Service Plan: Jerramungup Shire
Western Australian Country Health Service – Great Southern
Endorsed 30 April 2013
**Corporate Details**

**Project Leader**
Jill Thomas WACHS Great Southern
Jo Thorley Aurora Projects (to First Draft of plan)

**Principal Authors**
Jill Thomas
Daniel Serrano and Jacqui Moran
# Table of Contents

1. Executive Summary ........................................................................................................... 5

2. Introduction and Purpose ......................................................................................................... 9

3. Methodology .......................................................................................................................... 10

4. Strategic Planning Context ..................................................................................................... 12
   4.1. National and State Government Policies ........................................................................... 12
   4.2. Local service planning frameworks .................................................................................... 13
       4.2.1 WACHS Great Southern Clinical Services Plan 2009 .............................................. 13
       4.2.2 WACHS Great Southern Region Health Profile April 2012 ..................................... 13
   4.3. Governance ....................................................................................................................... 17
   4.4. Key Drivers for Change and Strategic Directions for Service Delivery ............................ 19
       4.4.1 Key Drivers for Change ............................................................................................... 19
       4.4.2 Key Priorities identified by Providers and Stakeholders ............................................ 19

5. Demographics and Epidemiology ......................................................................................... 21
   5.1. Overview of the Catchment Area ....................................................................................... 21
   5.2. Demographics .................................................................................................................. 22
   5.3. Factors Influencing Health Status ................................................................................... 23
       5.3.1 Socio-Economic Indexes for Areas (SEIFA) ................................................................. 23
       5.3.2 Australian Early Development Index ........................................................................ 24
       5.3.3 Accessibility/Remoteness Index of Australia ............................................................. 24
       5.3.4 Climate ........................................................................................................................ 26
       5.3.5 Lifestyle behaviors ..................................................................................................... 26
   5.4. Health Status .................................................................................................................... 27
       5.4.1 Lower Great Southern Health Service Utilisation .................................................... 27
       5.4.2 Hospitalisations ......................................................................................................... 27

6. Current and Future Service Delivery Profile ........................................................................... 29
   6.1. Community Based Services ............................................................................................. 31
   6.2. Health Centre Services .................................................................................................... 35
       6.2.1 Current Service Profile ............................................................................................... 35
       6.2.2 Future Service Profile ................................................................................................ 38
   6.3. Clinical Support Services ................................................................................................ 40
   6.4. Non- Clinical Services ..................................................................................................... 41
   6.5. Staff Training and Education .......................................................................................... 41
   6.6 Health Partners ................................................................................................................ 42
7. Identified Strengths and Shortcomings Relating to the Current Service Delivery Model ................................................................................................................................. 45

7.1. Strengths of the Current Service Delivery Model ............................................... 45

7.2. Current Shortcomings/Constraints in Service Delivery ...................................... 46
   7.2.1 Workforce and recruitment and retention issues ........................................ 46
   7.2.2 Increasing demand - forecast population expansion for Jerramungup Shire ...... 46
   7.2.3 Access to Primary Health Services including Dental Care ......................... 47
   7.2.4 Aged Care Services ..................................................................................... 47
   7.2.5 Facility shortcomings ................................................................................. 47
   7.2.6 ICT in Jerramungup Shire ........................................................................ 48

8. Proposed Service Reform Strategies ..................................................................... 49

8.1. Improve access to a range of primary health services and ambulatory care services through partnerships with public, non-government and private service providers ................................................................. 49

8.2. Utilise clinical service redesign methodology to address key service and workforce issues ............................................................................................................. 50

8.3. Utilise information and communications technology (ICT) and Telehealth to provide access to an enhanced range of services .................................................. 51

8.4. Address Facility Issues through business continuity planning and the minor capital works program ................................................................................................. 52

8.5. Address communication in the Shire to provide Health Service information and gain community engagement ................................................................. 53

8.6. Develop a partnership with the Shire of Jerramungup .................................... 53

8.7. Emergency Services partnership development .................................................. 54

8.8. Expand Home and Community Care Services to support positive ageing ........ 55

8.9. Evaluation and monitoring of the Service Plan ............................................... 55

9. Functional Model of Care ....................................................................................... 57

9.1. Proposed Future Functional Model for Jerramungup Shire ......................... 58

10. Conclusion ............................................................................................................. 60

11. References ............................................................................................................. 61

12. Appendices ............................................................................................................ 62

12.1. Staffing Profile for Jerramungup and Bremer Bay Health Centres ............. 62

12.2. Health and Wellbeing Surveillance System Lower Great Southern Health District (adults aged 16 years and over), 2007 to 2010 ............................... 63

12.3. Summary: Commonwealth and Western Australian State Government Policies for WA Country Health Service Planning ....................................................... 65
1. Executive Summary

The purpose of the Jerramungup Shire Health Service Plan is to provide a framework for health care services to meet the current and future health needs of the community. The Shire Service Plan will guide service development and delivery, building partnerships, workforce development/sustainability, Information Technology and asset planning.

Strategic Context

All planning in the WA Country Health Service (WACHS) occurs within a national and state policy context and in a multifaceted funding context.

The Australian health system encompasses public, non-government and private service providers including medical practitioners, nurses, allied health and other health professionals, and services within hospitals, clinics, and government and non-government agencies. ‘Health’ is a complex system supported by a range of legislative, regulatory and funding arrangements, which involves three levels of government, non-government organisations, health insurers and individual Australians (refer to Diagram 1 below).

Diagram 1 Australian health care funding and responsibilities

![Diagram 1](image-url)

**Figure 1.4: Health services—funding and responsibility**

*Source: Australia’s Health 2012, Australian Institute of Health and Welfare (AIHW)*

*Note: Excludes the Aged Care Sector which is categorised 'welfare' by AIHW. Community and Residential aged care services are funded primarily by the Commonwealth and provided by either the public system (e.g. WACHS) or private or non government providers.*
The Commonwealth Government is the largest contributor to health funding primarily through the two national subsidy schemes, the Medicare Benefits Scheme (MBS) and the Pharmaceutical Benefits Scheme (PBS). The Australian Government and state and territory governments also jointly fund public hospital services through the National Health Care Agreement.

Individual community members fund 17 per cent of the total funding (in 2009–10), with private health insurers contributing eight per cent, and accident compensation schemes contributing further five per cent toward health funding.

The formal ‘aged care system’ (Residential aged care and Home and Community Care services) are funded and regulated by the Australian Commonwealth Government.

Aged care delivery (both community and residential) is provided by a range of not-for-profit (religious, charitable and community groups), private sector operators as well as state, territory and local governments (Caring for Older Australians, 2011). The not-for-profit sector delivers approximately 65% of the county’s residential aged care services, with the balance provided by the private sector and governments (Health Directory Australia). There is also significant capital investment by both private, local government and not-for-profit sectors.

Additionally the contribution by family members, carers and community organisations in caring for older people can not be overlooked.

Local Planning Context

The Shire of Jerramungup is located in the Lower Great Southern Health District. It includes a health centre in each of the two main towns - Jerramungup and Bremer Bay. Bremer Bay is a coastal town providing many beaches for recreational activities, including fishing, diving and surfing. The Shire of Jerramungup has a high tourist population, especially in the holiday times (Christmas and Easter).

Key Features of the Catchment Area influencing Delivery of Services

A review of the demography and epidemiology of the Shire of Jerramungup reveals the following additional considerations in the planning for healthcare services:

- The population status to 2021 is projected to remain relatively stable. This provides an opportunity for a community based health promotion and ageing in place focus for health services for the small catchment population of 1083. (Australian Bureau of Statistics Estimated Resident Population 2011).

- There is a significant tourist population, particularly in Bremer Bay over the summer months. During this peak time the population is reported by the community to swell by up to 6,000 people or more, which places additional strain on health services. In 2011, one in four attendances at Jerramungup Health Centre was for patients not residing within Jerramungup postcodes and one in two attendances at Bremer Bay Health Centre were for patients not residing within Bremer Bay postcodes.

- The population of the Shire of Jerramungup may increase in the future due to a proposed magnetite mine located in Wellstead, just 80 km from both Jerramungup and Bremer Bay. It is anticipated that some workers and their families may relocate to Jerramungup and Bremer Bay if the mine proceeds.

- Only approximately half of adults (51.3 per cent) reported having used a dental health care service (Health and Wellbeing Surveillance System for Lower Great
Southern Health District, 2007-2010) which may indicate difficulties in accessing dental care within the catchment area.

- Between 2007 and 2010, one in fifteen adults (6.4 per cent) in the whole of the Lower Great Southern Health District reported having used a mental health care service (e.g. a psychiatrist, psychologist or counsellor) (Health and Wellbeing Surveillance System for Lower Great Southern Health District, 2007-2010). In line with recent trends, it is anticipated there will be increased demand for mental health services, particularly for counselling and drug and alcohol services.

Current Service Profile

The Western Australian Country Health Service (WACHS), Great Southern health care services available to the local community are delivered through the Jerramungup and Bremer Bay Health Centres (Remote Area Nursing Posts). They are part of the WACHS – Great Southern integrated network of health services, supported by Albany Health Campus (AHC), as the network ‘hub’ for services in the Great Southern region.

The Health Centres provide and facilitate medical services, 24 hour, seven day per week emergency response and stabilisation including on call after hours, nursing and medical outpatient services, a range of community health, allied health and population health services; community mental health services and aged care services (refer to section 6).

The following figure shows the total number of service events occurring at both Bremer Bay and Jerramungup (April 2011-March 2012) Health Centres.

A service event is defined as any service performed either on-site at the health centre or performed in a person’s home by a staff member from the health centre.

There were a total of 2,454 service events for Bremer Bay from April 2011 to March 2012 and a total of 985 service events for Jerramungup between April 2011 and March 2012.

Figure 1: Service Events at Bremer Bay and Jerramungup Health Centres by Month

<table>
<thead>
<tr>
<th>Months</th>
<th>Bremer Bay</th>
<th>Jerramungup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr-11</td>
<td>164</td>
<td>109</td>
</tr>
<tr>
<td>May-11</td>
<td>151</td>
<td>114</td>
</tr>
<tr>
<td>Jun-11</td>
<td>152</td>
<td>115</td>
</tr>
<tr>
<td>Jul-11</td>
<td>126</td>
<td>59</td>
</tr>
<tr>
<td>Aug-11</td>
<td>158</td>
<td>71</td>
</tr>
<tr>
<td>Sep-11</td>
<td>178</td>
<td>58</td>
</tr>
<tr>
<td>Oct-11</td>
<td>195</td>
<td>133</td>
</tr>
<tr>
<td>Nov-11</td>
<td>224</td>
<td>66</td>
</tr>
<tr>
<td>Dec-11</td>
<td>308</td>
<td>88</td>
</tr>
<tr>
<td>Jan-12</td>
<td>403</td>
<td>80</td>
</tr>
<tr>
<td>Feb-12</td>
<td>191</td>
<td>18</td>
</tr>
<tr>
<td>Mar-12</td>
<td>204</td>
<td>66</td>
</tr>
</tbody>
</table>

Source: Health Information Manager Great Southern (HCARE)
In 2009/10, Medicare Data demonstrated that there were **5,480 GP services** and 99 GP practice nurse services for residents of the Shire of Jerramungup (Social Health Atlas of Australia, Western Australia, 2011).

These services were not all within the Shire however they do assist in outlining the demand of the shire residents for services.

**Proposed Directions for Service Delivery**

The issues identified in this draft Service Plan, along with consultation processes that have occurred to date between WACHS Great Southern staff and the local community have informed the development of the following proposed directions for service delivery:

- Improve access to a range of primary health services and ambulatory care services through partnerships with public, non-government (NGO) and private service providers and through greater use of Telehealth.
- Utilise Clinical Service Redesign methodology to review service and workforce strategies to ensure that the quality of services provided are safe and sustainable.
- Utilise Information Communication Technology (ICT) and Telehealth to provide enhanced access to a range of services.
- Address facility issues through Business Continuity Planning, the Minor Capital Works Program and the state health infrastructure planning process.
- Address communication across the community to provide health service information and gain community engagement.
- Develop an ongoing partnership with the Shire of Jerramungup.
- Expand Home and Community Care (HACC) Services based on need.
- Develop positive ageing concept including “ageing in place” in line with the current Commonwealth policy Living Longer Living Better.
- Emergency services partnership development with NGOs and private providers.
- Evaluation and monitoring of the final Service Plan.

