

SPA Innovation Grant Summary Report

Australian Youth Self-Harm Atlas



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SUMMARY REPORT

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Report Disclaimer



Some people may find parts of this report confronting or distressing. Please carefully consider your needs when reading the following information about youth self-harm and suicidality. If this material raises concerns for you, please contact Lifeline on 13 11 14, or [see other ways you can seek support](#). This report places an emphasis on data, and as such, can appear to depersonalise the pain and loss behind the statistics. The project team acknowledges the individuals, families and communities affected by self-harm and suicide each year in Australia. Aboriginal and/or Torres Strait Islander readers are advised that information relating to Indigenous self-harm is included. The project team supports the use of the [Mindframe guidelines](#) on responsible, accurate, and safe self-harm and suicide reporting. Please consider these guidelines when disseminating the report's findings.

About this Report

This report presents the key methods and findings of the Australian Youth Self-Harm Atlas study. The Atlas study aimed to better understand what influences youth self-harm & suicide risk across geographically distinct regions of Australia. It achieved this by using a mixed methods approach, combining insights from (A) statistical modelling and spatial analyses of national survey and Census data, and (B) the voice of lived experience via focus groups.

At the heart of this research project was the voices of young Australians (≤ 21 years) with lived experience of self-harm or suicidality. We had discussions with over fifty young people and other stakeholders living in diverse areas across the nation, about their experiences and ideas for future solutions for the youth self-harm and suicide prevention sector. We hope this project elevates and amplifies their voices and contributes to wider efforts of embedding lived experience as a central pillar in the sector. One important take away message for our readers – young people should be at the heart of the design of new and emerging solutions in the youth suicide prevention space. More detailed information about the project and its results can be found in the Technical Report, which can be accessed by contacting the Chief Investigator.

Young people should be at the heart of the design of new and emerging solutions in the youth suicide prevention space.

Key message for our readers

DATA LANDSCAPE OF THIS REPORT

This mixed methods project triangulated findings from several different quantitative and qualitative data sources.



Part A Quantitative

Numeric data used to investigate regional variability of self-harm prevalence, related risk/protective factors, and mental health service use.

(1) Young Minds Matter Survey (YMM) (2013-2014)

YMM is a nationally representative survey of young Australians 11-17 years ($n=2,967$). Most comprehensive dataset of young Australian mental health and wellbeing^{1,2}.

(2) Australian Bureau of Statistic (ABS) 2016 Census

Most comprehensive snapshot of the Australian population with ~10 million households³.



Part B Qualitative

Descriptive or narrative data used to investigate the most pertinent risk/protective factors for key stakeholders in their local regions, and to explore local support services.

(1) Focus Group data (2021-2022)

10 focus groups with young Australians (≤ 21 years) with lived experience of self-harm or suicidality in regionally diverse regions (across QLD and NSW).

4 focus groups with staff who support young people with lived experience in regionally diverse regions (across QLD and NSW).

Acknowledgements

This research was supported by a Suicide Prevention Research Fund Innovation Grant, managed by Suicide Prevention Australia (SPA), funded by the Australian Government Department of Health. This research project was additionally supported by philanthropic funding from Roger and Jenny Pattison who are strong supporters and advocates for Australian mental health research.

The authors wish to express their gratitude to the 6310 families who participated in the Young Minds Matter Survey^{1,2}, which was incorporated as part of this project. The Young Minds Matter, or the second Australian Child and Adolescent Survey of Mental Health and Wellbeing, was funded by the Australian Government Department of Health. The authors also wish to express their sincere gratitude to the young people with lived experience of self-harm and suicidality who participated in the focus groups – for their insights, knowledge, and bravery. Finally, the authors wish to thank the staff of youth mental health organisations and clinical services across Queensland and New South Wales who assisted the research team with recruiting focus group participants, and who separately participated in the staff focus groups. Their support and assistance with this project was invaluable.

Ethics Approvals



The research protocol for the Young Minds Matter (YMM) study was approved by the Australian Government Department of Health Human Research Ethics Committee, and The University of Western Australia Human Research Ethics Committee. The focus group study received ethics approval from the QIMR Berghofer Human Scientific Sub-Committee (approval number: P3369) and complied with the Declaration of Helsinki. Additional governance approvals were obtained from various local sites throughout the four Primary Health Network (PHN) regions of interest, including participating youth mental health organisations (headspace, Open Doors Youth Service, ReFrame/Community Links Wellbeing, Roseberry QLD) and the PHNs themselves.

Glossary

TERMS	DEFINITION
ABS	Australian Bureau of Statistics (ABS) is Australia's national statistical agency.
ACT	Australian Capital Territory is located in south-eastern Australia, in the south-eastern corner of the state of New South Wales. It is one of two Australian territories – the other is Northern Territory.
ArcGIS Pro	ArcGIS Pro is a desktop GIS (geographic information system) software which can be used to create maps. Further details about this software can be found here .
Area level versus individual level	Area level variables refer to information about an area, like a suburb (e.g., proportion (%) of houses in a suburb which are rental properties, or the quality of the schools in the local community). Individual level variables refer to information about individual survey respondents such as their demographics, risky behaviours, family, and education levels.
ASIST Applied Suicide Intervention Skills Training	Training program for an applied suicide intervention model. It teaches caregivers and health professionals to recognise when someone is at risk of suicide ⁴ .
Association or relationship	An association is a relationship between two or more variables. For continuous variables, each relationship is a directional association, meaning when one variable increases the other variable(s) either also increases (described as positive) or decreases (described as negative). For categorical variables, odds ratios (OR) > 1 indicate increased risk compared to the reference category, and OR < 1 indicate reduced risk (should be interpreted in conjunction with the p-value and confidence interval).
Bivariate mapping	The process of examining the relationship between two variables in ArcGIS mapping software. In the case of this report, bivariate mapping looks at the effects of regional differences on a range of characteristics.
Blue sky thinking	A brainstorming process. In this study, this was based on a prompter question asked in the focus groups related to bold ideas for service innovations. "Can you think of any community programs or initiatives for young people with lived experience of self-harm/suicidality that would be useful but seem to not exist, or are currently not available in your local area?"
Chat-based services	An online service which offers mental health advice, guidance, and supports to people through the use of an online chat room or messaging app. Typically a trained crisis support worker or health professional is managing the online conversation (but others are more peer-to-peer formats). Some programs like 'chatbot' services instead simulate human conversation through text or voice interactions (in lieu of providing direct contact with other humans).
Chi-square test (χ^2)	A statistical hypothesis test used to compare the distributions of observed to expected counts of two categorical variables.
Choropleth maps	A map which uses the shading or sequential colouring to represent statistical data.
Confidence Interval (CI)	A confidence interval quantifies uncertainty for an estimate.
COVID-19	The Severe Acute Respiratory Syndrome Coronavirus 2 or Coronavirus Disease.
Density	The number of cases (e.g., self-harm cases) per unit area (e.g., square kilometre).
Digital environments	Virtual or cyber environments accessed through a device (e.g., social media, streaming services, gaming platforms).
e-safety	The safe and responsible use of technology.
Equity-based services	Support services that are based on one's needs and financial position.
Estimated resident population (ERP)	ERPs are official estimates of the Australian population produced by the Australian Bureau of Statistics for all local government areas ⁵ . ERP links people to a place of usual residence within Australia. They are prepared based on a modelling process incorporating Census and administrative data sources. Further details can be found here .

