INSIGHTS, OUTREACH AND BROKERING

Taking Australia’s healthcare innovation advantage to Indonesia
The Business Council of Australia and Asia Society established the Asia Taskforce (Taskforce) to identify specific industry sectors and countries where Australia has a comparative advantage and where there is local demand. This paper is part of the Asia Taskforce discussion paper on ‘Opportunities for Australian business in Indonesian Healthcare’. It draws attention to Australia’s healthcare innovation precincts and how the Australian Government can leverage precinct capabilities in healthcare technology, medical services, healthcare and pharmaceutical infrastructure to support Indonesia’s health-related challenges.

Through a case study focused on Monash Technology Precinct, we argue that MedTech and pharmaceutical innovation precincts form a ready-made cluster that is open to commercial partnerships and access into international markets. They are existing models that demonstrate Australia’s advantage in innovation, talent development, industry linkages and international partnerships to deliver improved healthcare and market growth. If adequately supported with three export development enablers – insights, outreach and brokering – precincts can provide affordable healthcare to citizens, create jobs – and better-skilled jobs – and contribute to export industries. These actions will also encourage the expansion of service delivery and research partnerships that further generate new innovative growth pathways for Australia into growing markets like Indonesia and the Indo-Pacific region.

Key points:
In this paper, we:

- Feature the Monash Technology Precinct, one of Victoria’s two major world-class healthcare innovation precincts, as an example of a highly flexible and mature model of business-university collaboration;
- Explore what this Precinct produces as exportable services; and
- Highlight the role that a healthcare innovation precinct could play in helping Indonesia meet its health and economic objectives.
The Indonesia-Australia Comprehensive Economic Partnership Agreement (IA- CEPA) opens up new pathways for Australian business in healthcare. The discussion paper on ‘Opportunities for Australian business in Indonesian healthcare’ outlines several areas where Australia’s competitive advantage can contribute to Indonesia’s growing healthcare demands.

Indonesia’s growing affluence is placing additional demands on the country’s already under-resourced healthcare system. Non-communicable diseases (NCDs), especially preventing illness, disability and premature deaths, is one of Indonesia’s grand challenges. Indeed, NCDs, including mental health conditions, is the leading cause of disease and sudden death in Indonesia. They also come at a high cost, with an estimated economic loss of US$7 trillion between 2011 and 2025 in low and middle-income countries alone. Indonesia already spends the majority of its public health insurance scheme on NCDs.

Australia is a recognised leader in healthcare innovation, science and research. It produces novel science, cutting-edge technologies and a strong talent pool. The medical technologies (MedTech) and pharmaceuticals sectors are among the most innovative and significant contributors to R&D globally and within Australia. Australia contributes 3% of the world’s biomedical research. It is one of the strongest performing sectors in business expenditure on R&D. Manufactured exports in 2015 was $4.6 billion, and the industry generates 48,000 jobs (10,000 medical technologies; 22,000 pharmaceutical and biotech; 16,000 health and medical research).

Australia’s competitive advantage in MedTech and Pharmaceutical has little penetration into Indonesia’s large and rapidly expanding market - from medical devices, laboratory equipment, diagnostic tools to digital health like telemedicine and data science, including human capital development.

Australia’s MedTech and pharmaceutical ecosystem comprises a range of significant activities and a well-established value chain of stakeholders. The activities span service delivery to manufacturing and development. These are all applied to strengthen health systems, including tackling the burden of heart disease, diabetes, chronic lung disease, cancer, obesity and mental health conditions. Its value chain consists of many parts - from consumers and patients, universities, other research organisations, local small and medium enterprises, and multinational companies, funders and investors, service providers, industry organisations, governments, regulators, policymakers and clinicians. (See Figure 1)

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**INTRODUCTION**

**Major MedTech and Pharmaceutical activities**

- Life sciences and biotechnology manufacturing and development
- Medical technology Manufacturing and development
- Vitamins, supplements product Manufacturing and development
- Pharmaceutical Manufacturing and development
- Healthcare services - Health systems design, contract research organisations, digital health, clinical trial providers, education & training.

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**Figure 1** MedTech and Pharmaceutical ecosystem of activities and a value chain of stakeholders
While the MedTech and pharmaceutical value chain span community, policy, research and industry, its innovative capacity lie in the nation’s innovation and science ecosystem. The ecosystem consists of a strong education and research sector, world-leading public research agencies, cutting-edge research infrastructure and innovative businesses expanding their impact globally. Increasingly, it also consists of large multinational companies like Johnson & Johnson and Pfizer that use Australia as an international trade and investment base for doing business in the Indo-Pacific region.

