Western Australian Auditor General’s Report

Access to State-Managed Adult Mental Health Services
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ACCESS TO STATE-MANAGED ADULT MENTAL HEALTH SERVICES

This report has been prepared for submission to Parliament under the provisions of section 25 of the Auditor General Act 2006.

Performance audits are an integral part of my Office’s overall program of audit and assurance for Parliament. They seek to provide Parliament and the people of WA with assessments of the effectiveness and efficiency of public sector programs and activities, and identify opportunities for improved performance.

This audit assessed whether people can access adult State-managed mental health services efficiently and effectively.

I wish to acknowledge the staff at the Mental Health Commission, the Department of Health, the North Metropolitan Health Service, the South Metropolitan Health Service, the East Metropolitan Health Service and the WA Country Health Service for their cooperation with this report.

CAROLINE SPENCER
AUDITOR GENERAL
14 August 2019
Access to State-Managed Adult Mental Health Services

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This report contains the findings from my Office’s performance audit of access to Western Australian State-managed adult mental health services.

About half of all people will have mental health problems at some time, and about 3% will have issues that require significant care and support. Each person’s experience of mental health is unique and can change over time, and their mental health issues will affect those who care for and support them. Providing care that best matches each person’s needs and circumstances is complex and difficult.

Through the Mental Health Commission, the State invests about $800 million each year in a range of community and hospital based mental health services that are delivered by Health Service Providers and non-government organisations. These services work alongside and with services provided by the Commonwealth and private practitioners.

This audit looked at how State-managed mental health services are structured and how people move through the WA mental health system. We found a system under significant pressure, which often struggles to meet the demand for mental health care. One of the reasons for this is the mix of services currently available does not match what the State needs. This will come as no great surprise, because the issue was identified almost 5 years ago in the Better Choices. Better Lives: Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025. It is a good plan, but progress in changing the service mix in accordance with the Plan has been very limited.

Efficient and effective mental health services should help people access the least intensive care appropriate for them for as long as possible and then provide accessible pathways to more intensive care when they need it. Unfortunately for many people, accessing mental health services is not always effective or efficient. They frequently have to access care in emergency departments and hospital beds when non-hospital alternatives would be better for them and more cost effective for the State. The lack of available suitable care settings hinders the work of dedicated clinicians, care-givers and front-line administrators in this very challenging sector.

The State has expressed its commitment to delivering person-centred mental health care, so this audit used a new person-centred approach to analysing performance information held by WA Health. It provides, for the first time, a systematic analysis of people’s journeys through State mental health services. We have provided the data model to the Department of Health which has committed to developing enduring data repositories available to the Commission and Health Service Providers. Used together with people’s lived experience, expert advice and existing activity data, this approach could make a profound difference to the way the State understands, prioritises and delivers care for people with mental illness.
Executive summary

Introduction

This audit assessed whether people can access adult State-managed mental health services efficiently and effectively.

We looked at whether mental health services are managed to deliver the Better Choices. Better Lives: Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025. We analysed the way people accessed mental health care in hospitals, emergency departments and community mental health teams from 2013 to 2017.

The audit covered the activities of the following State government entities (entities): Mental Health Commission (MHC), the Department of Health (the Department) and Health Service Providers (HSPs): North Metropolitan Heath Service (NMHS), South Metropolitan Health Service (SMHS), East Metropolitan Health Service (EMHS) and the Western Australian Country Health Service (WACHS). The Department and the HSPs together are known as WA Health.

Background

Mental health issues range from severe and persistent mental distress to mild and occasional incidents. Severe mental illness can be debilitating, and can require ongoing care and support. It often increases a person’s vulnerability to homelessness, unemployment, poverty, discrimination and isolation. Lower levels of distress can range from people needing to seek their own intensive treatment with a clinician to needing low intensity care every so often.

In 2017-18 the National Health Survey\(^1\) found that around 1 in 5 Australians, or 4.8 million people, had a mental health or behavioural condition that year. This had risen from 4 million people in 2014-15. Almost half of the population experience a mental health disorder at some point in their life\(^2\). Anxiety and affective disorders like depression are the most common mental health disorders.

Efficient and effective mental health services should help people stay in the least intensive care possible to manage their condition and then provide accessible pathways to more intensive care when they need it. This approach is beneficial for people who seek care, and is also more cost effective.

The delivery of mental health care in Western Australia is complex. It involves Commonwealth and State government effort as well as individually-funded services, from general practitioners to hospital care and private professional care.

The MHC funds 5 key mental health service streams:

- prevention, which includes suicide prevention projects and public awareness campaigns
- community support services, which includes hostels and recovery colleges
- community bed-based services, including step-up/step-down services
- community treatment services, which mainly consist of community mental health teams managed by HSPs

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\(^1\) Australian Bureau of Statistics, National Health Survey, First Results 2017-18 (4364.0.55.001)

\(^2\) National Survey of Mental Health and Wellbeing, 2007
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• hospital bed-based services, which are dedicated mental health units in hospitals provided by HSPs.

At present, the key document that guides the strategic direction of mental health services is the MHC’s Better Choices. Better Lives: Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025.


In 2015, the MHC published the Better Choices. Better Lives: Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025 (the Plan). This document describes an increased range of services to improve the accessibility and availability of services for people with severe mental health issues. A central goal was to build a system of person-centred care. The Plan articulates a future state of mental health care and notes that many of the initiatives will require significant investment. The Plan was not funded, and notes that investment would be ‘dependent on Government’s fiscal capacity’ and ‘subject to Government approval through normal budgetary processes’.

The Plan compared the volume of services available in 2012-13 and 2014 to those needed to meet demand. It showed that services fell short of optimal levels, providing:

• 20% of community support services needed
• 71% of community treatment services needed
• 40% of community bed-based services needed
• 74% of hospital bed-based services needed.

To achieve optimal levels, the Plan outlined changes to how expenditure should be proportioned, but not the total amount of investment required. Figure 1 shows the pre-Plan and 2025 target funding proportions.

<table>
<thead>
<tr>
<th>Service stream</th>
<th>2012-13 baseline expenditure</th>
<th>2025 optimal expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Community support</td>
<td>8%</td>
<td>22%</td>
</tr>
<tr>
<td>Community beds</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>Community treatment</td>
<td>43%</td>
<td>34%</td>
</tr>
<tr>
<td>Hospital beds</td>
<td>42%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Source: MHC

Figure 1: Expenditure ratios under the Plan

In the Plan, 2017 and 2020 were set as intermediate timelines to measure progress in achieving the optimal mental health service mix. The first phase was primarily for planning to prepare for the future. The period from 2017 to 2020 was when the system should be rebalanced. The Plan stated that the first priority should be to boost investment in community-based services.

Community and hospital based mental health care

State-managed care options are intended to focus on people with severe mental health issues. The State’s mental health services fall into two broad areas, community services and
hospital services. Across WA, 18 hospitals provide around 740 dedicated mental health beds, excluding the State Forensic Centre. A third of the beds are ‘secure’ and intended for those at risk of physical harm to themselves or others.

Community services consist of community treatment, community support and community bed-based services. Community treatment services are largely clinical services provided by community mental health teams managed by the HSPs.

Community support services include those that the MHC has directly contracted from non-government organisations (NGOs). These are non-clinical support services such as personalised support programs, peer support, family and carer support.

Community bed-based services include short, medium and long stay accommodation provided by non-government organisations and include step-up/step-down facilities. Step-up/step-down facilities support people following discharge from a hospital, or those in the community experiencing a change in their mental health, to avoid the need for a possible hospitalisation. Non-government organisations offer a range of residential mental health services covering accommodation, respite, crisis and transition care.