TERMS	DEFINITION
Focus groups	Discussion amongst a small group of people on a specific topic. Focus groups are conducted by trained facilitators who guide participants in a semi structured way.
Framework analysis	A qualitative analysis method used to organise and structure research data to refine a researcher's understanding and focus, and in turn, assist with identifying salient themes ^{6,7} .
Getis-Ord Gi*	Gi* is the statistic produced by ArcGIS's hot spot analysis. It looks at each feature in the context of other neighbouring features and comparison results are produced as a z-score.
headspace	headspace is the National Youth Mental Health Foundation which provides mental health services for young Australians aged 12-25 years.
Hot Spot Analysis	Hot spot analysis is a spatial analysis and mapping technique in ArcGIS used to identify 'hot spots' (areas where a feature is common) and 'cold spots' (areas where a feature is uncommon). For example, a feature of interest in the current study was self-harm prevalence. Statistically significant hot spots will have a high value and be surrounded by other high value features.
Indigenous Status	People identifying as Aboriginal and/or Torres Strait Islander.
Inpatient	A patient who stays in a hospital or clinic (for at least one night) while they receive treatment.
LGBTQI+	Lesbian, gay, bisexual, transgender, queer, intersex, or other diverse genders and sexualities. We acknowledge the complexity for including or excluding any specific diverse genders and sexualities in this acronym. For the purpose of this report, we are using LGBTQI+ as a broad term inclusive of many genders and sexualities.
Lifeline	Lifeline is a charity organisation, providing 24-hour crisis support and suicide prevention services.
Lived experience	The knowledge and understanding you get when you yourself have lived through something. Young people with direct experience of self-harm or suicidality (past and present) were the focus of the current study. However, the project team recognises the broader experiences of lived or living experience of suicide, including young people who have cared for someone in suicidal distress or are bereaved by someone close to them. See Roses in the Ocean website for more details on the definition of lived experience of suicide.
Missing middle services	The gap in current mental health services which fails to provide for the needs of people who are too unwell for primary health care but not unwell enough for acute care.
Mixed methods	An approach to research that combines qualitative and quantitative methods for data analysis.
National Mortality Database (NMD)	The NMD holds records of deaths in Australia from 1964 to 2019, including cause of death, age, gender, areas of residence, and Aboriginal and/or Torres Strait Islander status ⁸ .
Non-suicidal self-harm (NSSH/NSSI)	Self-injurious behaviour for which there is evidence that the person did not intend to kill themselves. Typically involves physical damage to the body (e.g., cutting, hitting, scratching) ⁹⁻¹¹ .
NSW	New South Wales is an Australian state located along the east coast of the country.
NT	Northern Territory is located in the central north of Australia. It is one of two Australian territories – the other is Australian Capital Territory.
Peer workers	A person employed on the basis of their personal lived experience of mental illness and recovery or as a carer of someone with mental illness.
Predictor	A variable used to predict some other variable or outcome.
Prevalence	The proportion of a population who have a specific characteristic in a given time period ¹² .
Primary Health Networks (PHNs)	Administrative health regions established by the Government to deliver primary care to patients.
Protective factor	Variable (e.g., individual or environmental factor) that decreases the risk of an outcome (e.g., self-harm).
QLD	Queensland is an Australian state located in the northeast of the country.

TERMS	DEFINITION
Qualitative research	Research involving non-numerical data (e.g., descriptive text, video, or audio).
Quantitative research	Research involving numerical data.
Quintile	One part of a population that has been divided into five equal parts, based on a variable's values.
Regional variability	Differences that occur between populations based on geographic location or region.
Remoteness	Throughout the prevalence chapter (see Chapter 4 of this report), we refer to findings in metro, regional, and remote areas of Australia. This is based on the ABS's remoteness classification scale of metro/major city, inner regional, outer regional, remote, and very remote.
Risk factor	Variable (e.g., individual or environmental factor) that increases the risk of an outcome (e.g., self-harm).
SA	South Australia is a southern central state of Australia.
Safe spaces/havens	Safe Spaces, also known as Safe Havens, are non-clinical alternatives to emergency departments for people experiencing a suicidal crisis. They are often staffed by peer-support workers and mental health professionals with lived experience.
Saturation of themes	In qualitative research, saturation of themes occurs when similar themes are repeated, and no new themes become apparent.
Self-harm (regardless of intent) – primary outcome of study	A global inclusive term for self-injurious behaviour regardless of the intention or motivation ^{9,10,13,14} . This definition was the primary focus as it is most inclusive of the heterogeneity of self-harming behaviours in young people where intent can be ambiguous, or where people can endorse both non-suicidal and suicidal motivations for engaging in such behaviours ^{15,16} .
Sense of place	An emotional bond or attachment to a location (physical or digital) developed through experience of a place over time ¹⁷ .
Service use	The utilisation of mental health services.
Small area estimation (SAE)	A small area is a small geographical area (e.g., a suburb). A parameter of interest could be the total or mean of a variable for the subpopulation in that small area (e.g., mean annual income of a suburb) ¹⁸ . Small area estimation is a statistical technique used to estimate a parameter of interest for small areas not included in a survey sampling frame. This is achieved by utilising measures common to both the measured (i.e., survey population) and unmeasured population (i.e., Census data which is available for all geographic areas of Australia) to help extrapolate survey data to other non-surveyed communities ¹⁸ .
Social determinants of health	The non-medical factors that influence health outcomes, such as early childhood, family relationships, social supports and exclusion, employment, and housing.
Socio-economic	Refers to the social and economic aspects of a population, where 'social' includes information about the community and its level of education, welfare, housing, and transport. High socio-economic disadvantage refers to a lack of resources or opportunities.
Statistical Area (SA1, SA2, SA3) <i>Based on place of usual residence on Census night</i>	Geographic areas as defined by the Australian Bureau of Statistics (ABS): <ul style="list-style-type: none"> – SA1: small geographic areas used to group population and housing data gathered through the Census. Tend to include 200–800 people with an average population of 400 people. – SA2: medium-sized general-purpose areas that represent a community that interacts socially and economically. They comprise of SA1s and generally include 3,000–25,000 people with an average population of 10,000 people. Generally, these are the size of suburbs within cities. – SA3: consists of whole SA2s and are designed for the output of regional data.
Stigma	Negative attitudes or discrimination towards someone based on a distinguishing characteristic (e.g., living with a mental illness).
Suicidal ideation	Thoughts of engaging in suicide-related behaviour ^{9,10} .
Suicide plans	Acts or preparation toward making a suicide attempt, but before potential for harm has begun ^{9,10} .
Suicide attempts	A nonfatal, self-directed, potentially injurious behaviour with any intent to die ^{9,10} .
Suicide death	Death caused by self-directed injurious behaviour with any intent to die ^{9,10} .

TERMS	DEFINITION
Suicide Prevention Australia (SPA)	Suicide Prevention Australia is the national peak body for the suicide prevention sector.
Synthetic estimates	Prevalence estimates for small areas, like a suburb. These are not direct estimates but rather are produced from modelling descriptive and demographic data from multiple sources (survey, Census), to produce estimates for more granular populations ^{18, 19} .
Systems-based	Considering all aspects of a system in order to develop solutions to problems.
TAFE	Technical and Further Education (TAFE) is a government funded post-secondary education organisation which provides technical and vocational training courses and programs.
TAS	Tasmania is a state of Australia, an island located far south from the Australian mainland.
VIC	Victoria is a southeastern Australian state.
WA	Western Australia is a state covering more than 33 percent of the Australian west coast.
Walk-in support service	Mental health support service that does not require an appointment and typically offers a range of clinical and non-clinical supports. Similar in nature to Safe Spaces but are intended for non-crisis situations.
What's existing	This was a prompter question asked in the focus groups related to existing local services and initiatives. "What programs or initiatives are currently available in your local area to support young people with lived experience of self-harm and/or suicidality?"
Young Minds Matter (YMM)	A nationally representative random sample of Australian children and adolescents (4-17). The most comprehensive survey to date on the mental health and wellbeing of young Australians ^{1, 2} .

