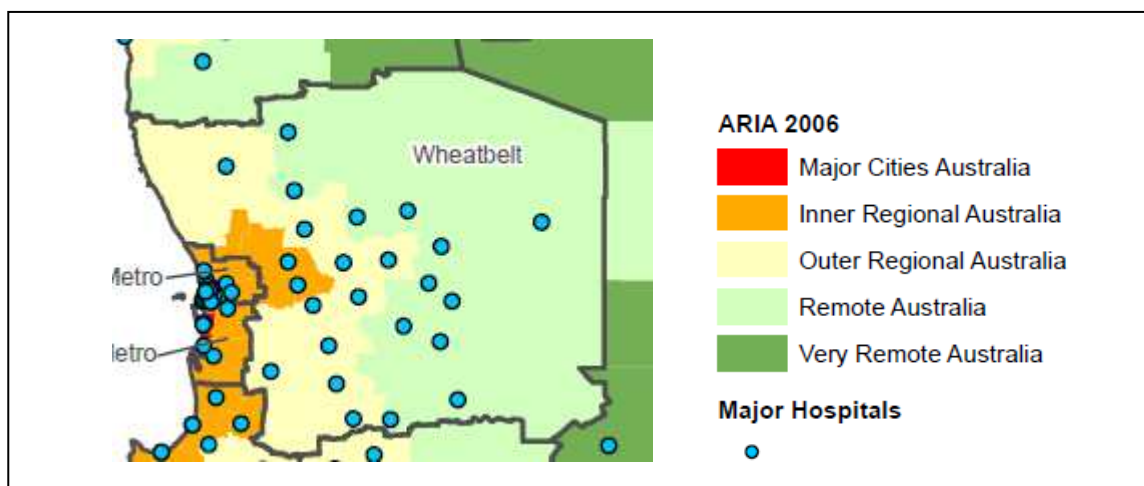
The factors highlighted influence the demand for health services and should be considered when designing the future models of care.

### 4.2.1 Remoteness

Based on the 2006 ARIA the Wheatbelt has areas classified as inner regional, outer regional and remote (Department of Health, Epidemiological Branch, 2010). Remoteness is measured by the Accessibility Remoteness Index of Australia (ARIA), where areas classified as remote have very restricted accessibility of goods, services and opportunities for social interaction (Department of Health and Ageing, 2001).

The distances and approximate vehicle travel time between Perth and major Wheatbelt towns are shown in the next table.

**Figure 8: ARIA classification of the Wheatbelt**



Source: Department of Health, Epidemiology Branch.

**Table 8: Distance and approximate travel time from Perth**

Town	Hours : minutes	Kilometres
Jurien Bay	2:30	270
Merredin	3:55	271
Moora	2:00	172
Narrogin	2:50	199
Northam	1:45	97

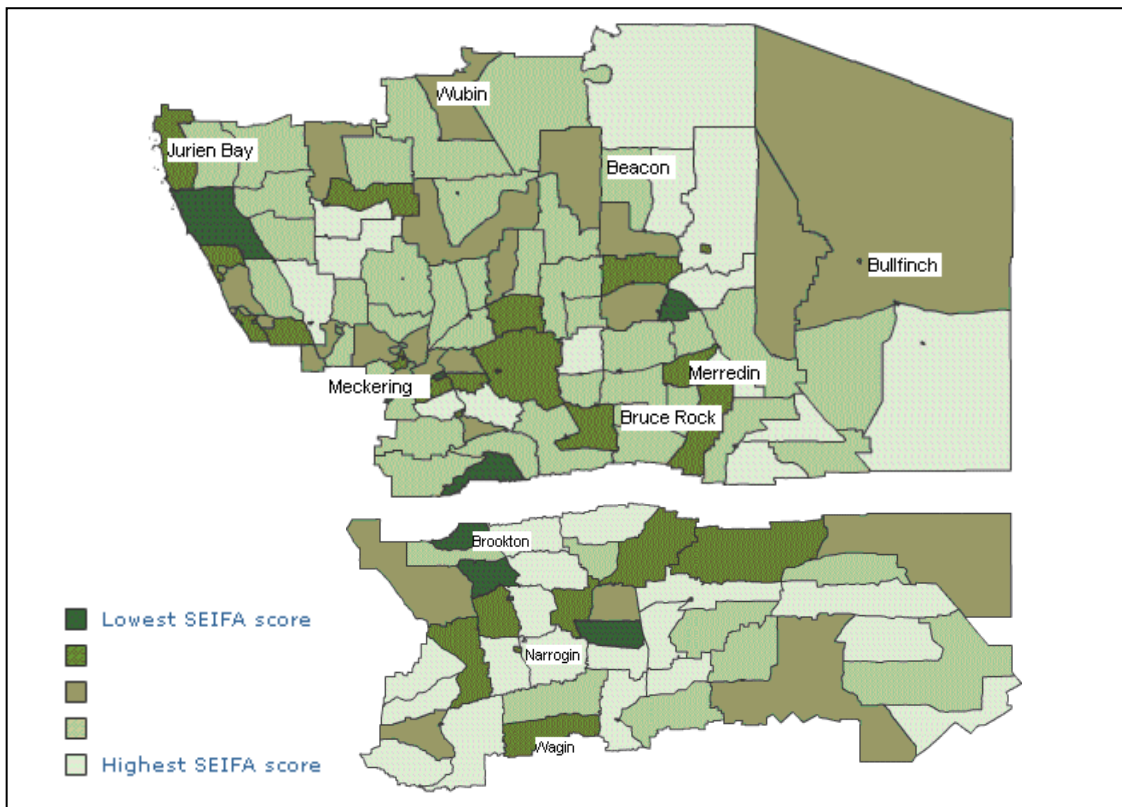
Source: Tourism Western Australia.

#### 4.2.2 Socio-economic disadvantage

Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Disadvantage scores are calculated by the ABS from responses to the Census. They look at 17 different measures which include measures like levels of education, income, rent, Aboriginality and more. The indexes do not take into account accumulated wealth, infrastructure of areas or differences in cost of living between areas. More disadvantaged areas have higher proportions of reported ill health or risk factors for ill health.

The mean SEIFA score for Australia is 1,000. Scores below 1,000 indicate areas of relative disadvantage, whereas scores above 1,000 shows areas of relative advantage. The ABS (2008) SEIFA reveals that the Eastern Wheatbelt SLA scores ranged from 991 in Corrigin to 1,023 in Mount Marshall. An indication of the distribution can be seen in the map below.

**Figure 9: Wheatbelt Health Region: SEIFA classification (Census 2006)**



Source: Australian Early Development Index website.

### 4.2.3 Local risks and climate

Merredin, due to its rural location; proximity to major highways; and role delineation as the major IDHS for the Eastern Wheatbelt, is at a higher risk of receiving high trauma cases from motor vehicle and farming accidents.

The Eastern Wheatbelt due to its proximity to the Perth has a similar climate to the metropolitan area and therefore health services should also be responsive to extreme conditions such as storms and flooding and natural disasters like fire.

### 4.2.4 Self-reported risk factors

Lifestyle behaviours are particularly important because of their relationship with chronic conditions that are considered to be preventable (Joyce and Daly, 2010). Prevention and management of these modifiable risk factors can therefore have a substantial effect on these preventable chronic conditions.

Table 9 shows the relationship between these modifiable risk factors and the National Health Priority Areas.

**Table 9: Chronic conditions and related modifiable risk factors**

Chronic disease/ condition	Behavioural risk factors				Biomedical risk factors		
	Poor diet	Physical inactivity	Tobacco smoking	Excess alcohol use	Excess weight	High blood pressure	High blood cholesterol
Coronary heart disease	✓	✓	✓	✓	✓	✓	✓
Cerebrovascular disease	✓	✓	✓	✓	✓	✓	✓
Lung cancer			✓				
Colorectal cancer	✓	✓		✓	✓		
Depression				✓	✓		
Diabetes	✓	✓			✓		
Asthma			✓		✓		
COPD <sup>(a)</sup>			✓				
Chronic kidney disease	✓		✓		✓	✓	
Oral diseases	✓		✓	✓			
Osteoarthritis		✓			✓		
Osteoporosis	✓	✓	✓	✓			

(a) Chronic obstructive pulmonary disease  
Source: AIHW 2002a.

Source: Reproduced from AIHW's *Chronic diseases and associated risk factors in Australia* (AIHW 2006).

Risk factor information is usually collected by population based surveys, such as the WA Health and Wellbeing Surveillance System. From this system, the Epidemiology Branch and Cooperative Research Centre for Spatial Information (CRC-SI) (2011) reported that in 2010, adults aged 16 years and over in the Wheatbelt region reported the following:

- More than four in five adults (83%) did not eat the recommended daily five serves of vegetables.
- Nearly half (47%) the adults did not eat the recommended daily two serves of fruit.
- Nearly half the adults (48%) who drank alcohol drank at risk for long-term harm.
- Half the adults (50%) did not do sufficient physical activity.
- One in five adults (18%) reported having high blood pressure.
- One in four adults (24%) reported having high cholesterol.

- One in three adults (34%) reported height and weight measurements that classified them as obese. This prevalence was significantly higher than the State (26%).

While many of the lifestyle behaviours of Wheatbelt residents may not be significantly higher than the state the prevalence is still important because these behaviours are modifiable risk factors for chronic conditions.

Lifestyle risk factor information is not available for Aboriginal Wheatbelt residents. At the national level Aboriginal people have been found to be twice as likely as non-Aboriginal people to be a current smoker (45.1% compared with 20.1%). Nearly a third (31.3%) of Aboriginal people have never smoked compared to half of non-Aboriginal people (51.7%). Furthermore, twice as many Aboriginal people report poor self-assessed health and report higher levels of psychological stress as non-Aboriginal people (ABS, 2006b).

## **Determinants of Health: Implications for service planning**

### *Socio-economic disadvantage*

The SEIFA Index of Relative Socio-Economic Disadvantage shows that there are areas within the Eastern Wheatbelt that are regarded as *disadvantage* (e.g. Corrigin). Ongoing service planning will need to identify these pockets of disadvantage along with the health needs of the community and ensure models of care provide service coverage to these *disadvantaged* areas.

### *Local risks and climate*

Merredin Hospital will need to maintain effective emergency management plans for receiving, stabilising and transferring patients to tertiary hospitals in the future. All facilities and services need to be responsive to climate risks such as storms, flooding and fires as per the *Department of Health's Emergency and Redundancy Planning Guidelines* (refer to Table 1).

### *Risk factors*

The modifiable risk factors and self-reported chronic conditions should continue to be monitored and used as a guide for developing and sustaining public health programs and interventions within the Wheatbelt region.

Wheatbelt residents were more likely to report height and weight measurements that classified them as obese compared with the State (one in three adults). They also reported high levels of blood pressure and insufficient physical activity. These behaviours are of particular interest as excess body weight, physical inactivity and high blood pressure are linked with several chronic conditions, including coronary heart disease and some cancers. The increasing trend of obesity in the state may suggest an increase in these chronic conditions in the future.

While specific information regarding the Wheatbelt Aboriginal population is not available, nationally Aboriginal people are more likely to smoke and to have poorer health than non-Aboriginal people. This demonstrates a need for culturally appropriate and targeted programs and services.

## 4.3 Health status

### 4.3.1 Self-reported chronic conditions

Chronic conditions refer to long-term conditions that last for six months or more (Joyce and Daly, 2010). Not all chronic conditions result in hospitalisations and so hospital data does not give the full picture. This type of information is usually collected by population based surveys, such as the WA Health and Wellbeing Surveillance System.

According to the WA Health and Wellbeing Surveillance System the most prevalent chronic conditions for adults in the Wheatbelt in 2010 were (Epidemiology Branch and CRC-SI, 2011):

- One in four adults (26%) had arthritis. This prevalence was significantly higher than the state (20%).
- One in seven adults (15%) had asthma. This prevalence was significantly higher than the state (9%).
- More than one in ten adults (12%) had a current mental health problem.

Nationally, Aboriginal people report a higher prevalence of most chronic conditions compared with non-Aboriginal people. For example, at a national level, after adjusting for age, Aboriginal people were 1.6 times more likely to report asthma, and three times more likely to report diabetes (ABS, 2006b). As the WA Health and Wellbeing Surveillance System may not be representative of the Aboriginal population, national levels of chronic disease among the Aboriginal population must be considered.

### 4.3.2 Self-reported service utilisation

The Epidemiology Branch and CRC-SI (2011) reported in 2010 there were no significant differences in the reported health service utilisation in the last year of Wheatbelt residents compared to the State. In 2010:

- More than eight in ten Wheatbelt adults (86%) reported having used a primary health care service.
- Half the Wheatbelt adults (51%) reported having used a dental health care service.
- One in three adults (29%) reported having used a hospital based health care service.
- One in twenty adults (5%) reported having used a mental health care service (e.g. a psychiatrist, psychologist or counsellor).

### 4.3.3 Mortality

#### *Mortality rate*

Mortality is an important indicator of the health of the population. Between 2003 and 2007 more than 400 Wheatbelt residents died each year. After removing the impact of the different age structures in the populations there was no significant difference between the mortality rate (the number of deaths per 1,000 people) of all Wheatbelt residents compared with the State (Epidemiology Branch and CRC-SI, 2009).

### Leading cause of mortality

The leading cause of mortality is shown in the next table. Between 2003 and 2007 the leading cause of death of Eastern Wheatbelt residents was diseases of the circulatory system, followed by neoplasms and injury and poisoning. The leading causes of death were similar in each of the Wheatbelt health districts and the State.

**Table 10: Eastern Wheatbelt residents: Leading cause of mortality (2003- 2007)**

Rank	Category	No.	% of total	State Rank
1	Circulatory diseases	136	35%	1
2	Neoplasms	115	30%	2
3	Injury and poisoning	27	7%	4
4	Respiratory diseases	26	7%	3
5	Endocrine and nutritional diseases	19	5%	6

Source: ABS Mortality Data.

From 1998 to 2007, Wheatbelt, Great Southern and South West Aboriginal residents had a significantly higher mortality rate for cardiovascular disease compared with the State Aboriginal population (Carlose, Crouchley, Dawson, Draper, Hocking, Newton and Somerford, 2009).

For the same time period, Aboriginal residents in the Wheatbelt, Great Southern and South West had a significantly higher mortality rate for diabetes, cardiovascular disease, respiratory disease, injury and poisoning, alcohol-related conditions and tobacco-related conditions compared with non-Aboriginal residents of the same area (Hocking, Draper, Somerford, Xiao, and Weeramanthri, 2010).

Aboriginal people have a significantly lower life expectancy compared with their non-Aboriginal counterparts, with the gap at the national level estimated to be 11.5 years for males and 9.7 years for females (ABS, 2006b).

### Avoidable mortality

Each year people die from diseases that have medical interventions and/or effective public health programs. These deaths are referred to as *avoidable mortality* and are classified into three categories related to the type of intervention according to Hocking, Draper, Somerford, Xiao, and Weeramanthri (2010).

Primary intervention includes deaths that could potentially have been avoided via effective public health measures. Secondary intervention includes deaths that could potentially have been avoided by early intervention through primary health care services or early detection through screening. Tertiary intervention includes deaths that could potentially have been avoided using medical or surgical techniques.

Between 1998 and 2007 around two-thirds of Wheatbelt resident deaths under the age of 75 were classified as avoidable, as shown in the next table. Cancers and chronic conditions accounted for the majority of avoidable deaths. Ischaemic heart disease was responsible for one in four avoidable deaths (24%), followed by lung cancer (13%) and suicide and self-inflicted injuries (7%).

The use of primary interventions could potentially have avoided more than half (54%) the avoidable deaths, while 24% could have potentially been avoided through the use of

secondary interventions, such as primary health care services or early detection through screening. One-fifth of the avoidable deaths could potentially have been avoided through the use of tertiary interventions, such as medical or surgical techniques.

**Table 11: Wheatbelt Health Region residents: Leading causes of avoidable mortality, aged 0-74 years (1998-2007)**

Rank	Condition	No.	% of total
1	Ischaemic heart disease	296	24%
2	Lung cancer	159	13%
3	Suicide and self-inflicted injuries	88	7%
4	Colorectal cancer	83	7%
5	Cerebrovascular diseases	64	5%

Source: ABS Mortality Data.

Between 1998 and 2007 Aboriginal Wheatbelt residents had a greater proportion of deaths classified as avoidable compared with non-Aboriginal Wheatbelt residents (75% compared with 63%). As shown in the next table ischaemic heart disease and diabetes accounted for a greater proportion of Aboriginal than non-Aboriginal deaths.

**Table 12: Wheatbelt Health Region residents: Leading causes of avoidable mortality by Aboriginality, aged 0-74 years (1998-2007)**

Condition	No.	% of total
<b>Aboriginal</b>		
Ischaemic heart disease	32	31%
Diabetes	11	11%
Cerebrovascular diseases	10	10%
Alcohol related disease	9	9%
Suicide and self-inflicted injuries	7	7%
<b>Non-Aboriginal</b>		
Ischaemic heart disease	254	24%
Lung cancer	146	14%
Suicide and self-inflicted injuries	80	7%
Colorectal cancer	78	7%
Cerebrovascular diseases	53	5%

Source: ABS Mortality Data.



### 4.3.4 Hospitalisations

#### *Hospitalisation rate*

Hospitalisations are an indicator of relatively severe conditions in the community and assist in targeting primary care resources to prevent hospitalisations. Wheatbelt residents may be admitted to a hospital in the region, or may choose to attend a hospital in the metropolitan area, as a public or private patient.

Between 2005 and 2009, Wheatbelt residents had a significantly lower hospitalisation rate than that of the State (Epidemiology Branch and CRC-SI, 2009). There were notable differences within the Wheatbelt health districts. Eastern Wheatbelt residents had a significantly higher hospitalisation rate compared to all Wheatbelt residents and WA residents (Epidemiology Branch and CRC-SI, 2009).

Aboriginal Wheatbelt residents had a significantly lower hospitalisation rate when compared with all Aboriginal WA residents. However, their hospitalisation rate was twice that of the non-Aboriginal Wheatbelt residents (Epidemiology Branch and CRC-SI, 2009).

#### *Leading cause of hospitalisation*

The leading categories of hospitalisation are shown in Table 13. Between 2005 and 2009 the leading category of hospitalisation of Eastern Wheatbelt residents was for factors influencing health status (which includes renal dialysis and chemotherapy), followed by diseases of the digestive system.

The leading causes of hospitalisation of Eastern Wheatbelt residents were different to those of the State in that neoplasms were not in the leading five categories as shown below.

**Table 13: Eastern Wheatbelt residents: Leading categories of hospitalisations (2005 to 2009)**

Rank	Category	No.	% of total	State Rank
1	Factors influencing health status	4,238	17%	1
2	Digestive diseases	2,581	10%	2
3	Injury and poisoning	2,180	9%	5
4	Ill-defined conditions	2,163	9%	7
5	Musculoskeletal diseases	1,787	7%	4

*Source: WA Hospital Morbidity Data System.*

Between 2005 and 2009 the leading causes of hospitalisation differed markedly between Aboriginal and non-Aboriginal Wheatbelt residents, as shown in the next table.

*Injury and poisoning* and *mental and behavioural disorders* accounted for a greater proportion of hospitalisations of Aboriginal Wheatbelt residents compared to non-Aboriginal residents.

*Injury and poisoning* is one of the leading causes of hospitalisation for both Aboriginal and non-Aboriginal residents and is also one of the leading causes of mortality.

**Table 14: Wheatbelt Health Region residents: Leading category of hospitalisations by Aboriginality (2005 to 2009)**

Wheatbelt Rank	Category	No.	% of total
<b>Aboriginal</b>			
1	Factors influencing health status	1,739	23%
2	Injury and poisoning	808	10%
3	Respiratory diseases	807	10%
4	Pregnancy and childbirth	764	10%
5	Mental disorders	639	8%
<b>Non-Aboriginal</b>			
1	Factors influencing health status	20,567	24%
2	Digestive diseases	13,832	14%
3	Musculoskeletal diseases	10,039	7%
4	Injury and poisoning	10,013	7%
5	Neoplasms	9,352	5%

Source: WA Hospital Morbidity Data System.

### Potentially preventable hospitalisations

Many hospitalisations result from conditions where hospitalisations could potentially be prevented by the use of preventive care and early disease management (Epidemiology Branch and CRC-SI, 2009). These hospitalisations are known as *potentially preventable hospitalisations* and are grouped into three major categories acute, chronic and vaccine preventable. Public health measures have the greatest influence on vaccine preventable and chronic conditions.

Between 2005 and 2009 potentially preventable hospitalisations accounted for 10% of hospitalisations of Wheatbelt residents (Epidemiology Branch and CRC-SI, 2009), a similar proportion to that of the State. Of these, vaccine preventable conditions accounted for 3%, acute preventable accounted for 42% and chronic conditions accounted for 55% (Epidemiology Branch and CRC-SI, 2009). Table 15 shows that *diabetes and its complications* was the leading potentially preventable hospitalisation, accounting for more than one in four hospitalisations.

**Table 15: Wheatbelt Health Region residents: Leading potentially preventable hospitalisations (2005 to 2009)**

Category	No.	% of total
Diabetes complications	3,588	28%
Dental conditions	1,321	11%
Chronic obstructive disorders	1,095	9%
Ear Nose and Throat (ENT) infections	1,054	8%
Congestive cardiac failure	938	7%

Source: WA Hospital Morbidity Data System.

Between 2005 and 2009, potentially preventable hospitalisations accounted for a greater proportion of hospitalisations of Aboriginal Wheatbelt residents compared with non-Aboriginal Wheatbelt residents (21% compared with 9%) (Epidemiology Branch and CRC-SI, 2009).

Chronic conditions accounted for 59% of the potentially preventable hospitalisations for Aboriginal people. While *diabetes and its complications* was the leading potentially preventable hospitalisation for Aboriginal and non-Aboriginal Wheatbelt residents, as shown in Table 16.

