TABLE OF CONTENTS

EXECUTIVE SUMMARY ........................................................................................................... 1

1. INTRODUCTION AND PROJECT OBJECTIVES ................................................................. 8

2. WESTERN ADELAIDE HEALTH SECTOR ANALYSIS ...................................................... 12
   2.1 WESTERN ADELAIDE’S RELATIVE COMPETITIVE POSITION ........................................ 12
       2.1.1 Western Adelaide’s Key Capabilities .......................................................... 12
       2.1.2 Health Research Institutions ..................................................................... 13
       2.1.3 Key Health Cluster Anchors ....................................................................... 13
       2.1.4 Key Stakeholders, Strengths and Market Engagement .............................. 14
       2.1.5 SME’s Clusters and Innovation .................................................................. 19
       2.1.6 Existing Government to Government Relationships ................................. 21

3. MARKET ATTRACTIVENESS - MACRO MARKET ANALYSIS ................................. 23
   3.1 THE GLOBAL HEALTH CARE SECTOR ........................................................................ 23
   3.2 SOUTH EAST ASIA – THE ASEAN REGION .......................................................... 25
       3.2.1 ASEAN - ANZ Free Trade Agreement (AANZFTA) ....................................... 25
       3.2.2 ASEAN Economic Community ................................................................... 27
       3.2.3 Healthcare Sector as an ASEAN Priority .................................................... 29
   3.3 OVERVIEW OF NORTH EAST ASIA – CHINA, JAPAN AND KOREA ...................... 32
       3.3.1 Korea – Australia Free Trade Agreement (KAFTA) .................................... 32
       3.3.2 Japan – Australia Economic Partnership Agreement (JAEPAR) ............... 33
       3.3.3 China – Australia Free Trade Agreement (ChAFTA) ................................ 34
       3.3.4 Trans-Pacific Partnership Agreement (TPP) ............................................... 35
       3.3.5 Regional Comprehensive Economic Partnership Agreement (RCEPA) .... 36

4. RECOMMENDED MARKET PRIORITIES .......................................................................... 38

5. OPPORTUNITY ASSESSMENT BY MARKET ..................................................................... 43

6. CONSULTATION AND PROJECT IDENTIFICATION ...................................................... 45

7. IMPLEMENTATION ............................................................................................................... 49
Executive Summary

Overview

Hudson Howells were engaged by City of Charles Sturt to undertake a strategic analysis of the Western Adelaide Health Sector with a focus on unlocking the sector’s economic potential, including the identification of national and International export opportunities. The report found that there was a strong and vibrant health business, research and services sector in Western Adelaide. During the course of the study businesses requested that a key outcome of the study be the formation of a Health Cluster.

The study was undertaken in four stages:

Stage 1 Analysis of the Western Adelaide Health Sector

- Desktop research to identify the key goods, services, supply chains and markets for the health sector.

Stage 2 Western Adelaide Health Business Collaboration Workshops

- Interviews and three industry workshops were undertaken to engage with those businesses and sectors identified during Stage 1.

Stage 3 Analysis and Final Report

- An implementation plan to identify 10 projects for future funding and implementation.

Stage 4 Detailed Implementation Plan

- Subject to funding a detailed implementation plan will be developed. In particular, the implementation will focus on the identified projects in stage 3. Each project will have clear objectives, outcomes, timelines and agency responsibilities.

This report found that there was with significant added value being provided by Hudson Howells in placing the project in an international context by detailing selected market characteristics, regulatory environments and prioritising markets for further research, strategy development and implementation.

Hudson Howells undertook interviews with selected industry stakeholders and three broad based industry workshops to engage with those businesses and sectors identified during Stage 1.

The key issues to emerge from these interviews are detailed in the report. Specific projects identified and discussed for the project Implementation Stage, and Hudson Howells associated comments and recommendations, included:

1. Establishment of a Western Adelaide Health Industry Alliance (Health Cluster) comprising in the first instance:

   a. Bio Innovation SA
   b. Healthfirst
The proposed **Western Adelaide Health Industry Alliance** would fit within the cluster program supported by the Department of State Development (DSD). DSD has recently established a Cluster Coordination Office responsible for the industry clustering activity across government.

What distinguishes the Western Adelaide Health Industry Alliance as proposed in this report is the strength of the medical and health research sector in Western Adelaide and its close links to industry particularly the SME sector. The structure of the cluster is proposed in figure 1 with at least 10 SME’s identified during the study as core members. Nevertheless, approximately 100 businesses have expressed an interest in the project with around 80 attending the three workshops. As such the cluster would seek to include all businesses contacted during the study.

*Figure 1: Western Adelaide Health Industry Alliance/ Cluster*

It is recommended that the following steps be taken to implement the **Western Adelaide Health Industry Alliance**:  

a. Identify a cluster catalyst and resources to bring the cluster together.  
b. Establish Terms of Reference  
c. Seek support from DSD.  
d. Identify key projects from this report.  
e. Establish performance benchmarks.  
f. Contact project participants to form part of the Alliance.
2. In collaboration with Western Hospital and potential Asian investment interests, investigate the feasibility of a Modern Aged Care/Seniors Living Facility in the Western Region.

3. Development of a China Health Export Strategy based on a Yantai (Shandong) market entry strategy (or pilot) formulated following specific in-market consultation and research to be undertaken in collaboration with the Yantai Municipal Bureau of Commerce. Projects already proposed by Yantai Municipal Bureau of Commerce for consideration include:
   a. Cooperation models with Yantai hospitals for exchange of medical technology, management experience, professional training, academic exchange, visiting scholar programs, etc.
   b. Health and elderly care projects – cooperation and joint venture projects.
   c. Marine, agribusiness and biopharmaceutical projects – sole venture, joint venture and cooperation.

It is recommended that the City of Charles Sturt (including the proposed Western Health Alliance) investigate the practicality, benefit/costs and next steps for these nominated projects in order to prioritise projects according to Western Adelaide and South Australian capability and propensity to deliver. This will require consultation and research in Yantai via the Yantai Municipal Bureau of Commerce.

4. Subject to the market research, Health Industry Alliance members would be briefed and plans developed for a targeted Trade Mission to Yantai. The model for Yantai could then be used for export strategy development and trade missions in other priority markets including Malaysia.

5. Health Precincts in Western Adelaide require greater definition and development. This will enable improved marketing for future investment attraction and new business incubation. There will also be opportunities to collocate health and allied businesses and support the Western Adelaide Health Industry Alliance. Key precincts which should be investigated, developed and promoted are:
   a. The Thebarton Bio Tech Precinct centered on Bio Innovation SA. It is recommended that this include a new business incubator – The BioSA Accelerator Building which will provide laboratory/production, office and shared services space for SME’s. The building’s concept is based around flexible spaces for tenants ranging from 250 m² to 500 m² of laboratory, office and production space over three floors, with an undercroft housing the shared services and car parking.
   b. The Woodville Road Health Precinct centered on the TQEH, Healthfirst, Adelaide Medical Solutions and the Basil Hetzel Institute. It is recommended that demand for new medical suites be investigated due to the large number of specialists and allied health professionals servicing TQEH (300 visiting specialists). It is recommended that a survey of clinicians be designed and undertaken to assess demand for new suites followed by active investment attraction and feasibility assessment.

It is also recommended that demand be assessed for the development of education and training facilities in the precinct. A Multidisciplinary Health Workforce Training Facility has been identified in the City of Charles Sturt Digital Economy Strategy 2013. It seeks to develop a Health Precinct on Woodville Road with the training facility as one of the anchor tenants to complement existing
medical services and research facilities. In addition, to providing training rooms and linking with live and wet sites (Hospitals and Surgeries) – specific medical training simulation facilities could be developed. It is recommended that potential partners be identified and that workforce training needs be assessed to confirm the potential viability of such a facility.

c. The Hindmarsh Health Business Precinct as a major service supplier to the new RAH and SAHMRI in addition to providing additional space for Health related SME’s.

6. In collaboration with Health Industries SA, research and implementation of an Investment Attraction Strategy focused on interstate and international health product and service suppliers locating in one of the three primary Health Precincts.

7. Development of a Western Adelaide Health Alliance Internet Site for:

a. Advancing and promoting the business interests of Alliance members.
b. Advice to members of major upcoming health initiatives and supply opportunities.
c. Use by Alliance members to promote Western Adelaide.
d. Promotion of Western Adelaide investment and joint venture opportunities.
e. Lodgment of enquiries for products and services.
f. Notification of events to Alliance members.

8. An annual Western Adelaide Health Industry Conference and Exhibition showcasing the region’s capabilities, investment opportunities, products and services.

9. Development of a Western Adelaide Health Brand for common use by Alliance members, signage and as a common marketing platform when marketing the region’s capabilities interstate and overseas.

10. Research and achievement of a Strategic Partnership Agreement between the Alliance and at least one significant and market connected international health industry participant for the purposes of mutual initiatives, research and market development.
**Recommended Market Priorities**

This report also identifies Western Adelaide’s specific strengths and competitive advantages and, within this context, qualifies and ranks target markets for Western Adelaide’s health exports and provides specific information on selected markets to inform Western Adelaide health exporters.

The ranking of target markets has been based on a methodology employing desktop research to identify Western Adelaide’s ‘Relative Competitive Position’ in the target markets alongside the ‘Market Attractiveness’ of selected markets. Criteria in each category are weighted and assessed allowing a final ranking and matrix to be constructed that establishes the recommended target market priorities.

There are significant regional market differences within countries, and Western Adelaide’s economy and population are comparatively small in a State and global context. The analysis therefore focuses on specific provinces and cities within the targeted countries and strengthening established ties as well as cultivating new relationships.

The initial set of target markets/regions based on research and stakeholder consultation (not in priority order) include:

- China – 3 to 5 provinces including the municipalities of Yantai, Beijing and Shanghai.
- Indonesia – West Java province and the Special Capital Region of Jakarta.
- Malaysia – Federal Territory of Kuala Lumpur and surrounds.
- Japan – Kanto Region incorporating the Greater Tokyo Area.
- India – 1 to 2 states including Bangalore City and /or Mumbai City.
- South Korea – Gyeonggi Province incorporating Seoul.
- Pacific Rim – up to 3 countries including Papua New Guinea, New Zealand and East Timor.
- Singapore.
- Middle East (UAE, Bahrain and Saudi Arabia).
- Latin America (Brazil, Mexico, Chile)

**Opportunity Assessment by Market**

Seven segments of competitive advantage within Western Adelaide’s health system have been identified as having significant potential for global growth. These include:

1. Health System Policy, Design, Funding and Operations
2. Healthcare provision and skilled health professionals
3. Medical research and Life Sciences
4. Education and training
5. Planning, construction and management of health and aged care facilities
6. Provision of diagnostic, medical and clinical services to international patients, both on and offshore
7. Medical products and technology.

Investment attraction is added as a major opportunity in recognition that a region’s ability to invest in Western Adelaide’s health system to raise health services and export capability is an important market attractiveness criteria.
The following summary table provides an assessment of opportunities for the selected target markets based on the Relative Competitive Position and Market Attractiveness research undertaken and reported in the report.

The opportunities have been assessed as High, Medium or Low, based on assessments of contextual factors in individual markets and from the analysis of market opportunities. Specific niche opportunities by market are detailed in the report.

<table>
<thead>
<tr>
<th>Table 1: Export Markets and Health Business Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health system policy and design</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Health system policy and design</td>
</tr>
<tr>
<td>Healthcare provision</td>
</tr>
<tr>
<td>Medical Research</td>
</tr>
<tr>
<td>Education and training</td>
</tr>
<tr>
<td>Facility design, construction and management</td>
</tr>
<tr>
<td>Provision of medical services</td>
</tr>
<tr>
<td>Manufactured products and related IP</td>
</tr>
</tbody>
</table>

Capital Funding and Foreign Investment Potential

Finally, opportunities for foreign investment from and into the selected markets are large across most health and aged care sectors. Notwithstanding the great potential, extreme caution must be
exercised in the selected markets for both corporate and market based reasons. For example, in China Hudson Howells was urged to exercise extreme caution in the aged care sector as it is an immature industry, models of aged care and senior living have not been sufficiently developed, potential markets and opportunities are large with servicing difficulties for providers and, lastly but importantly, there is a propensity for MOUs and information exchange with limited intellectual property protection. Cultural issues act as a barrier to industry development but some international firms are now starting new retirement village projects and are seeking JV partners.

Hudson Howells consultation and research in Malaysia and Singapore identified a major shift of retirement living and aged care planning into the Johor Bahru (Iskandar) area of Malaysia. There is a growing acceptance in both Singapore and Malaysia that children will be less likely to look after their parents, breaking down old traditions. This is leading to the acceptance of retirement living as a solution and the Prime Minister’s Performance Management and Delivery Unit (Pemandu) has identified retirement properties as a major national business opportunity.

1. Introduction and Project Objectives

The Western Adelaide region comprises the following local government areas:

- The City of Charles Sturt
- The City of Port Adelaide Enfield
- The City of West Torrens
- The City of Holdfast Bay.