Foreword

Suicide Prevention Australia is the national peak body for the suicide prevention sector. We count among our members the largest and many of the smallest suicide prevention and mental health not-for-profits, practitioners, researchers, and leaders. Suicide Prevention Australia also manages the National Suicide Prevention Research Fund, established by the Commonwealth Government to support research into suicide prevention. The aim of the fund is to support world-class Australian research and facilitate the rapid translation of knowledge into more effective services for individuals, families, and communities.

We can never underestimate the impact that every life lost to suicide has on family, friends, workplaces and the broader community. Over 10 million Australian adults are estimated to know someone who has died by suicide, and 1 in 2 young people are impacted by suicide by the time they turn 25. Sadly, suicide is the leading cause of death among young Australians 15-24 years with over one third of deaths in this cohort due to suicide. Particular groups of young Australian's are at elevated risk. Young males aged 15-24 years have a suicide death rate of 21.2 per 100,000, compared with 6.7 for young females. For Aboriginal and Torres Strait Islander young people aged 15-24, the rate of death by suicide per 100,000 was 58.9, compared with 18.5 for non-indigenous young people. Other groups of young people at higher risk include those in rural and remote areas, those in contact with the justice system, those leaving statutory care, those who have been exposed to suicide or suicide related behaviour, and LGBTIQ+ young people.

The COVID-19 pandemic has been incredibly disruptive for young people. It has impacted their schooling, saw the loss of key milestones, and created great uncertainty for the future. During this time, Kids Helpline have reported significant increases in calls from young people experiencing suicidality. Self-harm and suicidal ideation-related hospital admissions have also increased for young people in some jurisdictions.

As the national peak body for the suicide prevention sector, Suicide Prevention Australia will continue to advocate for governments to prioritise investment in youth-specific early intervention strategies, with particular priority on programs and services that are co-designed with young people. Suicide Prevention Australia also supports universal, in-school preventative education mental health and suicide prevention programs for young Australians. In addition, the development of help-seeking skills and knowledge should be built into the national curriculum. While rolling out services and programs is critical, so too is research.

Research is fundamental to developing suicide prevention solutions that work and are informed by evidence. Suicide is complex and more research is needed to gather evidence on how best to address suicide risks in young people. I commend this research paper that delves into the regional variability of self-harm, suicide attempts, and related risk and protective factors in Australian adolescents.

Nieves Murray

CEO – Suicide Prevention Australia



Take Home Messages and Next Steps

Existing Knowledge (prior to project)

- In 2015, the Government announced a renewed approach to suicide prevention through the establishment of a new National Suicide Prevention Strategy. A key component was a systems-based, regional approach led by the Primary Health Networks (PHNs).
- The need to understand suicidal behaviour within small-area geographies is supported by a growing spatial epidemiological literature. However, most research has focused on suicide deaths which may not properly reflect prevention needs, and few studies have focused on young people. This is a priority population where urgent action needs to be taken to prevent suicides in Australia.
- Previous regional variability studies have shown method of self-harm/suicide differs by geography. Aboriginal and/or Torres Strait Islander status, prior exposure to suicide, socio-economic status, and unemployment levels have been shown to be associated with youth self-harm and suicide clustering.

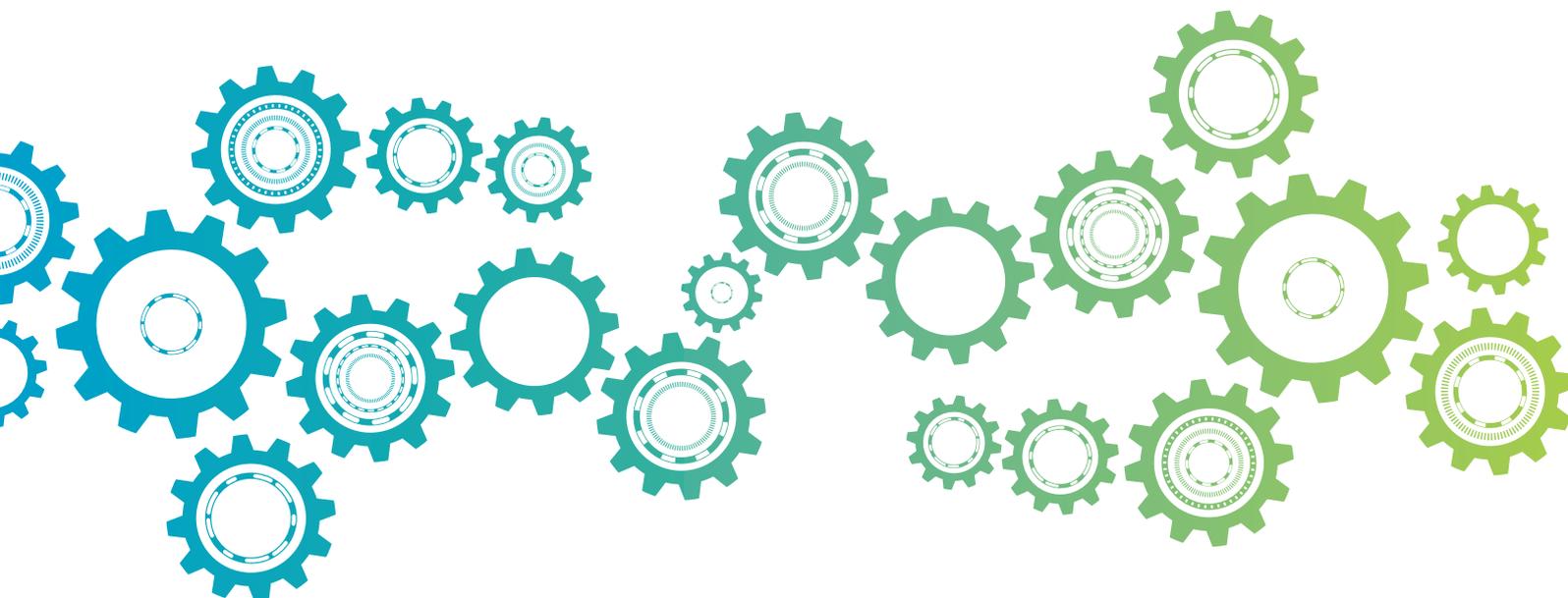
New Knowledge (based on current project)

