

Scoping and development of a National Digital Mental Health Framework:

Current State Assessment Report

Department of Health

November 2020



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Glossary

Notation	Description		
ADHA	Australian Digital Health Agency		
ACL	Australian Consumer Law		
Al	Artificial Intelligence		
ACSQHC	Australian Commission on Safety and Quality in Health Care		
Australian Government Department of Health	A department in government that oversees Australia's health system. Their role, in terms of the mental health landscape, includes supporting access to and adoption of mental health services and policy through funding initiatives, regulation and policy advice. This is used interchangeably with 'Commonwealth Government'.		
ATSI	Aboriginal and Torres Strait Islander		
CALD	Culturally and linguistically diverse		
CIS	Clinical Information System		
CRC	Cooperative Research Centre		
CSA	Current State Assessment		
CSIRO	Commonwealth Scientific and Industrial Research Organisation		
Digital Inclusion Index	The Digital Inclusion Index is a measurement of the extent to which there is digital inclusion Australia. It is calculated using a digital inclusion measurement tool and measures how access, affordability and digital ability changes over time with social and economic status		
ED	Emergency Department		
eMHprac	e-Mental Health in Practice		
EMR	Electronic medical record		
Governance	The role by which the Australian Government, states and territories manage, regulate, fur and carry out governing processes within the health sector.		
GP	General Practitioner		
HANDI	Handbook of Non-Drug Interventions		
LGBTI	Lesbian, Gay, Bisexual, Transgender and/or Intersex		
MBS	Medicare Benefits Schedule		
NCCP	National Community Consultation Program		
NSQDMH Standards	The National Safety and Quality Digital Mental Health Standards as developed by the Australian Commission on Safety and Quality in Health Care.		
PAS	Patient Administration System		
Patient In this Report, a patient refers to a user of a mental health or digital mental health including those who have, are, or will, receive treatment for mental health challeng term is used interchangeably with 'Consumer'.			
PHN	Private Health Network		
PMS	Practice Management Systems		
RACGP	The Royal Australian College of General Practitioners		
RCVMHS	Royal Commission into Victoria's Mental Health System		
RMIT	Royal Melbourne Institute of Technology		
TGA	Therapeutic Goods Association		

Notation	Description
The Framework	National Digital Mental Health Framework
The Review	National Mental Health Commission's 2014 National Review of Mental Health Programmes and Services
UNSW	University of New South Wales

1 Executive summary

1.1 Scoping and development of a National Digital Mental Health Framework

Digital mental health services are transforming the way in which mental health services are accessed and delivered; they reduce geographic barriers to help-seeking, enable increased peer support in the delivery of mental health services, enable digital triage and referral processes, and offer potential to be scaled up in a cost-effective way. While the evidence base for successful implementation and integration of digital mental health services within the broader mental health system and health care sector is still emerging, digital mental health services will continue to play an important role in meeting the increasing demand for mental health services in Australia.

The Australian Government Department of Health (the Department) has engaged a consortium of PricewaterhouseCoopers (PwC), the Royal Australian College of General Practitioners (RACGP), Good Things Foundation Australia, and John Torous MD MBI to develop the National Digital Mental Health Framework (the Framework) as one of the actions under The Fifth National Mental Health and Suicide Prevention Plan (the Fifth Plan). The objective of the Framework is to provide an integrated and strategic approach to digital mental health service delivery within the broader context of Australia's mental health system.

This report details the finding of the current state assessment (CSA) of the digital mental health ecosystem, including the relationships between service providers, technology used by providers, workforce, and barriers to use. Key components of the CSA include a desktop scan, preliminary workshop with the Department, consultations with PwC consortium members, validation workshops with the Department's Advisory Group, and consultations with other digital mental health stakeholders in the sector. The CSA will inform the development of a Consultation Paper which will support national consultations in November and December 2020.

1.2 Summary of the current state barriers and opportunities

The CSA identified key trends, barriers, and opportunities in the digital mental health services ecosystem, across the following themes:

- Demand for digital mental health services, including digital inclusion and adoption of services, considerations for vulnerable cohorts, and utilisation of lived experience in service design and delivery
- Supply of digital mental health services, including the mental health and lived experience workforce, integration of digital mental health services with the broader health system, software, platforms, and data and evaluation
- Funding and regulation of digital mental health services, including current models of funding between Commonwealth, State and Territory governments and current legal and regulatory frameworks.

The findings from the CSA against each theme are articulated below along with the key questions for consultation. Each trend, barrier, and opportunity is explored in more detail in the following sections of this report.

1.2.1 Demand for digital mental health services

Barriers

- The digital divide impacts on the extent to which digital mental health services will be consumed: Providing digital services, including digital mental health services may potentially exacerbate health inequities if those who most need healthcare are those least likely to have access to digital options. Older Australians, Aboriginal and Torres Strait Islander (ATSI) people, people from low socio-economic backgrounds and rural and remote communities are some of the least digitally included groups in Australia.
- Awareness, trust and adoption of digital mental health services: Concerns around data privacy and confidentiality
 and the efficacy of digital mental health services continue to impact the extent to which people use services.

- **Consumer literacy:** Consumer literacy is also a key consideration in accessing digital mental health services. For example, research indicates that the literacy required for e-mental health engagement is beyond the reach of most Australians.¹
- Barriers facing vulnerable cohorts: Specific groups find it difficult to access services that are inclusive and sensitive to the needs of all people's age, cultures, genders and backgrounds.
- Adverse impacts on families and carers: Due to the COVID-19 pandemic many people are opting for self-guided or
 therapist assisted digital mental health services, using their families and carers to support them in accessing and
 managing their mental health care programs. This has placed an increased burden on families and carers to be aware
 of existing programs. The Government has provided \$3.5 million in additional funding to Carers Australia and Carers
 Gateway to provide targeted assistance and information.
- Limited meaningful participation of the lived experience population for purposes of co-design and co-delivery of mental health services: Research shows that co-designed and delivered services can improve outcomes and recovery. While evidence shows that embedding the lived experience in the design and delivery of services can improve outcomes and recovery, 2 the sector struggles to incorporate lived experience in meaningful ways.3
- Little awareness on the value of peer support roles: Peer support roles are a vital recovery service for people with mental health challenges. Yet, the limited awareness of the value of peer support roles limits the extent to which they can be integrated in the co-design and co-delivery of mental health services.

Opportunities

- Improve integration of the consumer and lived experience perspective in digital mental health service design and delivery to build trust and awareness in the community, and ensure digital services are tailored and person centred. E.g. greater advocacy for peer support roles.
- Engage digital mental health champions to raise awareness and assist people, particularly in vulnerable cohorts, to navigate the digital mental health system.
- Explore options to provide suitable access to digital tools and platforms for people who are most likely to experience digital exclusion e.g. providing a room with internet access in general practice, provision of Data Sims cards or low-cost public internet for those with lack of internet access.
- Improve equity of access through targeted investment into enablers to support access to digital mental health services for vulnerable cohorts and ensuring sufficient broadband infrastructure in rural and remote areas.
- Improve consumer information by promoting the value of digital mental health services through community wide marketing strategies.

Questions for consultation

- What are peoples' preferences for blended models of care and treatment modalities? What are some enablers and barriers to these preferences?
- How can vulnerable and at-risk cohorts be better supported via digital tools and platforms as part of a blended model of care?
- How important is preserving anonymity, privacy and confidentiality for people accessing digital mental health support and is there an acceptable approach to enable data sharing (with consent) if it produces a better outcome and experience? What else is needed to support this?
- How can lived experience perspective be better integrated into the design and delivery of digital mental health services?
- What opportunities exist to enhance referral pathways so that people receive connected care across all stages of the care continuum?

Stone, L. and Waldron, R. (2019). Great Expectations and e-mental health. The role of literacy in mediating access to mental healthcare. Australian Journal of General Practice.

Resnick, S.G. and R.A. Rosenheck (2008), Integrating peer-provided services: A quasi-experimental study of recovery orientation, confidence, and empowerment. Psychiatric Services, 59(11): p. 1307-1314.

³ Happell, B., et al. (2015), Consumer participation in nurse education: A national survey of Australian universities. International Journal of Mental Health Nursing, Sourced from: QMHC. Promoting the lived experience perspective: discussion paper for the Queensland mental health commission.

1.2.2 Supply of digital mental health services

Barriers

- Knowledge and confidence in using digital mental health services among health practitioners: With recent enhancements in training and education on digital mental health, for example, the training programs and resourced delivered by e-Mental Health in Practice (eMHprac), awareness of digital mental health services among health practitioners have increased over time. However, there still exists some gaps in knowledge of the broad range of digital mental health services available, their purpose and the cohorts they are intended to service, and health practitioner confidence in using digital tools and technology. Additionally, health practitioners desire some transparency around service efficacy and visibility of clients referred into services.
- An underdeveloped evidence base to build trust in the efficacy of digital mental health services for specific
 cohorts: While some research on the efficacy of digital mental health interventions exist, particularly for management of
 depression and anxiety, ongoing research and evaluation is needed to build the evidence base and trust in the
 effectiveness, acceptability and efficiency of services, specifically for individuals in traditionally underserviced cohorts
 (CALD, Aboriginal and Torres Strait Islanders, LGBTI). This evidence base should be made widely available to increase
 uniform awareness on how to service different cohorts.
- A nonuniform approach to delivering training and support in digital mental health services: Health practitioners need specific skills and training, clinical supervision, and support to deliver mental health services, particularly for those people who require clinician led or supported digital mental health care. eMHPrac provides nationwide promotion, training, mentoring and other support to increase the use of digital mental health resources and services in primary care. While these programs and supports have increased health practitioner knowledge and awareness of digital mental health services, the availability of digital mental health training programs and specialist opportunities such as trauma informed, and culturally appropriate practice to health professionals is limited.
- Limited clarity on how digital mental health services fit within the stepped care model: Currently, there is limited clarity on where digital mental health services fit within the stepped care model of delivering mental health care. Digital interventions should be better integrated within the stepped care model to better match individuals needs to the most appropriate level and intensity of care, to allocate resources based on need, and to direct people to self-directed or clinician supported care or appropriate face to face services as appropriate based on their needs.
- Limited availability of tools and materials to support delivery of a blended model of care: A blended model of care is one that refers to a mixture of digital and in-person treatment for a disorder. A seamless referral, assessment and triaging process is essential for appropriate and safe treatment and continuity of care. Supporting digital technology ensures open access to care for patients and efficient and effective delivery of clinical treatment for health practitioners.
- Limited ability to respond to surges in demand: There is limited ability for the current health system to adapt and
 respond to surges in demand for mental health-related services. This stems from health practitioner workforce
 constraints not being able to align with increased prevalence of mental illness, particularly during the COVID-19
 pandemic. Workforce shortages will need to be considered in the long term to ensure that surges in demand, associated
 with unexpected environmental crisis, can be adequately met in the future. The availability of digital mental health
 services helps in addressing this concern to some extent as it offers the opportunity to scale up and enhance reach at
 low cost.
- Limited education, training and support programs for the lived experience workforce: Those with lived experience do not always encounter positive experience. Stigma and discrimination, sometimes indirect and sometimes direct, can cause a divide between the peer workforce and other staff. Formal structures, policies and procedures that support the peer workforce and provide a development pathway to adopt and build confidence in using digital tools and technology are needed if government services are to realise their full potential.
- Limited integration of digital interventions: The integration between the mental health system, including both digital and face-to-face services, and the broader health system is crucial in providing consumers with mental health challenges with person centric and holistic care. There is presently no clear understanding on how digital interventions can be integrated with the broader health sector.
- Limited data sharing between digital mental health programs and services and the software operating systems in the broader healthcare sector: Some consumer data is hosted on local platforms instead of in the cloud which presents a barrier to the sharing of data, and variations in practice management software can interrupt opportunities for system interoperability.

Opportunities

- Provide basic training on mental health more broadly to practitioners, particularly those who practice in regional, remote
 and communities in crisis; and specialised training to raise awareness of and confidence in using digital mental health
 services with patients that includes options to upskill around trauma informed care and culturally appropriate practice.
 This would require establishing a consistent education and training program, with locally appropriate and developed reskilling since one size won't fit all.
- Develop easy to find (decision support) tools and resources to raise health practitioner awareness and understanding of
 digital mental health tools and technology. This includes training about tools and technologies to build competency,
 triage and diagnostic tools to support assessment and referral, and education and training about how blended digital
 and face to face care models could work.
- Establish clear digital mental health training, development and certification pathways for non-professional practitioners, that includes peer-support workers, care navigators and lived experience workforce to equip them with the right skills and knowledge to use digital tools and platforms effectively.
- Establish a clear and consistent approach to digital mental health data collection, epidemiological surveillance and evaluation to enable service continuous improvement, assessment of clinical efficacy and value for money.
- Build evaluation into the budget for digital mental health services and programs to proactively embed the principles of evaluation and measure outcomes.



Questions for consultation

Workforce

- What are possible financial and non-financial incentives (professional standards, training, monetary incentives) to encourage health practitioners to adopt digital mental health services into "business as usual"?
- Should there be standardisation of triage and treatment protocols, treatment and referral pathways used by digital services etc. and which elements would be most useful?
- What and where are the gaps in our existing workforce to support a blended delivery model
 where digital mental health services are used in conjunction with face to face services? E.g. do
 we need more care navigators, peer-support workers etc. and what considerations need to be
 made to support this model?

Lived experience workforce

- What additional supports are needed to upskill the lived experience workforce in the use and delivery of digital mental health services and/or as digital inclusion champions?
- What do people with lived experience need to support the building of trust, confidence, and ultimately, their uptake and use of digital mental health services?

Integrated service delivery

- How can digital mental health services better integrate into the stepped care framework?
- What opportunities exist to create system interoperability to ensure digital mental health services can technologically connect and share information with other IT platforms and software?
- Where do broader general health and wellbeing applications and programs (e.g. FitBits) fit within
 the digital mental health services ecosystem and should there be separate governance
 mechanisms (e.g. accreditation of these products) to support these?
- Should parameters be set on the types of data that can be shared between different IT systems/tools and what are some implications, considering the use of shared data for outcomes monitoring and epidemiological surveillance?

Data and evaluation

- What are the best ways to provide guidance around the use of data, client records, data sharing and consent processes for digital mental health service providers?
- How important is epidemiological surveillance, data linkage and system outcomes in designing and evaluating digital mental health services and to what extent should they be considered?

1.2.3 Funding, legal, and regulatory context

Barriers

- Lack of coordinated service delivery by governments: Mental health services (inclusive of digital mental health) are
 delivered within a complex, often fragmented system, with multiple providers being funded by Australian Government
 and State and Territory funding streams. As outlined in the National Mental Health Commission's 2014 National Review
 of Mental Health Programmes and Services (the Review) without improved co-design, planning and communication
 between all levels of government, the ability for consumers to receive connected and person-centred care across the
 care continuum will be limited.
- Challenges in funding integrated services: The many facets that interface with a person's mental health need to be considered in funding and delivery of services. These include alcohol and substance abuse, housing, justice, social and welfare, financial services, education and employment. A cross government approach to funding and services planning is key to delivering integrated services. Digital and face to face mental health services have been developed independently and operate in parallel rather in an integrated way, translating to fewer incentives for providers to integrate service operations to provide care to people with comorbid mental health challenges.
- Limited funding for research and evaluation: At present, Australian Government funding is focused on service delivery, with few funding buckets dedicated to research, monitoring and evaluation programs. Some of the key investments in current research include a \$125 million investment over 10 years from 2018-19 through the Medical Research Future Fund's Million Minds Mental Health Research Mission. This program will invest in bold and transformative research to support one million people with mental health issues access new and innovative approaches to prevention, diagnosis, treatment and recovery. The national Mental Health Commission is also developing a National Mental Health Research Strategy as part of the Fifth Plan to drive better outcomes across the mental health sector in Australia. Research, monitoring and evaluation are critical to build trust in the efficacy of digital mental health services amongst consumers, health care practitioners and the broader community. Additional funding for research on implementation approaches will help to better understand how to make digital mental health services work with non-digital services in an integrated way.
- Limited funding for enabling functions of digital mental health service delivery: Currently, funding for enabling functions is limited. These include, training for healthcare practitioners, upskilling consumer capability in using digital services, referral interoperability and useability, and building and maintaining on-going relationships between consumers and healthcare practitioners. Such gaps can translate to a less than optimal service and user experience.
- There are multiple agencies at the Commonwealth level with responsibility for funding and regulating digital mental health services: Presently, multiple agencies, including the Department of Health, Australian Digital Health Agency (ADHA), the Therapeutic Goods Agency (TGA), the Australian Commission on Safety and Quality of Health Care (ACSQHC), and Primary Health Networks have responsibility for different aspects of digital mental health services. This leads to risk and confusion in the sector as to who is responsible and accountable for the regulation of providers and services, what standards or principles need to be met by services and providers, and where clinical responsibility begins and ends when consumers access care from different, disconnected parts of the healthcare system. The division of responsibility could further result in unnecessary duplication in effort.
- There are no registration or accreditation requirements for health practitioners specific to digital mental health services: Under the Health Practitioner Regulation National Law 2009, all health practitioners providing mental health services will be appropriately trained and qualified to do so. As they increasingly deliver services via digital means it is important that health practitioners that provide holistic, coordinated primary care undergo education and training programs to raise awareness of and better integrate digital interventions and broader service offerings.

Opportunities

• Better co-ordinated funding for digital mental health services, highlighting the need for clear roles and responsibilities and alignment of jurisdictional priorities.

⁴ Department of Health (2018). *Million Minds Mental Health Research. Available at*: https://www.health.gov.au/initiatives-and-programs/million-minds-mental-health-research-mission

⁵ National Mental Health Commission (2020). National Mental Health Research Strategy. The need for a national strategy. Available at: https://www.mentalhealthcommission.gov.au/mental-health-reform/national-mental-health-research-strategy.

- Review funding options to enable desired system level outcomes including bundled funding for multi-disciplinary and/or blended care models and shared value partnerships.
- Review funding of enabling and operational functions that support both digital mental health service delivery and
 continuity of care, including education, training, awareness and culturally appropriate and trauma informed care to
 enable appropriate referrals, relationship and partnership development, and research and evaluation to facilitate
 effective and person-centred service delivery.
- Enhance funding for integrated service delivery, including the appropriate integration of digital mental health with the broader health sector, interoperability and software systems to securely exchange and use information.
- Establish a framework which clearly articulates the division of responsibility between Australian Government entities in relation to the funding and regulating of digital mental health services while ensuring joint accountability.



Questions for consultation

Funding of digital mental health services

- · What alternative system-level funding models should be considered to enable better outcomes?
- Is a blended (multi-modal) care model desirable and what are some ways to better incentivise this approach?
- What mechanisms, if at all, could be considered to incentivise industry to develop digital technology solutions such as apps? What level of guidance is required by industry and developers? How should this be governed?
- What tools, supports and implementation considerations are needed to enhance the digital literacy and inclusion of people with lived experience and health professionals?
- At present few digital mental health services funded by the Australian Government are focused on culturally and linguistically diverse (CALD) people, Lesbian, Gay, Bisexual, Transgender and/or Intersex (LGBTI), Aboriginal and Torres Strait Islanders, and older cohorts – in what way could funding be designed and/or allocated to ensure digital services are available to these target groups?
- What are the governance considerations around payment models e.g. user-payment, co-payment and subsidised options to ensure the quality and safety of digital mental health services available to the public?
- How can additional funding for research and development, and monitoring and evaluation of digital mental health services, partnerships and relationships, warm-referral capacity etc. be built into service contracts? Should anything else be considered?
- What additional governance and/or guidance is needed around selection and implementation of technology, considering interoperability challenges now and into the future?

Regulation of digital mental health services

- What additional clinical governance and/or processes are required to support an optimum digital mental health ecosystem?
- How can existing qualification programs be adapted to provide health practitioners with the skills and experience required to refer, deliver and integrate digital mental health services into their practice?
- What additional guidance or frameworks do service providers need to operate within the current regulatory environment?

2 Project background

2.1 Project overview

The Australian Government Department of Health (the Department) has engaged a consortium of PricewaterhouseCoopers (PwC), the Royal Australian College of General Practitioners (RACGP), Good Things Foundation Australia, and John Torous MD MBI to develop the National Digital Mental Health Framework (the Framework). The objective of the Framework is to provide an integrated and strategic approach to digital mental health service delivery within the broader context of Australia's mental health system.

The outcomes from the Framework may include:

- Defining optimal delivery of digital mental health services to improve accessibility
- · Reduction in duplication of both effort and investment
- Embedding digital services in a stepped care model for mental health service delivery.

The scope of the PwC consortium engagement is to:

- Develop a detailed understanding of the current state of the digital mental health space, with consideration of the relationships between service providers, technology used by providers, workforce, and barriers to use
- Conduct consultations with a diverse range of stakeholders engaged in the digital mental health space, including digital mental health service providers, users of such services, health practitioners and clinical stakeholders, and other relevant stakeholders operating in the digital mental health environment (including government departments and community groups)
- Develop the Framework by creating recommendations that can be appropriately addressed through the Framework and by iteratively refining proposals and draft versions of the Framework through workshops with the Department

The Framework is intended to provide considered recommendations to government to support investment for digital mental health services in the future, whilst creating cohesion in the mental health support space. It will encompass definitions, structure, framework elements, and associated descriptions based on the insights gathered from the CSA and stakeholder consultations.

2.2 Current state assessment

This report is focused on the current state view of digital mental health services. The CSA will inform sector consultations and the development of the Framework in latter project stages.

The objectives of the CSA include:

- Developing a robust understanding of the digital mental health sector, key trends and the external environment that impacts the sector. This includes implications of COVID-19 on digital mental health service usage
- Developing a comprehensive view of the current state digital mental health services landscape, including funding, regulation and legal context, service provision and service consumption
- · Identifying current state barriers across the digital mental health landscape
- Synthesise this information to identify and understand opportunities where the Framework could support and better enable cohesion across the system.

2.2.1 Overview of current state assessment approach

The key components of the CSA approach are described below:

- Desktop scan: A rapid desktop scan was conducted to gain insights on digital mental health services landscape
- Preliminary workshops with the Department to validate Framework scope and approach to the CSA
- Consultations with consortium members to validate the CSA approach and gather global insights
- · Validation workshops with the Department's Advisory Group to inform the CSA and seek subject matter expertise
- Consultations with other stakeholders in the sector to inform the CSA and development of the Framework.

3 Mental health in Australia



Each year 1 in 5 million Australians experience a mental illness. 10 Of these 3.9 million people:

9-12%	4-6%	2-3%
experience mild mental illness	experience moderate mental illness	experience sever mental illness

Mental ill-health is linked with comorbid conditions. Almost all people (94.1%) with a mental and behavioural conditions report another co-existing long-term health condition.⁶

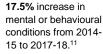
For example, people with mental health conditions are more likely to drink at risky levels than those without (21% compared to 17.1% for lifetime risky drinking), and 1.7 times as likely to have recently used any illicit drug (26% compared with 15.2%).⁷

Mental health problems were twice as prevalent during the first month of COVID-19 restrictions than in non-pandemic periods.⁸

This is due to increased fear, anxiety, panic and social isolation.⁹

Demand for mental health services







70% increase in mental health hospital emergency department presentations over the past 15 years¹²



31,000 people were hospitalised for intentional self-harm in 2017-18, and between 30,000 to 90,000 people may have attempted suicide in 2018.¹³



General practitioners are often the first port of call for people seeking help with a mental illness. Patients talk to their GP about mental health more than any other issue. ¹⁴ In 2015-16, 12.4% of GP visits were mental health related. ¹⁵

Most at risk populations

			<u> </u>		
Aboriginal and Torres Strait Islander people	CALD	Youth	LGBTI community	Older Australians	Rural and remote
24% reported having a mental health or behavioural condition in 2018- 19 ¹⁶	Over 250,000 first generation CALD Australians experience a mental disorder over a 12-month period ¹⁷	25% of young people aged 16-24 experience mental ill-health ¹⁸	Lesbian, gay and bisexual people are twice as likely to have symptoms of a mental health disorder than the general population in a 12-month period ¹⁹	10-15% of older Australians who live in the community experience anxiety or depression ²⁰	Each year, one in five rural and remote Australians experience a mental disorder ²¹
Suicide rate was twice that of non- Indigenous Australians in 2017 ²²	Suicide rates of migrants generally mirror those in their home countries ²³	Suicide accounts for over 33% of deaths among people aged 15 to 24 ²⁴	16% of LGBTI young people ages 16 to 29 reported that they had attempted suicide ²⁵	Highest age-specific suicide rate in older people was observed in men aged 85+ (32.9 deaths per 100.000 males) ²⁶	Suicide rate is 40% higher in regional areas and twice as high in remote areas than major cities ²⁷

- Australian Bureau of Statistics (2015), National Health Survey: Mental Health and co-existing physical health conditions, Australia.
- Australian Institute of Health and Welfare (2020), Alcohol, tobacco & other drugs in Australia.
- ⁸ Jane RW Fisher (2020), Mental health of people in Australia in the first month of COVID-19 restrictions: a national survey.
- ⁹ Black Dog Institute (2020), Mental Health Ramifications of COVID-19: The Australian context.
- ¹⁰ Australian Institute of Health and Welfare (2020), Mental health services in Australia.
- Australian Bureau of Statistics (2018), National Health Survey: First Results: Presenting key findings for health statistics including long-term health conditions; mental wellbeing; and health risk factors.
- ⁷ Productivity Commission (2019), Mental Health, Draft Report: Volume 1, Canberra.
- ¹³ Productivity Commission (2019), Mental Health, Draft Report: Volume 2, Canberra.
- Royal Australian College of General Practitioners (2019), General Practice Health of the Nation
- ¹⁵ Australian Institute of Health and Welfare (2020), Mental health services in Australia
- Australian Institute of Health and Welfare (2020), Indigenous health and wellbeing, Canberra.
- ¹⁷ Department of Health (2018), Fact sheet: Mental health services for people of culturally and linguistically diverse (CALD) backgrounds.
- ¹⁸ Mission Australia and Black Dog Institute (2017), Youth mental health report: Youth Survey 2012-16.
- 19 National LGBTI Health Alliance (February 2020), Snapshot of mental health and suicide prevention statistics for LGBTI people.
- ²⁰ Australian Institute of Health and Welfare (2015), Australia's Welfare 2015: Mental health of older Australians, feature article.
- ²¹ Bishop, L., Ransom, A., Laverty, M., & Gale, L. (2017), Mental health in remote and rural communities. Canberra, Royal Flying Doctor Service of Australia.
- ²² Black Dog Institute (2020), Facts about suicide in Australia.
- ²³ Department of Health (2018), Fact sheet: Mental health services for people of culturally and linguistically diverse (CALD) backgrounds.
- ²⁴ Productivity Commission (2019), Mental Health, Draft Report: Volume 2, Canberra.
- ²⁵ National LGBTI Health Alliance (February 2020), Snapshot of mental health and suicide prevention statistics for LGBTI people.
- ²⁶ Life in Mind (2020), Suicide across the lifespan: Older adults.
- ²⁷ National Rural Health Alliance Inc (2017), Fact Sheet: Mental Health in Rural and Remote Australia.

4 Defining digital mental health services

4.1 Defining digital mental health services

The definition of digital mental health services for this Framework is drawn from and builds upon the National Safety and Quality Digital Mental Health Standards (NSQDMHS) definition of digital health and digital mental health services.²⁸

Digital health: "the convergence of digital technologies with healthcare to enhance the efficiency of healthcare delivery and make medicine more personalised and precise. It may include both hardware and software solutions and services, including telemedicine, web-based analysis, email, mobile phones and applications, text messages, wearable devices, and clinic or remote monitoring sensors"

Digital mental health service: "a mental health, suicide prevention or alcohol and other drug service that uses technology to facilitate engagement and the delivery of care. The service may be in the form of information; digital counselling; treatment (including assessment, triage and referral); or peer to peer service that is delivered to a service user via a digital means".

Note: Medicare-subsidised telehealth services are not within the scope of the Framework.

The CSA identified several additional factors to consider when defining digital mental health services. These include:

- Information technology: inclusion of information technology such as electronic health records as a key enabler for electronic prescribing, transfer of information and secure access by consumers and healthcare professionals
- Emerging technologies: as new technologies emerge and other technologies become obsolete, definitions (conceptual and legal) will need to adapt
- Education and training of health practitioners: the ability to provide digital mental health services depends in part on the awareness and skills of health practitioners in relation to using digital tools and technologies
- **Digital mental health champions and navigators:** to engage people in the use of digital mental health services by raising awareness and providing support
- **Software and technology platforms:** availability of contemporary and secure software and platforms that enable the delivery of digital mental health services
- Access to information: access to information enhanced through the internet or related technologies that promote a greater understanding of mental health, its interrelated factors and the value of early intervention, and encourages help seeking behaviour. Digital mental health ideally assists to empower consumers through improved access to information
- **Data and evaluation:** using data linkage and predictive analytics to predict future behaviour and outcomes can help identify people at risk of developing mental health challenges and intervene early, through digital means, to prevent escalation of their conditions. Equally, evaluation of digital mental health services is required to understand effectiveness, usability and appropriateness.

A digital mental health service is understood in the CSA as encapsulating all the above considerations, categorised as mental health services, enablers and emerging technologies and innovations. These components are described in Table 1.

Australian Commission on Quality and Safety in Health Care (2020), *National Safety and Quality Digital Mental Health (NSQDMH)*Standards: Consultation Draft.

Table 1: Components of digital mental health services

Category of digital mental health services	Description	Components		
Digital mental health service	A service that uses technology to provide treatment and/or support to people with mental health conditions	 Service category Assessment Crisis support Counselling Treatment Peer to peer support Information, including directories General mental health information 	Delivery mode Online (website) SMS Videoconference Telephone* Mobile health applications Web chat *Does not include Medicare-subsidised telehealth services	 Delivery type Self-managed Clinician-led Clinician-supported Shared care arrangements Online peer forums
Enablers	Components that facilitate engagement and delivery of a digital mental health service	 Mental health workforce, including the lived experience workforce Education and training of healthcare practitioners Digital mental health champions and navigators Patient portals Consumer capability Outreach programs and social media Electronic health records Big data, machine learning and predictive analytics Decision-making tools Research and evaluation Software programs, platforms, and information systems Interoperability 		
Emerging technologies and innovations	Technology and innovations that are evolving and expected to create considerable impacts, but not the norm in the current environment	 Services delivered via virtual reality Artificial Intelligence and robotics supported treatment platforms Automated triage services Digital health wearables Gaming treatment for mental health Digital phenotyping 		

5 Overview of the digital mental health services sector

5.1 Overview of the digital mental health sector

5.1.1 Growth in digital mental health services

The availability of technology is transforming the way mental health services are delivered. Digital mental health services offer considerable potential to improve efficiencies and consumer access to services by transcending geographic, stigma, privacy and financial barriers. They are relatively inexpensive to deliver and offer the potential to be scaled up in a cost-effective way.

The provision of digital mental health services in Australia has expanded rapidly over the past two decades. The Australian Government commenced funding for The Telephone Counselling, Self Help and Web-based Support programs measure in 2006, which provides funding to a number of nationally available digital mental health services. In 2012 the e-Mental Health Strategy for Australia was announced and the mindhealthconnect online portal was launched with the aim of improving access to trusted mental health resources, support and services. In 2014, the National Mental Health Commission released their report on the national review of mental health programs and services. The findings highlighted, among other things, that clinically effective digital mental health services offer one of the greatest invest-to-save opportunities for government and the community.²⁹ In response to the Commission's report, the Government's mental health reform agenda is making optimal use of digital mental health services, including through the development of a new, consumer friendly digital mental health gateway - Head to Health. Launched in 2017, Head to Health is a digital mental health gateway to help people more easily access information, advice, and free and low cost phone and online mental health services and support.³⁰ More recently in 2019, a UNSW project, Under the Radar, received a \$3.7 million grant to assess the importance and potential collaboration of digital, peer support and face-to-face services in delivering care for the purpose of suicide prevention, using the internet as a first point of contract with a consumer-led approach.³¹

The following sections describe key drivers behind the growth in digital mental health services.

Broader reform in the mental health sector

Digital mental health services operate within a wider mental health system which itself is experiencing significant reform:

- The Fifth National Mental Health and Suicide Prevention Plan (the Fifth Plan) seeks to achieve greater coordination and integration across all governments in planning and delivering mental health services at a regional level, with consumers and carers at the heart of service design, planning and delivery
- The National Mental Health Commission is working on 'Vision 2030; Blueprint for Mental Health and Suicide Prevention', to provide a long-term blueprint for a successful, connected and well-functioning mental health and suicide prevention system to meet the needs of all Australians
- The Royal Commission into Victoria's Mental Health System (RCVMHS) highlighted existing service gaps, fragmentation and disconnects between parts of the system, and stigma and discrimination that impact on people's ability to access the right care at the right time
- The Productivity Commission inquiry into the social and economic costs of mental health examined the effect of mental health on people's ability to participate and prosper in workplaces and the community, as well as the broader impacts of poor mental health on productivity and the economy. It considered how governments, employers and the broader health and social sectors (including housing, justice, education, employment and social services) can collaboratively develop integrated solutions to cater for the multifaceted needs of people with mental health conditions
- Additionally, there has been an Australian Government Senate Inquiry into the accessibility and quality of mental health services in rural and remote Australia.

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²⁹ Australian Government, National Mental Health Commission (2014), Contributing lives, thriving communities, Report of the National Review of Mental health Programmes and Services Vol. 1-4

³⁰ Australian Government, Department of Health, Head to Health, Access at: www.headtohealth.gov.au

³¹ UNSW Newsroom (2019), Funding success for research into mental health and suicide prevention.

In addition, the significant surge in use of digital mental health services, particularly following the 2019 summer bushfires in Australia and during the COVID-19 pandemic when physical distancing and other restrictions reduced people's ability to continue with their usual face to face mental health care arrangements, further highlighted the benefit of digital mental health services in ensuring people can continue to access evidence-based and appropriate care and supports suitable to their needs.

These reviews and experiences all highlight the importance of identifying and harnessing digital opportunities to provide integrated mental health care across the care continuum, enhance access to mental health services for all Australians and drive efficiencies across the mental health sector. Digital mental health services are intended to complement rather than replace established and more traditional face to face mental health services.

Digital advancements in the health sector

In Australia, technological innovations in healthcare continue to grow. They are increasingly playing a role across all stages of the care continuum from patient registration, to data monitoring, through to provision of virtual care outside of hospitals and remote monitoring of patients. Digital platforms like the internet, smartphones, tablets, electronic medical records, electronic prescribing, secure communication software and national databases such as the My Health Record are starting to replace conventional monitoring and recording systems.

The Australian Government has spent approximately \$2 billion on the My Health Record since it was introduced as the e-health record in 2009.³² It is a means for consumers and health care professionals to securely access and share patient health information including medications, test results and other medical information with ease. Following the conclusion of the opt-out phase, more than 90 per cent of Australians have a My Health Record created for them.³³ The mental health toolkit recently developed by the ADHA aims to help health care practitioners feel confident answering questions on My Health Record privacy and security and describing the benefits of having a record so that consumers can make an informed choice on including their data in the My Health Record.³⁴

The rollout of the National Broadband Network (NBN) has meant that many Australians (87 per cent of the Australian population are active users of the internet)³⁵ now have access to fast and reliable internet connectivity that support digital mental health services. These include webchat, online information, online counselling and automated interactive programs. Fast and reliable internet connectivity makes it easier to enhance reach and improve access to needed services.

Health delivery is rapidly changing globally and in Australia with the growth of the global Artificial Intelligence (AI) market size expected to reach US\$190.61 billion by 2025, and with technological advancements in augmentation and virtual reality.³⁶ For example, Happify, a mobile application, is using gaming and technology-based activities to fight against psychological negativity and treat people with mental illness. High engagement and quality user experience have been key factors for Happify's success. Organisations such as ReachOut are now promoting Happify on their organisation website.

Entrepreneurship, innovation and adoption of digital technology across society

Australian workplaces are increasingly using technology to support employee health and wellbeing in the face of growing awareness and recognition of mental health issues and its effects in the workplace. The corporate wellness market in Australia is worth about \$57.3 million per annum. Approximately \$23 million (38 per cent) of this supports health risk assessments and health checks, and \$4 million (6.6 per cent) is spent on mental health programs.³⁷

Entrepreneurs are partnering with corporations to implement innovative digital programs and initiatives to encourage health behavioural changes to promote positive mental health. For example, Lendlease has invested in Sleepfit, a mobile application that educates employees on the importance of sleep. Sleepfit offers treatment pathways for employees with sleep related issues and has been found to be effective in promoting good sleep which in turn improves concentration and productivity at work. ^{38,39} Additionally, there is greater demand for prevention, early intervention and monitoring tools, such as wearables, that improve trust and quality of healthcare through data as consumers look to monitor self-manage their health. ⁴⁰

The Guardian (2020), My Health Record: almost \$2bn spent but half the 23m records created are empty.

³³ Australian Government, Australian Digital Health Agency (2019), 9 out of 10 Australians have a My Health Record.

³⁴ Australian Digital Health Agency (2020), My Health Record. Mental Health Toolkit for healthcare providers.

Roy Morgan, RMIT University, Centre for social impact and Swinburne university (2018), Measuring Australia's digital divide: The Australian Digital Inclusion index 2018.

³⁶ Australia and New Zealand Mental Health Association (2019), *Technology for Mental Health*.

 $^{^{\}rm 37}$ IBISWorld (2020), Corporate Wellness Services in Australia Market Size 2007–2027.

Parliament of Australia, Standing Committee on Health, Aged Care, and Sport (2019), *Inquiry into Sleep Health Awareness in Australia*: Submission 47 (Sleepfit).

³⁹ ABC (2019), Why your boss needs to take a look at your bedroom habits.

⁴⁰ Deloitte UK (2015), Connected health: How digital technology is transforming health and social care.

Impact of COVID-19 and the bushfire crisis

During the pandemic, there has been rapid investment into digital mental health services to provide consumers with flexibility in how they interact with and use services, as well as protect health professionals and consumers against potential exposure to COVID 19. Key facts include:

- Increasing prevalence of mental health challenges: Recent studies reported that up to 78 per cent of the population experienced worsening of their mental health since the COVID-19 outbreak, prompted largely by fear of contracting the virus, fear of their family and friends contracting the virus, financial stress, and isolation (as a result of social distancing measures). Of these people, over 50 per cent reported elevated levels of psychological distress, depression and anxiety. In response, there has been strong take-up of MBS mental health services provided through telehealth with over a third of all MBS mental health services in the 4 weeks to 6 September 2020 provided through telehealth. Additionally, evidence suggests that natural disasters can have adverse impacts on people's mental health, giving rise to increased rates of stress, depression, anxiety, post-traumatic stress disorder, alcohol and substance abuse, aggression and violence, suicide and exacerbation of other underlying mental health problems. Mental health challenges following a natural disaster can go unidentified and untreated, and may take time for symptoms to present and endure over an extended period of time. This was underscored by the 2019-2020 bushfires, which highlighted the necessity of delivering integrated and co-ordinated mental health services. In response to the bushfires, the Australian Government funded the National Mental Health Commission to develop a National Natural Disaster Mental Health Framework. The objective of this being to improve mental health and wellbeing coordination arrangements and allow governments to enable participative, localised responses following natural disasters.
- Response to the 2019-20 bushfire crisis: In January 2020, the Australian Government released \$76 million in funding for bushfire affected individuals, families and communities to improve access to counselling and mental health support through the Medicare Benefits Schedule (MBS) and locally commissioned services, train frontline emergency staff in trauma informed care and psychological first aid, and provide grants to support communities in recovery. ⁴⁵ An additional \$2.0 million was provided to ensure that Kids Helpline and Lifeline were able to manage increased demand. ⁴⁶
- Increased funding for mental health services in response to COVID-19: Since March 2020, the Australian Government has made available more than \$500 million in direct supports and telehealth services to respond to the mental health impacts of the COVID-19 pandemic⁴⁷. As part of the Government's emergency response measures, a number of key digital mental health service providers, including Lifeline, Beyond Blue and Kids Helpline have been provided additional funding to boost the capacity of the mental health system, manage increased demand and further support vulnerable groups. The economic downturn post COVID-19 is expected to bring with it a new set of challenges that will impact on the demand for mental health services:
 - Increasing demand for telehealth and crisis services: with service providers such as Lifeline and Beyond Blue already reporting increases of approximately 30 per cent in demand. As a part of its response to the COVID-19 pandemic, the Federal Government has invested more than \$2.4 billion in telehealth services. The Government has also extended Medicare subsidies for telehealth until March 2021. There has been strong take-up of MBS mental health services provided through telehealth—over a third of all MBS mental health services in the four weeks to 6 September 2020 were provided through telehealth.

⁴¹ Black Dog Institute (2020), Three quarters of Australians claim their mental health has worsened by COVID-19.

⁴² Australian Institute of Health and Wellbeing (2020), *The use of mental health services, psychological distress, loneliness, suicide, ambulance attendances and COVID-19.*

⁴³ Bryant, R.A., Gibbs, L., Gallagher, H.C, et al. (2014). *Longitudinal study of changing psychological outcomes following the Victorian Black Saturday bushfires*. Aust N Z J Psychiatry. 48 (7): 634-43.

⁴⁴ Royal Commission into National Natural Disaster Arrangements (2020). Report. Available at: https://naturaldisaster.royalcommission.gov.au/.

 $^{^{45}}$ Department of Health (2020), Australian Government mental health response to bushfire trauma.

⁴⁶ Department of Health (2020). Suicide prevention and mental health package signals once in a generation reforms.

Australian Government, Department of Health (2020), How's Your Head Today? Campaign launched to support mental health across Australia (https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/hows-your-head-today-campaign-launched-to-support-mental-health-across-australia)

⁴⁸ Lifeline (29 March 2020), Australian Government provides additional funding to increase access to Lifeline crisis support services through-out COVID-19 outbreak; Beyond Blue (29 March 2020), Beyond Blue welcomes funding for new COVID-19 support service.

⁴⁹ Minister Hunt's media (6 October 2020), *Budget 2020-21: Record health and aged care investment under Australia's COVID-19 pandemic plan.*

⁵⁰ AIHW (2020). The use of mental health services, psychological distress, loneliness, suicide, ambulance attendances and COVID-19.

- Women and youth may be disproportionately affected: In April 2020, 325,000 women become unemployed, accounting for 55 per cent of all jobs lost.⁵¹ Women are more likely to be the primary care givers making it difficult to search for and return to work. Young people aged 16-34 are at greatest risk of feeling isolated and alone during the pandemic.⁵² This coupled with high unemployment and job insecurity can have considerable impacts on their mental health.
- Economic impact: The Australian economy is expected to contract by 8 per cent in 2020⁵³, with a high unemployment rate unemployment increased from 5.2 per cent pre-COVID-19 to nearly 6.2 per cent in June 2020.⁵⁴ These impacts can have compounding effects on the prevalence of and demand for mental health services, including digital mental health services.

5.2 Digital mental health services within the stepped care model

5.2.1 Stepped care model

Figure 1 illustrates the mental health stepped care model. It defines the level of mental health need matched to the most appropriate type of service or support. The stepped care model ranges from low intensity and low-cost options for people with more common and less severe mental health challenges (e.g. depression and anxiety) through to holistic support and services for those with severe and persistent mental illness.^{55,56}

Digital mental health services can be used by anyone with mental health concerns, based on severity of symptoms and level of need. This can range from promoting good mental health amongst the well population, helping people with mild to moderate mental illness or supporting people with severe mental illness. The CSA mapped the Australian government funded digital mental health services across the stepped care model to understand coverage of existing services across the model (see chapter 7).

Currently, there is limited clarity on where and how digital mental health services best support the stepped care model. Digital interventions should be better integrated and identified within the stepped care model to assist in allocating resources based on need and direct people to self-directed or clinician supported care, or appropriate face to face services. Broader implementation issues with stepped care should be considered when delivering digital mental health services. For example, evidence from the UK find that patient flow through the stepped care model is sensitive to the background of the workers at each step; the rate of stepping up is generally low but when triaging and assessments are completed by a professionally qualified workforce it may lead to more people receiving high intensity treatment; and it is important to ensure appropriate high intensity options are available to prevent situations arising where patients maybe inappropriately held at a low intensity step.⁵⁷

Figure 1: Mental health stepped care model

Well population	At risk population (early symptoms, previous illness)	Mild mental illness	Moderate mental illness	Severe mental illness
Mainly publicly available information and self-heb resources	Mainly self-help resources, low intensity interventions including digital mental health. 23.1% of population (5.8 million people)	Mix of self-help resources including digital mental health and low intensity face-to-face services, Psychological services for those w ho require them. 9.0% of population (2.3 million people)	Mainly face-to-face clinical services through primary care, backed up by psychiatrists where required. Self-help resources, clinician-assisted digital mental health services and other low intensity services for minority. 4.6 of population (1.1 million people)	Clinical care using a combination of GP care, psychiatrists, mental health nurses, and allied health. Inpatient services, Pharmacotherapy. Psychological support services, Coordinated multiagency services for those with severe and complex illness 3.1% of population (775,000 people)

⁵¹ Australian Financial Review (15 May 2020), Women workers worst hit in COVID job losses.

⁵² The Lab and Nature, COVID-19 Special Report - Mental Wellbeing During the COVID-19 Crisis, June 2020.

Reserve Bank of Australia (May 2020), Statement of Monetary Policy - section 6: Economic Outlook.

⁵⁴ Australian Bureau of Statistics (2020), Labour Force, Australia, Apr 2020.

National Mental Health Commission (2014), Contributing lives, thriving communities: Report of the national review of mental health programs and services.

⁵⁶ National Mental Health Commission (2017), The Fifth National Mental Health and Suicide Prevention Plan.

⁵⁷ Richards, A et al. (2012), Delivering stepped care: an analysis of implementation in routine practice. Implementation Science. 7: 3.

Note: Adapted from Australian Government Response to Contributing Lives, Thriving Communities – Review of Mental Health Programmes and Services (November 2015).

5.2.2 Effectiveness of digital interventions across the stepped care model

There is strong evidence to suggest that digital interventions are appropriate and effective for mild to moderate mental illness such as depression and anxiety. ^{58,59} There is also evidence to demonstrate its effectiveness with primary care settings, and the RACGP has endorsed the use of e-mental health interventions for depression and anxiety in the Handbook of Non-Drug Interventions (HANDI). ⁶⁰ There is also evidence to suggest that telephone-based crisis support services promote better mental health outcomes. For example, an evaluation of Lifeline's SMS crisis supports service pilot found that help seekers were significantly less distressed, felt more confident in their ability to cope and felt a greater connection to others, following the text intervention. ⁶¹

There is less evidence on the effectiveness of digital mental health services for people with severe mental illness and those with comorbidities such as comorbid personality disorders, substance dependence or people who are at a high risk of suicide or self-harm. Fig. There is also very little evidence around digital tools that support decision making processes and navigation of service and support pathways for users and for providers. Emerging international research however suggests high usability and feasibility as well as efficacy and effectiveness of digital interventions for people with severe mental illness. Fig. 1

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Andrews G, Williams AD. (2014), Up-scaling clinician assisted internet cognitive behavioural therapy (iCBT) for depression: A model for dissemination into primary care. ⁵⁹ Andersson G, Hedman E. (2013), Effectiveness of guided internet-based cognitive behavior therapy in regular clinical settings.

⁵⁹ Andersson G, Hedman E. (2013), Effectiveness of guided internet-based cognitive behavior therapy in regular clinical settings.

Royal Australian College of General Practitioners (2015), Internet based or computerised CBT (iCBT or cCBT): depression and anxiety: The handbook of non-drug interventions (HANDI).

⁶¹ Williams, K., Fildes, D., Kobel C. et al. (2020). Evaluation of outcomes for help seekers accessing a pilot SMS based crisis intervention service in Australia. Crisis. April 28;1-8.

⁶² Royal Australian College of General Practitioners (2018), e-mental health: A guide for GPs.

⁶³ Batra, S. et al. (2017), Digital health technology for use in patients with serious mental illness: a systematic review of literature.

6 Demand for digital mental health services

6.1 Demand for and use of digital mental health services

The uptake of digital mental health services is steadily increasing in Australia. Demand is expected to continue growing rapidly in the face of the COVID-19 pandemic. For example, during the early months of COVID-19 there was an 89 per cent increase in website visits and a 90 per cent increase in telephone calls to the virtual mental health clinic, Mindspot, when compared to the pre-COVID period.⁶⁴ This rapid uptake of services is in line with broader health system demand for mental health services, with over 4.3 million people receiving mental health-related prescriptions in 2018-19,⁶⁵ and suicide rates expected to grow by over 13.7 per cent from 2020 to 2025.⁶⁶

However, it is estimated that 55 per cent of Australians with mental illness still do not receive any form of treatment. 67 Commonly identified reasons for this include financial barriers, stigma, shame, lack of awareness of availability and effectiveness of services. 68 Capacity constraints within the broader sector also compromises the extent to which consumers receive the right support, at the right time. Certain cohorts (e.g. youth, LGBTI) may prefer a blended model of service delivery where they have access to both digital and face to face services.

Digital mental health services have the potential to resolve some of these identified barriers, through for instance:

- Enhance reach and access to mental health services. Digital interventions have the potential to reduce geographical and socio-economic barriers, providing a convenient and easy to use option for consumers. Digital options provide consumers with the ability to exercise great choice and control over what treatment they will access, and when and where they will access treatment and what it be.⁶⁹
- **Fills service gaps.** Digital interventions present as an alternative for consumers who are reluctant to, or cannot use, face to face services due to feelings of stigma, shame, concerns over confidentiality, or physical accessibility.⁷⁰
- Potential to address the gap between identified needs and the limited capacity to provide traditional mental health services. At a minimum, digital mental health services act as an enabler for and compliment to face-to-face services for consumers as part of a blended care model.⁷¹
- Consumer empowerment. By providing innovative ways to access clinical care that transcend physical barriers, care providers are no longer the sole holders of information. Digital mental health services provide the opportunity to enhance access to health information, whereby consumers may become more knowledgeable about their own mental health challenges and are able to better self-manage their illnesses. T2, T3 Through self-management, there is potential for consumers to have ownership and control of their data, giving them the ability to choose what they share with which provider, thereby preserving privacy.

⁶⁴ Consultation with the Department of Health, Digital Health Policy team (22 September 2020).

⁶⁵ AIHW (2020). Mental health services, summary of mental health services in Australia.

Prof. Ian Hickey, The University of Sydney Brain and Mind Centre (2020), Road To Recovery: Restoring Australia's Mental Wealth, Uncovering the road to recovery of our mental health and wellbeing using systems modelling and simulation

⁶⁷ AIHW (2014). Australia's Health 2014.

⁶⁸ Productivity Commission (2019). Initial Submission to the Productivity Commission Inquiry into Mental Health.

⁶⁹ Productivity Commission (2019). Initial Submission to the Productivity Commission Inquiry into Mental Health.

⁷⁰ Andrews G, Cuijpers P, Craske MG, McEvoy P, Titov N. (2010). *Computer therapy for the anxiety and depressive disorders is effective, acceptable and practical health care: Ameta-analysis.*

⁷¹ AIHW (2020). Mental health services in Australia (MHSA).

Mental Health Commission of Canada (2014). E-mental health in Canada. Transforming the mental health system using technology. A briefing document.

⁷³ National mental health commission (2012). *E-mental health strategy for Australia*.

• Empowers families and carers. Involving family members through engaging them in the treatment process has shown to improve consumer outcomes.⁷⁴ Digital mental health services have helped to break down geographical barriers to accessing mental health services for families and carers, providing a mechanism for them to be involved in treatment plans for individuals. This provides mental health benefits for both carers and the consumer.⁷⁵

6.2 Digital inclusion

Digital inclusion is the premise that 'everyone should be able to make full use of digital technologies – to manage their health and wellbeing, access education and services, organise their finances, and connect with friends, family, and the world beyond'. ⁷⁶

Access to digital technologies (e.g. a suitable device with internet access including laptop, mobile phone, wearables) is pertinent to using digital mental health services. Providing digital services, including digital mental health services may potentially exacerbate health inequities if those who most need healthcare are those least likely to have access to digital technologies. In Australia, groups most likely to experience digital exclusion include older people, people from poor socio-economic backgrounds, those in rural and remote communities, Aboriginal and Torres Strait Island people and people with a disability (see insight box below). Additionally, research finds that internet access for those with poor mental health is lower than those without mental health illnesses. To less digitally literate people, using digital tools and technology can be hard and intimidating. For example, for some people wanting to access a digital mental health service, finding and downloading the right tools and technology can take up considerable amounts of time, impacting on the level of service engagement. Equally, reliable and high-quality internet connectivity is crucial for people to better engage and use services effectively.

There is opportunity to better support people who are most likely to experience digital exclusion with access to the right tools and environments to access digital mental health services. Potential opportunities include re-purposing unused clinical consult rooms in GP practices to provide support and access to digital tools and the internet.



Insight box 1: Australia's digital divide⁷⁸

The Digital Inclusion Index (the Index) is a measurement of the extent to which there is digital inclusion in Australia. It is calculated using a digital inclusion measurement tool and measures how **access**, **affordability and digital ability** changes overtime with people's social and economic status. The Index compiles numerous variables into a score ranging from 0 to 100, with a higher score reflecting a higher level of inclusion. These are detailed below:

- Internet Access: frequency, places, and number of access points
- Internet Technology: computers, mobile phones, mobile broadband, and fixed broadband
- Internet Data Allowance: mobile and fixed internet
- Relative Expenditure: share of household income spent on internet access
- Value of Expenditure: total internet data allowance per dollar of expenditure
- Attitudes: including notions of control, enthusiasm, learning, and confidence
- Basic Skills: including mobile phone, banking, shopping, community, and information skills
- Activities: including accessing content, communication, transactions, commerce, media, and information.

⁷⁴ Afzal Javed and Helen Herrman (2017), *Involving patients, carers and families: an international perspective on emerging priorities.*

⁷⁵ Consultation with CanTeen (25 September 2020)

Roy Morgan, RMIT University, Centre for social impact and Swinburne university (2018). Measuring Australia's digital divide. The Australian Digital Inclusion index 2018.

⁷⁷ Lay San Too; Leach, L. and Butterworth, P. (2020). Mental Health Problems and Internet Access: Results From an Australian National Household Survey, Vol 7, No 5.

⁷⁸ Roy Morgan, RMIT University, Centre for social impact and Swinburne university (2018). *Measuring Australia's digital divide. The Australian Digital Inclusion index 2018.*

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Insight box 1: Australia's digital divide⁷⁸

Overall, Australia's digital inclusion is improving, increasing by 9 points from 54.0 to 63.0 between 2014-2020. Australia has a high internet penetration rate – 88 per cent of the total population in Australia are active users of the internet.⁷⁹ However, there is a divide between some population cohorts:

- **Older Australians:** people aged 65 years and older are Australia's least digitally included group. Their score is 49.7, approximately 13.3 points below the national average (63.0).
- **Socioeconomics:** generally, there is a large digital divide based on socioeconomics. People in the lowest household income quintile had a digital inclusion score of 43.8, compared to 73.8 for those in the highest household income quintile.
- Geography: digital inclusion is 7.6 points higher in capital cities (65.0) than in rural areas (57.4).
- **Aboriginal and Torres Strait Islander people:** The average score for this group is below the national average, at 55.1.80
- **People with disability:** have a low level of inclusion compared to other Australians. The digital inclusion score for people receiving disability support is 52.6, which is 10.4 points below the national average.

Over four million Australians access the internet only through a mobile connection. These users have a mobile broadband device with a data allowance but no fixed connection. Mobile only users had a digital inclusion score of 43.7, which is approximately 19.3 points below the national average.

Collaboration across all levels of government is required to improve the digital skills of excluded communities.

6.2.1 Factors impacting consumption of digital mental health services

The CSA identified several key barriers in the consumption of digital mental health services. These include:

- Awareness, trust and adoption of digital mental health services: These include concerns around privacy and
 confidentiality, digital exclusion and fear of replacing traditional treatment services.⁸¹ Ensuring that digital mental health
 services are evidence-based, regulated and integrated within other mental health-related services will enable
 consumers to successfully and efficiently manage their health challenges with the intent of recovery.
- **Consumer literacy:** Consumer literacy is also a key consideration in accessing digital mental health services. For example, research indicates that the literacy required for e-mental health engagement is beyond the reach of most Australians.⁸²

⁷⁹ Statista (2020). Active internet users as percentage of the total population in Australia from 2015 to 2020

⁸⁰ National Mental Health Commission (2017). The Fifth National Mental Health and Suicide Prevention Plan, Priority Area 4: Improving Aboriginal and Torres Strait Islander mental health and suicide prevention, pp. 30-35.

⁸¹ Berry, N.; Lobban, F. and Bucci, S. (2019). A qualitative exploration of service user views about using digital health interventions for self-management in severe mental health problems, Article number 35

Stone, L. and Waldron, R. (2019). Great Expectations and e-mental health. The role of literacy in mediating access to mental healthcare. Australian Journal of General Practice.

• Adverse impacts on families and carers: The physical distancing and other restrictions of the COVID-19 pandemic have prevented many people from seeking face-to-face services. This has led to many opting for self-guided or therapist assisted digital mental health services, using their families and carers to support them in accessing and managing their mental health care programs. This has placed an increased burden on families and carers to be aware of a broad range of mental health services, including those tailored to more complex or comorbid needs. ⁸³ The Government has provided \$3.5 million in additional funding to Carers Australia and Carers Gateway to provide targeted assistance and information. ⁸⁴ Additionally, carers of young people with mental illness often experience high levels of stress and are more likely to experience mental illness themselves; it can be difficult for them to access support because they are often time-poor or isolated. Digital mental health services create an access point for carers to receive training, establish social networks with other carers, learn from peer and expert advice, and engage in interactive problem-solving. ⁸⁵

· Barriers facing vulnerable cohorts:

- Aboriginal and Torres Strait Islander community: Aboriginal and Torres Strait Islander adults are three times more likely than the general Australian population to experience psychological distress and have twice the rate of suicide.⁸⁶ However, Aboriginal and Torres Strait Islander people have lower levels of access to mental health services. Key barriers to access include lack of cultural appropriateness of the services, cost of health services, remoteness and availability of health professionals, and the attitudes of health professionals. The digital divide presents further challenges to the adoption and consumption of digital mental health services for this group.
- Culturally And Linguistically Diverse (CALD) communities: CALD communities are at increased risk of suicide and self-harm, with greater mental health challenges among CALD refugees and asylum seekers. Many individuals from CALD backgrounds do not seek help due to the limited availability of information in community languages and cultural appropriateness of care, and find it challenging to use mainstream services because of language and cultural barriers. This whilst some Australian Government funded digital mental health services offer interpretation services and provide information in multiple languages (e.g. Lifeline has access to free interpretation services for non-English speakers through the Translating and Interpreting Service National), there are none specifically for CALD communities.
- Older Australians: Older Australians are at high risk of developing mental and physical health challenges as a result of isolation and loneliness. They experience high rates of suicide, particularly among males over 85 years of age.⁸⁸ The government invested over \$102.5 million in 2019 to support older Australians over the age of 75 experiencing poor mental health.⁸⁹ Older Australians have limited access to appropriate mental health treatment,⁹⁰ and often experience discrimination across general and mental health care settings.⁹¹ Factors contributing to limited access to mental health services include geographical location, cultural background, availability of transport and incidence of multi-morbid illnesses.⁹² Additionally, with the impact of the digital divide heavily weighing on the older population, using digital mental health services to bridge the accessibility gap can prove challenging.

⁸³ Department of Health: Minister Hunt's Media (2020). COVID-19: \$48.1 Million for National Mental Health and Wellbeing Pandemic Response Plan.

Beautiful Department of Health (2020). COVID-19: \$48.1 Million for National Mental Health and Wellbeing Pandemic Response Plan, media release.

⁸⁵ Mead, S. and C. MacNeil (2006). Peer support: What makes it unique? International Journal of Psychosocial Rehabilitation.

⁸⁶ Beyondblue (2016), Improving Aboriginal and Torres Strait Islander Social and Emotional Wellbeing in Queensland Discussion Paper.

⁸⁷ Henderson, S. Kendall, E. (2011), Culturally and linguistically diverse peoples' knowledge of accessibility and utilisation of health services: Exploring the need for improvement in health service delivery

⁸⁸ COTA Australia (2018). Submission to the Senate Community Affairs References Committee, Inquiry into the accessibility and quality of mental health services in rural and remote Australia

⁸⁹ Australian Government, Department of Health (2019), Better Ageing – mental health support for older Australians, Budget 2018-19.

⁹⁰ McKay, R. (2016). Access and Affordability in Primary Health Care Presentation at the COTA Australian 2016 Policy Forum, Reframing Primary Health Care for Older Australians.

⁹¹ The Conversation, Draper, B. (2015). Elderly men have the highest suicide rate – and ageism stops us from doing something about it.

⁹² Deborah van Gaans and Dent, E. (2018). Issues of accessibility to health services by older Australians: a review, Article number 20

- LGBTI community: Compared to the general population, lesbian, gay, and bisexual people are twice as likely to be diagnosed and treated for mental health disorders and LGBTI young people (aged 16-27) are five times more likely to attempt suicide. 93 With increasing internet use, particularly among younger cohorts, digital interventions such as online communities and peer information provides greater opportunity for LGBTI individuals to find help and support, reduce social isolation and gain a sense of acceptance. Research from New Zealand has demonstrated promising effectiveness of LGBTI focused gamed based, computerised cognitive behaviour therapy programs. 94
- Youth: The prevalence of mental illness in young people continues to grow, seeing an increase of 18.7 per cent to 22.8 percent between 2012 and 2016.⁹⁵ In 2018, the rate of suicide among young Australians was the highest it had been in 10 years. Barriers to access include high services costs (48 per cent of young people reporting unaffordability), lack of time (25 per cent of young people), attitudinal issues such as embarrassment and fear, desire for self-reliance and geographical barriers (28 per cent and 24 per cent of young people with no access to transport and local services respectively).⁹⁶ Young people are the largest users of the internet with at least 99 per cent using the internet, and 95 per cent of that population using it on a daily basis. Further, young people are adequately aware of and trust in the effectiveness of digital mental health services, meaning younger generations have greater ease of accessing these services. ReachOut, for example, provides evidence-based tools and information to build trust and raise awareness on the effectiveness of digital mental health services for young people⁹⁷
- Rural and remote communities: Despite considerable growth, internet access is still not equitable within Australia. Internet connection is still poor in some rural and remote areas which impacts their level of engagement with digital technologies.⁹⁸ There is a greater need to build health and non-health related infrastructure in rural, remote and lower socioeconomic locations and communities with barriers of access to digital infrastructure i.e. National Broadband Network (NBN) and USB ports.⁹⁹

6.2.2 Integrating the lived experience perspective in the design and delivery of services

The Innowell Project Synergy report on the National Community Consultation Program (the NCCP) finds that people generally trust mental health products and services that are endorsed and recommended by their networks and peers. They value lived experience-led design of services and see themselves reflected and considered in the products. ¹⁰⁰ Evidence shows that embedding the lived experience in the design and delivery of services can improve outcomes and recovery. ¹⁰¹ However, despite continued advocacy for the engagement and inclusion of people with a lived experience, the sector struggles to incorporate lived experience in meaningful ways. ¹⁰² There is opportunity to better integrate the consumer perspective in the design of digital mental health services to deliver evidence-based outcomes that are more person centred and responsive to needs.

⁹³ National LGBTI Health Alliance (February 2020), Snapshot of mental health and suicide prevention statistics for LGBTI people.

⁹⁴ Mathijs Lucassen (2018). How LGBT+ Young People Use the Internet in Relation to Their Mental Health and Envisage the Use of e-Therapy: Exploratory Study

⁹⁵ Black Dog Institute (2016), Youth mental health report, Youth Survey 2012-2016

⁹⁶ ReachOut Australia, Mission Australia, Lorraine Ivancic (2018). Lifiting the weight: understanding young people's mental health and service needs in regional and remote Australia

⁹⁷ ReachOut Australia, Mission Australia, Lorraine Ivancic (2018). Lifiting the weight: understanding young people's mental health and service needs in regional and remote Australia

⁹⁸ AMA (2016). Better access to high speed broadband for rural and remote healthcare.

⁹⁹ Consultation with National Mental Health Commission (24 September 2020).

¹⁰⁰ Innowell (2020). Project Synergy. National Community Consultation Program.

¹⁰¹ Resnick, S.G. and R.A. Rosenheck (2008), Integrating peer-provided services: A quasi-experimental study of recovery orientation, confidence, and empowerment. Psychiatric Services, 59(11): p. 1307-1314.

Happell, B., et al. (2015), Consumer participation in nurse education: A national survey of Australian universities. International Journal of Mental Health Nursing, Sourced from: QMHC. Promoting the lived experience perspective: discussion paper for the Queensland mental health commission.

The NCCP, for example, was a lived experience led community consultation that used digital and face to face strategies to engage people with a lived experience of mental illness and their support networks. ¹⁰³ This program found that embedding the lived experience in a program is likely to increase community trust in, and acceptance of, a product or service; empower and integrate people from different background, and increase trust in organisations and governance.

Peer support roles are a vital recovery service for people with mental illness. Yet, the limited awareness of the value of peer support roles limits the extent to which they can be integrated in the co-design and co-delivery of mental health services. Peer support roles can be considered within the context of digital mental healthcare delivery. For example, incorporating the perspective of peer support workers in the development of a lived experience based digital resource for a digitally assisted peer support program for young people experiencing psychosis was found to enable the creation of a more tailored digital resource. 104 Additionally, peer support services are valuable in training young leaders to provide safe and open support to young people, however, it is important for these services to have escalation points to higher intensity care where an individual's condition begins to deteriorate. 105



Questions for consultation

- What are peoples' preferences for blended models of care and treatment modalities? What are some enablers and barriers to these preferences?
- How can vulnerable and at-risk cohorts be better supported via digital tools and platforms as part
 of a blended model of care?
- How important is preserving anonymity, privacy and confidentiality to people accessing digital mental health support and is there an acceptable approach to enable data sharing (with consent) if it produces a better outcome and experience? What else is needed to support this?
- How can lived experience perspective be better integrated into the design and delivery of digital mental health services?
- What opportunities exist to enhance referral pathways so that people receive connected care across all stages of the care continuum?

¹⁰³ Innowell (2020). Project Synergy. National Community Consultation Program.

¹⁰⁴ Peck CE, Lim MH, Purkiss M, Foley F, Hopkins L, Thomas N. (2020), Development of a Lived Experience-Based Digital Resource for a Digitally-Assisted Peer Support Program for Young People Experiencing Psychosis. Front Psychiatry.

¹⁰⁵ Consultation with CanTeen (25 September 2020).

7 Supply of digital mental health services

7.1 Mental health workforce implications

The mental health workforce in Australia responds to a range of mental health challenges and illnesses across the broad spectrum of severity. It is important that the supply of mental health services adequately meets the demand, currently and in the future as demand increases. Projected demand means that we can't rely solely on traditional forms of mental health service delivery and a highly trained professional workforce. ¹⁰⁶ Digital mental health services present an opportunity to meet demand by providing access to a broader range of services, including information, forums and online networks, self-directed services, and clinician supported and led services. It allows consumers to access mental health care using a blended model and supports digitally enabled referrals for those with complex needs.

To meet demand there is also an opportunity to expand the traditional workforce base by offering training, accreditation and support to the non-clinical and lived experience workforce. For this to occur, the digital mental health services workforce must be aware of, and appropriately skilled, in referring to, using and delivering digital mental health services. There are also opportunities to upskill those with lived experience and those in non-clinical roles to provide digital mental health services to allow more specialised clinicians to support Australians with more complex or co-morbid mental health conditions.

7.1.1 Factors contributing to low adoption of digital mental health services

Despite evidence that digital mental health services can be effective for treating and managing mental health challenges and illness, uptake by health practitioners for some evidence-based services has been low.¹⁰⁷

Key factors impacting health professional adoption of digital mental health services are articulated below:

• Knowledge and confidence in using digital mental health services among health practitioners: With recent enhancements in training and education on digital mental health (e.g. training programs and resourced delivered by eMHprac), awareness of digital mental health services among health practitioners have increased over time. However, there still exists some gaps in knowledge of the broad range of digital mental health services available, their purpose and the cohorts they are intended to service, and health practitioner confidence in using digital tools and technology. Additionally, health practitioners desire some transparency around service efficacy and visibility of clients referred into services. Appropriate incentives can be considered to increase awareness and adoption of digital mental health services.



Insight box 2: Use of incentive programs to change practitioner behaviour

Several programs have been established by the Department to encourage changes in health practitioner behaviour in order to achieve specific health outcomes. Two examples of this are outlined below:

- Practice Incentives Program: The Practice Incentive Program provides funding for general practices to help them
 continuously improve, provide quality care, enhance capacity and improve access and health outcomes for patients.
 Payments are available for eHealth, quality improvement, teaching, Indigenous health, after hours care, procedural
 activities, and for rural locations.¹⁰⁸
- Workforce Incentive Program: The Workforce Incentive Program aims to strengthen team-based and multidisciplinary models of care enabling collaborative arrangements to better support community needs in rural and remote areas. It provides targeted financial incentives to encourage doctors to deliver tailored services, and to

¹⁰⁶ Rosenberg, S, Hickie, I, and Rock, D (2020), *Rethinking Mental Health in Australia: Adapting to the challenges of COVID-19 and planning for a brighter future.*

¹⁰⁷ Titov N, Dear B, Nielssen O, et al. (2018), ICBT in routine care: a descriptive analysis of successful clinics in five countries.

¹⁰⁸ Australian Government, Services Australia (2020), Practice Incentives Program



Insight box 2: Use of incentive programs to change practitioner behaviour

support general practices to engage the services of nurses, Aboriginal and Torres Strait Islander Health Practitioners and Health Workers, and eligible allied health professionals. 109

These incentive programs are used to encourage a more equal distribution of health care across Australia. ¹¹⁰ As detailed above, they can address specific shortfalls in supply – for example, in regional and remote Australia, or they can be used to encourage specific activities – for example, quality improvement.

For the mental health workforce, there is an opportunity to use financial or non-financial incentives to encourage health professionals to adopt digital mental health services.

- An underdeveloped evidence base to build trust in the efficacy of digital mental health services for specific cohorts: Currently, many health practitioners do not have a sound understanding of the evidence base supporting the use of digital mental health services. Research to date indicates that some digital mental health services have the ability to support the same outcomes as face-to-face services, 111 and enables equal outcomes for Aboriginal and Torres Strait Islanders, 112 non-English speaking migrants, 113 and older cohorts. 114 Further, studies have shown that assessment or triage services can be as beneficial for health outcomes as treatment services. 115 Continued research and evaluation is important to understand the effectiveness, acceptability and efficiency of digital mental health services, including specific services and modes of delivery, for the general population and different cohorts. This research also needs to be disseminated widely to clinicians to increase uniform awareness on how to service different cohorts.
- A nonuniform approach to delivering training and support in digital mental health services: The Fifth Plan states that guidance and training tools are important in raising awareness of digital mental health services and reducing stigma. There is currently a shortage of mental health practitioners, exacerbated by the increased demand for services as a result of COVID-19 and other environmental factors. Health practitioners need specific skills and training, clinical supervision, and support to use and deliver digital mental health services, particularly for those who require clinician led or supported care. Education about digital mental health service delivery should be at the centre of specialised training; however, currently the availability of training programs about digital mental health services and specialist opportunities such as trauma informed, and culturally appropriate practice is limited. Health systems and platforms with existing clinical treatment flows will encourage increased adoption from clinicians. Where the use of these services changes the normal workflow for clinicians, they should be supported by guidelines and training to encourage adoption and use.

¹⁰⁹ Australian Government, Department of Health (2020), Workforce Incentive Program

¹¹⁰ Jennifer Mason (2013), Review of Australian Government Health Workforce Programs.

¹¹¹ MindSpot Clinic, Australia, and the Online Therapy Unit (OTU) in the province of Saskatchewan, Canada (2019), MindSpot Lessons Paper.

¹¹² Titov, Nickolai, et al (2018), A comparison of Indigenous and non-Indigenous users of MindSpot: An Australian digital mental health service.

¹¹³ Kayrouz, Rony, et al (2020), A comparison of the characteristics and treatment outcomes of migrant and Australian-born users of a national digital mental health service.

¹¹⁴ Titov, Nickolai (2018), *Treating anxiety and depression in older adults: randomised controlled trial comparing guided V. self-guided internet-delivered cognitive*—behavioural therapy.

¹¹⁵ MindSpot Clinic, Australia, and the Online Therapy Unit (OTU) in the province of Saskatchewan, Canada (2019), *MindSpot Lessons Paper*.

¹¹⁶ National Mental Health Commission (2017), The Fifth National Mental Health and Suicide Prevention Plan.

¹¹⁷ Productivity Commission (2019), Mental Health, Draft Report: Volume 1, Canberra.

¹¹⁸ Titov, Nick (2019), From Research to Practice: Ten Lessons in Delivering Digital Mental Health Services.

¹¹⁹ The Sydney Morning Herald (22 December 2019), Australians shun My Health Record with only 9 per cent ever logging in.

- Limited ability of the health system to respond to surges in demand for services: COVID-19 has rapidly increased demand for health and mental health services. As part of the Commonwealth Government's response to COVID-19, the annual cap on Medicare-subsidised mental health services has recently increased from 10 sessions to 20 sessions per patient per calendar year. Simultaneously, research suggests that there has been increased pressure on medical staff to meet this demand for general and mental health services, particularly for Emergency Departments. 121
- A National Mental Health Workforce Strategy is currently under development to consider the quality, supply, distribution
 and structure of the mental health workforce in Australia and identify practical approaches that governments can
 implement to attract, retain and train the workforce required to meet future demand. The availability of digital mental
 health services helps in addressing this concern to some extent as it offers the opportunity to scale up and enhance
 reach at low cost.



Insight box 3: Addressing the factors contributing to the limited uptake of digital health services by the workforce

The ADHA has developed the National Digital Health Workforce and Education Roadmap which identifies the impacts of digital health adoption on the clinical and non-clinical health workforce and the enabling education programs required to build digital health capability across Australia. The Roadmap sets a pathway for building digital health capability and leadership and outlines underpinning principles which seek to address the barriers to adoption outlined above:

- National alignment, collaboration and accountability;
- Flexibility to respond to diverse digital technologies, digital maturity variations and operational environments;
- · Leveraging partnerships to drive innovation;
- Delivery of equity of access to healthcare for all Australians, acknowledging the requirement for digital inclusion;
- Ethical use of data and information;
- · Responsiveness to government and community priorities; and
- · Focus on tangible actions and measurable objectives.

The ADHA will now work with digital health sector stakeholders to develop the general and job specific resources and curricula required to support workforce capability development.

This is supported by organisations who have developed programs to upskill the workforce. Royal Melbourne Institute of Technology (RMIT) Online and the Digital Health Cooperative Research Centre (CRC) have joined forces to create the three micro-credentials in digitally enabled healthcare, in partnership with Queensland Health, CanTeen, Telstra Health and RMIT's Health Transformation Lab. 123 The credentials aim to bridge skills gaps in key areas like digital health, change management and remote consumer care.

Another example is eMHprac, which has compiled resources and implemented training programs aimed at providing clinicians with the skills they need to confidently refer and provide digital mental health services. 124 eMHprac also provides training specific to the needs of subpopulation cohorts, including Aboriginal and Torres Strait Islander people through platforms such as WellMob.

7.1.2 Maximising the use of the mental health workforce

Digital mental health services can be used at each stage in the stepped care model. There is an opportunity to better utilise the non-clinical workforce (e.g. peer workers) to assist in the delivery of digital mental health care to individuals with high prevalence, low intensity conditions when provided with appropriate training, delivered under a robust clinical governance framework, and backed by assessments and escalation capabilities. This would allow frontline and clinical workers to focus on supporting individuals with more complex or co-morbid mental health conditions. There is also an opportunity to draw on care navigators and case managers to support consumers in accessing and managing services, particularly for complex and comorbid clients. For example, general practices are eligible to receive incentive funding for engaging the services of practice nurses, Aboriginal and Torres Strait Islander Health Workers and other allied healthcare providers via the Workforce Incentive Program.¹²⁵ Further, the non-clinical workforce can be used to deliver services in a clinical setting or in

¹²⁰ Australian Government Department of Health (9 October 2020), Factsheet for Additional 10 MBS Mental Health Sessions.

¹²¹ Victoria State Government, Health and Human Services (2020), Planning mental health workforce responses in coronavirus (COVID-19) recovery and outbreaks

¹²² Australian Digital Health Agency (September 2020), A snapshot of the National Digital Health Workforce and Education Roadmap.

¹²³ RMIT (20 July 2020), New courses to transform digital healthcare.

¹²⁴ eMHprac (2020), Your E-Mental Health Resources.

¹²⁵ The Department of Health (2020). Workforce Incentive Program.

a non-clinical setting. For example, the Safe Haven Café, helps people who are in acute psychological distress and/or experiencing a suicidal crisis by providing rapid and compassionate care by mental health clinicians and peer workers in a non-clinical environment.¹²⁶

Other community centres and organisations also play an important role in improving digital health literacy and supporting individuals in accessing digital mental health services. An example is the Health My Way, a national digital health literacy program delivered by community organisations to support people aged over 18 years to gain essential skills and confidence in managing their health and wellbeing online.¹²⁷ It is important that these organisations, which enable access to services across the sector, are also supported with the right resources and training.

Attract and retain the lived experience workforce

Lived experience refers to the knowledge and insights of people who have a personal experience of mental ill health. These people hold expertise that is incredibly valuable – they know what it is like to experience mental illness and can share experiences of personal recovery with others. For mental health service providers, employing people with lived experience in peer worker roles to support design and delivery of services brings a tremendous range of benefits.

The literature highlights the improvement in the consumer experience from peer-delivered support including instilling feelings of hope, self-determination, responsibility for self and personal empowerment. Feeling welcomed, understood and connected to people who have been on a similar journey are also commonly cited. Recent evaluations also show that these services increase quality of life, support an individual's progress towards recovery and reduce levels of psychological distress.¹²⁹

However, those with lived experience do not always encounter positive experience in these roles. Stigma and discrimination, sometimes subtle and sometimes obvious, can cause a divide between the peer workforce and other staff. Further, the digital literacy of those with lived experience can vary, influencing their levels of comfort in supporting others to access digital mental health services. Formal structures, policies and procedures that support the peer workforce and provide a development pathway are needed if services are to realise their full potential. State and Territory bodies have established platforms and programs to support providers with resources and people with lived experience with the skills, education, and support required to contribute to the mental health ecosystem, including digital services. A recommendation from the Royal Commission into Victoria's Mental Health System was to establish a new entity, Victorian Collaborative Centre for Mental Health and Wellbeing. One key purpose of this Centre is to drive exemplary practice for the full and effective participation and inclusion of people with lived experience across the mental health system. Further, the National Mental Health Commission is currently leading the development of Peer Workforce Development Guidelines to help support the peer workforce on a consistent basis across Australia.

7.2 Integration of digital mental health services

7.2.1 Delivering a blended model of care

A blended model of care is one that refers to a mixture of digital and in-person treatment for a disorder. Health care professionals, particularly mental health practitioners, refer patients to mental health service providers and receive referrals from these providers. This is the same for digital mental health service providers where mental health practitioners specifically prescribe the use of digital mental health services, such as This Way Up and eheadspace, to patients as ongoing support mechanisms that complement the use of face to face services. It is important that this referral process is seamless and does not impede access to care for the patient. It will also need to balance the issue of access to services with the appropriateness, safety, and continuity of the care provided. This would be supported by a consistent triage and assessment process and up-to-date referral databases to enable clinicians and service providers to identify the appropriate care quickly.

¹²⁶ Mission Australia (2020), Safe Haven Café Broken Hill.

¹²⁷ Australian Government and Good Things Foundation (2020), Health My Way.

¹²⁸ Mental Health Commission of New South Wales (2014), The peer workforce.

¹²⁹ Boyd, J. E., Zeiss, A., Reddy, S., & Skinner, S. (2016). Accomplishments of 77 VA mental health professionals with a lived experience of mental illness. American Journal of Orthopsychiatry.

¹³⁰ Mental Health Commission of New South Wales (2014), Living Well: A Strategic Plan for Mental Health in NSW 2014 – 2024.

¹³¹ Peer Work Hub (2020), Growing the lived experience workforce.

¹³² Royal Commission into Victoria's Mental Health System (2019). *Interim Report*.

A key resource in establishing this is the Department's National Guidance Initial Assessment and Referral for Mental Healthcare. ¹³³ This guidance document provides advice to Primary Health Networks (PHNs) on establishing effective systems for the initial assessment and referral of individuals presenting with mental health conditions in primary health care settings. The Guidance brings together information from a range of sources including Australian and international evidence and advice from a range of leading experts.

¹³³ Australian Government Department of Health (29 June 2020), National PHN Guidance: Initial Assessment and Referral for Mental Healthcare.

7.2.2 Integration of digital mental health services with the broader health sector

The integration between the mental health system, including both digital and face-to-face services, and the broader health system is crucial in providing consumers with mental health challenges with person centric and holistic care.



Insight box 4: Social determinants affecting risk for mental illness

Evidence has shown the way in which social determinants impact mental health outcomes in specific population cohorts. Some are outlined below:

- **Employment**: Research shows job or financial loss, or precarious employment, can increase a person's risk of health problems, such as depression and anxiety. The increase and presente eism due to mental ill-health in Australia costing \$13-17 billion per year. Digital mental health interventions in the workplace can improve employee psychological wellbeing and increase work effectiveness. Both government and private organisations are increasingly implementing programs to support mental wellness in the workplace.
- **Education**: Evidence indicates a strong association between wellbeing and educational attainment, particularly among children and adolescents. Mental illness is directly linked to low educational attainment as education plays an important role in children's social, emotion and cognitive development. 137
- **Housing**: An individual's physical environment, such as their living environment, can greatly impact one's mental health. Housing inequities and poor housing situations, including homelessness and social housing, can contribute to mental health conditions. Research notes that those who experience constant exposure to social housing and those with multiple housing transitions have worse mental health than individuals with a stable housing situation. 139
- **Income**: In a 2019 NAB Consumer Anxiety Survey, 25 per cent of consumers noted their cost of living anxiety as being very high. Financial stress invokes coping mechanisms that can greatly impact an individual's mental health. These include avoidance, overeating and alcohol and drug misuse.¹⁴⁰
- **Domestic and family violence**: Domestic violence can leave long-lasting effects on someone's mental health. For woman and children, who are most predominantly affected by domestic violence, the risk of developing anxiety, depression and post-traumatic stress disorder is higher than in non-affected individuals. Domestic violence also negatively impacts the early social and mental development of a child, including their ability to develop relationships and learn.¹⁴¹
- **Childhood adversity and trauma**: Childhood adversity and trauma can be experience in several ways including physical and emotional abuse and neglect or exploitation, with the potential to harm.¹⁴² Experiences of adversity and harm can leave serious long-lasting impacts on children's mental health. For example, if childhood sexual abuse was eliminated, the presence of mental illness would reduce by 13 per cent.¹⁴³

Digital interventions have a role to play in providing this holistic care by presenting as an alternative to consumers who are reluctant to or cannot use face to face services due to feelings of stigma, shame, concerns over confidentiality, or physical accessibility. Different types of health service delivery, for example Health Care Homes, are currently being trialled and may provide lessons for integrating digital mental health services with the broader health sector.

¹³⁴ Margarita Alegría et al. (2018), Social Determinants of Mental Health: Where We Are and Where We Need to Go.

¹³⁵ AIHW (21 November 2019), Mental Health Absenteeism and Presenteeism Costs \$17 Billion.

¹³⁶ JMIR (2017), Improving Employee Well-Being and Effectiveness: Systematic Review and Meta-Analysis of Web-Based Psychological Interventions Delivered in the Workplace.