**Table 16: Wheatbelt Health Region residents: Leading potentially preventable hospitalisations by Aboriginality, (2005 to 2009)**

Category	No.	% of total
<b>Aboriginal</b>		
Diabetes complications	643	41%
Convulsions and epilepsy	228	14%
Asthma	143	9%
ENT infections	133	8%
Dental conditions	86	6%
Pyelonephritis	86	6%
<b>Non-Aboriginal</b>		
Diabetes complications	2,945	27%
Dental conditions	1,235	11%
Chronic obstructive disorders	1,024	9%
ENT infections	921	8%
Congestive cardiac failure	880	8%

Source: WA Hospital Morbidity Data System.

## Health status – implications for service planning

### *Self-reported chronic conditions*

Asthma and arthritis rates were significantly higher than the State, which would indicate a need for local services to adequately cover these health care needs via visiting and/or permanent services in the Eastern Wheatbelt.

### *Self-reported health service utilisation*

Nine in 10 residents reported they accessed a primary health care service in the last year. This presents an ideal opportunity to screen and assess for modifiable risk factors that lead to illness and chronic conditions (e.g. brief intervention and early intervention).

### *Mortality*

More than half the deaths of Wheatbelt residents under the age of 75 could potentially be avoided through the use of primary health care services. Circulatory diseases were the leading cause of mortality for Wheatbelt residents, with Ischaemic heart disease the leading cause of avoidable mortality. Contributing to this prevalence are modifiable risk factors. In particular, Wheatbelt residents reported being less physically active and had a significantly higher prevalence of obesity when compared to the State population. These results suggest the need to boost primary and secondary preventative services such as health promotion initiatives for physical activity and diabetes education, management and control programs.

*Injury and poisoning* was also a leading cause of mortality for Wheatbelt residents with *suicide and self-inflicted injuries* one of the leading causes of avoidable mortality for both Aboriginal and non-Aboriginal residents. Again, this suggests the need for primary health care services targeted at improving the health and well-being of the community and individuals as well as identifying people at risk of self-harm.

The funding available through SIHI should look to address the current gaps in service delivery for preventing these causes of mortality and avoidable mortality across the continuum of care.

### *Hospitalisations*

Eastern Wheatbelt residents had a significantly higher hospitalisation rate compared to all Wheatbelt residents and the State. This was largely due to *factors influencing health status* (which includes renal dialysis and chemotherapy). There will be greater capacity in the region to meet this demand with two renal chairs planned for Merredin and greater capacity for chemotherapy at Narrogin and Northam. This will be particularly important for Eastern Wheatbelt residents to receive care closer to home.

One in ten hospitalisations of all Wheatbelt residents and one in five hospitalisations of Aboriginal Wheatbelt residents could potentially be avoided through the use of preventative care and early disease management. The SIHI will move the focus from providing inpatient hospital services to the delivery of primary care, including the prevention and detection of chronic conditions, such as diabetes related conditions and dental conditions, which accounted for the greatest proportion of potentially preventable hospitalisations.



## 5 HEALTH PARTNERS

The following services support WACHS to deliver services to the Eastern Wheatbelt to provide a continuum of care from primary health care to acute and emergency services in the regional and metropolitan area.

### Summary: Eastern Wheatbelt Health District Health Partners

- Private Providers**
- Independent GPs
  - Private allied health providers
  - Private dentists
  - Community Pharmacy
  - Visiting Specialists

- State Government**
- Department of Child Protection
  - Department for Communities
  - Department of Education
  - Disability Services Commission
  - District Health Advisory Council
  - Fire and Emergency Services (FESA)
  - Mental Health Commission
  - PathWest
  - Patient Assisted Travel Scheme (PATS)
  - Regional Development and Lands
  - Rural Link
  - Wheatbelt Development Commission
  - WA Dental Health Services
  - WA Police
  - Wheatbelt Memorandum of Understanding Group
  - WoundsWest

- Non-government and other agencies**
- GP Network
  - Holyoake
  - Local government agencies
  - Relationships Australia
  - Royal Flying Doctors Service (RFDS)
  - Rural Clinical School
  - Silver Chain
  - St John Ambulance (SJA)

- Commonwealth Government**
- Centrelink
  - Home and Community Care (HACC)
  - Medical Specialist Outreach Assistance Program (MSOAP)
  - Wheatbelt Aboriginal Health Service
  - Residential Aged Care



## 5.1 State Government

### *Department of Child Protection*

Department of Child Protection focuses on working with children and families assessed as 'at risk'. WACHS has working relationships Department of Child Protection to assess and monitor the health needs of 'at risk' children in the community.

### *Department for Communities*

The Department for Communities informs the development of social policy, advocating on behalf of Western Australian children, parents and their families, young people, seniors, women, carers, volunteers and non-government organisations. DFC is also responsible for the delivery of programs and services to support and strengthen WA's diverse communities. This includes administering WA's child care regulatory framework and, through the Child Care Licensing and Standards Unit, managing the licensing and compliance of some 1,500 child care services throughout WA.

### *Disability Services Commission*

Disability Services Commission work with people with disabilities and their families to access support in the community, access funding, and work across the community in collaboration with other agencies in the community.

### *District Health Advisory Council (DHAC)*

DHACs have been established by the State Government to give country people a say in how their health services are delivered and provide the opportunity for continuously improving consumer and community participation at the local, district and state levels. The Council consists of a group of people - health consumers, carers, community members and service providers who actively seek to improve service planning, access, safety and quality.

The composition of Advisory Councils intends to reflect a cross-section of community health interests. Health service providers and agency representatives should comprise no more than 30 per cent of the total number of members.

### *WA Mental Health Commission*

The WA Mental Health Commission was established in March 2010 with responsibility for policy, planning and the purchasing of mental health services in Western Australia. The Commission's functions include:

- development and provision of mental health policy and advice to the government;
- leading the implementation of the Mental Health Strategic Policy;
- articulating key outcomes and determining the range of mental health services required for defined areas and populations across the state;
- specifying activity levels, standards of care and determining resourcing required;
- identifying appropriate service providers and benchmarks and establishing associated contracting arrangements with both government and non-government sectors;
- providing grants, transfers and service contract arrangements;

- ongoing performance monitoring and evaluation of key mental health programs in WA;
- ensuring effective accountability and governance systems are in place; and
- promoting social inclusion, public awareness and understanding of matters relating to the wellbeing of people with mental illness to address stigma and discrimination.

### ***PathWest***

PathWest provide collection and testing services as per *Section 6.6.3*.

### ***Patient's Assisted Travel Scheme (PATS)***

The PATS provides an important role in linking specialist treatment to country Western Australians. The PATS provides assistance to people in the country who are required to travel more than 100 km (one way) to obtain the nearest available medical specialist treatment not available locally, via telehealth or from a visiting service.

### ***Regional Development and Lands, Royalties for Regions***

Regional Development and Lands is responsible for initiatives such as SIHI and SuperTowns and enable opportunities to develop partnerships with state, local, Commonwealth and non-government agencies and private providers in the Wheatbelt region.

### ***RuralLink***

RuralLink provides a specialist after-hours mental health telephone service for the rural communities and health services of WA.

### ***WA Police and Fire and Emergency Services (FESA)***

WA Police and FESA work together with WACHS and St John Ambulance to coordinate emergency management responses for the Eastern Wheatbelt. This is largely coordinated through the Local Emergency Management Committee.

WA Police also provide patient escorts as required by the Mental Health Act for acute mental health patients requiring admission to metropolitan health facilities.

### ***WA Dental Health Services***

Providing visiting dental health services to school aged children in the Eastern Wheatbelt.

### ***Wheatbelt Health Memorandum of Understanding Group***

The membership and purpose of this group is detailed in *Section 3.6.1*.



## *WoundsWest*

WoundsWest is an innovative project that aims to improve wound prevention and management throughout Western Australia. The project implemented in partnership between WA Health, Silver Chain and Curtin University.

## **5.2 Local Government**

Local Governments provide a number of health and community services that support the health and wellbeing of their communities. These include providing accommodation, vehicle and financial subsidies to attract GPs, environmental health, immunisation services, accommodation for child health clinics, aged care and accommodation, community care, recreational and sporting venues and welfare services.

The Eastern Wheatbelt is comprised of the following local governments:

- Shire of Bruce Rock
- Shire of Corrigin
- Shire of Kellerberrin
- Shire of Merredin
- Shire of Mt Marshall
- Shire of Mukinbudin
- Shire of Narembeen
- Shire of Nungarin
- Shire of Quairading
- Shire of Trayning
- Shire of Westonia
- Shire of Yilgarn

In rural communities, local governments often play a key role in attracting and supporting GPs and in undertaking health service planning for their community.

The shires of Merredin, Bruce Rock, Yilgarn, Westonia, Wyalkatchem, Kellerberrin, Mukinbudin, Trayning, Nungarin, Koorda and Mount Marshall have agreed to regionally unite to address the critical issue of Aged Care within their sub region, and deliver an Aged Care Regional Solution for the Central East Wheatbelt.

Initiated during the Royalties for Regions Country Local Government Regional Planning during late 2011, the Aged Care Regional Solution project will explore possible models of low and high aged care in terms of well-aged accommodation, services and governance.

The 11 local governments have partnered with the Wheatbelt Development Commission, who will manage the project, and RDA Wheatbelt, who will provide critical links to the Federal government.



## 5.3 Commonwealth Government

### *Wheatbelt GP Network*

The *Wheatbelt GP Network (WGPN)* (formerly the Central Wheatbelt Division of General Practice) is a network of GPs who work within a geographical area known as the Central Wheatbelt that encompasses the towns of Northam, Toodyay, York, Beverley, Quairading, Corrigin, Bruce Rock, Narembeen, Cunderdin, Wyalkatchem, Kellerberrin, Kununoppin, Merredin, Goomalling, Dowerin, Wongan Hills, Dalwallinu, Bindoon, Gingin, Moora, Lancelin and Cervantes.

The Network aims to improve the health outcomes of the Central Wheatbelt area population through facilitating links between GPs and strengthening primary health care services. WGPN also offers the following allied health services:

- *Wheatbelt Support Services* comprises a team of Counsellors and Psychologists, who together provide counselling service to the Wheatbelt.
- *Dietician* provides individual and group consultations.
- *Diabetes Educator* provides individual and group consultations.

Wheatbelt GP Network has also moved into the business of GP practice service delivery. They are also funded via COAG to increase access for Aboriginal people to GP services provided in Northam, Merredin and Narrogin.

WGPN is a not-for-profit organisation that is largely funded by the Commonwealth Department of Health and Ageing (DOHA) Divisions of General Practice Program (DGPP). With the introduction of Medicare Locals, core funding to DGPP will progressively transfer to the Medicare Locals program and cease on the 30<sup>th</sup> June 2012.

### *Home and Community Care (HACC)*

The HACC Program is a joint Commonwealth, State and Territory initiative which funds basic maintenance and support services to help frail older people and younger people with disabilities to continue living in their community.

### *Medical Specialist Outreach Assistance Program (MSOAP)*

The MSOAP aims to improve access to medical specialists in rural and remote communities and reduce some of the financial disincentives incurred by medical specialists in providing outreach services. Funds are available for the costs of travel, meals and accommodation, facility fees, administrative support at the outreach location, lease and transport of equipment, telephone support and up-skilling sessions for resident health professionals.

### *South West WA Medicare Local (SWWAML)*

The *South West WA Medicare Local (SWWAML)* is one of the first group of 19 Medicare Locals that commenced across Australia on the 1 July 2011. SWWAML was formed through an alliance of the following three GP Networks: GP Down South; Greater Bunbury Division of General Practice; and Great Southern GP Network. SWWAML covers the Wheatbelt, South West and Great Southern, with offices in Albany, Northam and Busselton.

For further information visit: [www.sw-medicarelocal.com.au/Home.aspx](http://www.sw-medicarelocal.com.au/Home.aspx)



## 5.4 Not-for-Profit Agencies

### *Holyoake*

Holyoake Community Drug Service Team (CDST) provides services for individuals and their families with alcohol and other drug misuse issues. It also provides education and prevention services to communities and professionals within the Wheatbelt area. Its main role is to empower people and communities impacted by addictions to create positive and sustainable outcomes.

Holyoake operates under a Memorandum of Understanding with the WACHS Mental Health section to provide a coordinated service to clients with *cross-over* needs. They operate the *No Wrong Door* model that works for people with a drug and/or alcohol issue and mental health problems.

Holyoake offers individual, couple, family and group counselling. The *Indigenous Services Program* supports Aboriginal families impacted by alcohol or drug use

The CDST is based in both Northam and Narrogin, and provides outreach services to Merredin, Wyalkatchem, Gin Gin, Goomalling and all points west to Beverley.

### *Avon Youth, Community and Family Services*

Avon Youth is working with at risk young people (13yo to 24yo) and their families. They provide supported transitional accommodation: a male residence and a female residence through the Supported Accommodation Assistance Program, and accept self-referral or referral from agencies. They also provide other support and referrals to agencies dependent on individual's needs.

### *Relationships Australia*

Provide mediation and counselling services to individuals, couples, children and families.

### *Royal Flying Doctor Service (RFDS)*

The RFDS provides a pivotal role throughout country Western Australia providing medical and nursing services to transfer patients to larger regional or metropolitan hospitals. There are no RFDS bases located in the Wheatbelt, but they do transfer patients from the Wheatbelt to the metropolitan area. This is due to the relative closeness of the Wheatbelt to metropolitan Perth.

### *Silver Chain*

Silver Chain is one of the largest providers of community and health services to the Western Australian community. Silver Chain provide a diverse range of services, including home care, palliative care, emergency care, family health care and other care services to residents living in metropolitan and rural Western Australia. Within the Eastern Wheatbelt, Silver Chain supports the WoundsWest Program.

### *St John Ambulance*

Merredin has 14 ambulance volunteers that provide first point of contact emergency care and coordinate patient transfers in partnership with WACHS to district, regional and metropolitan health services.

## 5.5 Private providers

As of late 2011, there were three GPs in Merredin and a GP in all small towns in the Eastern Wheatbelt. One private physiotherapist service is based within the GP surgery in Merredin and services Merredin, Kellerberrin, Southern Cross and Bruce Rock.

One GP provides obstetric services and one provides anaesthetic services.

There are a number of private dentists, one private pharmacist however there are no private dieticians. There is a visiting non-clinical psychologist from GP division and one employed recently, based in Nungarin.



## 6 CURRENT & FUTURE SERVICE DELIVERY

The following section details the current service models and future service reform strategies for the Eastern Wheatbelt based on the issues and priorities highlighted in Section 3.0, the demography and health status information in Section **Error! Reference source not found..0** and the activity seen by the hospitals and health services (Section 6.0). The information in this chapter will provide guidance for services in the district as they work towards consolidating improved models of care under the SIHI (refer to Section 3.7).

Section 6.3 also provides an overview of current supply and demand activity for the district including patient flows within the region and outflows to other regional and metropolitan healthcare facilities.

The remaining sub-sections detail each service/department's current service profile, historical activity, activity projections (where data is available and reliable) and proposed strategies for:

- Meeting the health needs of the population and projected demand for services.
- Implementing Commonwealth and State Government policy. For example, the required role delineations as described in the *WA Health Clinical Services Framework 2010 – 2010* (Department of Health, 2010a).
- Addressing the identified service issues and meeting the expectations of staff and stakeholders.
- Achieving the intent of the SIHI to ensure high quality, sustainable safe services for the Southern Inland area.

Overall the region reports that they are meeting or working towards meeting the role delineations stipulated in the *Clinical Services Framework*. Implementing the recommended strategies will be dependent on appropriate resourcing, endorsement, local collaborations and partnerships with other providers. The degree to which the staff, GPs and specialists can be attracted and retained to deliver the services will also determine the level of change achieved.

## 6.1 Ambulatory health care services profile

The current and proposed ambulatory care services for Eastern Wheatbelt residents are outlined below. Please note, quantitative activity data is often not presented as the actual data recorded underestimates activity and/or is unsuitable for planning purposes.

### 6.1.1 Primary Health Care Services

The preferred future model of primary health care in the Wheatbelt will support the *National Primary Health Reform Program*, align with the intentions of SIHI and link with Medicare Locals and Local Health Networks.

Integrated primary health care services offer the opportunity for improved economies of scale and efficiencies, integrated systems and promotion of a collaborative approach to patient and consumer health care and service improvement.

This service planning exercise for the Eastern Wheatbelt is an opportunity to reconsider the organisation of primary health care service in line with developments in acute, aged and emergency care. Integrated programs addressing issues such as chronic disease care coordination, community rehabilitation, maternal and child health, youth health, oral health and suicide prevention, will enhance the services delivered.

The current service model, key issues and challenges and proposed service model are described, by each primary health care service below.

#### **WACHS Wheatbelt Population Health Service**

WACHS – Wheatbelt Population Health Service is an essential element of the continuum of care for the Eastern Wheatbelt. The Wheatbelt Population Health Service cover the age and care continuum with a focus on health promotion and prevention plus interventions directed at preventing or minimising the progression of disease where possible.

The WACHS Wheatbelt Population Health Service consists of six units:

- Wheatbelt Public Health Unit – based in Northam with a Wheatbelt wide role.
- Wheatbelt Aboriginal Health Service (WAHS) – based in Northam with teams in the Eastern, Western and Southern Wheatbelt providing a whole of Wheatbelt service. Further information regarding WAHS is detailed below.
- Avon and Central Wheatbelt Primary Health – based in Northam providing Aboriginal health, allied health, community health nursing, and health promotion services, generally delivered from Northam with outreach services are provided to all towns in the district based on need.
- Eastern Wheatbelt Primary Health – based in Merredin. The Eastern Primary Health team provides Aboriginal, allied and community health services as well as health promotion services from Merredin Hospital. The service is provided to all towns and schools in the district based on need. Some staff are based at Mukinbudin Nursing Post and Koorda Health Service and there are also Community Health Nurses (Child and School Health) based at several sites including Bruce Rock, Koorda and Southern Cross.

Eastern Wheatbelt Primary Health also provides services to Koorda and Wyalkatchem.

In 2009/10 there were 7,183 occasions of service for community health services at Merredin (AOD pivot, 2011). Around 4% of the community health occasions of service were for Aboriginal residents, which is similar to the overall proportion of Aboriginal people living in the Eastern Wheatbelt (5%).

- Western Wheatbelt Primary Health – based in Moora and Jurien Bay providing Aboriginal health, allied health, community health nursing, and health promotion services, generally delivered from Moora and Jurien Bay with outreach services are provided to all towns in the district based on need.
- Southern Wheatbelt Primary Health – based in Narrogin.

These units provide a response to the Wheatbelt’s public and primary health issues in a planned manner or as they arise. This may involve disease and injury control, information management to communities and changes to living environments and community facilities.

There are 12 primary and preventative key service areas that are delivered by WACHS Population Health including:

- Alcohol and Other Drugs.
- Chronic Disease & Lifestyle (cancer, asthma, diabetes, cardio-vascular, arthritis, injury, respiratory).
- Disability.
- Disease Control (prevention, disease outbreak, immunization, trachoma, ear health, sexual health).
- Emergency and Outpatient.
- Environmental Health.
- Falls Prevention.
- Maternal and Child Health.
- Mental Health Promotion.
- Nutrition and Physical Activity.
- School and Youth.
- Women’s and Men’s Health.

Each key service is described briefly below:

*Alcohol and Other Drug Services*

Alcohol and other drugs services include education, training and support of national, state and local initiatives. These include:

- Support Alcohol and Drug advocacy, training and improved liaison between key stakeholders.
- Support for local drug action groups and Alcohol Accords.
- Coordination of local Needle and Syringe Program.
- Coordination and facilitation of training for staff and others.

*Chronic Disease and Lifestyle*

The Chronic Disease and Lifestyle areas include cancer support, asthma, diabetes, cardiovascular disease, arthritis, injury, respiratory.

Services across all areas includes education, advocacy and support for individuals, groups and families; in-service training for staff; and coordination of health promotion activities. Where applicable, clinical support is provided to outpatient specialist clinics such as diabetes.

### Disability

The Allied Health team predominantly delivers disability services including occupational therapy, physiotherapy, speech pathology and podiatry. Services provided include:

- Provision of assistive equipment for clients under the Community Aids and Equipment Program (CAEP), including assessment, prescription, ordering, fitting and monitoring (includes equipment and home modifications).
- Provision of therapy programs for therapy assistants, caregivers and families to implement.
- Education of child care workers regarding individual clients and their particular therapy and or equipment requirements.

### Communicable Disease Control

The key areas under Communicable Disease Control include prevention, disease outbreak, immunisation and sexual health.

There is a comprehensive multidisciplinary team with a public health physician that have the capacity to:

- Investigate cases/outbreaks.
- Co-ordinate and carry out contact tracing.
- Coordinate regional vaccination programs.
- Undertake promotion and prevention and harm minimisation activities for common communicable diseases including sexually transmitted infections and blood borne viruses.
- Undertake screening, treatment and follow up for communicable diseases of significance (e.g. sexually transmitted infections, trachoma and middle ear disease).
- Analyse routinely collected disease data to monitor trends and develop appropriate responses.
- Develop region wide plans for emergencies such as pandemic flu and coordinate the response should the pandemic occur.
- Provide training for health workers.

### Emergency and Outpatient

Some community health centres provide emergency nursing service and outpatient clinics.

### Environmental Health

Environmental Health includes health protection including food, air, water, radiation, pharmaceutical, pesticides, and mosquito borne diseases. Local government and/or Department of Environmental Protection deal with most issues and traditionally get WA Department of Health to assist from Perth.

### Falls Prevention

Programs such as community exercise programs are coordinated across the region. Health promotion and education is also provided for falls prevention across the district, in line with Stay on Your Feet WA Inc. A falls assessment and management clinic is provided at Northam.

Maternal and Child Health

WACHS Population Health provides maternal services including antenatal and post-natal education and exercise classes. In the area of child health, services include the coordination of child health schedules as established by WA Department of Health and provide home visiting and clinic appointment, and various parenting programs.

Mental Health promotion

Programs coordinated include *Act, Belong, Commit, Sustainable Farm Families* and other events for initiatives such as Mental Health Week.

Nutrition and Physical Activity

Nutrition programs support national, state and regional campaigns. Programs are developed for various target groups including infant, child, schools and Aboriginal specific. Resources, education and training is provided to individuals, groups, internal staff and external agencies. Clinical advice is provided to patients with chronic diseases to assist in the management of their health.