- There was overall large variability in youth self-harm prevalence (non-suicidal and suicidal) across the nation.
- Northern Territory, Western Australia, and South Australia had the overall highest state youth self-harm prevalence. Hot spot analyses identified local areas in each state and territory where future youth self-harm/suicide prevention efforts should be prioritised, including metro and regional areas across Western Australia, Northern Territory, Queensland, Victoria, and New South Wales.
- Mental ill health, parent unemployment and being born in Australia were key risk factors of youth self-harm in nationwide quantitative modelling. Spatial mapping showed all associations with self-harm differed geographically across Australia (in size and direction), emphasising the complexity of self-harm relations.
- Self-identified risk/protective factors in youth focus groups were largely consistent with key factors in our quantitative analysis, providing additional and needed richness. Overall, the home, high school, and digital environments were perceived as most influential by focus group participants – these settings should be priority areas. Themes related to financial barriers, transportation issues, and small-town effects were more prominent in regional than metro areas.
- Nationwide quantitative analyses showed 70% of young people reporting self-harm or suicidality did not use services for their mental health in the previous 12 months. Nearly half of this group reported an unmet need of care. Both metro and regional youth focus groups faced similar broader issues/barriers, related to mental health stigma and service accessibility. However, the nature of these problems differed in metro versus regional qualitative themes. For example, regional youth focused on community-level stigma (related to the small-town effect), whereas metro youth focused on stigmatising comments from hospital staff.
- In focus group discussions, there was overlap between youth and staff 'blue sky thinking' suggested improvements for the sector. These included: **(a)** increasing afterhours supports; **(b)** greater provision of missing middle services; **(c)** structural changes (e.g., increased connections between the mental health and school system, and separate, less clinical pathways to safe spaces); and **(d)** including peer workers at all levels of the sector. Blue sky thinking themes focused on improved intake processes, financial solutions, increased youth-specific inpatient facilities, housing supports (youth), and themes related to addressing community stigma, the need for less clinical 'horizon widening' therapeutic approaches, and more accessible in-person suicide risk assessment training (staff) were more prominent in regional than metro areas.



Next Steps

- Establishing partnerships between hospitals, coroners, police, and other relevant data custodians in youth self-harm clustering regions identified in nationwide hot spot analyses, to make real-time data more readily available, particularly at a localised level.
- Increased research efforts and program planning focused on improving youth mental health (via mental illness prevention efforts) and programs focused on improving the employment and socio-economic outcomes of single parents in Australia.
- E-safety discussions focused on monitoring online self-harm/suicide related content, and liaising with social media platforms to implement more comprehensive safety mechanisms.
- Education programs for parents and school staff (including teachers, principals) focused on improving understanding of youth mental health, self-harm, and gender and sexual diversity.
- Discussions with PHNs and other service planners about key service use barriers and suggested improvements provided by youth and staff focus group participants in regional versus metro areas. Common suggested improvements identified by both staff and youth with lived experience point to areas of greatest priority.



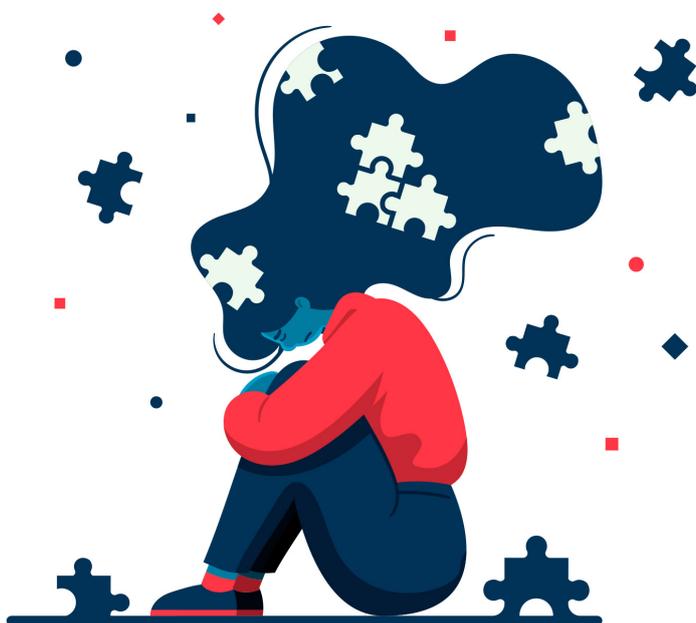
Chapter 1: Background

Suicide prevention strategies in Australia have shifted in recent years, from a national approach to one that is regionally tailored and responsive to local community needs. In 2015, the Government announced a renewed National Suicide Prevention Strategy²⁰. A key component was a systems-based, regional approach led by the Primary Health Networks (PHNs). This approach presumes that overly broad geographical aggregation can mask important small-area variations and that there are substantial differences between communities in suicide incidence and suicide-related risk and protective factors. For example, comparing risk factors for suicide in young people growing up in Melbourne with those living in regional Queensland, there are some common risk factors but also some that are unique to the area where the young person lives.

Previous literature supports the need to understand suicidal behaviour within small-area geographies. However, this body of research has focused on suicide deaths which may not properly reflect prevention needs^{1,6,7}. Targeting both non-suicidal self-harm and suicide attempts could substantially contribute to reductions in suicide rates^{11,17}. Also, few studies have used national data focused on *young people* – a high priority population in the suicide prevention sector^{4,8,9}. There have been recent calls for the Australian Government to lead the development of a separate Youth Suicide Prevention Plan, one which addresses the unique needs of young people, identifies specific at-risk groups, and considers young people's help-seeking patterns and preferences⁹. Therefore, there is an urgent need to investigate regional variation in non-suicidal self-harm and suicide attempts, along with related risk and protective factors and service utilisation in Australian youth. Such analyses would have strong translational value, identifying priority youth suicide prevention targets in distinct geographic regions, and thereby providing information to guide targeted local prevention efforts.

Our data-informed, youth-focused study was the first to investigate regional variability in 'self-harm' (both non-suicidal self-harm and suicide attempts), and related risk and protective factors in Australian young people. The project team consisted of a diverse group of researchers and clinicians, and at the heart of the project was the partnership between QIMR Berghofer and Roses in the Ocean, the lead Australian organisation for lived experience of suicide. The project's vision and goals were consistent with Suicide Prevention Australia's (SPA) strategic priorities of generating new knowledge of what works to prevent suicide and suicidal behaviour, and what factors are protective against suicide.

The project's vision and goals were consistent with Suicide Prevention Australia's (SPA) strategic priorities of generating new knowledge of what works to prevent suicide and suicidal behaviour, and what factors are protective against suicide.



Aim



To conduct the first national study in Australia on the regional variability of youth self-harm (including non-suicidal self-harm and suicide attempts) and related risk and protective factors.

Objectives

The objectives of this research project were to:

1. Investigate regional variability of non-suicidal self-harm and suicide attempts in Australian youth and related risk and protective factors.
2. Investigate regional variability of service use and barriers to help seeking among Australian youth who engage in non-suicidal self-harm and suicide attempts.
3. Investigate what key stakeholders perceive to be the most relevant risk and protective factors for self-harm and suicide prevention in their local communities and regions.



Objectives 1 and 2 were achieved by:

analysing the nationally representative Young Minds Matter survey of Australian adolescents (12-17 years) and Census data to produce local-level self-harm prevalence estimates, and to examine local-level relations with risk/protective factors and mental health service use.



Objective 3 was achieved by:

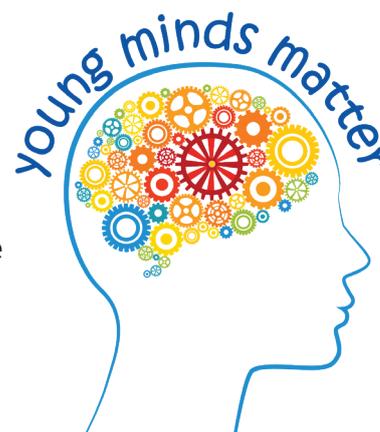
conducting focus groups with young people (<21 years) with lived experience of self-harm or suicidality and other key stakeholders living in geographically distinct areas of Australia. Discussions focused on what stakeholders perceive to be the most relevant risk and protective factors for self-harm and suicide prevention in their local communities.