These councils are formally collaborating on economic issues and have formed a Western Alliance of councils.

The Western Region is shown on the following Western Region Economic Map:
Map 2: The Western Region Economic Map
The City of Charles Sturt is in the heart of Western Adelaide and has the fastest jobs growth, in the fastest growing employment region in Adelaide. The region has grown by over 17,000 new jobs in the last five years. The highest growth has been in health care, education, construction and professional sectors.

The City of Charles Sturt is working with a consortium of Western Adelaide health agencies and businesses to:

- Identify key SME’s to collaborate with the health sector.
- Gain a greater knowledge of the health business supply chain.
- Identify opportunities to enhance business growth in the health sector.
- Identify health projects to promote jobs.

The project’s aims are to:

1. Develop and foster projects that will expand commercial and job opportunities in the health sector of Western Adelaide.
2. Identify national and international markets for Western Adelaide health, aged care and senior living goods and services.
3. Identify workable projects in a range of health, manufacturing and business services sectors.
4. Define the role of Woodville Road in the broader health sector.
5. Encourage links between existing Government programs and SME’s to commercialise research and develop products.
6. Encourage collaboration and specialisation in the SA health sector.
7. Build awareness amongst local businesses of the opportunities in the health supply chain and product development sectors.
8. Develop a report with detailed recommendations for projects to create jobs and export opportunities in the SA health sector.
9. Provide a detailed implementation plan with clear responsibilities and outcomes.

The following four stage process has been implemented to develop the Health Business Collaboration.

**Stage 1 Analysis of the Western Adelaide Health Sector**

- Desktop research to identify the key goods, services, supply chains and markets for the health sector.

**Stage 2 Western Adelaide Health Business Collaboration Workshops**

- Interviews and three industry workshops were undertaken to engage with those businesses and sectors identified during Stage 1.
Stage 3 Analysis and final report

- An implementation plan to identify 10 projects for future funding and implementation.

Stage 4 Detailed Implementation Plan

Subject to funding a detailed implementation plan will be developed. In particular, the implementation will focus on the identified projects in stage 3. Each project will have clear objectives, outcomes, timelines and agency responsibilities.

A successful Western Adelaide health capacity building and export strategy should seek the ideal use of forward and backward integration between domestic and external markets of health care services in order to encourage the development of a competitive supply of health services and a sustainable health sector. A health strategy should seek to deliver market-oriented actions by individual companies, governments, or private sector associations, to achieve market opportunities and reach final consumers in target markets. The World Health Organization report on export of health services suggests:

> The most important elements of the strategy are: the rationale (aims); the identification of specific services to export and internal and external barriers to overcome or eliminate; the trade policy devices to promote the exportable supply; and the marketing tools and promotional mechanisms to reach the appropriate consumers in foreign markets. Another key element is to be fully aware of the strengths, weaknesses, opportunities, trade barriers, and threats in adopting strategic actions concerning the most important issues to be addressed.

The ranking of target markets for Western Adelaide has therefore been based on a comprehensive methodology employing desktop research to identify the region’s ‘Relative Competitive Position’ in the selected markets alongside the ‘Market Attractiveness’ of each market. Criteria in each category are weighted and assessed allowing a final matrix to be constructed that establishes the recommended target market priorities. It is important to note that this report contributes to Western Adelaide’s health industry development and export strategy by analysing and recommending priority target markets for further investigation and strategy implementation. The scope of the work is therefore undertaken within that strategy itself and focuses on markets already identified by the City of Charles Sturt and Hudson Howells as ‘high priority targets’.

The recommended actions for the Western Adelaide Health Business Collaboration include:

- Facilitating trade opportunities for Western Adelaide organisations by raising the international profile of its health capabilities, assisting with in-market access and building government-to-government relationships.
- Enabling collaborations and partnerships by bringing together various parties across the health supply and value chains through the development of a health cluster.
- Improving the operating environment for Western Adelaide organisations moving into global health markets by tackling regulatory and administrative barriers.

---

Growing investment in Western Adelaide by supporting organisations to make investment decisions, making local business conditions attractive to investors and promoting investment opportunities.

This study therefore focuses on prioritising markets for the above actions along with the gathering and dissemination of information that will assist Western Adelaide organisations to access export opportunities in priority markets.

2. Western Adelaide Health Sector Analysis

This section of the report summarises the findings of the literature review and desktop research undertaken to inform the preliminary analysis and prioritisation of target markets for Western Adelaide Health Businesses.

The research and analysis has been divided into two distinct sections in order to facilitate an assessment and comparison of Western Adelaide’s Relative Competitive Position by market against the Market Attractiveness of each individual market for inclusion in an Export Strategy.

The Relative Competitive Position section relies heavily on existing research documents. This information has, however, been supplemented and updated by industry consultation.

The Market Attractiveness section provides detailed country profiles for each priority market, plus Singapore and Timor Leste to offer added information in the ASEAN and Pacific Rim regions. Detailed statistical data is provided for other global markets including the Middle East and Latin America for comparison purposes in assessing global priorities. A detailed combined analysis of the ASEAN region is provided at the commencement of this section reflecting the importance of the combined region to trade with South Australia and the emerging ASEAN Economic Community.

2.1 Western Adelaide’s Relative Competitive Position

2.1.1 Western Adelaide’s Key Capabilities

The Western Adelaide Region has world class capabilities across the health and aged care industry based on seven core capabilities which include:

1. Health System Policy, Design, Funding and Operations
2. Healthcare provision and skilled health professionals
3. Medical research and Life Sciences
4. Education and training
5. Planning, construction and management of health and aged care facilities
6. Provision of diagnostic, medical and clinical services to international patients, both on and off-shore
7. Medical products and technology

Health is the largest employer in South Australia and has replaced manufacturing as the largest employer in the City of Charles Sturt.

The health care and social assistance sectors represent 19,000 jobs in Western Adelaide, while the professional and scientific sector has over 7,700 jobs. The health sector is increasing rapidly in Western Adelaide. Between 2011 and 2014 the health care and social assistance sector grew by 13%.
The health and professional and technical services industries contribute significantly to building the health and medical technology sector, creating high value added jobs.

### 2.1.2 Health Research Institutions

Western Adelaide has a growing health business cluster. Starting in the West End of Adelaide, the new Royal Adelaide Hospital (RAH) and the South Australian Health and Medical Research Institute (SAHMRI) will have one of the richest health and medical research centres in the Southern Hemisphere. This is strengthened by a Bio Tech Precinct centered on Bio Innovation SA, which is a key member of Charles Sturt’s Western Business Leaders Group.

The South Australian Government has established Health Industries SA (HealthInSA) to identify, explore and promote business and investment opportunities associated with the new health and biomedical precinct in the western end of Adelaide. The health and biomedical precinct on the western end of North Terrace in Adelaide – led by the new RAH, SAHMRI and new University of Adelaide medical training facilities - is one of the largest in the southern hemisphere. Health Industries SA is promoting the cutting-edge capabilities being developed on North Terrace and at the Bio Tech Precinct at Thebarton which include:

- Pharmaceutical and medical device development.
- Emerging technologies, such as health information management.
- Enhancing services for research, such as granting access to South Australian tissue banks.
- Encouraging student and research placements.
- Attracting national and global conferences to South Australia.

It will encourage other companies to invest in partnerships within the precinct to develop, test and translate new drugs and technology into clinical practice, as well as helping boost local pharmaceutical and medical technology companies.

### 2.1.3 Key Health Cluster Anchors

Western Adelaide itself has three major hospitals:

- **The Queen Elizabeth Hospital (TQEH)** – a public primary health care provider.
- **Western Hospital** – a private hospital in Henley Beach, specialising in day surgery and sports medicine.
- **Ashford Hospital** – a private hospital located within the City of West Torrens.

In addition, the City of Holdfast Bay has the Gleneag Community Hospital.

The Queen Elizabeth Hospital precinct, adjacent to Port Road and Woodville Road, has over 10 major health businesses including Healthfirst, Adelaide Medical Solutions and the Basil Hetzel Institute. TQEH has over 300 medical specialists and this medical cluster presents an opportunity to build medical suites in the precinct for surgeons and other specialists.

The Healthfirst Network is a not-for-profit health service organisation focused on supporting population health and primary health care providers. It has over 20 years’ experience servicing general practice teams, allied health, regional health authorities (Medicare Locals & local health networks), aged care sector, community services organisations, and local and federal government bodies. It has three core business areas including:
• Healthfirst Training Australia - a nationally accredited Registered Training Organisation.
• Healthfirst Global Team - delivers GP data analytics (PHA); population health intelligence, research and rapid review consultancies; e-Health solutions and Telehealth.
• Healthfirst Care - aged care, mental health and chronic disease management teams.

Adelaide Medical Solutions, based in Woodville, is a privately owned and operated general practice that first commenced in 1980 in the western suburbs of Adelaide, and has grown to provide healthcare, support and medical advice to over 25,000 patients in the local area. It has visiting specialists in the areas of Geriatrics, Endocrinology, Surgical, Pediatrics, Obesity Management and Pain Management. Also located within the premises are other healthcare services including Audiology, Dentist, Pharmacy, Pathology, Psychology, Radiology, Optometrist, Podiatrist, Physiotherapy, Diabetes Educator and Dietitians.

The Basil Hetzel Institute for Translational Health Research is the research arm of The Queen Elizabeth Hospital. The Institute is purpose-built research facility opened in 2009 and is located on Woodville Road opposite the main campus of The Queen Elizabeth Hospital. It is located 15 minutes from the Adelaide CBD in the city’s western suburbs. All research departments have strong links to the clinical divisions within the Hospital underpinning the Institute's overarching focus on translational health research. This 'bench to bedside' approach is at the forefront of an emerging area of medical science that aims to improve public health through collaborative discoveries and innovations in patient care, education and research. Research conducted by The Institute covers a broad spectrum, exploring causes, potential improvements in therapeutic outcomes and the prevention of some of the most serious and common health conditions facing the community today. These include cancer, cardiovascular disease, arthritis, diabetes, respiratory diseases and stroke. The Institute also has long-standing teaching and research affiliations with the University of Adelaide, the University of South Australia and Flinders University, which offer a range of undergraduate and postgraduate research training opportunities. Several academic departments, including the University of Adelaide Disciplines of Surgery, Medicine and Psychiatry, are based at the Hospital.

The Western Region’s Export Strategy will aim to leverage these strengths as part of Western Adelaide’s increasing international engagement, generating new export and investment opportunities, diversifying the economy, adding value to global relationships and securing Western Adelaide’s position as one of Australia’s innovation centres, which in turn will improve Western Adelaide’s ability to develop and deliver high-quality health services. The region’s Export Strategy will be based on global demand for health goods and services growing fast, particularly in emerging economies with ageing populations, and a growing middle-class with higher quality healthcare expectations. The Export Strategy will therefore incorporate aged care and senior living services.

2.1.4 Key Stakeholders, Strengths and Market Engagement

The Western Region of Adelaide contains some of the State’s key health industry stakeholders. Examples are provided below in the seven core capability areas as a basis for identifying key stakeholders, their strengths and current market engagement, and potential participants in future strategy development and implementation.

Health System Policy, Design, Funding and Operations

The South Australian Department for Health and Ageing assists the Minister for Health, the Minister for Mental Health and Substance Abuse, and the Minister for Ageing to set the policy framework and strategic directions for SA Health. The department supports the delivery of public health services,
formulates health policy, facilitates public and consumer consultation on health issues, and monitors the performance of South Australia’s health system by providing timely advice, research and administrative support.

There are three divisions within the Department:

- Finance and Corporate Services
- System Performance and Service Delivery
- Transforming Health.

*Healthcare provision and skilled health professionals*

Western Adelaide’s health system comprises two major public health institutions and two major private hospitals including:

- The soon to be relocated **Royal Adelaide Hospital** which will provide excellence in care and research, resulting in improved patient outcomes and a system that will become one of the most highly-regarded in the world. The RAH is South Australia’s largest accredited teaching hospital, providing the people of South Australia (and nearby states and territories) with outstanding medical care and rehabilitation. **Hampstead Rehabilitation Centre**, a campus of the RAH, provides clinical rehabilitation services for people suffering from traumatic brain injury, stroke, other neurological and medical disorders, spinal cord injury, orthopaedic conditions and amputations.

- **The Queen Elizabeth Hospital**, a 311 bed, acute care teaching hospital that provides inpatient, outpatient, emergency and mental health services to a population of more than 250,000 people living primarily in Adelaide’s western suburbs.

- The private **Western Hospital** has had a long and successful history of providing surgical and medical acute care services to the residents of Western Adelaide. It accommodates medical patients with a variety of conditions such as:
  - Cancer
  - Diabetes
  - Heart Disease
  - Respiratory Disorders (e.g. asthma)
  - Arthritis/Skeletal Disorders
  - Neurological Disorders (e.g. stroke)

  Services offered include:

  - Physiotherapy
  - Dietary Support/Assessment
  - Pathology Services
  - Remedial Massage
  - Breast Care Nursing
  - Oncology Nursing Specialists
  - Radiological Services
  - Palliative Care Nursing Specialists.