The State also provides mental health services through hospital emergency departments (EDs). These are funded through individual HSPs, not the MHC, and the total cost of providing mental health care in EDs is not known. The MHC funds Mental Health Observation Areas that operate alongside EDs in 2 hospitals.

Management of the mental health system

The Department and the MHC are the two key administrators of public mental health services in WA. The MHC is responsible for mental health planning and strategy, setting the range of services needed, and for specifying, monitoring and evaluating service levels. It is also responsible for purchasing specialised hospital and community mental health services. Hospital services are purchased from the HSPs and community services from both HSPs and non-government organisations.

The Department provides strategic leadership and oversight, policy setting and planning for the entire WA health system. It oversees and monitors mental health services as part of this function. It sets directions for HSPs through formal agreements, and supports operational HSPs, which are individually accountable authorities for the region and services they provide, including mental health.

The HSPs are legally responsible and accountable for mental health services provided by hospitals and community treatment services under their control:

- there are 3 HSPs in the Perth metropolitan area (North, South and East)
- WA Country Health Service is the HSP for regional WA
- the Child and Adolescent Health Service is the HSP for child and adolescent health across the State.

Our audit focused on access to adult mental health services so we excluded the service policies and processes specific to children and adolescents provided by the Child and Adolescent Health Service.

Primary health care providers and private clinical mental health providers also deliver mental health care. These include general practitioners and private clinics, hospitals, psychiatrists and psychologists. This care is not funded or managed by entities, and was therefore not included in our audit.
Audit conclusion

An efficient and effective State-funded mental health care system should help people to stay in the least intensive care setting required to manage their condition, while providing access to more intensive care when needed. The Better Choices. Better Lives: Western Australian Mental Health, Alcohol and Other Drug Services Plan identified an urgent need to expand community mental health services and rely less on costly hospital beds. It is a soundly devised plan, developed with extensive consultation and strong support from consumers and care providers. However, there has been limited progress in implementing the Plan to rebalance the service mix. This means that the system continues to deliver services inefficiently and ineffectively. The Plan aimed to reduce the proportion of funding for hospital beds from 42% to 29% by 2025. By the end of 2017-18, it had instead risen to 47% of State mental health funding.

The MHC has not developed a system-wide implementation plan to support the Plan, and the lack of an agreed funding strategy means implementation has relied on ad-hoc investment. There has also been a lack of clarity around who is responsible for managing mental health care, which has worked against effective coordination between the entities. These factors have slowed progress in changing the mix of mental health services to better match needs. For some people this means there are gaps in services, so they continue to rely on acute, higher cost and often less suitable care settings. People accessing community treatment services in 2017 were receiving less care on average than in 2013.

The MHC and WA Health’s understanding of how people use mental health services relies on activity data and lived experience but does not identify the patterns of people accessing care. Our data analysis created a system-wide view of how people have used services over time and shows how 4.8 million care events were delivered to more than 212,000 people between 2013 and 2017. Just 10% of these people used 90% of hospital care and almost 50% of emergency and community treatment services. Without systematically examining people’s pathways in combination with existing information on lived experience, the MHC cannot develop, prioritise and cost appropriate solutions to provide mental health care efficiently for key groups of vulnerable people.

Key supporting findings

There has been limited progress implementing the Plan since it was released in 2015

The MHC’s Plan provided a soundly devised and widely accepted picture of the mix of the mental health services needed to meet people’s needs by the end of 2025. It focused on quantifying gaps in services using nationally agreed, evidence-based, modelling tools. The development of the Plan involved an extensive consultation process. The MHC was responsible for ensuring that the Plan was accepted as a blueprint for the future of mental health services and delivered in partnership with many key stakeholders.

However, since the Plan was launched in 2015 there has been little progress in changing the mix of mental health services. The MHC has not yet made progress in rebalancing investment to move away from investing in more high-cost acute hospital-based services. Against the Plan’s baseline proportional spend, the funding for hospital beds has increased from 42% to 47%. The proportion of funding on community treatment services has remained the same at 43% and the proportion of funding on prevention and community support has both decreased (3% to 1% and 8% to 5% respectively). The MHC’s 2019 progress report notes that it had only finalised 24% of projects it expected to complete by 2017, with a further 67% in progress.

A number of factors have contributed to the limited progress. Although the MHC has developed a number of strategies for engagement and service design, it has not yet
developed a system-wide implementation plan or funding strategy that would support a coordinated approach by all entities. This has led to ad-hoc changes to services, with limited progress in overall mental health service reform.

Without an agreed funding strategy, it remains unclear how the additional investment in infrastructure and services needed to move to the optimal service mix will be funded, while ensuring that existing services continue. This makes it difficult for the MHC to demonstrate how the optimum service mix in the Plan will be achieved by the end of 2025.

It is also not clear if either the MHC or the Department is responsible for delivering the necessary changes to the mix of mental health services to ensure care is efficient and effective. The HSPs deliver the vast majority of the services and follow direction from both MHC and the Department. To effectively implement the changes in service mix under the Plan, the HSPs need clear, coordinated direction from the MHC and the Department.

The MHC has implemented some initiatives from the Plan, including 3 step-up/step-down (SUSD) facilities and funded a Hospital in the Home (HITH) service. Consumers and providers of these services are reporting benefits and indicate that they fill some of the gaps in service mix for some people. However, implementing these services has also highlighted the remaining unmet need for services. HSPs reported to us that the eligibility criteria in step-up/step-down facilities can be restrictive. HSPs also indicated that they were unable to refer some people with more severe issues stepping down from hospital to the service. They reported it does not provide enough clinical contact. Similarly, the North Metropolitan Health Service reported that eligibility criteria could limit the number of people who could access the HITH service and we noted that occupancy rates were below target occupancy.

The current mix of mental health services has not changed significantly and does not work as intended for some people

The current service mix is struggling to meet the need for people to have access to appropriate services when they need them. The mix has changed little over the period of our analysis, and it continues to result in people being cared for in the most intensive and higher cost care settings, which is both an inefficient and often less effective way to provide care.

Our analysis of people’s pathways highlighted a number of areas where mental health hospital services were not used as intended:

- Acute mental health hospital beds are intended to provide short term, stabilising care to people in crisis or with acute mental health needs. The target for the average length of stay in acute mental health beds is less than 15 days. Each acute bed costs the MHC $1,500 a day. During 2013 to 2017, we found that 126 people spent more than 365 consecutive days in an acute hospital bed. The hospital fees alone for these providers during this period cost the public system an estimated $115 million. Another 158 people had multiple stays in acute beds that totalled 365 days or more across the same period. These long stays mean that hospitals must operate with less capacity for people who also need urgent access to care, reducing the availability of services overall. They are also the most expensive care option, and WA Health cannot systematically demonstrate they are the most cost-effective care option for this cohort.

- EDs are being used as a gateway, and hospital care has become harder to access with people spending more time in ED in order to access a secure mental health bed. From 2013 to 2017, almost half the people seeking care first accessed State-funded mental health services through an ED. Over the same period, we found 2,278 people had 3 or more ED visits in the 7 days before they were admitted to hospital for mental health care. This suggests community pathways to hospitals are not working for a significant number of patients.
• People seeking mental health care also spend longer in ED. In 2017, the average length of time all people who presented spent in an ED was 3 hours. This figure was doubled for mental health patients, in turn increasing the pressure in EDs.

