Modelling mental health service needs of Aboriginal and Torres Strait Islander peoples: a review of existing evidence and expert consensus

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Abstract

Objective: To identify key mental health service components required for Aboriginal and Torres Strait Islander peoples and develop proposed modelling to modify the National Mental Health Service Planning Framework to account for the unique needs of these populations.

Methods: Service areas and corresponding modelling rules were informed by a review and analysis of literature and data (on existing service models and policy directions) and expert group discussions on the important aspects of mental health care for Aboriginal and Torres Strait Islander peoples.

Results: Eight key service areas were identified and translated into proposed modelling rules for service planning: culturally appropriate assessment; increased care coordination; more family and carer involvement and support; specified workforce; holistic primary care teams; enhanced staffing for inpatient care; integrating culture; and earlier support for behavioural and psychological symptoms of dementia.

Conclusions: This study provides a consolidated framework and implementation guidance to support more effective mental health service planning for Aboriginal and Torres Strait Islander peoples.

Implications for public health: Better supporting planners to make informed decisions regarding mental health service provision for Aboriginal and Torres Strait Islander peoples will assist in a nationally coordinated approach to closing the mental health gap between Indigenous and non-Indigenous peoples.

Key words: Aboriginal and Torres Strait Islander, mental health, service planning, NMHSPF, mental illness, health services, service models, Indigenous, Australia, First Nations, social and emotional wellbeing

First Nations peoples have a rich diversity of cultures, religions, traditions, languages and histories, having lived in harmony with the land and passed down cultural values and traditions for an estimated 65,000 years or more.[1,2] Despite the lasting resilience of indigenous cultures, the devastating impacts of colonisation have resulted in indigenous populations having a disproportionately high burden of mental illness compared to non-indigenous populations.[3] In Australia, Aboriginal and Torres Strait Islander peoples (hereafter, respectfully referred to as Indigenous) currently have poorer outcomes, including significantly higher rates of suicide,[4] and more than double the rate of hospitalisation for mental and substance use disorders[4] than non-Indigenous Australians. Underpinning these outcomes are an array of systemic and institutional factors, such as social exclusion, cultural dislocation, rapid urbanisation, socio-political disempowerment, disadvantage and marginalisation due to displacement, discrimination, forced removal and racism.[5-11]

In addition to these factors, numerous barriers to accessing appropriate mental health services exist. These include direct barriers (e.g. treatment costs), indirect barriers (e.g. transport) and opportunity costs (e.g. lost wages and time away from family).[12] For Indigenous people living in rural and remote areas, access to and delivery of mental health care are also impacted by limited resources and service availability.[13,14] Furthermore, differences in worldview, conceptions of mental health and illness, and associated stigma may also act as barriers to accessing services.[5-9,14-16] A lack of extensive cultural training for non-Indigenous practitioners, a lack of culturally appropriate assessment tools, and the tendency to stigmatise Indigenous clients have led to many organisations' inability to provide safe, empowering and trustworthy care, discouraging individuals from accessing mental health services.[5-7,14-17]

Despite these barriers, Indigenous communities and individuals have numerous strengths that have the potential to improve health outcomes. Incorporating the extensive relationship with land and family, approaching mental health holistically, and

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involving cultural consultants and Indigenous mental health workers have been identified as key to increasing service utilisation rates.[18,19] In order to reduce the disparities in Indigenous and non-Indigenous mental health outcomes, the mental health service system must draw on these strengths and cater to the specific mental health service needs of Indigenous people.

Policy development to guide Australia's national reform and enhancement of mental health services for Indigenous people has been occurring for over two decades (see Table 1). Initially, this work was distinct from mainstream mental health policy and planning. However, over time, Indigenous mental health and suicide prevention priorities have become firmly integrated into the national agenda. A key priority in Australia's most recent National Mental Health and Suicide Prevention Plan[20] (the Fifth Plan) is to improve mental health outcomes for Indigenous people. Strategies to address this include strengthening cultural competence and safety in mainstream clinical services, incorporating healing practices and whole-of-person wellbeing into recovery, and building Indigenous workforce capacity.