Importance to Wider Sector

Collectively, this **mixed methods project** intended to identify characteristics of regions with lower and higher self-harm and suicide risk, and, in turn, help establish meaningful targets for youth suicide prevention informed by both **national data and lived experience**. In doing so, the findings are intended to influence policy and practice by identifying both general (national) and specific (regional) priority targets for youth suicide prevention, thereby increasing the efficiency of current suicide prevention strategies for young Australians.

Chapter 2: Methods (Quantitative)

The project team analysed the Young Minds Matter (YMM) survey^{1,2}, along with ABS Census data³, to address research objectives 1 and 2. These datasets were geocoded at various spatial units (for location of usual residence), allowing our team to conduct regional variability analyses of **prevalence of self-harm (non-suicidal and suicidal)**, and related risk and protective factors in Australian young people (12-17 years). The team also examined regional variability of **mental health service use and barriers** to help-seeking/receiving among young people engaging in self-harm.



About the Young Minds Matter (YMM) survey

- Also known as the Second Australian Child and Adolescent Survey of Mental Health and Wellbeing^{1,2}.
- National household survey funded by the Department of Health and led by the team at the Telethon Kids Institute in Western Australia. Data collected between 31 May 2013 and 10 April 2014.
- Parents of 6,310 children and adolescents aged 4-17 years were surveyed via personal interview.
- 2,967 young people 11 years and older completed the youth self-report survey on a tablet, including questions about self-harm and suicidality (≥ 12 years). National prevalence estimates are presented in the table below.
- Approximately 137,000 young Australians (12-17 years) reported self-harming (without suicidal intent), and 41,000 reported attempting suicide in the previous 12 months.

Self-harm and Suicidality in Australians aged 12-17 years

	Self-harm (irrespective of intent) past 12 months (%)	Non-suicidal Self-harm past 12 months (%)	Suicide attempt past 12 months (%)	Suicidality past 12 months (%)	Suicidal ideation/plans (only) past 12 months (%)
Males 12-15	3.6	3.0	0.8	3.4	2.6
Males 16-17	7.8	6.2	2.9	6.8	3.9
Females 12-15	9.9	9.8	2.7	8.1	5.4
Females 16-17	17.7	16.8	4.7	15.4	10.7
Persons 12-17	8.7	8.0	2.4	7.5	5.1

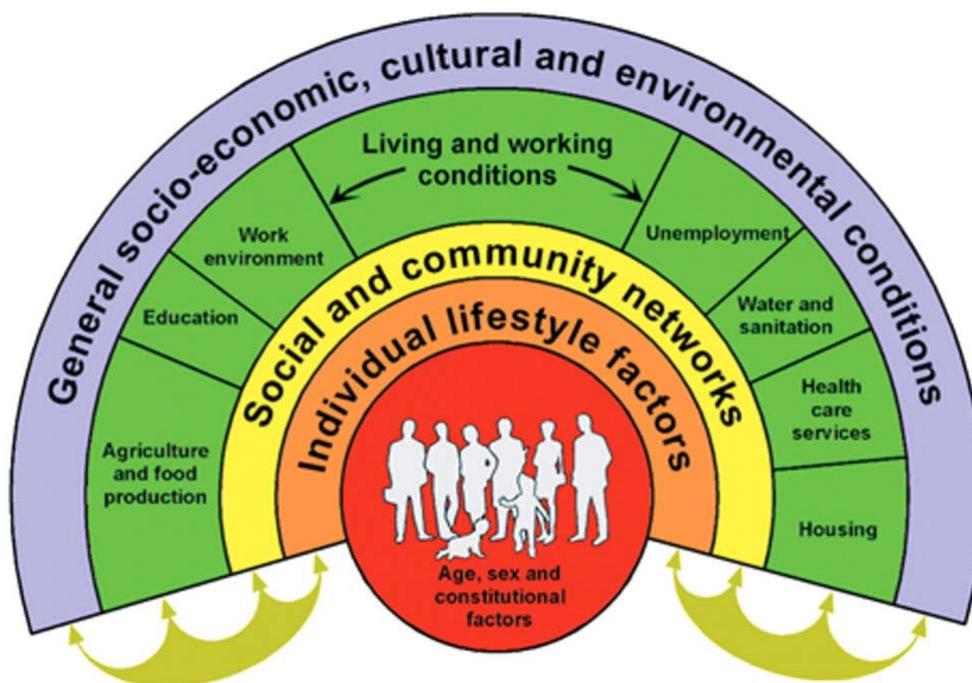
Self-harm irrespective of intent (primary outcome): self-harm with or without suicidal intent (non-suicidal self-harm or suicide attempts) in the past 12 months; Suicidality: suicidal ideation, plans, or attempts in the past 12 months; Suicidal ideation/plans (only): suicidal ideation or planning only in the past 12 months (suicide attempts excluded from variable)^{29,30}.

Primary outcome for the current study was **self-harm in the previous 12 months (irrespective of intent)**, and secondary outcomes were 12-month non-suicidal self-harm, suicide attempts, suicidality (ideation, plans, attempts), and suicidal ideation/plans only (see Glossary for definitions).

Risk & protective factors: Consideration for environments in which young people live, work, learn, and play

- YMM survey also captured risk and protective factors related to self-harm and suicide, at an individual, family, and community level. These were included in our self-harm predictive modelling (see next page).
- Socio-demographic and socio-economic information were also triangulated from the ABS Census data (2016)³.

Category	Key Indicators from YMM Survey
Community protective factors	Green spaces/parks in the local community, Socio-Economic Indicators for Areas
Community risk factors	Social fragmentation indicators (e.g., population mobility, privately rented households), remoteness, conditions of homes in the local area
Family protective factors	Family connectedness, family education and employment history, country of birth, family income
Family risk factors	Poor family functioning, history of mental illness, housing tenure (state housing, other rental, owned)
School protective factors	School engagement
School risk factors	School suspension, poor school performance
Individual/peer protective factors	Healthy self-esteem, social engagement, sufficient sleep, country of birth
Individual/peer risk factors	Depression, psychological distress, drug and alcohol use, being bullied, disordered eating behaviours



Source: Dahlgren and Whitehead⁴³

Key Analysis Steps

To derive, analyse, and map self-harm prevalence estimates across the nation, the following steps were taken:

Descriptive – YMM Survey

1. Describing self-harm prevalence – overall at the national level and by specified strata (age, sex, region).
2. Estimating standardised self-harm prevalence ratios and visually inspecting their spatial distribution for small areas, at the SA1 level i.e., smaller than suburbs (See Glossary for definitions).



Predictive Modelling – YMM Survey + ABS Census → Synthetic data

3. Predictive modelling (nationwide) to determine which factors best predict self-harm at an individual level.
4. Modelling of area-level self-harm using the YMM survey data (2013-14)^{1,2} and ABS Census data (2016)³.
5. Building a small-area (SA1-level) model to obtain out-of-sample predictions for self-harm prevalence (i.e., self-harm estimate for every region of Australia). This is 'small area estimation'. See description on next page.



Mapping – Synthetic data

6. Mapping "synthetic" self-harm prevalence estimates, and then exploring their spatial distribution across Australia.



Also using the YMM survey, the team analysed regional variability of **mental health service use and barriers to help seeking** among Australian youth (12-17 years).