To reduce the reliance on more intensive and higher cost hospital care, the Plan intended to increase access to a greater range of community services. From 2013 to 2017, there was a 17% increase in the number of people accessing community treatment services, but there was no increase in the total hours of care delivered. As a result, the people who accessed community treatment services received less care on average.

**MHC and WA Health do not use existing data effectively to manage service delivery and reform**

The MHC and WA Health’s capacity to improve the mix of mental health services is limited by how they use the existing data. For example, the MHC and WA Health know the volume of care provided, but do not know how many people accessed care or if they are using services as they were intended. This is because the current measures track the numbers of times a service is delivered rather than who used the service. If the MHC and WA Health used existing data in new ways to understand more about how people interact with existing services, they could develop targeted, more cost effective care options. In turn, it would allow the MHC and WA Health to justify and prioritise the changes to the service mix that were in the Plan. Using the existing data alongside the information the MHC collects on people’s lived experience could further develop person-centred care at a system-wide level.

Focusing on each discrete activity in the mental health system, rather than how people use services, means the MHC lacks some of the information needed to effectively quantify demand, prioritise investment and demonstrate its expected benefits. We undertook a data analytics exercise that linked instances of care from in-patient, ED and community treatment services to create episodes of care for people. These episodes allowed us to follow people’s pathways across State mental health services over time and we found that more than 212,000 people accessed State-managed mental health care from 2013 to 2017. While 30% of these people only accessed State-managed care once, 10% (21,000) used services much more intensively. This 10% of people using State-managed mental health services:

• accessed 90% of the hospital care provided, and almost 50% of both ED and care provided by community treatment services. This indicates that a relatively small group of people were consuming the most care. Since the MHC and WA Health have not previously quantified this group of people or analysed their pathways, they are not in a position to know whether their current relatively intensive use of services is meeting patient needs, or whether a different mix of services for this relatively small group could be much more efficient and effective.

• included more older adults compared to everyone that accessed mental health care. Twenty-five percent of them were over 65, compared to 15% of all mental health care consumers. Our analysis found that these people often required care for Alzheimer’s, delirium and dementia. The over-representation of older adults in this group is, in part, associated with the lack of suitable aged care services with appropriate clinical mental health support, resulting in some older adults staying longer in hospital. It would be difficult for the MHC to be confident people are receiving the most suitable and cost-effective care using its current information.

Rather than analysing patient journeys, the MHC and WA Health currently mainly monitor national indicators to measure ineffective care including the 28-day readmission rate key performance indicator (KPI). The 7-day follow-up KPI is also used to gauge the effectiveness of care by measuring the proportion of people who are connected to community services once they leave hospital. These KPIS are intended to indicate when a service may be under pressure or not performing as expected, and can be useful prompts to further investigation.
However, the 28-day readmission rate is at best a blunt indicator that does not take into account that effective care for some people can include planned readmissions. The national reporting framework recognises data limitations that prevent the differentiation between planned and unplanned readmissions for this indicator.

The 7-day follow-up does not reliably capture whether or not a person is actually connected to a community service and in some circumstances does not involve a contact from a community mental health team at all. Instead, it can be the hospital ‘checking-in’ on the person’s wellbeing after discharge through a quick phone call. During the 5 years, follow-up phone calls increased from 34% to 60%, while face-to-face contacts fell from 60% to 30%. This is not reflected in the current KPI.
Recommendations

The MHC and the Department should:

1. clarify their roles so that it is clear who is primarily responsible for the effective and efficient management of the mental health system.

   MHC response:
   
   Agreed. The Mental Health Commission (MHC) fully supports this recommendation. MHC and the Department of Health (DoH) have jointly developed and articulated roles and responsibilities, as set out in the Fact Sheet – Governance of Mental Health Services. In addition, the Head Agreement between the MHC and DoH sets out roles and responsibilities as defined in the Health Services Act 2016. The MHC will continue to work with DoH to review the current articulation and communication of roles to ensure effective and efficient management of the mental health system.

   DoH response:
   
   Supported. The Department of Health understands the significant complexity of the mental health system which has a number of service providers and key stakeholders, and agrees clarity of roles and responsibilities is required.

   Implementation timeframe:
   Ongoing.

2. examine and analyse people’s pathways across all State mental health services to better understand the capacity, effectiveness and efficiency of care options currently provided. Subsequently, this information should inform any reconfiguration of services and be used to prioritise the initiatives in the Better Choices, Better Lives: Western Australian Mental Health and Drug Services Plan.

   MHC response:
   
   Agreed. The MHC fully supports this recommendation. As a result of a new Data Memorandum of Understanding the MHC entered into with the DoH earlier this year, the MHC now has the ability to analyse people’s pathways across specialised mental health wards, emergency departments and clinical community treatment services. Work has commenced on how this information will be used to support the planning, purchasing, monitoring and evaluation of these mental health services into the future.

   DoH response:
   
   Supported. The Department of Health agrees that there is a tremendous value in analysing patient pathways and is investing resources in a number of initiatives to establish enduring linked data repositories for system-wide activity (not limited to mental health). It is important to note, however, that the greatest benefits of patient pathways analysis will not be realised until the full patient journey (incorporating non-government organisations, private and primary health providers, and Commonwealth Pharmaceutical Benefits Scheme and Medicare Benefits Schedule data) is included.

   Through an important body of work underway which aligns with Recommendation 2, the Department of Health is working to develop the dataset used by the OAG in this audit into an enduring linked data repository that will be utilised by Health Service Providers, the Mental Health Commission and the Department of Health as System Manager. The Department of Health has committed to undertake a monthly refresh of
the data to ensure that the information available in this valuable asset is as contemporary as possible.

The Department of Health is committed to working with Health Service Providers and the Mental Health Commission to undertake further detailed analytics of the data to better support service redevelopment and measurement. This resource will assist in enhancing existing mental health service planning, but also form a significant foundation for major mental health reform projects such as the decommissioning of Graylands Hospital.

**Implementation timeframe:**

The enduring data repository is aimed to be established by December 2019 with further detailed analytics of the data to be undertaken by December 2020.

3. **Once the MHC and the Department have prioritised the initiatives in the *Better Choices. Better Lives: Western Australian Mental Health and Drug Services Plan* according to the needs of consumers; they should develop an implementation and funding plan to support it.**

**MHC response:**

Noted. The MHC is developing a proposal that will identify priority areas required to further progress the implementation of the *Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025*.  

**DoH response:**

The Department of Health notes Recommendation 3 but can only partially accept it. The Department supports the prioritisation of initiatives within the Plan; however, the Plan has not been fully funded to enable full implementation.

The Department of Health will work with the Mental Health Commission, as the lead agency, and the Department of Treasury, to secure either full or phased funding for the implementation of the Plan.

**Implementation timeframe:**

Ongoing.
Response from the Mental Health Commission

The Mental Health Commission (MHC) appreciates the work of the Office of the Auditor General for completing this review of Access to State-Managed Adult Mental Health Services. The MHC agrees and notes the findings and is committed to working with the Department of Health, Health Service Providers and other providers in the mental health system to address the recommendations.

The Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025 (The Plan) released in December 2015 was developed to guide investment decisions for the optimal mix and level of mental health, alcohol and other drug services required to meet the needs of Western Australians until the end of 2025.

The Plan brought together the views of government and non-government organisations, including consumers and carers, to outline a whole-of-sector guide for investment. The MHC notes that this review covers only a portion of the mental health, alcohol and other drug (AOD) system, with the work of non-government organisations and AOD services not covered.