The National Strategic Framework for Aboriginal and Torres Strait Islander Peoples' Mental Health and Social and Emotional Wellbeing 2017-2023[21] (the Strategic Framework) is another key Australian policy guiding the improvement of the mental health and wellbeing of Indigenous peoples. This document builds on the Fifth Plan[20] and aligns with the vision of the National Aboriginal and Torres Strait Islander Health Plan 2013-2023.[22] It provides a comprehensive and culturally appropriate stepped-care model that is applicable to both mainstream health services and Indigenous-specific health services. The Strategic Framework is based on nine principles (see Table 1), which set the scope and intent of the ongoing reform agenda for Indigenous mental health and social and emotional wellbeing, and contextualise the holistic understanding of health held by Indigenous peoples.

Despite existing recommendations to improve Indigenous mental health services in national plans and policies, inequitable access for Indigenous and non-indigenous peoples remains. To improve provision, it is important that these high-level recommendations be translated into tangible guidance that can inform service planning and resource allocation. This is particularly relevant given the complexity of the Australian health system, where multiple levels of government (i.e. national, jurisdictional (state and territory), Primary Health Network (PHN) and Local Hospital Network (LHN)) share responsibility for planning, management and funding.[23,24] These stakeholders must act in a coordinated way to ensure the full spectrum of mental health services, appropriate for Indigenous peoples, is provided.

The National Mental Health Service Planning Framework (NMHSPF) is an Australian model designed to help plan, coordinate and resource the mental health services required to meet population needs.[24] It is endorsed in the Fifth Plan and is being used by jurisdictions, LHNs and PHNs to undertake evidence-informed and coordinated regional mental health service planning. However, the NMHSPF was based on a national average model (hereafter referred to as 'base model') and does not account for any variations likely to arise from factors such as rurality, sociodemographic variability (except age) or specific mental health needs of diverse populations.

This study aimed to identify the mental health service requirements of Indigenous peoples (key service areas) and develop proposed modelling rules to tailor components of the NMHSPF (such as service types and workforce types) to account for these unique needs.

Methods

This study focussed on the mental health service requirements for individuals experiencing mental health problems or mental illness. The focus of the NMHSPF is services that are typically funded by the mental health system, and as such, some social and emotional wellbeing services were out of scope. This included population-based mental health promotion and mental illness prevention services. Services that may be required by individuals with mental illness provided by general health and social care systems (e.g. drug and alcohol services, public housing and income support) were also excluded.

An iterative process of data gathering was followed to ensure the combination of best available evidence and expert consensus was used to inform the modelling rules (Figure 1). This included a scoping literature review, a series of expert panel meetings, data requests, data synthesis, and additional stakeholder consultation. This method is consistent with the general NMHSPF modelling approach to date.[24] This research adheres to the consolidated criteria for strengthening reporting of health research involving indigenous peoples: the CONSIDER statement,[25] see appendix 1; it was also approved by The University of Queensland Office of Research Ethics (clearance no. 2020001878).

1. Expert panel selection

The Aboriginal and Torres Strait Islander Peoples Expert Panel (hereafter referred to as Expert Panel) was established to guide and inform the study. A range of experts with extensive experience in providing or planning mental health services or direct lived experience were approached; if these representatives could not participate, they were asked to suggest alternative representatives. Despite approaching a range of potential representatives, we were unable to identify individuals who were available to represent Torres Strait Islander peoples or urban Indigenous populations by study commencement. Alternative mechanisms were employed to gather specific input regarding the service needs of these populations (see Additional consultation).

2. Scoping literature review

A scoping review was conducted in March 2018 of published literature (inclusive of journal articles, grey literature reports, policy documents and relevant websites) relating to the mental health of Indigenous populations; service needs and models of care; and other issues impacting the delivery of mental health services to Indigenous people. Search terms included: 'Aboriginal' or 'Torres Strait Islander' or 'Indigenous' and 'mental health' or 'mental illness' and 'service models' or 'health services'. Results were screened by title and abstract, then full text; sources that provided details on Indigenous mental health service models or policy directions were included. Snowballing[26] was used to identify additional publications. Key themes from included sources were collated and summarised into a discussion document for the Expert Panel.

