Allied Health Professions Australia



Pre-Budget Submission 2023





About AHPA and the allied health sector

Allied Health Professions Australia (AHPA) is the recognised national peak association representing Australia's allied health professions. AHPA's membership collectively represents over 150,000 allied health professionals and AHPA works on behalf of all Australian allied health practitioners. AHPA is the only organisation with representation across all disciplines and settings including health, disability and aged care.

AHPA supports the Australian government in the development of policies and programs relating to allied health, and advances system-wide issues that affect allied health.

https://ahpa.com.au/our-organisation/

The 5 health priorities in our submission are:

Build a Sustainable Allied Health Workforce

Improve access to multidisciplinary Allied Health care for people with Long COVID-19

Integrate Allied Health into Existing Digital Infrastructure

Fund Allied Health Services in Residential Aged Care

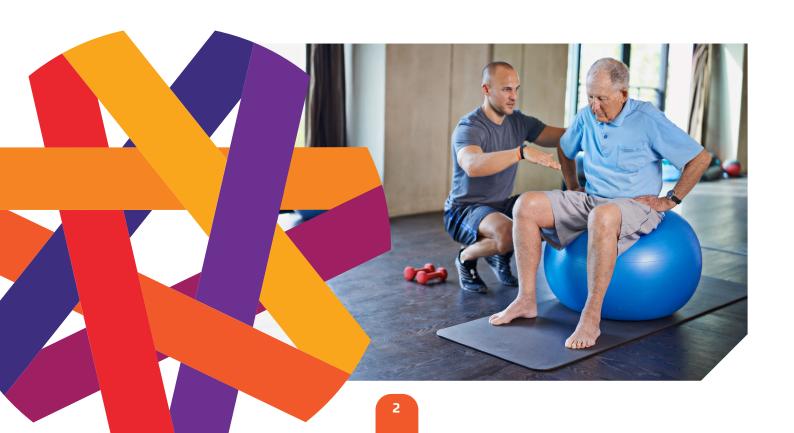
Improve Participant Utilisation of Allied Health Services in the NDIS

Contact us

AHPA welcomes further discussion about this submission.

Bronwyn Morris-Donovan

AHPA CEO ceo@ahpa.com.au M.0488 777 939





Build a Sustainable Allied Health Workforce

Nationally consistent allied health workforce data is needed to support quality workforce planning, sustainability and service modelling.

Despite allied health being the second largest health workforce there remains no national allied health workforce strategy and no clear picture of the various settings, sectors and locations in which allied health professionals work.

The Problem

In allied health, there remains no nationally consistent collection and integration of allied health workforce data. This means we cannot establish an accurate picture of how many allied health professionals are actively working, where they are located, in what sector, and how long they intend to keep working. This results in fragmented, inconsistent approaches to workforce and service planning. The impact of this is poor access to essential allied health services, especially for people in rural and remote areas and those with chronic conditions.

While the National Health Workforce Dataset (NHWDS) provides data on Ahpra-regulated professions, there is no single source of workforce data that captures all the allied health professions. This is especially relevant for self-regulated professions, such as Audiologists, Dietitians, Exercise Physiologists and Speech Pathologists, where data collection not consistent.

In 2022 AHPA conducted a member workforce survey to identify existing workforce data. We identified the following major shortcomings:

- For approximately **40%** of allied health professionals, it cannot be established what work role they occupy
- For approximately **30%** of the allied health workforce, the work setting of their role is not available
- While the allied health workforce location by state broadly reflects Australia's population distribution,
 2/3 of our membership cannot identify the number of allied health professionals in rural and regional Australia.

Appendix A presents the extent of workforce data currently available through our members.

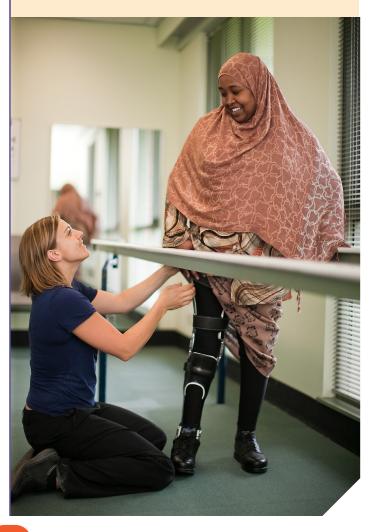
The Solution

Fund the development of a national allied health workforce strategy.

