VICTORIA'S FUTURE INDUSTRIES: MEDICAL TECHNOLOGIES & PHARMACEUTICALS

Response to the Discussion Paper
September 2015



About Research Australia

Research Australia is an alliance of 160 members and supporters advocating for health and medical research in Australia. Research Australia's activities are funded by its members, donors and supporters from leading research organisations, academic institutions, philanthropy, community special interest groups, peak industry bodies, biotechnology and pharmaceutical companies, small businesses and corporate Australia. It reflects the views of its diverse membership and represents the interests of the broader community.

Research Australia's mission is to make health and medical research a higher priority for the nation. We have four goals that support this mission:

- A society that is well informed and values the benefits of health and medical research.
- Greater investment in health and medical research from all sources.
- Ensure Australia captures the benefits of health and medical research.
- Promote Australia's global position in health and medical research.

Elizabeth Foley

CEO & Managing Director 02 9295 8547 elizabeth.foley@researchaustralia.org

www.researchaustralia.org 384 Victoria Street Darlinghurst NSW 2010

This document and the ideas and concepts set out in this document are subject to copyright. No part of this document, ideas or concepts are to be reproduced or used either in identical or modified form, without the express written consent of Research Australia Limited ABN 28 095 324 379.

TABLE OF CONTENTS

Response to selected questions
Question 1. Given the rise of global value chains and the highly globalised nature of medtech and pharmaceuticals, where is there an opportunity for growth and job creation in Victoria? 5 Question 2. What is the opportunity for Victoria in manufacturing and specifically in advanced and specialised areas? What is the role of a State Government in capturing the benefits of these opportunities?
and pharmaceuticals, where is there an opportunity for growth and job creation in Victoria? 5 Question 2. What is the opportunity for Victoria in manufacturing and specifically in advanced and specialised areas? What is the role of a State Government in capturing the benefits of these opportunities?
Question 3. Would a tax incentive similar to the UK's patent box, ensure that the sector is able to capitalise on opportunities in advanced and specialised manufacturing? What level of support would be required to maintain a comparative advantage?
products before licensing, trading or sale? How do we ensure that we retain appropriate activities in the state and maximise the value for Victoria?
Question 5. What are the barriers to enterprises realising value from knowledge and services? Is there more to be done to support these activities beyond the areas discussed? . 6 Question 6. How can collaboration between key parts of the sector be improved to create new opportunities and enable participation in initiatives of global relevance? In particular,
how can it be improved to better link organisations across the value chain?
institutions)
Question 12. How can Victoria ensure it has a skilled and capable workforce to enable sector growth? Are there significant or specific gaps in skills and/or capabilities that may limit
future industry growth?
Question 14. How can Victoria benefit from and leverage the Commonwealth's activities, particularly around the Medical Technologies and Pharmaceuticals Industry Growth Centre and CRC for Innovative Manufacturing?
Question 19. How can Victoria create an environment that supports a sustainable pipeline of investable opportunities and builds investor confidence in Australian innovations?

MEDICAL TECHNOLOGIES & PHARMACEUTICALS

RESPONSE TO THE DISCUSSION PAPER, SEPTEMBER 2015

INTRODUCTION

Research Australia welcomes the opportunity to make a submission in response to the Medical Technologies and Pharmaceuticals Discussion Paper.

Research Australia shares the Victorian Government's optimism for the future of the Victorian Medtech and Pharmaceuticals sector. As recognised in the Discussion Paper it is already a large and well-established part of the Victorian economy and there is plenty of scope to build on this base to drive even greater benefits.

Victoria's Medtech and Pharmaceuticals sector is intertwined with its health and medical research sector and Victoria's health system. Research Australia is pleased that the Victorian Government's strategy for the health and medical research sector and the future of the medical technologies and pharmaceuticals sectors are being considered at the same time; this provides an opportunity to develop complementary strategies that seek to further exploit and extend the existing synergies between the two. Of course, success in this regard relies on close co-operation and collaboration between the two departments and indeed across government.