At the heart of the ecosystem are innovation precincts. Precincts are located around major institutions such as universities, hospitals and medium to large companies involved in the commercialisation of innovation.

Precincts are locations where intellectual capital, commercial focus and collaborative approaches converge. It is at this convergence that discoveries are made, commercial applications created, and talent developed to lead innovative growth. A couple of points about precincts: first, precinct infrastructure does not provide a seamless concept-to-international market path for businesses. It instead gives companies a capabilities-based, problem-solving service organisation to seed innovative sectors like MedTech, biotechnology and pharmaceuticals. Companies in these precincts tend to look for capabilities that can assist them with rapid design, development, validation of products to manage access to Australia’s established R&D infrastructure and high-value skills base. (See Figure 2)

Precincts help companies - from start-ups, SME and large corporations – to reduce risk, cost and time-to-market for new products.

The second point is that most precincts in Australia currently lack the in-house expertise and capability to help companies take their ‘export-ready’ products to international markets. Companies tend to rely on the Government for help. For instance, through a range of support by the Victorian Government, the state’s MedTech and pharmaceutical sector has generated close to A$40 billion in exports over twenty years (1999-2017).

Support includes infrastructure investments, regular trade missions and access through its extensive international network of trade offices. There is an opportunity to take a national approach by providing support to companies with export or near to export ready products access international markets like Indonesia. (See Figure 2)
Australia has four of the world’s best 25 life sciences and biomedical innovation clusters - Melbourne (ranked no. 4), Sydney (7), Perth (17), Brisbane (25). The Melbourne Life Sciences cluster is ranked number four in the world after San Francisco, Boston and New York. (See Figure 3)

Melbourne is one of the largest Life Sciences clusters globally. (See Figure 4) It hosts more than 40% of Australia’s biomedical researchers. It attracts 40% of Australia’s medical research funding, and it is one of only three cities in the world to have two universities in the global top 20 biomedicine rankings - University of Melbourne and Monash University. About 53% of all ASX listed Life Sciences companies are based in Melbourne.  

**Figure 3** Top 10 global life sciences innovation precincts

- **No. 10 Vancouver**
  - Population: 2.5m
  - Major universities: University of British Columbia
  - Major companies: CRH Medical, Aquasis Pharmaceuticals, Arbutus Biopharma, Zymeworks, Cardiome Pharma, Naviscan

- **No. 8 Toronto**
  - Population: 5.9m
  - Major universities: University of Toronto

- **No. 7 Sydney**
  - Population: 4.6m
  - Major universities: University of Sydney; University of New South Wales
  - Major companies: Cochlear, Sirius Medical, Nanosonics, Viralytics, SomosMed, LifeHealthcare, Pharmaxis, Medlab Clinical

- **No. 6 Tokyo**
  - Population: 37.8m
  - Major universities: Universities of Tokyo, Tokyo Institute of Technology
  - Major companies: Astellas, Chugai Pharmaceutical, Dainichi, Sankyo, Eisai, Kyowa, Hakko Kirin, Otsuka

- **No. 5 San Diego**
  - Population: 3.1m
  - Major universities: University of California, san Diego

- **No. 4 Melbourne**
  - Population: 4.3m
  - Major universities: University of Melbourne; Monash University
  - Major companies: CSL Ltd, Mayne Pharma, Macquarie, Cliniscal Pharmacuticals, Medical Developments, Starpharma

- **No. 3 Greater New York City**
  - Population: 20.2m
  - Major universities: Columbia University
  - Major companies: Pfizer, Celgene, Regeneron Pharmaceuticals, Boston Biokinem, Zetara, CI Bard, Quest Diagnostic, Harry Schain, Foll Corporation, Sierra Dental Systems, Taro Pharmaceuticals, Cantel Medical

- **No. 2 Boston Cambridge**
  - Population: 4.1m
  - Major universities: Massachusetts Institute of Technology; Harvard University
  - Major companies: Thermo Fisher Scientific, Biogen, Boston Scientific, Veritas Pharmaceuticals, Modern, Halozyme, Alnylam Pharmaceuticals, PerkinElmer, Texas

- **No. 9 Tel Aviv-Jerusalem**
  - Population: 5.1m
  - Major universities: Hebrew University of Jerusalem, Tel Aviv University
  - Major companies: Teva Pharmaceuticals, Medtanz, Kamada, Uniform Pharma, Compugen, Gal/Biotechnology Industria