Invest in the development and implementation of a nationally consistent survey of all allied health professionals.

Fund the implementation of a national repository for allied health workforce data.

As an interim measure (2 years), fund AHPA to work with the allied health peak bodies to enhance existing workforce data collection.





Improve access to multidisciplinary Allied Health care for people with Long COVID-19

Multidisciplinary care is recognised as best practice care for people with symptoms of long COVID. Long COVID symptoms are estimated to impact 5-6% of Australians who've experienced COVID.

Poor management of long COVID symptoms is estimated to generate up to \$47billion in economic and social costs for the country.

The Problem

As of 3 January 2023, over 11.2 million cases of COVID-19 have been reported in Australia.¹ Estimates range from approximately 400,000 to 600,000 consumers who may experience a range of non-specific multi-system post-viral symptoms.

The economic costs of inadequate access to multidisciplinary CVOID-specific health services could be in the order of \$30 billion to \$47 billion (Appendix B).

An estimated \$1.8 - \$2.8 billion will be borne by the government through increased provision of health care. However, most of the economic burden is estimated to be borne by consumers through out-of-pocket healthcare costs (\$7.4 - \$11.5 billion) and foregone income (\$19.5 - \$30 billion).

Allied healthcare professionals tell us the system for providing support to people experiencing post-COVID-19 symptoms is fragmented, contingent on location and socioeconomic circumstances, and poorly supported by Medicare, with MBS-funded allied health sessions capped at five allied health sessions per calendar year.

A significant proportion of people with long-COVID report reduced workforce participation including limited working hours and reduced ability to perform the same duties.² Five subsidised allied health sessions for people with significantly reduced income capacity is woefully insufficient.

There is also a lack of clarity around utilisation of Chronic Disease Management Plans (CDM Plans) for people with long-COVID symptoms less than six-months from initial illness. Given the impacts of long-COVID there is a clear need to amend CDM Plan eligibility criteria. This will facilitate access to essential allied health services for people experiencing long-COVID symptoms less than six months from initial illness.

1. World Health Organisation: https://covid19.who.int/region/wpro/country/au (accessed 20 January 2023)

The Solution

Invest in the establishment and implementation of a nationally consistent data collection approach for people with post-COVID-19 symptoms to inform service planning.

Extend the Chronic Disease Management Plan to fund an additional 10 allied health sessions per calendar year.

Amend Chronic Disease Management Plan eligibility criteria to explicitly permit access to subsidised allied health sessions for people with long-COVID symptoms three months from their initial illness.

Increase the number of primary multidisciplinary care clinics, especially in rural and remote locations.

Fund Primary Health Networks to commission integrated, multidisciplinary primary care clinics, especially in rural and remote areas.



^{2.} Australian Institute of Health and Welfare. Long COVID in Australia – a review of the literature. 2022 https://www.aihw.gov.au/getmedia/9592f439-9b96-4589-a55d-6b04e262e5e1/aihw-phe-318.pdf.aspx?inline=true



Integrate Allied Health into Existing Digital Infrastructure

Allied health professionals are integral to the multi-disciplinary team. The client knowledge they share impacts the ability of professionals to improve an individual's health outcomes.

Interoperable, accessible digital systems are required to enable the efficient and timely sharing of allied health information.

Integration of allied health information to My Health Record (MHR) will improve the quality of health care, relieve acute care pressure points, and enable data generation to support patient, practice and community-level planning.

The Problem

Consumers want to use IT during health interactions to ensure accurate sharing of their personal health information without them repeating it, to personalise their journey and improve their health outcomes

Despite the benefits of access to real-time health information and the My Health Record (MHR) allied health professionals are not able to:

- Contribute critical health information to the MHR
- Choose suitable clinical information systems that are interoperable with MHR and other digital initiatives such as secure messaging
- Access the information required to inform practice at the point of care
- Participate in the efficient and timely sharing of consistent data to support consumer, practice, and community-level planning
- Readily participate in real-time multi-disciplinary team meetings, nor contribute to them via connected and interoperable IT systems.

The Solution

Invest in modernising MHR to enable allied health professionals to contribute critical health information via automated reports.