Victoria is well placed to develop a stronger Medtech and Pharmaceuticals sector and the Victorian Government has a critical role to play in supporting and facilitating this growth. Research Australia hopes that its submission will assist the Government in the development of a coherent and effective strategy.

RESPONSE TO SELECTED QUESTIONS

Question 1. Given the rise of global value chains and the highly globalised nature of medtech and pharmaceuticals, where is there an opportunity for growth and job creation in Victoria?

See the response to question 2.

Question 2. What is the opportunity for Victoria in manufacturing and specifically in advanced and specialised areas? What is the role of a State Government in capturing the benefits of these opportunities?

Victorian automotive component manufacturers provide some scope for growth and job creation in the medical technologies and pharmaceuticals sector. At a management level, these companies already have significant experience in participating in global supply chains and lean manufacturing. In terms of manufacturing facilities, many already have clean room facilities, particularly for the manufacture of electronic and other small, high precision components.

For example, Re-Time Ltd. a medical device company spun out from Flinders University, uses SMR Automotive Australia Ltd to manufacture its re-timer device using light therapy to assist individuals with insomnia. ¹ It was a beneficiary of the Medical Device Partnering Program, supported by the South Australian Government. SRX Global, with manufacturing and prototyping facilities in Dandenong, is an electronics manufacturer which has diversified away from the automotive industry into a range of areas including medical technologies. ² It was 2014 Large Business Victorian manufacturer of the year.

There is scope to build on the presence of the Advanced Manufacturing Industry Growth Centre in Geelong to support companies in the transition from automotive components to medical technologies and pharmaceuticals (particularly in relation to packaging and delivery systems). There is a role for the Victorian Government initially to help companies identify if they have the potential and capacity to make this transition, and to work with them to connect to existing device and pharmaceutical companies to learn about the sector and to build the links to the research, design and engineering expertise they will need to be able to compete successfully.

Question 3. Would a tax incentive similar to the UK's patent box, ensure that the sector is able to capitalise on opportunities in advanced and specialised manufacturing? What level of support would be required to maintain a comparative advantage?

Research Australia supports the proposal for the introduction of the Australian Innovation and Manufacturing (AIM) Incentive.

Modeled on the UK Patent Box, the AIM incentive is designed to provide an offset against the tax payable on profits derived from the innovation and manufacture in Australia of qualifying patented/licensed products. The patents/ licences would have to a connection to Australia to qualify for the Incentive. Further detail is available at http://www.aimincentive.com.au

¹ http://re-timer.com

² http://www.srxglobal.com

The introduction of the AIM incentive would assist the transition to a more innovative economy which supports the scientific research needed to develop new knowledge, promotes the innovation needed to apply that new knowledge, and encourages domestic manufacture of the products that creates jobs and generates export revenue.

While the AIM is directed at tax levied by the Commonwealth, there is scope for the Victorian Government to use the same principles to provide relief from State taxes. For example, relief from payroll tax could be targeted to companies whose activities involve the innovation and manufacture in Victoria of qualifying patented/licensed products. Medtech and pharmaceuticals would be an obvious candidate for such a scheme.

Question 4. How far along the product value chain should Victorian firms be seeking to take products before licensing, trading or sale? How do we ensure that we retain appropriate activities in the state and maximise the value for Victoria?

There is no single answer to this question. The available opportunities will depend on the particular case, and the Government needs to provide programs and support that are able to be flexible about this. Initiatives such as the introduction of an AIM can support the maximisation of value for Victoria, as can improvements in a range of other factors, from a deeper venture capital pool to a lower Australian dollar.

Question 5. What are the barriers to enterprises realising value from knowledge and services? Is there more to be done to support these activities beyond the areas discussed?

Access to information remains the key barrier. This is particularly the case for under-resourced SMEs whose management is often time poor and do not have dedicated product development or R&D staff.

The proposed Industry Growth Centres aim to address this issue, and both the Advanced Manufacturing Growth Centre and the Medical Technologies and Pharmaceuticals Growth Centre have a role to play. There is an opportunity for the Victorian Government to consider how it can develop programs that leverage the expertise and resources of the Growth Centres to support Victorian industry and institutions. It is difficult to be specific at this early stage in the development of the Growth Centres, but programs which complement rather than duplicate the activities of the Growth Centres could give Victorian companies a competitive edge.