- **No. 1 Bay Area**
  - Population: 7m
  - Major universities: Stanford; University of California, Berkeley, University of California, San Francisco
  - Major companies: Gilead Sciences; Intuitive Surgical, Agilent Technologies, BiMarin Pharmaceuticals, Medivation

- **No. 8 Toronto**
  - Population: 5.9m
  - Major universities: University of Toronto

- **No. 7 Sydney**
  - Population: 4.6m
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HEALTHCARE INNOVATION PRECINCTS

Precincts develop through a combination of factors. Market forces is an important factor leading companies to seek innovation and talent to help stay competitive. Many of them form links with research organisations to help expand market opportunities. In 2015, Philips Healthcare moved its US R&D headquarters to Boston-Cambridge. A year later GE followed with shifting 600 of its tech jobs to the area. Now Amazon, Twitter, Google, IBM, Schlumberger, Microsoft, Comcast and Oracle have an R&D presence in the Precinct.

Decades of investment is another factor contributing to precinct development. Federal and state governments and universities invest significantly over time in physical, transport, digital and research infrastructure to support precinct development. In 2007, the Australian Government built a national synchrotron facility on land next to Monash University. The facility supports research and industry applications in advanced materials, food technology, defence science, biomedicine, electronics, energy and mining. Victoria’s ‘Plan Melbourne’ is a metropolitan planning strategy over 35 years to develop transport links and accommodation to improve the growth and clustering of business activity and knowledge-based industries. Universities also are key drivers behind innovation precincts through significant investments in science infrastructure, entrepreneurship programs, and talent development. In 2003, Monash University completed its first stage development of the Monash Science and Technology Research and Innovation Precinct (the STRIP). The Precinct capitalises on its location - in technology and commercial light-manufacturing corridor in south-east suburbs. The STRIP has now become core to the Monash Technology Precinct.

Melbourne’s healthcare innovation clusters are organised into two geographical precincts: the Melbourne Biomedical Precinct located in metropolitan Melbourne; and the Monash Technology Precinct, in Southeast of Melbourne metropolitan. Over a relatively short time, both precincts have become important drivers of commercial and export growth.

Following are some highlights:

- Australia is a leading location for the commercial MedTech and pharmaceuticals sector. The commercial sector includes more than 180 companies based in Victoria, including 61 ASX-listed companies with a combined market capitalisation of A$60 billion.
- Employs more than 23,000 highly skilled people.
- A thriving ecosystem for healthcare start-ups with 13 internationally competitive companies listed on the ASX over the last five years with a combined market capitalisation of $7.1 billion as at March 2018. (See Figure 5)
- Attract companies such as CSL, Pfizer, Johnson & Johnson to establish head R&D branches.
- Exports (high-value manufactured export products) increased from $683 million in 2012 to $2.2 billion in 2018. (See Figure 6)
- Top five export markets (2011-2016) - United States, Europe, South East Asia, East Asia, including China and the Middle East and North Africa.
**Figure 5** Victoria thriving healthcare start-ups ecosystem

- **AdAlta 2016**
  Biotech treatments with an initial focus on treating fibrotic disease

- **Paradigm Biopharma 2015**
  Biopharma company focusing on treatment of inflammation

- **Monash IVF Group 2014**
  Operator of assisted reproductive services

- **Cann Group 2017**
  Cultivation and supply of medicinal cannabis

- **Integral Diagnostics 2015**
  Provider of diagnostic imaging services to healthcare professionals

- **Healthscope 2014**
  Private Hospital operator and provider of pathology services

- **Estia Health 2014**
  Provider of residential aged care services

- **Japara Healthcare 2014**
  Provider of residential aged care services

- **Lifespot Health 2017**
  Telemedical systems for monitoring and managing chronic diseases

- **Jayex 2015**
  Software platform for managing patient flow

- **dorsaVI 2013**
  Wearable sensor technology for athletes

- **TPI Enterprises 2015**
  Supplier of illicit narcotics raw material to the pharmaceutical industry

- **Sienna Cancer Diagnostics 2017**
  Provider of diagnostics for detecting cancer

- **Telix Pharmaceuticals 2017**
  Provider of molecularly-targeted radiation therapy technology