- Based on the subset who reported self-harm ever in the survey (n=790), proportion (%) of respondents who reported mental health service use in the past 12 months (primary outcome) was determined by state, primary health network (PHN), and small geographic area (i.e., suburb-level).
- Statistical comparisons for service use (by level of remoteness, state, strata) were conducted using Chi-squared analyses X^2 , significance set at $p < .05$.
- The team also examined barriers to help-seeking or receiving, and other service use (online, telephone, headspace) in the previous 12 months.

Small Area Estimation

- **Young Minds Matter (YMM)** survey did not collect data from every community; a **sample of 550 communities** were included from across Australia. To investigate regional variation of self-harm across the nation, we created “synthetic” area-level, model-based prevalence estimates for each outcome, using survey and Census data available for all communities in Australia. This process is also known as ‘**small area estimation**’ (**Step 5 on the previous page**), a statistical approach which utilises measures common to both the measured (i.e., survey population) and unmeasured population (i.e., Census data which is available for all geographic areas of Australia) to help extrapolate survey data to other non-surveyed communities¹⁸.
- Main **spatial unit of analysis** was Statistical Area Level 1 (SA1; smaller than suburbs) for place of usual residence. Self-harm estimates were then aggregated and visually presented at broader geographic units: SA2 (size of suburbs within cities), SA3, primary health network (PHN), and state. See [ABS’s website](#) for geographic structure.
- Predicted prevalence estimates of self-harm were calculated for each outcome (primary, secondary) in 2019, incorporating the estimated resident population (ERP) for 2019 provided by the ABS⁵. All analyses were conducted using Stata.

External Validation

- Suicide death data from the National Mortality Database (NMD)⁸ was incorporated to validate the current synthetic self-harm estimates.
- Associations were examined between SA2-level self-harm prevalence estimates and crude suicide rates (per 100,000 population). NMD data comprised of SA2-level crude annual adult suicide rates (per 100,000 population) averaged over 5-year periods. These were averaged to derive SA2-level average annual suicide rates for a 10-year period (2010–2019). All self-harm outcomes were significantly associated with NMD’s mean crude suicide rates ($p < .001$).

ArcGIS Mapping

- Small-area (or suburb-level) estimates of self-harm prevalence were imported into [ArcGIS Pro](#) mapping software for descriptive visualisation and mapping of spatial distribution (**Step 6 on the previous page**).
- Choropleth maps were produced of the distribution of self-harm prevalence. Density measures (self-harm cases per sq km) were mapped separately using dot density maps.
- We statistically examined the spatial distribution of self-harm prevalence across Australia using Moran’s I spatial statistic and the Hot Spot Analysis (Getis-Ord G_i^*) tool. Key risk/protective factors (at SA2 or suburb-level within cities) were imported into ArcGIS, and relations with self-harm were examined across the nation using the ArcGIS bivariate mapping tool.

CAVEATS AND LIMITATIONS – QUANTITATIVE ANALYSES



- **Synthetic estimates** – While synthetic estimates are the best available small-area data that can be used for service and program planning/delivery, the actual number of cases of self-harm in any small area can vary from the model prediction, if there are unique factors of that area that are not included in the model. See assumptions below.
- **Assumptions** – Synthetic estimates (derived from ‘small area estimation’) are not direct estimates. They are based on a model with a set of assumptions, including the assumption that self-harm prevalence in any small area can be determined based on knowing the socio-demographic characteristics of the area, and that the relationship between socio-demographics and self-harm does not drastically vary between broad geographic areas. It is not possible to test this assumption without detailed small-area data on actual numbers of cases. For example, if a particular community happens to have an effective self-harm/suicide prevention program that is not available elsewhere, or if there is some factor in the local environment that is a risk factor for self-harm, these factors would not be captured by the synthetic approach.
- **Areas with limited data** – YMM survey had sparse coverage in certain states and territories (remote areas in NT and WA). This may have implications for reduced accuracy, particularly for suicide attempt prevalence estimates.
- **Ageing cohort** – Estimates were prepared using YMM survey data (2013-14)^{1,2} applied to small-area demographic data from 2016 Census and updated to June 2019 using ABS population data (ERP)⁵. It is unclear whether 12-17-year-olds living in a small geographic area in 2016 share characteristics with 12-17-year-olds living in that area in 2022. For example, contemporary factors that may influence mental health and self-harm could not be accounted for, including the role of recent disasters (COVID-19) and technology use changes.

CAVEATS AND LIMITATIONS – QUALITATIVE ANALYSES



- **Sample size** – Overall focus group sample size was expected for a qualitative study of this nature, although subsamples for each Primary Health Network (PHN) region was relatively small, limiting our ability to make strong conclusions for individual regions. Study recruitment was challenging due to COVID-19.
- **Sample characteristics** – Whilst a qualitative study never aims to be representative per se, it is still important to recognise that the current themes cannot be applied to all Australian young people who self-harm. It is also important to recognise sample characteristics as a potential explanation for why certain themes may have been more prominent in the current study. Our youth focus group sample largely identified as female, Caucasian Australian, and lesbian, gay, bisexual, transgender, queer, intersex, or other diverse genders and sexualities (LGBTQI+); and notably ~20% identified as neurodivergent. Also, the sample did not have an even split of metro vs. regional based participants, with oversampling in the latter (~60% of total sample). However, statistical comparisons of key socio-demographics of metro versus regional participants showed no significant differences.
- **Saturation of themes** – Whilst the focus group data was extremely rich and there were many commonalities of themes across all focus groups (for staff and youth), it is unclear whether this study reached full saturation of themes.
- **Biases/priors of qualitative coders** – All three coders have a psychology background, higher education degrees, and have mainly lived in metro areas of Australia. Such factors likely impacted the way the coders analysed the focus group transcripts. However, there was diversity in age, gender, and ethnicity of the coders, along with frequent discussions among coders; this likely mitigated possible biases.



Synthetic estimates are prevalence estimates for small areas like a suburb. They are not direct estimates but rather are produced from modelling data from multiple sources (survey, census), to produce estimates for more granular populations^{22,23}. See Glossary for more definitions.

Chapter 3: Methods (Qualitative)

The project team conducted online focus groups to address research objective 3. Discussions focused on the **most pertinent risk and protective factors** for self-harm and suicidality for key stakeholders (young people with lived experience, and staff) in four geographically diverse areas of Australia. Focus groups also covered discussions about mental health support services, organisations, and initiatives in the local area, thereby providing additional richness to the other project objectives.

Focus Groups with Young People and Other Stakeholders



31 young people (15-21 years)

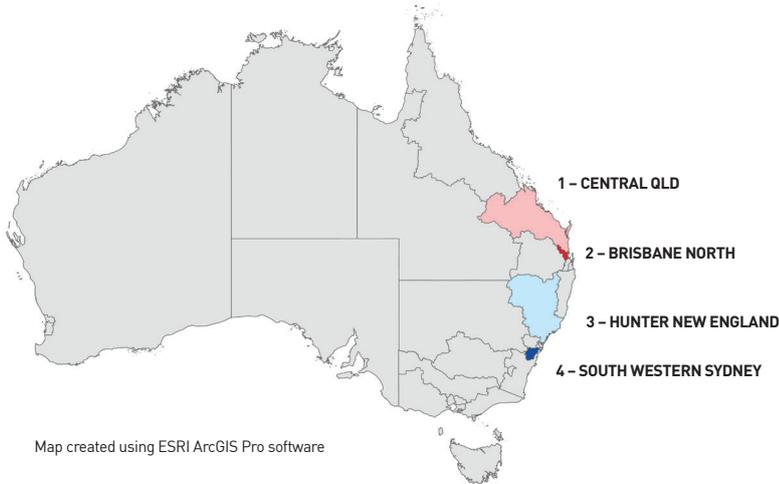
The project team hosted small group discussions with young people with lived experience of self-harm or suicidality. Discussions focused on the environments in which young people live, work, learn, and play, and how these impact a person's self-harming and suicidal behaviours. We also asked about local organisations, services, and initiatives, including what they think is needed but is currently missing to better support young people in their local area.