3. Expert Panel meetings

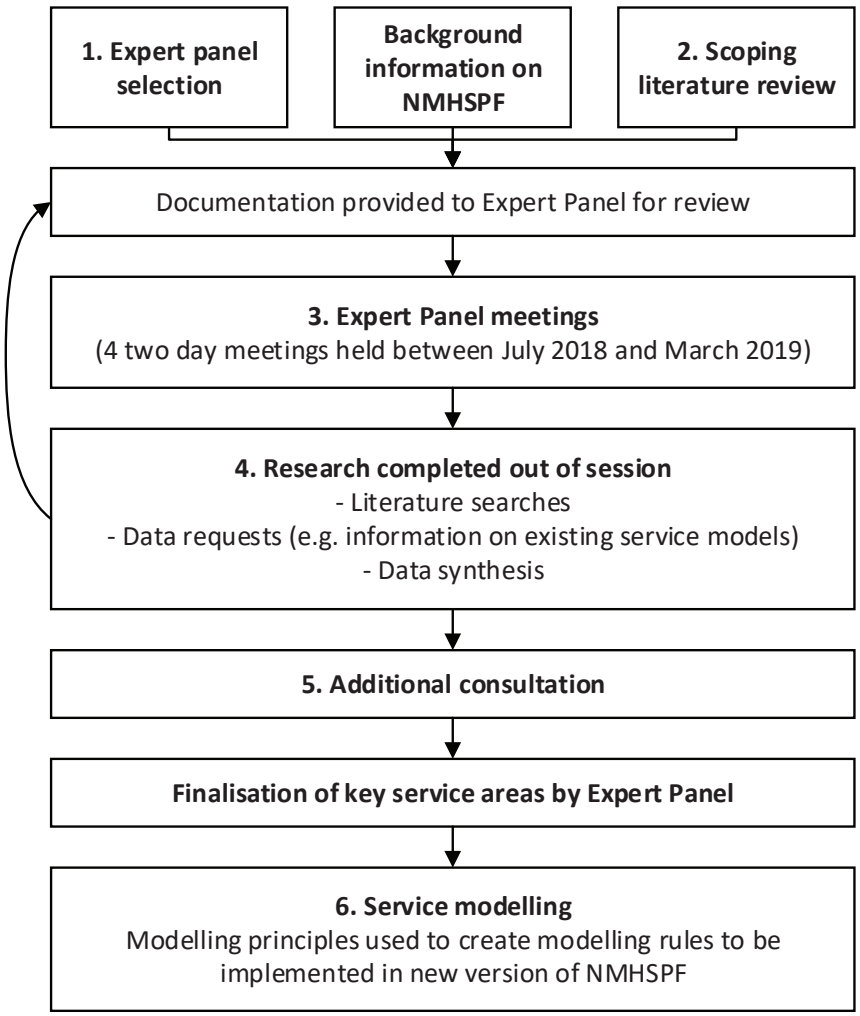
Four two-day face-to-face Expert Panel meetings were held between July 2018 and March 2019. Background information on

the NMHSPF model and purpose, and the discussion document, were disseminated prior to the first meeting. These were used to prompt and inform discussions on the scope of the work and key service areas to consider when planning mental health services for Indigenous people. Minutes from each meeting were thematically analysed to initially identify and subsequently consolidate information on key service areas. These key service areas were translated into implementable rules for the modelling tool to better meet the needs of Indigenous people with guidance from the panel. In principle, modelling rules sought to quantify the key service areas into implementable rules based on Expert Panel experience, expertise and data. At each meeting the Expert Panel was presented a range of targeted questions and modelling options for how proposed service enhancements could be applied within the existing NMHSPF model structure. These were discussed, and where panel members believed additional research was required, further work was undertaken out of session and presented at the following Expert Panel meeting.

Table 1: Selected documents related to the mental health and wellbeing of Indigenous people, current policies are shaded.