The information contained within the Service Plan will provide guidance for services in Jerramungup Shire, as they work towards sustainable and safe models of care and service delivery.

Recommendations to address the Service Plan directions are documented in the Proposed Service Reform Strategies Section 8.
2. Introduction and Purpose

WA Country Health Service consists of seven regions including the Great Southern Health Region.

The Great Southern Health Region boundary incorporates the Jerramungup Shire and within the Shire, the two Health Centres- Jerramungup and Bremer Bay.

The purpose of the Jerramungup Shire Health Service Plan is to guide service development and delivery, the building of service and resource partnerships, workforce development, sustainability, information technology and infrastructure planning.

A draft Service Planning Report was prepared initially by Aurora Projects and then updated by WACHS – Great Southern Region. It summarises the key service planning issues for health services in the Shire of Jerramungup, including the Jerramungup and Bremer Bay Health Centres.

The key objectives of the Service Plan are:

- outline the planning context for the development of this document;
- provide an overview of the catchment population and their health need, including the demography and epidemiology of the catchment area and demand for services;
- describe the current status of healthcare service delivery in Jerramungup Shire and the anticipated future needs of the catchment area;
- identify the key issues/shortcomings of the current service; and
- propose strategies for improving health service delivery for the local residents of Jerramungup Shire and surrounding areas.
3. Methodology

Aurora Projects on behalf of WACHS Great Southern conducted Service Planning workshops in May 2012 in the Shire of Jerramungup.

During the month prior to planned community consultations, Key Stakeholders were identified and invited to attend a consultation forum during May 2012 in either Bremer Bay (3 sessions offered) or Jerramungup (3 sessions offered) to participate in the development of a Health Service Plan for the Shire of Jerramungup.

The instructions attached to the invitation requested the stakeholders to attend the workshop with information relevant to the survey questions or to return the survey information via email or letter.

No surveys were returned prior to the community consultations.

Key Stakeholders were identified by WACHS Great Southern employees (Nurses in Health Centres, Population Health, Great Southern Nurse Director, Project Officer, Planning Analyst/Research and Evaluation Coordinator) and the Shire of Jerramungup. Identified Key Stakeholders were contacted via email or Telephone.

Key stakeholders included:

- Health Service personnel including Nurse Director, Medical Director, Health Centre Nurses, HACC Coordinator, Population Health Director
- WACHS Great Southern Manager Aged Care
- South West Medicare Local Manager
- WACHS Great Southern Manager Mental Health
- St Johns Ambulance Regional Manager
- Great Southern Development Commission
- The Royal Flying Doctor Service (RFDS)
- Police
- The Jerramungup Shire Chief Executive Officer
- Shire Board members
- Volunteer emergency services personnel
- Local businesses personnel
- Local education providers
- Local early childhood service providers - Bremer Bay and Jerramungup Occasional Child Care Centres
- Sporting Clubs
• General Practitioner

• Community Resource Centres – Bremer Bay and Jerramungup

• Gardiner Parents and Citizens

• Jerramungup and Gardiner Progress Association

• Jerramungup Parents and Citizens

• Southern Ag Care

Several stakeholders also distributed the invitation and survey to their contacts (unknown recipients)

Participation was offered via the workshop, questionnaire, individual meeting, teleconference or email.

Each Key Stakeholder was sent a copy of Jerramungup Shire Catchment Profile Summary and Jerramungup Shire Workshop Questionnaire documents.

Following the workshops several Key Stakeholders contacted Albany Health Service Executive and reported that they had not participated in the community consultation but would now like the opportunity to do so.

Further interview requests were sent to:

• Regional Manager, Primary Health, Country Services, Silver Chain

• WACHS Great Southern Population Health Manager

• Great Southern St John’s Ambulance Manager

• WACHS Great Southern Aged Care Manager

• WACHS Great Southern HACC Project Officer

• WACHS Great Southern Mental Health Manager

• RFDS WA

• Shire of Jerramungup

The Aurora draft plan was updated using data obtained from the follow up interviews.
4. Strategic Planning Context

The development of the Service Plan, for health services in the shire of Jerramungup, has been guided by a number of National, State and Local Government policies and strategic service planning frameworks, as well as the overall future outlook for the Great Southern region. A comprehensive descriptive report called *Summary of National and State Policies* describes all relevant policies and Acts and is available on the WACHS intranet (under planning page) and internet (under publications) and a summary is provided below.

4.1. National and State Government Policies

National and State Government policies and Acts relevant to the *Jerramungup Shire Health Service Plan* and all WACHS health planning projects includes but is not limited to:

<table>
<thead>
<tr>
<th>Commonwealth Government Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A National Health and Hospitals Network for Australia’s Future - Delivering the Reforms</td>
</tr>
<tr>
<td>Council of Australian Governments (COAG) National Indigenous Reform Agreement</td>
</tr>
<tr>
<td>National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003-2013</td>
</tr>
<tr>
<td>Living Longer Living Better aged care reform</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WA Health Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Activity Purchasing Intentions 2012-2013</td>
</tr>
<tr>
<td>WA Health’s Clinical Services Framework, 2010 – 2020</td>
</tr>
<tr>
<td>WA Health Networks and Models of Care</td>
</tr>
<tr>
<td>WA Health, Greening Health, Building and Renovations (2010)</td>
</tr>
<tr>
<td>WA Health Telehealth Strategic Directions (under development)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health 2020: Making it personal and everybody’s business. Reforming Western Australia’s mental health system (WA Mental Health Commission)</td>
</tr>
<tr>
<td>Review of the admission or referral to and the discharge and transfer practices of public mental health facilities/services in Western Australia, Professor Bryant Stokes, AM, July 2012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WACHS Policies and Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towards Healthier Country Communities - WACHS Strategic Priorities 2013 - 2015</td>
</tr>
<tr>
<td>Primary Health Reform in Country WA 2010-2012</td>
</tr>
<tr>
<td>Aboriginal Employment Strategy 2010-2014</td>
</tr>
<tr>
<td>WACHS Mental Health Strategic Directions (2010)</td>
</tr>
<tr>
<td>WACHS ICT Strategy (awaiting endorsement)</td>
</tr>
</tbody>
</table>

The healthcare reform policies outlined in these documents acknowledge that meeting future demand is not purely about increasing the capacity of facilities. Meeting demand is more reliant on reconfiguring service delivery to ensure patients are managed more efficiently and safely.

A summary of these policies is provided in Appendix 4.
4.2. Local service planning frameworks

The following WACHS planning provides specific reference to health services in Jerramungup Shire and have been considered in developing this Service Plan:

- WACHS Great Southern Clinical Services Plan (March 2009); and
- WACHS Great Southern Health Profile (April 2012)
- WACHS Great Southern Operational Plan 2011-12.

4.2.1 WACHS Great Southern Clinical Services Plan 2009

A comprehensive service planning process was undertaken for the development of the WACHS Great Southern Clinical Services Plan (CSP), which sets out the vision and strategic approach for the development of health services in the Great Southern Region.

The CSP outlines a range of strategies to address the challenges of increasing health service demand, chronic disease management and aging related co-morbidities. These include:

- An increased commitment to developing and expanding new models of care – particularly in ambulatory care;
- Improved service integration across the continuum of care as a major regional focus;
- An increased focus and commitment to developing partnerships with relevant stakeholders;
- A commitment to enhancing and maximising the use of health networks, both internal and external to the Department of Health;
- A commitment to improving access to specialist services across the Great Southern region through increased service provision, with appropriate, and better utilisation and application of technology such as Telehealth; and
- Attraction and retention of a skilled workforce which are located in the areas of service need.

The WACHS – Great Southern CSP 2009 acknowledges that significant levels of service reform are required for the Region to continue to safely and effectively manage the current and future health needs of the population.

Specifically, the CSP identified that difficulties exist in recruitment and retention of staff particularly Allied Health and support workers to cover remote areas such as Jerramungup and Bremer Bay.

4.2.2 WACHS Great Southern Region Health Profile April 2012

This document provides a broad overview of the health of the Great Southern region residents and highlights areas that may need to be considered in the
planning of health services within the Great Southern region. Key findings relate to:

**Population**

- The Great Southern health region has an Estimated Resident Population (ERP) of 59,412 in 2010 (this excludes Ravensthorpe).
- Based on *WA Tomorrow, 2012* the region’s resident population is projected to grow by around 25 per cent between 2010 and 2016.
- The region has an Aboriginal population (4 per cent in 2010) with a younger age structure than the non-Aboriginal population.

**Determinants of Health**

- Based on the 2006 census the region has areas with low SEIFA scores.
- Lifestyle behaviours will need to be monitored, particularly those relating to smoking, alcohol consumption, diet, exercise and body mass index.

**Mortality**

Between 2003 and 2007:

- There was no significant difference in the mortality rate of Great Southern residents compared with all residents of the state.
- Diseases of the circulatory system and neoplasms collectively accounted for two-thirds of the deaths of Great Southern residents.

**Emergency Departments**

- In 2010/11 two-thirds of emergency attendances to hospitals within the Great Southern were for semi-urgent or non-urgent cases (Semi urgent and non-urgent categories are triage 4 and 5 presentations to the health service). (See Table 6 page 36 for Triage description).

**Hospitalisations**

Between 2006 and 2010:

- The hospitalisation rate of Great Southern residents was significantly lower than that of the State.
- There was no significant difference in the hospitalisation rate of potentially preventable conditions for Great Southern residents compared with all WA residents.
- In 2010/11, 84 per cent of Great Southern resident’s public hospitalizations occurred within the Great Southern region (this includes any hospital in the Great Southern).

**Aged Care**
• Between 2006 and 2009 a significantly higher proportion of older Great Southern residents reported receiving their five yearly pneumonia vaccinations compared with the State.
Maternal Health

- Between 2004 and 2008 the proportion of Aboriginal Great Southern mothers who were teenagers was higher than the proportion for non-Aboriginal mothers.

- In 2009/2010 almost half of Aboriginal Great Southern women smoked during pregnancy.

Child and Adolescent Health

- Immunisation rates for Great Southern children 12 to 15 months tend to be lower on average than the older age groups, i.e. 24-27 months and 60-63 months. The rate fluctuates below 90 per cent which can compromise herd immunity in this cohort.

- The rate in the 12-15 month age group for the Jerramungup Shire is currently 100 per cent coverage.

4.2.3 WACHS Great Southern Operational Plan 2011-2012

This document provides an overview of the direction of the regional Health service development and includes the following objectives:

- Mental Health patients within the Great Southern receive the appropriate care in the right environment/facility and in a timely manner by appropriately trained staff.

- Providing workforce stability, training and planning across all disciplines clinical and non-clinical in the WACHS Great Southern region

- Improve access of communities to Primary Health Care services

- Development and implementation of integrated risk management framework.

- Compliance with the ACHS EQuIP and Quality Standards

- Medication safety and PBS Reform

- Improving access to aged care services. Provide integrated approach to patient care – promote “seamless patient journey” by consolidating links between all key stakeholders

- Increase the use and expertise in digital technology to improve access to health services to Great Southern region.

- Albany Health Campus Redevelopment

- Progress Capital Works Programs and service planning

- Provide high quality evidence based clinical services across the Great Southern Region
• Refine models of care and referral processes across services to reduce fragmentation and assist in effective service planning

• Improve services to Aboriginal communities and boost Aboriginal employment

• To increase regional executive and senior managers understanding of the ABF model regarding clinical and financial implications for the Great Southern.

4.3. Governance

Great Southern Health Services in Jerramungup and Bremer Bay operate within a regional model, with line management and reporting through the GS Nurse Director based in Albany (See Figure 2) and accountable to the Regional Director.

Jerramungup and Bremer Bay Health Services are both designated Remote Area Nursing Posts. There is a Remote Area Nurse currently employed in Jerramungup and a Nurse Practitioner employed in Bremer Bay.