Promotion of physical activity includes the coordination of national, state and regional campaigns. These include programs such as 10,000 Steps and *Pit to Port Challenge* that both promote physical activity. Exercise programs for teenagers, expectant mothers, seniors and those with chronic disease conditions are offered.

School and Youth

Community Generalist Nurses provide support and education to students and teachers at school campuses. Support is provided to implement the Health Promotion Schools Initiative and the development of School Health Plans for Children with special needs.

Women’s and Men’s Health

In addition to the variety of programs and services already described that can be accessed by both women and men, there are programs specifically for each of these groups.

*Well Women’s Clinics* to be delivered at all community health sites across the region have been developed. These clinics provide a wide range of activities and information on various health topics as well as providing the opportunity for community health nurses to conduct any screening or early interventions that may be required.

The facilitation and coordination of community based Men’s health programs is also conducted. These include programs such as *Health Men’s Business*, men’s cooking classes and health assessment program *PIT Stop*.

An overview of the types of population health programs currently in place within the Wheatbelt region are shown below:

**Table 17: Wheatbelt Population Health Programs**

Wheatbelt Population Health Programs	
<ul style="list-style-type: none"> <li>Aboriginal Health</li> </ul>	<ul style="list-style-type: none"> <li>Health Planning</li> </ul>
<ul style="list-style-type: none"> <li>Alcohol and Drugs</li> </ul>	<ul style="list-style-type: none"> <li>Health Promotion</li> </ul>
<ul style="list-style-type: none"> <li>Arthritis Management and Education</li> </ul>	<ul style="list-style-type: none"> <li>Immunisation</li> </ul>
<ul style="list-style-type: none"> <li>Asthma Management and Education</li> </ul>	<ul style="list-style-type: none"> <li>Injury Prevention</li> </ul>



Wheatbelt Population Health Programs	
• Child Development	• Men's Health
• Chronic Disease	• Mental Health
• Continence Management and Education	• Nutrition
• Diabetes Management and Education	• Parenting Program
• Disease Control	• Public Health
• Environmental Health	• Research, Research Support
• Epidemiology	• Sexual Health
• Health Education	• Stress Management
• Health Enhancement	• Suicide Prevention/ Intervention

Source: [http://www.health.wa.gov.au/services/detail.cfm?Unit\\_ID=284](http://www.health.wa.gov.au/services/detail.cfm?Unit_ID=284)

There are several other not-for-profit and private providers in the district and region who provide primary health care services – refer chapter five health partners.

It is the intention that more service and funding partnership approaches will develop over time to address the health needs of the population identified in this plan.

### Wheatbelt Aboriginal Health Services

The Wheatbelt Aboriginal Health Service reports to Population Health Services and addresses the health and wellbeing needs of the Aboriginal community. A variety of Aboriginal health specific programs are delivered from the Wheatbelt Aboriginal Health Service building in Northam as well as other health service sites across the region.

There is an interagency group that meet monthly to address Aboriginal health issues and monitor health and wellbeing initiatives coordinated throughout the Eastern Wheatbelt, including initiatives to address the increasing rates of self-harming and suicides in the Aboriginal community in the Merredin area.

There are significant and persistent disparities between the health status of Aboriginal and non-Aboriginal people. A review of Aboriginal health and community mental health services for the Aboriginal population is/has occurred due to increases in self-harming and suicides in the Aboriginal community in the Narrogin area.

Specific Aboriginal health strategies and approaches have also been developed and offered to the Kellerberrin Quairading and Tammin communities (e.g. Keela Healing Project).

Projected activity data is not available; however the areas of greatest need for Aboriginal people are listed under Identified Issues and Challenges and in *Section 4*.

### Community Aged Care

The Wheatbelt Regional Community Aged Care Program includes the following services:

- *Aged Care Assessment Teams (ACATs)* assess the care needs of the aged care client and refers them to community and residential aged care service providers. There is an ACAT team in Merredin.

- The *Home and Community Care (HACC)* program which provides services such as domestic assistance, social support, nursing care, respite care, food services and home maintenance, which aims to support people who live at home and whose capacity for independent living is at risk of premature admission to long-term residential care.
- The *Older Patients Initiative (OPI)* aims to reduce avoidable or premature admissions of older people to hospitals through early identification of people at risk, complex care coordination and provision of age friendly services.
- *Community Aged Care Packages (CACPs)* are funded by the Australian Government and are targeted at frail older people, aged 70 years and over (or 50 years and over for Aboriginal and Torres Strait Islander people), with complex care needs who wish to remain living in their own home. The CACP program support people who would otherwise be assessed as requiring a low level of residential care.
- The *Extended Aged Care at Home (EACH)* provides care for people who would otherwise be assessed as requiring a high level of residential care and the *Extended Aged Care at Home Dementia (EACHD)* program supports people who have complex high-care needs associated with their dementia
- *Residential care*, while provision of residential aged care is the responsibility of the Australian Government, the WACHS provides 'flexible care places' in some small towns where private aged care facilities are not viable. These are provided under a MPS funding agreement.

Furthermore, geriatrician services are contracted through Royal Perth Hospital for the Eastern Wheatbelt. Geriatricians visit Merredin twice a year. There is also a visiting psycho-geriatric service to Merredin that undertakes assessments, consultation and liaison for identified clients in association with the regional Aged Care Unit and Mental Health Team, education and support for health care professionals and ongoing access for advice and follow up.

### **Public Oral Health Care**

Limited adult dental care services are available to residents of the Eastern Wheatbelt. There is one private dentist and one public dental chair in Merredin as well as a private dentist in Bruce Rock.

A school dental service is based in Merredin at Merredin College. It is staffed by dental therapists and a visiting dentist. A dental therapy van visits all schools out of Merredin once a year and depending on the length of that visit the dentist also comes to the town. The van that covers Northern towns including Mukinbudin, does do adults but this very much depends on if a dentist is available at the time of visit.

### **Community Mental Health Service**

There is a community mental health clinic in Merredin for the Eastern Wheatbelt residents, largely providing support to the acute services.

There is also are a number of mental health prevention and promotion activities that are provided by Population Health in the Eastern Wheatbelt.

Department of Education school psychologists are also available across the district.

The community mental health data for Eastern Wheatbelt residents is outlined below, but as with the community health data, should be treated as a guide only.

**Table 18: Community Mental Health Data – Eastern Wheatbelt Residents, 2007/08 - 2009/10**

Community Mental Health	Occasions of service		
	2007/08	2008/09	2009/10
Eastern Wheatbelt Mental Health Service	1,243	1,250	1,375

Source: MHIS. Note this is indicative only.

**Alcohol and other drug services**

The community drug and alcohol service is provided by Holyoake (based in Northam) as described in Section 5.

**Recommendations for service reform - Primary Health Care Services**

**General**

- Provide a Primary Health Care Centre located on the Merredin Health Campus providing a one-stop shop for all community and allied health services including mental health, and in the future Aboriginal health. The Centre will also co-locate with outpatient services accommodating visiting specialists and other public health services, such as dental services and non-government organisations.
- Establish an integrated primary health model of care (including mental health services, HACC, GPs and other primary health care services that are co-located in the Primary Health Care Centre).
- Prioritise additional FTE in primary health care as per SIHI (Stream 2).

**Community based mental health / alcohol and other drugs**

- Explore the benefits of expanding the Mental Health Elderly Program across the Eastern Wheatbelt and increasing visits by the Psychogeriatrician.
- Introduce a paediatric primary health early years mental health program.
- Enhance tertiary level child and adolescent community mental health services within the Eastern Wheatbelt.
- Expand the Mental Health First Aid Program.
- Expand the Suicide Prevention Program.
- Promote after-hours access to Rural Link for mental health information and support.
- Investigate the establishment of a metropolitan based mental health patient retrieval team, to ensure country services are not limited when transport of mental health patients is required.
- Establish a Drug and Alcohol Service (including detox service) in Merredin, located on the Merredin Health Campus, servicing the entire Eastern Wheatbelt.

**Health promotion, allied health and oral health**

- Establish a two-chair public dental service located in the new Primary Health Care Centre on the Merredin Hospital site.
- Co-locate the district social worker service with the new Primary Health Care Centre on the Merredin Health Campus.

## Recommendations for service reform - Primary Health Care Services

### Aged care, Aboriginal health and chronic disease

- Establish new models of care for chronic disease management in the community.
- Increase visiting specialist services for cardiology for chronic disease management. Cardiology services currently visit four times per year for Aboriginal patients (MSOAP funded).
- Increased capacity for a Clinical Nurse Specialist providing an adult continence service.
- Provide additional FTE to undertake aged care assessments in the hospital and community (e.g. physiotherapy)
- Expand the Older Persons Initiative across the Eastern Wheatbelt and enhance the associated referral pathways.
- Provide more flexible and increased HACC services.
- Investigate the option of individuals and/or families purchasing the self-directed aged care packages they require, similar to the Disability Services Model.
- Provide professional development for staff in aged care and others that provide services to the elderly.
- Small hospitals require refurbishment and enhanced training for staff to better meet the needs of dementia patients.
- Ensure HACC services are more culturally appropriate, flexible and promote the services to families. The employment of more Aboriginal staff and support workers and working with Aboriginal families to determine their needs would assist in this process.
- Ensure Wheatbelt Health Services work more closely with Wheatbelt Aboriginal Health Service to support Aboriginal clients and their family and carers access Wheatbelt health services.
- Provide for more culturally appropriate chronic disease prevention, screening and palliative care programs for Aboriginal people. Introduce a model of care for Women's Health, similar or tied into the Breast Screen bus services, for pap smears, sexual health check-ups and education.

### 6.1.2 Same day surgery

Refer to Section 6.4.2.

### 6.1.3 Outpatient Services

The following outpatient services are currently provided at Merredin Hospital:

- Audiology through the Audio Clinic.
- Dermatology.
- Medical Imaging (x-ray and ultrasound) through Global Diagnostics.
- Wound Management through Merredin staff.
- Continence Clinic through the Continence Nurse on-site at Merredin Hospital.
- Diabetic Clinic through the Population Health Diabetic Educator.

- Pathology through PathWest.
- Physiotherapy through Population Health.
- Podiatry through Population Health, GP Network and private provider.
- Occupational Therapy through Population Health.
- Speech Pathology through Population Health.
- Needle and Syringe Program through on-site representative.
- Domestic Violence Program through on-site representative.
- Dietician through Population Health.
- Palliative Care through the Rural Cancer Nurse Coordinator.
- Breast Care Van through Breast Screen WA (twice yearly).
- Paediatrician through Population Health.
- Consultant Psychiatrist through Merredin Medical Centre.
- Mental Health services through Mental Health.
- Drug and Alcohol services through Mental Health.

### Recommended strategies for service reform - Outpatient Services

- Review the alignment between regional and metropolitan hospitals for specialist support, taking into account new services from Fiona Stanley Hospital. Work towards more formal arrangements with metropolitan area health services rather than individual consultants for the provision of specialist support. It is proposed that this occur over time and without disruption to existing arrangements where these arrangements are working well.
- Provide nurse specialist clinics for outpatients, particularly for chronic disease management.
- Increase the number of specialist clinics and support staff for specialists at Merredin.
- Investigate the feasibility of providing *Well Women Clinics* for pap smear, contraceptive and reproductive system advice for all age groups and cultures.
- Investigate ways to deliver diabetes education and podiatry services more regularly and consistently across the district.

## 6.2 Emergency Services Profile

### Current service model

#### *Merredin Hospital Clinical Services Framework role delineation – Level 3:*

- Local GPs who are rostered to provide 24 hour cover, with services provided by a Registered Nurse.
- Resuscitation and stabilisation.
- Access to visiting specialist services or by telehealth.

Merredin has 24 hour medical, nursing and support staff and is currently meeting its delineation of a Level 3 service. Acute presentations that require higher levels of care are assessed and stabilised in one of the treatment bays and transferred by RFDS to the metropolitan area.

The ED at Merredin Hospital has two emergency bays and one procedure room and provides capacity for acute management and stabilisation of all forms of emergency illness including life threatening illness requiring immediate resuscitation and management of all traumas.

Under the WA Health *Clinical Services Framework* the role delineation for ED services at Merredin Hospital is proposed to remain at Level 3.

### Activity summary

#### *Actual and projected activity*

- From 2008/09 to 2010/11, ED activity has reduced for Triage 5 cases and increased for Triage 2 and 3 cases across the Eastern Wheatbelt facilities.
- In 2010/11, 82% of ED attendances (occasions of service) were for less or non-urgent presentations which could potentially be seen by private GPs and other primary health care services during work hours.
- In 2010/11, 9% of Merredin ED presentations involved Aboriginal people. The proportion of attendances involving Aboriginal people varied at other eastern Wheatbelt hospitals from 31% at Quairading and 34% at Kellerberrin to 3% at Narembeen and Southern Cross.
- The attendances for triage 5 categories are projected to continue to decrease at all facilities in the Eastern Wheatbelt in line with State and SIHI expectations.
- As shown in Table 19, the current number of ED bays at Merredin Hospital and other Eastern Wheatbelt hospitals will be sufficient to meet projected demand.
- Within the ED modelling, the number of required treatment bays is estimated from the projected attendances in each of the triage categories using the benchmarks in Table 20. These benchmarks have also been applied to the historic activity below to give an indication of the number of ED bays currently required to meet demand.
- Please note: Current projections are based on 2008/09 actual data and therefore projections for 2011/12 are lower than the actual data for 2010/11. The ED projections

will be remodelled in late 2011/12 and will be based on 2010/11 actual data giving a more accurate indication of future demand and required bay numbers.

**Table 19: Eastern Wheatbelt hospitals: Current and projected ED activity and treatment bays, by triage category.**

Hospital	Actual Occasions of Service			Projected Occasions of Service		
	2008/09	2009/10	2010/11	2011/12	2016/17	2021/22
<b>Merredin Hospital</b>						
Triage 1	7	15	5	10	13	16
Triage 2	88	101	134	79	105	135
Triage 3	223	345	400	214	261	314
Triage 4	1,056	1,158	1,050	1,298	1,637	2,010
Triage 5	2,056	1,442	1,456	1,563	1,268	1,014
<b>Total</b>	<b>3,430</b>	<b>3,061</b>	<b>3,045</b>	<b>3,164</b>	<b>3,284</b>	<b>3,489</b>
<b>ED bays required</b>	<b>1.4</b>	<b>1.3</b>	<b>1.4</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>
<b>Other Eastern Wheatbelt hospitals</b>						
Triage 1	15	20	15	15	19	22
Triage 2	163	186	210	160	213	275
Triage 3	523	667	810	544	669	807
Triage 4	2,122	2,227	2,191	2,536	3,233	4,004
Triage 5	3,364	3,083	2,591	2,518	2,095	1,673
<b>Total</b>	<b>6,187</b>	<b>6,183</b>	<b>5,817</b>	<b>5,774</b>	<b>6,229</b>	<b>6,781</b>
<b>ED bays required</b>	<b>2.5</b>	<b>2.7</b>	<b>2.6</b>	<b>2.4</b>	<b>2.7</b>	<b>3.0</b>

Source (historic): WACHS online ED pivot, extracted 12th September 2011.  
 Source (projections) WACHS ED Projections Pivot (Based on ABS Series B+).

**Table 20: Emergency department planning benchmarks**

Measure	Treatment Space	Benchmark	Source
ED Attendances (all ages)	Fast Track	1/3000 yearly T4 and T 5 attendances	Adapted from Emergency Demand Treatment Space Calculator, The Advisory Board Company, 2009
	General ED	1/1000 yearly T 2 and T3 attendances	
	Trauma/Critical Care	1/500 yearly T1 attendances	

Source: WACHS Planning Team.

### Current ED attendance, by age

- In 2010/11, approximately one quarter of ED attendances were for children aged under 14 years and 16% were for people aged 65 year and over across all Eastern Wheatbelt hospitals. The remainder of attendances were for those aged 15 to 65 years.
- Of the small hospitals, Kellerberrin had the most attendances and Bruce Rock Hospital had the lowest.

**Table 21: Eastern Wheatbelt hospitals ED activity, by age category (2010/11).**

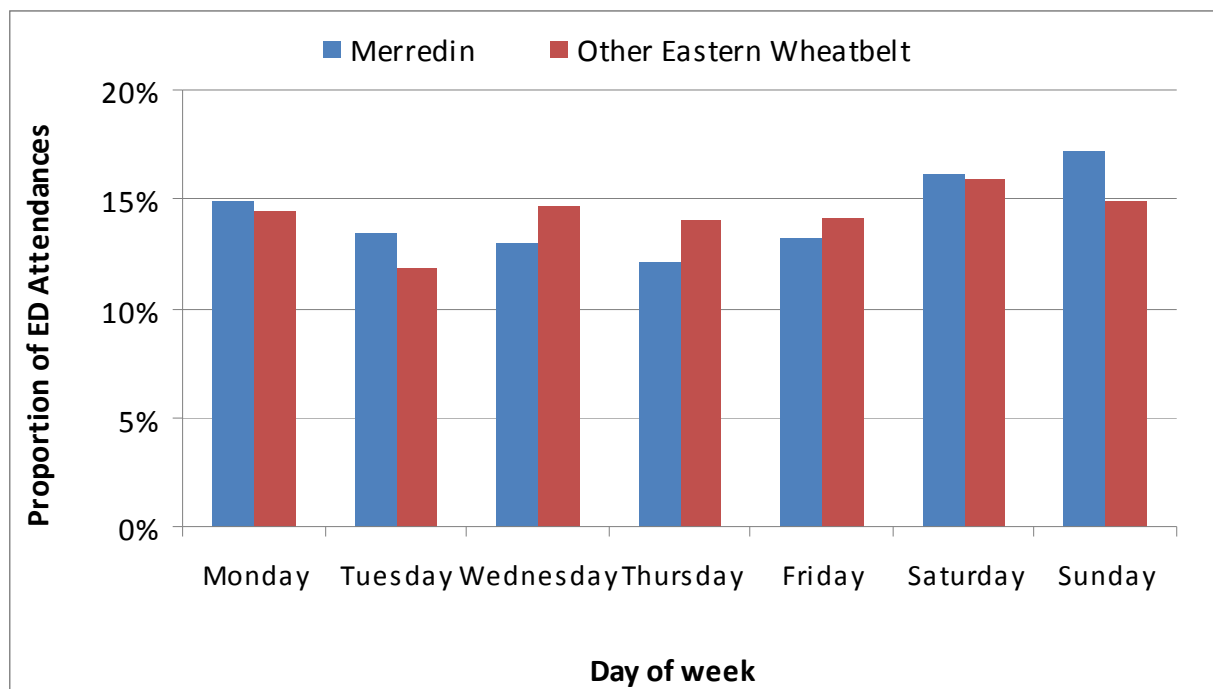
Age	Actual Occasions of Service					Total
	0-14	15-44	45-64	65-84	85+	
Merredin	770	1277	585	343	70	3045
Bruce Rock	105	130	85	67	24	411
Corrigin	196	266	181	107	21	771
Kellerberrin	370	440	243	205	51	1309
Kununoppin	194	165	181	129	14	683
Narembeen	173	240	141	104	18	676
Quairading	285	258	281	147	51	1022
Southern Cross	259	401	185	84	16	945
<b>Total</b>	<b>2352</b>	<b>3177</b>	<b>1882</b>	<b>1186</b>	<b>265</b>	<b>8862</b>

Source: WACHS online ED pivot, extracted 12<sup>th</sup> September 2011.

### Actual day and time of attendances

- As shown in the following figures, peak activity for Merredin and the other Eastern Wheatbelt hospitals is on Saturday and Sunday. The other Eastern Wheatbelt hospitals appear to have a higher proportion of attendances in the later part of the week, Wednesday to Friday, when compared to Merredin.
- The majority of attendance between 8:00 and 19:00 with peak activity at Merredin between 10:00 – 11:00. Peak activity for other Eastern Wheatbelt hospitals is between 10:00 – 11:00 and 16:00 – 17:00.

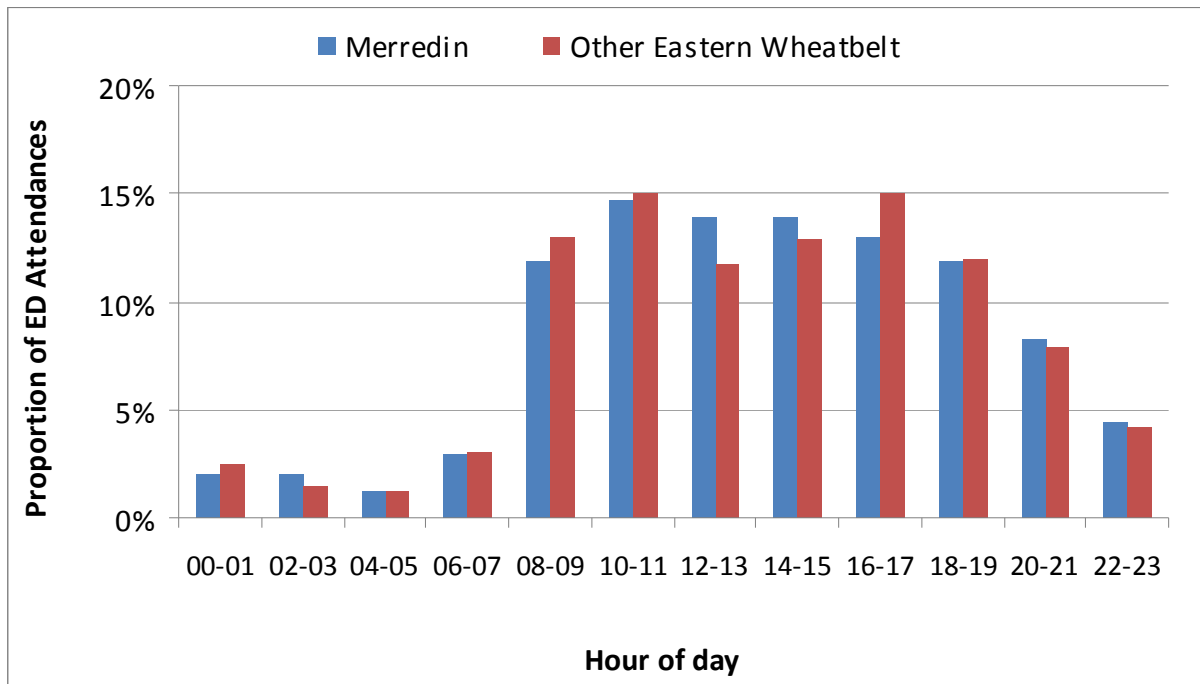
**Figure 10: Proportion of emergency department attendances by day of week, 2009/10**



Source: WACHS online Emergency Department pivot, extracted 2nd June 2011.