Policy document	Key strategies for Indigenous mental health
National Mental Health Plan 1992-1997[34]	First national agenda for mental health reform. No specific focus on Indigenous populations, but did acknowledge the recommendations of the National Aboriginal Health Strategy.
1995 Ways Forward Report[35]	First national analysis of Indigenous mental health and social and emotional wellbeing. Supported strengths-based, culturally appropriate, community led primary mental health and social and emotional wellbeing services and programs.
Second National Mental Health Plan 1998-2003[36]	Key strategy: identification and introduction of service initiatives for improving Indigenous mental health. Key outcome: improved emotional and social wellbeing for Indigenous populations.
National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003-2013[37]	Builds on 1989 National Aboriginal Health Strategy. Overarching goal: "To ensure that Aboriginal and Torres Strait Islander peoples enjoy a healthy life equal to that of the general population that is enriched by a strong living culture, dignity and justice".
Third National Mental Health Plan 2003-2008[38]	Outcome 16: improved access to services for Indigenous people. Focus on social and emotional wellbeing, partnerships, access, and to include Indigenous people in mental health policy-making and planning.
National Strategic Framework for Aboriginal and Torres Strait Islander Peoples' Mental Health and Social and Emotional Wellbeing 2004-2009[39]	Continued efforts to implement Ways Forward Report. Complimented the National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003-2013.
Fourth National Mental Health Plan 2009-2014[40]	Lead the development of coordinated actions to implement a renewed Indigenous social and emotional wellbeing framework. Mainstream services need to be culturally proficient so that Indigenous people feel confident to seek assistance when required.
National Aboriginal and Torres Strait Islander Suicide Prevention Strategy -May 2013[41]	Recognised that suicide rates were approximately two times higher in Indigenous populations than non-Indigenous. Early intervention focus working to build strong communities through more community-focused and integrated approaches to suicide prevention.
National Aboriginal and Torres Strait Islander Peoples' Drug Strategy 2014-2019[42]	Recognition that Indigenous people experience a disproportionate amount of harms from alcohol and other drug use. Recognises historical impacts on current issues and seeks to identify and maximise community strengths as a basis for action in the future.
Solutions That Work: What the Evidence and our People Tell us[43]	Indigenous Suicide Prevention Evaluation Project Report. Summarises the evidence base for what works in Indigenous community-led suicide prevention.
National Aboriginal and Torres Strait Islander Health Plan 2013-2023[22]	Overarching goal: targeted, evidence-based action that will contribute to achieving equality of health status and life expectancy between Indigenous and non-Indigenous Australians by 2031.
Gayaa Dhuwi (Proud Spirit) Declaration 2015[44]	Declaration on Indigenous leadership across all parts of the mental health system to achieve the highest attainable standard of mental health and suicide prevention outcomes for Indigenous peoples. A companion document to the Whareratā Declaration for use by Indigenous Australians.
Cultural Respect Framework for Aboriginal and Torres Strait Islander Health 2016-2026[45]	A framework designed to support the corporate health governance, organisational management and delivery of the Australian health system to further embed safe, accessible and culturally responsive services.
Fifth National Mental Health and Suicide Prevention Plan 2017-2022[20]	Priority area 4: Improving Indigenous mental health and suicide prevention.
National Strategic Framework for Aboriginal and Torres Strait Islander Peoples' Mental Health and Social and Emotional Wellbeing 2017-2023[30]	Intended to guide and inform Indigenous mental health and wellbeing reforms - provides a framework for action. Nine principles: 1. Indigenous health is viewed in a holistic way, encompassing mental health and physical, cultural and spiritual health. When the harmony of these interrelations is disrupted, ill health will persist. 2. Self-determination in provision of services is key. 3. Culturally valid understandings must shape services, assessment and treatment of both general health problems and, in particular, mental health problems. 4. The generational effects of trauma and loss, arising from the European invasion, have a direct outcome on cultural wellbeing. The magnitude of these effects has led to continued issues and has inter-generational effects. 5. The human rights of Indigenous Australians must be recognised and respected. 6. Racism, stigma, environmental adversity and social disadvantage all contribute to ongoing stressors that have negative impacts on Indigenous people's mental health and wellbeing. 7. The importance of kinship, relationships and connections must be recognised, along with broader concepts of family and bonds of reciprocal affection, responsibility and sharing. 8. Diversity in cultural practices, values and beliefs must be acknowledged. Indigenous Australians are an extremely diverse group of people, who may reside in urban, rural or remote settings, in traditional or other lifestyles (and often move between these locations and ways of living). 9. It must be recognised that Indigenous Australians have great strengths, creativity and endurance, along with a deep understanding of the relationships between humans and their environment.

Figure 1: Method to develop key service areas and modelling principles.



4. Research completed out of session

Following each meeting, the research team undertook additional research as suggested by the Expert Panel. This included: searching for existing models or policies to inform modelling rules (e.g. funding/planning models on the use of traditional healers or 'ngangkari' throughout Australia); defining new workforce types (e.g. Indigenous mental health worker); and liaising with service providers to obtain existing service models. Searches were guided by expert advice on which organisations to approach for information. The outputs of this work were then synthesised and prepared as briefing papers for review and discussion by the Expert Panel.