Jerramungup

The role of Remote Area Nurse (Jerramungup)

The role and scope of practice of Remote Area Nurses (RAN) was developed by the Council of Remote Area Nurses of Australia (CRANA) which defined the RAN as follows:

The remote area nurse (RAN) is a registered nurse whose day to day practice encompasses all or most aspects of Primary Health Care. This practice most often occurs in an isolated or geographically remote location. The RAN is responsible, either solely or as a member of a small team, for the continuous coordinated and comprehensive health care in that location (Knight 1992).

Bremer Bay

The role of Nurse Practitioner (Bremer Bay)

The nurse practitioner at Bremer Bay works in an enhanced role to that of a remote area nurse and is a registered nurse educated to a master’s degree level and authorised to function autonomously and collaboratively in an advanced and extended clinical role.

The nurse practitioner role includes assessment and management of clients using nursing knowledge and skills and may include, but is not limited to, the direct referral of patients to other health care professionals, prescribing medications and ordering diagnostic investigations.

The organisational structure for both Jerramungup and Bremer Bay is summarised in Figure 2.
Figure 2: Current Organisational Chart for Jerramungup and Bremer Bay
4.4. Key Drivers for Change and Strategic Directions for Service Delivery

4.4.1 Key Drivers for Change

The catchment population, current and projected activity, 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 Jerramungup Shire including Jerramungup and Bremer Bay Health Centres:

- The population status to 2021 is projected to remain relatively stable. This provides an opportunity for a community based health promotion and ageing in place focus for health services for the small catchment population of 1083. (Estimated Resident Population 2011).

- There is a significant tourist population, particularly in Bremer Bay over the summer months. During this peak time the population is reported by the community to swell by up to 6,000 people or more. Between March 2011 and April 2012 the number of service events at Bremer Bay doubled during the summer months of December and January from around 150 per month (average seven service events per day) to between 300 and 400 per month (average 10 - 13 service events per day) (refer figure 1). This needs to be managed operationally each year. In 2011, one in four attendances at Jerramungup Health Centre was for patients not residing within Jerramungup postcodes and one in two attendances at Bremer Bay Health Centre were for patients not residing within Bremer Bay postcodes.

- The population of the Shire of Jerramungup may increase due to a proposed magnetite mine located in Wellstead, just 80 km from both Jerramungup and Bremer Bay. It is anticipated if this occurs that many workers and their families may relocate to Jerramungup and Bremer Bay.

- Only approximately half of adults (51.3 per cent) reported having used a dental health care service (Health and Wellbeing Surveillance System for Lower Great Southern Health District, 2007-2010) which may indicate difficulties in accessing dental care within the catchment area.

- Between 2007 and 2010, one in fifteen adults (6.4 per cent) in the whole of the Lower Great Southern Health District reported having used a mental health care service (e.g. a psychiatrist, psychologist or counsellor) (Health and Wellbeing Surveillance System for Lower Great Southern Health District, 2007-2010). In line with recent trends, it is anticipated there will be increased demand for mental health services, particularly for counselling and drug and alcohol services.

4.4.2 Key Priorities identified by Providers and Stakeholders

Consultative workshops with service providers and stakeholders identified specific issues which impact on health service provision in the catchment area. Key issues (in no particular order) identified at workshops and interviews included:
• Improve access to a range of primary health services and ambulatory care services through partnerships with public, non-government (NGO) and private service providers and through greater use of Telehealth.

• Utilise Clinical Service Redesign methodology to review service and workforce strategies to ensure that the quality of services provided are safe and sustainable.

• Utilise Information Communication Technology (ICT) and Telehealth to provide enhanced access to a range of services.

• Address facility issues through Business Continuity Planning, the Minor Capital Works Program and the state health infrastructure planning process.

• Address communication across the community to provide health service information and gain community engagement.

• Develop an ongoing partnership with the Shire of Jerramungup.

• Expand Home and Community Care (HACC) Services based on need.

• Advocate for the Shire and the Great Southern Development Commission develop a positive ageing concept including “ageing in place.”

• Emergency services partnership development with NGOs and private providers.

• Evaluation and monitoring of the final Service Plan.
5. Demographics and Epidemiology

The following section provides an overview of the Jerramungup and Bremer Bay catchment areas, along with a description of the demography and other factors that influence the health status of the local residents.

5.1. Overview of the Catchment Area

Great Southern Region

The Great Southern is the second smallest region in Western Australia and represents about 1.5 per cent of the total State land mass. Albany is the regional centre with other population hubs centred around Katanning, Denmark, Mt Barker, Kojonup, Ravensthorpe and Gnowangerup. The main industries in the region are agriculture, fishing, forestry, mining, tourism and viticulture.

The region incorporates two health districts – the Central and Lower Great Southern.

Shire of Jerramungup

The Shire of Jerramungup is located in the Lower Great Southern Health District. It includes a health centre in each of the two main towns - Jerramungup and Bremer Bay. Jerramungup is 179 km from Albany and Bremer Bay is 180 km from Albany. The two centres are 96 km apart.

Figure 3: Great Southern Health Region
5.2. Demographics

5.2.1 Resident Population

The total Estimated Resident Population (ERP) for the shire of Jerramungup in 2011 is 1083. (53.2 per cent males).

*The population is projected to increase by 0.5 per cent annually to 2016 then decrease by 1.3 per cent annually to 2026. (That is 1,060 persons by 2026).*

The current population of each town site is estimated to be 571 people in Bremer Bay and 480 people in Jerramungup.

The ERP for Aboriginal population of the Shire according to DoH estimates for 2011 ERP is eight people.

![Figure 4: Projected Population of Jerramungup Shire by Age Group](source: WA Tomorrow 2012)

<table>
<thead>
<tr>
<th>Total Population</th>
<th>ERP</th>
<th>WA Tomorrow Band D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
<td>2011</td>
<td>2016</td>
</tr>
<tr>
<td>0 to 4</td>
<td>73</td>
<td>95</td>
</tr>
<tr>
<td>5 to 19</td>
<td>188</td>
<td>200</td>
</tr>
<tr>
<td>20 to 64</td>
<td>722</td>
<td>810</td>
</tr>
<tr>
<td>65 to 69</td>
<td>44</td>
<td>55</td>
</tr>
<tr>
<td>70 to 74</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>75 to 79</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>80 to 84</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>85 and over</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>65+</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1083</td>
<td>1205</td>
</tr>
</tbody>
</table>

WA Tomorrow band D has been approved by Health for WACHS Great Southern use. Population projections are shown above along with 2011 ERP.

This shows the numbers of people aged 65+ years at 100 in 2011 to 95 people by 2021.

With numbers as small as this, it is difficult to accurately predict population growth, either negative or positive.

The resident population of the shire of Jerramungup may increase due to a proposed magnetite mine located in Wellstead just 80 km from Jerramungup and Bremer Bay. There are unknown variables associated with the proposed
development such as a Fly in Fly out workforce that may also influence the population levels.

Other key features of the catchment population include:

- The proportion of people born in Australia in the catchment population is 83.8 per cent compared to 65.3 per cent for Western Australia.
- Unemployment in 2008 was 1.2 per cent for the catchment population compared to 3.1 per cent for Western Australia.
- The total fertility rate for 2005 to 2007 was 2.96 per 1000 women compared to 1.93 per 1000 women for Western Australia.
- Smoking during pregnancy for the mid to late 2000’s was 19.4 per cent compared to 16.4 per cent for Western Australia.
- Voluntary work for an organisation or group in the catchment population was 42.3 per cent compared to 16.8 per cent for Western Australia.

5.2.2 Tourist Population

There is a significant tourist population, particularly in Bremer Bay over the summer months. During this peak time the population is reported by the community to be up to around 6,000 people which impacts on utilisation of health services.

5.3. Factors Influencing Health Status

The following section describes the current health status of the Shire’s community and summarises the factors (or determinants of health) that will influence the health status of residents and visitors now and into the future.

These influences include:

- Level of disadvantage experienced in the community (according to the Socio-Economic Indexes for Areas)
- Australian Early Development Index
- Level of remoteness experienced by the catchment area
- Climate
- Lifestyle behaviours

5.3.1 Socio-Economic Indexes for Areas (SEIFA)

The ABS produces the Socio-Economic Indexes for Areas (SEIFA) which measures the level of social and economic well-being of Australian geographical areas. According to the SEIFA Index of Relative Socio-
Economic Disadvantage,¹ the shire of Jerramungup, with a SEIFA score of 1026, reflects a higher socio-economic status when compared to WA.

A high SEIFA score would indicate fewer households with low incomes and fewer people with no qualifications or in low skilled occupations. However, despite the level of relative advantage in the community there are inevitably pockets of disadvantage whereby residents have limited resources and access to suitable health and human services.

### 5.3.2 Australian Early Development Index

The Australian Early Development Index (AEDI) is a population measure of children’s development as they enter school. Based on the scores from a teacher-completed checklist, the AEDI measures five areas, or domains, of early childhood development: physical health and wellbeing; social competence; emotional maturity; language and cognitive skills (school-based) and communication skills and general knowledge.

AEDI results are reported as average scores (0 is the lowest score; 10 is the highest score) on each of the five domains. AEDI results are also reported as proportions of children on each domain who are considered to be:

- ‘on track’: children who score above the 25th percentile of the national AEDI population are classified as ‘on track’;
- ‘developmentally at risk’: children who score between the 10th and 25th percentile of the national AEDI population are classified as ‘developmentally at risk’;
- ‘developmentally vulnerable’: children who score below the 10th percentile (in the lowest 10 per cent) of the national AEDI population are classified as ‘developmentally vulnerable’.

For Jerramungup Shire, 16.7 per cent (5 children) of children were assessed as being developmentally vulnerable on one or more of the domains including; physical health and well-being (3.3 per cent) [1 child], social competence (3.3 per cent) [1 child], emotional maturity (3.3 per cent) [1 child], language and cognitive skills (10 per cent) [3 children] and communication skills and general knowledge (6.7 per cent) [2 children]. 6.7 per cent [2 children] of 30 children in Jerramungup Shire were assessed as developmentally vulnerable on two or more of the domains.


### 5.3.3 Accessibility/Remoteness Index of Australia

According to the Accessibility/Remoteness Index of Australia (ARIA), the Shire of Jerramungup is categorised as remote, with very restricted accessibility of goods and services and opportunities for social interaction. Jerramungup has a Seniors and Community Bus.

---

¹ Includes the variables of low-income, low educational attainment, high unemployment, and people with low skilled occupations. The baseline for the Index of Disadvantage is 1,000. A score above 1,000 indicates an area of socio-economic advantage, and a score below 1,000 indicates an area of disadvantage. The further the deviation away from 1,000, the greater the level of advantage or disadvantage.
The distances and approximate travel times between Perth, Albany, Jerramungup, and Bremer Bay are highlighted below.

Table 1: Distances and Travel Times: Perth, Albany, Jerramungup and Bremer Bay

<table>
<thead>
<tr>
<th>Distance (km)</th>
<th>Perth</th>
<th>Albany</th>
<th>Jerramungup</th>
<th>Bremer Bay</th>
</tr>
</thead>
<tbody>
<tr>
<td>416</td>
<td>4.5 hours</td>
<td>2 hours</td>
<td>1.25 hours</td>
<td>180</td>
</tr>
<tr>
<td>456</td>
<td></td>
<td>179</td>
<td></td>
<td>96</td>
</tr>
<tr>
<td>556</td>
<td></td>
<td></td>
<td></td>
<td>Bremer Bay</td>
</tr>
</tbody>
</table>

Source: [www.westernaustralia.com](http://www.westernaustralia.com), Google maps

This ARIA Index and table above reinforce the level of isolation and remoteness experienced by local services and residents. Therefore, one of the underlying aims for the future will be to ensure services continue to be integrated within an efficient ‘hub and spoke’ model that provides adequate coverage within the resources provided. Furthermore, to meet the needs of the community, services need to be supported by modern ICT, Telehealth and other support services which enable staff and services to operate in a range of settings across the region.
5.3.4 Climate

The Shire of Jerramungup experiences a mild, temperate climate.