The MHC is currently developing a proposal for immediate investment towards the Plan for the consideration of Government and will develop further proposals for additional investment in the future. Actions that can be progressed by the MHC as part of normal business will continue to be initiated and completed. Projects already well underway include the MHC’s establishment of step up/step down services, the Accommodation Strategy and Workforce Strategic Framework. These projects and additional work done by the MHC will provide a good foundation for additional investment and system improvements over the next six years.

The MHC acknowledges there remains important and valuable work to be done within the public health system to optimise patient flows and services for individuals. The MHC thanks the Office of the Auditor-General for their proof-of-concept work regarding patient pathways, a concept that had not been possible to date due to data accessibility. MHC looks forward to working collaboratively with the DoH to develop this concept further in partnership, so that planning and purchasing decisions can take into account the pathways and aggregate data of people using services in the public health system. Work has already commenced through a revised Data Memorandum of Understanding the MHC has entered into with the DoH in early 2019, that will facilitate the analysis of people’s pathways across mental health services.
Response from the Department of Health

The Department of Health supports Recommendations 1 and 2 of the audit. As you are aware in relation to Recommendation 2, the Department is working to develop an enduring linked data repository that will be utilised by Health Service Providers, the Mental Health Commission and the Department of Health as System Manager. We see enormous value in the data set developed by the OAG and recognise the benefits that an enduring linked data set will bring, particularly in assisting with mental health services planning, and enabling a greater understanding of the needs of patients, effectiveness of services, and our engagement with providers. This important body of work is aligned with Recommendation 2.

The Department of Health notes Recommendation 3 but can only partially accept it. While the Department supports the prioritisation of initiatives within the Better Choices. Better Lives: Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015-2025 Plan (the Plan); the Plan has not been fully funded to enable full implementation. That said, the Department of Health will work with the Mental Health Commission, as the lead agency, and the Department of Treasury, to secure either full or phased funding for the implementation of the Plan.

Response from the East Metropolitan Health Service

The EMHS is constantly seeking opportunities to improve the way mental health services are delivered, as well as enhancing the patient experience. EMHS recognise that the provision of excellent mental health care can be supported by better understanding the movement of the patient through their journey of care, which for many patients, extends to the community, emergency department and inpatient settings, often for long periods of time.

EMHS welcomes the opportunity to take a longitudinal view of patient interactions with MH services, in order to better understand patient need.

Just preceding this audit, EMHS had explored the use of a data analytics service to understand the variation occurring during the mental health patient journey and identifying unwanted variation. This was deferred, pending the outcome of this audit and associated data availability.

Once transitioned, EMHS is keen to work with the Department of Health to further develop and use this data in the prioritisation of initiatives towards more effective and efficient care for those groups of people most in need.

Response from the North Metropolitan Health Service

We have reviewed the summary of findings and confirm there are no additional comments or concerns from a North Metropolitan Health Service perspective.
Response from the South Metropolitan Health Service

Thank you for the opportunity to review the revised version of the summary of findings. SMHS is satisfied that you have considered our feedback and accept the summary with changes as documented.

Response from the WA Country Health Service

As consultation was extensive with WACHS Mental Health and its clinicians, there are no concerns about the general content or any identified inaccuracies in the report. WACHS supports the overall findings of the report and the process that has been undertaken by the Office of the Auditor General (OAG) in the performance of this audit. We would like to take the opportunity to note the following matters.

In the report, the OAG draws a clear distinction between community based services and hospital based services. In regional WA the distinction between hospital based Mental Health (MH) care in emergency departments and community mental health (CMH) teams is less clear, and that in-reach of CMH teams is commonplace in regional WA hospitals.

WACHS supports the OAG’s conclusion that this imbalance in the mix of services and settings is a consequence of broader system-wide complexity in funding, accountability and governance. Such imbalances are often further amplified in rural settings where State-managed Mental Health services are sometimes the only provider of care, and where, for urgent and emergency presentations, rural hospitals are frequently the only point of access to MH care. Often it is the only “accommodation” available to a consumer at that point in time.

WACHS supports the finding that a better understanding of how individuals interact with existing services should enable targeted, lower cost care options to be developed. However, such a reconfiguration needs to have sufficient capacity to manage redirected demand, as WACHS has seen previous efforts to meet specific needs overwhelmed as the rest of the system seeks to move people elsewhere. This has occurred with early psychosis services, personality disorders, ADHD clinics and with secure extended care beds. Demand booms, waiting lists develop, responsiveness wanes, confidence is lost and services are mainstreamed again – failures from their own success.

The level of data analysis undertaken by the OAG exceeds WACHS and most likely all other HSPs capacity to produce. The application of business intelligence processes to MH service delivery is still quite rudimentary and leveraging it for meaningful planning and evaluation is not yet well developed. It is our understanding that access to further data analysis and breakdown into HSP level data may be available in the future and WACHS would welcome the opportunity this presents.
Audit focus and scope

This audit assessed whether people can access adult State-managed mental health services efficiently and effectively. We focused on the following questions:

- Are mental health services being effectively managed to deliver the service mix outlined in the Better Choices. Better Lives: Western Australian Mental Health, Alcohol and Other Drug Services Plan?
- Do people access the service they need when and where they need it?

We assessed the progress made to implement the changes required under the Plan. Our data analysis focused on the 90% of the MHC’s mental health expenditure that delivers hospital bed-based care and community treatment services, both of which are delivered by HSPs. We also analysed mental health presentations at hospital EDs, which are delivered by HSPs without MHC funding.

Our data analysis exercise did not include data about non-clinical community support services that the MHC purchases from non-government organisations providers. Nor did we analyse community bed services, which the MHC also purchases from non-government organisations.

Care provided by primary health care providers was outside of the scope of this audit because it is not funded or managed by the State. This includes care provided by general practitioners and private providers such as psychiatrists, psychologists and private mental health hospitals. The audit also did not review forensic mental health services or specialised Statewide services such as programs for eating disorders, perinatal mental health care, homelessness or youth mental health services.

In conducting the audit, we:

- reviewed policies, procedures and key documents
- interviewed key staff across the North, South and East Metropolitan Health Services and WA Country Health Service, Mental Health Commission and the Department of Health
- liaised closely with a key group of clinicians from these Health Services
- interviewed key staff at the Office of the Chief Psychiatrist
- met with the Mental Health Clinical Governance Review Panel
- met with key advocacy bodies for Mental Health in Western Australia – WA Association for Mental Health, the Consumers of Mental Health Western Australia and the Mental Health Advocacy Group
- reviewed the funding model for mental health care.

In addition, we carried out an extensive data analysis exercise. This included WA Health data from 2013 to 2017, the latest full 5-year period available at the time of our data request. Doing this involved:

- WA Health extracting data from the Emergency Department Data Collection, the Hospital Morbidity Data Collection, the Mental Health Information Data Collection and PSOLIS (Health’s mental health clinical information system). WA Health removed the names and addresses for all people and provided a unique identifier and linked the data which allowed us to build a data model for patient journeys
• using this data to describe people’s pathways in accessing care. This allowed us to identify how many people had used mental health services over this period and how they used services

• analysing journeys to identify where services were not being utilised for their intended purpose or where patterns of access did not follow the intended models of care.

We did not include MHC-funded community support services or community bed-based services provided by non-government organisations in our data analysis because the MHC did not have detailed data on those services that could be combined with data from other services. These services accounted for 10% of the MHC’s total funding for mental health services in 2017-18.