**Figure 11: Proportion of emergency department attendances, by hour of day (2009/10)**

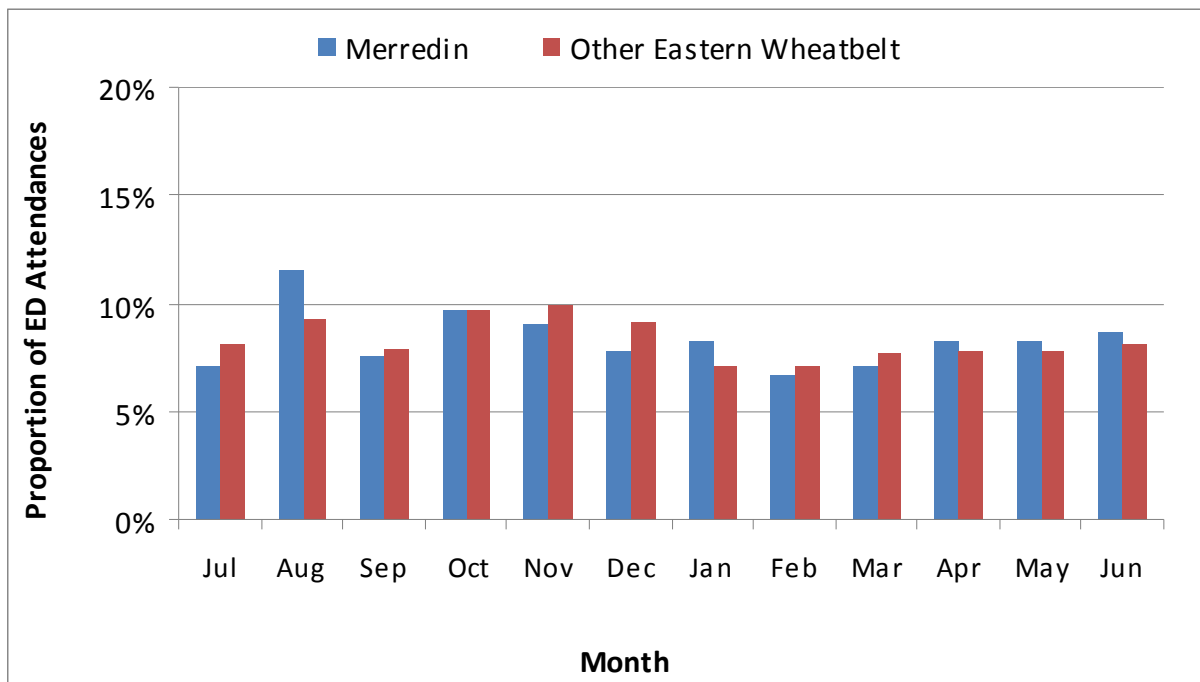


Source: WACHS online Emergency Department pivot, extracted 2<sup>nd</sup> June 2011.

**Actual month of attendances**

- There is little seasonal variation shown in the ED attendances at Merredin and the other Eastern Wheatbelt hospitals. Merredin does have a spike in August while October and November are the busiest months for the other hospitals.

**Figure 12: Proportion of Emergency Department attendances by month of year, 2009/10**



Source: WACHS online Emergency Department pivot, extracted 2<sup>nd</sup> June 2011.

### Actual mental health emergency department attendances, including alcohol and other drugs

- As shown in Table 22, 3% of all 2009/10 attendances to ED at Merredin and 2% to the other Eastern Wheatbelt hospitals were classified as *mental health* or *alcohol/drug*. Alcohol/drug accounted for around 24% of these attendances at Merredin Hospital and 37% of these attendances at other Eastern Wheatbelt hospitals.

**Table 22: Proportion of ED attendances classified as Mental Health/Alcohol/Drug (2009/10)**

Hospital	Proportion of ED attendances classified as Mental Health/Alcohol/Drug		
	2007/08	2008/09	2009/10
Merredin	2%	2%	3%
Other Eastern Wheatbelt	2%	2%	2%

Source: WACHS online ED pivot, extracted 2<sup>nd</sup> June 2011.

### Recommended strategies for service reform - Emergency Services

- Provide a Primary Health Care Centre located on the Merredin Health Campus providing a one-stop shop for all community and allied health services including mental health, and in the future Aboriginal health. The Centre will also co-locate with outpatient services accommodating visiting specialists and other public health services, such as dental services and non-government organisations.
- Provide 24/7 medical coverage to the ED and meet emergency surgical services.
- Clarify and confirm the role of the nurse practitioner role in emergency care.
- Participate actively in the Clinical Coordination Project to improve clinical coordination; consultation and advice from metropolitan emergency specialists; and intra-regional coordination and clinical governance for emergency care.
- Investigate recruitment and retention strategies to ensure multi-skilled, experienced nursing staff are present in all small hospitals, particularly if more specialists visit the area.
- Explore the need for *Family Care Units* in Eastern Wheatbelt small hospitals.
- Explore the provision of locum services to be provided at smaller hospitals to relieve local GPs and prevent inpatients being transferred to other hospital on weekends.
- WACHS, St. John Ambulance and WA Police to explore the possibility of 'leap frogging' long patient transfers through the towns by sharing the transfers and workload.
- Explore the potential of a health transport service with paid drivers and appropriate vehicles to take all low acuity patients, including bariatric patients with both patient and hospital equipment.
- Upgrade security at Merredin Hospital, especially for violent/aggressive patients.
- Promote Rural Link after-hours mental health service, particularly for videoconferencing.
- Introduce telehealth services to increase access to supervision, assessment and training.
- Introduce workforce reform initiatives to sustain service delivery as per Section 7.
- Re-furbish and extend ED at Merredin Hospital as per recommendations in Section 10 (e.g. ensure the future Merredin Hospital has a designated triage area and improved patient access to ED).

## 6.3 District Current Activity Overview

Category	Merredin	Bruce Rock	Corrigin	Kellerberrin	Kununoppin	Narembeen	Quairading	Southern Cross
EMERGENCY DEPARTMENT (2010/11)								
Number of treatment bays	2	2	2	2	3	2	1	2
Emergency Department Attendances	3,045	411	771	1309	683	676	1,022	945
RESIDENTIAL CARE as at 30/11/2011								
Number of active residential beds (high & low care)	20	12	15	4	9	13	14	8
ACUTE INPATIENT CARE (2009/10)								
Number of active acute multiday beds	24	2	5	4	9	3	3	6
Total multiday separations	467	100	94	142	145	125	91	108
Total multiday bed-days	1,696	548	518	1,128	896	756	490	426
Average multi day Bed Occupancy	4.6	1.5	1.4	3.1	2.5	2.1	1.3	1.2
Number of active same-day beds	-	-	-	-	-	-	-	-
Total same-day separations	176	14	6	23	17	14	39	18
Total same-day bed-days	176	14	6	23	17	14	39	18
Average Same-day bed occupancy	0.5	0.0	-	-	-	-	-	-
Total separations	643	114	100	165	162	139	130	126
Total bed days	1,872	562	524	1,151	913	770	529	444
Average bed occupancy	5.1	1.5	1.4	3.2	2.5	2.1	1.4	1.2
Average Multiday Length of Stay	3.6	5.5	5.5	7.9	6.2	6.0	5.4	3.9
Public Acute Self Sufficiency (All EWHD Hospitals)	39.7%							

Inpatient data excludes boarders, unqualified neonates and residents. Also excludes Nursing Home Type patients with beddays greater than 180 at separation.

Source (inpatient): WA Hospital Morbidity Data System, via Clinical Modelling Unit

Source (ED): ED online pivot, extracted March 2012

Source (active beds): WACHS online bed pivot.

### 6.3.1 Supply of acute inpatient services from Eastern Wheatbelt hospitals

Merredin Hospital provides a range of inpatient, ambulatory, medical, surgical, paediatric and mental health services, emergency and residential aged care to its catchment population.

The next table highlights the inpatient activity at all Eastern Wheatbelt hospitals. There were 1,673 separations from WACHS Eastern Wheatbelt hospitals in 2009/10. Nine in ten (1,462) of these separations involved residents of the Eastern Wheatbelt health district. The largest proportion of separations was from Merredin Hospital (41%).

Of the 688 separations at Merredin Hospital, 91% involved residents of the Eastern Wheatbelt.

**Table 23: Eastern Wheatbelt hospitals: Supply of inpatient services (2009/10)**

Hospital	Separations by Resident Grouping						% of Total Separations
	Coastal Wheatbelt	Eastern Wheatbelt	Western Wheatbelt	Southern Wheatbelt	Other	Total	
Merredin	<5	629	<5	<5	51	688	41%
Bruce Rock	<5	114	<5	<5	9	124	7%
Corrigin	<5	86	<5	8	10	105	6%
Kellerberrin	<5	153	12	<5	5	170	10%
Kununoppin	<5	159	8	<5	<5	173	10%
Narembeen	<5	111	<5	17	17	147	9%
Southern Cross	<5	89	<5	<5	36	130	8%
Quairading	<5	121	5	<5	7	136	8%
<b>Total</b>	<b>&lt;5</b>	<b>1.462</b>	<b>36</b>	<b>32</b>	<b>139</b>	<b>1.673</b>	<b>100%</b>

*Note: Excludes boarders, unqualified neonates and residents. Also excludes Nursing Home Type patients with bed-days greater than 180 days at separation.*

*Source: WA Hospital Morbidity Data System, via Clinical Activity Modeling Unit.*

### 6.3.2 Where do residents of the Eastern Wheatbelt go for acute inpatient treatment?

In 2009/10, 5,049 separations from all WA private and public hospitals involved residents of the Eastern Wheatbelt. Of these separations:

- 27% (1,381) were from hospitals within this health district
- 6% (344) were from other Wheatbelt hospitals
- 35% (1,751) were from public metropolitan hospitals
- 32% (1,573) were privately treated (1% were privately treated in rural facilities and 31% were privately treated in metropolitan facilities).

The data is presented in the next table.

**Table 24: Eastern Wheatbelt residents: Total separations, by all WA health facilities (2009/10)**

Area	Treating Hospital	Residents' Total Separations 2009/10	% of Total Public & Private Separations	% of Total Public Separations
WACHS Eastern Wheatbelt	Merredin	590	12	17
	Bruce Rock	105	2	3
	Corrigin	83	2	2
	Kellerberrin	148	3	4
	Kununoppin	148	3	4
	Narembeen	106	2	3
	Southern Cross	86	2	2
	Quairading	115	2	3
<b>Sub-total (WACHS – Eastern Wheatbelt)</b>		<b>1,381</b>	<b>27</b>	<b>40</b>
Other Wheatbelt District	All	279	6	8
Other WACHS Regions	All	65	1	2
<b>Sub-total ( WACHS)</b>		<b>1,725</b>	<b>34</b>	<b>49</b>
South Metropolitan Area Health Service	All	782	16	22
North Metropolitan Area Health Service	All	772	15	22
Child and Adolescent Health Service	All	182	4	5
Contracted Metro	All	15	0	0
<b>Sub-total (metro)</b>		<b>1,751</b>	<b>35</b>	<b>50</b>
<b>Total Public*</b>		<b>3,476</b>	<b>69</b>	<b>100</b>
Private	Metro	1,564	31	
	Rural	9	0	
<b>Total (Private / Public)</b>		<b>5,049</b>	<b>100</b>	

Source: WA Hospital Morbidity Data System, via Clinical Modelling Unit.

Excludes boarders, unqualified neonates and residents. Also excludes Nursing Home Type patients with bed-days greater than 180 at separation.

Includes public patients in private hospitals.

### 6.3.3 Public self-sufficiency

*Self-sufficiency* is a calculation used to identify the proportion of resident separations that are managed by Eastern Wheatbelt hospitals - an indicator of the district's capacity to provide care closer to home.

In 2009/10, the public self-sufficiency for Eastern Wheatbelt hospitals was 40%. This means 40% (1,381) of the Eastern Wheatbelt health district residents who required or opted for public health care (i.e. excluding private health care) received that care from a local WACHS facility. Public self-sufficiency for the district has steadily decreased from 55% in 2005/06.

Due to the level of remoteness and availability of onsite specialists, a country health service will not achieve 100% self-sufficiency. Highly acute and complex patients will continue to be transferred to Perth where more specialised services and medical equipment are located.

**Table 25: Eastern Wheatbelt hospitals: Public self-sufficiency (2005/06 to 2009/10)**

Category	Proportion of resident public separations from the Eastern Wheatbelt hospitals, by financial year				
	2005/06	2006/07	2007/08	2008/09	2009/10
Public self-sufficiency	55%	53%	52%	47%	40%

*Excludes boarders, unqualified neonates and residents. Also excludes Nursing Home Type patients with bed-days greater than 180 at separation.*

*Source: WA Hospital Morbidity Data System, via Clinical Activity Modelling Unit.*

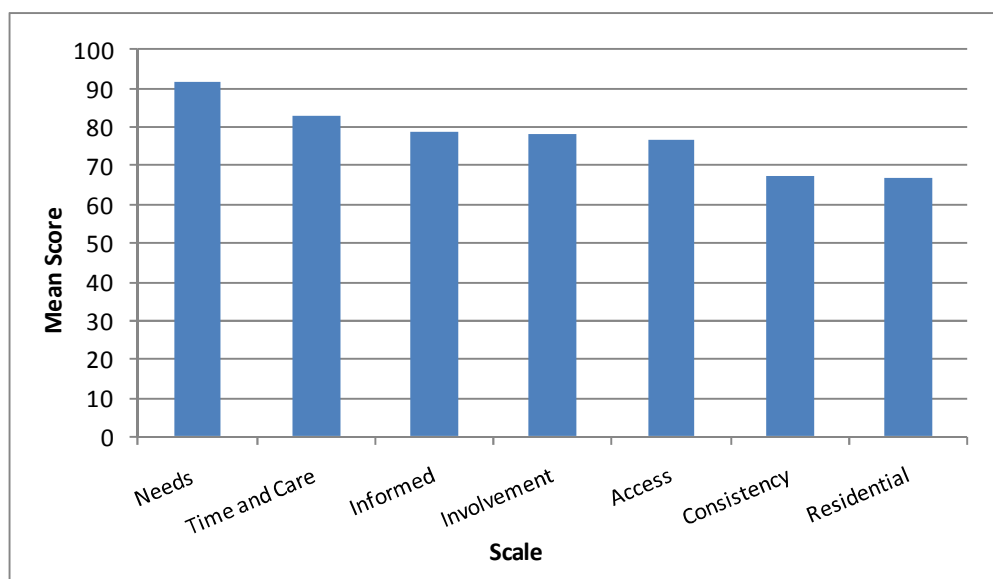
### 6.3.4 Patient satisfaction at Merredin Hospital

In 2009/10 a sample of adult patients who had stayed less than 35 nights at Merredin Hospital completed a patient satisfaction survey. The answers to the survey have been grouped into themes (scales) that represent how the patients rated the hospital on a particular aspect of health service. The scales include:

- Needs Scale: Meeting personal as well as clinical needs
- Time and Care Scale: Time and attention paid to patient care
- Informed Scale: Information and communication
- Involvement Scale: Involved in decisions about your care and treatment
- Access Scale: Getting into hospital
- Consistency Scale: Continuity of care
- Residential Scale: Food and residential aspects
- **Note:** these scale score do not represent the percentage of patients satisfied with the service.

As shown in in the figure below, the *needs scale* was rated the highest (92), while the *residential scale* was rated the lowest (67). Overall patients were satisfied with their hospital stay and its outcome.

**Figure 13: Merredin Hospital: Patient satisfaction, by mean scale scores (multi-day adults 0-34 nights), 2009/10**



*Source: Patient Evaluation of Health Services (Epidemiology Branch).*



### 6.3.5 Length of stay performance

WA Health is now using an activity based funding (ABF) and management (ABM) system. Within the ABF inpatient separations with a length of stay between one-third and three times the WA average length of stay (known as the central episode) for an AR-DRG will be funded at a set price for that episode. This funding mechanism means that separations within the central episode that have a length of stay greater than the average will tend to cost the hospital more than the payment they receive.

Separations with a length of stay greater than three times the WA average are regarded as being over the high boundary of the central episode (outlier episodes of care) and in 2011/12 will be paid at a rate per day. These high boundary separations are of particular interest from a safety and quality perspective and in the ABF/M as they are more likely to have adverse events associated with them.

In 2009/10 there were 39 out of 643 separations (i.e. 6%) at Merredin Hospital that had a length of stay that was greater than three times the WA average. These 39 separations resulted in 476 bed-days (1.3 beds) of over boundary stay.

Within the service planning the models of care and hospital processes, such as admission and discharge, will also need to be considered within the context of how they impact on the average length of stay.



## 6.4 Inpatient Services Profile

### Current service model

Merredin Hospital consists of a 24 hour ED and a 24 bed surgical and medical unit. The 24 beds comprise 22 acute beds, 1 high care bed and 1 palliative care bed/unit. Merredin Hospital also provides respite beds and unauthorised acute inpatient mental health beds. Staff also provide a service to the community and inpatients five days a week.

In addition to inpatient services are 10 high care residential aged care rooms and 10 low care units.

Merredin Hospital uses 2.5 FTE salaried medical officers who provide 24 hour cover to the ED, and hospital as required. Local GPs manage the inpatient admissions.

The inpatient activity at Merredin Hospital is shown below and is further broken down in subsequent sections.

### Activity Summary

#### Assumptions for Projected Inpatient Activity

*Future inpatient activity projections were remodelled in late 2011 by the Department of Health Clinical Modelling Unit, the WACHS Planning Team and the region. The updated modelling was based on the following assumptions:*

- *An increase in the relative utilisation of renal dialysis to account for people moving to receive their dialysis care.*
- *An increase in the public self-sufficiency of renal dialysis (to 95%), in line with the WACHS renal plan. In the Southern Wheatbelt the renal dialysis service will operate at Narrogin Hospital with four chairs.*
- *An increase in the public self-sufficiency for chemotherapy (to 75%), in line with the WACHS cancer plan.*
- *An increase in the public self-sufficiency of select ESRGs, in line with the role delineation of the hospitals.*

*The specific inpatient service areas are analysed in greater detail in the following sections.*

#### Current and projected activity

- In the activity projections modelling patients coded as nursing home type (NHT) patients with a bed-day at separation of 180 days have been excluded as these are likely to be residents.
- Generally inpatient separations (same-day and multi-day) have reduced between 2007/08 to 2009/10 at all Eastern Wheatbelt hospitals.
- Inpatient separations at Merredin Hospital are projected to increase by just over a third between 2009/10 and 2021/22. This is largely driven by an 83% increase in same-day activity, mainly due to plans to establish a satellite renal dialysis service.
- The separations at other Eastern Wheatbelt hospitals are expected to increase at a much faster rate (83%) over the same period, driven by a 210% increase in same day activity.



- The inpatient activity at Merredin Hospital and other Eastern Wheatbelt hospitals are broken down by medical, surgical, obstetrics, paediatrics and palliative care in subsequent sections of this service plan.

**Table 26: Eastern Wheatbelt hospitals: Actual and projected inpatient separations (2009/10–2021/22)**

Hospital	Actual separations			Projected separations			% growth (2009/10 - 2021/22)
	2007/08	2008/09	2009/10	2011/12	2016/17	2021/22	
<b>Merredin Hospital</b>							
Same-day	177	180	176	220	276	322	83%
Multiday	528	479	467	512	512	536	15%
<b>Total</b>	<b>705</b>	<b>659</b>	<b>643</b>	<b>732</b>	<b>788</b>	<b>859</b>	<b>34%</b>
<b>Other Eastern Wheatbelt hospitals</b>							
Same-day	218	176	131	272	336	406	210%
Multi-day	1,132	973	805	1,237	1,265	1,308	63%
<b>Total</b>	<b>1,350</b>	<b>1,149</b>	<b>936</b>	<b>1,509</b>	<b>1,601</b>	<b>1,715</b>	<b>83%</b>

*Excludes boarders, unqualified neonates and residents.*

*Source (actual): WA Hospital Morbidity Data System, via Clinical Activity Modelling Unit.*

*Source (projections): WACHS Inpatient 2011 Modelling– based on ABS Series B+*

### Actual and projected bed-days

- By 2021/22, it is projected that the number of bed-days at Merredin will be approximately 2,989 or the equivalent of approximately 11 beds. This indicates that the current number of acute inpatient beds (24) will be more than sufficient to meet future demand.

**Table 27: Eastern Wheatbelt hospitals: Actual and projected inpatient bed-days (2009/10–2021/22)**

Hospital	Actual		Projected					
	2009/10		2011/12		2016/17		2021/22	
	Bed-days	Occupied Beds	Bed-days	Occupied Beds	Bed-days	Beds	Bed-days	Beds
<b>Merredin Hospitals</b>								
Same-day	176	0.5	220	0.6	276	0.8	322	0.9
Multi-day	1,696	4.6	2,473	9.0	2,512	9.2	2,667	9.7
<b>Total</b>	<b>1,872</b>	<b>5.1</b>	<b>2,694</b>	<b>9.6</b>	<b>2,788</b>	<b>9.9</b>	<b>2,989</b>	<b>10.6</b>
<b>Other Eastern Wheatbelt hospitals</b>								
Same-day	131	0.4	272	0.7	336	0.9	406	1.1
Multi-day	4,762	13.0	7,535	20.6	7,637	20.9	7,702	21.1
<b>Total</b>	<b>4,893</b>	<b>13.4</b>	<b>7,808</b>	<b>21.4</b>	<b>7,973</b>	<b>21.8</b>	<b>8,109</b>	<b>22.2</b>

*Excludes boarders, unqualified neonates and residents.*

*Source (2009/10): WA Hospital Morbidity Data System, via Clinical Activity Modelling Unit.*

*Source (Merredin projections): WACHS Inpatient Demand Modelling Pivot (August 2010) – based on ABS Series B+. Source (Other projections): AIM (Harden) 2007/08 modelling tool, based on ABS series C– to be used as a guide only.*

NOTE: The bed-days are not directly comparable. The 2009/10 historic data excludes Nursing Home Type patients with bed-days greater than 180 at separation. These patients will be excluded from the future modelling as they are believed to be residents.