The climate is complementary to its main attractions, particularly Bremer Bay. Bremer Bay is a coastal town providing many beaches for recreational activities, including fishing, diving and surfing. The town attracts many tourists, especially in the holiday times (Christmas and Easter).

5.3.5 Lifestyle behaviors

The WA Health and Wellbeing Surveillance System surveys around 6,000 West Australians regularly. The System examines health and wellbeing indicators including health risk behaviours, prevalence of chronic diseases, health service utilisation and the level of psychological distress.

The Health and Wellbeing Surveillance System results for the Lower Great Southern Health District are attached at Appendix 2. The data is not available for smaller areas and it is important to note that this data may not reflect the more remote area of Jerramungup Shire. The results demonstrate that:

- the district has higher levels of obesity (30 per cent) than the State (26 per cent).
- levels of “lack of control over life” in the district are 6 per cent which are also higher than the State; (4 per cent).
- self-reported levels of diabetes are higher in females of the district (8.3 per cent) than females in the State (5.7 per cent)
- Arthritis has a higher self-reported prevalence than the State, 24 per cent compared with 20 per cent.

While some risk factors showed no significant difference in the prevalence of Lower Great Southern residents compared with the state, the prevalence is still important because these behaviours are modifiable risk factors for chronic conditions.
5.4. **Health Status**

5.4.1 **Lower Great Southern Health Service Utilisation**

The Health and Wellbeing Surveillance System also presents results relating to Health Service utilisation in a particular area. The results for the Lower Great Southern state that between 2007 and 2010 residents reported their health service utilisation in the last year as:

- nine in ten adults (87.7 per cent) reported having used a primary health care service;
- half the adults (51.3 per cent) reported having used a dental health care service;
- one in three adults (31.7 per cent) reported having used a hospital based health care service; and
- one in fifteen adults (6.4 per cent) reported having used a mental health care service (e.g. a psychiatrist, psychologist or counsellor).

5.4.2 **Hospitalisations**

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

A separation from a hospital is defined as “the administrative process by which a hospital records the cessation of an episode of care for a patient within the one hospital stay” (Australian Institute of Health and Welfare 2012).

Across all hospitals in the State in 2010/11 there were 278 separations for Jerramungup Shire residents, comprising 706 total bed days. Of these separations, 37 per cent were in private metropolitan hospitals, 46 per cent in Albany hospital, 13 per cent in metropolitan public hospitals and the remaining 3 per cent in other country hospitals.

The most common reasons for hospitalisation were orthopaedics, colonoscopy and gastroscopy, obstetrics and gynaecology, other surgery, dentistry and chemotherapy.

Jerramungup Shire resident separations from Albany Hospital were 50 per cent same day compared with 58 per cent of all separations from Albany hospital.

The average length of stay for patients from Jerramungup Shire is 2.7 days compared to 3.2 days for Albany residents.
Implications for Service Planning:

Jerramungup Shire has a SEIFA score of 1026. Although this reflects a relatively higher socio-economic status when compared to WA, service planning must be conscious of pockets of disadvantage within the catchment population.

Jerramungup is classified as remote according to the Accessibility/Remoteness Index of Australia (ARIA). To meet the needs of the community, services need to be supported by modern ICT, Telehealth and other support services which enable staff and services to operate in a range of settings across the region.

While some lifestyle behaviour risk factors showed no significant difference in the prevalence of Lower Great Southern residents compared with the State, the prevalence is still important because these behaviours are modifiable risk factors for chronic conditions. This would suggest the need for primary interventions, including health promotion and chronic disease self management support.

Only approximately half of adults (51.3 per cent) reported having used a dental health care service (Health and Wellbeing Surveillance System, 2007-2010) which may indicate difficulties in accessing dental care within the catchment area.

Jerramungup residents access Albany Health Campus as the primary place of treatment, which is supportive of WA Country Health Services integrated network of hospitals (hub and spoke) model.
6. Current and Future Service Delivery Profile

Jerramungup and Bremer Bay Health Centres form part of the WACHS Great Southern Health Region’s integrated network of services.

Figure 5: WACHS Great Southern: Location of clinical services, by health district

Jerramungup and Bremer Bay Health Services are designated Remote Area Nursing Posts.

Albany Health Campus (AHC) is the ‘hub’ for hospitals in the Great Southern Health Region and is recognised as a Regional Resource Centre under the WA Clinical Services Framework (2010-2020). A range of regional and district services are coordinated from AHC to support the smaller health services including Jerramungup and Bremer Bay Health Centres (Remote Area Nursing Posts).

Construction is currently underway to transition from the existing Albany Hospital into the Albany Health Campus, a larger new facility with most public sector health services collocated on the one site.

Jerramungup Health Centre

Jerramungup Health Centre, designated as a Remote Area Nursing Post (RANP) has been treating patients since 1958. As such the RANP offers a greater scope of service, including accessibility, than a Nursing Post.
The facility (pictured below) is reported to be well maintained and fit for purpose. While no formal review has been undertaken, the staff members report that there are no significant facility issues.

There is a three bedroom, two bathroom house for the Jerramungup Nurse. Air conditioning has recently been installed.

![Figure 6: Jerramungup Health Centre](image)

**Bremer Bay Health Centre**

The Bremer Bay Health Centre was built in the early 1980s. It is designated as a Remote Area Nursing Post (RANP) and offers a greater scope of service, including accessibility, than a Nursing Post.

Staff working at the Bremer Bay Health Centre reported key issues include:

- lack of consulting spaces
- no patient shower facilities
- poor acoustics resulting in a lack of patient confidentiality
- functional issues at the Ambulance Bay including weather protection and emergency treatment bays
- office space capacity issues
- The layout of the emergency treatment area makes it difficult to accommodate multiple patients when busy and there is limited capacity to manage any unplanned surge in emergency activity.

Bremer Bay Health Centre does not have a Business Continuity Plan.

There is a house leased by the Health Service in the community as accommodation for the Nurse Practitioner.
6.1. Community Based Services

For the local catchment area of Jerramungup, a range of community based services are provided mostly from the health centre facility or the patient’s home.

These are summarised in the tables below.
Community based services provided at Jerramungup include the following:

Table 2: Community Based Services - Jerramungup

<table>
<thead>
<tr>
<th>Services</th>
<th>Jerramungup</th>
<th>Frequency</th>
<th>Provider</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Services</td>
<td>Local GP</td>
<td>3 days per week</td>
<td>Private</td>
<td>Health Centre</td>
</tr>
<tr>
<td>Medical Outpatient/Visiting Medical</td>
<td>Well Women’s Health Clinic sponsored by RFDS Female GP</td>
<td>every 6-8 weeks</td>
<td>RFDS</td>
<td>Health Centre</td>
</tr>
<tr>
<td>Practitioners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allied Health</td>
<td>Podiatry</td>
<td>every 4 weeks</td>
<td>WACHS</td>
<td>Health Centre</td>
</tr>
<tr>
<td></td>
<td>Dietitian</td>
<td>every 4 weeks</td>
<td>WACHS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Work</td>
<td>every 4 weeks</td>
<td>WACHS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diabetes Team</td>
<td>four times a year</td>
<td>WACHS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Great Southern Chiropractic</td>
<td>every 4 weeks</td>
<td>WACHS</td>
<td></td>
</tr>
<tr>
<td>Population Health</td>
<td>Immunisation</td>
<td>every fortnight by appointment or presentation to the Health Centre</td>
<td>Jerramungup Nurse</td>
<td>Health Centre</td>
</tr>
<tr>
<td></td>
<td>Child Health Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>School Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Antenatal and postnatal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sexual health and contact tracing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health promotion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>GP</td>
<td>by appointment by appointment by phone, after hours or weekends by appointment</td>
<td>Private WACHS</td>
<td>Health Centre</td>
</tr>
<tr>
<td></td>
<td>Great Southern Mental Health (Albany)</td>
<td></td>
<td>Private</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural-Link</td>
<td></td>
<td>Private</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Southern Ag Care</td>
<td></td>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>Drug and Alcohol Services</td>
<td>Palmerston</td>
<td>by appointment</td>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>Aged Care Services</td>
<td>HACC</td>
<td>by appointment</td>
<td>HACC</td>
<td>Home/Community</td>
</tr>
<tr>
<td></td>
<td>Home visits by Nurse Practitioner/Remote Area Nurse</td>
<td>by appointment</td>
<td>Jerramungup Nurse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aged Care Assessment Team (ACAT)</td>
<td>by appointment</td>
<td>WACHS Aged Care Unit</td>
<td></td>
</tr>
<tr>
<td>Sub-Acute Care</td>
<td>Sub-Acute Care Program</td>
<td>by appointment</td>
<td>WACHS Aged Care Unit</td>
<td>Home/Community</td>
</tr>
</tbody>
</table>
Community based services provided at Bremer Bay include the following:

<table>
<thead>
<tr>
<th>Table 3: Community Based Services - Bremer Bay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bremer Bay</strong></td>
</tr>
<tr>
<td>Medical Services</td>
</tr>
<tr>
<td>Medical Outpatient/Visiting Medical Practitioners</td>
</tr>
<tr>
<td>Allied Health</td>
</tr>
<tr>
<td>Population Health</td>
</tr>
<tr>
<td>Mental Health</td>
</tr>
<tr>
<td>Drug and Alcohol Services</td>
</tr>
<tr>
<td>Aged Care Services</td>
</tr>
<tr>
<td>Sub-Acute Care</td>
</tr>
</tbody>
</table>
Medical services are provided to Jerramungup by a GP, three days a week. The same GP provides a service in Bremer Bay one day a week.

The following services are provided by the GP:

- GP consultation service;
- Minor procedures;
- Pharmaceutical services (limited to license); and
- Ordering of pathology, radiology and referrals.

School and Child Health services for the Shire of Jerramungup are via the Nurse Practitioner/RAN. These positions are line managed through nursing services at Albany Health Campus. The Great Southern Community Health senior school and child health nurses provide professional support to this role ensuring Child and School Health governance is met.

Specialist Ambulatory Mental Health is provided by Great Southern Mental Health (Albany). Generally patients travel to Albany for assessment and treatment. Telehealth clinical services are available and provided in conjunction with the local health service.

Rural-Link, a specialist after-hours mental health telephone service for rural communities, is utilised for after hours and weekend patient support. This service provides direct patient support and advises clinicians and carers on mental health management strategies.

Primary Mental Health Services

Primary Mental Health Services are provided by the GP who can utilise Access to Allied Psychological Services (ATAPS) and Better Access interventions under a Mental Health Care Plan and is funded by Medicare. This relies on private psychologists, social workers and occupational therapists providing services to the Region.

Residents can also access Southern Ag Care, a not for profit agency that provides counseling and support services to the local community.

Primary, Population and Allied Health Services

Primary, Population and Allied Health Services are mostly provided on a visiting basis by the WACHS great Southern Population Health team. There is a private optometrist who visits Bremer Bay regularly.

Aged Care Services

These services including Home and Community Care (HACC) and Aged Care Assessment services are provided by WACHS aged Care Unit and HACC teams in collaboration with the RANs/Nurse Practitioners in the Health Centres and the local GP.
6.2. **Health Centre Services**

The Jerramungup and Bremer Bay Health Centres are staffed by registered nurses, five days a week. There is 24 hour nurse led emergency service at both Jerramungup and Bremer Bay Health Centres with telephone back up provided by Albany Health Campus. Routine visits are encouraged between 0900 and 1600 but if the nurse is undertaking community visits then a visitor needs to call them if they need to be seen urgently. Out of hours on call is available outside of these hours depending on demand and activity.

Health Centre services at Jerramungup are provided currently by a Remote Area Nurse and Bremer Bay services are provided by a Nurse Practitioner and a registered nurse (Relief position).

Services include (but are not limited to):

- Assessment, care planning
- Aged Care Support
- Infection management
- Minor procedures e.g. pap smears
- Ongoing BP checks
- Blood Tests – International Normalised Ratio (INR), Troponin levels, Blood Sugar Levels (BSL), Haemoglobin (Hgb)
- Community education
- Medical emergencies.