We will publish more information about our analysis in a separate volume to enable wider access to the approach and results. The data model will also be provided to WA Health to enable them and the MHC to use and further develop our analysis to understand consumer needs and inform service planning and reform, in both mental health and potentially general health.

This was a performance audit, conducted under section 18 of the Auditor General Act 2006 and in accordance with the Australian Standards on Assurance Engagements ASAE 3500 Performance Engagements. We complied with the independence and other ethical requirements related to assurance engagements. Performance audits focus primarily on the effective management and operations of agency programs and activities. The approximate cost in undertaking the audit and reporting was $501,800. The cost of the patient-centred data model which, in addition to being made available to WA Health, is expected to have enduring benefit for future audits by this Office was $301,855. Further costs associated with additional analysis will be included in a separate supporting report.
Audit findings

There has been limited progress implementing the Plan since it was released in 2015

The Plan was soundly based, but lacked an implementation plan

Since 2015, little progress has been made against the Plan. The Plan was widely accepted, endorsed, and released by the then Minister, but no implementation or funding plan to support its delivery was developed. The MHC has completed some underpinning engagement and service design work, but no system-wide program of actions was developed. While the MHC remains responsible for the planning, strategy and commissioning to implement the Plan, it is not clear what the other entities are accountable for.

The years 2017 to 2020 were identified in the Plan as the key phase in rebalancing the mix of services offered by the system. Although there was an overall 6% increase in expenditure since the Plan was launched, service provision has largely continued to be based on what was delivered the previous year, and overall service reform has been limited. In its 2019 update of the Plan’s progress, the MHC reported that it had finalised 24% of projects it expected to be complete by 2017.

The Plan was developed with reference to the National Services Planning Framework. It included sound initiatives that were accepted by a large range of stakeholders including consumers of mental health services, the former Drug and Alcohol Office, the Department of Health and the Department of Corrective Services.

Based on the population and geography of WA, the Plan stated that the level of mental health services was significantly below that required to meet all the needs of people with a severe mental illness by the end of 2025. Specifically, hospital-based inpatient care was estimated to be 74% of what was needed, community treatment services were at 71%, community support services were at 20% and community bed-based services were at 40%.

The Plan proposed a significant investment in community services and identified that there was also a funding gap for hospital services and residential services. To address the funding shortfall, the Plan suggested a significant initial investment in a greater range of community care options to deliver long-term efficiency gains and more tailored care. There was extensive consultation on the Plan and it was accepted by a wide range of stakeholders.

The MHC has not yet made progress in rebalancing investment to move away from investing in more high-cost acute hospital-based services. The Plan recognised that the distribution of funding in 2012-13 was inefficient and aimed to change the way funding was distributed by the end of 2025. By the end of 2017-18 the funding proportion for hospital beds had not moved down as expected.

In the 2017-18 financial year, the MHC spent $803 million on mental health services, or 13% of all total WA Health expenditure. The expenditure mix was:

- community support services $37 million (4.6%)
- community treatment services $347 million (43.2%)
- community bed-based services $31 million (3.9%)
- hospital-based services $378 million (47.1%)
- prevention activity $10 million (1.2%).
The proportion of hospital-based care increased from 42% to 47%, moving further away from the optimal 29% spend the MHC would like to achieve by the end of 2025.

The proportion of funding towards community treatment services has remained the same at 43%. However, the proportion of funding for both prevention and community support has decreased instead of steadily increasing (3% to 1% and 8% to 5% respectively) (Figure 2).

![Figure 2: Analysis of funding mix proposed in the Plan](image)

The lack of progress is in part because the Plan lacked some key elements that would have improved the chances of successful implementation. For example, not having a detailed implementation plan that demonstrated why initiatives were prioritised and how they would be paid for has made the delivery of the Plan reliant on ad-hoc funding and resulted in opportunistic implementation of initiatives rather than a co-ordinated move toward the desired mix of services. It also makes it difficult for the MHC to demonstrate how the balance of investment and service mix in the Plan will be achieved by 2025.

**Without an agreed funding plan, the MHC has not secured the additional investment needed to establish new services**

The Plan did not include an agreed investment strategy or funding plan that allowed continued funding for in-patient beds alongside investment in alternative and additional care settings. In the Plan, the MHC noted the absence of agreed funding and stated that it would take a phased approach and develop business cases for each initiative. In practice, the MHC has struggled to secure the investment needed to deliver a more cost effective mix of services.

The MHC spent $803 million on mental health services in 2017-18, an increase of $41 million since 2015-16. Current funding mechanisms create a number of barriers to changing the mix of services. In part, this is because around $400 million is activity based funding (ABF) from the Commonwealth which is tied to existing hospital-based services. Establishing new services, particularly if it involves new or expanded facilities, requires additional capital investment, and the cooperation of other partners that control the existing infrastructure.

Hospital bed-based mental health services are funded through the ABF model. This funding can only be used for specified purposes, in this case specialised mental health hospital beds. If the MHC wants to re-direct the funding to other mental health services, it needs to provide the Department of Treasury with a business case justifying why the money should be re-directed. This in turn means the HSPs lose the funding for the beds because funds have been redirected. As a result, they would have to reduce bed numbers and until alternative services have been established there will be less access for those seeking mental health care.
Activity based funding (ABF) for hospitals means a price is set for all of a hospital’s activities and the hospital receives funding every time it completes an activity. The cost of activity is provided to the Independent Hospital Pricing Authority who then calculates the national efficient price. This price is used by the Department of Treasury to calculate how much funding the hospital will receive for each activity it completes.

The activities funded include stays where someone is admitted with a mental health diagnosis to a mental health hospital bed. Hospitals are paid when the person leaves hospital, known as ‘separation’.

Community treatment services are block funded through the ABF model, meaning they are funded in lump sum payments.

In August 2011, all states and territories entered into the National Health Reform Agreement with the Commonwealth. The main aim of this agreement was to deliver a nationally integrated and locally controlled health system and this is where ABF funding originated. The hospital services funded under this agreement include: all admitted and non-admitted services, all ED services provided by a recognised ED and other outpatient, mental health, sub-acute services that are public hospital services.

The MHC purchases mental health services from providers. If the MHC decides that it is willing to purchase a new service from a HSP, the HSP needs to have the infrastructure in place to provide the service. If new infrastructure is required, the MHC or the Department have to negotiate the capital funding required to build the infrastructure in order for the MHC to be able to purchase the service. This is a consequence of the organisational structure, where the Department controls the infrastructure used to provide mental health services and MHC is responsible for determining the service mix and purchasing services to deliver the desired service mix.

The MHC did not develop an agreed strategy that articulated how capital investment would be provided. This has contributed to the limited funding directed to the Plan’s initiatives. The MHC’s delivery of the Plan’s initiatives is dependent on ad-hoc funding, based on individual business cases. This approach has resulted in patchy implementation of the Plan, and prolonged reliance on higher-cost hospital services.

**It is not clear who is ultimately responsible for the efficient and effective management of mental health services**

Clear accountability is fundamental in driving overall system wide improvement. A lack of clear accountability for the performance of the mental health system overall, has limited the Plan’s implementation. It is not clear who is ultimately responsible for the efficient and effective management of mental health services. Under current governance arrangements, the MHC and the Department both appear to be responsible for leading the strategic direction of mental health services. This is one of the reasons that has led to both entities implementing ad-hoc change, and not delivering the more significant impact that a better coordinated approach to implementing the Plan and managing the mental health system would enable.