### Current activity, by age group

- As shown in Table 28, around one quarter of separations at Merredin hospital were for individuals aged 15 to 44 year olds, while 8% were aged 85 years and over (53 separations).
- Aboriginal people accounted for 6% of the 2009/10 separations at Merredin Hospital.
- As shown in Table 29, the other Eastern Wheatbelt hospitals had a greater proportion of separations involving individuals aged 65 years and over compared with Merredin (49% compared with 38% in Merredin).
- In particular, 85 year olds and over accounted for nearly one-quarter of separations at Quairading and nearly one in five separations at Bruce Rock, Corrigin and Narembeen hospitals.

**Table 28: Merredin Hospital: Inpatient activity (separations) by age group (2009/10)**

Stay Type	Number of inpatient separations, by age group					Total
	0-14 yrs	15-44 yrs	45-64 yrs	65-84 yrs	85+ yrs	
Same-day	12	44	55	59	6	176
Multi-day	46	131	110	133	47	467
<b>Total</b>	<b>58</b>	<b>175</b>	<b>165</b>	<b>192</b>	<b>53</b>	<b>643</b>

Excludes boarders, unqualified neonates and residents. Also excludes Nursing Home Type patients with bed-days greater than 180 at separation.

Source: WA Hospital Morbidity Data System, via Clinical Activity Modelling Unit.

**Table 29: Other Eastern Wheatbelt hospitals: Inpatient activity (separations) by age group (2009/10)**

Hospital	Number of inpatient separations, by age group					Total
	0-14 yrs	15-44 yrs	45-64 yrs	65-84 yrs	85+ yrs	
Bruce Rock	8	19	21	44	22	114
Corrigin	8	15	14	44	19	100
Kellerberrin	8	39	32	60	26	165
Kununoppin	14	25	36	77	10	162
Narembeen	9	28	40	38	24	139
Quairading	10	19	45	26	30	130
Southern Cross	4	46	31	34	11	126
<b>Total</b>	<b>61</b>	<b>191</b>	<b>219</b>	<b>323</b>	<b>142</b>	<b>936</b>

\*Numbers of children were too small to report (<5) so have been included in the 15-44 year olds.

Excludes boarders, unqualified neonates and residents. Also excludes Nursing Home Type patients with bed-days greater than 180 at separation.

Source: WA Hospital Morbidity Data System, via Clinical Activity Modelling Unit.

### Current activity, by Aboriginality

- Approximately 6% of separations from Merredin Hospital involved Aboriginal people in 2009/10.
- Aboriginal and/or Torres Strait Islanders were over-represented in the 2009/10 separations at Kellerberrin and Quairading Hospitals, accounting for more than one in four separations, but only 11% and 14% of the population respectively.

**Table 30: Eastern Wheatbelt hospitals: Inpatient separations, by Aboriginality (2009/10)**

Hospital	Number of separations, by Aboriginality			
	Non-Aboriginal	Aboriginal	Total	% of separations Aboriginal
Merredin Hospital	41	602	643	6%
Bruce Rock	<5	n/a	114	n/a
Corrigin	0	100	100	0%
Kellerberrin	39	126	165	24%
Kununoppin	13	149	162	8%
Narembeen	<5	n/a	139	n/a
Quairading	31	99	130	24%
Southern Cross	<5	n/a	126	n/a
<b>Total</b>	<b>92</b>	<b>844</b>	<b>936</b>	<b>10%</b>

*Excludes boarders, unqualified neonates and residents. Also excludes Nursing Home Type patients with bed-days greater than 180 at separation.*

*Source: WA Hospital Morbidity Data System, via Clinical Activity Modelling Unit.*

## Recommended strategies for service reform

The recommended strategies for service reform are listed against the individual service/departmental areas in the following pages.

### 6.4.1 Medical services profile (Adult)

#### Current service model

##### *Merredin Hospital Clinical Services Framework role delineation – Level 3*

Level 3 medical services should provide:

- 24/7 on-call by GP or visiting medical practitioner.
- 24 hour cover by a Registered Nurse.
- GP inpatient care.
- Outpatient care by general physician or visiting general medicine specialist or via telehealth.
- Access to some allied health services.



### **General medical services**

Twenty-four hour medical and nursing coverage is in place currently at Merredin and as such Merredin Hospital is currently meeting its Level 3 role delineation for medical services. Medical services are provided to Merredin Hospital via Resident Medical Officers (RMOs). The RMOs are contracted to provide medical/surgical//anaesthetic and emergency services. These services are provided 24 hours per day, 365 days per year.

Medical services to Merredin hospital are provided by the local salaried GPs and a range of visiting medical specialists providing:

- Orthopaedics
- Rheumatology
- Cardiology
- ENT
- Dermatology
- Pain Management
- Ophthalmology
- Respiratory Physician
- Radiology
- Dental

### **Renal Services**

Currently there are no renal services offered in the Wheatbelt. Patients requiring renal services are referred to Perth services. The endorsed *WACHS Renal Dialysis Plan 2010* identified the need for increasing self-sufficiency in the region to develop the capacity to provide for less complex clients with renal failure through home based or centre based care.

The WACHS Renal Plan outlines that two Satellite Outreach Service (SOS) chairs will be available in Merredin in phase two of implementation plan (Narrogin and Northam are within phase one of implementation). However, given that infrastructure funding through the SIHI funding is now available, consideration could be given for two renal dialysis chairs within phase 1 with the service model to be further reviewed (i.e. SOS or community supported home dialysis). Recurrent funding is currently being sought through Royalties for Regions.

### **Cancer care coordination and chemotherapy**

In terms of Cancer Care Coordination and Chemotherapy, the WA Cancer and Palliative Care Network in collaboration with WACHS appointed a Rural Cancer Nurse Co-ordinator (RCNC) in January 2007. The RCNC facilitates a co-ordinated regional approach to cancer services for patients in the Wheatbelt.

Medical oncology at Merredin Hospital is currently role delineated in the *Clinical Services Framework* as a Level 2 service which means they should offer:

- Specialist RN in the region who links with relevant tumour specific Cancer Nurse Coordinator (CNC) and treating facility for care coordination.
- No treatment facilities.

In line with the *Clinical Services Framework* there are currently no designated chemotherapy chairs/places at Merredin Hospital. Some low level chemotherapy is sometimes given in accordance with chemotherapy guidelines.

Whilst there are no plans to provide chemotherapy chairs at Merredin in the future, by 2013/14 Northam will have a five chair, one bed chemotherapy unit and Narrogin will have a three chair chemotherapy unit. In addition, both Northam and Narrogin will provide patient and carer accommodation for overnight stays.

## Activity summary (Adult)

### Current and projected medical service activity

- The activity for inpatient medical services in Merredin is outlined in the tables below. The data excludes activity that is categorised as paediatrics, mental health, obstetrics and palliative care, as these service areas are presented in subsequent sections.
- There has been a 10% decrease (44 separations) in adult medical service activity (patients aged 15 years and over) at Merredin Hospital between 2007/08 and 2009/10.
- The medical activity within the other Eastern Wheatbelt hospitals has decreased by 28% over the same period.
- The number of adult medical separations from Merredin Hospital is anticipated to increase by 588 separations (22%) between 2011/12 and 2021/22.
- Paediatric medical activity of patients aged 14 years and under is included in Section 6.4.4.

**Table 31: Eastern Wheatbelt hospitals: Actual and projected adult medical service separations, ages 15 years and over (2007/08 – 2021/22)**

Hospital	Actual separations			Projected separations		
	2007/08	2008/09	2009/10	2011/12	2016/17	2021/22
<b>Merredin Hospital</b>						
Same-day	82	83	78	109	144	176
Multi-day	378	346	338	375	386	412
<b>Total</b>	<b>460</b>	<b>429</b>	<b>416</b>	<b>484</b>	<b>530</b>	<b>588</b>
<b>Other Eastern Wheatbelt hospitals</b>						
Same-day	169	150	101	209	267	332
Multi-day	923	773	680	931	965	1,011
<b>Total</b>	<b>1,092</b>	<b>923</b>	<b>781</b>	<b>1,140</b>	<b>1,232</b>	<b>1,343</b>

*Excludes unqualified neonates and boarders.*

*Source (historic): Hospital Morbidity Data System via Clinical Activity Modelling Unit.*

*Source (Merredin projections): WACHS Inpatient Demand Modelling Pivot. Projections based on ABS Series B+ population projections.*

*Source (Other projections): AIM (Hardes) 2007/08 modelling tool, based on ABS series C– to be used as a guide only.*

## Recommended strategies for service reform - Medical Services

- Provide greater access to medical specialities including ENT, ophthalmology, anaesthetists, psychiatry, psychogeriatrician, oncology, cardiology and gerontology (via telehealth and visiting services).
- According to the *Renal Dialysis Plan (2010)*, there will be Level 4 renal services at Merredin Hospital by 2014/15. This means Merredin will provide:
  - Two-chair general hospital-based satellite service.
  - Visiting specialist or general physician with nephrology skills.
  - More complicated cases.
  - Assessment services.
  - Specialist RN.
  - Access to designated allied health services.
  - Outreach support for home dialysis.
  - Some allied health undergraduate education.
  - Other strategies as directed by the *WACHS Renal Dialysis Plan (2010)*.
- As per Stream 1 of SIHI prioritise needs and introduce medical staff plus an ED Nurse Practitioner.
- Work with metropolitan hospitals to improve the discharge system (from metropolitan to country health services) to enhance the continuum of care and ensure optimal health is needed.
- Advocate to the Department of Health WA and WACHS Area Information Services to establish shared electronic medical records.
- Consider reducing acute inpatient bed capacity to 15 – 16 beds given very low acute bed occupancy currently and into the future and reinvesting funds into additional primary health care services such as domiciliary nursing care, community rehabilitation and chronic disease self-management programs.
- Introduce workforce reform initiatives to sustain service delivery as per Section 7.
- Construct and re-furbish capital facilities as per recommendations in Section 10 to co-locate health services in the one site (Merredin Hospital) and consider accommodation needs for services at MPS sites.

## 6.4.2 Surgical services profile (Adult)

### Current service model

#### *Merredin Hospital Clinical Services Framework role delineation – Level 3*

Level 3 surgical services should offer:

- Surgery by GPs, general surgeons and visiting sub-specialists.
- Broad range of day and general surgery and some specialty surgery.
- Emergency surgery.
- Theatre trained nurses.
- More than 1 theatre.
- Access to designated allied health services.
- Some allied health undergraduate education.
- 24 hour cover by a Registered Nurse.
- Outpatient care.

Merredin is one of four IDHS that provide acute surgical services within the Wheatbelt region. Merredin Hospital currently only has one theatre operational and two recovery bays and performs ophthalmology, endoscopy, orthopaedic, dermatology and general surgery procedures.

The theatre operates 20 days a year and is not currently able to meet its intended CSF role delineation as a Level 3 surgical service. The region, through the SIHI initiative, aims to increase access to GP proceduralists. However, if this strategy is unsuccessful, given the very limited availability of this workforce, Merredin would need to consider alternative models such as increasing visiting specialist lists, transferring out where necessary or using more telehealth outpatient services. The region will also work towards nurse lead models of care primary health and chronic disease management with the implementation of the Nurse Practitioner workforce. Identification of opportunities for proceduralist Nurse Practitioners roles over the next few years will enhance the opportunities to meet customer demands for care closer to home. The Nurse Practitioner is not a substitute model for the GP proceduralist's service, rather, a service model in its own right.

### Activity summary (Adult)

#### *Current and projected surgical activity*

- Adult multiday and same-day surgical activity at Merredin is very low, despite an increase in same-day activity 2007/08 and 2009/10.
- Based on past patterns of activity and the population projections it is projected that the number of same-day adult surgical separations at Merredin Hospital will increase slightly but overall multi-day and same-day surgical activity will be below 100 separations a year.
- Paediatric surgical activity is included within *Section 6.4.4*.

**Table 32: Eastern Wheatbelt Hospitals: Actual and projected adult surgical and procedural\* separations, 15 years and over (2007/08 – 2021/22)**

Hospital	Actual separations			Projected separations		
	2007/08	2008/09	2009/10	2011/12	2016/17	2021/22
<b>Merredin Hospital</b>						
Same-day surgical	16	29	41	21	27	31
Multi-day surgical	13	15	19	12	10	11
<b>Total surgical</b>	<b>29</b>	<b>44</b>	<b>60</b>	<b>33</b>	<b>37</b>	<b>42</b>
Same-day procedural	31	33	35	36	43	51
Multi-day procedural	5	9	<5	<5	<5	<5
<b>Total procedural</b>	<b>36</b>	<b>42</b>	<b>35</b>	<b>36</b>	<b>43</b>	<b>51</b>
<b>Other Eastern Wheatbelt hospitals</b>						
Total surgical/procedural	9	<5	<5	9	10	10

\* Procedural includes scopes and dental extractions and restorations.

Source (historic): Hospital Morbidity Data System via Clinical activity modelling

Source (Merredin projected): WACHS Inpatient Demand Modelling Pivot. Projections based on ABS Series B+

Source (Other projected): AIM (HARDS) 2007/08 modelling tool, based on ABS series C– to be used as a guide.

### Recommended strategies for service reform - Surgical Services

- Merredin Hospital to review its Level 3 role delineation surgical service given it is unlikely to be able to reliably and sustainably achieve this level of service.
- Provide greater access to visiting surgical specialities including ENT, ophthalmology, anaesthetists, oncology and cardiology (including via Telehealth).
- Promote new Medicare items to support the use of telehealth.
- Utilise telehealth for post-operative care to reduce the need for patient transport.
- Introduce workforce reform initiatives to sustain service delivery as per *Section 7*.
- Advocate to the Department of Health WA and WACHS Area Information Services to establish shared electronic medical records.



### 6.4.3 Obstetric Services

#### Current service model

##### *Merredin Hospital Clinical Services Framework role delineation – Level 1*

Level 1 obstetric service should provide:

- No planned births
- Inpatient care following birth elsewhere, if required
- Antenatal, postnatal care carried out by visiting public, ACHHO or RFDS GPs with or without the assistance of Aboriginal health workers, or RNs/RMs depending on the type of patient care needed.

Obstetric birthing services are only provided at Narrogin and Northam Hospitals within the Wheatbelt. The majority of emergency maternity referrals in the Wheatbelt are referred to Narrogin as it is the only facility in the region with the capacity to perform emergency caesareans.

Merredin Hospital is only required to operate as a Level 1 obstetric service and therefore only provides a very limited service. This current role delineation is causing a number of gaps in essential services within the area and many of these are highlighted below. All high risk deliveries are transferred to Perth metropolitan hospitals.

#### Activity summary

##### *Current and projected activity*

- Historical and projected obstetric services at Merredin Hospital are outlined in the table below. The actual obstetric activity at Eastern Wheatbelt hospitals has remained fairly stable between 2007/08 and 2009/10 and is projected to remain below 30 deliveries per year between 2011/12 and 2021/22.

**Table 33: Eastern Wheatbelt hospitals: Recent and projected deliveries (2007/08 – 2021/22)**

Hospital	Actual separations			Projected separations		
	2007/08	2008/09	2009/10	2011/12	2016/17	2021/22
<b>Merredin Hospital</b>						
Total	18	22	16	22	25	27
<b>Other Eastern Wheatbelt hospitals</b>						
Total	22	27	8	23	25	26

*Note: small numbers are not shown to ensure confidentiality.*

*Source (historical): Hospital Morbidity Data System via Clinical activity modeling.*

*Source (Merredin projected): WACHS Inpatient Demand Modelling Pivot. Projections based on ABS Series B+*

*Source (Other projected): AIM (HARDS) 2007/08 modelling tool, based on ABS series C- to be used as a guide only.*

## Obstetric patient flows

- The majority of public and private Eastern Wheatbelt residents deliver in North Metropolitan Health Service hospitals and private facilities as shown below.

**Table 34: Eastern Wheatbelt resident obstetric inpatient separations, 15 years + (2009/10)**

Area	Hospital	Residents' Total Separations 2009/10	% of Total Public & Private Separations	% of Total Public Separations
WACHS Eastern Wheatbelt	Merredin	13	6%	9%
	Other	6	3%	4%
<b>Sub-total (WACHS – Eastern Wheatbelt)</b>		<b>19</b>	<b>9%</b>	<b>13%</b>
Other Wheatbelt District	All	35	17%	24%
Other WACHS Regions	All	8	4%	6%
<b>Sub-total ( All WACHS)</b>		<b>62</b>	<b>30%</b>	<b>43%</b>
South Metropolitan Area Health Service	All	13	6%	9%
North Metropolitan Area Health Service	All	67	32%	46%
Child and Adolescent Health Service	All	<5	-	-
<b>Sub-total (metro)</b>		<b>80</b>	<b>38%</b>	<b>56%</b>
Total Public*		142	68%	100%
Private	All	66	32%	
<b>Total (Private and Public)</b>		<b>208</b>	<b>100%</b>	

Source: Hospital Morbidity Data System via Clinical activity modeling.

### Recommended strategies for service reform - Obstetrics Services

- Consider a model of care for antenatal and postnatal care, similar to the pilot undertaken in the Southern Wheatbelt Health District whereby a child health nurse delivers antenatal and postnatal services to the community.
- Develop improved recruitment and retention strategies to maintain midwives and child health nursing staff.
- Utilise video-conferencing to provide antenatal, postnatal and parenting education and support to the community.
- Expand parenting support, such as midwifery, lactation, physiotherapy and education via video conferencing and WA Health web based approved applications such as Skopia at smaller sites and directly to patient's homes.
- Improve ICT systems, such as STORK and patient held computers that allows them to be supported by Telehealth at home.
- Promote shared care opportunities and the uptake of telehealth by obstetricians for higher risk patients so that antenatal care can be provided locally.
- Introduce other workforce reform initiatives to sustain service delivery as per Section 7.
- Advocate to the Department of Health WA and WACHS Area Information Services to establish shared electronic medical records.

#### 6.4.4 Paediatrics services profile (0 – 14 years)

##### Current service model

###### *Merredin Hospital Clinical Services Framework role delineation – Level 3*

Level 3 paediatric services offer:

- Designated paediatric ward, including short stay.
- Inpatient medical care by GP or paediatrician.
- On-call paediatric advice.
- Outpatient care by visiting paediatrician.
- Limited surgery by visiting paediatric surgeon or surgeon with paediatric skills.
- Day surgery, uncomplicated elective surgery and emergency surgery.
- Access to some allied health services.

Given that there are no visiting paediatric services, Merredin Hospital does not fully achieve its intended role delineation in this area. Currently there is no designated Paediatric Unit within the Wheatbelt area, however Merredin Hospital does provide some paediatric services and has the capacity to admit children to the hospital.

Paediatric patients with complex needs are referred to Princess Margaret Hospital in Perth to receive inpatient care.

##### Activity summary

###### *Current and projected activity*

- Paediatric inpatient activity across Eastern Wheatbelt hospitals almost halved between 2007/08 and 2009/10.
- The vast majority of paediatric activity at Merredin is medical activity (more than 95% in each year).
- Demand for services in regional areas, particularly for paediatric care is highly episodic and seasonal.
- The projected paediatric activity for Merredin Hospital is anticipated to decrease and remain below 230 separations a year.

**Table 35: Eastern Wheatbelt hospitals: Paediatric services activity (0-14 years)**

Hospital	Actual separations			Projected separations		
	2007/08	2008/09	2009/10	2011/12	2016/17	2020/21
<b>Merredin Hospital</b>						
Total	110	58	58	101	96	91
<b>Other Eastern Wheatbelt hospitals</b>						
Total	141	118	61	121	107	96

Source (historical): Hospital Morbidity Data System via Clinical activity modeling.

Source (Merredin projected): WACHS Inpatient Demand Modelling Pivot. Projections based on ABS Series B+

Source (Other projected): AIM (Harden) 2007/08 modelling tool, based on ABS series C- to be used as a guide only.

### Recommended strategies for service reform - Paediatric Services

- Paediatric services will remain at Level 3 role delineation to 2020.
- Work to establish greater paediatric services for the district, including visiting specialty paediatric services.
- The trend for paediatric patients to receive high levels of inpatient care at Princess Margaret Hospital is expected to continue.

## 6.4.5 Mental health inpatient service profile (including Alcohol and Other Drugs)

### Current service model - adult and older adult emergency and inpatient services

#### Merredin Hospital Clinical Services Framework role delineation – Level 3

Level 3 adult and older adult mental health inpatient and emergency services offer:

- Emergency assessment capacity.
- Capacity for non-authorized mental health treatment only.
- Admission and management by GP or other medical officers.
- Capacity to cope with acutely unwell pending transfers.

However Level 3 services are not expected to provide specialist mental health professionals on site and only expected to provide:

- Limited assessment and treatment for severe and persistent mental health conditions.
- Limited access to mental health multidisciplinary team.

Merredin Hospital is currently meeting its role as a Level 3 service. There are three FTE allocated to mental health across the EWHD as well as one 'Stolen Generation' FTE. A clinical psychologist and psychiatrist alternate fortnightly providing 1.5 days service. These sessions are booked months in advance and some are conducted via video-conference. A psychogeriatrician visits the EWHD occasionally.

Under the WA Health *Clinical Services Framework* the role delineation for mental health services will remain at Level 3 for Merredin Hospital.

Child and adolescent emergency mental health services are also currently role delineated as a Level 3 service, however the role delineation for child and adolescent inpatient mental health services is nil. In the *Clinical Services Framework* there is no distinction between the different age groups in the detailed descriptions of the mental health services.