*Year listed

**Figure 6** Value of Victoria’s MedTech and Pharmaceuticals Exports

<table>
<thead>
<tr>
<th>Year</th>
<th>Value 2012</th>
<th>Value 2014</th>
<th>Value 2016</th>
<th>Value 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>683</td>
<td>749</td>
<td>1345</td>
<td>2200</td>
</tr>
</tbody>
</table>

**Figure 7** Two examples of Victorian-based MedTech and Pharmaceuticals exports

**Leica Biosystems**

Leica Biosystems is a medical device company specialising in the design and build of diagnostic and research instruments in the fields of oncology, haematology and life sciences. The company provides instruments from Biopsy to diagnosis. Leica Biosystems business has doubled over the past 5 years. As a major player in anatomical pathology, exporting in excess of 90 per cent of all products designed and manufactured in their Melbourne facility.

**Care Essentials**

Care Essentials Pty Ltd manufactures and sells high-quality medical devices, namely Forced Air Warming System, for use in Operating Theatres all over the world. Warming during surgery reduces the chance of infection, increases the speed of recovery and prevents hypothermia.
MONASH TECHNOLOGY PRECINCT

The City of Monash, located in the Southeast of Melbourne, is a leading region of innovation, employment, economic growth and exports. After the Melbourne metropolitan, it is Victoria’s second-largest economic and employment hub. At the centre of the region is the Monash Technology Precinct (MTP). The Precinct is home to a significant concentration of Victoria’s knowledge-based industries, particularly in the fields of education, health and advanced manufacturing. Surrounding the Precinct are 13,000 businesses, of which 70% are in high-value and advanced manufacturing, contributing $9.4 billion to the Victorian economy and employing 82,000 people.

Collaborating with businesses in this region is Monash University with 83,663 students, of which 4,733 are PhD students and a total research income of A$342 million.

Along with Monash are major facilities including the Australian Synchrotron, CSIRO - its largest site in Victoria, the Melbourne Centre for Nanofabrication, the Monash Children’s Hospital, and the Monash Medical Centre. New major investment in the Precinct is the A$543 million development of the Victorian Heart Hospital - Australia’s first dedicated heart health and research hospital. Combined, the region contributes A$2.8 billion in exports to the Victorian economy, with manufacturing, education and training dominating and hosting a high proportion of the Indonesian diaspora - 1,200 in 2019.

The MTP activities focus on four particular areas: Health Sciences; Future Materials and Processes; Artificial Intelligence; and Data Science. In advanced manufacturing, the Precinct is home to over 70% of Victoria’s high value and advanced manufacturing.

Figure 8  City of Monash Export Services

2015/16
$2.2 Billion

$900m - Manufacturing
$600m - Wholesale Trade
$400m - Education and Training

2018/19
$2.8 Billion

$1B - Manufacturing
$684m - Education and Training
$477m - Wholesale Trade
MTP hosts a number of local and foreign industry partners. They include Agilent, Johnson & Johnson, ABB, BHP Billiton, Bosch, Pfizer, Hydrix, Chobani, Woodside, Janssen & Lockheed Martin. Below are examples of university-industry collaborations in healthcare.

**Example 1: J&J Lab - Colocation to enhance export market** - The Victorian headquarters for J&J’s scientific, investment and commercialisation arms, is located in the MTP to identify MedTech and pharma projects that can lead to commercialisation. J&J brings the global market to the Precinct and facilitates access by researchers and companies to the expertise across Johnson & Johnson’s scientific research, investor and commercial business arms. Medical technologies and pharmaceuticals have been identified by the Victorian State Government as one of eight priority sectors with strong potential for significant growth. The extent to which companies collaborate with precincts can grow and change: use of open-source facilities and access to talent (students and researchers) or full scale investment with a clear commercialisation agenda.

**Example 2: Pfizer and Monash alliance to discover new therapeutics** - Monash joins Pfizer’s Centers for Therapeutic Innovation (CTI) which is a unique academic-industry collaboration model designed to bridge the gap between early scientific discovery and its translation into new medicines and therapies. Together, Pfizer and Monash are working to create new therapies for cancer and fibrosis. Pfizer has benefited from the partnership by gaining access to world-leading science and novel therapeutic targets, while Monash has gained exposure to the industry translation and research and development process.