  The hospital has a range of specialist clinics which include:
- Western Sports Ortho
- Western Heart Care
- Western Eyecare
- Leading Edge Physical Therapists
- Western Sports Ortho & GP practice
- Western Breast Clinic
- City Fertility Centre (IVF)
- Western Oncology
- Western Gynaecological and Obstetrics
- Western Gastrointestinal Service
- Active Orthopaedics.

- The private Ashford Hospital a private, not-for-profit hospital and is a member of the Adelaide Community Healthcare Alliance Incorporated (ACHA) in South Australia. Ashford Hospital is located 5 km south west of Adelaide and with 239 beds, it is South Australia’s largest private hospital and considered a centre for clinical excellence. Its high level of service enable it to perform a broad range of surgical, medical, diagnostic and interventional procedures which are supported by medical imaging, radiology and pathology on site. Ashford is fully equipped with the highest level of private intensive care, and available in South Australia with the additional provision of high dependency, angiography, coronary and cardiac surgical units.

Other key organisations include:

- **Adelaide Medical Solutions** - general practice and visiting specialist services as detailed above.

**Medical Research and Life Sciences**

Western Adelaide’s medical research segment includes clinical trial capabilities, contract research, registries/cohorts, research partnerships and licensing of intellectual property.

Many of the health and medical research institutes are considered world leaders in their fields, with the capability of meeting international public health challenges. These include:

- **The South Australian Health and Medical Research Institute (SAHMRI)** is South Australia’s first independent, flagship health and medical research institute and the pioneer of the state’s new Health and Biomedical Precinct on North Terrace. The Institute will house a mix of 600 South Australian, interstate and international researchers in its purpose built, iconic building. The facility has been a key element in attracting new research talent and retaining the best from within SA. SAHMRI supports and fosters an environment where early career researchers can build their careers and undertake world-leading research. Collaboration and innovation are the main drivers in making SAHMRI work. SAHMRI collaborate with the State Government, SA’s three major universities and CSIRO to provide resources to researchers across the state. Each of the three universities and CSIRO will have research teams in the SAHMRI building that are aligned closely with SAHMRI’s research themes. SAHMRI also works closely with leading charities, including the Cancer Council SA and Heart Foundation.

- **The Basil Hetzel Institute for Translational Health Research** - the productive research arm of The Queen Elizabeth Hospital as detailed above.
Bio Innovation SA is an initiative of the South Australian government based in Western Adelaide that has facilitated significant company and job growth, increased exports and attracted investment capital to South Australia over the past 14 years. It is fast-tracking high-tech industry with a focus on bringing innovative South Australian products and technologies to global markets. The organisation offers:

- Access to funding including grants, venture capital and other finance.
- Connection to technology investment opportunities in South Australia.
- Infrastructure support through two business incubators and land for new technology facilities.
- Co-location with a cluster of 60+ high-tech companies.
- Business assistance catalysing companies towards technology commercialisation.
- Access to international networks.

**Education and Training**

Western Adelaide has significant expertise in providing medical education and training to students and clinicians in South Australia and overseas.

Since it was founded in 1840, the RAH has built an international reputation as one of Australia’s finest public teaching hospitals. The hospital offers basic training positions in internal medicine, surgery and general practice, as well as advanced training in a range of specialty areas. Its staff are also actively involved in cutting edge research, making the RAH a centre for both medical and research excellence. TQEH is also an acute care teaching hospital and the University of Adelaide Disciplines of Surgery, Medicine and Psychiatry, are based at the TQEH.

Other key organisations include:

- **Healthfirst** training research and management teams as detailed above.

- **The South Australian Sports Institute (SASI)**, a division of the State Government’s Office for Recreation and Sport, identifies, develops and supports athletes with the potential to perform at the highest national and international levels of sport. The institute works with sporting partners to conduct world-class intensive coaching and training programs and individual scholarship programs. Delivering leading edge scientific and technical support, SASI supports the holistic development of athletes, coaches and staff.

**Planning, construction and management of health and aged care facilities**

Another area of strength for Western Adelaide is in the architectural design, construction and operational management of healthcare facilities, and facilitating the coordination of packaged ‘end-to-end’ solutions to offer international customers.

Companies include:

- **Western Hospital**
- **Elwa** - Elwa has a long tradition of providing energy and water efficient solutions for buildings and residential. Since 1990 Elwa has been focusing on energy efficiency.
- **Coombsbarei Constructions** – An integrated design and construction company seeking international projects.
Provision of diagnostic, medical and clinical services to international patients, both on and off-shore

Development of this segment can contribute to the growth of the public and private health services sector by delivering an additional revenue stream outside of patient care and research. This will support increased service delivery and enable the purchase of the latest health technologies.

This segment includes Medical Tourism which relates to the provision of medical services to fee-paying international patients, separate to meeting service commitments to South Australian patients. Sports Medicine is a particular strengths of the Western Adelaide Region.

The Western Region comprises some elite sporting organisations including the Adelaide Football Club, the Port Adelaide Football Club, Adelaide United Soccer Club and the Adelaide 36ers along with a host of medical specialists including physiotherapists and trainers and a range of specialist suppliers of services and medical equipment. These organisations have potential synergies that can be combined to explore opportunities to export Sports Medicine, including elective surgery, to emerging markets. Western Hospital specialises in day surgery and sports medicine and is a specific regional strength in this area.

Medical products and technology

Western Adelaide is home to one of the world’s top biotechnology clusters including Bio Innovation SA. Bio Innovation SA is in contact with over 50 companies involved in various stages of product and patent development. There are opportunities through this project to bring other companies and concepts into Bio Innovation SA and the Flinders University Medical Devices Partnering Program (MDPP).

The MDPP supports the development of cutting-edge medical devices through unique collaborations between researchers, industry, end-users and government. The program facilitates the development of medical devices by coordinating the efforts of key stakeholders. It provides a mechanism for the development of prototypes, proof of concept and/or commercialisation planning for potential Australian medical device products. MDPP has a particular focus on finding solutions for clinicians, the ageing and the disabled. Medical devices provide Western Adelaide with the opportunity to position itself in a growing global market, taking advantage of current research and manufacturing capability.

There is further capacity to grow Western Adelaide’s international exports of medical devices, scientific equipment, pharmaceuticals and digital health/ICT products. This includes leveraging expertise in design consultancy and high-tech contract development for international clients, as well as encouraging collaboration to improve domestic procurement and market access information. CPIE Pharmacy Services (CPIE) is a South Australian owned and operated registered pharmacy located at Findon in Western Adelaide. In 1996, CPIE commenced operation of an aseptic compounding pharmacy. Initial focus was directed towards provision of chemotherapy compounding services to support local day oncology centres in public and private SA hospitals. Over time, CPIE expanded to provide aseptic compounding services to support growth in the HITH sector. CPIE now has a strong focus towards integrated home infusion pharmacy services, including: antimicrobial, chemotherapy, post-operative pain management, and palliative care services. CPIE currently supplies antimicrobial infusion products to several SA public hospitals along with a number of country centres. Since 2004, CPIE has provided comprehensive pharmacy services (distribution, clinical and aseptic compounding) to the Western Hospital through an onsite hospital pharmacy department. Being co-located within the Hospital, the pharmacy was developed to deliver services linked to the medical specialties of the Hospital, which creates the opportunity to be involved in multidisciplinary
management of care. Professional pharmacy services are provided to patients that attend the growing General Medical Practice also located on the Hospital premises. CPIE specialises in:

- Aseptic compounding.
- Home infusion pharmacy services.
- Infusion devices.
- Hospital & Community pharmacy (Western Hospital).
- Home Medicines Reviews.

**Austofix** has supplied quality, Australian-made orthopaedic trauma devices to individual surgeons and leading multi-national distributors with a focus on state-of-the-art, specialised products to deliver intuitive instrumentation that can drastically reduce surgery time and improve clients’ businesses.

### 2.1.5 SME’s Clusters and Innovation

There are over 100 companies in Western Adelaide directly involved in the health sector. In addition, the region has three major hospitals and a wide range of clinicians, researchers and medical specialists. The local health sector including Bio Innovation SA has cutting edge companies such as Dynek, CPIE, ELWA, and Austofix. These companies, institutions and service providers such as hospitals provide one of the richest test beds for medical innovation. When added to the Health and Biomedical Precinct in the West End of Adelaide we have a truly unique agglomeration of health businesses, services and medical research institutions all within a few kilometres of each other. The issue is then how to foster innovation for the development of new products and services?

The key to innovation is combining the strength of this health sector with that of the broader SME sector and advanced manufacturing sector to produce innovative products and services for the global market.

Innovation in the form of new products, processes is essential to economic growth. The innovative capacity of a nation or region is heavily rooted in its microeconomic environment, in areas such as the intensity of scientists and engineers in the workforce. Innovation in our local area can hold the key to solving many of the world’s most pressing challenges in health care.

Innovation can be more readily achieved with a well-funded and structured cluster. The term business cluster, also known as an **industry cluster, competitive cluster**, was introduced and popularised by Michael Porter in *The Competitive Advantage of Nations* (1990). Michael Porter claims that clusters have the potential to affect competition in three ways: by increasing the productivity of the companies in the cluster, by driving innovation in the field, and by stimulating new businesses in the field. Porter argues that economic activities are embedded in social activities; that 'social glue binds clusters together.'

Below is a diagram of how the local health business cluster could work with a focus on producing products and services for the global market.
Figure 2:

Health Cluster Innovation process

Export Health Products and Services
2.1.6 Existing Government to Government Relationships

South Australian State Government

Existing government to government relationships and the existence of South Australian Government Commercial offices in-market contributes significantly to the relative competitive position of Western Adelaide and its companies when compared with markets that have no representation.

The Department of the Premier and Cabinet has established the Office of International Engagement (OIE) as part of its Business and International Development Division, to ensure the state has an integrated and strategic approach to its international activities that align with South Australia’s policy priorities. The office has established four international ‘desks’ covering:

- **The Americas**: United States, South America and Canada
- **North East Asia**: China, Hong Kong, South Korea and Japan
- **Greater Europe**: United Kingdom, European Union member countries, Russia
- **South Asia and South Pacific**: the Subcontinent, South East Asia, South Pacific, Middle East and Africa.

These desks are the catalyst for gathering international intelligence and developing links and partnerships with relevant Commonwealth agencies (particularly DFAT), foreign governments and diplomatic networks, influential interlocutors and key advisory bodies, and the private sector.

The South Australian Government has commercial representation in overseas target markets to attract business investment and migration to the state. These representatives also provide export assistance to South Australian businesses. Markets with commercial representation include:

- The United Kingdom (Agent-General for South Australia).
- China – Shanghai, Jinan (the capital of Shandong Province and Hong Kong (Austrade in HK).

South Australia also has a sister-state relationship with China’s Shandong Province that commenced in 1986. It is a partnership that has encouraged academic and cultural exchange but both parties have agreed to pursue a more fruitful economic and commercial relationship.

South Australia also has a strategic alliance with West Java, Indonesia established in 1996

City of Adelaide

The City of Adelaide has international alliances through Sister City partnerships including:

- Austin, Texas, United States of America (1983)
- Christchurch, Canterbury, New Zealand (1972)
- Georgetown, Penang, Malaysia (1973)
- Himeji, Hyogo, Japan (1982)
- Qingdao, Shandong, Peoples Republic of China (2014)

More recently a series of Friendly Cooperative Agreements have developed to promote relations with China. These agreements support Adelaide’s connections with:

- Dalian, Liaoning, Peoples Republic of China (2001)
- Chengdu, Sichuan, Peoples Republic of China (2001)
Activities under these relationships include educational, cultural and sporting exchanges to business networking opportunities.

**The City of Charles Sturt**

The City of Charles Sturt currently has no Sister City partnerships. However, in September 2015 Council signed a Memorandum of Understanding (MoU) with the Yantai Municipal Bureau of Commerce in Shandong Province. The aim of the MoU is to encourage long term cultural and economic relations between Charles Sturt and the City of Yantai.

Yantai is a dynamic port city, and an economic powerhouse in Shandong with a population of more than 6.5 million people. Yantai has presented to Council a series of health related projects which provides opportunities for a joint ventures and research and ultimately mutually beneficial trade.

*Map 3: Shandong Province China*
3. Market Attractiveness - Macro Market Analysis

3.1 The Global Health Care Sector

The global health sector continues to grow, despite the recent global financial crisis that effected government revenues and private spending in many regions of the world. In many countries, spending on health has grown faster than GDP and population growth, with the Organisation for Economic Cooperation and Development (OECD) member countries averaging 2% more spend annually than GDP growth between 1960 and 2006\(^2\). The World Health Organisation estimated that health expenditures doubled from $2.6 to $5.1 Trillion from 1995-2005\(^3\).