## Activity summary

### Current and projected activity adult and older adult mental health activity (15 years and over)

- There has been an 18% increase in mental health activity of 15 year olds and over for Merredin Hospital between 2007/08 and 2009/10 (12 separations), driven by an increase in *acute psychiatry* activity. This category includes schizophrenia, major affective disorders and other psychiatry (including anxiety disorders, eating and obsessive compulsive disorders).
- Drug and alcohol activity has decreased slightly in both Merredin and other Wheatbelt hospitals.
- There were very few mental health separations of children (<5 at Merredin Hospital in 2009/10).
- Projected mental health activity is anticipated to remain below 50 separations per year at Merredin and 80 separations per year at other Eastern Wheatbelt hospitals from 2011/12 to 2021/22.

**Table 36: Mental health inpatient activity and projections for Merredin & Other Eastern Wheatbelt Hospitals, 15 years + (2007/08- 2009/10)**

Hospital	Actual separations			Projected separations		
	2007/08	2008/09	2009/10	2011/12	2016/17	2021/22
<b>Merredin Hospital</b>						
Acute Psychiatry	21	38	33	21	22	22
Drug & Alcohol	23	18	19	23	23	23
<b>Total</b>	<b>44</b>	<b>56</b>	<b>52</b>	<b>44</b>	<b>44</b>	<b>45</b>
<b>Other Eastern Wheatbelt hospitals</b>						
Acute Psychiatry	48	46	48	48	49	52
Drug & Alcohol	26	17	17	26	27	27
<b>Total</b>	<b>74</b>	<b>63</b>	<b>65</b>	<b>73</b>	<b>76</b>	<b>79</b>

Data includes acute mental health and drug and alcohol ESRGs.

Source (historical): Hospital Morbidity Data System via Clinical activity modelling

Source (Merredin projected): WACHS Inpatient Demand Modelling Pivot. Projections based on ABS Series B+

Source (Other projected): AIM (HARDS) 2007/08 modelling tool, based on ABS series C- to be used as a guide only.

### Acute mental health service patient flow

- In 2009/10 there were 171 adult mental health separations of Eastern Wheatbelt residents from all health facilities in WA.
- Six in ten (94) of these residents received their public health care from Eastern Wheatbelt facility, giving a public mental health self-sufficiency for local mental health care of 64.4%.
- Almost half of these residents received their care at Merredin Hospital.

**Table 37: Eastern Wheatbelt resident mental health inpatient separations, 15 years + (2009/10)**

Area	Hospital	Residents' Total Separations 2009/10	% of Total Public & Private Separations	% of Total Public Separations
WACHS Eastern Wheatbelt	Bruce Rock	5	3%	3%
	Corrigin	5	3%	3%
	Kellerberrin	9	5%	6%
	Kununoppin	12	7%	8%
	Merredin	44	26%	30%
	Narembeen	<5	-	-
	Southern Cross	7	4%	5%
	Quairading	12	7%	8%
<b>Sub-total (WACHS – Eastern Wheatbelt)</b>		<b>94</b>	<b>55%</b>	<b>64%</b>
Other WACHS	All	<5		
<b>Sub-total (All WACHS)</b>		<b>94</b>	<b>55%</b>	<b>64%</b>
South Metropolitan Area Health Service	All	19	11%	13%
North Metropolitan Area Health Service	All	33	19%	23%
<b>Sub-total (metro)</b>		<b>52</b>	<b>30%</b>	<b>36%</b>
<b>Total Public*</b>		<b>146</b>	<b>85%</b>	<b>100%</b>
Private	Metro	25	15%	
<b>Total (Private and Public)</b>		<b>171</b>	<b>100%</b>	

*Note: Includes acute mental health and drug and alcohol ESRGs.  
Source: Hospital Morbidity Data System via Clinical activity modeling.*

### Recommended strategies for service reform - Inpatient Mental Health Services

- Increase primary mental health care capacity within the intentions of SIHI (Stream 2) which could in reach into inpatient services.
- Investigate strategies to improve patient transport/transfer options (e.g. mental health retrieval team, volunteer patient transport model).
- Explore the opportunity to enhance capacity in supporting non-authorised inpatient mental health admissions at Merredin Hospital through the adoption the Narrogin model of two FTE enrolled nurses for two mental health inpatient beds to increase care closer to home and reduce transfers.
- Access to 24 hour mental health services and support.

### Recommended strategies for service reform - Inpatient Mental Health Services

- Promotion of Rural Link after-hours mental health service to stakeholders and greater use of video conferencing by Rural Link, including on-call psychiatrists.
- Provide capacity to provide in patient alcohol and detoxification services.
- Further investment into dual diagnosis where people have both a mental illness and a drug and/or alcohol problem. Consideration of a dedicated dual diagnosis role and all mental health staff to be trained in drug and alcohol and vice-versa.
- Introduce workforce reform initiatives to sustain service delivery as per *Section 7*.
- Advocate to the Department of Health WA and WACHS Area Information Services to establish shared electronic medical records.
- Provide telehealth enabled rooms when upgrading hospitals to allow greater uptake of telehealth and eHealth services to increase access to treatment, supervision, assessment and training.

#### 6.4.6 Palliative care services profile

##### Current service model

##### *Merredin Hospital role delineation – Level 3*

Level 3 palliative care services should offer:

- Inpatient care by an accredited GP.
- 24 hour cover by a clinical nurse with experience in palliative care services.
- Outpatient care by visiting general physician and possible palliative care specialist by Telehealth.
- Access to some allied health services.
- Consult liaison services for inpatients.

Inpatient palliative care services are provided as part of the medical ward establishment of beds in Merredin Hospital. Silver Chain provides a linked community based palliative care service under contract to WA Health. The outpatient palliative care service is provided by the Rural Cancer Nurse Coordinator.

Merredin Hospital is currently meeting its role delineation of a Level 3 palliative care service.

##### Current and projected activity

The recent and projected palliative care activity at Merredin Hospital is presented in the table below. The palliative care separations at Merredin Hospital decreased slightly between 2007/08 and 2009/10 and are projected to remain around 2007/08 levels in the future.

**Table 38: Eastern Wheatbelt Hospitals: Actual and projected palliative care activity, 15 years and over (2007/08 – 2021/22)**

Hospital	Actual separations			Projected separations		
	2007/08	2008/09	2009/10	2011/12	2016/17	2021/22
<b>Merredin Hospital</b>						
Palliative	8	6	<5	9	10	12
<b>Other Eastern Wheatbelt hospitals</b>						
Palliative	12	14	17	14	16	19

Source: Hospital Morbidity Data System via Clinical Activity Modelling Unit.

Source (Merredin projections): WACHS Inpatient Demand Modelling Pivot. Projections based on ABS Series B+ population projections.

Source (Other projections): AIM (Hardes) 2007/08 modelling tool, based on ABS series C– to be used as a guide only.

### Recommended strategies for service reform – Palliative Care

- Explore the feasibility of a family care unit as a sub-acute room to provide palliative care.
- WACHS to work with existing palliative care providers to implement the Cancer and Palliative Network Model of Care.
- Establish a governance structure for palliative care services that reflects the Rural Palliative Care Model as developed by the Cancer and Palliative Care Network.
- Education services to be delivered to cancer/palliative care patients about available treatment at home and/or in local area if their condition was to decline.

## 6.4.7 Sub-Acute and Rehabilitation Inpatient Care

### Current service model

#### Merredin Hospital role delineation – Level 3/4

Level 3/4 rehabilitation services should offer:

- Regular visiting services provided by district/regional allied health staff
- Full time salaried physiotherapy, occupational therapy
- Speech and social work services
- Region referral role
- Limited day hospital program
- Rehabilitation program for both inpatients and outpatients
- Links between regions and designated metropolitan hospitals
- Rehabilitation specialist services with experienced registered nurses, physiotherapists, occupational therapists, speech pathologists and dieticians.



Subacute care is defined as interdisciplinary care in which the need for *care is driven primarily by the patient's functional status* and quality of life rather than the underlying medical diagnosis. It may include care for patients who have multiple diagnoses, none of which is a principal diagnosis.

Merredin Hospital does not currently have a full time salaried physiotherapist or occupational therapist or a social work service and therefore is not currently meeting its role delineation as a Level 3/4 rehabilitation service.

The residential aged care services available to Eastern Wheatbelt residents are outlined in *Section 6.5*.

One of the planned deliverables outlined in the WACHS Operational Plan is to implement the COAG sub acute care National Partnership Agreement.

### Activity summary

The WACHS Planning team has undertaken sub-acute modelling using the projected inpatient activity within select ESRGs, including rehabilitation and neurology but excluding Mental Health.

This modelling considers multiday separations of patients 15 years and over and considers how many sub-acute beds would be required by the projected activity of Merredin Hospital as well as transferring 25% of sub-acute activity from its local network of smaller hospitals. Based on an 80% bed occupancy three sub-acute beds would be required in Merredin Hospital by 2016/17.

### Recommended strategies for service reform - Inpatient Aged Care / Sub-Acute Care Services

- Provision for increased physiotherapy and occupational therapy services across the EWHD.
- Provision for social work service to be introduced at Merredin Hospital.
- Review the number of acute and sub-acute beds required for Eastern Wheatbelt hospitals, so that care requirements meet population need.
- Determine a sub-acute model of care across the Eastern Wheatbelt that meets *Clinical Services Framework* level 3/4 for rehabilitation and is flexible to meet the population needs (aged care) that is supported by appropriate workforce and infrastructure.

## 6.5 Residential aged care services profile

### Current service model

Public residential aged care beds and services are provided on the Merredin health campus as part of the MPS arrangement. There are 20 residential aged care beds (10 low care beds at Berringa Frail Aged Hostel and 10 high care beds at Moorditj Mia Nursing Home).

Table 39 shows the residential aged care beds across the Eastern Wheatbelt.

**Table 39: Residential Aged Care Facilities in the Eastern Wheatbelt District**

Residential Care Facility	Location	High Care Beds	Low Care Beds	Respite Beds	Total
Bruce Rock MPS	Bruce Rock	7	6	-	13
Corrigin MPS	Corrigin	5	10	-	15
Dryandra Hostel	Kellerberrin	-	25	1	26
Kellerberrin MPS	Kellerberrin	5	-	-	5
Kununoppin MPS	Kununoppin	11	-	-	11
Berringa Frail Aged Lodge	Merredin	-	10	1	11
Moorditj Mia Nursing Home Merredin MPS	Merredin	10	-	1	11
Narembeen MPS	Narembeen	7	6	-	13
Southern Cross MPS	Southern Cross	4	6	-	10
Parker House Aged Lodge	Quairading	-	7	-	7
Quairading MPS	Quairading	6	-	-	6
<b>Total</b>		<b>55</b>	<b>70</b>	<b>3</b>	<b>128</b>

Source: WACHS online Bed Numbers pivot and <http://www.agedcareguide.com.au/>

### Activity summary

- Activity recorded in 2009/10 relating to residential care activity at Eastern Wheatbelt hospitals is outlined in the following table. This includes data relating to acute beds being utilised for residential care activity.
- Occupancy of residential aged care beds across the district is high at 91%. Southern Cross has the lowest occupancy rate at 61%, whilst Kununoppin and Merredin have the highest occupancy rates at 99%.
- Commonwealth aged care planning benchmarks for high and low care residential aged care places applied to forecast populations provide another indicator of demand. The current benchmarks are for the provision of 44 high beds and 44 low care beds for every 1,000 people (non-Aboriginal aged 70 years and over and Aboriginal aged 50 years and over). There are not currently Aboriginal projections available for the Eastern Wheatbelt district. Based on the 2021 projected population of all Eastern Wheatbelt residents aged 70 years and over (1727 persons) there will be a need for 152 residential care beds (76 high and 76 low). However, the trend is for people to be cared for in their own home with support via HACC and community aged care packages rather than enter low care facilities. Where sites are part of an MPS



the "cashed out" funding for residential care places can be used based on the community needs and transferred into such community care packages.

- The residential aged care and dementia investment program of the SIHI will help to alleviate this shortfall in aged care places through incentives offered to private providers to expand services in the area.

**Table 40: Eastern Wheatbelt aged care facilities: Residential care activity (2009/10)**

Hospital	Total Residential care		
	Bed-days	No. of designated residential care beds	Occupancy Rate
Bruce Rock	4,450	13	94%
Corrigin	4,586	15	83%
Kellerberrin	1,517	5	92%
Kununoppin	3,955	11	99%
Merredin	7,282	20	99%
Narembeen	4,405	13	96%
Quairading	4,608	13	96%
Southern Cross	2,217	10	61%
<b>Total</b>	<b>33,020</b>	<b>100</b>	<b>91%</b>

Source: WACHS online Bed Numbers pivot.

### Recommended strategies for service reform – Residential Aged Care

- Eastern Wheatbelt to leverage partnerships with private aged care residential providers to increase the number of residential aged care beds as per Stream 6 of the SIHI Initiative.
- Explore options with the local government zone members to provide independent living units (supported and unsupported) and a complex that combines retirement village as well as low and high care.
- Work with Wheatbelt MOU Group and the Wheatbelt Development Commission to develop a new model of aged care for the Wheatbelt that is both centralized for specialty needs (e.g. dementia) and de-centralized for some of the longer term residential care needs. Led by WACHS with private sector inclusion.
- Review the need for the provision of HACC services after hours.
- Explore the need for an Aged care nurse practitioner for the Wheatbelt.
- Increased visits by Geriatrician or via telehealth.
- Increase the capacity for older persons mental health services in the SWHD including visits and telehealth consults by a psychogeriatrician.
- Explore options to deliver aged care assessment and treatment by telehealth.
- Explore options with shires and Medicare Locals to provide access to programs that promote community participation and activities for aged care residents of the small district hospitals.

## 6.6 Clinical support services profile

### 6.6.1 Medical Imaging

#### Current service model

##### *Merredin Hospital role delineation – Level 3*

- Mobile service and limited to x-ray of extremities, chest, abdomen
- Interpreted by onsite doctor/health professional or by electronic means
- On site designated room
- Radiographer in attendance who has regular access to radiological consultation
- Simple ultrasound capacity for foetal monitoring
- Teleradiology facility available

Merredin Hospital is not meeting its role delineation as a Level 3 service as there is currently no capacity for medical imaging staff at Merredin to view images electronically. Merredin Hospital currently has an ultrasound machine, a new Ortho-Pantomogram (OPG) machine, one general x-ray room and one mobile x-ray machine. Patients requiring a CT scan are sent to Northam or Perth. There is capability to provide emergency after hours imaging however appointment times are Monday-Friday 08.30am – 15.00pm. There are two radiographers, one sonographer and one clinical staff member.

Images are initially sent electronically to Global Diagnostics for review. The patient's GP receives an electronic copy of the image report.

#### **Recommended strategies for service reform - Medical Imaging Services**

- Implement digital medical imaging at all Eastern Wheatbelt sites.
- Re-furbish Merredin Hospital to make provision for waiting areas for Medical Imaging services.
- Upgrade equipment to allow for x-rays to be seen on a computer at Merredin Hospital.

## 6.6.2 Pharmacy

### Current service model

#### *Merredin Hospital role delineation – Level 2*

- Service oversight by pharmacist located elsewhere
- Drugs supplied on individual prescription from community pharmacy
- Visiting pharmacist from regional hospital
- Minimal clinical service
- Staff education
- Drugs provided by regional hospital

Overall the Wheatbelt region’s pharmacy service, which is located in Narrogin, achieves the *Clinical Service Framework* level 2 role delineation.

The Pharmacy Department at Narrogin Hospital supplies the Wheatbelt region with both clinical pharmaceutical and supply services to Merredin Hospital and the MPS supplies are ordered by the iPharmacy system and imprest based (weekly). There is a supply clerk at Merredin Hospital who works two hours per day. There is one private pharmacist in Merredin.

#### **Recommended strategies for service reform - Pharmacy Services**

- Implement Pharmacy reform as per Action 15 of the WACHS Operational Plan 2010/11.
- Undertake a regional review of the management and governance processes for provision of pharmacy services to smaller hospitals.
- Review the pharmaceutical/medication planning for patients pre-transfer/discharge from tertiary hospitals to WACHS hospitals.

## 6.6.3 Pathology

### Current service model

#### *Merredin Hospital role delineation – Level 3*

- Specimen collection by RN or GP
- Specimens transmittal to referral laboratory
- Specimen collection by pathology staff
- Able to perform a defined range urgent tests

Merredin Hospital is currently meeting its role delineation of a Level 3 pathology service. PathWest are contracted to provide all pathology services for WACHS.

Pathology services for Merredin are provided by PathWest on-site at Merredin Hospital. Operating hours are 08.30am to 17.00pm Monday-Friday with the capacity for after-hours emergency testing provided through an on-call roster system. Tests carried out on-site include biochemistry, haematology and microbiology tests as well as transfusion medicine and some coagulation testing. There is a pathology collection centre on-site at Merredin. Specimens are sent by courier to Perth where further specialised testing is required.

PathWest provides point of care testing of equipment and training to staff to operate the equipment. This includes blood gas analysers and cardiac readers for Merredin staff.

#### Recommended strategies for service reform - Pathology Services

- Review pathology facility and FTE needs, to meet anticipated increased services at Merredin Hospital and in conjunction with the anticipated pathology requirements of the smaller hospitals in the District.

### 6.6.4 Sterilising Services

#### Current service model

There is a Hospital Sterilising Services Unit (HSSU) at Merredin Hospital which provides a service to six other health sites as well as two external health providers. Equipment is provided to the other sites by courier in secure, allocated containers.

#### Recommended strategies for service reform - HSSU

- Ensure the sustainability of Merredin Hospital's HSSU to allow service provision to be maintained and increased in the future.

### 6.6.5 Infection Control

#### Current service model

Currently, each Eastern Wheatbelt health service site has its own allocated infection control nurse. Merredin Hospital has a dedicated, specific FTE allocation for infection control.

#### Recommended strategies for service reform - Infection Control

- Determine regional need for dedicated Infection Control role.



## 6.6.6 Telehealth and e-health

### Current service model

The Wheatbelt region currently utilises telehealth for staff meetings, staff education, and the receiving of outpatient appointments provided by the metropolitan health services.

The SIHI telehealth investment will provide the opportunity to standardise telehealth venues ensuring that these are clinically appropriate. This will assist with receiving additional services from specialists and other health professionals for patient assessment, follow up and care planning. Additionally it will allow telehealth service delivery to be developed within the region resulting in improved access to healthcare for Wheatbelt health consumers.

Considerable work is being undertaken by the *Statewide Telehealth Service* to establish and deploy improved videoconferencing technologies and supporting systems in a consistent and scalable manner across WA Health Department sites.

The initial focus of telehealth will be:

Clinical Telehealth Service Provision – live, synchronous interaction between two or more locations conducted by videoconference.

Emergency Telehealth – enabling remote monitoring and triage of patients in the acute care setting.

These models will be developed to enable smaller regional sites to link into larger resource centres and / or metropolitan providers in order to access services and advice.

Telehealth can deliver:

- Efficient and cost effective services while improving service access, equity, safety and quality.
- Improved health outcomes through increased service access and support.
- Better education, training and support opportunities for local health care providers and consumers.
- Improved collaboration and communication between health care providers.

### Recommended strategies for service reform - Telehealth Services

- Ensure infrastructure and staffing capacity is available to support the implementation and uptake of new telehealth and ehealth technology that is being implemented through SIHI. As per Stream 5 of the SIHI project employ a Wheatbelt Telehealth Project Implementation Team.
- Plan to have a flexible telehealth system in clinical areas and workstations that facilitates patient and staff engagement. The medical workforce and telehealth initiatives in the SIHI project were seen as key enablers to address the current challenges and to support the existing workforce.
- With the increasing demand for telehealth facilities, the existing infrastructure and capacity to meet demand should be assessed. Staff training and technical support will also need to be considered.
- Utilise telehealth for meetings and identify what other e-technology could make things easier, such as integrated medical records.

### Recommended strategies for service reform - Telehealth Services

- Ensure greater use of telehealth at small hospitals for clinical care, such as assessment and treatment and outpatient appointments and ED assessments, support and monitoring.
- Provide wireless technology across all hospitals.
- Ensure telehealth technology is available and accessible across all hospitals.





## 6.7 Non-clinical support services profile

Acute activity is reducing in the small hospital sites. There is an opportunity to review what services can be consolidated and provided from Merredin Hospital. Any level of discussion regarding this issue should be focussed on improving health outcomes for patients, improving service efficiencies, maximising the use of existing resources at the Eastern Wheatbelt District level.

### 6.7.1 Food Services

#### Current service model

All the Eastern Wheatbelt hospitals have cook fresh kitchen services. Meals are provided for patients, residents, staff, visiting agencies, doctors, visiting medical officers and for meetings and training sessions. The Merredin kitchen also provides meals for the *Meals on Wheels* service 7 days per week.

#### Recommended strategies for service reform – Food Services

- Review the option to introduce a cook chill regional model of service delivery to gain efficiencies in food production.
- Merredin Hospital kitchen requires upgrading. It needs to be larger, requires new equipment and a new and larger cool room.

### 6.7.2 Linen services

#### Current service model

The laundry service at Merredin Hospital is located on-site and operates between 07.00am and 17.00pm. The laundry provides services to all areas of the hospital including ED, theatre, x-ray, PathWest centre and medical centre. The laundry service also extends to the physiotherapist, aged care, acute care as well as for staff accommodation. Merredin laundry service also extends to Bruce Rock and Southern Cross hospitals and private GP rooms. Linen is dispatched and retrieved by the Merredin Hospital driver. Corrigin and Quairading hospitals use laundry services from Northam.

#### Recommended strategies for service reform - Linen Services

- Current linen service delivery model to continue.
- Within the refurbishment of Merredin Hospital, upgrade the laundry which should address the water supply to maximise the capacity of the equipment on site.

### 6.7.3 Engineering and Maintenance / Cleaning and Gardening

#### Current service model

There is a regional Wheatbelt Engineering and Maintenance team based in Merredin that has responsibility for the continuity of essential services to Merredin and the smaller hospitals. There is 2.0 FTE allocated to Engineering and Maintenance comprising a Maintenance Officer and a Building Service Assistant. Engineering technical support, clerical support and general management support is provided from the regional engineering resource hub in Northam.