5. Additional consultation

Additional consultation was conducted to gain input from stakeholders who were not represented within the Expert Panel (i.e. Torres Strait Islander peoples and urban service providers). Fifteen additional stakeholders were identified through discussions with the Expert Panel. The research team prepared a discussion paper outlining the key service areas emerging from the first three panel meetings and the proposed modelling rules. The discussion paper and background information on the NMHSPF was emailed to the stakeholders and they were invited to provide comment on the suitability of these proposed enhancements for their respective populations. The research team also requested feedback on any other issues stakeholders believed should be addressed in a national planning model. Feedback was provided in person at informal meetings or via email. Input obtained from this additional consultation was provided to the Expert Panel for discussion at the final panel meeting.

6. Modelling rules

The advice provided by the Expert Panel and through additional consultation was used to develop proposed rules to enhance the base NMHSPF model to address the specific requirements of Indigenous people. Where necessary, new workforce types, components of service delivery and staffing mixes for different services were defined to ensure proposed enhancements met objectives identified by the panel.

Results

Expert consultation

The Expert Panel included nine members with backgrounds in delivering mental health care to Indigenous peoples, including service providers from Aboriginal Community Controlled Health Services (ACCHS), public mental health services and a mental health advocate. Eight Expert Panel members identified as Aboriginal.

Additional stakeholders consulted included four representatives from an urban Indigenous mental health service and two Torres Strait Islander representatives. The research team met with these stakeholders for face-to-face meetings in February 2019. A further nine Torres Strait Islander representatives were approached and sent the proposed modelling via email; one expert provided feedback.

Key service areas and modelling rules

Several key service areas were identified as needing enhancement to better represent Indigenous population needs. Two key principles, resulting from iterative panel discussions, underpinned these modelling rules:

- Modelling rules aimed to model what a good service would require, rather than making up for existing gaps in service availability.
- Indigenous people will require the interventions in the base NMHSPF, plus the new modelling rules. There should be no deductions made from the interventions and resource requirements in the base NMHSPF model.

Table 2 summarises key service areas and proposed modelling rules informed by existing service models, literature and expert consultation.

Table 2: Summary of key service areas, supporting evidence and proposed NMHSPF modelling rules.