The Victorian Platform Technologies Network (VPTN) is an example of a Victorian facility which is working to improve access by industry and researchers to existing infrastructure, services and expertise.³ The Victorian Government is a key financial supporter of the VPTN, and it is critical that this financial support continue.

³ http://www.platformtechnologies.org

Question 6. How can collaboration between key parts of the sector be improved to create new opportunities and enable participation in initiatives of global relevance? In particular, how can it be improved to better link organisations across the value chain?

In 2013 the Victorian Government provided funding for the formation of the Monash Partners Academic Health Science Centre (MPAHSC) and the Melbourne Academic Health Research Centre (MAHRC). The importance and national significance of these partnerships was reinforced in 2015 with the announcement by the NHMRC that two of the four Australian Advanced Health Research and Translation Centres were Victorian, centred around the MPAHSC and the MAHRC respectively. In 2014, the Western Alliance Academic Health Science Centre was formed, bringing together Deakin University, Federation University and 13 health service providers operating across the western region of Victoria with a focus on improving health outcomes in regional Victoria.

Other examples of the strong links between research and health care include the new Victorian Comprehensive Cancer Centre, which brings research and health care together in the one building; the development of the Olivia Newton John Cancer Wellness Centre and Research Institute, co-located on the Austin Hospital campus in Heidelberg; and the further planned development of Monash Heart Health.

The greater scale created by these collaborations groups can provide a basis for new opportunities and enable participation in global initiatives.

In relation to better linking organisations across the value chain, to date these collaborations have been focussed on bringing research institutions and healthcare providers together. The further evolution of these collaborations could include building relationships with the medical technologies and pharmaceuticals sectors.

Question 7. Does Victoria have the right mix of industry bodies and networks? How could this mix be evolved to better connect the sector and build the necessary scale?

Research Australia believes Victoria has the right mix of state based industry bodies and networks and appropriate access to national industry bodies and networks. There is scope for the Victorian Government to bring together the different industry bodies and networks to identify how they can work together more effectively, and how it can use the industry bodies to deliver specific initiatives and projects in support of a Medical Technologies and Pharmaceuticals strategy.

Question 9. Is institutional competition inhibiting sector growth in Victoria? Or, does the majority of collaboration continue to occur at the people-to-people level (rather than between institutions)

In the response to question 6, Research Australia referred to the various collaborations that have been created between research institutions and healthcare providers with the support of successive Victorian Governments.

While their creation should enhance the level of collaboration between the partners within each group, they also have the potential to increase competition between the groups. There is a role for the Victorian Government to encourage the groups to identify areas where they can actively collaborate to their mutual benefit. There is a further opportunity for the Victorian Government to challenge each group to identify how it will work with the private sector and SMEs, which has not been a primary focus of these collaborations to

date. If managed properly, the Centres can act as a conduit for the private sector to access their members' extensive skills and expertise across a range of disciplines and in a range of health settings in a way that is useful to large pharmaceutical companies and SMEs alike.

Question 11. What can be done to leverage the State's ICT capability and establish Victoria as a leader in digital health?

The Discussion Paper notes that Victoria's hospital, health management and clinical networks are among the world's most advanced and yet many records are still paper based and there are many system operating as silos.

With the forecast move to an 'opt out' model for the Personally Controlled Electronic Health Record, the impetus for electronic record keeping is building. A critical initiative which would build on and further drive this impetus would be a commitment by the Victorian Government to replacing all paper based health records in the Victorian public health system with digital records, and setting a target date for this achievement.

The digitisation of Victoria's hospital system would initially provide opportunities for software developers. Once complete, the digitisation would not only make more data accessible for research and analysis but support innovation in the delivery of healthcare and patient management. This would provide further opportunities for software developers, drive greater innovation in devices, and make Victoria a more attractive site for clinical trials.

Within this context, the Victorian Government could use its role as a provider of healthcare services to seek the provision of specific initiatives to improve the quality of healthcare and increase efficiency. Ideas could be generated from with the hospital and healthcare system (for example by offering prizes for innovative ideas) as well as from outside. Many elements of the former Market Valuation Program could be incorporated in such a scheme.

Question 12. How can Victoria ensure it has a skilled and capable workforce to enable sector growth? Are there significant or specific gaps in skills and/or capabilities that may limit future industry growth?

The skills required to successfully commercialise new innovations are a well recognised gap among researchers seeking to develop a product. There are some existing well regarded programs eg. 'the molecules to medicines program', but places are limited. ⁴ Support from the Victorian Government to increase the availability of existing programs would be a useful initiative.

The lack of clinician researchers in Victorian health services is a significant barrier to the active engagement of the health system with the research, medical technology and pharmaceuticals sectors. Not only do clinician researchers provide an interface.

Research Australia Page 8

-

⁴ http://molecules2medicine.org

Question 13. Are there any essential and/or urgent areas in need of regulation or taxation reform at the Commonwealth level to enable growth? How important is retention of the R&D tax incentive at a stable level to industry growth?

Stability in policy settings is a critical issue. The R&D tax incentive is still a relatively new program and the Australian Government's continued attempts to reduce the rate of the incentive are a threat to this stability and cast doubt on the Government's commitment to supporting Australian innovation at a time when confidence in the policy settings is crucial.

Question 14. How can Victoria benefit from and leverage the Commonwealth's activities, particularly around the Medical Technologies and Pharmaceuticals Industry Growth Centre and CRC for Innovative Manufacturing?

Please refer to Research Australia's response to Question 5.

Seven of the 11 health related CRCs are based in Victoria, and six of these have pharmaceutical or device related research programs:

- CRC for Cancer Therapeutics,
- CRC for Oral Health
- Hearing CRC,
- Young and Well CRC
- · CRC for Mental Health
- CRC for Alertness, Safety and Productivity.

Together these CRCs possess a wealth of experience in promoting engagement between researchers and industry, negotiating commercialisation arrangements and building successful networks. The Victorian Government should engage the CRCs to discuss how this expertise and the presence of so many health related CRCs in Victoria can be even better utilised by the broader Victorian research and innovation communities.

While following a recent review the CRC Program is to continue, there will be changes to its guidelines and structure. The Department should adopt a 'watching brief' to monitor these changes for their potential impact on existing and future CRCs.

Question 17. Are there strategic assets which could be better utilised or leveraged, and if so, how could this be done?

Please see the reference to the Victorian Platform Technologies Network (VPTN) at Question 5. The provision of vouchers or other means of buying access to key infrastructure for small innovative companies should be considered.

Victoria's health system is itself a strategic asset that could be better utilised to support research and innovation for medical technologies and pharmaceuticals. This could be done by providing more infrastructure within our health system to support research, including better support for investigator led and commercial trials and the opportunity for small pilot programs to evaluate and further develop new devices and technologies (particularly low risk non-invasive devices).

Question 19. How can Victoria create an environment that supports a sustainable pipeline of investable opportunities and builds investor confidence in Australian innovations?

The Victorian Government has a critical role as a purchaser of products and services. The USA Government's Small Business Innovation Research Program is a good example of how government funding can help address a government's need for R&D, support SMEs, and provide confidence for investors. Please also see the response to question 11.

⁵ https://www.sbir.gov/about/about-sbir#sbir-program

CONCLUSION

Research Australia believes that medical technologies and pharmaceuticals have a strong future in Australia. Victoria's strengths in health and medical research and in manufacturing provide an opportunity for the Victorian Government to capitalise on the Australian Government's identification of the sector as a key strategic priority. Victoria has the opportunity to build on its already strong networks and infrastructure to promote greater collaboration and more efficient use of both its assets and expertise, and Research Australia commends the Victorian Government for its focus in this area.

If you require further information or have any questions in relation tot his submission, please contact Greg Mullins, Head of Policy, on 03 9662 9420 or at greg.mullins@researchaustralia.org.

RESEARCH AUSTRALIA LIMITED

384 Victoria Street Darlinghurst NSW 2010
T +61 2 9295 8546 ABN 28 095 324 379
www.researchaustralia.org