Australia is geographically aligned with many developing countries in Asia that are experiencing increasing expenditure on health due to a variety of factors including, for example\(^4\):

- 80 percent of the world’s smokers live in developing countries.
- 80 percent of worldwide deaths occur in developing countries as a result of chronic diseases.
- Infectious diseases such as HIV/AIDS and tuberculosis are increasing in prevalence.
- Increased income levels and ability to pay for care.
- Increased expectations due to travel and access to media and information.

As indicated in Table 1 below, the Economist Intelligence Unit has forecast that health care spending is likely to accelerate fastest in Asia and Australasia, followed by Eastern and Central Europe, the Middle East and Africa. These markets provide an opportunity for the Western Adelaide Health and Aged Care sector to develop export and health revenue. Increasing demand for health services such as diagnostic treatment and care indicates one of the largest opportunities for the high quality Western Adelaide Services Sector.

Table 2: Health Care Spending by Region (in $US Billions)\(^5\)

<table>
<thead>
<tr>
<th>Region</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Healthcare CAGR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>2,487.2</td>
<td>2,463</td>
<td>2,525</td>
<td>2,615</td>
<td>2,725</td>
<td>2,855</td>
<td>2,999</td>
<td>2.7</td>
</tr>
<tr>
<td>Western Europe</td>
<td>1,767</td>
<td>1,648</td>
<td>1,718</td>
<td>1,756</td>
<td>1,848</td>
<td>1,937</td>
<td>2,018</td>
<td>1.9</td>
</tr>
<tr>
<td>Eastern and Central Europe</td>
<td>184</td>
<td>144</td>
<td>168</td>
<td>183</td>
<td>207</td>
<td>230</td>
<td>258</td>
<td>5.0</td>
</tr>
<tr>
<td>Asia and Australasia</td>
<td>866</td>
<td>902</td>
<td>1019</td>
<td>1116</td>
<td>1227</td>
<td>1352</td>
<td>1475</td>
<td>7.9</td>
</tr>
<tr>
<td>Latin America</td>
<td>277</td>
<td>247</td>
<td>280</td>
<td>293</td>
<td>317</td>
<td>345</td>
<td>376</td>
<td>4.5</td>
</tr>
<tr>
<td>Middle East and Africa</td>
<td>75</td>
<td>75</td>
<td>81</td>
<td>83</td>
<td>89</td>
<td>97</td>
<td>112</td>
<td>5.8</td>
</tr>
<tr>
<td>Worldwide(^6)</td>
<td>5,655</td>
<td>5,478</td>
<td>5,788</td>
<td>6,045</td>
<td>6,410</td>
<td>6,813</td>
<td>7,235</td>
<td>3.6</td>
</tr>
</tbody>
</table>


Growth opportunities identified by the International Finance Corporation in emerging economies for health service providers include large facilities that use cutting-edge technology and promote medical tourism; medium-size, low-cost, high-efficiency hospitals that serve a range of income groups; and medical professionals in solo practice\(^6\).

---

\(^3\) World Health Organization (WHO), 2007
\(^5\) Economist Intelligence Unit, World Industry Outlook: Healthcare and Pharmaceuticals, 2010
The International Finance Corporation, part of the World Bank group, in their 2010 report “Guide for Investors in Private Health Care in Emerging Markets” identified some key barriers that face international health sector companies seeking to develop markets in emerging economies. They identified a number of factors that constrain investment and increase investors’ perceptions of risk in the health sector including:

- **Lack of market information**: As many financial institutions have not invested in the health sector, they often have limited information on the size of the market; its financing needs; and the risks, opportunities, and trends.

- **Fragmented nature of the sector**: Although consolidation and corporatisation are expanding investment opportunities for investors, the private health sector in most emerging markets remains highly fragmented and is dominated by small health care businesses.

- **Lack of transparency**: The private health sector in many developing countries is characterized by low levels of transparency.

- **Ethical concerns**: The private health sector in some countries is characterized by uneven ethical standards. At its most basic level this encourages over-diagnosis, over-prescribing, over-treatment, and overcharging. Other illicit practices conducted by private health care providers may include sales of counterfeit drugs, organ trading, illegal gender selection, and female circumcision. Clearly, such practices discourage investors who value ethical practices and their reputation.

- **Limited business and financial management capacity**: Clinicians who do not have a business background often own health care businesses. Investors cite limited management capacity as a risk in the sector – and it is a key barrier to business growth.

- **Concerns about collateral**: Many investors complain about the type of collateral that health service providers offer, including facilities and specialised medical equipment.

- **Long-term investments**: Due to the nature of the business, many health service providers require longer-term investments, particularly in the case of equity or project financing for larger organisations such as hospitals.

- **High profile project failures**: There have been high-profile failures in the health sector. Investing in hospital infrastructure is costly and risky, particularly with large greenfield sites where there is a high failure rate. These publicised failures make investors cautious of the sector.

- **Economic stability and growth**: A key determinant of the strength of the private health sector is the broader economic environment, including GDP, trading incentives or barriers, and the investment climate.

- **Human resources**: The availability of qualified staff is a key determinant in the size, viability, and growth rate of the private health sector.

- **Government policy toward the private health sector**: Regulations can support or hinder the

---

growth of the private health sector. For example, tax incentives for new health care businesses, clarity of regulations, availability of licenses, and flexibility of hiring medical staff are conducive to the growth of the private health sector. Conversely, other regulations, such as unclear requirements for opening clinics, price controls, and ownership restrictions are likely to inhibit entry and competition. Government funding and contracts to the private health sector is an important indicator of its strength and potential. For instance, many governments are now contracting with the private sector to offer health services.

- **Private expenditures in the health sector**: High levels of funding from private sources, including employer contributions and user fees, are indicators of a strong private health care market. The availability and maturity of private health insurance is also a key indicator.

- **Utilisation of health services in the private sector**: The extent to which a community or population segment accesses health care in the private sector is a clear marker of its scale and potential. For example, the existence of overcrowded, small-scale health facilities and pharmaceutical retail outlets can signal an investment opportunity for expansion and consolidation.

### 3.2 South East Asia – The ASEAN Region

South East Asia is dominated by the Association of South East Asian Nations (ASEAN), a political and economic regional integration grouping. It comprises member states of Singapore, Malaysia, Indonesia, Thailand, Brunei, Philippines, Vietnam, Laos, Cambodia and Myanmar (Burma). This section of the report explores the broader ASEAN market and the trade and investment rules that affect Western Adelaide companies when seeking to export and invest through market entry into ASEAN member countries. Specifically this section looks at the AANZFTA Treaty and the ASEAN Economic Community, before looking at the specifics of individual member countries.

#### 3.2.1 AANZ - ANZ Free Trade Agreement (AANZFTA)

The ASEAN – Australia and New Zealand Free Trade Agreement (AANZFTA) was the first comprehensive free trade agreement signed by ASEAN, and creates one of the largest free trade zones in the world, covering approximately 600 million people (Indonesia, Malaysia, Singapore, Thailand, Vietnam, Philippines, Laos, Burma, Cambodia and Brunei).

The AANZFTA was signed in 2009 and subsequently came into action in 2010, and resulted in development of a common market area, which allowed freer movement of goods between signatory states including, for example, Australia and Indonesia. The economic and trade effects of AANZFTA between Australia and Indonesia have been reductions in tariff and non-tariff barriers. AANZFTA will see progressively lower tariffs on most goods exported within the trade area. The effect of this agreement on trade includes:

- Provides a solid framework for liberalisation of trade in services policy across the region, although leaves greater scope for effective liberalisation in services trade.

- Covers all sectors, including goods, services, investment and intellectual property.

---

• Opens up opportunities for access to global supply chains in South East Asia with Regional Rules of Origin (ROO) ensuring that products made in one ASEAN country, and containing Australian component parts will retain preferential trade status within the AANZFTA zone.

• Trade liberalisation in AANZFTA goes beyond the commitments made by ASEAN countries in the Doha Round of WTO negotiations.

AANZFTA has the broad effect of reducing the effective tariff barrier to trade for Australian companies into the member states of ASEAN. The table below indicates the level of change to the number of tariff lines that are implemented in each ASEAN member state in addition to Australia and New Zealand. The effect is a gradual reduction to zero tariff across the majority tariff lines in most ASEAN jurisdictions.

Table 3: AANZFTA Tariff Lines and Elimination Schedule

<table>
<thead>
<tr>
<th>Country</th>
<th>2005 Base Tariffs (%)</th>
<th>2010 (%)</th>
<th>2013 (%)</th>
<th>Final Tariff Elimination (%)</th>
<th>Year Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>47.6</td>
<td>96.4</td>
<td>96.5</td>
<td>100</td>
<td>2020</td>
</tr>
<tr>
<td>Brunei</td>
<td>68</td>
<td>75.7</td>
<td>90</td>
<td>98.9</td>
<td>2020</td>
</tr>
<tr>
<td>Burma</td>
<td>3.7</td>
<td>3.6</td>
<td>3.6</td>
<td>85.2</td>
<td>2024</td>
</tr>
<tr>
<td>Cambodia</td>
<td>4.7</td>
<td>4.7</td>
<td>4.7</td>
<td>88</td>
<td>2024</td>
</tr>
<tr>
<td>Indonesia</td>
<td>21.2</td>
<td>58</td>
<td>85</td>
<td>93.2</td>
<td>2025</td>
</tr>
<tr>
<td>Laos</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>88</td>
<td>2023</td>
</tr>
<tr>
<td>Malaysia</td>
<td>57.7</td>
<td>67.7</td>
<td>90.9</td>
<td>96.3</td>
<td>2020</td>
</tr>
<tr>
<td>New Zealand</td>
<td>58.6</td>
<td>84.7</td>
<td>90.3</td>
<td>100</td>
<td>2020</td>
</tr>
<tr>
<td>Philippines</td>
<td>3.9</td>
<td>60.3</td>
<td>91</td>
<td>94.6</td>
<td>2020</td>
</tr>
<tr>
<td>Singapore</td>
<td>99.9</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>2009</td>
</tr>
<tr>
<td>Thailand</td>
<td>7.1</td>
<td>73</td>
<td>87.2</td>
<td>99</td>
<td>2020</td>
</tr>
<tr>
<td>Vietnam</td>
<td>29.3</td>
<td>29</td>
<td>29</td>
<td>89.8</td>
<td>2020</td>
</tr>
</tbody>
</table>

In addition to the removal of tariff lines in their entirety as they relate to Australian companies seeking to export to ASEAN, there is also a reduction of the total tariff lines to the 0-5% tariff level. The table below indicates the level of total percentage of tariff lines in each ASEAN member state, Australia and New Zealand that will be contained between the 0-5% tariff level.

---

The broad effect of this regional free trade agreement will be economy wide implications for Western Adelaide companies seeking to export products and services to the region. However, the specific opportunities that emerge from AANZFTA relate to the reduction in some of the specific tariff lines related to products and services in the health and aged care sectors.

The main effect of AANZFTA on the Western Adelaide health and aged care sectors has been to create increased opportunities for exports of products and services directly to markets in the ASEAN region. The agreement does not however go directly to the many non-tariff barriers and regulatory hurdles that inhibit investment and market engagement in specific markets such as Malaysia, Indonesia, Vietnam, and Thailand. There is an expectation that bi-lateral free trade agreements and comprehensive economic partnership agreements with countries such as Malaysia and Indonesia will address many of these Non-Tariff Measure (NTM) barriers to trade10.

### 3.2.2 ASEAN Economic Community

In 2009 the political leaders of the ASEAN grouping agreed to move towards greater economic integration through the reduction of tariff and non-tariff measures between member states. This agreement sought to establish the ASEAN Economic Community by 2015, and was modelled to some level on the European Community model of economic integration of the early 1990s (prior to the political integration arising from the establishment of the EU). The ASEAN Economic Community areas of cooperation include human resources development and capacity building; recognition of professional qualifications; closer consultation on macroeconomic and financial policies; trade financing measures; enhanced infrastructure and communications connectivity; development of electronic transactions through e-ASEAN; integrating industries across the region to promote regional sourcing; and enhancing private sector involvement for the building of the AEC.

The Blueprint for regional economic integration in ASEAN covers a range of different areas, including11:

- Skill acquisition through education and other forms of human resource development
- Information and communication technology
- Science and technology

---


11 ASEAN Secretariat, 2009, “ASEAN Economic Community Blueprint”, Association of South East Asian Nations.
• Entrepreneurship
• Poverty alleviation
• Social safety nets
• Food security and safety
• Health
• Drugs
• Natural disasters, and the environment
• ASEAN’s cultural heritage
• And the cultivation of a regional identity.

The ASEAN Economic Community (AEC) is in principle moving towards elimination of customs duties on most intra-ASEAN trade. However, there are domestic political issues within the ASEAN member states which have limited to scope for full economic integration as originally scheduled. A recent study by the Asian Development Bank into the progress of the ASEAN Economic Community found that many member states are intent on maintaining political autonomy despite the objective of seeking economic integration. This does not however indicate that the objective of regional economic integration is unachievable or beneficial in its current state, or future scope\textsuperscript{12}.