¹³⁷ VicHealth (2015), Evidence review: Addressing social determinants of inequities in mental wellbeing of children and adolescents.

¹³⁸ VicHealth (2015), Evidence review: Addressing social determinants of inequities in mental wellbeing of children and adolescents.

¹³⁹ Bentley, Rebecca (2018), The impact of social housing on mental health: longitudinal analyses using marginal structural models and machine learning-generated weights.

¹⁴⁰ Black Dog Institute, (2020), Financial Stress & Health Care Workers during COVID-19.

¹⁴¹ Health to Health (2019), Domestic Violence and mental health.

¹⁴² Pearce, Josie (2019), Childhood adversity and trauma: experiences of professionals trained to routinely enquire about childhood adversity.

¹⁴³ Beyond Blue (2019), A word from Julia: How childhood trauma affects our mental health.



Insight box 5: Coordinating care for consumers with chronic and complex conditions

Consumers with chronic and complex conditions need to access services from several health professionals who often work in different locations. This can be difficult due to the lack of coordination and communication between the different parts of the health system.¹⁴⁴

To help these consumers navigate the system, the Australian Government established the Health Care Homes trial. Under the trial, approximately 117 general practices and Aboriginal Community Controlled Health Services (ACCHS) across 10 PHNs received funding to coordinate comprehensive care for enrolled consumer with chronic and complex conditions. The program is designed to provide 'one team' to coordinate care. The team works with the patient to develop a shared care plan to set goals, help them manage their conditions, improve quality of life, and identify the best local providers to meet their needs. The Health Care Homes receive payments in line with the complexity of the consumer's needs. The Health Care Homes trial will run to 30 June 2021. As noted earlier in this Report, mental ill-health is linked with comorbid conditions. Almost all people (94.1 per cent) with a mental and behavioural condition report another coexisting long-term health condition. It is important that these individuals receive wraparound support which is tailored to their unique needs. It

7.2.3 Ability to share data between digital mental health services and existing clinical systems and software

The benefits of electronic health records are clear; it is easier to validate a consumer's medical history, there are financial savings that come from less duplication of diagnostic testing, it allows for secure messaging between clinicians for the secure transfer of medical information, and information is available to support effective delivery of emergency care to consumers. However, to reap the benefits of these records, new platforms, programs and services need to be able to share data with existing health care systems.

There is limited data sharing between digital mental health programs and services and the software operating systems in the broader healthcare sector. Some consumer data is hosted on local platforms instead of on the cloud which presents a barrier to the sharing of data, and variations in practice management software can interrupt opportunities for system interoperability. This is not unique to digital mental health services as barriers to data sharing exist even within the existing health care system. For example, hospitals have Patient Administration Systems (PAS) and Electronic Medical Reports (EMR), while GPs have Practice Management Systems (PMS) and Clinical Information Systems (CIS). This often lends itself to a lack of standardisation in the capture, storage and reporting of data.

The Australian Government Department of Health is working to improve data standardisation with programs like the Commonwealth Scientific and Industrial Research Organisation (CSIRO) Primary Care Quality Project which aims to redesign data fields in the software systems used by GPs, with their input, to support improved data integration and continuity of care for consumers. It is important that existing and new digital mental health services are included in efforts to reduce the complexity of software systems and increase alignment across platforms. This will enable the realisation of the benefits of a single view of a person with lived experience.¹⁴⁸



Insight box 6: Integration of the My Health Record system with other systems

My Health Record, first launched in 2012, is a secure online summary of an individual's health information and is available to all Australians. Healthcare providers authorised by their healthcare organisation can access My Health Record to view and add consumer health information.

When first implemented, the realisation of the benefits of the My Health Record system was slow due to incompatibilities between it and the practice software used by medical specialists. ¹⁴⁹ Some health practitioners noted that after

¹⁴⁴ Australian Government Department of Health (2020), Health Care Homes, Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-care-homes

¹⁴⁵ Australian Government, Department of Health (2020), Health Care Homes, Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-care-homes

¹⁴⁶ Australian Bureau of Statistics (2015), National Health Survey: Mental Health and co-existing physical health conditions, Australia.

¹⁴⁷ Leanne Hall (2020), Why do we need wraparound services in mental health care treatment?

¹⁴⁸ The Sydney Morning Herald (22 December 2019), Australians shun My Health Record with only 9 per cent ever logging in.

¹⁴⁹ Minion, Lynne (2017), GPs and hospitals claim My Health Record is not fit for purpose as alarmingly low usage figures are released.



Insight box 6: Integration of the My Health Record system with other systems

connecting to the system, it was difficult to access and rely on information and preferred the 'existing, well-developed local systems and software to collect and manage consumer medical information'. Others were frustrated by the poor connection (41 per cent) of diagnostic imaging services to the system, noting that all services needed to adopt the system for it to be beneficial.

ADHA, the system operator of the My Health Record system, was able to provide several clinical software vendors with \$40,000 each to integrate their systems with the record and enable simple upload of information. The funding is part of a concerted effort by the ADHA to increase My Health Record use by specialists.¹⁵⁰

7.3 Importance of a data driven approach to enhance supply of services

While there has been a rapid increase in the number of digital mental health services, there is limited monitoring and evaluation of the outcomes of many publicly available interventions. ¹⁵¹ A system-wide outcomes approach would support coordination and enable joint accountability and partnerships in delivering outcomes for consumers. This needs to be supported by a consistent approach to the collection of data on consumer outcomes and experience and provider experience.

There is an opportunity for the Framework to identify the need for a data and evaluation approach to enable more effective monitoring and evaluation of digital mental health services. Such a data-driven evaluation approach would enable:

- An improved understanding of how people access digital mental health services, and by geography and cohort, and support the funding decisions of public and private investors
- An improved understanding of the relationships between social determinants or demographic characteristics and an individual or population group's likelihood of requiring mental health interventions
- An improved understanding of the need to have consistent data collection approaches including metrics that can be collected by digital health providers to enable greater comparability across the sector
- Improvements in data linkage and epidemiological surveillance, particularly for vulnerable and at-risk cohorts to better understand the characteristics of user journeys and interactions with the system
- An understanding, through systems modelling, of which interventions provide the greatest impact for cohorts and populations, to then inform how best to integrate digital support more broadly
- The creation of an evidence base for the efficacy of digital mental health services, the user experience, provider
 experience, security of data systems, and integration with other systems and sectors. This will need to be supported by
 funding to evaluate services, particularly their use for populations who experience additional barriers to access, for
 example, Aboriginal and Torres Strait Islander cohorts
- The identification of opportunities for continuous improvement activities for providers.

¹⁵⁰ Computerworld (4 July 2020), My Health Record operator funds software maker integrations.

¹⁵¹ The Sax Institute (2014), Strategies for adopting and strengthening e-mental health.



Questions for consultation

Workforce

- What are possible financial and non-financial incentives (professional standards, training, monetary incentives) to encourage health practitioners to adopt digital mental health services into "business as usual"?
- Should the digital mental health framework include some standardisation of triage and treatment protocols, treatment and referral pathways used by digital services etc. and which elements would be most useful?
- What and where are the gaps in our existing workforce to support a blended delivery model
 where digital mental health services are used in conjunction with face to face services? E.g. do
 we need more care navigators, peer-support workers etc. and what considerations need to be
 made to support this model?

Lived experience workforce

- What additional supports are needed to upskill the lived experience workforce in the use and delivery of digital mental health services and/or as digital inclusion champions?
- What do people with lived experience need to support their trust, confidence, and ultimately, their uptake and use of digital mental health services?

Integrated service delivery

- How can digital mental health services better integrate into the stepped care framework?
- What opportunities exist to create system interoperability to ensure digital MH services can technologically connect and share information with other IT platforms and software?
- Where do broader more general health and wellbeing applications and programs (e.g. FitBits?)
 fit within the digital mental health services ecosystem and should there be separate governance mechanisms to support these?
- Should parameters be set on the types of data that can be shared between different IT systems/tools and what are some implications, considering the use of shared data for outcomes monitoring and epidemiological surveillance?

Data and evaluation

- How should the digital mental health framework provide guidance for client records, data sharing, consent processes and the use of data?
- Should the Framework include considerations such as epidemiological surveillance, data linkage and system outcomes and in what way?

8 Funding and regulation of digital mental health services

8.1 Current expenditure and sources of funding

8.1.1 Expenditure on mental health services

In Australia, responsibility for funding mental health services is shared between Australian Government, State and Territory governments and private health insurers. The estimated spending on mental health related services in Australia was \$9.9 billion in 2018-19¹⁵². Of this, approximately,

- 34 per cent was funded by Australian Government
- 61 per cent was funded by State and Territory governments, and
- 5 per cent was funded by private health insurance funds and other third-party insurers.

Over the last five years, Australian government funding for mental health-related services has increased by approximately 1 per cent per annum, while State and Territory funding has increased by an annual average rate of 3.2 per cent. ¹⁵³ This is due to increased awareness of mental health and a growing number of people reporting anxiety, depression and mental ill health.

8.1.2 Expenditure on digital mental health services

As described in section 5, in recent years, the Australian government has increased its spend on digital mental health services. However, it is unclear how much of the total mental health expenditure relates to digital mental health services.

8.1.3 Sources of funding for mental health services

Both the Australian Government and State and Territory governments fund and deliver digital mental health services. Table 2 describes government responsibilities for mental health services in Australia. Current models of funding between Australian Government and State and Territory governments impacts on the extent to which services can provide connected mental health care. For example, the Australian Government funds crisis support lines and States and Territories fund emergency and crisis response units, meaning that these services do not have joint accountability to provide a continuous service for the consumer. Arrangements to provide connected care are often network or relationships based.

¹⁵² Australian Institute of Health and Welfare (2020), *Mental health services in Australia*.

¹⁵³ Australian Institute of Health and Welfare (2020), Mental health services in Australia.

Table 2: Overview of roles, responsibilities and agreements for mental health services in Australia

Australian Government	State and territory governments	Shared responsibility or arrangements
 Medicare (subsidised) PBS and Repatriation Pharmaceutical Benefits Scheme (subsidised) Veterans' mental health services under Department of Veterans' Affairs PHNS and PHN Primary Mental Health Care Flexible Funding Pools (funding and quality assurance) Social security payments Other national projects and programs to address national issues (e.g. digital mental health program, Program Assisting 	 Public hospitals (management and administration) Community mental health services (funding) 	National approach for collaborative government efforts: Fifth National Mental Health and Suicide Prevention Plan Additional shared arrangements: Public hospital services (activity-based funding in accordance with National Health Reform Agreement) Australian Health Practitioner Regulation Agency (registration and accreditation) National Disability Insurance Scheme National Housing and Homelessness Agreement

8.1.4 Australian Government funded digital mental health programs

Currently, the Australian Government funds 29 digital mental health services. 154 These services use a range of digital tools and platforms including online information, email, video, webchat, services delivered via telephone, SMS to deliver services to the wider population and to population cohorts with specific characteristics.

8.1.5 Coverage of digital mental health services across the mental health spectrum

The CSA mapped the Australian Government funded digital mental health services across the mental health spectrum as a high-level exercise to understand coverage of existing services across the spectrum, from health promotion to prevention and early intervention, through to assessment, treatment and continuing care. It is noted that these services are directly funded by the Australian Government and do not include services commissioned by PHNs with Australian Government funding or include any digital services funded by states and territories.

This mapping is illustrated in Figure 2 describing the digital mental health providers currently funded by the Australian Government, their offerings and positioning in relation to the mental health spectrum. Appendix A: provides further detail on the funded services.

Based on the mapping, and noting that some services address multiple needs in the patient journey, it is evident that:

- 14 digital mental health services are focused on prevention and/or early intervention
- Three services are focused on continuing care
- · Eight digital mental health services are focused on assessment or treatment
- Three services are focused on health promotion
- Three services are enablers that facilitate the delivery of digital mental health services. These include education and training and provision of information and peer support.

¹⁵⁴ Department of Health (August 2020), Digital Mental Health Services funded by Mental Health Division.

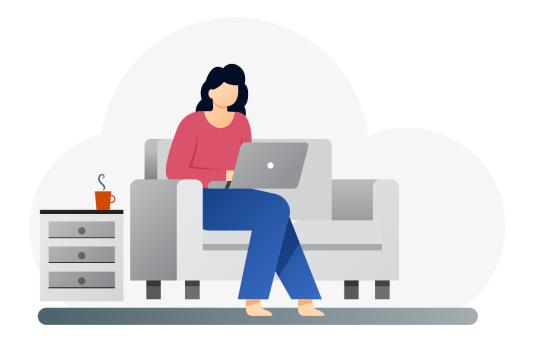


Figure 2: Australian Government funded digital mental health services, mapped across the mental health spectrum

								Mental hea				
Cohort	Cohort (specified)	Organisation	Service name	Service Type	Target Group	Digital service delivery	Prevention	Early Intervention	Assessment or Treatment	Continuing Care	Intervention enablers	Health promotion
Adults	Depression/anxiety	Access Macquarie	MindSpot	Treatment and e-Therapy Services	Adult population - Depression/anxiety	Online support via telephone and online treatment					0	
Adults	Depression/anxiety	Australian National University	e-hub services 1. MoodGym	Treatment and e-Therapy Services (Self Directed)	Adult population - Depression	n, Online learning programs Blue						
Adults	Depression/anxiety	beyondblue Support Service	beyondblue Support Service	Health and Wellness Promotion and Psycho-	Adult population - Depression/anxiety	Online support via website, telephone, email, and web					2	
Youth	Depression	Black Dog Institute:	1. myCompass 2. BITE BACK	Treatment and e-Therapy Serv	Youth myCompass - Depression	Online learning programs						
All Australians	LGBTI/ATSI	Black Rainbow	Black Rainbow website*	Health and Wellness Promotion and Psycho-	LGBTI ATSI population	Black Rainbow website						
Children	Trauma	Blue Knat	Blue Knot	Prevention and Early Intervention (Counselling)	Childhood Trauma Survivors	Online support via website, telephone, email, and web						
All Australians	Eating disorders	Butterfly Foundation	EDHope	Prevention and Early Intervention (Counselling)	All Australians - Eating Disorders	Online support via website, telephone, email, and web		☑				
Youth	Cancer	CanTeen - online platform for young people living with cancer	Canteen	Prevention and Early Intervention (Counselling)	Youth living with cancer	Online support via website, telephone, email, and web						
All Australians	Medical practitioners and students	Doctors Health Services Pty Ltd	Doctors Health Services	Prevention and Early Intervention (Counselling)	Medical practitioners and medical students	Telehealth consultations (phone and video)		2				
Youth	All	eheadspace	eheadspace	Treatment and e-Therapy Services	Youth	Online support via website, telephone, and web chat.		0				0
All Australians	All	Griefline Community and Family Services	Griefline	Prevention and Early Intervention (Counselling)	All Australians	Telephone counselling		₩.				
All Australians	Youth, Veterans, Adults and those at risk of	Innowell Pty Ltd	Synergy	IT system for mental health services	Youth, Veterans, Adults and those at risk of suicide -	Trial Synergy Online System						
All Australians	LGBTI	LGBTI Health Alliance	Qlife	Prevention and Early Intervention (Counselling)	LGBTI	Online support via website, telephone, and web chat.	V	2				
Adults	All	Lifeline	Lifeline Text	Trial	Adults who consent to participate in the trial	Text service						0
All Australians	All	Lifeline	13 11 14 Crisis Service	Crisis intervention and Suicide Prevention	All Australians	Online support via website, telephone, and web chat.						
All Australians	Suicide	Lifeline	Hotspots	Hotspots phone service and project to increase signage at	All Australians - contemplating suicide at	Telephone support		2				₩.
All Australians	Suicide	On the Line	National Suicide Call Back Service	Crisis intervention and Suicide Prevention	All Australians - suicide	Online support via website, telephone, and video/web						
All Australians	Client refered by PHN networks	On the Line	All Hours Support Service	Suicide helpline designed to support the clients of the	All australians - Clients referred for or receiving	Telephone counselling						
All Australians		Perinatal Anxiety & Depression Australia (PANDA)		Recovery and Mutual Support (Peer Support)	All australians - (women and families) Perinatal	Online support via website and telephone				0		0
All Australians	Women and families	Parent-Infant Research Institute (PIRI)	MumSpace	Recovery and Mutual Support	All australians - (women and families) Postnatal	Online information and treatment course	0					
All Australians	Health Professionals	Queensland University Technology - e- Mental Health in Practice	eMHPrac	Health and Wellness Promotion and Psycho-	Health Professionals	Website and online learning					■	₩.
Youth	All	ReachOut Australia	ReachOut.com	Health and Wellness Promotion and Psycho-	Youth	Online support via website and online forums.				0		
All Australians	Bereavement recipients	Red Nose (formerly SIDS & Kids)	Red Nose	Recovery and Mutual Support (Peer Support)	bereavement support for sudden death of baby or	Online support via website and telephone.						
All Australians	Bereavement recipients	Stillbirth and Neonatal Death Support (SANDS)	SANDS	Recovery and Mutual Support (Peer Support)	bereavement support for miscarriage, stillbirth and	Online support via website, telephone, and web chat.	0			2	0	
Adults	All	SANE Australia	Carers and Lived Experienc	Recovery and Mutual	Adult population - all Australians	Online forums						
Adults	Depression/anxiety	St Vincent's Hospital	THISWAY UP	Treatment and e-Therapy Services	Adult population - Depression/anxiety	Online treatment/learning programs					0	
Adults	All	Swinburne University	Mental Health Online	Treatment and e-Therapy Services	Adult population - all Australians	Online information, clinical assessment and treatment						
All Australians	rural and remote	Virtual Psychologist Pty Ltd	Virtual Psychologist	Prevention and Early Intervention (Counselling)	Australians in rural and remote areas	Text service		2				0
Youth	All	YourTown	Kids Helpline	Prevention and Early Intervention (Counselling)	Youth	Online support via website, telephone, email, and web		2				

8.1.6 Coverage of digital mental health services across the stepped care framework

The CSA also mapped the digital mental health providers currently funded by the Australian Government across the stepped care model as a high-level exercise to understand the coverage of services by severity of the mental health challenge. This mapping is illustrated in Figure 3. Appendix A: provides further detail on the funded services.