23 staff members (18+ years)

The project team had separate discussions with community mental health staff in the four regions of interest about what's existing and what could be improved to better support young people with lived experience of self-harm or suicidality in the local area.

Data Collection Areas

Online discussions with young people and staff living in four regionally and socially diverse areas across Queensland and New South Wales, Australia. See the four **Primary Health Network (PHN)** areas of interest in the map below.



Youth Focus Groups (approx. 2 hours each)

10 online focus groups with young people with lived experience of self-harm and/or suicidality. The regional: metro divide was a 61:39 split. ~4 people per group.

	QLD	NSW
Metro PHN	Brisbane North 3 groups; 31.0%	Southwestern Sydney Metro & regional subdivision 3 groups; 31.0%
Regional PHN	Central QLD, Wide Bay, Sunshine Coast 2 groups; 17.3%	Hunter New England & Central Coast 2 groups; 20.7%

% of total participants

Each group discussed the following with respect to their experiences of self-harm or suicidality:

1. Risk and protective factors across their home, work or study (school/uni/TAFE), play, digital environments
2. Recent environmental stressors (e.g., flooding, climate change, COVID-19)
3. Existing self-harm/suicidality support services available in their local area
4. Suggested improvements for these services

Zoom's whiteboard function was used to help capture key topics (themes) during the focus groups.

Staff Focus Groups (approx. 1 hour each)

Four staff focus groups were conducted online, one in each region of interest. Most staff worked in a regional area (65% regional vs. 35% metro).

	QLD	NSW
Metro PHN	Brisbane North 1 group; 17.6%	Southwestern Sydney Metro & regional subdivision 1 group; 41.2%
Regional PHN	Central QLD, Wide Bay, Sunshine Coast 1 group; 11.8%	Hunter New England & Central Coast 1 group; 29.4%

% of total participants

Average 5 people per group, the staff focus groups discussed the following:

1. Existing services and resources available in their organisation/community to support young people with lived experience of self-harm or suicidality
2. Suggested improvements to existing services to better support young people with lived experience



Note: Metro PHN areas have $\geq 85\%$ of the population in 'major cities', as defined by the ABS. All other areas are classified as regional PHNs⁴⁴.

Recruitment and Analysis

Youth Recruitment

We recruited young people who met the following criteria:

- aged between 15-21 years
- had lived experience of self-harm and/or suicidality
- lived in one of the four areas of interest for at least the past 12 months.

Youth participants were recruited from various community organisations, social media, university/TAFE, and youth health websites.

Staff Recruitment

The project team relied on existing networks and connections in the four regions to recruit for staff focus groups, including staff (18+ years) who assisted with recruitment of youth focus group participants. Organisations included: headspace, Open Doors Youth Service, ReFrame/Community Links Wellbeing, Roseberry QLD, and New Horizons. Staff had been working at this organisation (or a similar organisation) in their respective PHN for at least the past 12 months.

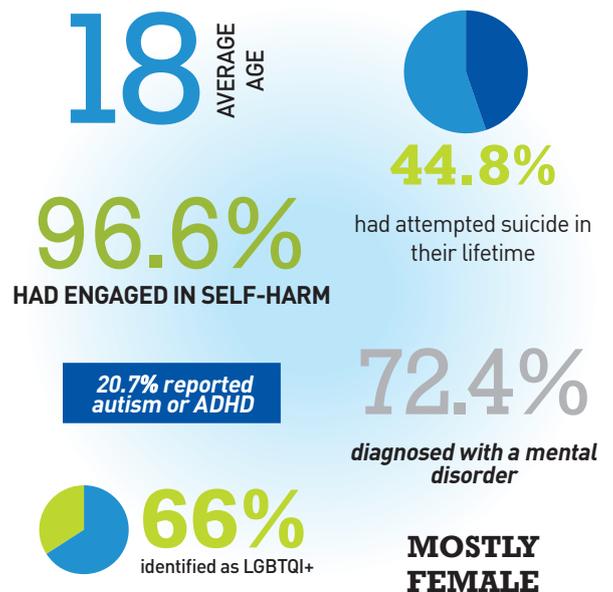
Analysis

Focus group audio was recorded and transcribed using Zoom. Transcripts were checked for quality independently by three team members. Framework analysis was used to analyse both youth and staff focus group transcripts. This means we went through the transcripts line-by-line and identified key themes/topics discussed, using a framework we developed using initial notes from the Zoom whiteboards. Themes were analysed for the overall sample and for metro vs. regional focus groups. For those interested in framework analysis, please refer to research by Arifin et al.⁷ and Srivastava & Thomson⁶.

Demographics

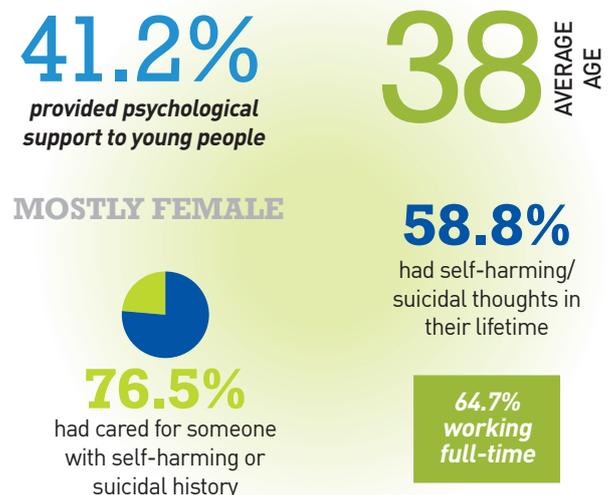
Youth focus group characteristics (31 participants):

- Aged 15–21 years (Mean = 18.76 years, $SD = 1.85$)
- Most youth identified as female (20.6% identified as non-binary, non-conforming, or gender fluid)
- 66% identified as LGBTQI+
- 6.9% identified as culturally and linguistically diverse
- 72.4% reported being diagnosed with a mental disorder (depression and anxiety most common). 20.7% reported having autism or attention deficit hyperactivity disorder (ADHD).
- Almost all had engaged in self-harm irrespective of intent (96.6%) and had suicidal or self-harming thoughts (93.1%) in their lifetime
- Almost half (44.8%) had attempted suicide in their lifetime
- Majority (79.3%) currently engaged in counselling or other forms of formal supports



Staff focus group characteristics (23 participants):

- Aged 24–69 years (Mean = 37.93 years, $SD = 11.39$)
- Most staff participants (76.5%) identified as female (12% identified as non-binary or non-conforming)
- A third (29.4%) identified as LGBTQI+
- All staff worked at community mental health organisations
- 41.2% provided direct psychological (or other supports) to young people; most others worked in broader roles in a relevant organisation
- 64.7% working full-time
- Over half had suicidal or self-harming thoughts in their lifetime (58.8%), and had cared for a friend or family member with self-harming or suicidal histories (76.5%)
- Two staff participants (and one youth participant) identified as Aboriginal and/or Torres Strait Islander



Results

The following Chapters (Chapters 4-7) present the key results from both (Part A) Quantitative spatial analyses, and (Part B) Qualitative focus groups components of the project.