Other services such as plumbing and refrigeration services are outsourced to local private contractors. A range of other preventative maintenance services are also under contract with outside providers.

Cleaning and gardening services are provided by locally employed WACHS staff at all sites.

#### Recommended strategies for service reform – Engineering and Maintenance / Cleaning and Gardening

- The Merredin workshop needs upgrading and the extra workshop needs to be used for purposes other than storage.
- Upgrade to the air change system is required.
- Explore alternative water supply.
- Provisions made for a new back-up generator.
- Review essential equipment to be linked to back-up generators.
- Upgrades to switchboard and cabling are required.
- Explore the option of an apprentice electrician to help with increasing workload.
- Explore the option of a handyman or PCAs to perform simple tasks such as rubbish removal and changing of light bulbs.

### 6.7.4 Supply Department

#### Current service model

Merredin Hospital has a Supply Department which is supported by the Regional Supply Department at Northam Hospital. The Merredin supply department services the needs of Merredin Hospital and the surrounding hospitals are serviced from the regional supply department at Northam.

#### Recommended strategies for service reform – Supplies

- Provisions to be made to improve the storage and functionality of the service/supply area.

## 6.7.5 Information & Communication Technology

### Current service model

ICT services are based out of Kellerberrin hospital as there is more room there than at Merredin Hospital. Every hospital in the Eastern Wheatbelt has its own server and community health also has its own server. There is Wi-Fi available at Merredin, Kellerberrin and Southern Cross.

#### Recommended strategies for service reform – Information & Communication Technology

- Provisions for on-site ICT technical support.
- Consistent databases be implemented across WACHS to ensure clinicians have access to patient information in a timely manner.
- Wireless ICT access to be provided at all Eastern Wheatbelt primary care sites.
- Future planning of ICT services including the implementation of the WACHS ICT review identifies the need for additional FTE and salary equity.
- Provision made for a separate computer area to access online essentials like policies, ordering and leave forms.
- Explore the idea of shared patient information via electronic medical records.
- Provision for same versions of Microsoft Office installed on all computers.

## 6.7.6 Learning and Development

### Current service model

Human Resources (HR) provide services to the whole of the Wheatbelt. There is currently minimal FTE devoted to Learning and Development (LD) at Merredin. A good partnership exists with Northam and Narrogin hospitals with respect to LD.

Merredin ISHD has no facility for training and therefore finds it hard to attract specialist trainers. The added cost of hiring an external venue also hinders LD. TAFE offers aged care training and there are possibilities with regards to EN/RN training.

#### Recommended strategies for service reform – Learning and Development

- Establish a coordinated approach at the Wheatbelt for training and education including facilities for this.
- Provide an increased level of staff development through a range of professional development programs and support in the use of Telehealth and ehealth technology.
- Undertake a human resource and learning and development review to determine

structure and FTE requirements.

- Within Merredin Hospital refurbishment, provide an appropriate training room with video-conferencing equipment for both internal staff and external providers to use.
- Explore opportunities to *Train the Trainer* with local teachers being provided with health information from health staff to educate school children.

### 6.7.7 Corporate Services

#### Current service model

The WACHS - Wheatbelt Regional Corporate Services are coordinated from Northam. This includes the administration, ICT, clinical governance, human resource, medical records management and financial accountability structures and systems for the Eastern Wheatbelt.

Health Corporate Network (HCN) known as WA Health's shared services centre was established five years ago and provides WA Country Health Service with centralised Employment and Payroll Services. In addition, HCN provides support to components of the finance function.

The Health Information Network was established in 2005 as Health's shared ICT service. HIN provides WACHS with a range of ICT related services, but ICT staff remain managed through WACHS.

#### Recommended strategies for service reform – Corporate services

- WACHS has established an ICT Strategic Plan that will guide developments for the next five years, including equipment investment and application development. Service and workforce implications of establishing electronic medical records and human resource systems will need to be identified.
- Enhance partnerships with HIN for ICT support (e.g. define role delineation and level of collaboration).
- Review departmental ICT needs to manage services, databases and records (e.g. electronic medical records and maternity requires upgrades to STORK).
- Plan for integrated electronic medical records across the continuum of care (e.g. GPs, primary care services, mental health and discharge planning).
- Increase capacity of Human Resources and Occupational Health and Safety to provide support to health services across the Eastern Wheatbelt.
- Undertake a review of human resources and learning and development to determine structure and FTE requirements.
- Review of Eastern Wheatbelt government vehicles to ensure suitability to meet changing models of care. For example, current vehicles do not meet ICT staffing requirements where tools and equipment are also transported.

## 7 OTHER SERVICE DELIVERY ENABLERS

### 7.1 Workforce

Regional and district level workforce planning to attract, retain and nurture the Wheatbelt workforce is the key priority for ensuring the successful implementation of this Service Plan. The Wheatbelt is an ageing workforce which experiences difficulties in sustaining the primary health care services; building up expertise due to low activity in small hospitals and maintaining 24/7 on-call, after-hours and visiting medical and surgical services. Furthermore, WACHS have been unable to fill vacant positions despite funding being available. These issues have many impacts on the availability and sustainability of models of care in the Wheatbelt, particularly the efficiency and effectiveness of patient assessment and care.

Consultation undertaken with stakeholders expressed a need for a comprehensive review of the workforce to develop and implement a strategy to attract, retain and nurture the workforce. This strategy would include:

- Succession planning to build career pathways for staff and graduates.
- Succession planning to ensure staff can work across the Wheatbelt and in areas that require back-filling for staff training or general staff absences.
- Orientation and mentoring programs.
- Continue ‘trans-disciplinary’ types of interventions (e.g. maximizing the use of core skill sets common to allied health) for high need groups of patients.
- Increased access to a range of professional supervision and mandatory / clinical training (e.g. face-to face and via telehealth technologies).
- More opportunities for permanency for casual staff.
- Providing better incentives for staff to remain in rural and remote areas rather than the metropolitan area (e.g. suitable and modern housing for singles and families onsite and offsite and paid overtime).
- Provide short-term self-contained accommodation for visiting specialists, locums and transient staff to access.
- Enhance partnerships with employment networks to extend the reach of recruitment efforts.
- Review workforce models to support new models of care that include assistants in nursing and nurse practitioners.

Concurrent to this is the need to employ and nurture Aboriginal people through all levels of the health system. This would also include the development of traineeships and mentoring to increase recruitment of Aboriginal people.

#### Recommended strategies for service reform – Workforce

- Regional and district level workforce planning to occur as a priority to address issues: succession planning, attraction and recruitment strategies, staff accommodation, professional supervision, staff training (mandatory and clinical) and Occupational Health and Safety.
- Encourage employment of Aboriginal in all levels of the organisation as per WACHS *Aboriginal Employment Strategy* and Department of Health’s *Equity and Diversity Plan*.

## 7.2 Transport and retrieval

Travel and lack of transport is an on-going issue within the Eastern Wheatbelt. The lack of viable patient transport options within the region and to and from metropolitan areas plays a significant role in the health and wellbeing of residents and places a strain on the existing delivery of health services to the Eastern Wheatbelt.

Patients unable to drive or access transport often forego their appointments, compromising their health and increasing their risk of further morbidity. At times, existing staff such as nurses are currently driving patients to these appointments resulting in a shortage of staff at Merredin and smaller sites. This problem is exacerbated when a mental health patient is involved as two staff must accompany the patient. Similarly, when patients require transport from smaller sites to Merredin or metropolitan hospitals via ambulance, it leaves the smaller communities without an ambulance and in some cases, where police are required to escort patients, without a police presence in the area.

There is also a current lack of voluntary transport services. Another issue highlighted is that many volunteer drivers are elderly and a suggestion to include first aid, manual handling and CPR training for drivers was met with resistance by volunteers who did not want to undergo that responsibility. A difficulty in accessing suitable, reliable vehicles and no public transport are also issues facing the transport of patients. Staff report that this is causing residents to leave the area due to a lack of transport facilities to and from health services.

The number and type of transfers are outlined in the following sections.

### *RFDS Inter-hospital patient transfers*

- The following two tables outline the number of inter-hospital RFDS patient transfers from the Eastern Wheatbelt hospitals to metropolitan facilities between 2007/08 and 2009/10.
- In 2009/10, there was a 30% increase in transfers, a third of the transfers were from Merredin Hospital.
- In 2009/10 half (51%) RFDS transfers from Eastern Wheatbelt hospitals were to Royal Perth Hospital, followed by one in five (20%) to Sir Charles Gairdner Hospital.

**Table 41: Eastern Wheatbelt hospitals: RFDS transfers (2007/08-2009/10)**

Hospital (transfer from)	2007/08	2008/09	2009/10
Merredin	98	98	110
Southern Cross	75	53	63
Bruce Rock	10	15	36
Corrigin	11	24	33
Other	77	98	152
<b>Total</b>	<b>250</b>	<b>249</b>	<b>325</b>

*Data includes unqualified neonates and boarders. Excludes emergency evacuations funded by the Commonwealth.*

*Source: WACHS RFDS pivot, extracted 28th July 2011.*

**Table 42: Destination of RFDS Transfers from Eastern Wheatbelt, 2009/10**

Hospital (transfer to)	2009/10
Fremantle Hospital	14
Royal Perth Hospital	167
Sir Charles Gairdner Hospital	66
King Edward Memorial Hospital	11
Princess Margaret Hospital	37
Other	30
<b>Total</b>	<b>325</b>

Data includes unqualified neonates and boarders. Excludes emergency evacuations funded by the Commonwealth.

Source: WACHS RFDS pivot, extracted 28<sup>th</sup> July 2011.

### Other inter-hospital patient transfers

- The non-RFDS inter-hospital patient transfers are highlighted below. This includes transfers via ambulance, health service owned transport or helicopter evacuation.
- Note: ambulances transfers associated with the RFDS transfers above are excluded in the following tables.
- In 2009/10, there were 285 of these transfers from Eastern Wheatbelt hospitals, with 50 of these being from Merredin Hospital.
- In 2009/10, 46% of the non-RFDS transfers from Eastern Wheatbelt hospitals were to Wheatbelt facilities (hospitals and nursing homes). Half the transfers (47%) were to metropolitan facilities, with Royal Perth Hospital receiving the largest number (27 or 8% of all transfers).

**Table 43: Inter-hospital Transfers 2009/10**

Hospital (transfer from)	Type	2009/10
Merredin	Ambulance	<5
	Hospital Transport	19
	Helicopter Evacuation	<5
	Other*	28
	<b>Sub-total</b>	<b>50</b>
Other (excludes nursing posts)	Ambulance	66
	Hospital Transport	<5
	Helicopter Evacuation	<5
	Other*	164
	<b>Sub-total</b>	<b>235</b>
<b>Total^</b>		<b>285</b>

Data includes unqualified neonates and boarders.

Includes transfers to acute hospitals, psychiatric hospitals and nursing homes. Excludes transfers from residential aged care facilities and nursing posts.

\* Other includes private/public transport, police and other.

^Total includes the small numbers suppressed in the table.

Source: WACHS online ED pivot and WACHS online ATS pivot, as at 28th July 2011.

Note: Ambulances include volunteer, community or hospital owned ambulances, but exclude instances where an ambulance is used in conjunction with RFDS, other plane or helicopter.

**Table 44: Destination of non RFDS inter-hospital transfers from Eastern Wheatbelt, 2009/10**

Region	Hospital (transfer to)	2009/10
<b>Transferred from ED</b>		
Wheatbelt	Merredin Hospital	63
	Northam Hospital	14
	Narrogin Hospital	10
	Other Wheatbelt Hospital	8
Other WACHS		<5
Metro	Royal Perth Hospital	14
	Princess Margaret Hospital	11
	Other^	46
<b>Transferred from inpatient</b>		
Wheatbelt	Merredin Hospital	15
	Berringa Frail Aged Hostel	10
	Wogerlin House Hostel (Aged Care)	7
	Kununoppin Hospital	5
	Other Wheatbelt	10
Other WACHS		<5
Metro	Royal Perth Hospital	13
	Sir Charles Gairdner Hospital	10
	Other^	42
<b>Total</b>		<b>285</b>

Data includes unqualified neonates and boarders.

Includes transfers to acute hospitals, psychiatric hospitals and nursing homes. Excludes transfers from residential aged care facilities and nursing posts.

^Includes not stated.

Source: WACHS online ED pivot and WACHS online ATS pivot, as at 28th July 2011.

### Recommended strategies for service reform – Transport

- Explore patient transport options to enhance access to care when patient transport is an issue.
- Investigate an initiative by St. John Ambulance and the police to ‘leap frog’ long patient transfers through towns to share the transfer and workload.
- Explore feasibility of a hospital transport service with paid drivers and appropriate vehicles to take all low acuity patients, including bariatric patients to and from health settings.



### 7.3 Cultural security

Eastern Wheatbelt health services and facilities need to be culturally appropriate for the catchment area's Aboriginal population. This will work towards ensuring Aboriginal people receive appropriate care at the right time in the right setting and would align with the intentions of Commonwealth and State Government policies.

### 7.4 Staff accommodation

There is currently accommodation on-site and adjacent to the Merredin health campus. There is a nurses quarters which comprises six bedrooms with shared living areas, bathrooms and kitchens. In addition, there are four houses available for staff. There is one four bedroom house and three three bedroom houses. There are also two units available. These units are both two bedroom units.

There are two Government Regional Officers Housing (GROH) settings available. There is a three bedroom house and a two bedroom unit. There is also three leased houses in Merredin for Population Health staff and a shire owned five bedroom house as a doctors dwelling.

Despite this, the consultation process identified that there is a need to improve access to accommodation as a means of recruiting and retaining staff. The current nurse's quarters are quite old and not suitable for couples/families and are high maintenance. A self-contained on-site motel style accommodation provision was seen as an ideal set-up to house transient staff, short-term contract staff, locums and students. Many staff do not have their own form of transport and hence on-site accommodation is a convenient, safer option for them.

### 7.5 Disaster preparedness and response

The CSF recommends Merredin Hospital operate as a Level 4 service (Department of Health, 2010a). This equates to a Group 3 rating in WA Health Capital Works Program's *Redundancy and Disaster Planning Guidelines*. The full requirements are listed online ([www.public.health.wa.gov.au/cproot/2540/2/Redudancy%20and%20Disaster%20Planning.pdf](http://www.public.health.wa.gov.au/cproot/2540/2/Redudancy%20and%20Disaster%20Planning.pdf)) and include strategies to enhance security across the sites. Refurbishment of Merredin Hospital should include the opportunity upgrade facilities for greater compliance to Government Policy.

### 7.6 Contemporary facility design

Future redevelopment of the Wheatbelt sites should align with the *Australasian Health Facility Guidelines* and various building codes and guidelines of Australia to ensure the facilities are contemporary and able to meet modern best practice models of care. The list of upgrades highlighted during service planning is detailed in Section 10.

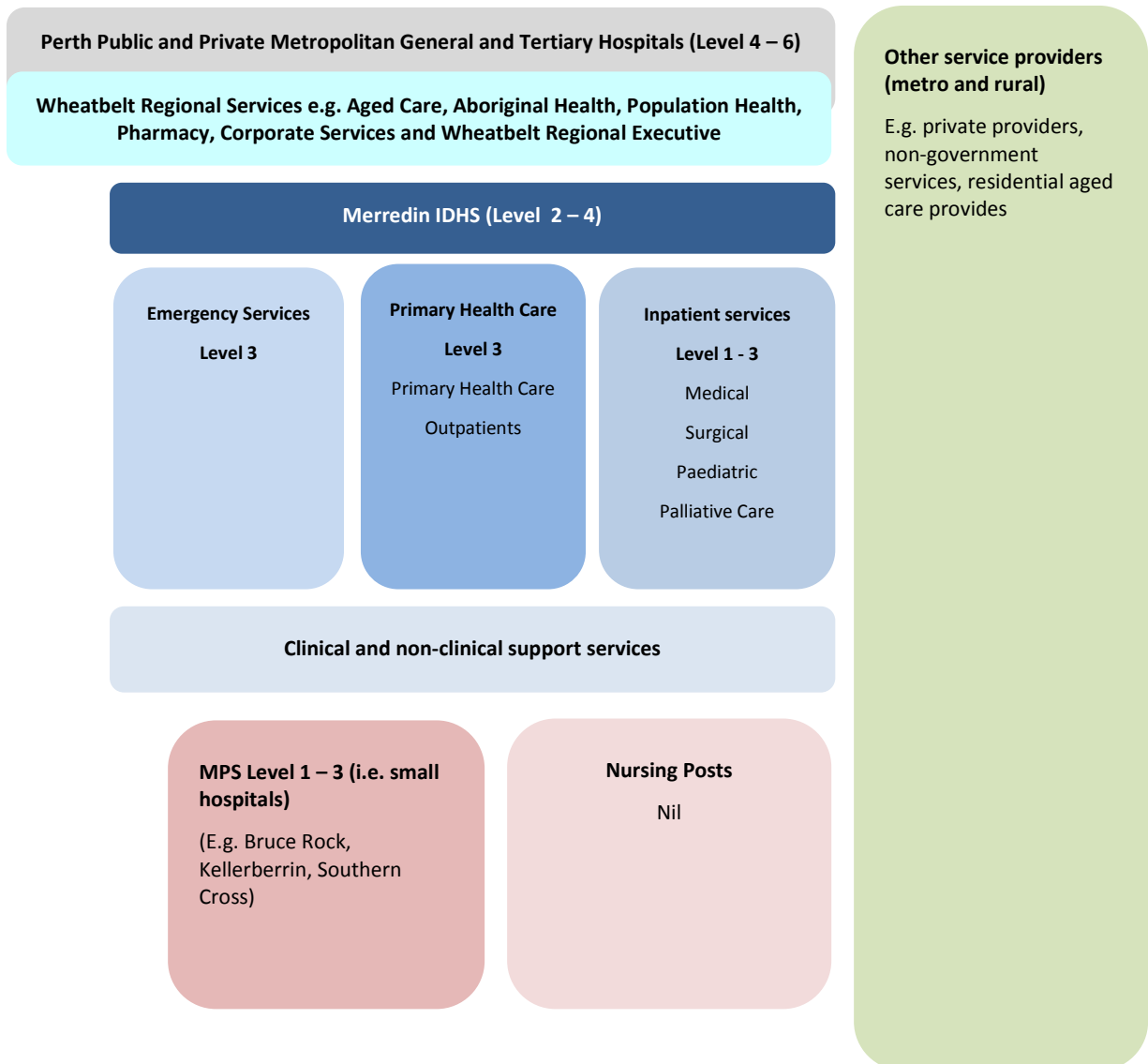
## 8 PROPOSED FUNCTIONAL MODEL OF CARE

The following section provides a visual representation of the proposed functional model of care for Eastern Wheatbelt.

In developing the functional model, it has been essential to consider the range of services to be provided across the district, patient flows within the district; intraregional flows and the relationship with metropolitan and private healthcare facilities.

The following figure provides an overview of the proposed clinical services available in Eastern Wheatbelt and the interrelationships between Merredin, the greater Wheatbelt Region and Perth.

**Figure 14: Future Functional Model of Care for Eastern Wheatbelt**





## 9 CONCLUSION

This Service Plan is the outcome of extensive research and consultation with WACHS and their stakeholders to set the strategic direction for service delivery across the Eastern Wheatbelt for the next ten years.

The strategic directions and recommendations for service delivery outlined in this service plan will enable the WACHS to better manage demand for services, improve efficiencies in patient care, meet the needs of the local catchment area and ensure alignment with existing policies and strategies, including the SIHI project.

The Plan will also assist in informing the development of future business cases for the potential redevelopment of services. It is essential that this service plan is reviewed as facility planning progresses, new policies are introduced and the needs of the community change.

An ongoing proactive approach to service planning will ensure that healthcare services remain responsive to the rapidly changing community, new policy developments and advances in medical care and technology.

## 10 RECOMMENDATIONS

The following recommendations should be undertaken over the next six to 12 months as planning progresses to Business Case development and beyond.

### Service reform recommendations

- Determine the higher level strategic directions for the Wheatbelt region once the development of service plans for the Western, Southern, Eastern and Coastal Wheatbelt areas is complete and where possible pool resources and efforts to achieve service reform across the Region (e.g. workforce development, patient transport, community midwifery model, sub-acute rehabilitation services and increasing post-acute services).
- Develop an Implementation Plan to identify the key operational activity and tasks arising from the service delivery strategies outlined in this document. This will ensure all key issues arising from the Service Plan are considered to progress service reforms and to enable full achievement of current and future *Clinical Services Framework* role delineations. This includes determining priorities within the Service Plan that align with the funding intentions of the SIHI to ensure priorities are met, including but not limited to:
  - Utilise recurrent funding for medical and emergency services (Stream 1).
  - Establishing a one-stop shop by co-locating primary health care services (including mental health) and outpatient services and on the Merredin Health Campus (Stream 2) by building a Primary Health Care Centre.
  - Utilise recurrent funding for primary health care services (Stream 2) to boost service delivery.
  - Determine Wheatbelt sites that are suitable for Stream 3: Primary Health Care Demonstration Program informed by their historical and projected acute activity levels.
  - Prioritise the redevelopment or refurbishment of small hospitals and nursing posts in the Wheatbelt as per Stream 4 as supported by building condition audits.
  - Employ a Wheatbelt Telehealth Project Implementation Team (Stream 5).
  - Leverage partnerships with private aged care providers to establish residential aged care and respite beds (Stream 6).
- Consolidate the future operational models of care for emergency services and primary health care within the Eastern Wheatbelt.
- Implement the recommendations of the key Commonwealth and State Government policy, including:
  - Provide a two chair satellite outreach renal dialysis service at Merredin Hospital (WACHS Renal Dialysis Plan 2010-2021).
  - Upgrade services and facilities to comply as a Group 4 service for emergency management and redundancy planning.
  - Establish electronic integrated medical records (as per the National Health Reform Agreement).
- Determine the workforce strategy and recurrent cost implications for achieving service reform (workforce model to include a focus on education and training for GPs, medical, nursing and allied health staff).