There have been substantial improvements in the level of reduction in internal tariff reduction for intra-ASEAN trade, and this positive tariff effect has resulted in some Australian based companies establishing some in-market operations to take advantage of the preferential trade arrangements between ASEAN member states. The ASEAN Economic Community regional economic integration process also has benefits when seen in conjunction with the existing AANZFTA treaty, which provides Australian companies preferential access to export markets in ASEAN\textsuperscript{13}. If the AEC can be implemented as intended, it could expand economies of scale for investors in Southeast Asia and lead to a more efficient allocation of resources.

There are however concerns about the level of Non-Tariff Measures (NTM). These internal domestic regulatory barriers have replaced tariffs as protective measures for domestic industries. This is particularly a concern as the global production networks of multinational companies in the region drive a majority of Intra-ASEAN trade. The Asian Development Bank has identified NTMs as having replaced tariffs as protective measures for domestic industries\textsuperscript{14}. Often these NTM’s take the form of compliance with technical regulations, such as standards to protect plant, animal and human health, entails additional costs and raises the cost of production for goods destined for foreign markets. The effect of these measures is similar to a tariff measure as it disadvantages foreign firms that may have a different set of standards (or none as in the case of developing countries) for their own local markets.

ASEAN Tariff rates have been progressively reduced over the past two decades, while non-tariff barriers (at the border and beyond the border) are still prevalent. These NTMs include; discriminatory, diverse product standards, weak enforcement of government regulations, and the ‘logistics gap’ among the economies. The effect of NTM’s in the Healthcare Sector in selected ASEAN markets can be seen in the table below where the overall impact of the NTM on individual product lines is comparatively low, except in the cases of Indonesia (61.12%) and Singapore (71.35%) where there is prohibition of import lines.

\textsuperscript{12} ASEAN Secretariat, 2009, “ASEAN Economic Community Blueprint”, Association of South East Asian Nations.
\textsuperscript{14} Asian Development Bank, 2013, “ASEAN Economic Community: a work in progress”, Asian Development Bank
Table 5: ASEAN Health Sector NTM Import Coverage Ratios

<table>
<thead>
<tr>
<th>NTM Type</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>ASEAN-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2300 Internal Taxes and Charges on Imports</td>
<td>1.52</td>
<td></td>
<td></td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>6100 Non-Automatic Licensing</td>
<td></td>
<td>4.18</td>
<td>25.69</td>
<td>12.78</td>
<td></td>
</tr>
<tr>
<td>6170 Prior Authorizing for Sensitive Products</td>
<td></td>
<td></td>
<td>0.59</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>6200 Quotas</td>
<td>4.88</td>
<td></td>
<td></td>
<td>0.47</td>
<td></td>
</tr>
<tr>
<td>6300 Prohibition</td>
<td>61.12</td>
<td>71.35</td>
<td></td>
<td>39.54</td>
<td></td>
</tr>
<tr>
<td>8100 Technical Regulations</td>
<td>27.72</td>
<td>0.31</td>
<td>17.31</td>
<td>7.09</td>
<td></td>
</tr>
<tr>
<td>8130 Labeling Requirements</td>
<td>56.24</td>
<td></td>
<td>0.59</td>
<td>5.51</td>
<td></td>
</tr>
<tr>
<td>8150 Testing, Inspection, Quarantine Requirements</td>
<td>27.72</td>
<td></td>
<td>0.59</td>
<td>2.79</td>
<td></td>
</tr>
<tr>
<td>8900 Technical Measures</td>
<td></td>
<td></td>
<td>0.59</td>
<td>0.15</td>
<td></td>
</tr>
</tbody>
</table>

The product lines effected through prohibition can be moderated through the AANZFTA, and other bi-lateral treaties between Australia and ASEAN member states. It is important to note that although there has been a noticeable decline in the non-tariff trade costs in the past decade, the trade performance is still lower, due to these imposts, than that of China, South Korea and Japan\(^\text{15}\).

3.2.3 Healthcare Sector as an ASEAN Priority

In the AEC Blueprint, the healthcare sector was made a priority sector for liberalisation in investment/foreign ownership levels as a result of its potential to develop GDP growth, technology transfer, and the mobility of the medical profession that would lead to better quality of healthcare and the overall welfare in the region. The Blueprint identified the healthcare sector as including\(^\text{16}\):

- Hospital and medical products.
- Hospital, medical laboratory, and ambulance services.
- Medical services involve medical, dental, and paramedical services.

The AEC Blueprint sought to remove or substantially remove all restrictions on trade in healthcare, alongside e-ASEAN, Tourism Services, Logistics, and Construction by 2015.

\(^\text{15}\) Asian Development Bank, 2013, "ASEAN Economic Community: a work in progress", Asian Development Bank
\(^\text{16}\) ASEAN Secretariat, 2009, "ASEAN Economic Community Blueprint", Association of South East Asian Nations.
Table 6: AEC Blueprint Trade Liberalisation Targets

<table>
<thead>
<tr>
<th>Service Sector Liberalization Targets Set by the AEC Blueprint</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority Sectors:</strong></td>
</tr>
<tr>
<td>e-ASEAN, Healthcare and tourism services</td>
</tr>
<tr>
<td>70% – 2010</td>
</tr>
<tr>
<td>Logistics and other service sectors</td>
</tr>
<tr>
<td>51% – 2010</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>51% – 2008</td>
</tr>
</tbody>
</table>

The ADB report “ASEAN Economic Community: a work in progress” identified Malaysia, the Philippines, Indonesia and Thailand as not having increased foreign equity share limits in certain health services to 70% by 2010 as prescribed by the AEC Blueprint. This investment facilitation measure is not uncommon in terms of liberalisation of investment rules across the AEC. In general the level of liberalisation across all trade and investment regulatory lines is behind schedule by about 30%. The ADB makes the point that relaxing the restrictions on foreign capital participation may have limited impact on cross border investment in health services given the shortage of physicians in the region. However this may prove to be a potential market opportunity for the Western Adelaide Health and Aged Care sector. The specific level of liberalisation in the investment/foreign ownership levels amongst ASEAN countries can be seen in the table below.

Table 7: ASEAN Healthcare Sector Foreign Ownership Regulations

<table>
<thead>
<tr>
<th>Regulations on Foreign Ownership in the Healthcare Sector of each ASEAN Country</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country</strong></td>
</tr>
<tr>
<td>Malaysia</td>
</tr>
<tr>
<td>Philippines</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Thailand</td>
</tr>
<tr>
<td>Laos PDR</td>
</tr>
<tr>
<td>Cambodia</td>
</tr>
<tr>
<td>Brunei Darussalam</td>
</tr>
<tr>
<td>Singapore</td>
</tr>
<tr>
<td>Viet Nam</td>
</tr>
<tr>
<td>Myanmar</td>
</tr>
</tbody>
</table>

ASEAN countries generally have low levels of medical professionals working in their countries, which is one of the leading contributors to low health standards. As an example, Malaysia has a number of physicians per 10,000 population lower than the average of that of the lower-middle income countries (of which Malaysia is classified). The level of medical professionals as indicated across all ASEAN countries in the following table demonstrates this lack of capability institutionally, which will require government and industry investment in the sector to raise health outcomes for the general population. In generally, universities producing medical professionals are under the government or

---


the ministry of health’s control.

As a consequence, this shortage of physicians and nurses creates inefficiencies in the health system because the private sector cannot fulfill the needs of medical professions by itself. Therefore, the limitations of the medical workforce is one factor inhibiting the integration of healthcare sectors in the region, in addition to existing restrictions on foreign equity in hospital services.

Table 8: ASEAN Medical Professional Workforce

<table>
<thead>
<tr>
<th>Country</th>
<th>Physician</th>
<th>Nursing and midwifery personnel</th>
<th>Pharmaceutical personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>15</td>
<td>44</td>
<td>3</td>
</tr>
<tr>
<td>The Philippines</td>
<td>12</td>
<td>61</td>
<td>6</td>
</tr>
<tr>
<td>Brunei Darussalam</td>
<td>11</td>
<td>61</td>
<td>1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>7</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>6</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Myanmar</td>
<td>4</td>
<td>10</td>
<td>&lt;0.5</td>
</tr>
<tr>
<td>Thailand</td>
<td>3</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>3</td>
<td>10</td>
<td>n/a</td>
</tr>
<tr>
<td>Cambodia</td>
<td>2</td>
<td>8</td>
<td>&lt;0.5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1</td>
<td>8</td>
<td>&lt;0.5</td>
</tr>
</tbody>
</table>

Source: SCB EBC analysis based on data from World Health Statistics 2010, World Health Organization (WHO).
3.3 Overview of North East Asia – China, Japan and Korea

Map 4: Overview of North East Asia – China, Japan and Korea

North East Asia has undergone substantial urbanisation over the past 70 years, which has accelerated in the past decade, and has been one of the principle drivers of economic growth across the region. This growth in urbanisation is reflected in the movement of Chinese regions from low – income economies to middle income economies.

Similarly there has been strong economic growth from South Korea, which has moved from a low income economy in the 1980’s to an advanced economy today, while Japan has long been considered an advanced economy.

In China real GDP per capita at purchasing power parity (PPP) expanded at more than 10% percent annually from 1990 to 2010. It is estimated that approximately 500 million households in North East Asia are part of the “consuming class,” which is a proxy for the middle class, and these consumers are the main purchases of consumer products. Urbanisation is continuing and will continue to drive growth in North East Asia with conservative estimates of the consuming class forecast to reach more than 1 billion households by 2030. This dramatic income shift will spur demand for a wide range of goods and services, and is one of the major reasons North East Asia is one of the fastest growing consumer markets.

Australia has recently signed three bi-lateral trade agreements in North East Asia; the (South) Korea – Australia Free Trade Agreement (KAFTA), Japan – Australia Economic Partnership Agreement (JAEPA), and the recently signed China-Australia Free Trade Agreement (ChAFTA). Countries in North East Asia are currently involved in negotiations over two regional trade agreements involving Australia which have the potential to further open Australian export opportunities in North East Asia; the Trans Pacific Partnership Agreement (TPP), and the Regional Comprehensive Economic Partnership Agreement (RCEPA). Brief details of these agreements are included below as regional context.

3.3.1 Korea – Australia Free Trade Agreement (KAFTA)

The Korea-Australia Free Trade Agreement (KAFTA) was ratified and officially entered into legal force in December 2014. KAFTA substantially liberalises Australia’s trade with its fourth-largest trade partner and protects and enhances the competitive position of Australia’s businesses in South Korea.
Australian exporters gain significantly improved market access in goods, with tariff elimination on nearly all Australia’s current exports by value by full implementation of the Agreement. Under KAFTA, Australian services providers (including the health sector) receive the best treatment Korea has agreed with any trade partner. Investment commitments in the Agreement protect and enhance investment in both directions.

On entry into force, Korea provided duty-free access on 84 per cent of Australia’s exports (by value) to Korea. This will increase to 95.7 per cent by 1 January 2023, and 99.8 per cent on full implementation (1 January 2033). A small number of products are subject to other phasing arrangements (including seasonal tariff elimination). Korea insisted that some of its most sensitive products, such as rice, be excluded from any tariff concessions under KAFTA (accounting for only 0.2 per cent of Australia’s current exports to Korea). On entry into force of the Agreement, Australia provided duty-free access on 86 per cent of our current imports from Korea. This will increase to 100 per cent by 1 January 2021. On certain import sensitive products, Australia’s tariff elimination is being undertaken progressively over transitional periods. Products covered by transitional arrangements include some motor vehicles and parts, steel, chemical, plastics and textile, clothing and footwear products. A bilateral safeguard mechanism is in place to address any sudden surge in imports over the transitional periods.

The Australia-Korea Free Trade Agreement (KAFTA) provides Australian services exporters with the best treatment Korea has agreed with any trading partner, on par with its agreements with the United States and Europe. This includes new market access for suppliers of legal, accounting, and telecommunications services and guaranteed access across a broad range of other services.

A broad range of Australian professionals, including health care, architects, landscape architects, surveyors, and urban planners will benefit under KAFTA from Korea’s commitments to guarantee existing market access.

- Australian professionals will benefit from ongoing work to enhance mutual recognition of professional qualifications. This will be initially focused on: engineering services; accounting services; architectural services; healthcare services provided by pharmacists and radiographers; and veterinary services.

- An agreement by both countries for improving recognition of health professional qualifications over time, including for pharmacists and radiographers.

- Australian professionals benefit from guaranteed visa access arrangements, including for their spouse and dependents, to enter and stay in Korea.

It is important to note that the agreement does not provide preferential access for Australian Health and Aged Care product and technology providers by way of tariff relief, nor regulatory approval processes. This still provides a substantial impediment to the growth of the Korean export market for Australian health and medical device, goods and technology producers.

### 3.3.2 Japan – Australia Economic Partnership Agreement (JAEPA)

The Japan-Australia Economic Partnership Agreement (JAEPA) was ratified and officially entered into force in January 2015. The Agreement provides valuable preferential access for Australia’s exports and supports growth in two-way investment. JAEPA is the most liberalising trade agreement Japan has ever concluded, and provides Australian exporters preferential trade access compared with comparative exporting economies from North America and Europe.
JAEPAs provide market access through lower tariffs, facilitation of bilateral trade, provision of protection for domestic industries and ensures that only Australian and Japanese goods benefit from the preferential market access. JAEPAs will ensure customs procedures are applied in a predictable, consistent, transparent, impartial and reasonable manner to facilitate trade. Greater transparency is a key outcome of JAEPAs. To assist traders to take full advantage of the opportunities created under JAEPAs, information on customs requirements will be more easily accessible, including on the Internet and through designated public inquiry points.

To provide legal certainty, JAEPAs enable traders to apply for advance rulings in respect of origin and tariff classification, valuation, and to ascertain whether or not a good will qualify for preferential tariffs under the Agreement. Under JAEPAs, traders will also have access to independent review mechanisms to address any complaints about customs decisions.

JAEPAs guarantees Australian services providers access to the significant and well-developed Japanese market. JAEPAs builds on the longstanding and important bilateral investment relationship to improve opportunities and protections for Australian investors in Japan, while sending a clear message to Japanese investors that Australia is open for business.

The agreement establishes a comprehensive framework for continued growth and development in Australia’s services and investment relationship with Japan. Australia has secured outcomes which are equal to, or better than, the best commitments Japan has made in any of its other trade agreements. The agreement goes beyond Japan’s existing commitments to Australia under the World Trade Organisation, including in key areas of commercial interest such as financial, education, legal and telecommunications services. It includes a framework to advance mutual recognition of services qualifications and to support mutual recognition initiatives by professional bodies in Australia and Japan.

The provisions in the agreement are structured in a similar fashion to Australia’s trade agreements with the United States, New Zealand and Chile, and the recently concluded FTA with Korea. Importantly, Japan has committed to extend future liberalisation, including commitments it makes in future trade agreements, to Australian services exporters and investors. These commitments help ensure Australian companies will be able to operate in Japan, now and into the future, on the basis of the highest levels of market access enjoyed by any of our competitors.

It is important to note that the agreement does not provide preferential access for Australian Health and Aged Care product and technology providers by way of tariff relief, nor regulatory approval processes. This still provides a substantial impediment to the growth of the Japanese export market for Australian health and medical device, goods and technology producers.

3.3.3 China – Australia Free Trade Agreement (ChAFTA)

The China-Australia Free Trade Agreement (ChAFTA) was formally signed between the governments of China and Australia in Canberra on 17 June 2015. This agreement now needs to undergo domestic ratification in order for the agreement to legally come into force (and provide the improved trade outcomes). This process normally takes a period of up to 6 months, and so it is likely that the agreement will come into force late 2015 or early 2016. ChAFTA lays an historic foundation for the next phase of Australia’s economic relationship with China. ChAFTA will unlock significant opportunities for Australia. China is Australia’s largest export market for both goods and services, accounting for nearly a third of total exports, and a growing source of foreign investment.
China is Australia’s largest services export market, worth $7.5 billion in 2013-14 (13 per cent of Australia’s services exports). The Chinese services sector is larger than manufacturing and a major driver of GDP growth. CHAFTA provides Australian services exporters preferential access to the Chinese market that is regarded as China’s best-ever services commitment, including the provision of new or significantly improved market access not included in any of China’s previous FTAs. The Australian Government has indicated that this agreement will benefit Australian industries including banks, insurers, securities and futures companies, law firms and professional services suppliers, and education services exporters, as well as health, aged care, construction, manufacturing and telecommunications services businesses in China.

Specific opportunities for Australian Health and Aged Care companies will be provided in China with the following allowances:

- In best-ever commitments, China has committed that Australian medical service suppliers are able to establish wholly Australian-owned hospitals in China in Beijing, Tianjin and Shanghai as well as the provinces of Jiangsu, Fujian, Guangdong and Hainan.

- China has made its first ever commitment in an FTA on aged care services, allowing Australian medical service suppliers to establish wholly Australian-owned profit-making aged care institutions in China with no geographical restrictions.

There are a number of Australian health and aged care service providers that are currently exploring opportunities in China. These allowances align with the new Chinese government focus upon opening the Health and Aged care sector to foreign investment in order to facilitate technology transfer and improved patient outcomes for China’s growing aged care sector. It is important to note that the agreement does not provide preferential access for Australian Health and Aged Care product and technology providers by way of tariff relief, nor regulatory approval processes. This still provides a substantial impediment to the growth of the Chinese export market for Australian health and medical device, goods and technology producers.

### 3.3.4 Trans-Pacific Partnership Agreement (TPP)

The Trans-Pacific Partnership Agreement (TPP) is one of the largest global free trade agreements currently under negotiation, and provides a tangible trade and investment integration in the Asia-Pacific region. The Asia-Pacific region is a key driver of global economic growth. Close to half of all global trade, and around 70 per cent of Australia’s trade flows through the region. There are currently 12 parties negotiating the TPP (Australia, United States, New Zealand, Japan, Singapore, Canada, Malaysia, Brunei, Vietnam, Chile, Peru and Mexico). Five of the negotiating parties for the TPP are among Australia’s top 10 trading partners for goods and services in 2013-14 (United States – 2, Japan – 3, Singapore – 4, Malaysia – 7 and New Zealand – 10). In addition, five of these countries were among the top ten destinations for outward Australian investment in 2013 (United States – 1, New Zealand – 3, Canada – 5, Japan – 6 and Singapore – 8). Australia’s participation in the TPP negotiations has the opportunity to strengthen trade and investment relationships with these key partners. Conclusion of the TPP would open new trade and investment opportunities for Australia in the Asia-Pacific region, further integrate our economy in this fast growing region, and promote and facilitate regional supply chains.

Key points of interests and benefits being negotiated include:

- The TPP has the potential to strengthen economic links between economies in the Asia-Pacific region based on common rules for trading. It is in Australia’s interests to be involved in order
to shape the direction of the initiative.

- The TPP will provide new opportunities for Australian goods to be used in manufacturing and production processes in the region.

- Australia does not have existing trade agreements with a number of the current TPP parties (Canada, Peru, and Mexico). The TPP could provide Australian exporters of goods and services with increased access to these new markets. The TPP could also build on the FTAs Australia has concluded by providing additional access for Australian goods and services into those TPP countries.

- The TPP provides an opportunity to benefit Australia’s significant services sector, through enhanced access for service suppliers involved in health, education, legal, financial, mining and agricultural services.

- The TPP will provide substantive outcomes on electronic commerce which will benefit consumers and businesses.

- Negotiators are examining a set of new issues not traditionally included in free trade agreements including:
  - How to ensure the benefits of this agreement extend to small and medium-sized enterprises.
  - Strengthening regulatory coherence among parties.
  - Promoting economic development.
  - Promoting transparency of new laws and regulations.

- The provisions on Technical Barriers to Trade (TBT) in the TPP aim to ensure that regulations, standards, testing and certification procedures do not create unnecessary obstacles to trade.

The TPP has so far been under negotiation for more than 8 years, in various guises. However, full agreement has not been reached with all 12 negotiating economies. This agreement has been a priority for the current government of the United States, and so it is likely that if there is to be any chance of successfully negotiating this agreement, it will take place during the existing Presidential term up until the end of 2016. There have been many contentious issues that have been raised in the public forum about this trade agreement, however until the final details of the agreement are released the full benefits, opportunities and threats will not be ascertained.

Analysis of existing information on the TPP suggests there are more positives for Australian health and aged care goods, technologies and services exporters in this treaty than currently exists.

### 3.3.5 Regional Comprehensive Economic Partnership Agreement (RCEPA)

The Regional Comprehensive Economic Partnership (RCEP) is an ASEAN-centered proposal for a regional free trade area, which would initially include the ten ASEAN member states and those countries which have existing FTAs with ASEAN – Australia, China, India, Japan, Republic of Korea and New Zealand. The RCEP will build on and expand Australia’s existing FTA with ASEAN and New Zealand, AANZFTA. It will complement Australia’s participation in bilateral trade negotiations and in Trans-Pacific Partnership Agreement (TPP) negotiations.

It should be noted that Australia has existing bi-lateral trade agreements with 6 of the 16 negotiating
countries; Singapore, Malaysia, Thailand, Japan, Korea and China. Additionally, Australia is negotiating with India and Indonesia on additional bi-lateral trade agreements. RCEP has the potential to deliver significant opportunities for Australian businesses. The 16 RCEP participating countries account for almost half of the world’s population, almost 30 per cent of global GDP and over a quarter of world exports. The objective of launching RCEP negotiations is to achieve a modern, comprehensive, high-quality and mutually beneficial economic partnership agreement that will cover trade in goods, trade in services, investment, economic and technical cooperation, intellectual property, competition, dispute settlement and other issues.

Key points of interests and benefits being negotiated include:

- RCEP participating countries are important economic partners and regional neighbours for Australia.
- Nine out of Australia’s top 12 trading partners (China, Japan, ROK, Singapore, New Zealand, Thailand, Malaysia, India and Indonesia) are participating in RCEP negotiations, and together with the other six participating countries, account for almost 60 per cent of Australia’s two-way trade, and 70 per cent of Australia’s goods and services exports.
- RCEP will provide a basis for more open trade and investment in the region. This will help address concerns about a ‘noodle bowl’ of overlapping bilateral agreements and derive additional benefits (e.g. through supply chains) from regional liberalisation.
- Australia and a number of other countries are engaged both in the Trans-Pacific Partnership Agreement (TPP) and RCEP negotiations – both processes provide possible pathways to a free trade area of the Asia-Pacific.

A comprehensive trade liberalising RCEP would create opportunities for increased Australian exports of meat and dairy products, processed foods and beverages, motor vehicles and other transport equipment, ferrous metals, metal products, chemical, rubber and plastic products, textiles and paper products. Exporters of a wide range of agricultural products could also benefit from greater certainty resulting from the binding of current duty free entry, more effective disciplines on import licensing requirements, elimination of quotas, and enhanced cooperation on food standards. RCEP could also enhance the potential for greater industry specialisation in the region (e.g. automotive component industries), promoting more investment.

The RCEPA has so far been under negotiations for 3 years and is reportedly progressing positively due to the regional leadership of China. China is using the development of this regional agreement to demonstrate leadership in Asia, and also as a counter weight to the simultaneous negotiation of the TPP (which China is not included). It should be noted that China has negotiated recent bi-lateral agreements with NZ, Korea and Australia, and is in negotiations with Japan and India over further bi-lateral trade agreements. These ancillary agreements under negotiation are important in terms of providing impetus for the RCEPA to reach agreement across Asia. This agreement has not received the same level of discussion in the media as the TPP. However, it has potentially greater relevance and economic impact for Australian exporters due to its focus upon most of our top 10 export partners. This agreement also has the potential of opening trade access to more than 3 billion consumers, making Australia part of the world’s largest trade area.

*Analysis of existing information on the RCEPA suggests there are more positives for Australian health and aged care goods, technologies and services exporters in this treaty than currently exists, particularly in economics such as Vietnam, and India.*
4. **Recommended Market Priorities**

It is recommended that the Western Adelaide Region’s Health Export Strategy specifically adopts a targeted approach to supporting local industry. It needs to be recognised that there are significant regional market differences within countries and that Adelaide’s, and Western Adelaide’s, economy and population are comparatively small in a global context.

*Focussing on specific provinces and cities within the targeted countries and strengthening established ties as well as cultivating new relationships is our recommended approach.*

The initial set of target markets/regions based on research and stakeholder consultation (not in priority order) include:

- China – 3 to 5 provinces including the municipalities of Yantai, Beijing and Shanghai.
- Indonesia – West Java province and the Special Capital Region of Jakarta.
- Malaysia – Federal Territory of Kuala Lumpur and surrounds.
- Japan – Kanto Region incorporating the Greater Tokyo Area.
- India – 1 to 2 states including Bangalore City and/or Mumbai City.
- South Korea – Gyeonggi Province incorporating Seoul.
- Pacific Rim – up to 3 countries including Papua New Guinea, New Zealand and East Timor.
- Singapore.
- Middle East (UAE, Bahrain and Saudi Arabia).
- Latin America (Brazil, Mexico, Chile)

*References to countries in the analysis that follows incorporates the above in-country regional priorities for ongoing strategy research and implementation.*

The following criteria are nominated to be taken into account when prioritising geographic targets:

**Western Region’s Relative Competitive Position Factors**

- Where and what industry is already exporting in the healthcare domain, and where industry has explicitly expressed desire for Government action.

- Existing Government strategic international relationships and partnership/links programs (Local, State and Commonwealth).

- Existing trade relationships and evidence of trade.

**Market Attractiveness Factors**

- Ability to pay to access Australia’s high-quality healthcare offering (GNI per Capita).

- Current population and population growth forecasts.

- Demand for new goods and services.

- Ability to invest in Western Adelaide’s health system to raise health services and export capability.
• Ease of doing business.

These criteria have therefore been adopted as selection criteria for the prioritisation of target markets in the Relative Competitive Position and Market Attractiveness Assessment. This assessment is based on the allocation of weightings to the selection criteria, the rating (or scoring) of each of these criteria by market, the calculation of an assessment score for each criteria by market and finally an overall total or priority score for each market.

The following important issues are noted in relation to this assessment:

• The weights attached to each of the Relative Competitive Position and Market Attractiveness factors below are based on Hudson Howells’ assessment of the relative importance of each factor to export success.

• The scoring of each country against the Relative Competitive Position and Market Attractiveness factors is based on either (1) an objective and sourced global competitiveness indicator (e.g. GNI per Capita) or, where such indicators were not available, (2) Hudson Howell’s interpretation of the desktop research detailed in this report.

The following weights have subsequently been assigned to each of these factors:

Table 8 Relative Competitive Position Factors

<table>
<thead>
<tr>
<th>Relative Competitive Position Factors</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where and what industry is already exporting in the healthcare domain, and where industry has explicitly expressed desire for Government action</td>
<td>0.3</td>
</tr>
<tr>
<td>Existing Government strategic international relationships and partnership/links programs (Local, State and Commonwealth)</td>
<td>0.3</td>
</tr>
<tr>
<td>Existing trade relationships and evidence of merchandise trade</td>
<td>0.2</td>
</tr>
<tr>
<td>Existing trade relationships and evidence of services trade</td>
<td>0.2</td>
</tr>
<tr>
<td>Total Relative Competitive Position</td>
<td>1.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market Attractiveness Factors</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to pay to access Australia’s high-quality healthcare offering (GNI per Capita)</td>
<td>0.3</td>
</tr>
<tr>
<td>Current population and population growth forecasts</td>
<td>0.2</td>
</tr>
<tr>
<td>Demand for new goods and services</td>
<td>0.15</td>
</tr>
<tr>
<td>Ability to invest in Adelaide’s health system to raise health services and export capability</td>
<td>0.15</td>
</tr>
<tr>
<td>Ease of Doing Business</td>
<td>0.2</td>
</tr>
<tr>
<td>Total Market Attractiveness</td>
<td>1.0</td>
</tr>
</tbody>
</table>

The following scores (from 0 – 10 with 10 being the best) have been assigned to each country against the relevant factors:
Table 9: Relative Competitive Position

<table>
<thead>
<tr>
<th>Country</th>
<th>Where and what industry is already exporting in the healthcare domain, and where industry has explicitly expressed desire for Government action (Scored by Desk Research)</th>
<th>Existing Government strategic international relationships and partnership/links programs – Local, State and Commonwealth (Scored by Desk Research)</th>
<th>Existing trade relationships and evidence of trade (Scored by Merchandise Exports by Country – 2011/12(^{19}))</th>
<th>Existing trade relationships and evidence of trade by service exports by country(^{20})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Singapore</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>China</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>South Korea</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>India</td>
<td>8</td>
<td>9</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>New Zealand</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Timor Leste</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Middle East</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Latin America</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 10: Market Attractiveness

<table>
<thead>
<tr>
<th>Country</th>
<th>Ability to pay to access Australia’s high-quality healthcare offering (Scored by GNI per Capita)</th>
<th>Current population and population growth forecasts (Scored by Population)</th>
<th>Demand for new goods and services (Scored by Total GDP)</th>
<th>Ability to invest in Western Adelaide’s health system to raise health services and export capability (Scored by Index of Economic Freedom(^{21}))</th>
<th>World Bank “Ease of Doing Business” Rank 2014(^{22})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>1</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Singapore</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>China</td>
<td>2</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Japan</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

\(^{19}\) Source: DFAT, Australia’s Trade by State and Territory 2011/12.


\(^{21}\) Source: www.heritage.org - The Index covers 10 freedoms – from property rights to entrepreneurship – in 186 countries

The following scores have been derived (in ranking order) for Western Adelaide’s Relative Competitive Position in each country and each country’s Market Attractiveness (i.e. weight x score):

**Table 11: Western Adelaide’s Relative Competitive Position**

<table>
<thead>
<tr>
<th>Country</th>
<th>Western Adelaide’s Relative Competitive Position Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>9.7</td>
</tr>
<tr>
<td>India</td>
<td>6.9</td>
</tr>
<tr>
<td>Japan</td>
<td>5.1</td>
</tr>
<tr>
<td>Singapore</td>
<td>5.1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4.5</td>
</tr>
<tr>
<td>New Zealand</td>
<td>4.5</td>
</tr>
<tr>
<td>Middle East</td>
<td>4</td>
</tr>
<tr>
<td>South Korea</td>
<td>3.6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.5</td>
</tr>
<tr>
<td>Latin America</td>
<td>1.7</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>1.4</td>
</tr>
<tr>
<td>Timor Leste</td>
<td>1.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>Market Attractiveness Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>7.65</td>
</tr>
<tr>
<td>Singapore</td>
<td>7</td>
</tr>
<tr>
<td>South Korea</td>
<td>6.6</td>
</tr>
<tr>
<td>Middle East</td>
<td>5.55</td>
</tr>
<tr>
<td>New Zealand</td>
<td>5.5</td>
</tr>
<tr>
<td>Latin America</td>
<td>5.4</td>
</tr>
<tr>
<td>China</td>
<td>5.05</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4.5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.5</td>
</tr>
<tr>
<td>India</td>
<td>3.35</td>
</tr>
<tr>
<td>Timor Leste</td>
<td>1.7</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Assuming equal rating is given to Western Adelaide’s Relative Competitive Position and Market Attractiveness, the recommended priority market order is as follows:
Table 12: Rating Western Adelaide’s Relative Competitive Position

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority #1 - China – Yantai, Shanghai, Beijing,</td>
<td>14.75</td>
</tr>
<tr>
<td>Priority #2 - Japan - Kanto Region incorporating</td>
<td>12.75</td>
</tr>
<tr>
<td>the Greater Tokyo Area</td>
<td></td>
</tr>
<tr>
<td>Priority #3 – Singapore</td>
<td>12.1</td>
</tr>
<tr>
<td>Priority #4 - India - Bangalore City and Mumbai</td>
<td>10.25</td>
</tr>
<tr>
<td>City</td>
<td></td>
</tr>
<tr>
<td>Priority #5 - South Korea - Gyeonggi Province</td>
<td>10.2</td>
</tr>
<tr>
<td>incorporating Seoul</td>
<td></td>
</tr>
<tr>
<td>Priority #6 - New Zealand</td>
<td>10</td>
</tr>
<tr>
<td>Priority #7 - Middle East (UAE, Saudi Arabia and</td>
<td>9.55</td>
</tr>
<tr>
<td>Bahrain)</td>
<td></td>
</tr>
<tr>
<td>Priority #8 - Malaysia - Federal Territory of</td>
<td>9.0</td>
</tr>
<tr>
<td>Kuala Lumpur and Iskander region</td>
<td></td>
</tr>
<tr>
<td>Priority #9 - Latin America (Brazil, Mexico and</td>
<td>7.1</td>
</tr>
<tr>
<td>Chile)</td>
<td></td>
</tr>
<tr>
<td>Priority #10 - Indonesia – West Java province</td>
<td>7.0</td>
</tr>
<tr>
<td>and the Special Capital Region of Jakarta</td>
<td></td>
</tr>
<tr>
<td>Priority #11 - Timor Leste</td>
<td>2.7</td>
</tr>
<tr>
<td>Priority #12 - Papua New Guinea</td>
<td>2.3</td>
</tr>
</tbody>
</table>

This determination of priority markets by Relative Competitive Position and Market Attractiveness is graphically demonstrated in the following matrix:

*Figure 3: Relative Competitive Position*
5. **Opportunity Assessment by Market**

As previously identified earlier in this report, seven segments of competitive advantage have been identified within Western Adelaide’s health system with significant potential for global growth and the focus for future Export Market Strategy. These include:

1. Health System Policy, Design, Funding and Operations
2. Healthcare provision and skilled health professionals
3. Medical research and Life Sciences
4. Education and training
5. Planning, construction and management of health and aged care facilities
6. Provision of diagnostic, medical and clinical services to international patients, both on and off-shore
7. Medical products and technology.

Investment attraction is added as a major opportunity in recognition that a country’s ability to invest in Western Adelaide’s health system to raise health services and export capability is an important market attractiveness criteria.

The following table provides a *preliminary assessment* of opportunities for the target markets based on the Relative Competitive Position and Market Attractiveness research undertaken and reported in this section of the report. The opportunities have been assessed as either High, Medium or Low, based on assessments of contextual factors in individual markets and from the in-depth analysis of market opportunities.
### Table 13: Export Markets and Health Business Opportunities

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>Japan</th>
<th>Singapore</th>
<th>India</th>
<th>South Korea</th>
<th>New Zealand</th>
<th>Middle East</th>
<th>Malaysia</th>
<th>Latin America</th>
<th>Indonesia</th>
<th>Timor Leste</th>
<th>Papua New Guinea</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health system policy and design</strong></td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Healthcare provision</strong></td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Medical Research</strong></td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Education and training</strong></td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Facility design, construction and management</strong></td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td><strong>Provision of medical services</strong></td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Manufactured products and related IP</strong></td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Investment attraction</strong></td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

It should be noted that the above priorities largely reflect the respective stages of development of the target markets (e.g. GDP per capita) and their capacities to trade and/or invest in the seven segments of competitive advantage. Consequently, for example, Japan, Singapore and South Korea are prioritised over India and Malaysia for investment attraction.
6. **Consultation and Project Identification**

Following the Stage 1 desktop research to identify the key goods, services, supply chains and markets for the health sector (as reported on in the previous sections), Hudson Howells undertook interviews with selected industry stakeholders and three broad based industry workshops to engage with those businesses and sectors identified during Stage 1.

The key issues to emerge from these interviews and consultations included:

1. Aged care enquiries are already being received from Asia by Western Adelaide businesses.

2. The project (Collaboration for Commercialisation) should have a register of businesses by capability, along with capability mapping. Companies should register with the State Government’s Industry Capability network (ICN).

3. A register of emerging new health projects would assist company planning and marketing.

4. Western Adelaide health businesses need to gain access to existing in-market connections for export success. Participants should therefore share distributor contacts and assist each other with introductions. A shared market model could be built around an existing successful exporter such as Dynek which already exports to 50 countries.

5. Understanding global and target market demand trends is essential and should be the first place to start. In-market models of care need to be well understood.

6. There is an opportunity to have a Western Adelaide Health Brand based around quality and safety.

7. A Health Industry Alliance or Cluster Group would help give the Collaboration for Commercialisation project some momentum and longevity. Clever use of internet marketing could also greatly assist new opportunity identification.

8. An Alliance would need to focus on regional strengths such as the Woodville Road research and development cluster. It could also benefit industry by establishing an Incubation Precinct connected to other health nodes (e.g. hospitals, specialists, etc.).

9. Export strategy should be initiated by aligning Western Adelaide with existing trade relationships such as Shandong/Yantai. Yantai is an economic powerhouse in Shandong and has a population of over 6.5 million people. It is a dynamic Port City. The two cities have complementary economies and therefore can generate mutually beneficial trade based relationships.

10. South Australia and Adelaide are not visible in an international health market context.

11. China, Singapore and Malaysia (Johor Bahru) have specific aged care and seniors living initiatives which offer excellent export potential for Western Adelaide businesses.

12. Post hospital (acute treatment) transitional care is a major gap in local services and a new model could be designed and piloted in the region.
13. Western Adelaide health businesses should be aware of and access relevant State and Commonwealth funding programs including, for example:
   b. The State Government’s Export Partnership Program.

14. There is a need for addition aged care and seniors living facilities in Western Adelaide. Most existing facilities are old and full. Western Hospital is looking at options and funding of Aged Care facilities in the Western Region. Also looking at potential for clinical trials and research funding. It is also known that there are Malaysian interests looking at establishing seniors living in Australia which could offer joint venture opportunities.

15. Health Industries SA recognises the potential to attract European and US firms to SA as a base for broader Asian market development.

Specific projects identified and discussed for the project Implementation Stage, and Hudson Howells associated comments and recommendations, included:

1. Establishment of a Western Adelaide Health Industry Alliance (Health Cluster) comprising in the first instance:
   a. Bio Innovation SA
   b. Healthfirst
   c. Health Industries SA /Department of State Development
   d. TQEH and Western Hospital
   e. City of Charles Sturt.
   f. At least 10 businesses identified during this Study.

The proposed Western Adelaide Health Industry Alliance would fit within the cluster program supported by the Department of State Development (DSD). DSD has recently established a Cluster Coordination Office responsible for the industry clustering activity across government.