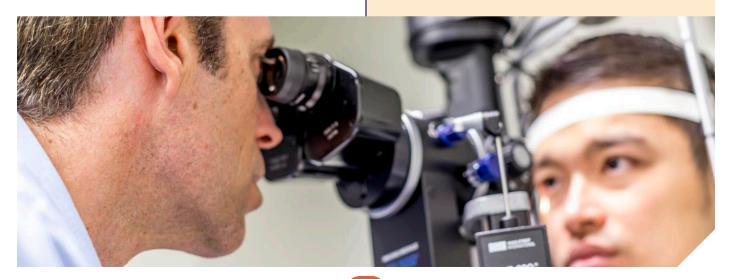
Adequately fund integration between MHR and allied health clinical information systems.

Fund development of education packages to support allied health professionals to rapidly integrate digital reforms into their practices.

Incentivise allied health practices to rapidly adopt digital health and new digital technologies.

Ensure the Australian Digital Health Agency National Healthcare Interoperability Plan identifies barriers to interoperability and ways to overcome them for allied health professionals.

Facilitate and support the implementation of the National Healthcare Interoperability Plan.





Fund Allied Health Services in Residential Aged Care

Allied health services are essential to maintain aged care residents' wellbeing and facilitate the restoration of function.

The Royal Commission into Aged Care Quality and Safety found that allied health services are underused and undervalued across the aged care system and that this produces morbidity, mortality, and quality of life impacts, including those associated with dementia, mental health, malnutrition and falls.

The Royal Commission called for allied health to become an intrinsic part of residential care, provided at a level appropriate to each person's needs.

The Problem

Unlike nursing and personal care, there is no mandated minimum benchmark of allied health care per person per day and no ringfenced funding. This means there is no guaranteed provision of allied health in residential aged care. Allied health services have now decreased to 4.9 minutes per resident per day.³

A recent Health Consult scoping study concluded that the level and breadth of allied health involvement in Australian residential aged care homes is limited.⁴ An AHPA survey found this results in serious impacts on both the allied health residential aged care workforce and residents, including more than 1 in 8 allied health professionals losing their jobs and another 30% planning to leave the sector due to substandard quality and safety.⁵ The National Aged Care Advocacy program also reports numerous care concerns, including limited access to allied health services and poor care planning.⁶

The Royal Commission recommended clinically assessing each person, ideally via a coordinated multidisciplinary team, against the full range of potentially available allied health services that could help maintain their wellbeing and assist reablement. In practice, assessors only determine the AN-ACC funding classification level. It is then up to facility staff to identify any perceived allied health needs and deliver the right care, without any standardised tool to coordinate care planning. Many aged consumers will therefore not receive the allied services that best meet their needs.

3. Sutton, N., Ma, N., Yang, J.S., Lewis, R., Brown, D., Woods, M., McEwen, C., Parker, D. (2022) Australia's Aged Care Sector: Full-Year Report (2021–22). UTS Ageing Research Collaborative, The University of Technology Sydney.

The Solution

Extend currently proposed models of multidisciplinary outreach care for residents in residential aged care facilities (Government Response to Royal Commission Recommendation 58) to explore a harmonised and joined up residential aged care approach via multipartner collaboration.

Commonwealth and State/Territory Governments to partner with allied health peak bodies and researchers to provide onsite core allied health services and secure pathways to other allied health disciplines as required. This can include any necessary collaboration with the private sector.

Incorporate a provisional allied health service benchmark. Trial a standard allied health assessment and care planning tool for use in residential aged care.

Invest in the development and evaluation of models of allied health student clinical placements in residential aged care to alleviate the nationwide shortage of allied health professions in aged care.

Collect evaluation measures including resident health and wellbeing, emergency department presentations, workforce impacts, reporting of care minutes and cost of each type of allied health service against each of the 13 AN-ACC classes and relevant demographics.

Use evaluation outcomes to build system capabilities, revise quality indicators, standards and star ratings, and strengthen the regulatory role of the Aged Care Quality and Safety Commission.

https://www.health.gov.au/resources/publications/scoping-studyon-multidisciplinary-models-of-care-in-residential-aged-care-homessummary?language=en .