**Example 3: Pulp and Paper and Health Technology** - A blood-typing test based on bioactive paper has enormous implications for use in the developing world and poor and remote regions. The test uses bioactive paper, which can be stored in a variety of conditions, maintains its efficacy for months, and can be manufactured easily and cheaply. The results can be interpreted by someone without medical knowledge or skills. By comparison, traditional blood-type tests require complex and expensive laboratory equipment, careful refrigeration of antibody reagents and someone with a university degree in pathology. With industry partner Haemokinesis, the first blood typing paper diagnostic is in full commercialisation. The group are now working on other paper diagnostic measures for other health conditions.
Example 4: Product Impact - Oxytocin Inhaler - Death during childbirth as a consequence of unchecked postpartum haemorrhage is still a frighteningly real risk for many women, even though it can be readily prevented by a dose of the hormone oxytocin. This life-saving measure, which stems excessive blood loss, is largely confined to developed countries because oxytocin must be kept in cold storage and injected by trained staff using sterile syringes. Monash University researchers across precincts in Parkville and Clayton have developed a new formulation of oxytocin that is stable at room temperature and resistant to degradation. The team has collaborated with healthcare workers and women in rural areas of developing countries to design an inhaler that can be used with minimal training. Making an oxytocin inhaler a standard part of every midwife’s bag, or including one in a safe birthing kit for expectant mothers, could be the difference between life and death for hundreds of thousands of women. The project has received funding and support from a number of organisations including the World Health Organization, the Bill and Melinda Gates Foundation, Grand Challenges Canada and GlaxoSmithKline (GSK). Johnson & Johnson Innovation also collaborate on this project. Postpartum haemorrhage mortality rates in Indonesia continue to be one of the highest in Southeast Asia. Indonesian maternity health workers could both inform ongoing refinement of the product and contribute to improving health outcomes for women.
Indonesia’s market size - the fourth largest in the world covering over 200 million people - and government spending on universal healthcare, plus 20 million people covered by private health insurance, makes it an important growth opportunity for Australia.

Innovation precincts could play an important role in helping Indonesia meet its health and economic objectives. Below are some examples of opportunities for precincts.

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>EXAMPLES OF PRECINCTS CAPABILITY</th>
</tr>
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<tbody>
<tr>
<td>Indonesia’s growing middle class and universal healthcare program are driving demand for healthcare services</td>
<td>Drug discovery and development - Melbourne’s new drug development accelerator, a partnership between Monash University and the University of Melbourne to deliver new investment opportunities for biotechnology companies and venture capital funds. There are 22 pharmaceutical manufacturers producing a variety of products for international markets using advanced manufacturing technologies.</td>
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<tr>
<td>Indonesia’s medical devices technology market is growing and over the next four years, it expects to pass US$1.9 billion. The market is expected to remain heavily import-dependent due to limited domestic production - local manufacturers currently only meet 10% of the local demand.</td>
<td>MBusiness opportunities primarily exist in surgical equipment, high-intensity focused ultrasound, radioimmunotherapy and clinical laboratory equipment used for diagnostic tests, particularly for molecular diagnostics, microbiology, and immunochemistry testing and genetics testing.</td>
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<td></td>
<td>Neuroscience research and development - Melbourne neuroscientist and leading medical radiation physicists and chemists are working with companies like Siemens to advance MRI and PET imaging technologies.</td>
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<td></td>
<td>Regenerative Medicine - Global medical engineering company, Invetech, working closely with Organovo to help them design and manufacture the world’s first commercial 3D bioprinter. Regenerative medicine leader, Mesoblast Ltd is leveraging a proprietary stem cell technology platform to establish a broad portfolio of late-stage product candidates for a range of conditions. PolyNovo Biomaterial Pty Ltd won approval from the United States Federal Drug and Administration to sell NovoSorb, a temporary lattice inserted ahead of eventual skin grafts for patients with burns.</td>
</tr>
<tr>
<td></td>
<td>Medical technologies - Melbourne is home of the Cochlear implant and Bionic Eye. Dorsavi has developed an FDA-cleared wearable sensor system used by sporting teams and organisations to measure movement and posture to reduce injuries. Medical Developments International, manufactures Penthrox, a device which allows the inhalation of safe pain relief for use in emergency situations.</td>
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<tr>
<td>Education &amp; workforce - Indonesia needs more trained doctors and nurses and medical administrator. Many new private medical institutes and clinics have been opened in major cities, experiencing significant growth despite the economic slowdown.</td>
<td>Higher Education and Vocational Education and Training services - Melbourne is the number one destination for Indonesian students, enrolling 4,692 in 2019. Indonesia is the MTP’s fifth highest market for export of its education services. Since 2017, it has attracted approximately 1500 Indonesian student enrolments. Monash has graduates more than 11,000 Indonesian students with many holding prominent roles in Government, industry, the professions and education.</td>
</tr>
<tr>
<td>Most medical expenses are in the private healthcare system, accounting for 53.4 percent of overall healthcare spending. The island of Java offers a higher standard of medical care in Indonesia, especially in the capital – Jakarta.</td>
<td>Health systems strengthening: In September 2015, the Victorian Government finalised two health collaboration agreements with Jiangsu and Sichuan Provinces. The agreements provide scope to jointly design hospitals and clinics, train health staff and medical specialists and promote the use of the latest medical technologies. This provides an example of sister-state relations that can be leveraged in healthcare.</td>
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</tbody>
</table>
Australia’s healthcare innovation precincts are locations where research and business converge to create commercial and export ready products. They form a ready-made cluster open to commercial partnerships and access into Indonesia.