- Determine the private and inter-governmental partnerships to be formed to enable the future models of care to be established.
- Continue the community engagement model for service planning to ensure services are suitable and culturally secure services for all residents.

### Facility development – Merredin Hospital

- Support the achievement of service reform above by redeveloping selected health facilities across the Eastern Wheatbelt. This includes utilising the funding allocation available from SIHI and other funding sources to improve facilities at Merredin Hospital and other Eastern Wheatbelt MPS sites as required.
- The capital works to the existing building at Merredin Hospital will need to take into account the following areas highlighted during the consultation period:
  - Consider reducing acute inpatient bed capacity to 15 – 16 beds given very low acute bed occupancy currently and into the future and reinvesting funds into additional primary health care services such as domiciliary nursing care, community rehabilitation, chronic disease self-management programs.
  - Construction of new integrated Primary Care Centre at Merredin Hospital to accommodate primary, allied, community, mental and future Aboriginal health services and visiting specialist services and NGO's.
  - Co-locate outpatient facilities with the new Primary Health Care Centre.
  - Co-locate a two-chair public dental clinic in the new Primary Health Care Centre.
  - Co-locate a two-chair renal satellite outreach service in the new Primary Health Care Centre.
  - Provide multi-use consulting rooms at Merredin Hospital for primary health and outpatient services.
  - Review the recommendation to refurbish Merredin Hospital to provide better patient flow and ward design in order to accommodate the needs of mental health patients.
  - Provide a multipurpose room with dual egress, duress and video-conference facilities for use by families, mental health patients, rehabilitation.
  - A shared entrance to the hospital and the new Primary Health Care Centre to enable hospital and primary care administration staff to be co-located creating a centralised administration and patient records area. The shared entrance to take into account cultural sensitivities and child health services.
  - Provide a designated triage area and improve patient access to ED at Merredin Hospital.
  - EDs to have an interview room with dual egress, duress and access to videoconferencing facilities.
  - Disability access required to all services.
  - Therapy specific consulting/treatment rooms to be designed at Merredin Hospital.
  - Provide bariatric equipment at Merredin Hospital.
  - Upgrade to laundry required.
  - Upgrade to kitchen required.
  - Upgrade to administration area required.

- Upgrade to stores area required.
- Designated separate area for computers where access to online policies, ordering systems and leave forms is allowed.
- Appropriate training room with video conferencing equipment – for both in house staff and external training providers to use.
- Ensure ICT bandwidth is upgraded to support telehealth.
- Security upgrades are required, providing capacity to lock down and secure areas at all sites.
- Provide a safe room for staff with duress and communication facilities.
- Consideration for provision of extra room for storage of equipment.

**Table 45: Summary of preliminary facility needs for Merredin hospital**

Services	Current configuration	Future Configuration
<b>Ambulatory Health Care</b>		2 x chair public dental clinic 2 x chair renal dialysis Consult space for outpatients Multipurpose consult rooms Population health
<b>Acute Care Inpatient</b>	24 multiday beds: <ul style="list-style-type: none"> <li>• 22-bed general surgical and medical unit</li> <li>• 1-bed high care unit</li> <li>• 1-bed palliative care unit</li> </ul>	Dependent on consideration of reducing acute inpatient beds
<b>Emergency Department</b>	3 x Treatment Spaces (2 x emergency bays & 1 x procedure room)	3 x Treatment Spaces (2 x emergency bays & 1 x procedure room) Interview room with dual e-gress Designated triage area Consult rooms to be determined
<b>Theatres</b>	1 x theatre	1 x theatre

### Facility development – Eastern Wheatbelt small hospitals

- The capital works to the existing buildings at Eastern Wheatbelt MPS sites will need to take into account the following areas highlighted during the consultation period:
  - Consider the accommodation needs for primary care, allied health and visiting specialist services, including the need for multi-use consulting rooms with dual egress, duress and telehealth capacity and storage.
  - Provide suitable facilities for the management of mental health patients and for paediatric clients.
  - All EDs to have an interview room with dual egress, duress and access to videoconferencing facilities.
  - Disability access required to all services.
  - Therapy specific consulting/treatment rooms to be designed at MPS sites.
  - Provide bariatric equipment at MPS sites.
  - Ensure ICT bandwidth is upgraded to support telehealth.

- Security upgrades are required, providing capacity to lock down and secure areas at all sites.
- Provide capacity for emergency power at all Eastern Wheatbelt sites to allow for essential services to operate when mains power is lost.
- Provision of safe room for staff with duress and communication facilities.

## 11 GLOSSARY

Term	Meaning
<b>Acute care</b>	Care in which the need for treatment is driven primarily by the patient's principal medical diagnosis rather than their functional status.
<b>Admitted patient</b>	Is a person who has been assessed by the treating clinician as meeting at least one of the minimum criteria for admission to an inpatient area and who undergoes the hospital's formal or statistical admission process as either a same-day, overnight or multi-day patient.
<b>Ambulatory health care centre</b>	Is a health facility where ambulatory health care services are provided along with emergency department care and overnight inpatient admissions.
<b>Ambulatory care services</b>	Is a broad term that generally refers to the planned services provided to patients who are able to 'walk in and walk out' on the same-day. Ambulatory care services can include primary health care services, day surgery and outpatients (e.g. wound care and management).
<b>Authorised bed</b>	Authorised under the <i>Western Australia Mental Health Act, 1996</i> to accept involuntary admission to a Mental Health Unit. Unauthorised facilities cannot accept involuntary admissions.
<b>Catchment area</b>	A catchment area refers to the geographical area that a health service will primarily provide services to. It is usually bound by one or more local statistical areas as defined by the Australian Bureau of Statistics.
<b>Clinical support services</b>	Includes services to support the operations of clinical services. Includes pharmacy, medical imaging, central sterilising services and pathology.
<b>Co-located/ Collocated</b>	Co-located services are located together in the one facility. Collocated services are located adjacent to another another or in close proximity to one another, generally in a separate buildings.
<b>Culturally secure</b>	Services or facilities that are culturally appropriate and meet local cultural and religious needs.
<b>Health consumer</b>	A term utilised to refer to individuals who are likely to or are currently accessing WACHS services. Includes inpatients and clients.
<b>Length of stay</b>	The number of days spent in hospital by a patient for a single admission. Calculated as date of separation minus date of admission.
<b>Model of care / service delivery model</b>	A service delivery model is a framework that establishes how particular health care services will be delivered. The model stipulates the key features of a service such the key aim/focus of care provided; type of specialist and general services provided; the preferred strategy for patient management and flow; and the relationships required with other stakeholders to deliver care. One of the key features of the Service Plan is the future service delivery models. These form the foundation for workforce and master planning.
<b>Multi-day patient</b>	Is a patient that was admitted to, and separated from, the hospital on different dates. Therefore, a booked same-day patient who is subsequently required to stay in hospital for one night or more is an overnight patient; a patient who dies, is transferred to another hospital or leaves of their own accord on their first day in the hospital is a same-day patient even if the intention at admission was that they remain in hospital at least overnight.
<b>Non-clinical support services</b>	Includes corporate support, information and communication technology services, supply services, site maintenance, cleaning, kitchen services and laundry services. Services that are required to maintain the safety and comfort of staff, patients and visitors.
<b>Primary health care</b>	Is an aspect of ambulatory health care but is generally first level health care. The term is sometimes used interchangeably with the term primary care although primary care tends to refer to the clinical care provided by GPs. Primary health care gives priority to those most in need, maximises community and individual





Term	Meaning
	<p>self-reliance and participation and involves collaboration with other sectors. It includes:</p> <ul style="list-style-type: none"> <li>• Health promotion</li> <li>• Illness prevention</li> <li>• Clinical treatment and care of the sick</li> <li>• Community development</li> <li>• Advocacy and rehabilitation</li> </ul> <p>Primary health care is provided by general practitioners, practice nurses, primary/community/child health nurses, pharmacists, dentists, allied health professionals, aged care workers, support workers and many other providers across the local, state and federal government sectors, non-government organisations and the private sector.</p>
<b>Primary health care centre</b>	<p>Generally refers to a stand-alone health facility where primary health care services are provided. It would ideally be located in close proximity to emergency department and may be collocated with inpatient, outpatients, minor wound care and diagnostic services. A primary health care centre does not include day surgery services.</p>
<b>Role delineation</b>	<p>Indicates the type and level of services provided by a hospital, as outlined in the WA Health <i>Clinical Services Framework 2010 - 2020</i>.</p>
<b>Same-day patient</b>	<p>A same-day patient is a patient who is admitted and separated on the same day of inpatient admission. May be either a planned booked patient or an unplanned patient transferred from the emergency department. A patient cannot be both a same-day patient and an overnight or multi-day stay patient at the one hospital.</p> <p>The category of same-day is determined retrospectively; that is, it is not based on the intention to admit and separate on the same date. Rather, a patients is deemed to have been a same-day patient, if in retrospect, it can be seen that the patient was admitted to, and separated from, the hospital on the same date. Therefore patients who die, transfer to another hospital or leave of their own accord on their first day in the hospital are included. Booked same-day patients who are subsequently required to stay in hospital for one night of more are excluded and regarded as a multi-day patient. Examples of same-day activity include renal dialysis, colonoscopy and chemotherapy.</p>
<b>Separation</b>	<p>Separation is the most commonly used measure to determine the utilisation of hospital services. A separation equates to a patient leaving a healthcare facility because of discharge, sign-out against medical advice, transfer to another facility/service or death. Separations, rather than admissions, are used because hospital data for inpatient care are based on information gathered at the time of discharge.</p>
<b>Service planning</b>	<p>Is a process of:</p> <ol style="list-style-type: none"> <li>1. Documenting the demographics and health status of a health service's catchment area.</li> <li>2. Recording the current status and projected future demands for the health service.</li> <li>3. Evaluating the adequacy of the existing health service to meet the future demands.</li> </ol> <p>The process involves analysis of current and future population and service data and consultation with a range of internal and external stakeholders to develop the future service delivery models for the identified health campus or site.</p> <p>The key deliverable or outcome of service planning is a Service Plan.</p>
<b>Service plan</b>	<p>A Service Plan will outline the current and preferred future profile for services operating from an identified health campus or site. It will include the context for service delivery including the population profile, future demand, existing policies and strategies and the preferred future service delivery models.</p>
<b>Sub-acute care</b>	<p>Interdisciplinary or multidisciplinary care in which the need for care is driven primarily by the patient's functional status and quality of life rather than the underlying medical diagnosis. It may include care for patients who have multiple diagnoses, none of which can be specified as the principal diagnosis.</p>



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## APPENDIX A: METHOD FOR DEVELOPING THE SERVICE PLAN

Developing the Eastern Wheatbelt Service Plan included Aurora Projects and WACHS undertaking the following methods:

### Project Plan (July 2011)

- A Project Plan detailing the method, consultation process, timeframe, key milestones and budget for the planning process for developing the service plan was negotiated with and signed off by WACHS.

### Literature Review (August – December 2011)

- Key literature including Commonwealth, state and local policies were reviewed to provide direction for service reform as contained *Section 4* in this service plan.

### Data Analysis (August – December 2011)

WACHS Clinical Planning Team provided the following data:

- Demographic data analysis of Estimated Resident Population (population numbers) and Australia Bureau of Statistics Series B+ (population growth).
- Health status activity data obtain from the WA Health and Wellbeing Survey (2009) and various morbidity and mortality databases.
- Actual and projected health service activity from various Department of Health databases.

### Consultation workshops (October 2011)

Round 1 of service planning consultation workshops were conducted with staff of the Eastern Wheatbelt hospitals to determine the district's strengths, emerging issues, areas for improving the existing model of care and opportunities to implement the intentions of the Southern Inland Health Initiative. Workshops engaged representatives from emergency, acute, aged care, primary health care services and clinical and non-clinical support services.

### Validation workshops (November 2011)

A thematic analysis was undertaken of the data collected in Round 1. Validation workshops were held with staff of Round 1 to confirm the outcomes and determine the strategic direction as detailed in this service plan.

### External stakeholder consultation (November 2011)

WACHS conducted a series of workshops with external stakeholders to promote the objectives of the service plan and the Southern Inland Health Initiative and obtain their views for local service reform.

## APPENDIX B: OPERATIONAL STRUCTURE (MERREDIN)

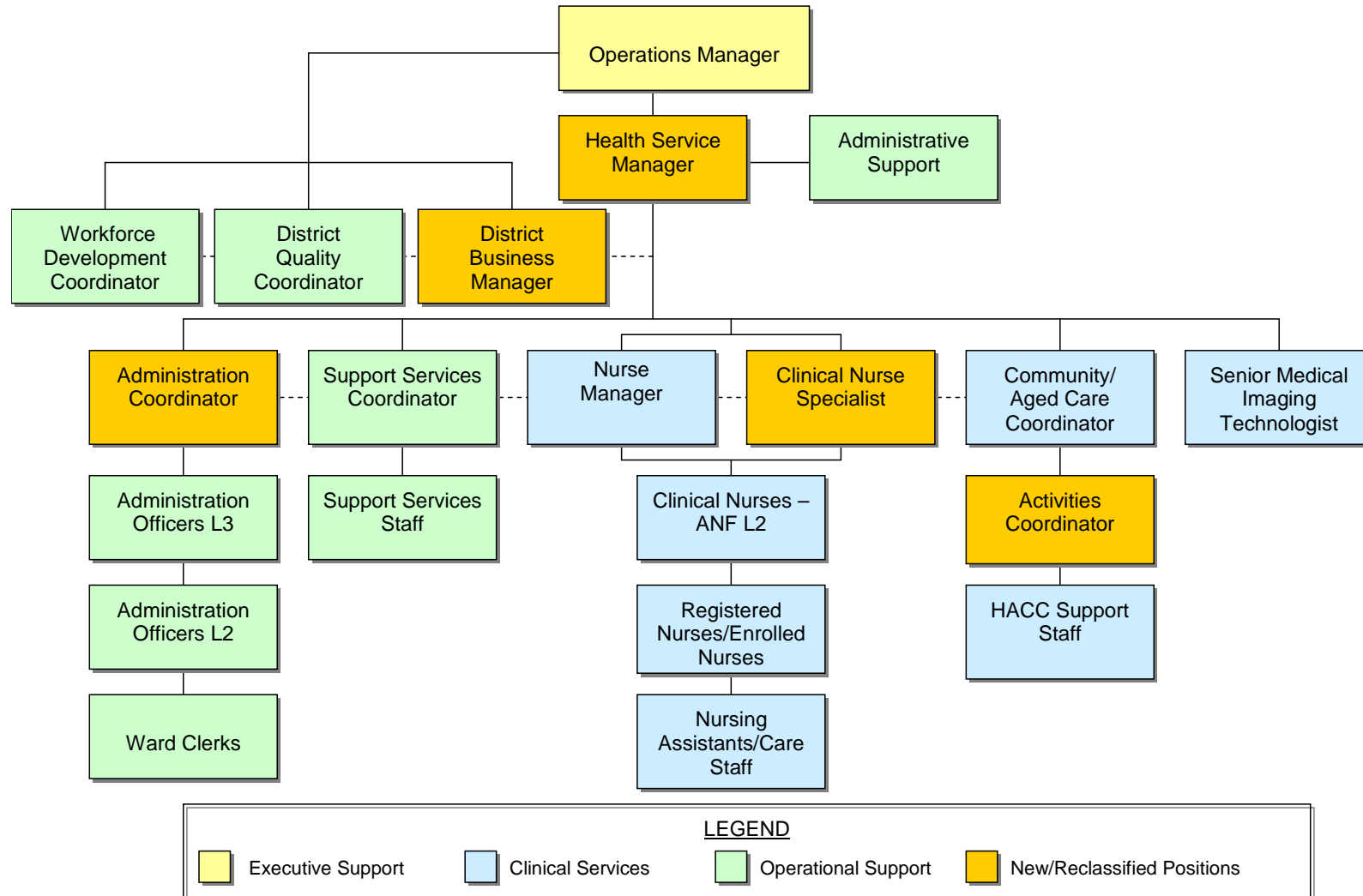
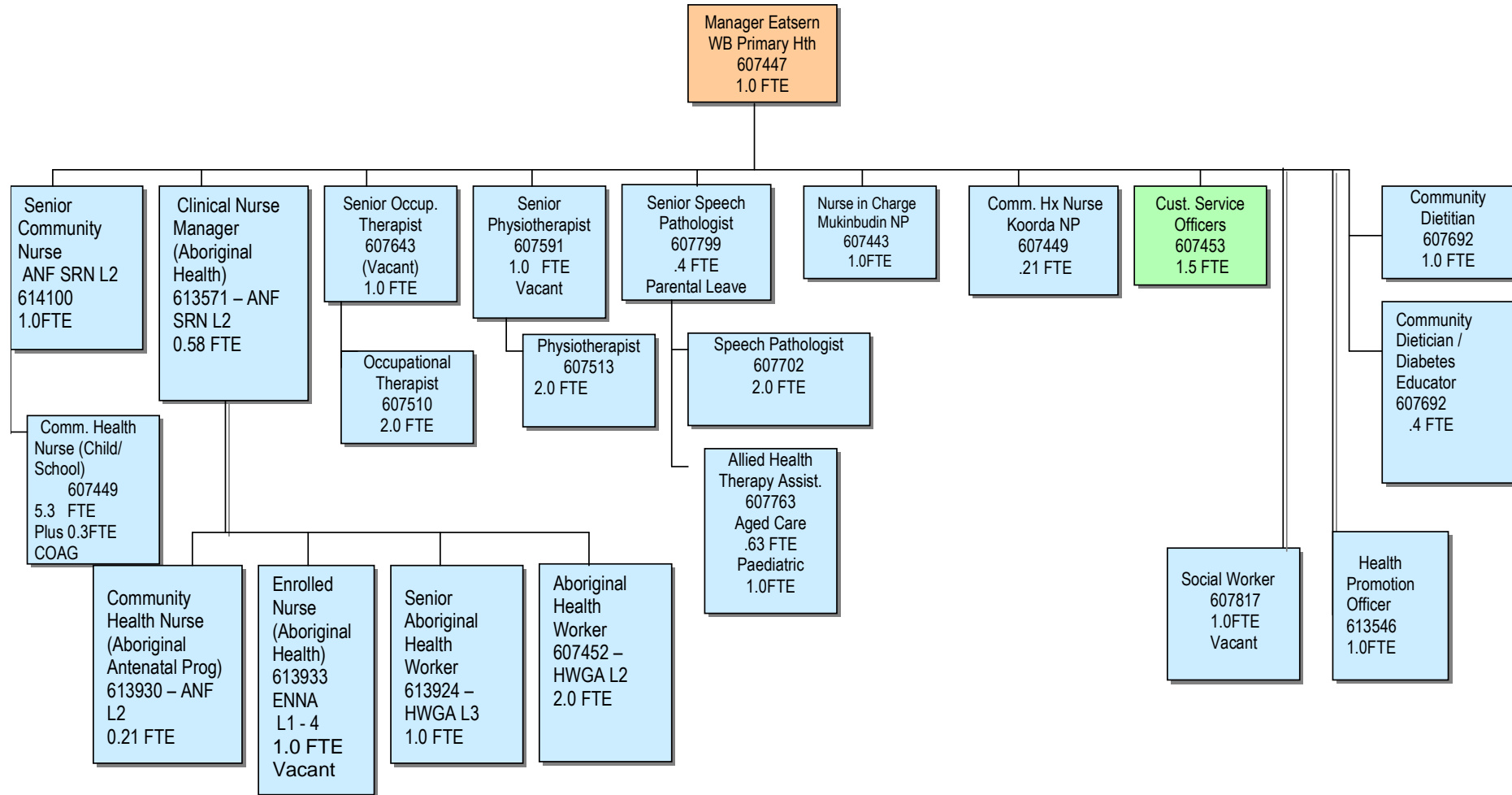
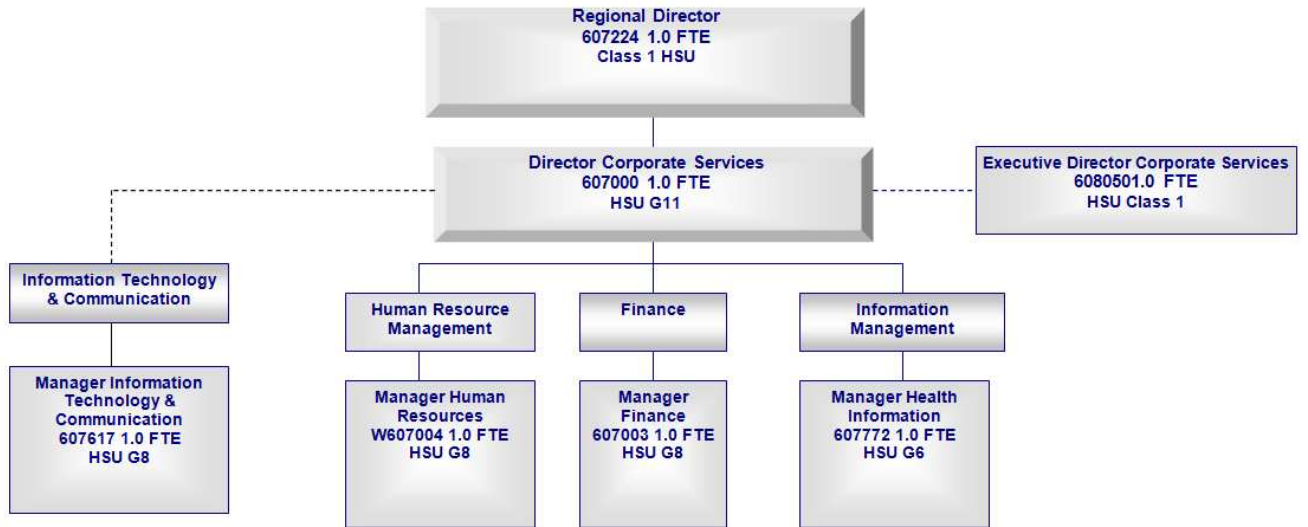


Figure 15: Eastern Wheatbelt Population Health Structure





**Figure 16: Corporate Services Structure**



Source: WACHS Wheatbelt Organisational Structure (14 May 2012).