Key service areas	Evidence		Proposed modelling rules for Aboriginal and Torres Strait Islander planning model
	Expert Panel consensus	Existing models/Literature	
Mental health assessment	Assessment requires understanding of the cultural context of the individual and behaviour. When engaging with Indigenous clients there may be cultural and language barriers as well. Clinicians require adequate time to develop trust and rapport, along with a thorough understanding of local people, relationships and community to provide a culturally appropriate service to the individual. This requires substantially more time.	MBS health assessment items for Aboriginal and Torres Strait Islander peoples (MBS item no. 715)[46] are longer in duration and may be more frequent (every 9 months vs. 12 months) compared to a standard health assessment (MBS item no. 703).[47] Culturally appropriate assessment can significantly enhance the capacity to make accurate diagnostic decisions regarding service needs, subsequently improving overall care.[48]	In the NMHSPF, assessment is either modelled as being provided by individual practitioners or included within team functions. • Increase the duration of assessments by 15 minutes and the frequency of contact by 1.25. • Model half of all primary mental health care assessments as provided by Indigenous primary care teams. • When assessments are provided by teams, increase resourcing for these teams by 30%. Allocate additional FTE staff to an Indigenous specialist team (tertiary and vocationally qualified positions in this team are Indigenous-specified roles).
Care coordination and liaison	Care coordination is a key component of providing culturally appropriate care for Indigenous people. There is an increased need to actively engage with family and community in all aspects of care and coordinate services across multiple agencies to provide comprehensive treatment responses for individuals with potentially complex health and social issues.	Indigenous people currently have higher rates of physical illness, chronic disease, injury and substance use; higher rates of disability than the Australian average; and higher rates of social disadvantage and engagement with agencies such as child protection or the justice system.[49] To combat these disadvantages, a whole of community approach to healthcare should be employed to draw on existing strengths to improve mental health outcomes.[18,19] Culturally valid understandings must shape services, assessment and treatment.[30]	• Double existing resource allocation for care coordination and liaison and allocate additional FTE staff to Indigenous specified roles. • Add additional resourcing for care coordination and liaison where it was not previously modelled.
Family and carer support	The significant role of family and community must be recognised in all aspects of care.	Family functioning has been found to have strong associations with the family and wider community's social, economic and psychological environment.[50] The importance of kinship, relationships and connections must be recognised, along with broader concepts of family and bonds of reciprocal affection, responsibility and sharing.[29]	Two enhancements were conceptualised to increase capacity for services to involve carers, families and community in care. • Increases to care coordination and liaison (see above). • Double existing resourcing for interventions that target the needs of the family through family and carer support. Add additional resourcing for these interventions where it was not previously modelled.
Aboriginal and Torres Strait Islander workforce	Indigenous workers should be available in all services. Ideally defining workforce targets would not be necessary, however in the context of current low rates of representation of Indigenous people in the health workforce, specifying a workforce target is necessary to provide a standard against which to measure progress and drive sustained workforce development.	Indigenous health practitioners and health workers play an important role in providing culturally competent care to Aboriginal and Torres Strait Islander people.[27] Existing targets: one Aboriginal and/or Torres Strait Islander practitioner per 400 Indigenous population identified in the Ways Forward Report[35] as a goal across all sectors; one Aboriginal mental health worker per 1000 Indigenous population within the NSW public mental health sector.[51]	• Incorporate specified Aboriginal and/or Torres Strait Islander roles in the NMHSPF: Indigenous clinician (tertiary qualified), Indigenous worker (vocationally qualified), Indigenous peer worker (consumer and carer). In testing, enhancements were modelled based on conceptualisations of what staffing mixes were required in each service (see other enhancements below). The validity of aggregate staff outputs were then tested against a target of 1 per 500 – 1000 Aboriginal and Torres Strait Islander population.
Enhancement to primary care teams	It was identified that ACCHS[52] provide culturally appropriate care, and have flexible staffing and funding arrangements which provide the capacity to provide a holistic, comprehensive primary care approach.	ACCHS models include access to Indigenous mental health workers and peer workers who are not usually funded or available under mainstream primary care services. ACCHS are considered leaders in Aboriginal primary health care.[53] Studies have found ACCHS to be 23% better at attracting and retaining Aboriginal clients than mainstream service providers.[52] ACCHS work with communities to encourage participation in health checks and screening services; provide early advice on health issues and treatment options; and identify and facilitate access to care for those with mental health problems.[52] Self-determination in provision of services is key.[29]	Within the NMHSPF, people with mild and moderate mental health problems are modelled as receiving services within standard primary health services settings. • Development of a new Indigenous primary care team to include Indigenous specified tertiary qualified, vocationally qualified and peer workers based on an existing ACCHS model. • Replace 50% of existing items to be delivered by GP and tertiary qualified staff in primary care settings with the new Indigenous primary care team.
Inpatient care	Indigenous workforce should be available in all services. The panel advised that inpatient services should be enhanced with additional Indigenous workforce, along with culturally relevant in-reach to improve consumer recovery.	Indigenous people have significantly higher rates of admission to inpatient treatment than non-Indigenous Australians, with 140.9 separations from overnight admitted patient specialised mental health care per 10,000 Indigenous population compared to 64.3 for non-Indigenous Australians in 2018-19.[54] Data on patterns of utilisation of inpatient care in WA show evidence of reduced episodes of care and lengths of stay for Aboriginal people since the introduction of the Specialised Aboriginal Mental Health Service, which provides in-reach cultural support to Aboriginal people admitted to public inpatient care.[55]	• Add one Indigenous-specific FTE staff member (50% tertiary qualified, 50% vocationally qualified) per 1500 bed days occupied by an Indigenous person.

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Table 2 cont.: Summary of key service areas, supporting evidence and proposed NMHSPF modelling rules.

Key service areas	Evidence		Proposed modelling rules for Aboriginal and Torres Strait Islander planning model
	Expert Panel consensus	Existing models/Literature	
Recognising cultural practices and perspectives	In providing culturally appropriate care, mental health service systems should recognise and respect cultural perspectives on mental illness and incorporate access to traditional cultural practices that support understanding of spiritual aspects of mental illness and social and emotional wellbeing. Traditional healers and elders are key members of Indigenous communities recognised as having knowledge and expertise in applying traditional practices. Whilst many practitioners are currently offering their services for free there should be resourcing available to ensure they are supported and paid.	The WA Mental Health Act[56] recognises the role of elders and traditional healers and provides for their inclusion in processes of assessment and treatment of people with mental illness. The Productivity Commission[28] recommended the Australian Government should evaluate best practices for how partnerships between traditional healers and mainstream mental health services can best support Indigenous people and facilitate recovery in their community.	• Development of a new service component for cultural consultation. This can be modelled as a fee per session service, which includes travel time. • Allocate this new cultural consultation component at a rate of approximately 140 consultations per 100,000 Indigenous population, based on 2018 rates of utilisation of traditional healers by public sector mental health services in one Australian jurisdiction.
People with behavioural and psychological problems associated with dementia	Indigenous communities need adequate resourcing for dementia services.	There is evidence of higher rates of dementia at younger ages for Indigenous people, compared to non-Indigenous Australians.[57]	Extend the age range used in estimating demand levels for services for people with behavioural and psychological problems associated with dementia and calculate resources based on a population lower age threshold of 55 years instead of 65 years as used in the non-Indigenous model.