The Nurse Practitioner has the authority to prescribe medications within the scope of clinical guidelines, refer patients and order diagnostic tests.

6.2.1 **Current Service Profile**

Over 90 per cent of all activity occurs between 8am and 5pm Monday to Friday at both Jerramungup and Bremer Bay Health Centres. In Jerramungup 48 per cent of Occasions of Service occur in the morning while in Bremer Bay 57 per cent of Occasions of Service occur in the morning on average.

One in four attendances at Jerramungup Health Centre is for patients not residing within Jerramungup postcodes. One in two attendances at Bremer Bay Health Centre is for patients not residing within Bremer Bay postcodes.
The distribution of attendances by age is shown in the table below.

<table>
<thead>
<tr>
<th>Age</th>
<th>Bremer Bay</th>
<th>Numbers of presentations</th>
<th>Jerramungup</th>
<th>Number of presentations</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>25per cent</td>
<td>605</td>
<td>28per cent</td>
<td>277</td>
</tr>
<tr>
<td>15-24</td>
<td>5per cent</td>
<td>122</td>
<td>8per cent</td>
<td>76</td>
</tr>
<tr>
<td>25-44</td>
<td>20per cent</td>
<td>483</td>
<td>31per cent</td>
<td>301</td>
</tr>
<tr>
<td>45-64</td>
<td>20per cent</td>
<td>492</td>
<td>15per cent</td>
<td>151</td>
</tr>
<tr>
<td>65+</td>
<td>31per cent</td>
<td>751</td>
<td>18per cent</td>
<td>180</td>
</tr>
<tr>
<td>Total</td>
<td>100per cent</td>
<td>2453</td>
<td>100per cent</td>
<td>985</td>
</tr>
</tbody>
</table>

Source: Health Information Manager Great Southern (HCARE).

Of those attending the health centres:

- 72 per cent were treated with no referral
- 13 per cent required no treatment
- 11 per cent were treated and referred to GP
- 3 per cent were treated and transferred (2011).

Between the months of April to January there are almost no patients overlapping when presenting to Bremer Bay Health Service. During January, February and March most overlapping of patients occurs. In many cases the overlap is only five minutes according to entered time seen and time out data on the MR1 document.

Figure 8 Over-lapping Patients in Bremer Bay Health Centre per month

Source: Health Information Manager Great Southern (HCARE).
GP services Medicare Data

In 2009/10, Medicare Data demonstrated that there were 5,480 GP services and 99 GP practice nurse services for residents of the Shire of Jerramungup (Social Health Atlas of Australia, Western Australia, 2011).

These presentations were not all within the Shire however they do assist in outlining the demand of the shire residents for services.

Health Centre Activity

The following figure 9 shows the total number of service events occurring at both Bremer Bay and Jerramungup (April 2011-March 2012) Health Centres. A service event is defined as any service performed either on-site at the health centre or performed in a person’s home by a staff member from the health centre.

There were a total of 2,454 service events for Bremer Bay (average 6.7 per day increasing to between 10 and 13 per day in summer months) and a total of 985 service events for Jerramungup between April 2011 and March 2012 (average 2.7 per day). (See Figure 9 for monthly service events). There is a risk that the Remote Area Nurse in Jerramungup may become deskilled based on the current number of Patients seen through the Health Centre.

The figure shows that service events at Jerramungup were relatively steady across the year. However, more than a third (37 per cent) of service events at Bremer Bay in 2011 were across the summer months. This indicates that the influx of tourists visiting Bremer Bay in summer results in an increase in activity at Bremer Bay Health Centre to between 10 and 13 service events per day.
Emergency Services

There is a 24 hour nurse led emergency service at both Jerramungup and Bremer Bay Health Centres with telephone back up provided by Albany Health Campus.

Triage

Triage is a brief clinical assessment that determines the clinical urgency of the patient’s presenting complaint and allocates an Australasian Triage Score (ATS) category which defines the time and sequence in which care is provided. (Operational Directive OD 0334/11)

Table 5: Australian Triage Score

<table>
<thead>
<tr>
<th>ATS CATEGORY</th>
<th>Treatment acuity (Maximum waiting time)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATS 1</td>
<td>Immediate</td>
</tr>
<tr>
<td>ATS 2</td>
<td>10 minutes</td>
</tr>
<tr>
<td>ATS 3</td>
<td>30 minutes</td>
</tr>
<tr>
<td>ATS 4</td>
<td>60 minutes</td>
</tr>
<tr>
<td>ATS 5</td>
<td>120 minutes</td>
</tr>
</tbody>
</table>

Source: Health Information Manager Great Southern (HCARE).
Appropriate emergency management services are essential as, due to the remote location, any traffic or road accidents require immediate response and management. Emergency management includes assessing and stabilising patients until patients can be transported to a more appropriate healthcare facility for definitive care. The nurses prepare the health centre to accept the patient/s unless requested to attend the scene of the accident.

St John's Ambulance provides the ambulance service for both Bremer Bay and Jerramungup. Volunteer officers operate the emergency transport, and a community paramedic commenced work in June 2012. The paramedic is based in Gnowangerup but will live and operate from Bremer Bay at peak periods.

The Role of the community paramedic is to educate and monitor community emergency volunteer activities.

The paramedic has an ambulance but it is not a person ambulance. The paramedic can assist and provide advanced life skills when or if requested. (Operational turnout is not a priority. The main role is recruit, retain, mentor and support volunteers and provide advanced life support (ALS) paramedic experience and skills to the community).

In 2011 there were 79 call outs in the whole of Shire (St Johns Ambulance).

In 2011, 50 people from Jerramungup and Bremer Bay were transferred to Albany Hospital.

There were 483 emergency occasions of service at Bremer Bay Health Service included in the 2453 service events and 307 emergency occasions of service at Jerramungup Health Service included in its 985 service events.

The majority of activity (81 per cent) in Bremer Bay Health Centre is ATS Categories 4 and 5, which are non-urgent primary care type presentations which could be seen by a GP if available. The remainders in 2011 were mainly categories 3. There were no reported presentations of Category 1 patients.

Table 6: Triage categories of patients presenting to Health Centres

Data Source: ACHS Data Warehouse Extracts as at 4 February 2013

<table>
<thead>
<tr>
<th>April 2012 - March 2011</th>
<th>Bremer Bay</th>
<th>Jerramungup</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Triage Category</strong></td>
<td>**per cent</td>
<td><strong>Presentations</strong></td>
</tr>
<tr>
<td>1</td>
<td>0 per cent</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1 per cent</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>18 per cent</td>
<td>64</td>
</tr>
<tr>
<td>4</td>
<td>52 per cent</td>
<td>190</td>
</tr>
<tr>
<td>5</td>
<td>29 per cent</td>
<td>104</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100 per cent</td>
<td>362</td>
</tr>
</tbody>
</table>
In Jerramungup Health Centre (April 2011 to March 2012) the activity was mostly in categories 3, 4 and 5 with the category of presenting patients fairly evenly distributed. There were 3 per cent of presentations at Category 2 and none at Category 1.

### 6.2.2 Future Service Profile

Given the forecast population for Jerramungup Shire is predominantly stable, it is reasonable to assume that healthcare demand will be focussed on health promotion to prevent or manage conditions commonly seen in across the community e.g. chronic disease self-management, falls prevention, dementia management and cancer prevention/early intervention and management.

Continued provision of primary health care services, health promotion and early interventions focus on keeping the population as well as possible.

The large tourist population places a strain on the health centres during the peak periods and it is important that the health centres are prepared to manage the emergency presentations during these times. The proposed mine in Wellstead may also bring many younger families to Jerramungup Shire, thus increasing the demand for health services of a different nature. This will need to be monitored.

In line with recent societal trends, it is also anticipated that that there will be increased demand for mental health services, particularly for counselling and drug and alcohol services.

### 6.3. Clinical Support Services

Clinical Support Services for Jerramungup and Bremer Bay are outlined below.

<table>
<thead>
<tr>
<th>Service</th>
<th>Current Service Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Imaging</td>
<td>Limited X-Ray services are available in Jerramungup. However the service is limited to single views only as performed by the Trained X-Ray Operators. X-Rays may only be ordered by those with privileges to do so i.e. GP or Nurse Practitioners. All X-Rays are couriered to Albany to be reported and digitised. Patients are referred to Albany for more complex X-Rays, CT and Ultrasound; to Perth for MRI and PET scans and to Perth Medical imaging services for Mammography. In 2011 60 X-Rays were taken and to date (Sept 2012) 44 X-rays have been taken. There is no X-Ray service in Bremer Bay. The Nurse Practitioner may order X-rays.</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Jerramungup and Bremer Bay Health Centres utilise the regional pharmacy imprest system, based in Albany. Pharmacy supplies are received via courier when required. Pharmacy supplies at both Health Centres are managed by on-site nursing staff. The Nurse Practitioners prescribe within the scope of clinical guidelines.</td>
</tr>
</tbody>
</table>
6.4. **Non-Clinical Services**

Corporate services including human resources, finance, ICT, supply, engineering and maintenance are coordinated within a regional model from Albany Health Campus.

<table>
<thead>
<tr>
<th>Service</th>
<th>Current Service Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering and Maintenance</td>
<td>This is a regional service based from Albany, and visits the health centres once every three months or on request.</td>
</tr>
<tr>
<td>Medical Records</td>
<td>Jerramungup and Bremer Bay store and manage their medical records. Archived medical records are stored in Perth.</td>
</tr>
<tr>
<td>Catering</td>
<td>There is no onsite provision for catering.</td>
</tr>
<tr>
<td></td>
<td>There are no meals on wheels service.</td>
</tr>
<tr>
<td>Linen</td>
<td>Limited linen supplies for both Jerramungup and Bremer Bay are provided by Albany Health Campus. Deliveries are approximately once per month.</td>
</tr>
<tr>
<td>Cleaning</td>
<td>Cleaning occurs locally, approximately 8 hours per week.</td>
</tr>
</tbody>
</table>

6.5. **Staff Training and Education**

Essential skills training are provided by the Albany Staff Development Unit and mandatory annual on line training is available to all employees via desktop computers. The orientation program is also available on line. There are opportunities for the Health Service Employees to travel to Albany to attend education sessions and in-service training. Videoconferencing facilities are available to access training and education opportunities and participate in health networks.
6.6 Health Partners

**Figure 10: WACHS – Great Southern Health Partners Jerramungup Shire (Jerramungup and Bremer Bay Health Centres)**

**WACHS – Great Southern (Jerramungup and Bremer Bay Health Centres)**

<table>
<thead>
<tr>
<th>Not for profit and Other Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerramungup Shire Council</td>
</tr>
<tr>
<td>St John Ambulance</td>
</tr>
<tr>
<td>Royal Flying Doctor Service</td>
</tr>
<tr>
<td>Southern Ag Care</td>
</tr>
<tr>
<td>Occasional Day Care</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commonwealth Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrelink</td>
</tr>
<tr>
<td>Medicare Locals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany Health Campus</td>
</tr>
<tr>
<td>Great Southern Population Health including Needle and Syringe Program</td>
</tr>
<tr>
<td>Perth Metropolitan Healthcare Facilities</td>
</tr>
<tr>
<td>PathWest</td>
</tr>
<tr>
<td>WA Dental Health Services</td>
</tr>
<tr>
<td>WA Police and FESA</td>
</tr>
<tr>
<td>Rural Link</td>
</tr>
<tr>
<td>Department of Child Protection (Albany)</td>
</tr>
<tr>
<td>Disabilities Services Commission (Albany)</td>
</tr>
<tr>
<td>Dept. of Education: local schools, TAFE</td>
</tr>
<tr>
<td>Dept. for Communities</td>
</tr>
<tr>
<td>Mental Health Commission</td>
</tr>
</tbody>
</table>

**Emergency Services**

Police, St John Ambulance (SJA) and Fire and Emergency Services (FESA) are first responders to emergency situations. SJA and FESA are managed by volunteers with basic training. A community paramedic, who has been appointed to the Shire, is based in Gnowangerup, has an office in Jerramungup and will operate from Bremer Bay during peak periods.