Good governance requires that each entity understands the overall strategic objectives for the mental health system, and their roles and responsibilities in delivering them. But the roles and responsibilities of the entities currently involved in delivering mental health services are not clear. Issues with accountability have been raised in a number of reviews.

The 2018 *Review of Safety and Quality in the WA Health System* found that the Department recognised it still needed to work to ‘fully operationalise its role as an effective system manager’. The lack of clarity was also highlighted in the Sustainable Health Review *Interim*
Report to the Western Australian Government. This report recommended that a clinical governance review in mental health be immediately completed to simplify and clarify the roles and responsibilities between the Department and the MHC. The recommended Clinical Governance Review in mental health is currently underway.

The Health Services Act 2016 appointed the Department as system manager. In this role it is responsible for the overall management, performance and strategic direction of WA Health. However, since its creation in 2010, the MHC is also responsible for leading mental health reform throughout WA and working towards a modern effective mental health system (Figure 3).

![Organisational structure of key mental health entities](image)

Figure 3: Organisational structure of key mental health entities

The Head Agreement between the Department and the MHC was intended to clarify the division of responsibilities. It maintains that both entities are responsible and must work together to determine health service priorities. In implementing the Plan, HSPs deliver the vast majority of the services and follow direction from both the MHC and the Department. To effectively implement the changes in service mix, HSPs need clear, coordinated direction from the MHC and the Department.

Some parts of the Plan have been partially implemented, but it is not yet clear if these services are delivering the planned benefits

The Plan set out to broaden the range of community based services, specifically through establishing 8 step-up/step-down facilities and delivering around 20% of hospital mental health beds through Hospital in the Home (HITH) by the end of 2025. Three of the 8 step-up/step-down services have so far been opened, and HITH capacity has expanded, but occupancy levels indicate the service may not be able to be used by a wide variety of people.

Step-up/step-down facilities are a bridge between community and hospital care, and HITH allows people to receive mental health care in their home instead of in a hospital. Providing a
continuum of integrated care options is necessary to meet the varying needs of individuals as these needs change over time. Step-up/step-down services and HITH help to establish the continuum of care necessary.

Three of 8 step-up/step-down facilities have been established, and more are planned to open by the end of 2020

The Plan set out to broaden the range of community based services, partly by establishing 8 step-up/step-down facilities. Following the establishment of the Joondalup step-up/step-down in 2013, the Plan proposed that 5 additional services would be created immediately, with another 2 planned by 2025. However, only 2 have been delivered to date, in Rockingham and Albany. The 3 services provide a total of 38 beds.

In November 2018, the Minister for Mental Health announced funding of $28 million to establish the remaining services listed in the Plan (Broome, Bunbury, Kalgoorlie and Karratha) and an additional service (Geraldton). The MHC anticipates that the majority of these SUSD services will be operational in 2020. The MHC informed us that establishing a step-up/step-down can involve finding the right location, design and construction of the facility.

SUSD facilities are short stay accommodation services that allow people to step-up from the community when they need additional support, and support people stepping down from hospital care, as they work to re-establish themselves in the community. The MHC reported that since they were established 66% of admissions to the step-up/step-downs in these sites were people stepping up from the community and 34% were stepping down. The MHC believes that this ratio is consistent with national experience, and is effective in helping people to avoid unnecessary hospital stays.

While there will be benefits for the people who use these services, even when all the planned sites are in place, the services will not deal with everyone’s needs. For example:

- The service eligibility criteria for step-up/step-downs require that a person has pre-existing accommodation or has secured accommodation in the community. Consequently, the services are not accessible to people who are homeless or who may have lost their accommodation during an extended hospital stay and are seeking to step-down into community services.

- According to WACHS, they only refer people with a low acuity or low complexity to the Albany step-up/step-down, meaning some people are unable to step-down from hospital care into the service. WACHS advised that the service best meets the needs of people with relatively low risk mental health symptoms stepping-up.

- The provider of one of the step-up/step-down facilities reported that it can take up to 2 weeks from referral for people to access the service and this significant delay poses problems for people at risk of worsening mental health. Clinicians also reported that a lack of integration between hospitals and step-up/step-down facilities can delay access for people stepping down.

Rockingham was identified in the Plan, but Albany was not. The MHC informed us that the Albany service was established ahead of others in the Plan because WACHS had a vacant facility that could be adapted for this purpose. This meant the MHC did not have to identify a site, secure capital funding and go through local consultation and approvals processes to establish the service.

South Metropolitan Health Service (SMHS) manages a step-up/step-down service that has been operating since 2001. It provides community-based care to adults who are at risk of becoming unwell or need intensive support before they return home. People can stay there for up to 4 weeks. The service has a higher degree of clinical input than services.
commissioned by the MHC, in this case from Fremantle Mental Health Service. SMHS believes this helps to ensure that people can appropriately step-down after a stay in hospital, reporting that over the last 5 years nearly half of the people who use the service are stepping down.

Mental health Hospital in the Home services are not reaching expected numbers

HITH allows people to access mental health services in their home and supports one of the Plan’s objectives to provide more person-centred care closer to home. The Plan aims to deliver about 20% of hospital beds through HITH by the end of 2025. The expansion of mental health HITH beds was also intended to free up capacity in hospital services. To date, HITH services are only provided by North Metropolitan Health Service (NMHS), and occupancy has been below target.

NMHS currently provides 48 HITH beds, up from 16 when the service was funded by the MHC under ABF in 2014. We found that since 2015 the occupancy of HITH services has been below 70% (Figure 4), which is below the target occupancy level of 85%. This means there is under-utilised capacity which affects the cost efficiency of the initiative. It also reduces its impact on hospital capacity since more people cannot be directed to HITH beds and instead utilise hospital beds.

It is not clear why the service is not more utilised given that NMHS reported that consumers, carers and clinicians were very positive about the service. NMHS indicated that eligibility criteria could limit the number of people who could access the service. The MHC has not reviewed how the service is working in order to improve its utilisation and learn lessons for rolling it out to other HSPs, which will be needed to achieve the 2025 target.

![Figure 4: Hospital in the Home occupancy and capacity: 2014 - 2017](image)

The current mix of mental health services has not changed significantly and does not work as intended for some people

The Plan identified gaps in the mental health service mix that for some people meant their available care pathway necessitated more intensive and higher cost care settings than required, usually a hospital. These gaps largely remain and the reliance on hospital services has continued, making services less accessible and less efficient.
An acute specialised mental health bed costs $1,500 a day, 3 times the cost of the most expensive non-hospital facility

Hospitals provide a significant amount of mental health care, and this generally involves 1 or more presentations to an ED and an admission to a hospital bed. The average length of stay in an acute hospital bed is intended to last less than 15 days and help stabilise people with severe mental health issues. An acute hospital bed is estimated to cost the MHC $1,500 a day (Figure 5), 3 times the cost of community based higher acuity facilities.

Figure 5: Costs of current State-managed services

Expanding the care options between current community services and hospital care, as intended in the Plan, would provide people with more cost-effective, accessible and personalised care options and help to reduce the unsustainable reliance on hospital beds.

People staying in acute beds for long periods reduces the number of beds that are available, making it more difficult for others to access services

The MHC’s target for an average length of stay in an acute hospital bed is less than 15 days. While the MHC expects that some people will require a stay longer than the 15 days in line with their support needs, groups of people who stay significantly longer than 15 days highlight where the use of services does not match the model of care. This pattern may also indicate difficulties in accessing more appropriate care settings.

Using WA Health’s data from 2013 to 2017, we found 284 people had spent at least a year in an acute mental health hospital bed. Of the 284 people, 126 had spent more than 365 consecutive days in an acute hospital bed, costing the State an estimated $115 million. Less than one third of these long stays in acute beds resided at Graylands Hospital for the entire stay. The other 158 people had multiple stays in an acute hospital bed that in total were longer than a year.

Acute beds are intended to stabilise people over a short period of time and not provide long term clinical treatment. Moving people requiring long-term clinical care into more appropriate alternative care settings would effectively increase acute bed capacity in hospitals without
expanding bed numbers. It would also improve access to care for those who need short-term stabilisation. However, the alternative options to long-term clinical care are currently limited. There are 2 hospitals that have sub-acute beds. These provide clinical care with a longer length of stay, but are not intended to provide the years of support needed by some people. The MHC reported it purchases 177 long-term residential mental health beds from non-government organisations with clinical support, but we still saw in our data analysis people staying in acute beds for extended periods of time.

Providing options for people needing long-term clinical care out of hospitals is more cost effective. The State currently has Jacaranda House, which provides long-stay mental health care for people with enduring, severe mental illness. This service consists of 5 beds and is managed by the East Metropolitan Health Service (EMHS). Under the Service Agreement between the MHC and the EMHS, beds at Jacaranda House cost around $435 a day, over $1,000 less than a bed day in an acute hospital bed. Because the service is standalone and has clinical input from the hospital, the people who live there are able to receive care specific to their needs.

In its 2003 publication *Organization of services for mental health*, the World Health Organization reported that an extremely small number of people will always need acute long-stay services. Our analysis of WA Health data showed that 41 people were either in State-managed hospital for the entire 5-year period or had completed a stay that lasted longer than 5 years. Acute long-term services are where people with extremely severe mental health needs can both reside and receive intensive mental health care. This care is necessary even with good quality community treatment services available, and is best provided in small units within the community. Unless this type of care is available, these people are likely to seek care in a hospital, a higher cost care setting than other clinically appropriate options.

The current service mix increases the pressure on EDs

For the people who use State-funded mental health services, their mental health issues can be episodic with periods of relative wellness punctuated by occasional deterioration and sometimes crisis. This pattern often goes on for years. The Plan set out a mix of services to allow people to escalate the intensity of care as their mental health deteriorates. However, continuing gaps in the range of community-based services make it difficult for people to do this, and result in them seeking care through EDs. This is often not the most appropriate care setting for them, and increases the pressure and cost in EDs.

Almost half of the people who first accessed State-managed mental health services from 2013 to 2017 made their first contact with these mental health services through an ED. People sometimes have to present to an ED more than once to access care. We found 2,278 people who had 3 or more ED visits in the week before they were admitted to hospital for mental health care. Some people had this issue more than once. For example, 9 people had more than 10 ED presentations in the week leading up to an admission, sometimes presenting multiple times a day before accessing a bed.

The time it takes to address mental health ED presentations is longer than for general medical presentations, which exacerbates the impact on EDs. From 2013 to 2017, mental health ED presentations accounted for 5% of the total presentations to EDs, yet accounted for 10% of the total care time provided in EDs. The MHC does not fund the mental health care delivered in EDs because it is not considered a specialised mental health service, and the cost of it is not separately captured by WA Health or the MHC.

More people are accessing community treatment services, but overall capacity has not increased, so on average people are receiving less care

Between 2013 and 2017 there was a 17% increase in the number of people accessing community treatment services. Over the same period, there was a 6% decrease in the total hours of care provided by those services. Increasing the number of people accessing
community treatment services is consistent with the intent of the Plan. But the lack of growth in funding and capacity has meant a 20% reduction overall in the hours of care provided per person (Figure 6). So more people are getting less care from community treatment services overall.

Seeing more people within the same resources could indicate improved efficiency in community treatment services. However, to evidence this the MHC would need to demonstrate that quality of service has been maintained. We did not see any data to demonstrate the evaluation of service quality. The clinicians we consulted believed that services were struggling to meet the increasing demand.

**Figure 6: Hours of community treatment services against number of people accessing community treatment services**

**MHC and WA Health do not use the existing data effectively to manage service delivery and reform**

The MHC and WA Health do not use the existing data effectively to inform how they deliver services, or to target changes in the mix of services. The MHC use data on activity, mainly instances of care, to monitor service delivery. However, activity data does not provide information on how many people used mental health services. It also does not provide insight on whether they are efficient and effective or if people are using them as intended. Focusing on people, and how they use services over time, could help the MHC and WA Health prioritise investment and service reform.

**MHC and WA Health did not know how many people accessed mental health services**

While activity data tells the MHC and WA Health how many times a service has been delivered, it does not tell them how many people accessed services, or the pathways they took through those services. This is because the data records instances of care as single events, rather than linking them together to show people’s episodes of care, which show how they use services.

The MHC and WA Health’s activity data tells them that 4.8 million instances of care were delivered across the various hospital and community treatment services from 2013 to 2017. These events included a range of care types, such as short phone calls to stays in a mental health hospital bed. It also included 253,000 EDs visits. What the activity data does not show
the MHC and WA Health is that more than 212,000 people accessed mental health care from 2013 to 2017.

To identify that more than 212,000 people used mental health services between 2013 and 2017, we looked at people’s pathways in accessing care in WA Health’s hospitals, EDs and community treatment services. This allowed us to identify that people use combinations of services in a series of episodes often over many years. It also allowed us to identify particular groups of people who use services in a way that indicates that the service is not working as intended. This is not information that the MHC can generate from activity data.

For instance, by looking at people’s episodes of care we were able to see that one person was in hospital for 173 consecutive days across 3 hospitals (Figure 7). The MHC and WA Health would have captured this as 6 separate instances of care; 3 ED visits and three hospital stays. For reporting purposes, it would not have been clear to the entities if this was 1 person or up to 6 people.

Figure 7: Activity-based reporting compared to reporting on usage

This pattern of access suggests that the person was not able to get the right level of care in the first regional centre. After an extended stay in the larger regional hospital they required further care and were eventually transferred to a major metropolitan hospital. Measuring instances of care individually, such as this person’s hospital stays, would not provide an accurate reflection of their overall care. Reviewing episodes of care allows entities to better understand people’s pathways through mental health services, improving their ability to deliver people-centred services most efficiently and effectively.

Existing activity data does not enable MHC to know if there is sufficient service capacity to reach all the people who need it

As the basis for the Plan, the MHC estimated that around 3% of the WA population would require State-managed care for severe mental health issues each year. The model was based on the National Mental Health Service Planning Framework adapted to take into account WA’s population and geographical distribution. This allowed the MHC to build estimates of the service capacity required to meet demand. The Framework estimates the volume of services required, taking into account that people may present to services multiple times. However, the MHC does not regularly assess the actual number of people accessing care against the estimated number, and so is not identifying if there is an overall service gap.
Our analysis indicates that a lower than forecast number of people are accessing community treatment services and hospital mental health care. This could indicate a few things. If the estimate of need is reliable, it may suggest that the volume of available State-managed care is not sufficient or people could be accessing services elsewhere. It could also mean that there are too few options to meet people’s needs, although the service gap was smaller in 2017 than 2013. For example, in 2013, 54,800 people accessed State-managed mental health care, 24,300 less than the MHC estimated. In 2017, the figure was 63,700, which was 16,500 less than the estimate (Figure 8). Monitoring this information would give the MHC better information on whether they are reaching more people by introducing new services or expanding existing services. It would also inform the MHC on whether their ongoing estimates of need are proving to be accurate, and enable them to adjust the Plan and its roll-out.

![Graph showing estimated number of people who need services against people accessing services](image)

Source: OAG analysis of MHC and Department of Health data

**Figure 8: Estimated number of people who need services against people accessing services**

**Analysing pathways shows that 10% of people used 90% of in-patient care and 50% of emergency and community care**

By using WA Health’s hospital, emergency and community treatment service data from 2013 to 2017 and looking at pathways we were able to identify clear patterns in how services were being used by groups of people. By comparing them to how the MHC and WA Health expect services to work, we were able to identify patterns of use that indicate that services are not working as intended for some groups. This information can inform more efficient and effective management of services and help to prioritise investment in service reform.

Of the 212,000 people who accessed State-managed mental health care, 30% of these people only accessed care once. This suggests that for this group either their mental health issues were resolved, or that they were accessing care through alternative providers which can include primary care (general practitioners), private services or non-government organisations care. Although we did not have access to data from primary healthcare, private mental health services or non-government organisations services to verify this, this group are not the most numerous or resource-intensive consumers of State-managed mental health services.
The main consumers of State-managed services are the 10% or 21,000 people who, over the 5 years we reviewed, consumed 90% of the hospital care provided and around half of the community treatment services and ED mental health care (Figure 9). This is one of the key groups of people who the MHC and WA Health should focus on understanding so they can provide pathways that enable these people to spend as much time as possible in the community and then move through more intensive services as they need to. This approach would reduce the amount of time these people spend in very expensive hospital beds and EDs.

![Figure 9: The proportions of care consumed by people who accessed mental health services 2013-2017](source)

**Older adults are over-represented in the 10% of people who accessed the most in-patient mental health care**

Within the top 10% of people who accessed the most hospital care, older adults (people aged 65 and over), were over-represented. Older adults represented 15% of all the people who had accessed mental health services between 2013 and 2017. However, they represented 25% of the 10% of people who had used the most in-patient hospital care (Figure 10). Their episodes of care tend to show long-stays in an in-patient setting, indicating a lack of community-based care options.

![Figure 10: Representation of older adults in mental health care](source)
Reviewing the most common diagnoses of older adults in this group showed that they often required care for Alzheimer’s, delirium and dementia. Clinicians reported that the consumption of hospital care by this group of older adults was in part due to a shortage of aged care services equipped to manage people with mental health issues, and limited clinically appropriate residential care settings in the community. The MHC reported that the State and Commonwealth governments are also working together to introduce a specialist dementia program for this cohort.

Understanding people’s pathways in accessing care would allow the MHC to target, prioritise and demonstrate the expected benefits of investment under the Plan to change the mix of mental health services. Being able to find alternative care settings for this group would allow them to access care in a more appropriate setting, and would effectively increase the available capacity of hospital beds, improving access for those who need them.

**Current KPIs do not meaningfully inform MHC on the outcomes of care**

The MHC reports on the rate of readmission to hospital within 28 days of discharge from a specialised mental health ward as an indicator of the effectiveness of care. The MHC also reports the percentage of occasions that someone is contacted by community treatment services within 7 days of discharge, to assess the effectiveness of follow-up and service integration. These are standard nationally-reported metrics however, neither measure provides a robust view of actual performance or outcomes for people in the system. Rather, they provide an indication of when the system may be under pressure, prompting further review by the MHC:

- The 7-day follow-up measure counts whether someone leaving hospital is contacted by community mental health services within 7 days. However, counting contacts has a number of limitations in measuring whether there is effective integration between services, and whether people access the care they need. The measure does not capture whether the person gets an appointment with community services in a reasonable timeframe and whether they keep that appointment, both of which impact whether that person accesses care.

- Second, counting the contacts does not provide a view of the quality of the contact. Face-to-face contact with the community treatment service is preferred, as this is likely to be more effective in helping someone to access services. In practice, they more frequently use phone calls, which often come from the hospital, not the community treatment service. Across the 5 years of data we analysed, follow-up phone calls increased from 34% to 60%, while face-to-face contacts fell from 60% to 30%. The KPI does not identify this.

The MHC also monitors the readmissions to hospital within 28 days of discharge from specialised mental health units. This KPI currently counts how many readmissions occurred within 28 days of discharge from a hospital bed. Some patients are readmitted as part of their care plans, but the measure and data do not distinguish between planned and unplanned readmissions. The national reporting framework acknowledges that there are data limitations that prevent the ability to differentiate between planned and unplanned readmissions. Analysing people’s pathways, rather than counting these events, would allow the MHC to measure useful indicators. These could include how many people accessed community services within a given time following a hospital stay, if contact was by phone or in person, and whether contacts resulted in subsequent access to care. This would provide a better measure of service integration. It would also inform the MHC whether people’s access to services follow the models of care, and enable a more sophisticated view of readmissions within 28 days.
Appendix 1: How many people used State-managed mental health services

One of the important outcomes of our analysis was to identify how many people had engaged with the State’s mental health services over time. The distribution of people’s access was not known by the MHC or WA Health as they had not analysed data in this way. We took linked de-identified data from three WA health systems and merged the information to create a database based on individual people’s journeys over time and across the system. This approach offers many ways to look at how the system is working, but most importantly it helps put people rather than activity at the centre of the picture.

Figure 11: Numbers of people using the State-managed mental health system 2013-2017

Figure 11 shows that between 2013 and 2017 there were 212,679 people who had used State-managed hospital in-patient services, EDs or community treatment services. Of those people:

- 81,662 had used community treatment services only
- 28,690 had used community treatment services and presented at least once at an ED
- 7,222 had used community treatment services and had at least one in-patient stay
- 43,700 had only presented at an ED
- 8,061 had presented at least once at an ED and had at least one in-patient stay
- 5,263 people’s only connection was through in-patient stays
- 38,081 people had at least one contact with each of the three service types we analysed.
Appendix 2: Picturing people’s journeys through the mental health system

Another key part of our analytical approach was to test if it was possible to plot the individual interactions of all people who had accessed the services in our data set. This provided some key findings and other observations, and a proof of concept. This approach could allow for longitudinal and broad analysis of how people had accessed the system. This could be refined by many factors, for instance diagnosis type, service type, delivery organisation, age or region.

Figures 12 and 13 show extracts of our analysis, converted into activity plots. Each row represents the service history of 1 person, and each cell represents 1 day. They show part of the range of different ways that people access services.

Figure 12 shows access to services by 42 different people over 69 days. White space shows the person did not have an ED, in-patient, or community treatment service contact that day. Light blues cells are mental health related public inpatient stays where a mental health issue was the primary diagnosis. Dark blue cells are non-mental health inpatient stays. Green cells are contact with community treatment services. Red cells show ED presentations where mental health was the main issue. Pink cells show ED presentations for other health issues. Purple cells indicate a specific mental health assessment was recorded. Black cells indicate that the person is deceased.

Figure 13 shows a larger selection from our dataset with which some preliminary analysis was carried out. It has been sorted to show the 500 people with the most time spent in an in-patient setting for a mental health diagnosis over about 3 years of our analysis period. The colour scheme is the same as in the previous figure.
As noted in the report and described in Appendix 1, more than 212,000 people accessed at least one of the 3 types of service captured in these figures. To put that number in some perspective, it would take another 424 illustrations like Figure 13 to include all of them. A supporting report on our analytical approach will give further detail on how we carried out this analytical exercise, and show more examples of the kinds of outcomes this approach can produce.
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