Notes:
MBS: Medicare Benefits Schedule; NMHSPF: National Mental Health Service Planning Framework; FTE: full-time equivalent; ACCHS: Aboriginal Community Controlled Health Services; NSW: New South Wales; WA: Western Australia

Guidance for implementation

Alongside proposed modelling changes, the Expert Panel provided advice on additional considerations for implementing the proposed service reforms, including cultural awareness, workforce considerations and kinship relations.

Firstly, cultural awareness and understanding of local community beliefs and customs should be a core competency of all staff and a requirement for culturally appropriate treatment by mental health services. The recent Australian Government Productivity Commission inquiry into mental health recommended training of all clinicians to include understandings of how people's cultural background affects the way they describe their mental health and correspondingly their preferences for treatment.[27]

Secondly, the availability of Indigenous-specified staff within mental health services is critically important in improving access and cultural safety for Indigenous people, facilitating community engagement and fulfilling roles that require specific cultural knowledge. The Expert Panel advocated strongly for the inclusion of an Indigenous-specific workforce in mental health services (see Table 2). However, two caveats were identified: (1) there must be capacity for individual consumer choice as not all people may choose to utilise these positions; and (2) while the availability of Indigenous health workers has been shown to improve health service access and outcomes,[27] these are not the only staff who are responsible for providing care to an Indigenous person. It was also recommended that Indigenous specified positions are core team members (replacing non-Indigenous workers where appropriate) rather than being additional to team structures.

While the value of lived experience is increasingly being recognised in mental health services, the panel noted that hierarchies have developed within the peer workforce which focus on formal qualifications and act as a barrier to the participation of Indigenous peer workers. As this is an emerging workforce type, it was recommended that a broader understanding of lived experience be applied when hiring Indigenous peer workers, valuing the specific experience of mental health problems within the context of local cultural beliefs and practices, rather than formal qualifications.

Although an Indigenous medical worker (a medically trained professional who would provide mental health care e.g. general practitioner or psychiatrist, who identifies as Indigenous) specified role has not been proposed, the panel noted that Indigenous practitioners should be available at all levels to ensure culturally appropriate care. The medical worker role was not specified because the workforce is still emerging, and proportionally there would not be many specified roles in particular regions. This is an area that was recommended to be revisited more explicitly as the workforce develops.

Thirdly, the Expert Panel advised that individualised approaches to mental health treatment are inappropriate for Indigenous people and emphasis must be placed on understanding the individual and illness in the context of family and community culture, relationships and responsibilities. Indigenous kinship relations comprise a complex and dynamic system that is not aligned with typical non-Indigenous definitions of family.[28] It is common to have a collective community focus on child-rearing, and for households to be complex and fluid in their composition.[28] Because of this, Indigenous people have particular needs regarding family involvement in care. Active engagement of families should be a core component of all aspects of treatment. For people with severe disorders, engagement with family is often a key mechanism for arranging appropriate care. Family involvement is especially important in contexts where involuntary treatment or detention in secure environments is required.

Discussion

This study has resulted in a consolidated list of eight key service areas and corresponding proposed modelling rules which may be implemented in a new version of the NMHSPF to improve mental health service planning for Indigenous peoples. Although similar lists of key areas have been developed previously,[29] this study expands on that knowledge base by translating key areas into modelling rules that, if implemented into the NMHSPF, will produce specific resource targets for service planning.

As shown in Table 2, proposed modelling rules were guided by evidence from existing policy and service models where possible. For example, assessment was increased based on Medicare Benefits Schedule (MBS) provisions, workforce allocations were crosschecked against existing targets, and the age threshold for dementia services was modified based on epidemiological data. However, for some key service areas, proposed modelling changes relied more heavily on Expert Panel and stakeholder advice. These included: doubling the resourcing for care coordination and liaison and family support, the 50-50 split of consumers who would access primary health care through ACCHS, and the addition of one full-time equivalent staff member per 1500 bed days within inpatient care. Finally, some proposed modelling was based on a combination of expert opinion and existing models. For example, modelling for the proposed new service component for cultural consultation is based on the 2018 rates of utilisation of traditional healers in one Australian jurisdiction; however, the fee-for-service cost had to be estimated based on Expert Panel advice. This triangulation of evidence and expert opinion allows for the inclusion of proposed additions to the model even in the absence of an established evidence base. This is particularly important in an area such as Indigenous mental healthcare, where some existing models of care have not been formally evaluated.