**Royal Flying Doctor Servicer (RFDS)**

The RFDS provide a visiting female GP service (Well Women’s Health Clinic), through the federally funded ‘Royal Women’s GP Service’. This service occurs every six to eight weeks.

**General Practitioner**

There is a local GP who provides services to both Jerramungup (three days per week) and Bremer Bay (one day per week). The GP also provides on-call services when resident.

The services provided by the GP are described in section 6.1 Community Based Services.
Southern Ag Care

Southern Ag Care is a not for profit agency that offers a free, mobile and confidential family counselling service.

Services provided include:

- Family counselling
- One to one counselling
- Aboriginal Early Years program
- Community and Business workshops
- Mental Health First Aid training workshops
- Bereavement and other support groups
- No interest loans scheme (NILS)
- Emergency relief funds – The Commonwealth Department of Family, Children, Housing and Indigenous Affairs and Lottery West funded

Specialist Mental Health Services (MHS)

The Great Southern Community Mental Health Service provides a triage service to manage critical situations (i.e. acute psychiatric risk) to self-referred clients or referrals from other sources (such as agencies or family members). The triage team is available Mon - Friday 8.30am to 4.30pm by phone and/or videoconference.

“Admission” to the mental health service requires referral by a General Practitioner who has already assessed the patient as having a moderate to severe mental illness.

Prioritisation for admission to the Community Mental Health Service is based on risk and complexity.

Community Mental Health Treatment Services are prioritised in the following way:

Priority 1:

Patients who are being managed under the Mental Health Act i.e. those on a Community Treatment Order

Patients whose psychiatric illness results in high to extreme risks including:

- Risks to self, others or from others if unwell
- Patients with limited ability to manage their condition and/or collaborate in their treatment as this creates additional risks

Priority 2:

Patients with complex psychiatric conditions or multiple conditions for example they require a complex medication regime, their diagnosis is unclear, they experience treatment resistance
Priority 3:

All other patients with a psychiatric illness that are seeking treatment.

The mental health service will discharge patients back to GP care when their symptoms are stable and/or their treatment needs are non-complex.

The Mental Health Commission of WA has identified non-government agencies as the preferred providers of recovery, rehabilitation and psycho-social support services for people with a mental illness. Currently the non-government agencies providing these services (e.g. Community First, Albany Halfway House, Fellowship House, Bay of Isles) do not provide a service to Bremer Bay and Jerramungup. Supports for people with a mental illness to develop social connections and find meaningful occupation (e.g. employment, training) are not available.

There are opportunities to access more Commonwealth primary mental health funds via the Mental Health Nurse Incentive program, Partners in Recovery, ATAPS and Better Outcomes.

There are also opportunities for non-government agencies to advocate to the WA Mental Health Commission for mental health rehabilitation and recovery services.

Innovative shared care arrangements can also be further developed with the support of telepsychiatry e.g. to provide the GP with advice on medication or to provide diagnostic clarity and with jointly developed care plans with the Nurse Practitioner, GP and mental health service.

Some Child focused Mental Health Services are available including:

- Child and Adolescent Mental Health Services (CAMHS)
- Visiting School Psychologist.
- Visiting school nurses
- School – Mental Health First Aid
- RAP (Resourceful Adolescents Programme)
- Friends Programme

Private Allied Health

There is a private chiropractor and a private muscle rehabilitation therapist that can provide services in the Shire if required.
7. Identified Strengths and Shortcomings Relating to the Current Service Delivery Model

Based on an analysis of the planning context for health service development, the catchment population and activity data, the following strengths and shortcomings relating to the delivery of healthcare services in Jerramungup and Bremer Bay have been identified.

7.1. Strengths of the Current Service Delivery Model

The service planning workshop conducted in May 2012 identified the following strengths relating to the health service delivery model:

- The local GP delivers a quality service and has a long standing (over 20 years) relationship with the community. This includes providing on-call services, attending home visits if required and bulk billing patients.

- The nursing service provided at both health centres is of a high standard. The nurses are advanced nurse clinicians and provide a range of services including accident and emergency services, outpatient services and educational services. The nurses support self-management and health promotion. They also provide child health services and a high number of immunisations.

- Due to the experience and standard of the nursing staff, patients can attend the Health Centre to be seen by the Nurse Practitioner at Bremer Bay or Remote Area Nurse at Jerramungup. This is especially beneficial in Bremer Bay where the GP is only available one day per week.

- Health service staff reported an excellent working relationship with emergency services and St John’s Ambulance volunteers.

- Home and Community Care (HACC) provide a quality service, in particular for home help and support, despite difficulties attracting trained staff.

- Non Government (NGO) Aged Care agencies provide community support for aged care packages such as Extended Aged Care and Home (EACH) packages.

- There are many community volunteers that help and support the health service. It is also reported that approximately 50 per cent of the community are qualified in first aid training.

- The Health Services providers (WACHS and private) in the Great Southern are very obliging with patients from the Shire of Jerramungup and will generally accommodate them with short notice appointments, especially at Albany Health Campus.

- Telehealth facilities have been enhanced recently providing opportunity to increase access to external health professionals and for staff to access education and training.
7.2. **Current Shortcomings/Constraints in Service Delivery**

7.2.1 **Workforce and recruitment and retention issues**

During the service planning consultation workshops, participants identified that the perceived high standard of health service delivered in Jerramungup and Bremer Bay health centres was due to the current nursing staff.

Concern was expressed that due to the relatively small size of the workforce, any staff changes have the potential to create a major change in the effectiveness of the health service.

Current workforce issues identified for Jerramungup and Bremer Bay are:

- There is reliance on the Nurse Practitioner and RAN at both health centres after hours with pressure to be available or on-call at all times.

- Need to ensure activity allows RAN and/or Nurse Practitioner to maintain currency in all clinical competencies required.

- Staff shortages in the HACC program mean that limited programs are provided.

- Limited visiting health professionals services at the health centres. (See Tables 2 and 3)

- The lack of staff accommodation and/or quality of staff accommodation (there is a house provided by the Health Service in Bremer Bay and Jerramungup for the RAN/NP) and health centre consulting facilities (particularly at Bremer Bay) have been identified by the community as one of the key factors in the inability to attract visiting health professionals.

7.2.2 **Increasing demand - forecast population expansion for Jerramungup Shire**

The projected population for the Jerramungup Shire does not indicate significant population growth. However the popularity of Bremer Bay as a holiday destination, high tourist numbers, a $40 million upgrade to the Fitzgerald River National Park and the possible mine located in Wellstead are all factors that indicate that the future population and demand for services is difficult to quantify.

In any case, there is a need to plan to operationally manage the peaks and troughs in demand for services related to the peaks and troughs in population (both transient and permanent) and the subsequent public health demands and needs of this population.
Given the forecast population stability it is important that health service delivery is focused on health promotion for conditions commonly seen in the community e.g. chronic diseases, falls, dementia and cancers, for prevention of disease and for early interventions. Visiting health professionals or telehealth consultations are an adjunct for the Nurses in the provision of these services.

It is also important to acknowledge that with the potential for mining workers and their families to reside in Jerramungup Shire there will be an associated increase in healthcare demand that will be primarily focussed on primary healthcare and emergency services and likely to increase need for other services. There may be an increased demand for the assessment, management and planned evacuation of emergency presentations. The mining company may address this need through an onsite health practitioner.

In line with recent trends, it is also anticipated that there will be increased demand for primary mental health services and drug and alcohol services.

### 7.2.3 Access to Primary Health Services including Dental Care

It was reported during staff consultation workshops, as part of the development of this service plan, that there is a limited number of allied health and community nursing staff that are based in the catchment area or provide a visiting service. Tables 2 and 3 provide an overview of the services provided.

There is a particular identified need for improved access to oral health services. Currently there are no adult dental services provided in the community therefore residents have to travel to Albany or Perth for treatment. A school health dentist visits only once per year.

### 7.2.4 Aged Care Services

Whilst the demand for aged care services is not high in Jerramungup Shire at present, there is a need to explore future demand for aged care services across the entire spectrum of service provision. This includes exploring the potential for future independent living units for older people, as well as home based support services. Over the last three years there has been fifteen ACAT assessments requested and completed.

It has also been reported that HACC services are currently hampered by staff shortages. HACC services are managed from Jerramungup through a referral system HACC services are regional and all referrals are assessed for eligibility.

### 7.2.5 Facility shortcomings

While the building is ageing there were no reported significant facility issues for Jerramungup Health Centre as a result of the community consultation.

Whilst a formal assessment of the state of the Health Centre has not been undertaken, it is reported that the facilities have been maintained and some renovations are currently being considered.

Opportunities to address facility issues can be accessed through the Minor Capital Works program and state health infrastructure planning process.
Key facility shortcomings identified for Bremer Bay Health Centre include:

- There is one consulting room which is problematic when visiting professionals and/or GP are in Bremer Bay
- The Nurse Practitioner can consult with patients in the facility office but cannot perform dressings or procedures in the office
- No shower for patient treatment
- Lack of patient confidentiality due to poor acoustics
- Inadequate emergency dock for ambulance transfers
- Only two emergency bays and
- No ancillary office space.

It is clear from the consultation that the facility requires review and assessment against current and future needs.

### 7.2.6 ICT in Jerramungup Shire

Both Health Centres in the Shire have Telehealth capability. Scopia is available via desktop computers in both facilities to facilitate communication with regional personnel. Jerramungup Telehealth facilities consist of desktop videoconferencing equipment in the Nurses’ Station.

There are videoconferencing services available in Bremer Bay. A new high definition 6000 machine was recently installed (purchased through the Royalties for Regions funded from Southern Inland Health Initiative).

There are designated telehealth facilities in the Emergency Room in Bremer Bay for remote support in emergency cases. The model for use in conjunction with the Emergency Department (ED) from the ED in Albany is not yet in place but is currently being developed.

There is no designated Telehealth clinical consulting room, although the telehealth facilities in the nurses’ offices can be used.

Staff training and educational opportunities are provided through the Telehealth Coordinator in Albany Hospital.

The following shortcomings have been identified:

Currently a basic X-Ray service (chest and extremities only) is provided by a nurse X-Ray operator in Jerramungup. There is no digital transfer of images available and X-Ray films are couriered to Albany Health Campus for digitising and reporting. This means that urgent reporting to support the immediate diagnosis of patients is only possible when the GP is present. The current X-Ray machine is a Mobile Toshiba X-Ray machine that is 18 years old.
8. Proposed Service Reform Strategies

The issues outlined in Section 7 and consultation processes that have occurred to date between WACHS Great Southern staff and the local community have informed the development of a number of key service delivery strategies for the Shire of Jerramungup.

These strategies acknowledge that the focus of healthcare delivery at Jerramungup and Bremer Bay needs to be on primary health care and health promotion, preparedness for emergency services, chronic disease self-management and prevention, and population health services to address local health priorities.

8.1. Improve access to a range of primary health services and ambulatory care services through partnerships with public, non-government and private service providers

Improved access to a range of primary health services would be beneficial to assist in addressing a range of services with limited access to health professionals such as chronic disease prevention in the well ageing.

Recommendations: Range of Primary Health Services

- Innovative models of service delivery (e.g. Telehealth and service partnerships with other providers) are required to better address the limited allied health staff visiting the Shire of Jerramungup (refer to section 7.2) in order to provide an enhanced service. Services provided should be at levels appropriate to need.

- It is expected that demand for Mental Health, Alcohol and Other Drug counseling type services will increase. Telehealth offers an opportunity to access services as well as promoting a Shared Care Model between service providers.

- Ensure HACC, paramedic and St John’s Ambulance volunteers and visiting health professionals are included in any service redesign model as well as engaging Non-Government Organisations such as the South West Medicare Local and other Albany based NGO service providers.

- It is recommended that improved access to dental services in Jerramungup Shire in the future should be considered through health promotion strategies and Shire support to attract dental professionals.

- Liaise with the public Dental Health Service regarding the issue of access to Oral Health Services for adults and advocate for increased access to mobile public dental nurse services for eligible residents (those with a health care card).