What distinguishes the Western Adelaide Health Industry Alliance as proposed in this report is the strength of the medical and health research sector in Western Adelaide and its close links to industry particularly the SME sector. The structure of the cluster is proposed in figure 1 with at least 10 SME’s identified during the study as core members. Nevertheless, approximately 100 businesses have expressed an interest in the project with around 80 attending the three workshops. As such the cluster would seek to include all businesses contacted during the study.
It is recommended that the following steps be taken to implement the Western Adelaide Health Industry Alliance:

a. Identify a cluster catalyst and resources to bring the cluster together.
b. Establish Terms of Reference
c. Seek support from DSD.
d. Identify key projects from this report.
e. Establish performance benchmarks.
f. Contact project participants to form part of the Alliance.

2. In collaboration with Western Hospital and potential Asian investment interests, investigate the feasibility of a Modern Aged Care/Seniors Living Facility in the Western Region.

3. Development of a China Health Export Strategy based on a Yantai (Shandong) market entry strategy (or pilot) formulated following specific in-market consultation and research to be undertaken in collaboration with the Yantai Municipal Bureau of Commerce. Projects already proposed by Yantai Municipal Bureau of Commerce for consideration include:

a. Cooperation models with Yantai hospitals for exchange of medical technology, management experience, professional training, academic exchange, visiting scholar programs, etc.
b. Health and elderly care projects – cooperation and joint venture projects.
c. Marine, agribusiness and biopharmaceutical projects – sole venture, joint venture and cooperation.

It is recommended that the City of Charles Sturt (including the proposed Western Health Alliance) investigate the practicality, benefit/costs and next steps for these nominated projects in order to prioritise projects according to Western Adelaide and South Australian capability and propensity to deliver. This will require consultation and research in Yantai via the Yantai Municipal Bureau of Commerce.
4. Subject to the market research, Health Industry Alliance members would be briefed and plans developed for a targeted Trade Mission to Yantai. The model for Yantai could then be used for export strategy development and trade missions in other priority markets including Malaysia.

5. **Health Precincts in Western Adelaide** require greater definition and development. This will enable improved marketing for future investment attraction and new business incubation. There will also be opportunities to collocate health and allied businesses and support the Western Adelaide Health Industry Alliance. Key precincts which should be investigated, developed and promoted are:

   a. The Thebarton Bio Tech Precinct centered on Bio Innovation SA. It is recommended that this include a new business incubator – The BioSA Accelerator Building which will provide laboratory/production, office and shared services space for SME’s. The building’s concept is based around flexible spaces for tenants ranging from 250 m² to 500 m² of laboratory, office and production space over three floors, with an undercroft housing the shared services and car parking.

   b. The Woodville Road Health Precinct centered on the TQEH, Healthfirst, Adelaide Medical Solutions and the Basil Hetzel Institute. It is recommended that demand for new medical suites be investigated due to the large number of specialists and allied health professionals servicing TQEH (300 visiting specialists). It is recommended that a survey of clinicians be designed and undertaken to assess demand for new suites followed by active investment attraction and feasibility assessment.

   It is also recommended that demand be assessed for the development of education and training facilities in the precinct. A Multidisciplinary Health Workforce Training Facility has been identified in the City of Charles Sturt Digital Economy Strategy 2013. It seeks to develop a Health Precinct on Woodville Road with the training facility as one of the anchor tenants to complement existing medical services and research facilities. In addition, to providing training rooms and linking with live and wet sites (Hospitals and Surgeries) – specific medical training simulation facilities could be developed. It is recommended that potential partners be identified and that workforce training needs be assessed to confirm the potential viability of such a facility.

   c. The Hindmarsh Health Business Precinct as a major service supplier to the new RAH and SAHMRI in addition to providing additional space for Health related SME’s.

6. In collaboration with Health Industries SA research and implementation of an Investment Attraction Strategy focused on interstate and international health product and service suppliers locating in one of the three primary Health Precincts.

7. Development of a Western Adelaide Health Alliance Internet Site for:

   a. Advancing and promoting the business interests of Alliance members.
   b. Advice to members of major upcoming health initiatives and supply opportunities.
   c. Use by Alliance members to promote Western Adelaide.
   d. Promotion of Western Adelaide investment and joint venture opportunities.
   e. Lodgment of enquiries for products and services.
   f. Notification of events to Alliance members.
8. An annual Western Adelaide Health Industry Conference and Exhibition showcasing the region’s capabilities, investment opportunities, products and services.

9. Development of a Western Adelaide Health Brand for common use by Alliance members, signage and as a common marketing platform when marketing the region’s capabilities interstate and overseas.

10. Research and achievement of a Strategic Partnership Agreement between the Alliance and at least one significant and market connected international health industry participant for the purposes of mutual initiatives, research and market development.

7. Implementation

As noted at the commencement of this report, the following four stage process has been implemented to commence development the Health Business Collaboration project in pursuit of the overall project objectives.

Stage 1 Analysis of the Western Adelaide Health Sector

Stage 2 Western Adelaide Health Business Collaboration Workshops

Stage 3 Analysis and Final Report

Stage 4 Detailed Implementation Plan.

The recommendations 10 recommendations in section 6 “Consultation and Project Identification” represents the first stage of an Implementation Plan as proposed in Stage 4.

To implement the report funding for Stage 5 and 6 is now being sought from the Department of State Development. Stage 5 would seek to provide additional market research on overseas markets in the Health Sector and determine priority by market size. This will allow DSD and Health Industries SA to develop a more targeted approach to export markets. In addition, detailed analysis of the Yantai Key Projects document, which was provided by the Yantai delegation (9th September 2015). The document lists 10 potential projects in Yantai, which are mainly health or aged care related. It is essential that SA Government and business support for these projects is determined from three: perspectives: implementation capability, resources and creation of local jobs.

Stage six will determine composition, resources and funding required to establish the Western Adelaide Health Industry Alliance/ Health Cluster.

This report addresses the first 4 stages funded in this project with significant added value being provided by Hudson Howells in placing the project in an international context by detailing selected market characteristics, regulatory environments and prioritising markets for further research, strategy development and implementation.

The Collaboration for Commercialisation Project, via this research and report, recommends 10 key projects for implementation including:

1. A Western Adelaide Health Industry Alliance.
4. Targeted Trade Missions to Yantai (China) and Malaysia.
5. Health Precinct Development,
7. A Western Adelaide Health Alliance Internet Portal
8. An annual Western Adelaide Health Industry Conference and Exhibition
9. A Western Adelaide Health Brand
10. An international Strategic Partnership Agreement.

In addition to the specific projects above, it is recommended that the Alliance pursue the following short term niche export opportunities in specific markets:

<table>
<thead>
<tr>
<th>Services/ Products</th>
<th>Opportunity Assessment – Priority by Market Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Research</td>
<td><strong>1. Medical Research – Japan</strong> - There are likely to be strong opportunities for collaboration on medical research with Western Adelaide’s world-class medical research sector. Particularly where there is an opportunity to leverage joint research grants (Japan and Australia), and leverage high quality Adelaide Medical researchers to help build increased capacity in Japan through collaboration.</td>
</tr>
<tr>
<td>Medical Research</td>
<td><strong>2. Medical Research – South Korea</strong> - South Korea is a leader in medical research in Asia, helping to coordinate medical research from across the region. There are good opportunities for collaboration.</td>
</tr>
<tr>
<td>Medical Research</td>
<td><strong>3. Medical Research – Malaysia</strong> - Malaysia coordinates Medical Research through the Institute for Medical Research, a division of the Ministry of Health, with the following medical research centres established;</td>
</tr>
<tr>
<td></td>
<td>• Cancer Research Centre</td>
</tr>
<tr>
<td></td>
<td>• Cardiovascular, Diabetes And Nutrition Research Centre</td>
</tr>
<tr>
<td></td>
<td>• Herbal Medicine Research Centre</td>
</tr>
<tr>
<td></td>
<td>• Infectious Disease Research Centre</td>
</tr>
<tr>
<td></td>
<td>• Medical Research Resource Centre</td>
</tr>
<tr>
<td></td>
<td>• Environmental Health Research Centre</td>
</tr>
<tr>
<td></td>
<td>• Allergy and Immunology Research Centre</td>
</tr>
<tr>
<td></td>
<td>• Specialised Diagnostics Centre</td>
</tr>
<tr>
<td>Workforce training</td>
<td><strong>4. Medical Research – Singapore</strong> - Singapore coordinates funding for Medical Research through the National Medical Research Council, a division of the Ministry of Health. There may be opportunities for Adelaide Medical Research institutes to collaborate with Singaporean partners to access grant funding.</td>
</tr>
<tr>
<td>Workforce training</td>
<td><strong>1. Workforce Training - China</strong> - Health Management training is in demand across China, and could be activated through joint degree or twinning programs. This would address known skill and systems deficits in the health and aged care management sector across China. Specific opportunities exist with the best quality, well-funded and specialist medical universities in China.</td>
</tr>
<tr>
<td>Workforce training</td>
<td><strong>2. Workforce Training – India</strong> - India has recently relaxed restrictions on international universities from operating in India. This will provide an opportunity for SA Universities to establish campuses in India to tap the large market opportunity. Opportunities exist for ‘twinning’ programs where</td>
</tr>
</tbody>
</table>
students are trained by both an Indian based institution and an Australian based institution (e.g. Two years in India, two years in Australia) receiving 2 degrees (one from each university). There are complications with this model with regards to satisfying medical accreditation in both countries.

3. **Workforce Training – Indonesia** - Health Management training is in demand across Indonesia, and could be activated through joint degree or twinning programs. This would address known skill and systems deficits in the health and aged care management sector across Indonesia.

4. **Workforce Training – Malaysia** - Malaysia is encouraging international universities to operate in Malaysia, such as has already been established by Monash at Sunway. The new education precinct in Iskandar region and Johor Bahru, will provide an opportunity for SA Medical and Health Training providers (University and TVET sector) to develop campuses which would be geographically suitable to satisfy both Malaysian and Singaporean markets. Opportunities exist for ‘twinning’ programs where students are trained by both an Malaysian based institution and an Australian based institution (e.g. Two years in Malaysia, two years in Australia) receiving 2 degrees (one from each university). There are complications with this model with regards to satisfying medical accreditation in both countries.

4. **Workforce Training Singapore** - Singapore encourages international universities to operate in Singapore. The new education precinct in Iskandar region of Malaysia and Johor Bahru, may provide an opportunity for SA Medical and Health Training providers (University and TVET sector) to develop campuses which would be geographically suitable to satisfy both Malaysian and Singaporean markets.

5. **Workforce training – Middle East** - Opportunities exist for ‘twinning’ programs where students are trained by both an Middle East based institution and an Australian based institution (e.g. Two years in Middle East, two years in Australia) receiving 2 degrees (one from each university). There are complications with this model with regards to satisfying medical accreditation in both countries.

<table>
<thead>
<tr>
<th>Facility design, construction and management</th>
<th>1. <strong>Facility design construction and management – China</strong> - Aged care facility design and construction is another growing area, with strong potential for Western Adelaide expertise. There is large demand for aged care community development near first tier and second tier east coast cities for the Upper-Middle Class.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. <strong>Facility Design, construction and management – Indonesia</strong> -Aged care facility design and construction is another growing area, with strong potential for Western Adelaide expertise. There is large demand for aged care community development across Java and Bali for Indonesians in the Upper-Middle Class.</td>
</tr>
<tr>
<td></td>
<td>3. <strong>Facility Design, Construction and Management – Malaysia</strong> Aged care facility design and construction is an area of growing interest, with strong potential for Western Adelaide expertise. Malaysian culture currently supports home</td>
</tr>
</tbody>
</table>
management of the elderly. However, demographic and societal change is resulting in development of high-end aged care facilities.

**4. Facility Design, construction and management – Middle East** - Middle East has a shortage of skilled management processes for health and aged care facilities. There is an opportunity for joint venturing with Middle East based developers who require the management and systems input for new aged care and retirement developments.

**5. Facility design, construction and management – Timor Leste** - There is a large demand for a private medical facility/hospital to be established in Dili to satisfy the private (cruise ships, private tourists, backpackers, development aid workers etc.) market. The government of Timor Leste has committed to providing land, facility building assistance, tax holidays, and confirmed supply of government and military patients to the facility increase feasibility. Limitations are Timor Leste is a greenfield site, with limited infrastructure at present and a small domestic market. The market size would change should the off-shore oil and gas agreement over the location of processing be changed to Timor. In this event, there will be a substantial added increase in market demand for services of this kind. Australian construction crews are able to work in Timor Leste on public and private projects due to lack of internal capacity.

| Manufactured products and related IP | 1. Manufactured Products – Malaysia - Hospital diagnostic technologies are in demand in Malaysia, mostly in the large growth markets on peninsular Malaysia where the most advanced private hospitals and best-funded medical professionals are located.  

2. Manufactured Products – New Zealand - The high quality state of the private and public health systems provides a market opportunity for high quality Western Adelaide medical devices and products. |