Australian Chamber of Commerce and Industry

Securing the future of health in Australia

Maximising the potential of our MTP sector - medical technology, biotechnology and pharmaceutical

August 2023

About ACCI

The Australian Chamber of Commerce and Industry is Australia's largest and most representative business network. Our members are state and territory chambers of commerce, national industry associations and a council of business leaders from individual enterprises. Together, we represent Australian businesses of all shapes and sizes, across all sectors of the economy, and from every corner of our country.

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Introduction

Australia is at the forefront of global health research and provision.

Australia's medical technology, biotechnology and pharmaceuticals sector is a major growth sector important to our economy, health and wellbeing and security.

From 2016 to 2021 the sector had a gross value added (GVA) average of 2.3 per cent per annum. Surprisingly, it remained stable during COVID-19 in 2020 and 2021 highlighting the sectors resilience and long-term economic value.[1]

It provided an additional 13,000 jobs with a growth rate of 4 per cent per annum and grew significantly as an export sector up until encountering pandemic supply chain headwinds at the beginning of 2020.[2]

Australia is well positioned to maintain the growth trajectory of this sector if the focus on investment and optimal business conditions is continued.

There are four broad areas of action needed to achieve this vision:

- Embedding a One Health model
- Addressing skills needs for our future workforce
- Facilitating the digital revolution in health
- Investment and fit for purpose regulatory environments

Increasing investment in the sector and addressing these critical areas will not be enough to ensure long-term prosperity. Australia also needs to ensure we have resilient health systems looking forward.

If we are to achieve a strong, resilient, and sustainable health system that is better able to cope with disasters, governments and industry must work together to ensure resources are dedicated to all parts of the ecosystem, including enabling sectors such as MTP.

This de-risking needs to encompass cyber security; policies for workforce flexibility; preventative health; health literacy; vaccines; public-private partnerships; preparedness for future health threats; and clarity of governance structures when threats eventuate.

One Health

A 'One Health' approach explicitly acknowledges that the health of humans, animals, plants, and the wider environment are closely linked and interdependent. This means that actions in one sector have synergistic reactions in the other sectors. Recognition of this interdependence is of particular importance in mitigating health risks to both people and animals.

Public health is a cross-sectoral issue that requires co-ordinated One Health-based approaches. The health of animals, humans and the environment face shared challenges including zoonotic diseases, antimicrobial resistance and threats posed by climate change. At least 75 per cent of emerging human infectious diseases are zoonotic[3] – that is, they can be transferred from animals to people, and from people to animals. Protecting animal health directly protects human health. There has been a 300 per cent increase in the zoonotic disease outbreaks over the past 30 years.

A One Health approach provides an integrated and unified approach where management of disease outbreaks, would be supported by co-ordinated interactions between health, animal health and environment departments.

There are currently no One Health frameworks in federal or state jurisdictions in Australia.

Beyond expanding capacity to address emerging diseases at the human-animal-environmental interface, One Health also supports strategies to address non-communicable diseases.

This can be achieved by translational and comparative medicine approaches, such as with cancer development and ageing, and sentinel surveillance for infectious disease and environmental exposure. It can also occur by acknowledging the contribution animals and our shared environment make toward positive physical and mental health outcomes for the community.

A One Health operational framework would provide a holistic approach in these situations, facilitated by a trans-disciplinary team with pre-established structures and relationships to enable collaborative, co-operative and co-ordinated preparedness and timely responses.

Recommendations: ***Improve formal linkages between human, animal and environmental health sectors using a One Health approach. Build on existing knowledge, expertise and industry and government processes.***

Support the development of national animal health infrastructure to facilitate data collection, information sharing and effective engagement and collaboration across a diverse range of disciplines and industries.

Skills needs for our future workforce

The focus on health, both human and animal, has never been greater. COVID-19 has been the catalyst for significant transformation in the health and medical technology, biotechnology and pharmaceutical (MTP) sectors. The pandemic pushed rapid digitisation, investments in infrastructure and services, and streamlined regulatory frameworks and processes. It also exposed and exacerbated a shortage of skilled workers to fill the demand in the growing sectors, and the adverse impacts of lack of easy access to care.

Businesses within the MTP sector are grappling with how to bring their workforce along with the rapid pace of change. These businesses are increasingly concerned about future workforce needs.

If Australia is to realise the potential of its MTP industry as well as create and maintain high-quality jobs, it requires a workforce with the right skills.

In order to be ready, we must have flexible Vocation Educational and Training (VET) and higher education systems that allow for skilling, upskilling and lifelong learning. The role of microcredentials and responsive short courses in industry will increase. Having the appropriate system frameworks and funding approaches will be vital.

Recommendations: ***The National Micro-credential Framework needs to be broadly applied and promoted across VET, higher education and industry to allow for clear and consistent application and understanding across sectors.***

Government should work with industry to ensure funding distributions for the development of micro-credentials are transparent, and in the higher education space be untied to provider type. The platform for listing micro-credentials should be expanded to include VET with ongoing funding for the maintenance for this platform.

Sector skills gaps

MTPConnect conducted a 'root-and-branch' review of current and future skills gaps in Australia's medical technology, biotechnology, pharmaceutical and digital health during 2020-21.

Twenty priority skills gaps were identified across seven key themes: advanced manufacturing and supply chain; business operations; clinical trials; health data and cybersecurity; health economics and regulatory affairs; product development and commercialisation; and specialist and technical skills.[4,5]

The establishment of Jobs and Skills Australia (JSA) will assist in improving the national skills system and ensure it will meet Australia's current and future needs. JSA should establish a mechanism to work collaboratively with existing entities looking at the health sectors' workforce skills needs and not duplicate existing work in order to maximise the impact of addressing the skills gaps.

Recommendation: ***The appropriate jobs and skills council should take the lead role and establish a mechanism to work with the health sectors existing entities and recognise industry initiatives currently assessing the health sectors' workforce skills needs and not duplicate.***

The timeliness and responsiveness of the new JSA, and jobs and skills councils, will be critical in overcoming delays and bottlenecks created due to the transition to the new system. The councils need to be supported to become operational as soon as possible with mechanisms to fast-track critical work to overcome these delays.

Skills needs assessments should look at both short-term and future needs, particularly in the context of establishing a national centre for disease control. A greater emphasis should be given to biosecurity and future pandemics. It should also capture and review 'lost' skill sets such as veterinary public health, which was removed for not being economically feasible at the time.

The qualifications and skills for health sector-based work are typically acquired through higher education. Our university offerings, however, are demand-driven; further work should be undertaken to ensure students are well-informed about future work opportunities and labour gaps.

Recommendation: ***Increase marketing and promotional activities to students where there are forecast work opportunities and labour gaps in the health sector.***

Digital revolution in health

Digitalisation of high growth industries, such as the MTP sector will create positive spill-over benefits through the economy, improving multi-factor productivity, and lifting GDP and wage growth.

Digital literacy and inclusivity of citizens and industry

It is widely accepted that successful adoption and integration of new health-enabling technologies cannot be achieved without increasing the digital competencies of users. In order to have an adequately and appropriately skilled workforce, we must first ensure a strong foundational skillset. All citizens need basic digital literacy to access government and business services and workplaces need workers with the requisite foundation skills to take advantage of productivity benefits digitalisation provides. The *Digital Economy Strategy 2030* recognised skills and inclusion as a foundation for growing the digital economy and had several initiatives and plans articulated in the roadmap.

The proliferation of digital activities and piecemeal approach by federal, state and territory governments means that it remains elusive for industry to see a coherent picture for how digital ability will be increased generally, and how they then can seek to increase particular digital skills relevant to the industry sector.

The push for more digital solutions, driven by COVID-19, has also exacerbated the growing digital inclusivity gap emerging between low and high income groups.[6] It has also highlighted the opportunities for regional populations if their connectivity was enhanced.

Regional Australia produces 40 per cent of the national economic output, and is home to more than one third of the workforce.[7] Therefore, improving digital infrastructure in regional Australia is important to ensure their participation in the workforce and economy.

It is not enough to just build digital literacy and competency, we must also have plans to increase access and affordability to truly realise the benefits of digitalisation.

Recommendation: ***Creation of a whole-of-government National Digital Inclusion Plan as previously recommended by the Australian Digital Inclusion Alliance.***

The plan should identify and seek to embed the most appropriate nationally-agreed framework for digital capabilities and should be informed by digital literacy data from the planned JSA Foundation Skills Study.[8]

Digital health strategy

It is critical that we monitor and ensure progress of system-level planning to support the strengthening of digital competencies in using new digital technologies in health provision, e.g., telemedicine, artificial intelligence (AI), health and medical apps with a focus on supporting consumers, workers and management.

Workforce planning should also take into account new digitally-enabled care models, efficiencies and gaps digital transformation of the sector creates.

The *National Digital Health Capability Action Plan* addresses some of these concerns however it is unclear as to the industry progress against the plan.

Recommendations: ***Ensure activities, opportunities for engagement and measurements against the Capability Action Plan (CAP) are transparent and easily available for industry stakeholders. An easy-to-read scorecard against achievements of the CAP should be established.***

Expand peak body and industry engagement on the CAP to the MTP sector given the interconnectedness of activities, consumers and workers.

Consult with the animal health industry on the potential for a digital health CAP for this sub-sector with a particular emphasis on workforce planning and infrastructure development. This may also be a consideration for a function of a new CDC.

Barriers to successful digital transformation

COVID-19 has contributed to a rise in digital services and led to a greater use and reliance on technology and online interactions. Seventy per cent of Australians are now willing to use virtual healthcare services, and 80 per cent are ready to share their health data in a digitally-enabled health system.[9] Technology advancement in artificial intelligence and robotics means that increased personalised healthcare treatments are becoming more achievable.

For a sustainable digital health transformation, we need to increase digital literacy and inclusivity of both individuals and businesses. Further, we must look at data availability, citizenship and the interoperability of data systems.

Greater data citizenship, that is, for both the user of health services (the ability to use one's own health data in a meaningful, informed, consented and empowered manner), and the health care provider (understanding the ethics, governance and legal requirements for health data management) can only occur if we build greater trust.

Greater reliance on technology is expanding the global data pool, highlighting the need to maintain strong data security and privacy. From July to December 2022, Australia's health sector accounted for twenty-eight per cent of all notifiable data breaches, making it the highest reporting sector in Australia.[10]

Recommendation: ***Government should consult with the health/MTP sector on progressing a cyber security strategy fit for purpose for this sector.***

Data availability and interoperability

Data and digital technologies offer unique opportunities to strengthen health systems and offer efficiencies of care, yet health has lagged behind several other sectors in harnessing the potential of data and digital technology, 'missing the potential to save a significant number of lives and billions of dollars'.[11]

The sharing of data amongst the government, government agencies and businesses has yet to follow the trajectory of consumer data sharing. Whilst some data is shared such as releases through the Australian Bureau of Statistics, there still exists reluctant and risk avoidant behaviour from the public sector in the release of data. The Productivity Commission's 2017 *Data Availability and Use* inquiry urged the government to move from risk aversion system to a transparent data sharing system, which businesses and consumers can place confidence in. The benefits to businesses from engaging in public sector data includes building pricing strategies, tailored investment, improved collaboration, quicker diffusion of knowledge, and reduced cost and time spent on research.

The Australian Data Strategy in May 2021 stipulated three data priorities: enabling greater data use, improving data safety and security, and maximising the value of data. These are currently failing with the Data Availability and Transparency (DAT) Act 2022, undermining the goals and preventing the sharing of public sector data between government agencies, and with the private sector. Changes to the DAT Act need to occur, prioritising the safe and productive use of government collated data.

Given the current review of the Privacy Act 1988 (Cth) and the crossover, a review of the DAT scheme should e brought forward as soon as possible.

The recommendations proposed by the OECD should be considered during this review, most importantly the need to encourage 'data-sharing partnerships', including public-private partnerships, and the adoption of a 'strategic whole-of-government approach to data access and sharing'.

Recommendation: ***Advance the review of the DAT Act with the agenda to allow sharing of government data to the private sector and within the public sector itself, following international movements.***

Sharing of data in the animal health sub-sector has potentially different privacy concerns and barriers to overcome. For example, farmers collecting and reporting information on animal health and associated personal safety risks that may arise. Clarity would be needed on the purpose of data collection, access to data and steps to avoid unnecessary duplication of data collection.

Recommendation: ***If health data is to be considered in a review of the DAT Act and data sharing arrangements, careful attention should be given to a potential 'carve out' for animal health data. Consultation should be undertaken specifically with animal health industry representatives on appropriate data interoperability concerns and the best controls to put in place for this sub-sector.***

Digital infrastructure is rapidly replacing older systems, but interoperability is not all about technology. It is also linked to the need to accelerate the up-skilling of the current workforce to enable the full use and realisation of benefits from digital health technologies. At the same time, pre-digital legal, financial and organisational governance frameworks need to be redesigned for industry and governments to reap the full benefits of these new technologies whilst maintaining appropriate safeguards.

Recommendation*: Government should work with industry to implement the OECD Council Recommendation on Health Data Governance to ensure maximum interoperability — both within and between national health systems — and public trust ensuring data privacy and safe use of data.*

In the animal health subsector, providers are not necessarily in proximity to each other and their clients resulting in a greater reliance on digital infrastructure adoption moving forward to keep up productivity gains. Regulation will need to keep pace with this in order not to negatively impact animal welfare and have flow on effects to issues such as market access and biosecurity.

Recommendation: *Regulatory flexibility needs to keep pace with digital transformation. This applies to both the human and animal health regulatory systems.*

Investments for a world-leading health industry

R&D incentives

Investment in R&D and innovation is fundamental to lifting productivity and maintaining the international competitiveness of Australian business. Yet Australia is falling behind on all international comparisons. Australia's investment in R&D and innovation is less than 1.8 per cent of gross domestic product (GDP), well below the OECD average of 2.7 per cent, and that of other major economies such as Japan (3.3 per cent), Germany (3.1 per cent) and the United States (3.5 per cent).[12]

Recommendation: ***To increase Australia's overall (government and business) R&D expenditure, the federal government should work with states and territories, industry and academia to develop an innovation incentive roadmap with the target of lifting overall R&D expenditure to 2.5 per cent of GDP by 2025.***

Industry R&D spend has increased by 17 per cent per annum from 2016 to 2021. Maintaining and growing industry investment will be conditional on having the right incentives and reducing disincentives such as Australia's high tax rates, high interest on loans and a lack of funding support.

The establishment of the National Reconstruction Fund with low interest loans and guarantees on loans goes some way to addressing these barriers. However, industry is still urging use of tax incentives so that Australian businesses can be competitive with those in international jurisdictions that have lower taxes.

Recommendation: ***Consult with industry on tax concessions for Australian medical and biotechnology patents at an internationally competitive tax rate in order to attract global investment opportunities; and explore an extension of this model to all R&D expenditure.***

IP protections

A strong intellectual property (IP) system has a fundamental role in encouraging innovation and the diffusion of ideas leading to productivity boosts and economic growth.

Australia has a strong reputation on IP. However, industry believes we can strengthen our system further.

To ensure ongoing growth in investment, it is critical that we have the correct settings. Strong, stable and reliable IP settings that ensure a good foundation for innovation and adequate patent protection will guarantee ongoing and long-term investment decisions. IP is also essential in supporting investment in new research and technology, both domestically and internationally.

The Australian government should aim to increase data exclusivity to align with international best practice to ensure Australia remains at the forefront of international competitiveness in attracting foreign investment.

Recommendation: ***Strengthen protections of Australian IP and attract more companies to register IP in Australia by reviewing the Australian patent system and harmonisation of data exclusivity term lengths in relation to world best practice.***

IP is particularly beneficial to small and medium-sized enterprises (SMEs). The *Australian IP Report 2022* presented evidence that IP activity is a significant forward indicator of employment growth for Australian SMEs,[13] and that small businesses disproportionately contribute to job creation through their innovation related activities.

The report found that after filing for IP rights, Australian SMEs are more likely to achieve higher growth than their peers (one study cited estimates a 22 per cent increase in firm size following the grant of a patent) and pay a higher median annual wage. However, the current share of Australian SMEs with active IP rights remains low.

Recommendation: ***More work needs to be done to ensure that small businesses have the information they need to make informed decisions about IP protection, and to encourage filing for IP rights within start-ups and SMEs.***

International collaboration

The development and diffusion of knowledge between countries is core to economic development and growth. International research collaboration allows countries to learn from one another and build capability to respond to unique challenges.

93%

of standard patent applications by residents in Australia are filed by single parties only. In 2021, 5 per cent of resident applications indicated domestic partnerships and only 2 per cent indicated international partnerships, down a percentage point from 2020.[14]

The IP Australia report states that there is evidence that research is becoming more localised and that this trend pre-dates COVID-19.

Recommendation: ***Create further opportunities for Australian business innovation, growth, and promotion through the establishment of global networks for Australian health industry innovators in health industry epicentres across the globe. These hubs would be focused on facilitating greater collaboration, promotion, and access to research and development (R&D) opportunities.***

Where possible, health industry hubs should be joined up with other industry hubs across the value chain including advanced manufacturing to facilitate greater cross pollination of ideas and knowledge.

Translating research into commercial outcomes

IP rights, for example, patents and trademarks, are good indicators of R&D, innovation, and commercialisation. Patents are a partial indicator of the success of R&D in generating innovative technology outputs.

In 2021, the three leading classes for patent applications in Australia were from pharmaceuticals, medical technology, and biotechnology.

Positively, Australian resident filings of patents increased in 2021, however, made up only 9 per cent of all applicants. Based on the latest data from the World Intellectual Property Organization (WIPO), the number of patents filed overseas by Australians decreased by 5 per cent in 2020, with a total of only 9,106 applications.[15]

There is significant opportunity to increase the development, commercialisation, and patenting of technology within the sector.

Recommendation: ***Review the patent filing process for Australian companies to ensure it is as streamlined as possible and there are no unnecessary barriers to filing.***

Two of the major barriers to commercialisation of research are competition for staff time and the availability of staff with relevant commercial skills.

Although the NHMRC has a legislated objective of 'translation' and a *Research Translation Strategy 2022-2025*, there is only one clear activity addressing commercialisation within the corporate plan (2020–21 to 2024–25) under the translation pillar. That is, to fund research that focuses on translation into practice, policy, and products, encouraging industry engagement and the commercialisation of research outcomes, where appropriate. The rest of the activities are focused on the translation of research into guidelines and public health/health policy.

Within the strategy, the activity focused on building capacity and capability does not have a strong enough focus on commercialisation skills development, rather it looks at linking clinical researchers to health-related systems and additional funding streams.

Recommendations: ***Strengthen the focus on commercialisation of research and consider relevant KPIs around increasing the percentage of researchers successfully commercialising their research into products or services.***

Implement the 2017 recommendation from Australia 2030: Prosperity through Innovation for greater Industry–research sector collaboration through introducing a collaboration premium (of up to 20 per cent on non-refundable tax offset) to incentivise collaboration in the R&D tax incentive program.

Further, more needs to be done to assist companies to overcome the 'commercialisation chasm', where companies are unable to access funding to commercialise R&D and innovation in Australia. These companies typically move overseas to realise the full potential of their inventions and innovation. In addition to the lower tax rate provided by the patent box recommendation, direct support is needed through low interest loans or other financial support to assist businesses to start-up and scale-up, enabling them to capitalise R&D and commercialise innovation in Australia. By offering Australian businesses access to the support they need to nurture their ideas, we can reap the benefits of Australian innovations and technology break-troughs on our shores.

Recommendation: ***Stimulate investment and assist businesses to commercialise R&D and innovation in Australia though low-interest loans and other financial assistance.***

Clinical trials reform

In 2019, clinical trials contributed $1.4 billion to the Australian economy, saw over 8,000 Australians employed and more than 95,000 Australian trial participants.[16]

Australia is a world-leader for clinical trials however as international competition for the placement of clinical trials increases, in order to sustain our tier one reputation and future-proof our international status there is urgent need for continual investment and reform.

In order to attract greater international investment in clinical trials, governments must commit to alleviating the inefficiency created by having multiple, jurisdictional-based systems and complex, burdensome approvals processes. The proposed National One Stop Shop for Clinical Trials is an opportunity to achieve an interconnected, rapidly responsive, streamlined, and intuitive platform to fast-track trial commencement and patient recruitment.

Recommendation: ***Following the conclusion of the second phase of consultations on the One Stop Shop initiative in June 2022, urgent action is needed on sustainable funding for the build of the program and continual maintenance.***

Clinical trials are not only beneficial for our economy, they also play an important role in improving Australia's healthcare system such as through the development of new and innovative treatments and providing patients with early access to potentially life-saving medicines at no cost.

Early access to medicines through clinical trials has been estimated to save Australian taxpayers around $100 million annually in healthcare costs, as well as providing patients with significant benefits from timely treatments. This healthcare saving includes reduced Government expenditure on the Pharmaceutical Benefits Scheme (PBS) due to patients' access to innovative treatments. Expanding investment in clinical trials will allow more patients to gain early access to innovative medicines and provide valuable real-world evidence that these medicines directly benefit the health of Australian patients.

Recognition of the benefits of newer innovations and breakthrough medicines successful in clinical trials should flow through to PBS listings. A balanced investment approach to the PBS is also needed to ensure faster access to subsidised medicines which would allow all eligible Australians to more rapidly benefit from these medicines equitably. This is particularly relevant with an ageing population when access to medicines will help Australians live longer and healthier lives, stay in the workplace, keep out of hospital and positively contribute to the community and the economy.

Australia now consistently underperforms against international peers on measures related to access to innovative medicines and vaccines.

On average, across 20 OECD countries, more than 60 per cent of medicines become available to patients within six months, but in Australia it is just 22 per cent.

Japan, Germany, Austria, Great Britain and Switzerland all take less than 200 days on average to achieve public reimbursement from registration of an innovative medicine, whereas in Australia this process takes almost 400 days on average.[17]

Health and medicine supply chains

The medicines manufacturing process depends on a complex global network of suppliers, competing for raw materials and equipment. Trade bottlenecks − including export restrictions, regulatory barriers, tariffs, and customs red tape − add uncertainty, cost and delay to both manufacturing and patient access. COVID-19 exposed that Australia's island geography can serve as an advantage, but it also presents a significant challenge with intense pressure on supply chains into and out of the country in times of crisis.

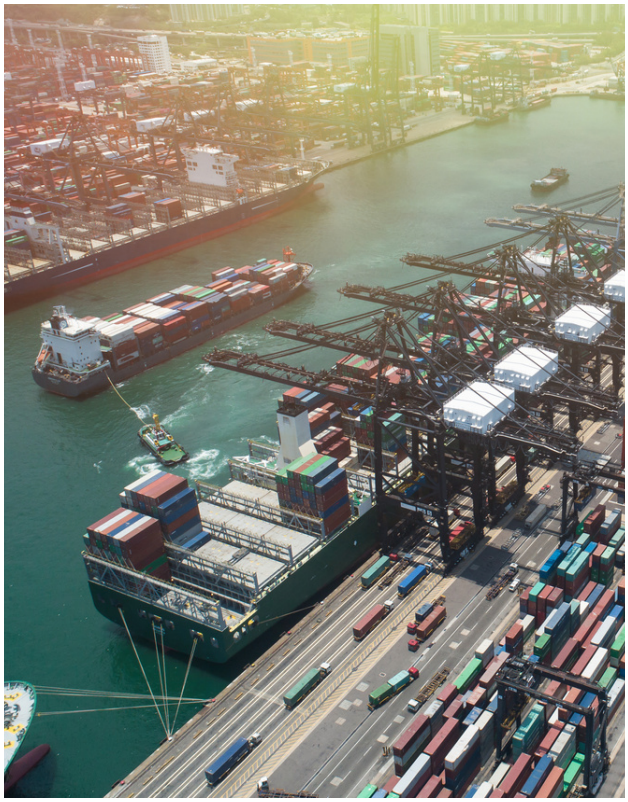
If we are to take steps to make Australia more resilient in a global supply chain environment, there needs to be a recognition that ingredients and components of the end product come from many sources and have multiple conversion points from raw material to finished product.

The supply chains inquiry from the Productivity Commission recognised that onshoring of manufacturing capability is a valid consideration but that prioritising sovereign capability over global supply can present risks to government. The two issues are not mutually exclusive, and Australia should consider a diversified approach to ensure access to medicines (both innovative and generic medicines).

During COVID-19 this was particularly problematic. For example: when in the first instance companion veterinary services were excluded from the essential services lists whereas agricultural veterinary services were deemed essential and could not deliver services across state borders.

Recommendation: ***To build resilient supply chains, governments should focus on both reducing trade barriers to allow the frictionless movement of pharmaceutical active ingredients, excipients, finished products and devices; facilitating importation and export of Australian manufactured goods. To ensure patients have access to the medicines when they need them, where they need them and at a sustainable price for all.***

This is also relevant to the frictionless movement of personnel and delivery of services across borders (both domestic and international).



Resilient Health Systems looking forward

The economy and health are undeniably intertwined, and the impacts of health crises on economic stability and productivity became alarmingly apparent during the COVID-19 pandemic.

During the pandemic, businesses felt the negative health impacts of sick workers and suffered shocks including exacerbated skills shortages, rapid digital adoption, supply chain disruption and financial pressures such as reduced cash flow. Simultaneously, Australia has experienced natural disasters such as the 2020 bushfires, La Niña floods and sporadic heat waves.

These events and the wide-ranging impacts to government, industry and communities reinforce the need for a collaborative approach among all actors and across policy and industry areas.

The MTP sector is a critical part of the health ecosystem yet is often overshadowed by a focus on primary care.

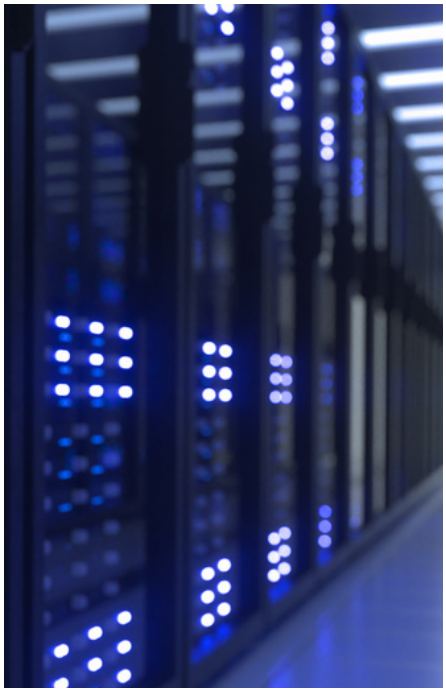
If we are to achieve a strong, resilient, and sustainable health system that is better able to cope with disasters, governments and industry must work together to ensure resources are dedicated to all parts of the ecosystem, including enabling sectors such as MTP.

Cyber security and cyber resilience of the industry

As we work to invest and build resources and expertise in our health data systems, increase interoperability and access, attention must also be paid to data protections and cyber security.

As noted earlier in the report, government should consult with the MTP sector on a sector-specific cyber security strategy that accounts for its unique regulatory and operating environments.

Investment will deliver greater resilience of our critical health infrastructure from cyber-attacks, particularly when at its most vulnerable, such as during public emergency events.



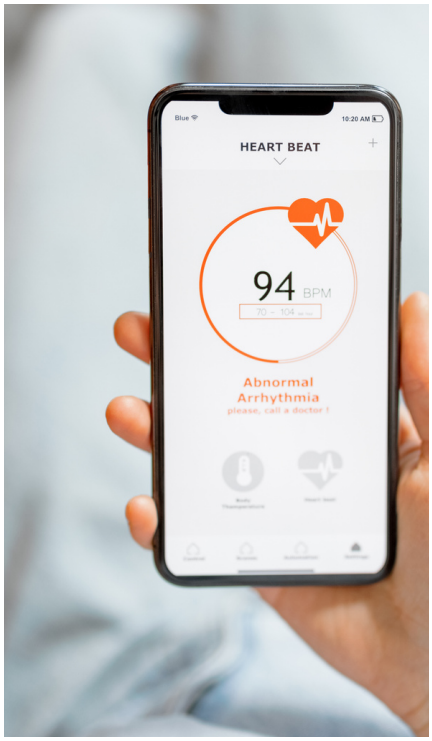
Effective policies to improve workforce flexibility

During the pandemic, the capacity of the health workforce was optimised by making better use of all health professionals and services. These included, for example, community pharmacies successfully implementing COVID-19 vaccination, partnerships with private providers, vaccine indemnity coverage and increased funding for telehealth.

Without such policy changes, these activities would otherwise have taken up capacity in higher-cost (and less accessible) settings such as general practice or hospitals.

Through a more flexible and efficient health system, all professionals can provide patient services at the highest level of their competencies and scope of practice.

Stockpiles of emergency PPE and other medical supplies should be developed for use by critical workers and industries during a national emergency. These should be separate from, and additional to, resources stockpiled for the health sector.



Preventative health

Prevention is an essential component of an effective health system and a productive economy.
Our current health system is fundamentally focused on the treatment of illness and disease with only a small fraction of health spending spent on prevention activities.

In 2018-19, public health and preventative expenditure was only 2 per cent of total health expenditure by Australian governments. Across comparable OECD countries, spending was higher in Canada (5.7 per cent), Japan (3 per cent), UK (4.8 per cent) and the United States (3.2 per cent).[18]

Business strongly supports the National Preventive Health Strategy goal to increase this investment to 5 per cent of total health expenditure across federal, state and territory governments by 2030.

Health Literacy

Health Literacy is critical to improving health outcomes in the Australian population on an individual and systemic scale.

Every year 50,000 Australians are hospitalised with issues relating to medication errors, inappropriate use, misadventure, and interactions. A further 400,000 present to emergency departments at a cost of nearly $1.4 billion annually. At least half of the cases, which include prescription and non-prescription medicines misuse, are preventable.[19]

Additionally, up to $1.67 billion a year is spent on unnecessary hospital and GP consultations for self-treatable conditions that could be safely self-managed, with sufficient advice and support available from a pharmacist. [20]

Increasing investment in a national health literacy strategy should focus on empowering consumers with ability, knowledge, skills and support to access, understand and apply information to make effective decisions about health and health care, and take appropriate action. Unfortunately, up to 60 per cent of Australia's do not have these skills at present.[21]

Domestic and international research has shown that co-creating local services and resources to increase health literacy is most effective when consumers, healthcare professionals, health service managers and industry work together to address specific community needs, however a national strategy would ensure that these groups work toward a national standard to equalise the distribution of resources and opportunities across the country.

Vaccine literacy and adult immunisation programs

The COVID-19 pandemic demonstrated the impact of infectious disease on adults. It reinforced the importance of protecting adults against vaccine preventable diseases – and preparing for the next pandemic.

Increasing investment in immunisation will ensure broad protection of population health. This should include expanding the community's access to funded vaccines and maximising uptake. One pathway should be for public health authorities to form more partnerships with industry to provide accurate, accessible and trusted information about vaccines to workers and communities, continuing efforts to reduce vaccine hesitancy.

Public private partnerships and not shifting the burden

Employers acknowledge that public health issues such as diabetes, cardiovascular disease and cancer impact individuals and families as well as workplaces. Many employers already undertake a range of strategies helping workers improve their general health and wellbeing.

Governments should consider more incentives to invest in health promotion in the workplace, recognising it as a key intervention setting for reducing risk factors. However, responsibility for public health should not be shifted onto private industry. There is increasing concern that with growing pressure on health budgets, industry levies and taxes are being misused to raise revenue to pay for public health costs.

Any extension of employer duties to that of general worker health and wellbeing would fundamentally redefine expectations about the nature of the employment contract, the scope of work, the capacity to manage a business and its workers, and the drivers of productivity needed for competitive and profitable performance.

Better preparedness for future health threats through One Health

Embedding One Health into Australia's broader health sector with equitable representation across human, animal, and environmental health sectors will support better preparedness for future infectious disease outbreaks, as well as responding to rising levels of non-communicable (chronic) diseases, and mitigating the health impacts of climate change in Australia.

The significant disparity between infrastructure and resources provided to the human health sector to manage public health concerns, such as antimicrobial resistance, compared to the animal health sector, is currently prohibitive to a genuine One Health approach to managing public health in Australia.

Government needs to establish formal linkages with the broader public health sector using a One Health approach to support better preparedness and more effective, efficient and timely responses to public health threats in the future.

Clarity of governance arrangements for threats

The COVID-19 pandemic highlighted gaps and inconsistencies in inter-governmental coordination of emergency powers and responses to disease outbreaks.

During the initial scoping stage of an Australian centre for diseases control, clear mapping of existing legislation and agencies relevant to pandemic preparedness and outbreak response should be conducted. Proposed reforms to the Human Biosecurity Emergency (HBE) framework should also be consulted on and progressed.

To date, the focus of biosecurity powers has been heavily on the 'human' element. To have a genuine One Health framework, consideration of underlying biosecurity legislative powers and governance arrangements must clearly incorporate animal and environmental health.

References

1. MTPConnect. (2022). Medical Technology, Biotechnology and Pharmaceutical Sector Competitiveness Plan. mtpconnect.org.au
2. ibid.
3. CSIRO. (2020). Australia's Biosecurity Future. https://www.csiro.au/en/work-with-us/services/consultancy-strategic-advice-services/csiro-futures/agriculture-and-food/biosecurity-futures.
4. MTPConnect. (2021). MTPConnect REDI Initiative Skills Gap Analysis Second Report. mtpconnect.org.au
5. ibid.
6. Thomas, J, Barraket J, Wilson C, Holcombe-James I, Kennedy J, Rennie E, Ewing S, MacDonald T. (2020). Measuring Australia's digital divide: The Australian digital inclusion index. RMIT, Swinburne University of Technology, Telstra.
7. Productivity Commission. (2022). 5-year Productivity Inquiry: Australia's data and digital dividend, Inquiry Interim Report, Canberra.
8. *ACCI notes that there are now multiple frameworks for digital literacy and competency such as the Digital Literacy Skills Framework and Digital Skills Standards developed by the Digital Skills Organisation.*
9. Deloitte. (2019). The Future of Health. [Press release]. https://www2.deloitte.com/au/en/pages/media-releases/articles/future-healthcare-australia-020322.html
10. Office of the Australian Information Commissioner (OAIC). (2023). Notifiable Data Breaches Report: July to December 2022. https://www.oaic.gov.au/__data/assets/pdf_file/0026/39068/OAIC-Notifiable-data-breaches-report-July-December-2022.pdf
11. OECD. (2019). Health in the 21st Century: Putting Data to Work for Stronger Health Systems, OECD Health Policy Studies, OECD Publishing, Paris.
12. OECD (2022). OECD Main Science and Technology Indicators. OECD Directorate for Science, Technology and Innovation. http://www.oecd.org/sti/msti2022.pdf
13. IP Australia. (2022). Australian Intellectual Property Report 2022.
14. ibid.
15. ibid.
16. MTPConnect. (2021). Australia's Clinical Trials Sector. mtpconnect.org.au
17. Medicines Australia. (2020). Medicines Matter - Access to Medicines 2014-2019 Report.
18. OECD. (2019). Health in the 21st Century.
19. Pharmaceutical Society of Australia. (2019). Medicine Safety: Take Care. https://www.psa.org.au/wp-content/uploads/2019/01/PSA-Medicine-Safety-Report.pdf
20. University of Technology. (2019). An Australian Minor Ailment Scheme 2019. https://www.uts.edu.au/sites/default/files/2019-11/Full%20Report%20%28wl%29.pdf
21. CHP Australia. (2022). The Self-Care Opportunity Final Report. https://www.chpaustralia.com.au/Self-Care/The-Self-Care-Opportunity