- Liaise with organisations such as the South West Medicare Local and Rural Health West for support to attract visiting health professionals.
8.2. **Utilise clinical service redesign methodology to address key service and workforce issues**

Consultation highlighted that community members were more concerned about the condition of the building in Bremer Bay and work conditions of the Nurses than of the range of services provided locally.

The community expressed concern about the hours of on call and perceived lack of relief for the Nurses.

The GP has indicated that he may retire in the next few years.

A St Johns Ambulance community paramedic has recently commenced work in the Shire.

Home and Community Care Services are available in a limited capacity due to workforce issues (HACC is the service provider but the support workers are difficult to recruit)

**Recommendations: Workforce Issues**

- Use Clinical Redesign methodology to develop a new service model ensuring that it is a whole of Shire focused health service, not just township focused. This could include resource and workforce partnerships with other health providers and NGOs.

- A Shire based health service model will aim to allocate resources to areas of need in a timely manner (e.g. in peak tourist seasons).

- Identify clear roles and responsibilities of Nurse Practitioner/RAN and reporting lines and communicate to community.

- Identify one Nurse Practitioner Manager for the Managerial role in the Shire and ensure that time is allocated to perform the managerial duties.

- Confirm the nursing management strategy including agreed plan for nursing relief.

- Consider the employment of two Nurse Practitioners in Jerramungup Shire to ensure advanced nursing for primary health care in the event of GP retirement or difficulty in recruitment. (note a Nurse Practitioner is not a substitute medical practitioner but a nurse with an advanced scope of practice).

- Negotiate with other NGO or private Service Providers to explore opportunities for a partnership to support the Nurse Practitioner model.

- Enhance the partnership with the local GP.
• Facilitate a multi-disciplinary health group – use the group for discussion/development of Shared Care plans for complex patients.

• Direct health service focus to health promotion and with a community capacity building focus. Publish a health promotion programme schedule.

• Improve client management through sharing medical information such as chronic disease plans through a complex patient/ and care planning group.

• Organise workload through an appointment system that improves access to the health centre on a person by person basis to reduce opportunities for any breach of confidentiality.

• Identify agreed times for nurses to provide community based programmes, access education opportunities, take time out/days off and provide health promotion. This may be particularly appropriate when the GP is in the town and attending the health centres.

• Build GP and Nurse Practitioner/RAN capacity to manage non-complex Mental Health Patients though a shared care model.

8.3. Utilise information and communications technology (ICT) and Telehealth to provide access to an enhanced range of services

As a service modality, Telehealth aims to assist clients (health consumers and staff) to come together for clinical, educational or administrative purposes, regardless of geographical location.

Health Services in the Jerramungup Shire have access to Telehealth services for all of the above purposes.

Staff access to technology in Bremer Bay emergency room will enable staff to consult with services in Albany and Perth for patient consultations and professional education. An innovative program called the Emergency Telehealth Service is currently being implemented in the Wheatbelt region. It is currently being scoped for implementation in the Great Southern to support clinicians dealing emergency cases requiring additional remote support and ED specialist input after hours

Both facilities have desktop access to Scopia in the nurses’ offices.

Recommendations: ICT

• Develop and implement models of care relevant to reform and increased and innovative use of Telehealth

• Focus on utilising the technology by establishing programmes and practitioner relationships in speciality areas.

• Promote use of, develop partnerships for services, advertise opportunities
8.4. **Address Facility Issues through business continuity planning and the minor capital works program**

Both facilities are older buildings. Jerramungup Health Centre is reported to be well maintained but staff members and the community have identified that the Bremer Bay facility does not meet the current needs of the service. Lack of confidentiality is reported due to poor acoustics in the building as well as limited areas for visiting health professionals to use for consultations with patients.

**Recommendations: Facilities**

- Using clinical service redesign methodology to examine work practices to provide an opportunity to also examine the use of rooms and identify effective facility usage. For example:
  - Re-arrangement of the emergency bays in Bremer Bay facility may result in a more effective work practices
  - Advertise/promote Telehealth services to reduce number of visiting health professionals required to use office space in the facility
  - Implement an appointment system to minimise the times when there are opportunities for confidentiality breaches
  - Commission a formal Building Condition Audit of the both current facilities within the next six months to inform the need for refurbishment and/or replacement and as part of WACHS and WA Health infrastructure planning and prioritisation.
  - Submit applications to the Minor Capital Works Program for facility improvements to both health centres.
  - Review location of radiology equipment to confirm placement of the service within the Shire of Jerramungup for maximum benefit.
  - Revitalise Jerramungup Health Centre through encouraging more Health Professionals and other community groups to provide clinics, health promotion and social activities from the centre. (Currently the GP, nursing services, HACC services and the Community Paramedic are actively using the health centre).
Bremer Bay Staff Housing

- The leased health service house in Bremer Bay is available for the Nurse Practitioner.

Jerramungup Staff Housing

- A 3 bedroom, 2 bathroom house is available in Jerramungup for the employed Nurse. Air-conditioning has recently been installed in the house.

8.5. **Address communication in the Shire to provide Health Service information and gain community engagement**

The planning process has highlighted the need to improve community awareness of the services provided by the Health Service. Information about access to all types of health services is required to improve community understanding of the scope of health services available to the local community.

**Recommendations: Communications**

- Develop a communication strategy to inform communities regarding changes, partnerships and services available.

- Convene a Local Health Action Group to work together to develop a Local Health directory. This could also inform the national health directory which the South West Medicare Local is contributing to.

- Develop and implement information fact sheets to ensure that correct service information is available including information on services that are not available in the Shire but may be accessed elsewhere.

- Partner with Police and Emergency Volunteers to provide the Health Service Information to visitors at peak times (At Peak times a Road Block on the only road into Bremer Bay is set up by Police. This is an opportunity to target visitors with Health messages. This can be done by Community members, Police or Emergency Volunteers)

- Promote available services through a range of sources, including local media, newsletters and service directories.

- Improve intra-regional communication so that clients are referred between services seamlessly (using referrals system, telehealth, electronic medical records).

8.6. **Develop a partnership with the Shire of Jerramungup**

The Shire of Jerramungup has planned for developments within the Shire and is keen to partner with WACHS to develop a new health centre for Bremer Bay.
In the Bremer Bay township plan the concept of ‘ageing in place’ is identified as an opportunity to provide accommodation for the aged in a central location in the town to encourage the residents to ‘age in place’.

A partnership with the Shire would provide an opportunity for enhancing understanding between the Shire, WACHS and other health service providers about the health needs of and demand for services by the local population.

**Recommendations: Shire Partnership**

- Develop a partnership with the Shire of Jerramungup to facilitate involvement in future developments that may impact upon the health service.

- Document an agreement between the health service and Shire with regards to use of facilities.

- Continue ongoing dialogue with the Shire regarding any opportunities for health service and facility development.

- Support Shire and other partners such as the South West Medicare Local and St John’s Ambulance to develop opportunities to provide facilities for visiting health professionals. Include rooms for health promotion programmes, GP services and potentially a dental surgery to attract service providers.

- Ensure any community rooms are ICT compatible with health service telehealth and video conferencing.

**8.7. Emergency Services partnership development**

Police, St John Ambulance (SJA) and Fire and Emergency Services (FESA) are first responders to emergency situations. SJA and FESA are managed by volunteers with basic training. A community paramedic has been appointed to the Shire. Concern has been expressed about the potential for lack of emergency bays at the Health centre in Bremer Bay. There is a similar set up for emergencies in Jerramungup facility though this has not been reported as a concern.

**Recommendations: Emergency Services**

- Further develop partnership/relationships with the community based emergency service providers and plan for simulation exercises in preparedness.

- Utilise the Great Southern Emergency Plan Code Brown as the model for managing incidents with potential for large numbers of casualties in both Health Centres.

- Communicate Code Brown actions to the community

- Negotiate use of appropriate buildings in the town to support management of multiple casualties should the need arise.

- Implement the national triage system for managing incidents with potential for large numbers of casualties.
- Negotiate support strategies with the community paramedic to help manage peak times of activity

8.8. **Expand Home and Community Care Services to support positive ageing**

Home and Community Care (HACC) provide services to all eligible residents in the Shire, in particular for home help and support. HACC are currently not funded to provide Meals on Wheels.

There are some perceptions of a lack of coordination across the community for HACC Services.

**Recommendations: HACC and Aged Care Services**

- Transfer management of the current HACC and Aged Care services to the WACHS Great Southern Aged Care Manager.

- Provide information about HACC to the community explaining the referral systems, coordination of care and HACC roles across the Shire.

- Develop recruitment strategies to attract staff for HACC and aged care services (e.g. support to attend TAFE to study Aged Care Certificate 4, use of telehealth, mentoring with nurses).

- Develop partnerships with NGO and private service providers for care planning at home using an outreach model.

- Negotiate with community catering services already in place to provide meals on wheels if the service is required.

- Investigate NGO partnerships to further provide community aged care packages to enable older people to stay at home for as long as possible.

- Promote Social Connectiveness and Positive Ageing concept.

- Recruit an Activities Coordinator to fill the position available for the Shire.

8.9. **Evaluation and monitoring of the Service Plan**

The community of the Shire of Jerramungup and Key Stakeholders providing Health Care Services have contributed to the development of Health Service Planning. It is imperative that their engagement with the Health Service is maintained. Evaluation of the Health Service Plan is a method of ascertaining the effectiveness and efficiency of the plan and will provide vital information to the community.
**Recommendations: Evaluation**

- The recommendations in the Service Plan will be developed into an implementation action plan with clear priorities, timelines, roles and responsibilities and expected outcomes and outcome measures.

- The achievements measured against the expected outcomes can be communicated to the wider community.
9. **Functional Model of Care**

Figure 11: WACHS Great Southern – Jerramungup and Bremer Bay: Functional Model of Care

The figure above provides a visual representation of the functional model of care for Jerramungup and Bremer Bay within the Great Southern Region. It shows the range of services to be provided across the health district, patient flows within the health district, intra-regional flows and the relationship with Albany Health Campus; along with outflows to metropolitan health services. Telehealth is not demonstrated in the above Figure. However it is available in both health Centres.
9.1. **Proposed Future Functional Model for Jerramungup Shire**

Key functional areas proposed for the Jerramungup Shire health service are outlined below:

**Table 5: Jerramungup Health Centre**

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Proposed Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Department</td>
<td>2 bay emergency room, with one bay established for resuscitation</td>
</tr>
<tr>
<td></td>
<td>Telehealth function from within the emergency bay area</td>
</tr>
<tr>
<td></td>
<td>Enclosed ambulance load / unload area</td>
</tr>
<tr>
<td></td>
<td>Patient toilet/shower facility</td>
</tr>
<tr>
<td>Ambulatory Care Services</td>
<td>1x nurse consult room; 1 x consult room for visiting health professionals</td>
</tr>
<tr>
<td></td>
<td>Immunisation facilities</td>
</tr>
<tr>
<td></td>
<td>Waiting area</td>
</tr>
<tr>
<td></td>
<td>Telehealth facilities non-emergency consultation</td>
</tr>
<tr>
<td></td>
<td>Nurse office</td>
</tr>
<tr>
<td></td>
<td>Office for Community Paramedic, including pharmacy safe Client group/meeting area</td>
</tr>
<tr>
<td>HACC</td>
<td>Provides service off-site</td>
</tr>
<tr>
<td></td>
<td>HACC office onsite</td>
</tr>
<tr>
<td>Dental Services</td>
<td>Consider provision of dental service in the future</td>
</tr>
<tr>
<td>Clinical Support Services</td>
<td>Recommend relocation to Bremer Bay</td>
</tr>
<tr>
<td>Medical Imaging (emergency nurse operator)</td>
<td>Specimen collection within existing consult facilities</td>
</tr>
<tr>
<td></td>
<td>function provided by local GP service for community</td>
</tr>
<tr>
<td></td>
<td>Pharmacy service for nursing post delivered via Albany Hospital</td>
</tr>
<tr>
<td></td>
<td>Pharmacy safe for schedule 8 and restricted schedule 4,</td>
</tr>
<tr>
<td></td>
<td>Single use items to be purchased, service provided from Albany Hospital</td>
</tr>
<tr>
<td>Pathology</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td></td>
</tr>
<tr>
<td>Sterilising Service</td>
<td></td>
</tr>
<tr>
<td>Non-clinical Support Services</td>
<td></td>
</tr>
<tr>
<td>Medical Records</td>
<td>On-site records storage, with off-record archiving in Albany</td>
</tr>
<tr>
<td>Catering</td>
<td>N/A</td>
</tr>
<tr>
<td>Linen</td>
<td>Limited linen provided from Albany</td>
</tr>
<tr>
<td>Staff Accommodation</td>
<td>Accommodation to be available for permanent nursing staff</td>
</tr>
<tr>
<td>Patient Accommodation</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Table 6: Bremer Bay Health Centre