Based on this mapping it is evident that,

- 22 digital mental health services cater to the at-risk groups in the stepped care framework and people with mild and/or moderate mental illness
- · One service caters to people with severe mental illness
- Of the services that cater to people at risk or with mild to moderate mental illness, five services also cater to the well population, focusing on mental health promotion and provision of information and education (ReachOut, Black Rainbow, Beyond Blue).

8.1.7 Coverage of digital mental health services by population cohort

The CSA identified the availability of digital mental health services by population cohort (see Appendix A:). It is evident that:

- eight services are available to all Australians, regardless of demographics or target group
- · five services cater to youth
- six services target specific illnesses (cancer, eating disorders, anxiety, depression and trauma) and 11 services are
 directed at specific target groups (LGBTI, Aboriginal and Torres Strait Islanders, Medical practitioners, bereavement
 recipients, rural and remote, woman and families, suicide)
- · one service is specific to Aboriginal and Torres Strait Islander people
- · two services are specific to the LGBTI community.

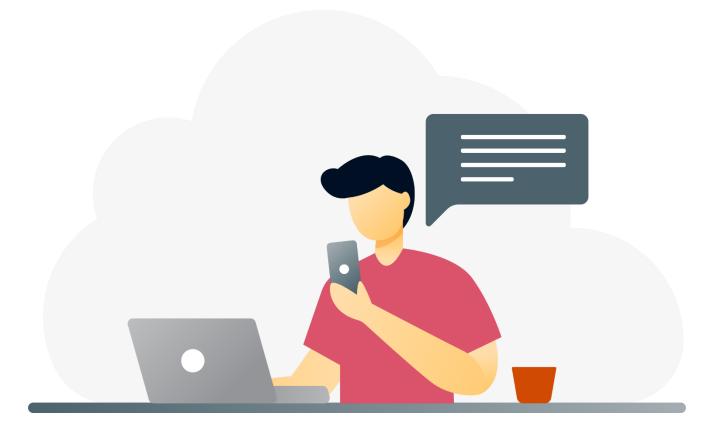


Figure 3: Australian Government funded digital mental health services, mapped across the stepped care model

Cohort	Cohort (specified)	Organisation	Service name	Service Type	Well population	At risk groups	Mild mental illness	Moderate mental illness	Severe mental illness
Adults	Depression/an xiety	Access Macquarie	MindSpot	Treatment and e-Therapy Services (Clinician Supported)		✓	abla		
Adults	Depression/an xiety	Australian National University	e-hub services 1. MoodGym 2. E-Couch 3. Bluepages	Treatment and e-Therapy Services (Self Directed)		✓	✓	0	0
Adults	Depression/an xiety	beyondblue Support Service	beyondblue Support Service	Health and Wellness Promotion and Psycho- Education (Provision of Information and Service Access Point)		✓	✓	☑	
Youth	Depression	Black Dog Institute:	1. myCompass 2. BITE BACK	Treatment and e-Therapy Services (Self Directed)		$ \mathbf{\nabla}$	$\overline{\checkmark}$		
All Australians	LGBTI/ATSI	Black Rainbow	Black Rainbow website*	Health and Wellness Promotion and Psycho- Education (Provision of Information and Service Access Point)		✓			
Children	Trauma	Blue Knot	Blue Knot	Prevention and Early Intervention (Counselling)		✓	✓	✓	
All Australians	Eating disorders	Butterfly Foundation	EDHope	Prevention and Early Intervention (Counselling)		\checkmark	\checkmark	\checkmark	
Youth	Cancer	CanTeen - online platform for young people living with cancer	Canteen	Prevention and Early Intervention (Counselling)		✓	✓	✓	
All Australians	Medical pracititioners and students	Doctors Health Services Pty Ltd	Doctors Health Services	Prevention and Early Intervention (Counselling)		✓	✓	☑	
Youth	All	eheadspace	eheadspace	Treatment and e-Therapy Services (Clinician Supported/Counsellors)		$ \mathbf{Z} $	$\overline{\checkmark}$	$\overline{\mathbf{v}}$	
All Australians	All	Griefline Community and Family Services Inc	Griefline	Prevention and Early Intervention (Counselling)		✓	abla	✓	
All Australians	Veterans,	Innowell Pty Ltd	Synergy	IT system for mental health services		0	0	0	0
All Australians	LGBTI	LGBTI Health Alliance	Qlife	Prevention and Early Intervention (Counselling)		✓	✓	✓	
Adults	All	Lifeline	13 11 14 Crisis Service	Crisis intervention and Suicide Prevention (Counselling)	$\overline{\checkmark}$				
All Australians	All	Lifeline	Hotspots	Hotspots phone service and project to increase signage at identified Hotspots locations and build referral pathways		abla	lacksquare		0
All Australians	Suicide	Lifeline	Lifeline Text	Trial	✓	✓			
All Australians		On the Line	All Hours Support Service	Suicide helpline designed to support the clients of the Primary Health Networks when their allied health provider is not available		✓	lacksquare	☑	0
All Australians	Client refered by PHN networks	On the Line	National Suicide Call Back Service	Crisis intervention and Suicide Prevention (Counselling)		$ \mathbf{\nabla}$	abla	☑	
All Australians	Women and families	Perinatal Anxiety & Depression Australia (PANDA)	PANDA	Recovery and Mutual Support (Peer Support)			abla		
All Australians	Women and families	Parent-Infant Research Institute (PIRI)	MumSpace	Recovery and Mutual Support			$ \checkmark $	☑	
All Australians		Queensland University Technology - e-Mental Health in Practice	еМНРгас	Health and Wellness Promotion and Psycho- Education (Provision of Information and Training)					
Youth	All	ReachOut Australia	ReachOut.com	Health and Wellness Promotion and Psycho- Education (Provision of Information and Peer support)	abla	✓	0	0	0
All Australians	Bereavement recipients	Red Nose (formerly SIDS & Kids)	Red Nose	Recovery and Mutual Support (Peer Support)		✓	abla	 ✓	
All Australians	Bereavement recipients	Stillbirth and Neonatal Death Support (SANDS)	SANDS	Recovery and Mutual Support (Peer Support)		✓	✓	⊘	
Adults	All	SANE Australia	Carers and Lived Experience Forums	Recovery and Mutual Support (Peer Support)	<u>~</u>	✓	✓		
Adults	Depression/an xiety	St Vincent's Hospital	THISWAY UP	Treatment and e-Therapy Services (Clinician Supported)				✓	☑
Adults	All	Swinburne University	Mental Health Online	Treatment and e-Therapy Services (Clinician Supported)		✓	✓		
All Australians	rural and remote	Virtual Psychologist Pty Ltd	Virtual Psychologist	Prevention and Early Intervention (Counselling)		✓	✓	✓	
Youth	All	YourTown	Kids Helpline	Prevention and Early Intervention (Counselling)		✓	$\overline{\vee}$	$ \overline{\mathbf{v}} $	

Source: Department of Health, Digital Mental Health Services funded by Mental Health Division August 2020

8.1.8 Current barriers in Australian Government funding

The following barriers were identified in the CSA and will be considered in the development of the Framework:

- Lack of co-ordinated service delivery by governments: Findings from the National Mental Health Commission's 2014 National Review of Mental Health Programmes and Services (the Review) indicate that mental health services (inclusive of digital mental health services) are delivered within a complex system, with multiple providers being funded by mixed Australian Government and State and Territory funding streams. As outlined in the Review, without improved co-design, planning and communication between all levels of government consumers will not receive connected care across the care continuum. There is opportunity to develop an overarching governance framework to support funding decisions and clarity on roles and responsibilities to minimise inefficiencies, duplication and service gaps in the current state. Set Additionally, there are some limitations in the system in terms of clinical handover. People are often discharged from hospitals to the community without appropriate handover to primary care, which impacts on the ability to provide connected care.
- Challenges in funding integrated services: Achieving integration across the system will need to consider the social determinants that impact mental health. Many people with mental illness interface with other parts of the broader health and other systems due to other life challenges including alcohol and substance abuse, housing, justice, social and welfare, financial services, education, and employment. This requires a cross government approach to funding and services planning. Adding to this complexity is the integration of digital mental health services with face to face services. The strategic plan released by the NSW Mental Health Commission identifies that both online and face to face service models have been developed independently and operate in parallel rather in an integrated way. These complications translate to fewer incentives for providers to integrate service operations to provide care to comorbid mental health consumers (e.g. psychosocial substance abuse, chronic health cancer), or those that are vulnerable or underserviced (CALD, Aboriginal and Torres Strait Islanders, rural and remote cohorts). Service providers often operate in isolation of each other, meaning consumers experience disjointed care and poor user experience. Additionally, the extent to which digital mental health service providers communicate back to referrers in primary care is limited. While this happens with some providers under circumstances where the GP elects to take on a monitoring role, many other providers operate in silos.
- Limited funding for research and evaluation: At present, Australian Government funding is primarily focused on service delivery, with few funding buckets dedicated to research and evaluation of programs. The main investments in research include a \$125 million investment over 10 years from 2018-19 through the Medical Research Future Fund's Million Minds Mental Health Research Mission, which aims to invest in bold and transformative research to support one million people with mental health issues access new and innovative approaches to prevention, diagnosis, treatment and recovery. The national Mental Health Commission is also developing a National Mental Health Research Strategy as part of the Fifth Plan to drive better outcomes across the mental health sector in Australia. Research and evaluation are critical to build trust on the efficacy of digital mental health services amongst consumers, health care practitioners and the broader community. Currently, there is limited research on implementation to better understand how to make digital mental health services work with non-digital services in an integrated way. The University of Sydney Brain and Mind centre, for example, recommends that \$60 million be dedicated to a Mental Health Public Observatory to build evidence base around what works in terms of building data, innovating and setting benchmarks in the digital mental health space.
- Limited funding directed to enabling functions of digital mental health service delivery. Currently, there is limited investment to support enabling functions. These include, training healthcare practitioners, upskilling consumer capability in using digital services, referral interoperability and useability, and building and maintaining on-going relationships with consumers and primacy care providers. This can translate to a less than optimal service and user experience.

¹⁵⁵ NSW Mental Health Commission (2014), *Strategies for adopting and strengthening e-mental health.*

¹⁵⁶ NSW Mental Health Commission (2014), Strategies for adopting and strengthening e-mental health.

¹⁵⁷ Department of Health (2018). Million Minds Mental Health Research. Available at: https://www.health.gov.au/initiatives-and-programs/million-minds-mental-health-research-mission

¹⁵⁸ National Mental Health Commission (2020). National Mental Health Research Strategy. The need for a national strategy. Available at: https://www.mentalhealthcommission.gov.au/mental-health-reform/national-mental-health-research-strategy.

¹⁵⁹ The University of Sydney, Brain and Mind Centre (2020), Mental Health Funding Priorities: Responding to COVID-19 and Building Longer-term Reform.



Questions for consultation

- What alternative system-level funding models should be considered to enable better outcomes?
- Is a blended (multi-modal) care model desirable and what are some ways to better incentivise this approach?
- What mechanisms, if at all, could be considered to incentivise industry to develop digital technology solutions such as apps? What level of guidance is required by industry and developers? How should this be governed?
- Are the National Safety and Quality Digital Mental Health Standards fit for purpose and where could improvements be made?
- What tools, supports and implementation considerations are needed to enhance the digital literacy and inclusion of people with lived experience and health professionals?
- At present few digital mental health services funded by the Australian Government are focused on CALD, LGBTI, Aboriginal and Torres Strait Islanders, and older cohorts – in what way could funding be designed and/or allocated to ensure digital services are available to these target groups?
- What kind of governance for around payment models e.g. user-payment, co-payment and subsidised options should be considered to ensure the quality and safety of digital mental health services available to the public?
- Should additional funding for research and development, and monitoring and evaluation of digital mental health services, partnerships and relationships, warm-referral capacity etc. be built into service contracts? Should anything else be considered?
- What additional governance and/or guidance is needed around selection and implementation of technology, considering interoperability challenges now and into the future?

8.2 The legal and regulatory framework

8.2.1 Existing legal framework

To realise the benefits of digital mental health services, they must be supported by a robust legal and regulatory framework. As with other digital health services and applications, digital mental health services currently operate within an existing legal framework. The key pieces of legislation and their primary purpose in the sector are detailed below.

- Therapeutic Goods Act 1989: The legislation governing therapeutic goods in Australia, including medical devices, is the Therapeutic Goods Act 1989. This Act, which is administered by the Therapeutic Goods Administration (TGA) is supported by the Therapeutic Goods Regulations 1990 and the Therapeutic Goods (Medical Devices) Regulations 2002. The TGA is currently leading the program of work regarding the regulation of software, including software as a medical device that supports the delivery of digital mental health services. This will impact the classification of tools, services and technologies as a 'mental health' service and guide the essential principles for safety and performance.
- **Privacy Act 1988**: The benefits of digital health come through sharing of information which, by necessity, increases the risk to privacy. The Australian Digital Health Agency has reiterated that the aim of digital health is to electronically connect different points of care so that health information can be shared securely.¹⁶⁰ Digital mental health providers operating within the ecosystem must abide by the Australian Privacy Principles as set out in the *Privacy Act 1988*. This Act operates in parallel with relevant State and Territory privacy and health-related privacy legislation to regulate the way in which public and private agencies collect, store, retain, disclose and dispose of personal information, where personal information is defined as *information or an opinion about an identified individual, or an individual who is reasonably identifiable*.¹⁶¹

¹⁶⁰ International Comparative Legal Guides (2020), Australia: Digital Health Laws and Regulations 2020.

¹⁶¹ Privacy Act 1988, s6(1).

- Australian Consumer Law: The Australian Consumer Law (ACL) as set out in Schedule 2 of the Competition and Consumer Act 2010 protects users of digital mental health services by ensuring a minimum standard for the quality and safety of the services provided. It also prohibits digital mental health service providers from making false or misleading misrepresentations about what their service, program or platform can do (regarding functionality of the services and the outcomes for the consumer). Finally, the ACL prohibits providers from including unfair contract terms in any standard form agreement that individual consumers may be required to agree to before they can use the product or service. 162
- Health Practitioner Regulation National Law 2009: The Health Practitioner Regulation National Law 2009 enforces a national registration and accreditation scheme such that only health practitioners who are suitably trained and qualified to practise in a competent and ethical manner are registered. Other objectives of the national registration and accreditation scheme include facilitating the provision of high quality education and training of health practitioners; facilitating access to services provided by health practitioners in accordance with the public interest; enabling the continuous development of a flexible, responsive and sustainable Australian health workforce; and enabling innovation in the education of, and service delivery by, health practitioners. The Health Practitioner Regulation National Laws can be used to support the critical upskilling of the mental health workforce in the delivery of digital mental health services.



Insight box 7: Software as a medical device

The definition of a medical device is given by section 41BD of the Therapeutic Goods Act 1989:164

A medical device is:

- any instrument, apparatus, appliance, material or other article (whether used alone or in combination, and including the software necessary for its proper application) intended, by the person under whose name it is or is to be supplied, to be used for human beings for the purpose of one or more of the following:
- diagnosis, prevention, monitoring, treatment or alleviation of disease;
- diagnosis, monitoring, treatment, alleviation of or compensation for an injury or disability;
- investigation, replacement or modification of the anatomy or of a physiological process;
- control of conception;

and that does not achieve its principal intended action in or on the human body by pharmacological, immunological or metabolic means, but that may be assisted in its function by such means.

In early 2019, the TGA issued a consultation paper which proposed the following reforms to the regulation of software-based medical devices:¹⁶⁵

- · New classification rules for medical device software-based products; and
- Changes to the essential principles for safety and performance of software-based medical devices to improve the clarity of requirements.

The changes to the classification rules for software-based medical devices will result in higher risk products being reclassified at a higher level. This is to ensure such products are subject to appropriate scrutiny and manufacturing standards. The classification rules for software-based medical devices now consider the **harm that could be caused by the provision of incorrect information in carrying out the medical device functions of the software** and determines the level of regulatory oversight it will undergo. This will cover devices intended for: diagnosing and screening for a disease or condition; monitoring the state or progression of a disease, condition, etc; specifying or recommending a treatment; or providing therapy (via provision of information).

¹⁶² Competition and Consumer Act 2010, Schedule 2.

¹⁶³ Health Practitioner Regulation National Law 2009, s3(2).

¹⁶⁴ Therapeutic Goods Act 1989, s41BD.

¹⁶⁵ Australian Government Department of Health Therapeutic Goods Administration (March 2020), Consultation: scope of regulated software-based products.

8.2.2 The developing regulatory framework

National Safety and Quality Digital Mental Health Standards

The Australian Commission on Safety and Quality in Health Care (the Commission) developed the NSQDMH Standards in collaboration with consumers, carers, clinicians, service providers and technical experts. The primary aim of the NSQDMH Standards is to improve the quality of digital mental health service provision and to protect service users from harm. The NSQDMH Standards provide a nationally consistent quality assurance mechanism that tests whether relevant systems are in place to ensure that expected standards of safety and quality are met by digital mental health services. They will complement the existing legal and regulatory framework.

The three standards are:

- Clinical and Technical Governance Standard, which describes the clinical and technical governance, safety and quality systems and the safe environment (including privacy, transparency, security and stability of digital systems) that are required to maintain and improve the reliability, safety and quality of digital mental health care, and improve health outcomes for service users.
- Partnering with Consumers Standard, which describes the systems and strategies to create a person-centred digital mental health system by including service users in shared decision making, to ensure that service users are partners in their own care, and that service users are involved in the development and design of quality digital mental health care.
- Model of Care Standard, which describes the processes for developing and delivering digital mental health services, minimising harm to service users, communicating for safety and recognising and responding to acute deterioration in mental state.

The NSQDMH Standards are written to be applied at the level of the service provider (as opposed to applying to each individual digital service) and may, over time, support a certification process for providers of digital mental health services.



Insight box 8: Use of predictive analytics in mental health

Many Australian organisations are currently collaborating on projects aimed at integrating existing data sets to allow healthcare users, practitioners and researchers to share biopsychosocial and environmental data to identify digital predictors of future affective disorders and psychosis in patients.¹⁶⁸

The Black Dog Institute has taken the lead on one of these projects. Created in partnership with Deakin University, the Instil Digital Phenotyping Platform supports the continuous measurement of behaviour for the purposes of predicting mental health outcomes. The Institute is also currently leading a *Future Proofing* study – a randomised controlled trial of 20,000 Australian teenagers that incorporates digital phenotyping of location, movement, typing and voice. It is expected that this digital phenotyping will, over time, allow for the development of individually targeted prevention interventions. ¹⁶⁹

Over the next decade, as these emerging technologies form part of the day-to-day service delivery ecosystem, the legal and regulatory framework will need to adapt. As data is increasingly used to enable automated decision making, the application of the laws governing digital mental health services will need to be considered further. It is important that the Framework enables this innovation and development.

Mobile Health Applications Assessment Framework

The Australian Digital Health Agency (ADHA) and Queensland Health in collaboration with the Therapeutic Goods Administration, the Australian Commission on Safety and Quality in Health Care, the National Chief Health Information Officers Roundtable and the Australian E-Health Research Centre are currently working to develop a national assessment framework for mobile health applications (mHealth Apps). The overarching purpose of this assessment framework is to promote innovation in health service delivery through increasing the adoption and use of mHealth Apps that are safe and have the potential to improve health outcomes. The objectives include:

¹⁶⁶ Australian Commission on Safety and Quality in Health Care (February 2020), *National Safety and Quality Digital Mental Health Standards:* Consultation draft.

¹⁶⁷ Australian Commission on Safety and Quality in Health Care (February 2020), National Safety and Quality Digital Mental Health Standards: Consultation draft.

¹⁶⁸ SCU online (13 November 2018), Transforming mental health outcomes with analytics.

¹⁶⁹ Black Dog Institute (2020), Using technology to better understand behaviour related to mental ill health.

- To protect the public from harm
- To assist consumers in their selection of credible apps
- To assist health care professionals to make informed choices when recommending or "prescribing" digital applications to their patients
- · To provide vendors with guidance and certainty about what is required when developing mHealth Apps
- Supporting the integration of effective and safe mHealth Apps into clinical workflows.

Once established, this assessment framework will support the development and evaluation of mobile health applications, ensuring that those available are effective and safe for use. Given the relevance, the mHealth Apps work is being informed by the NSQDMH Standards project.

8.2.3 The legal and regulatory barriers

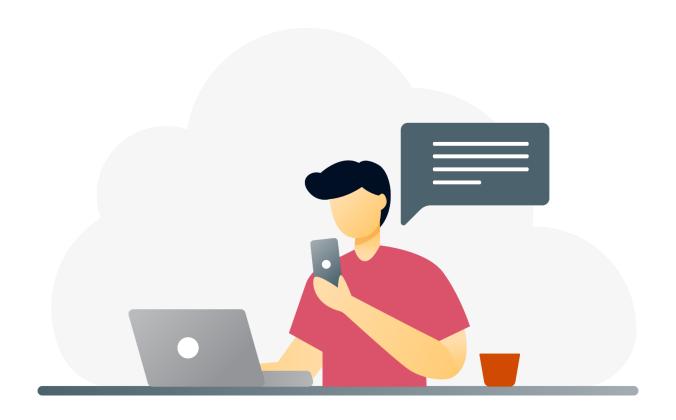
The following legal and regulatory barriers will need to be considered in the development of the Framework:

- There are multiple agencies at the Commonwealth level with responsibility for funding and regulating digital mental health services. Presently, multiple agencies, including the Department of Health, the Australian Digital Health Agency, the Therapeutic Goods Administration, the Australian Commission on Quality and Safety in Health Care, and Primary Health Networks have responsibility for different aspects of digital mental health services. This leads to risk and confusion in the sector as to who is responsible and accountable for the regulation of providers and services, what standards or principles need to be met by services and providers, and where clinical responsibility begins and ends when consumers access care from different, disconnected parts of the healthcare system. The division of responsibility could further result in unnecessary duplication in effort.
- There are no registration or accreditation requirements for health practitioners specific to digital mental health services. Under the Health Practitioner Regulation National Law 2009, all health practitioners providing mental health services will be appropriately trained and qualified to do so. However, as these professionals increasingly deliver these services using a digital medium, there is an opportunity to implement robust modules into education programs to ensure that the workforce is aware of and understands how best to use and integrate digital mental health services into their broader service offering. It is also important that other clinical and non-clinical health care workers undergo some level of training given their role in referring consumers to digital mental health services and providing a continuum of care. The Australian Government Department of Health is currently developing a National Mental Health Workforce Strategy which will address these considerations.



Questions for consultation

- What additional clinical governance and/or processes are required to support an optimum digital mental health ecosystem?
- How can existing qualification programs be adapted to provide health practitioners with the skills and experience required to refer, deliver and integrate digital mental health services into their practice?
- What additional guidance or frameworks do service providers need to operate within this regulatory environment?



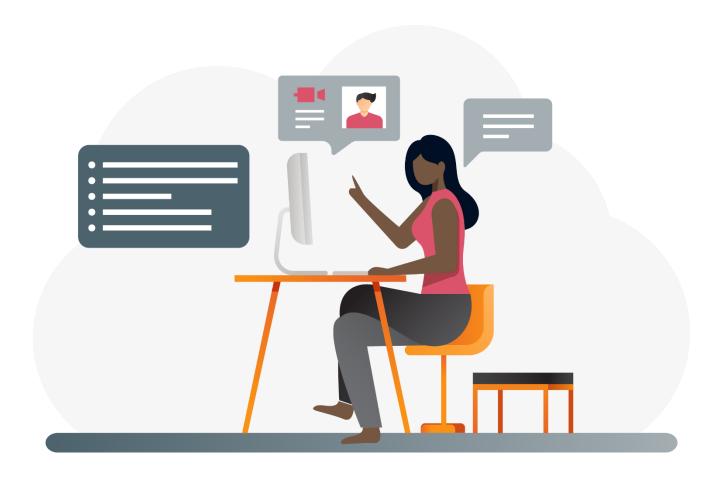
9 Emerging insights

Table 3 describes the opportunities identified through the CSA that will be used to inform the development of the Framework.

Table 3: Summary of emerging opportunities to inform the development of the Framework

Area of assessment	Emerging opportunities
Demand and consumption of services	 The framework can explore opportunities to: Improve integration of the consumer and lived experience perspective in digital mental health service design and delivery to build trust and awareness in the community, and ensure digital services are tailored and person centred. E.g. greater advocacy for peer support roles. Engage digital mental health champions to raise awareness and assist people, particularly in vulnerable cohorts, to navigate the digital mental health system. Explore options to provide suitable access to digital tools and platforms for people who are most likely to experience digital exclusion – e.g. providing a room with internet access in general practice, provision of Data Sims cards or low-cost public internet for those with lack of internet access. Improve equity of access through targeted and enhanced investment into enablers to support access to digital mental health services for vulnerable cohorts and ensuring sufficient broadband infrastructure in rural and remote areas. Improve consumer information by promoting the value of digital mental health services
	through community wide marketing strategies.
Supply of services	 Provide basic training on mental health more broadly to practitioners, particularly those who practice in regional, remote and communities in crisis; and specialised training to raise awareness of and confidence in using digital mental health services with patients that includes options to upskill around trauma informed care and culturally appropriate practice. This would require establishing a consistent education and training program, with locally appropriate and developed re-skilling since one size won't fit all. Develop easy to find (decision support) tools and resources to raise health practitioner awareness and understanding of digital mental health tools and technology. This includes training about tools and technologies to build competency, triage and diagnostic tools to support assessment and referral, and education and training about how blended digital and face to face care models could work. Establish clear digital mental health training, development and certification pathways for non-professional practitioners, that includes peer-support workers, care navigators and lived experience workforce to equip them with the right skills and knowledge to use digital tools and platforms effectively. Establish a clear and consistent approach to digital mental health data collection and evaluation to enable service continuous improvement, assessment of clinical efficacy and value for money. Build evaluation into the budget for digital mental health services and programs to proactively embed the principles of evaluation and measure outcomes.
Funding, regulation and legal context	 The framework can explore opportunities to: Better co-ordinated funding for digital mental health services, highlighting the need for clear roles and responsibilities and alignment of jurisdictional priorities. Review funding options to enable desired system level outcomes including bundled funding for multi-disciplinary and/or blended care models and shared value partnerships.

Review funding of enabling and operational functions that support both digital mental health service delivery and continuity of care, including education, training, awareness and culturally appropriate and trauma informed care to enable appropriate referrals, relationship and partnership development, and research and evaluation to facilitate effective and personcentred service delivery. Enhance funding for integrated service delivery, including the appropriate integration of digital mental health with the broader health sector, interoperability and software systems to securely exchange and use information. Establish a framework which clearly articulates the division of responsibility between Commonwealth entities in relation to the funding and regulating of digital mental health services while ensuring joint accountability.



Appendix A: Australian Government funded digital mental health services

Australian Government funded digital mental health services, mapped across the mental health ecosystem

						Mental health stepped care framework			Mental health spectrum						
Cohort	Cohort (specified)	Organisation	Service name	Service Type	Well population	At risk groups	Mild mental illness	Aoderate mental illness	Severe mental illness	Prevention	Early Intervention	Assessment or Treatment	Continuing Care	Intervention enablers	Health promotion
Adults	Depression/an xiety	Australian National University	e-hub services 1. MoodGym 2. E-Couch 3. Bluepages	Treatment and e-Therapy Services (Self Directed)	0	☑	☑	0	0	0	0	⊵	0	0	0
Youth	Depression	Black Dog Institute:	1. myCompass 2. BITE BACK	Treatment and e-Therapy Services (Self Directed)		\checkmark	\sim					$\overline{\mathbf{z}}$			
Adults	All	Lifeline	13 11 14 Crisis Service	Crisis intervention and Suicide Prevention (Counselling)	✓					✓					
All Australians		On the Line	All Hours Support Service	Suicide helpline designed to support the clients of the Primary Health Networks when their allied health provider is not available		✓	☑	$ \mathbf{Z} $	0	☑		0		0	0
Adults	Depression/an xiety	beyondblue Support Service	beyondblue Support Service	Health and Wellness Promotion and Psycho- Education (Provision of Information and Service Access Point)	Z	✓	abla	~	0					☑	☑
All Australians		Black Rainbow	Black Rainbow website*	Health and Wellness Promotion and Psycho- Education (Provision of Information and Service Access Point)	2	✓	0							☑	☑
Children	Trauma	Blue Knot	Blue Knot	Prevention and Early Intervention (Counselling)		✓	\checkmark	~		✓	✓				
Youth	Cancer	CanTeen - online platform for young people living with cancer		Prevention and Early Intervention (Counselling)		✓	$\overline{\mathbf{v}}$	$\overline{\mathbf{v}}$		abla	\checkmark				
Adults	All	SANE Australia	Carers and Lived Experience Forums	Recovery and Mutual Support (Peer Support)		✓	\leq						☑		
All Australians	Medical practitioners and students	Doctors Health Services Pty Ltd	Doctors Health Services	Prevention and Early Intervention (Counselling)		\checkmark	$ \checkmark $	\sim							
All Australians	Eating disorders	Butterfly Foundation	EDHope	Prevention and Early Intervention (Counselling)		✓	~	\sim		✓	✓				0
Youth	All	eheadspace	cheadspace	Treatment and e-Therapy Services (Clinician Supported/Counsellors)		✓	✓	~				✓			
All Australians		Queensland University Technology - e-Mental Health in Practice	eMHPrac	Health and Wellness Promotion and Psycho- Education (Provision of Information and Training)		0	0	0	0	0	0	0	0	☑	⊠
All Australians	All	Griefline Community and Family Services Inc	Griefline	Prevention and Early Intervention (Counselling)		✓		$\overline{\mathbf{z}}$		abla					
All Australians		Lifeline	Hotspots	Hotspots phone service and project to increase signage at identified Hotspots locations and build referral pathways		✓		$ \mathbf{\nabla}$	0	0	✓	✓		0	
Youth	All	YourTown	Kids Helpline	Prevention and Early Intervention (Counselling)		~	$ \mathbf{Z} $	\sim		\leq	✓				
All Australians	Suicide	Lifeline	Lifeline Text	Trial	~	~				$\overline{\mathbf{v}}$					
Adults	All	Swinburne University	Mental Health Online	Treatment and e-Therapy Services (Clinician Supported)		$\overline{\mathbf{v}}$	$ \mathbf{Z} $					☑			
Adults	Depression/an xicty	Access Macquarie	MindSpot	Treatment and e-Therapy Services (Clinician Supported)		✓	$\overline{\mathbf{z}}$	$\overline{\mathbf{z}}$				$ \mathbf{Z} $			
All Australians	Women and families	Parent-Infant Research Institute (PIRI)	MumSpace	Recovery and Mutual Support			abla	$\overline{\mathbf{z}}$							
All Australians	Client refered by PHN networks	On the Line	National Suicide Call Back Service	Crisis intervention and Suicide Prevention (Counselling)		✓	$ \mathbf{Z} $	$ \mathbf{Z} $		☑					0
All Australians	Women and families	Perinatal Anxiety & Depression Australia (PANDA)	PANDA	Recovery and Mutual Support (Peer Support)			$ \mathbf{v} $	\sim							
All Australians	LGBTI	LGBTI Health Alliance	Qlife	Prevention and Early Intervention (Counselling)		\sim	$\overline{\mathbf{v}}$	\sim		~	✓				
Youth	All	ReachOut Australia	ReachOut.com	Health and Wellness Promotion and Psycho- Education (Provision of Information and Peer support)	✓	✓	0	0	0	☑	✓	0	0	0	0
All Australians	Bereavement recipients	Red Nose (formerly SIDS & Kids)	Red Nose	Recovery and Mutual Support (Peer Support)		✓	✓	\sim					☑		
All Australians	Bereavement recipients	Stillbirth and Neonatal Death Support (SANDS)	SANDS	Recovery and Mutual Support (Peer Support)		~	<	\sim					⊘		
All Australians	Veterans, Adults and those at risk of suicide	Innowell Pty Ltd	Synergy	IT system for mental health services	0	0	0	0	0	0	0		0	2	0
Adults	Depression/an xiety	St Vincent's Hospital	THISWAY UP	Treatment and e-Therapy Services (Clinician Supported)				$\overline{\mathbf{z}}$	☑			☑			
All Australians	rural and remote	Virtual Psychologist Pty Ltd	Virtual Psychologist	Prevention and Early Intervention (Counselling)		✓	abla	∠		☑	☑				



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