While there was strong engagement from the Expert Panel, some additional stakeholders who agreed to provide feedback were later unable to do so. This possibly reduced the breadth of input into this work. However, we found a high degree of consistency in the views expressed by the Expert Panel, and their recommendations were widely supported by literature and supplementary consultations. Additionally, the focus of this research was to develop options for a version 1 model. It is recommended that, should modelling enhancements be endorsed and implemented, a user-testing phase take place. This will allow service planners and other relevant stakeholders to provide feedback on the model, and for this feedback to be collated and used to inform the development of a version 2 model.

This study highlighted the lack of information translation from best practice mental health care for Indigenous people to specific guidance for service planners. It also highlighted the diversity within these populations and that services cannot be based on a one-size-fits-all approach. The modelling additions which have been proposed here were purposefully designed with consumer choice as a main priority, aligning with the focus on person-centred care in the Strategic Framework.[29] This means that consumers should have many different service options (e.g. ACCHS vs mainstream services) and service providers (e.g. Indigenous specified staff vs non-Indigenous staff) available to them. However, it was acknowledged that local factors, such as economies of scale, can constrain choices and must be considered when planning services. For example, in very remote settings such as the Torres Strait, it may not be feasible to have the full spectrum of mental health services available locally. The strength of the NMHSPF is in its capacity to guide what mix of services is needed, but it is imperative that planners use their knowledge of the local context to create innovative solutions to problems of access.[24]

The Expert Panel highlighted that as more than 50% of the Indigenous population are currently aged under 25 years,[30] the needs of this group are particularly important and potentially different from other age groups. Furthermore, having appropriate mental health care during the perinatal and early childhood periods to support parents and their children is integral.[27] It was recommended that a focussed discussion and review of the specific needs of Indigenous children, adolescents and young adults be conducted. In the interim, it was agreed that the current enhancements will provide an appropriate starting point for identifying service needs.

The scope of the NMHSPF, in that the focus is on services funded by the mental health system, is a limitation that resulted in some social and emotional wellbeing services being excluded from modelling. Despite this, where possible, modelling rules were targeted at a holistic approach to mental health care. For example, additional care coordination and liaison resourcing was added to ensure services would have appropriate resourcing for care coordination across multiple agencies to provide comprehensive treatment responses. Although having a more targeted social and emotional wellbeing model may be preferable, incorporating Indigenous service needs in a national tool that is being used for mental health service planning by stakeholders in all levels of government is an important first step in coordinated evidence-based planning for Indigenous peoples.

Related work to enhance the NMHSPF was also undertaken in parallel with this study. First, a detailed analysis of available evidence on mental illness prevalence in Indigenous populations was conducted with advice from the NMHSPF Epidemiology Expert Panel. Second, a model of proposed enhancements for rural populations was developed. Together, these enhancements to the NMHSPF will combine the Indigenous, rural and base NMHSPF modelling in an additive way to create estimates for whole populations within different catchment areas (i.e. urban non-Indigenous, urban Indigenous, rural non-Indigenous and rural Indigenous). For example, any populations which are Indigenous and within a rural area would receive both Indigenous and rural modelling enhancements.

Conclusion

This study provides the first step towards developing a nationally consistent tool for mental health service planners, which accounts for the specific service needs of Indigenous consumers. It is recommended that the suggested enhancements outlined here be incorporated into a future version of the NMHSPF. Creating a revised planning tool to provide estimates of which services should be available for Indigenous people will support planners to make decisions based on evidence, rather than "the loudest voices in the room".[31-33] The accompanying implementation guidance is also critical to support planning. The proposed modelling is being reviewed for potential implementation in a new version of the NMHPSF. Once released, further refinement based on feedback from users and key stakeholders is encouraged. The NMHSPF model requires

continuous refinement as new guidance and service types emerge to ensure it remains current and supports best-practice care.

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Supporting Information

Additional supporting information may be found in the online version of this article:

Supplementary Table 1: The CONSIDER checklist of items to include when reporting health research involving Indigenous Peoples.[1]