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Proposed Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Services</td>
<td>Emergency Room with three treatment areas, with one area set up as resuscitation area</td>
</tr>
<tr>
<td></td>
<td>Telehealth service for emergency consultation</td>
</tr>
<tr>
<td></td>
<td>Patient toilet and shower facilities</td>
</tr>
<tr>
<td></td>
<td>Enclosed ambulance load/unload area</td>
</tr>
<tr>
<td>Emergency Department/Outpatient</td>
<td>Ambulatory Care Services</td>
</tr>
<tr>
<td>presentations</td>
<td>Visiting services to operate from consult facilities within Health Centre</td>
</tr>
<tr>
<td></td>
<td>1 x nurse consultation area, 2 x consultation rooms, with one room established as Telehealth area for elective consultations</td>
</tr>
<tr>
<td></td>
<td>Waiting area</td>
</tr>
<tr>
<td></td>
<td>Client group area/meeting room</td>
</tr>
<tr>
<td></td>
<td>Patient toilet facility</td>
</tr>
<tr>
<td></td>
<td>Nurse and administration office space (2)</td>
</tr>
<tr>
<td>Ambulatory Care Services</td>
<td>HACC</td>
</tr>
<tr>
<td></td>
<td>Provides service off-site HACC office</td>
</tr>
<tr>
<td>Ambulatory, Community Health and Community Mental Health</td>
<td>Dental Clinic</td>
</tr>
<tr>
<td></td>
<td>Consider provision of dental service in the future</td>
</tr>
<tr>
<td>Clinical Support Services</td>
<td>Medical Imaging (emergency nurse operator only)</td>
</tr>
<tr>
<td></td>
<td>Transfer medical imaging service from Jerramungup</td>
</tr>
<tr>
<td>Pathology</td>
<td>Specimen collection within existing consult facilities</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Pharmacy service for nursing post provided by Dedicated schedule 8 and restricted schedule 4</td>
</tr>
<tr>
<td>Sterilising Service</td>
<td>Purchase single use items, service from Albany Hospital</td>
</tr>
<tr>
<td>Non-clinical Support Services</td>
<td>Medical Records</td>
</tr>
<tr>
<td></td>
<td>On-site records storage</td>
</tr>
<tr>
<td>Catering</td>
<td>N/A</td>
</tr>
<tr>
<td>Linen</td>
<td>Limited linen provided from Albany</td>
</tr>
</tbody>
</table>
10. Conclusion

The strategic directions for service delivery outlined in this Service Plan will enable health services for the residents and visitors to the Shire of Jerramungup to better manage demand for services, improve efficiencies in patient care, address identified current gaps in service delivery, meet the needs of the local catchment area and ensure alignment with existing policies and strategies.

It is necessary that the plan is reviewed as any future planning progresses, National/State policies are introduced and the needs of the community change. An ongoing proactive approach to service planning will ensure healthcare services remain responsive to the ever changing community needs, new policy developments and advances in medical care and technology.
11. References

http://meteor.aihw.gov.au/content/index.phtml/itemId/327268


Department of Health WA. ([Year]) HealthTracks Reporting. Epidemiology Branch, Public Health Division, Department of Health WA in collaboration with the CRC for Spatial Information. July 2012


Public Health Information Development Unit: A Social Health Atlas of Australia, Western Australia, 2011


WACHS Great Southern Clinical Services Plan (March 2009)

WACHS Great Southern Operational Plan 2011-12

WACHS Great Southern Health Profile (April 2012).


www.westernaustralia.com, Google maps.
12. Appendices

12.1. Staffing Profile for Jerramungup and Bremer Bay Health Centres

Table 9: Current Staffing Profile for Jerramungup Health Centre

<table>
<thead>
<tr>
<th></th>
<th>Budgeted FTE</th>
<th>Actual FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>1.0</td>
<td>1.0 (currently vacant) plus casual relief</td>
</tr>
<tr>
<td>Administration</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>HACC Coordinator</td>
<td>0.54</td>
<td>0.54</td>
</tr>
<tr>
<td>Activities Coordinator</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>Cleaning</td>
<td>Casual use</td>
<td></td>
</tr>
<tr>
<td>HACC Support Workers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Provided by WACHS – Great Southern

Table 7: Current Staff Profile for Bremer Bay Health Centre

<table>
<thead>
<tr>
<th></th>
<th>Budgeted FTE</th>
<th>Actual FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing</td>
<td>0.8</td>
<td>0.92 plus casual relief</td>
</tr>
<tr>
<td>Clinical Support</td>
<td>Relief</td>
<td>Relief</td>
</tr>
<tr>
<td>Administration</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Cleaning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Provided by WACHS – Great Southern
12.2. **Health and Wellbeing Surveillance System Lower Great Southern Health District (adults aged 16 years and over), 2007 to 2010**

Table 3: Lifestyle and psycho-social risk factors for persons aged 16 years and over by gender, Lower Great Southern health district, 2007 to 2010

<table>
<thead>
<tr>
<th>Health Enhancing Behaviours - adults 16 years and over</th>
<th>Lower Great Southern</th>
<th>Western Australia</th>
<th>Significant differences*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Persons</td>
</tr>
<tr>
<td>Currently smokes</td>
<td>13.8</td>
<td>17.1</td>
<td>15.5</td>
</tr>
<tr>
<td>Does not eat two or more serves of fruit daily</td>
<td>42.1</td>
<td>51.6</td>
<td>47.1</td>
</tr>
<tr>
<td>Does not eat five or more serves of vegetables daily</td>
<td>83.4</td>
<td>89.2</td>
<td>88.4</td>
</tr>
<tr>
<td>Drinks at risky/high risk levels for long-term harm (a)</td>
<td>30.7</td>
<td>56.5</td>
<td>45.5</td>
</tr>
<tr>
<td>Drinks at risky/high risk levels for short-term harm (b)</td>
<td>16.4</td>
<td>28.7</td>
<td>23.5</td>
</tr>
<tr>
<td>Insufficient physical activity (c)</td>
<td>49.4</td>
<td>47.4</td>
<td>45.3</td>
</tr>
</tbody>
</table>

### Risk Factors - adults 16 years and over

| Current high blood pressure                            | 18.0     | 18.4   | 18.2    | 6036               | 16.5          | 16.8    | 16.7    | -       | -                   | -      |
| Current high cholesterol                               | 15.5     | 20.2   | 18.0    | 6847               | 17.9          | 19.5    | 18.7    | -       | -                   | -      |
| Overweight (d)                                         | 28.8     | 45.3   | 37.6    | 14340              | 32.3          | 46.1    | 39.3    | -       | -                   | -      |
| Close (d)                                              | 32.6     | 28.1   | 30.2    | 11493              | 25.9          | 26.4    | 26.2    | Higher  | Higher              | -      |
| High or very high psychological distress               | 11.5     | 8.0    | 9.7     | 3580               | 9.6           | 7.0     | 8.3     | -       | -                   | -      |
| Lack of control over life in general (e)               | 7.1      | 5.3    | 6.2     | 2345               | 4.6           | 3.2     | 3.9     | Higher  | Higher              | -      |

Source: WA Health and Wellbeing Surveillance System, Epidemiology, OOH

This information is based on responses from 1830 adults within the Lower Great Southern health district and 27877 adults within the state.

* Estimated population refers to the estimated number of people with the particular risk factor. It is derived by multiplying the Estimated Resident Population by the persons prevalence estimate.

(a) As a proportion of respondents who reported drinking alcohol. Drinks more than 2 standard drinks on any one day.

(b) As a proportion of respondents who reported drinking alcohol. Drinks more than 4 standard drinks on any one day.

(c) Did not do 150 minutes or more of moderate activity over five or more sessions, persons aged 16-64 years.

(d) Self-reported height and weight have been adjusted for under-reporting.

(e) Often or always feels a lack of control over life in general.

Source: Summary of population characteristics and the health and wellbeing of residents of the WACHS - Lower Great Southern Health District. Epidemiology Branch (PHI) in collaboration with the Cooperative Research Centre for Spatial Information (CRC-SI). Accessed Thursday, 28 July 2011 by Beth Newton (Great Southern Population Health).
Table 4: Self-reported doctor diagnosed health conditions for persons aged 16 years and over by gender, Lower Great Southern health district, 2007 to 2010

<table>
<thead>
<tr>
<th>Condition</th>
<th>Lower Great Southern</th>
<th>Western Australia</th>
<th>Significant differences*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prevalence Estimate</td>
<td>Estimated Pop.†</td>
<td>Prevalence Estimate</td>
</tr>
<tr>
<td></td>
<td>Female   Male  Persons Persons</td>
<td>Female   Male  Persons Persons</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>8.3      4.2   6.1  2334</td>
<td>5.7     5.8   5.8  2334</td>
<td>Higher</td>
</tr>
<tr>
<td>Heart disease</td>
<td>5.4      7.0   6.7  2548</td>
<td>4.6     7.3   5.9  2548</td>
<td>-</td>
</tr>
<tr>
<td>Cancer</td>
<td>6.9      5.2   6.0  2285</td>
<td>5.6     4.5   5.0  2285</td>
<td>-</td>
</tr>
<tr>
<td>Current asthma</td>
<td>13.2     7.6   10.3 3916</td>
<td>11.1    7.2   9.2  3916</td>
<td>-</td>
</tr>
<tr>
<td>Current respiratory problem (a)</td>
<td>2.8   3.2   3.0 1134</td>
<td>1.9     2.3   2.1 1134</td>
<td>-</td>
</tr>
<tr>
<td>Stroke</td>
<td>2.2      3.1   2.6 1010</td>
<td>1.6     2.2   1.9 1010</td>
<td>-</td>
</tr>
<tr>
<td>Arthritis</td>
<td>27.9     20.8  24.1 9199</td>
<td>23.2    16.9  20.0 9199</td>
<td>Higher</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>7.7      3.2   5.3 2016</td>
<td>7.3     2.1   4.7 2016</td>
<td>-</td>
</tr>
<tr>
<td>Injury (b)</td>
<td>21.2     28.8  24.1 9202</td>
<td>19.0    25.3  22.2 9202</td>
<td>-</td>
</tr>
<tr>
<td>Current mental health problem (c)</td>
<td>17.1 11.1 14.0 5322</td>
<td>17.1    10.4 13.8 5322</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: WA Health and Wellbeing Surveillance System, Epidemiology, DOH.

This information is based on responses from 1650 adults within the Lower Great Southern health district and 27677 adults within the state.

* Determined by comparing confidence intervals, where intervals that do not overlap are deemed significantly different.

† Estimated population refers to the estimated number of people with the particular condition. It is derived by multiplying the Estimated Resident Population by the persons prevalence estimate.

(a) Respiratory problem other than asthma that has lasted 6 months or more.
(b) Injury in the last 12 months requiring treatment from a health professional.
(c) Diagnosed with depression, anxiety, stress-related or other mental health problem in the past 12 months.

Source: Summary of population characteristics and the health and wellbeing of residents of the WACHS - Lower Great Southern Health District. Epidemiology Branch (PHI) in collaboration with the Cooperative Research Centre for Spatial Information (CRC-SI). Accessed Thursday, 28 July 2011 by Beth Newton (Great Southern Population Health).
12.3. **Summary: Commonwealth and Western Australian State Government Policies for WA Country Health Service Planning**

This document may be accessed via the WACHS intranet and internet at:
