



## **WA HEALTH HACKATHON 2022**

### **CHALLENGE 5: Improving Delivery of Mental Health Initiatives**

#### **Background**

WA Primary Health Alliance (WAPHA) works with several providers to deliver primary mental health care for patients across the state. The objectives of this program include:

- Improve targeting of psychological interventions to most appropriately support people with or at risk of mild mental illness at the local level through the development and/or commissioning of low intensity mental health services.
- Support region-specific, cross sectoral approaches to early intervention for children and young people with, or at risk of mental illness (including those with severe mental illness who are being managed in primary care) and implementation of an equitable and integrated approach to primary mental health services for this population group.
- Address service gaps in the provision of psychological therapies for people in rural and remote areas and other under-served and/or hard to reach populations, making optimal use of the available service infrastructure and workforce.
- Commission primary mental health care services for people with severe mental illness being managed in primary care, including clinical care coordination for people with severe and complex mental illness who are being managed in primary care including through the phased implementation of primary mental health care packages and the use of mental health nurses.
- Encourage and promote a systems-based regional approach to suicide prevention including community-based activities and liaising with Local Hospital Networks (LHNs) and other providers to help ensure appropriate follow-up and support arrangements are in place at a regional level for individuals after a suicide attempt and for other people at high risk of suicide, including Aboriginal and Torres Strait Islander people; and
- Enhance access to and better integrate Aboriginal and Torres Strait Islander mental health services at a local level facilitating a joined-up approach with other closely connected services including social and emotional wellbeing, suicide prevention and alcohol and other drug services

#### **Challenge**

By broadly analysing the available data, can we gain any insights to improve the delivery of these services?

#### **Possible Approaches**

Areas of focus may include:

- What variables have the most impact on mental health improvement?
- Are there predictors of success or risk of non-compliance for mental health patients?

- Can we more accurately predict the degree of improvement for individual patients?
- How can we identify patients that may need greater intervention or support?
- Can we identify certain mental health programs that are more successful than others?
- Could you build a variability matrix (using variance partitioning) across patient demographics and outcomes for Low Intensity programs? Ultimately to determine the contribution of patient, location and program factors to outcomes and/or variability in program dynamics?
- Are there any visualisation tools that could help navigate and analyse the data? Including geospatial visualisation of the data in innovative ways to identify areas of interest within the data (possibly in conjunction with other public geospatial datasets).

## Data Available

Primary Mental Health Minimum Data Set (PMHC-MDS) - Programs administered by WAPHA's commissioned service providers collect data in the Primary Mental Health Minimum Data Set (PMHC-MDS) and provides the basis for Primary Health Networks (PHNs) to monitor and report on the quantity and quality of service delivery and inform future improvements in the planning and funding of primary mental healthcare services.

The data is available from 2017 – 2022 and is de-identified. 2017 data is of questionable value given it was the first year of collection and there are various doubts over the quality of the data.

## Domain Expertise

**WA Primary Health Alliance representative**

## Challenge Owner

**WA Primary Health Alliance**