

## Regional Biomedical Supply Chain Development Project – Gold Coast Executive Summary

Global drivers of the clinical trials sector are well understood and include emerging markets seeking greater health outcomes, population growth and personalised healthcare. This market is being met by unprecedented investment by the medical technologies and pharmaceutical sector with all new innovations requiring the process of clinical trials. This is a sector that Australia enjoys competitive advantage in due to favourable tax benefits, a strong healthcare system and well-regarded researchers. This presents significant opportunities for Australian cities in attracting clinical trials due to the value it provides in terms of economic benefits, innovation and healthcare outcomes.

The Regional Biomedical Supply Chain Development Project has identified the current capability of the Gold Coast clinical trials sector, its economic value, its projected growth over the next ten years and the supply chain opportunities that will enable the sector to continue to grow. This project has been delivered through a three-step process involving key stakeholder engagement, economic analysis and supply chain analysis.

### Stakeholder Engagement

The stakeholder engagement process to inform the Regional Biomedical Supply Chain Development Project included interviews with 29 different stakeholder groups, well positioned to provide data and commentary on the following key elements of the project:

- The current nature and capability of the clinical trials sector on the Gold Coast;
- The potential growth of their organisation and the sector over the next ten years; and
- The supply chain opportunities to unlock or catalyse the sector.

Key stakeholders interviewed for the briefing document highlighted that the Gold Coast has a maturing clinical trials sector with strong foundations for continued growth.

### Economic Analysis

The main features of the medical clinical trials sector on the Gold Coast are that:

- It is an emerging sector that is rapidly growing;
- The demand drivers are well established and include ageing, population growth, increasing populations in subtropical and tropical areas, growing middle class in Asia, increased regulatory pressures, closer scrutiny of research findings and trials results, and the need to diversify the trial population base;
- It represents a peak of scientific investigation operating in a highly regulated environment;
- The direct jobs created are typically high value, knowledge-based jobs that contribute substantially to the economy, in particular;
  - Each direct job generates a value add to the Gold Coast economy of over \$150,000;
  - By 2029, the employment in clinical trials is expected to generate \$33.1m per year to the Gold Coast economy,
  - The building associated with the projected growth require \$34M in building works; and
  - Every \$10m in revenue from grants or contracts attracted provides a value-added contribution of \$8.9m to the Gold Coast economy and generates 89 local jobs, of which the Gold Coast retains 84.7% of the jobs created in Queensland.

### Supply Chain

Seven parameters of the clinical trial supply chain at a city level were identified which include trial sites, participants, sponsors and therapeutic products, clinicians and clinical trial staff, support services, bioanalytical services and logistics. Consolidation of the views of key stakeholders and market research identified the following Gold Coast supply chain opportunities:

Supply Chain Parameter	Gold Coast Growth Opportunity
Trial Sites	<p>The city does not have a dedicated Phase I facility. Phase I facilities currently exist in Brisbane (Q-Pharm owned by Nucleus Network), Adelaide (CMAx), Perth (Linear), Melbourne (Nucleus Network) and Sydney (Scientia). With a large, fast-growing population and excellent hospital facilities, this presents an opportunity for the city. This was commonly highlighted by key stakeholders as a gap in the city's capability and offering.</p>
Participants	<p>The Gold Coast population was commonly identified as ideal for clinical trials for the following reasons:</p> <ul style="list-style-type: none"> <li>• It is growing quickly and is the 6<sup>th</sup> biggest population in the country;</li> <li>• It has a large and growing student population which can be attractive for Phase I trials;</li> <li>• It has a relatively ageing population which drives the clinical trials sector;</li> <li>• It has a relatively ethnically diverse population which is attractive for testing products for international markets.</li> </ul> <p>An opportunity exists to take advantage of the city's population and improve categorisation and databases of potential participants.</p>
Sponsors and therapeutic products	<p>The City is currently delivering over 100 trials with a strong view amongst key stakeholders that this number will grow significantly in the short and long term. Strong relationships with sponsors and CROs will enable this in addition to a focussed approach to regional governance and defining marketing capability.</p>
Clinicians and clinical trial staff	<p>An opportunity exists to categorise clinician areas of research interest. A training gap may exist for expertise in areas like good clinical practice – it may be appropriate to review the city's current training capability. There will likely be growing demand for Clinical Trial Coordinators, Clinical Researchers, Project Managers, Quality Assurance Managers, Data Managers and Clinical Trial Nurses.</p>
Support Services	<p>In taking the next step in the sector's progression, growth will have to continue to occur in the allied health sector.</p> <p>The opportunity to attract businesses to the city that enable the development and delivery of clinical trials is a clear opportunity. As trials become increasingly complex it is these areas involved in ethics, regulatory approval, project governance, data management, privacy and trial design that present significant opportunity for the city.</p>
Bioanalytical Services	<p>As the sector grows there will be value in looking to attract more specialised types of laboratories in the city. It was noted that in many cases, samples need to be sent away for specialised requirements. This will become a bigger issue as emerging sectors grow in maturity on the Gold Coast associated with therapeutic areas.</p> <p>It is important to recognise that if the city were to become a hub for bioanalytical services that airport and courier capability would also need to be assessed.</p>
Logistics	<p>Over the next ten years the opportunity exists to review the role of city building initiatives such as airport operations, transport connectivity and communications infrastructure. There may also be value in attracting clinical trial specific logistics companies as the sector grows.</p>

It is expected that with strong foundations in place, the clinical trials sector will continue to grow organically and provide important social, economic and innovation value to the Gold Coast over the next ten years. There is a clear opportunity to unlock value in the clinical trials supply chain by strategically pursuing the initiatives listed above and within the briefing document.