That if adequately supported, through three export development enablers – insights, outreach and brokering – precincts can play an important role in supporting Australia’s long-term Indonesia and Asia engagement.

These enablers are needed so that an effective supply-demand value-chain can be crafted that ultimately results in the transfer of knowledge, technology and capability between nations. These enablers will improve the connectivity between the two countries and beyond sharing knowledge, will ultimately allow for businesses to trade in areas of importance to both nations.

### THREE ENABLERS: INSIGHTS, OUTREACH AND BROKERING

<table>
<thead>
<tr>
<th>Enabler 1: Insights</th>
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<th>Enabler 3: Brokering</th>
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<tbody>
<tr>
<td>Improve knowledge and understanding of commercial opportunities in Indonesia’s healthcare.</td>
<td>Increase branding and promotion of Australia’s relevant healthcare innovation capabilities</td>
<td>Focus support in network creation and relationship development with Indonesian partners</td>
</tr>
<tr>
<td>Work with Indonesia governments – at national and sub-national - as well as private sector hospital and medical centres and university research centres - to help develop a prioritisation framework for their skills and technology needs.</td>
<td>Identify opportunities at Indonesia’s national and sub-national levels to promote MedTech and Pharmaceuticals capability, services and education in areas such as:</td>
<td>Assist to strengthen ties and establish links and partnerships in Indonesian markets, including identifying potential private sector, multinational, philanthropic or multilateral investments.</td>
</tr>
<tr>
<td>Undertake a market feasibility study that identifies Indonesia’s market requirements, opportunities, barriers, gaps, best practices.</td>
<td>- Vocational Education and Tertiary Education (VE/TE) - eg. Allied health, Engineering, ICT, Design, Quality Control, Scientific Assessment &amp; Evaluation, Business administration and management, Entrepreneurship.</td>
<td>Connect with Indonesia’s industry bodies to develop an understanding of Indonesia’s market requirements and how to effectively leverage existing networks and potential partners.</td>
</tr>
<tr>
<td>Develop and implement a program of market insights and business networking targeting innovation precincts.</td>
<td>- Research training in medical research and life sciences</td>
<td>Establishing commercial and sector relationships through trade activities, facilitating collaboration and partnership, building government-to-government relationships.</td>
</tr>
<tr>
<td>Build the supply-demand relationships between the relevant organisations.</td>
<td>- Provision of diagnostic, medical and clinical services to Indonesian patients, both on-shore, off-shore and telemedicine.</td>
<td>Map and leverage influential alumni and existing networks in Indonesia, including research collaboration networks.</td>
</tr>
</tbody>
</table>

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**Enabler 1: Insights**

**Enabler 2: Insights**

**Enabler 3: Brokering**
ENDNOTES


3. CSIRO, 2017, Medical technologies and pharmaceuticals: a roadmap for unlocking future growth opportunities for Australia, April, p.10


13. Fitch Solutions, 2020, Indonesia medical devices report,


In October 2019, the Business Council of Australia and Asia Society Australia together with knowledge partners PwC Australia and the University of Sydney Business School formed the Asia Taskforce senior leaders from the business, education and government sectors to examine how Australian companies and organisations can increase their presence and position in Asia to ensure our continued prosperity and deliver progress for future generations.

This draft discussion paper contributes to the Asia Taskforce Discussion Paper No. 05 "Opportunities for Australian business in Indonesian Healthcare”.

This paper refers to Asia as the countries of South-East Asia, South Asia and North East Asia.

This Discussion Paper and other publications by the Taskforce can be found at https://asiasociety.org/australia/asia-business-taskforce

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