^{5.} https://ahpa.com.au/advocacy/3489-2/

^{6.} Older Persons Advocacy Network, The National Aged Care Advocacy Program Presenting Issues – Report 2 (January-June 2022)



Improve Participant Utilisation of Allied Health Services in the NDIS

Allied health services are vital to help NDIS participants maintain and improve function, build their capacity, and access assistive technology.

Participants use significantly fewer allied health services than they are entitled to under their plans.

NDIS pricing is increasingly out of step with allied health workforce costs, exacerbating challenges in workforce recruitment and retention.

The Problem

Participants utilise fewer allied health services than they are entitled to under their plans. Utilisation rates (planned supports compared to actual payments) are much lower for allied health services than for plan utilisation overall.⁷

For example, overall national utilisation is 77%, but for Capacity Building – Daily Activities (therapy supports that fund the majority of in-person Allied Health services) it is 56%. This difference in utilisation rates varies across Australia. Participants such as First Nations peoples and those in rural and remote areas have particularly low utilisation rates, both overall and specifically for allied health.

A significant factor in allied health utilisation is whether participants can access services via an available and appropriately skilled workforce. NDIS pricing is increasingly out of step with allied health workforce costs, exacerbating challenges in recruitment and retention, particularly in professions such as speech pathology, occupational therapy, psychology, physiotherapy and dietetics.⁸

Allied health utilisation receives little attention in NDIS data and analysis. For example, we need to know more about allied health use in geographical utilisation 'hot spots' and disaggregate utilisation by allied health profession and by participant characteristics and types of plan management to enable development and implementation of solutions which address these equity and access challenges.

The Solution

Reinstate annual indexation of NDIS allied health provider payments.

Ensure pricing arrangements and price limits are GST-exclusive for all allied health providers across all support areas of the NDIS.

Recognise the value of quality support by building the cost of administration, student placements, training and supervision into NDIS allied health provider pricing.

Fund the 'Raising the Level' project so the NDIA can work with peak allied health providers, Disability Representative Organisations, and researchers to identify data trends and address other barriers to equity in allied health service utilisation.



^{7.} NDIS Quarterly Report to Disability Ministers Q1 2022-2023 (September 2022).

 $^{8. \} https://ahpa.com.au/advocacy/national-disability-insurance-agency-2021-22-annual-pricing-review/; National Disability Services, State of the Disability Sector Report 2022 https://www.nds.org.au/about/state-of-the-disability-sector-report .$



Appendices

Appendix A
– 2022 AHPA Workforce Survey

Appendix B

 Extract from AHPA submission to House of Representatives Committee on Health, Aged Care and Sport Inquiry into long COVID and repeated COVID Infections – November 2022

Appendix A



2022 Member Survey

Survey Summary

Allied Health Professions Australia (AHPA) regularly surveys its members as part of its peak bodies advisory grant from the Department of Health and Aged Care. We surveyed 38 allied health peak bodies and received responses from 35 members. The table below summarises the **responses** from this year and last year's survey.

	2021 Membership		2022 Membership	
AHPA Members	20 Ordinary Members	12 Affiliate Members	25 Ordinary Members	10 Affiliate Members
	Total	Practising	Total	Practising
Ordinary Members	149,908	98,559	161,825	132,357
Affiliate Members	22,343	14,348	22,200	18,604
All Members	172,251	112,907	184,025	150,961

Data Qualifications/Limitations

Please be aware of following data limitations:

- Data represents responses of peak body membership and the practising members of those peak bodies they may not necessarily represent the total allied health workforce
- Some specific data is not collected by the peak bodies and so does not cover the entire AHPA membership this data is represented in the "Don't Know/Do Not Collect" totals.
- The absence of consistent workforce data collection methodology means comparison with other datasets should be done with caution

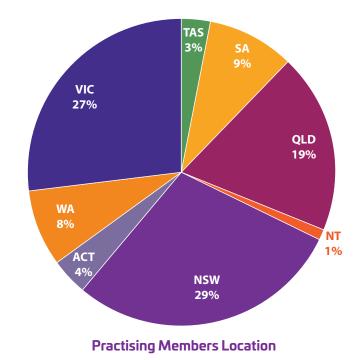
Workforce Data - Location

The surveyed allied health workforce is distributed across states and territories as follows:

The location of allied health practitioners is broadly consistent with the distribution of the Australian population, with over-representation most notable in the ACT.

Allied health practitioners practicing in rural and regional areas, as defined by Monash Modified Model Areas 3-7, equates to approximately 7% of the surveyed allied health workforce. This is likely an under-representation as many member organisations report they are not able to collect this data.

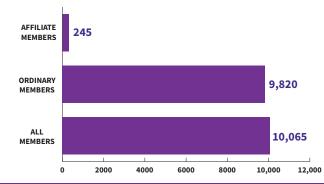




State	Population ¹	Allied Health
New South Wales	31.8%	29%
Victoria	25.6%	27%
Queensland	20.3%	19%
South Australia	7.0%	9%
Western Australia	10.5%	8%
Tasmania	2.2%	3%
Northern Territory	0.9%	1%
Australian Capital Territory	1.8%	4%

¹ Usual resident count by state and territory, 2021 Census of Population and Housing, ABS

Practising Members in MMA 3–7



Workforce Data - Demographics

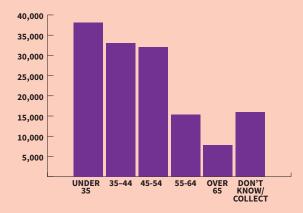
Gender

The allied health professions predominantly consist of female workers. A sizeable proportion of affiliate members do not record this data, however.

	Male	Female	Other	Not Collected
All Members	19.6%	74.8%	2.4%	3.1%
Ordinary Members	18.6%	76.9%	2.8%	1.7%
Affiliate Members	26.3%	60.7%	0.0%	13.0%

Practising Members Age Distribution

The surveyed allied health profession age distribution is presented below:



The allied health workforce age distribution has more middle-aged workers than the general working population (older than 20 years of age).

	Australia ^{2,3}	Allied Health⁴
Under 35	35%	30%
35-44	23%	26%
45-54	20%	26%
55-64	16%	12%
65 +	6%	6%

² Employed Persons by sex, age - 2019-2020, Jobs in Australia, ABS



2022 Member Survey

Workforce Data - Hours Worked

Over 53% of allied health professionals were reported as working full time and 35% part time. There is no data reported for almost 12% of members surveyed.

Practising Members Hours Worked



The Australian Bureau of Statistics reports that 59% of the employed Australian population worked full time and 33% part time, according to the 2021 Census. The Median hours worked in the Healthcare and Social Assistance industry sector is reported as 32 hours per week in the 2021 Census. The All Industries median hours of 38 hours per week indicates a sizeable proportion of health care is provided by part time workers compared to other industries.

The definition of part-time varied considerably between AHPA member organisations and so needs to be compared with caution against other datasets, however.

Workforce Data – Work Roles and Settings

Data on the work role occupied by allied health professions is not available for approximately 40% of the surveyed workforce. Of the member organisations that collect data on work roles, almost 60% work as clinicians. A further 24% of the surveyed workforce are employed in management or education/research.

Practising Members Work Role



Data on the work settings for allied health professions is not available for approximately 1/3rd of the surveyed workforce. Of the member organisations that collect data on work settings, almost 45% work in private practice. A further 16% of the surveyed workforce are employed in hospitals and almost 8% in other types of government employment.

Practising Members Work Settings



AHPA would like to thank its members for providing their data and time to contribute to this survey.

³ Excluding employed persons younger than 20 4 Excluding "Don't Know/Do Not Collect" from 2022 AHPA Member Survey

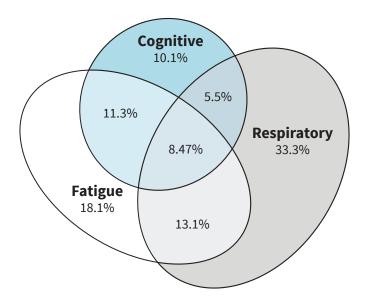
Indicative Economic Impacts of the post-COVID condition

The post-COVID-19 presentation varies from specific serious sequelae through recovery from severe illness that required intensive care management to non-specific post-viral symptoms and the mental health impacts of the acute illness (Royal Australian College of General Practitioners, 2022).

(Wulf Hanson S, 2022) conducted a meta-analysis that pooled information on the occurrence of three symptom clusters – cognitive, fatigue and respiratory symptoms – and derived estimates of the incidence of symptom overlap for the years 2020 and 2021.

The figure below summarises their findings:

Chart 1: Incidence of Long COVID Symptoms and their Overlap



Symptom	% of cases
Fatigue	51.0%
Respiratory	60.4%
Cognitive	35.4%

Over 38% of long COVID cases presented with two or all 3 of the symptom clusters. Globally, of long COVID cases 63.2% were female. **The peak ages of long COVID were between 20 and 29, which are peak workforce and family formation years.** Of particular importance, the authors found that the severity of long COVID is equivalent to severe neck pain, Crohn's disease, or the long-term consequences of moderately severe traumatic brain injury in terms of disability (Wulf Hanson S, 2022).

With estimates of 5% (Steves, 2022) to 6% (Wulf Hanson S, 2022) of people who contract COVID developing post-COVID conditions, the prevalence of post-COVID conditions in the Australian population equates to approximately 400,000 people (Baillie, Teesson, Britton, & Sorrell, 2022), while the growing number of Australians contracting COVID suggest up to 600,000 people may suffer from long COVID.

In addition, (de Leeuw, Yashadhana, & Hitch, 2022) note that "over-representation of chronic conditions among disadvantaged and (often racialised) populations ... increases the risk of both COVID-19 acute severity and long COVID". This will create issues with equitable access to the treatment proposed for post-COVID conditions.

(Sadler, et al., 2021) identify the need for a "validated case definition for chronic fatigue after COVID-19 infection... for both clinical and research purposes". They identify the fatigue syndromes following other bacterial/viral infections and the similarities between post-COVID infections and these other post-infection fatigue syndromes.

One of the most well-known syndromes is myalgic encephalomyelitis or chronic fatigue syndrome (ME/CFS). (Close, et al., 2020) assessed the economic impacts of ME/CFS in Australia and utilising their analysis we can estimate various aspects of the economic burden of long-COVID to Australians and the Australian economy.

From a 2019 economic survey of participants who satisfied varying definitions of ME/CFS and a prevalence cost model to identify an aggregate measure of the economic burden of the disease, (Close, et al., 2020) estimated the cost of ME/CFS at over \$14 billion annually.

Appendix B

Indicative Economic Impacts of the post-COVID condition

The World Health Organisation reports, that as of November 2022, over 10 million Australians have been infected with COVID (World Health Organisation, 2022). Based on estimates quoted above, this indicates that up to 620,000 Australians could suffer from long COVID. Other authors (Baillie, Teesson, Britton, & Sorrell, 2022) estimate long COVID cases at 400,000.

Applying the average costs identified by (Close, et al., 2020) to estimates of the long COVID cohort identifies an **economic burden of between \$30 to 47 billion dollars annually.** This model estimates Government healthcare costs would be \$1.8 billion to \$2.8 billion for long COVID and patients could incur \$7.4 billion to \$11.5 billion in personal healthcare costs.

Importantly, the major share of the economic cost is the **foregone income** of people with long COVID from the **reduced engagement with the labour force.** This lower engagement with the labour force is also estimated to cost between \$4.9 billion and \$7.8 billion annually in **foregone income taxes** based on the 2020 income tax rates.

The UK House of Lords recently identified "... there appears to be a broad increase in chronic illness since the pandemic, including in the share of people who have multiple conditions." (Economic Affairs Committee-UK House of Lords, 2022), emphasising the **risk to workforce participation** that long COVID carries.

Details are summarised in the following table:

Table 1: Estimated Economic Costs of Long COVID

	Average costs (per person) All Respondents	Low Scenario (\$million)	High Scenario (\$million)
Direct patient out of pocket costs	\$18,540	7,416	11,530
Reduction in personal income	\$48,757	19,503	30,322
Other direct personal costs	\$3,918	1,567	2,437
Government healthcare costs	\$4,483	1,793	2,788
Total Annual Average Cost	\$75,698	30,279	47,076

Sources: (Close, et al., 2020), (Steves, 2022), (Wulf Hanson S, 2022), (World Health Organisation, 2022)

Patient expenditure on non-prescription medications and devices accounted for a significant share of patient out-of-pocket costs identified by (Close, et al., 2020). This may not eventuate for patients of long COVID but there is **a risk that long COVID patients may turn to treatments with no efficacy** due to a lack of access to appropriate allied health care.

(Close, et al., 2020) also identify that "Compared to the 2018 national average, patients that meet any of the ME/CFS definitions have twice as many visits with a GP (12.1 vs 6)". Inadequately managing the symptoms of a much larger cohort of long COVID patients will **place significant additional burdens on the primary healthcare system.** If long COVID patients follow a similar GP utilisation pattern as ME/CFS patients, it could increase annual GP visits by between 2.4 to 3.8 million.

Reports of increased demand for services of long COVID clinics have already been reported in the media (Cunningham, 2022) (Martin, 2022) and waiting lists of six to 12 months for appointments are reported. With waiting lists at hospital-based services, allied health practitioners become the only option available to many Australians.

In Summary, the economic costs of poorly managing patients with long COVID could be in the order of \$30 billion to \$47 billion.

While substantial costs of \$1.8 - \$2.8 billion will be borne by government through increased health care costs, most of the economic burden will be borne by long COVID patients through increased healthcare costs (\$7.4 - \$11.5 billion) and foregone income (\$19.5 - \$30.2 billion).

Hospital based long COVID services already have long waiting lists and allied health practitioners in the community are the only source of long COVID care available to many.

Indicative Economic Impacts of the post-COVID condition

Works Cited

Baillie, A., Teesson, M., Britton, P., & Sorrell, T. (2022, June 30). Retrieved from The Conversation: https://theconversation.com/triple-vaccination-seems-to-reduce-the-chance-of-long-covid-but-we-still-need-to-prepare-for-a-jump-in-cases-183428

Close, S., Marshall-Gradisnik, S., Byrnes, J., Smith, P., Ngheim, S., & Staines, D. (2020, August 21). The economic Impacts of Myalgic Encephalitis/Chronic Fatigue Syndrome in an Australian Cohort. *Frontiers in Public Health*, 420-428.

Cunningham, M. (2022, June 20). It's been horrific': Long-COVID patients face months on waiting lists. *The Sydney Morning Herald*.

de Leeuw, E., Yashadhana, A., & Hitch, D. (2022). Long COVID: sustained and multiplied disadvantage. *Medical Journal Australia*, 222-224.

Department of Health and Aged Care. (2022, November 8). *New COVID-19 variant leads to increase in cases - Stattement from Professor Paul Kelly*. Retrieved November 2022, from Department of Health and Aged Care: https://www.health.gov.au/news/new-covid-19-variant-leads-to-increase-in-cases

Economic Affairs Committee-UK House of Lords. (2022, December 20). *Where have all the workers gone? 2nd Report of Session 2022-23 - HL Paper 115*. Retrieved January 2023, from www.parliament.uk: https://publications.parliament.uk/pa/ld5803/ldselect/ldeconaf/115/11502.htm

Martin, S. (2022, August 14). Long Covid clinic wait times blow out to five months as Australia's health experts call for national approach. *The Guardian*.

Royal Australian College of General Practitioners. (2022, September 5). *Caring for patients with post–COVID-19 conditions*. Retrieved from RACGP: https://www.racgp.org.au/clinical-resources/covid-19-resources/clinical-care/caring-for-patients-with-post-covid-19-conditions/introduction

Sadler, C. X., Wyller, V. B., Moss-Morris, R., Buchwald, D., Crawley, E., Hautvast, J., . . Lloyd, A. R. (2021, August 5). Long COVID and Post-infective Fatigue Syndrome: A Review. *Open Forum Infectious Diseases*, 1-6.

Steves, C. J. (2022). Risk of Long COVID associated with delta versus omicron variants of SARS-CoV-2. *The Lancet*, 2263-2264.

World Health Organisation. (2022, November 1). *COVID-19 Dashboard - Australia*. Retrieved November 2, 2022, from WHO Coronavirus (COVID-19) Dashboard: https://covid19.who.int/region/wpro/country/au

Wulf Hanson S, A. C.-A. (2022, May 27). A global systematic analysis of the occurrence, severity, and recovery pattern of long COVID in 2020 and 2021. *medRxiv: the preprint server for health sciences*(https://doi.org/10.1101/2022.05.26.22275532).