The results are presented in the following order:

Chapter 4 Self-Harm Prevalence



Chapter 5 Risk and Protective Factors



Chapter 6 Service Use and Barriers to Help Seeking



Chapter 7 Blue Sky Thinking for Service Innovation



Some people may find parts of this next section confronting or distressing. Please carefully consider your needs when reading the following information and results about youth self-harm and suicidality. If this material raises concerns for you, please contact Lifeline on 13 11 14, or [see other ways you can seek support](#).

Chapter 4: Self-Harm Prevalence

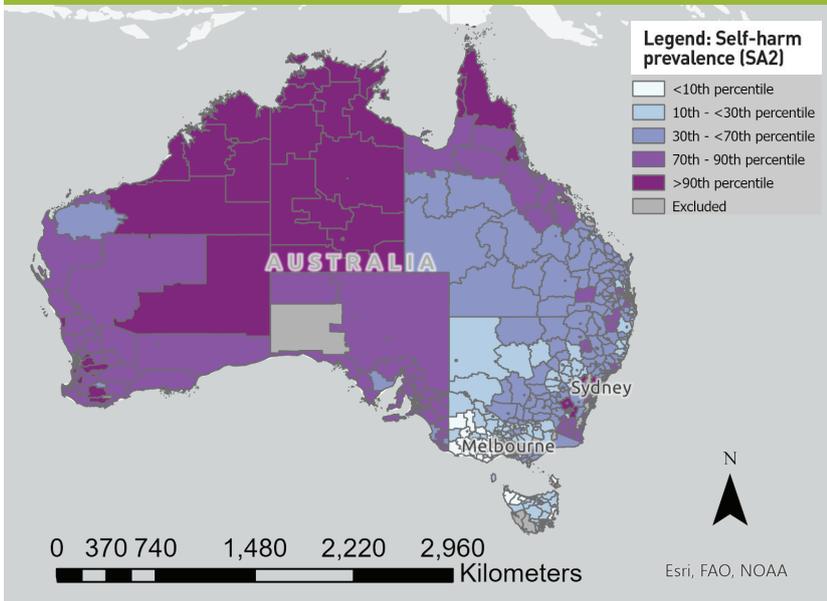
Self-Harm Prevalence Key Findings	Implications
As expected, there was overall large variability in 12-month youth self-harm prevalence across Australia. This was also the case for secondary outcomes: non-suicidal self-harm, suicide attempts, and suicidality (ideation, plans, attempts).	This provides further support for Australia’s National Suicide Prevention Strategy of a systems-based regional approach to suicide prevention, which presumes that overly broad geographical aggregation can mask important small-area variations.
Northern Territory (NT), Western Australia (WA), and South Australia (SA) had highest state prevalence of youth self-harm (irrespective of intent). See prevalence maps on next page.	These jurisdictions should be given high priority from federal funding programs and youth self-harm/suicide prevention research initiatives.
Girls aged 16-17 years reported highest engagement in self-harm (non-suicidal or suicidal). However, parts of regional NT, WA, and Queensland (QLD) indicated high area-level proportions of adolescent males associated with high self-harm prevalence.	Supporting older adolescent females should be a key focus of prevention programs. It is important to recognise, however, that both young males and females are susceptible to self-harm. Also, young people identifying as gender diverse were not captured in the current survey data, where studies have shown heightened self-harm risk relative to the general adolescent population ⁴⁷ .
Based on the synthetic estimates, there was an increasing trend in youth self-harm prevalence with increasing remoteness, for most outcomes (primary and secondary). However, in the YMM survey data, there were insufficient observations from remote/very remote regions to fully assess remoteness.	The self-harm-remoteness relationship appears to be more complex than simply youth self-harm being more prevalent in one or the other (i.e., in metro vs. regional/remote). Also, YMM survey data had limited coverage of remote areas. It may be more informative to focus on priority locations in both metro and regional areas, as identified in hot spot analyses (see next point).
<p>Hot spot analyses identified regions in each state and territory that warrant particular attention (see maps on next page).</p> <p>Statistically significant clusters of self-harm were found in:</p> <ul style="list-style-type: none"> • metro, regional and remote parts of WA • regional and remote parts of NT • regional parts of North and Central QLD • metro and regional areas of New South Wales (NSW) (particularly outer Western Sydney) • eastern metro areas of Melbourne • outer South-Eastern regions of Adelaide <p>Supplementary hot spot analyses showed suicide attempt clusters tended to be more predominant in East Coast regions of Australia, however, these supplementary results should be interpreted with caution due to sparse numbers for attempts.</p>	<p>Whilst spatial analyses can only provide an indication of what <i>may</i> be happening at the local level, identifying small geographic areas with high estimated youth self-harm prevalence is a good starting point for mapping priority regions of ‘need’. This is a crucial step in the development of effective public health initiatives/interventions in the youth suicide prevention sector.</p> <div data-bbox="890 1395 1374 1559" style="border: 1px solid black; padding: 5px;"> <p>Note: Throughout this prevalence section, we refer to findings in metro, regional, and remote areas of Australia. This is based on the ABS’s remoteness classification scale of metro/major city, inner regional, outer regional, remote, and very remote.</p> </div>
<p>Primary Health Networks (PHNs) with highest estimated youth self-harm prevalence in each state:</p> <ul style="list-style-type: none"> • QLD – Northern QLD (PHN 307) • NSW – Nepean Blue Mountains (PHN 104) • VIC – Eastern Melbourne (PHN 202) • TAS (PHN 601 – state/territory has only 1 PHN) • NT (PHN 701 – state/territory has only 1 PHN) • ACT (PHN 801 – state/territory has only 1 PHN) • WA – Country WA (PHN 503) • SA – Country SA (PHN 402) 	These findings are informative for state-level planning (for those with multiple PHNs) with respect to guiding prioritisation of resources and self-harm/suicide prevention program allocations.

Synthetic estimates of self-harm prevalence and hot spot analysis maps are shown on the next page. Note, map regions in grey indicate regions with missing data, or regions with low quality data (5% of total small areas in Australia). Other project maps can be found on the online interactive Australian Youth Self-Harm Atlas.

Self-Harm Prevalence

Map 1 shows synthetic self-harm prevalence estimates (in 2019) among young Australians aged 12-17 years. Primary outcome of self-harm (irrespective of intent) in the previous 12 months. The below map shows the distribution of self-harm prevalence in each Statistical Area Level 2 (SA2) across Australia i.e., the size of suburbs within cities. Synthetic self-harm estimates were derived from multilevel modelling (see Chapter 2).

Map 1: 12-month self-harm prevalence, 12-17 years, Australia (2019)



Interpretation of Map 1

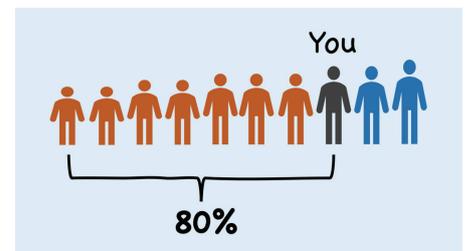
“Dark Purple” indicates higher prevalence (i.e., above the 90th percentile), and “Light Blue” indicates lower prevalence of self-harm (i.e., below the 10th percentile). As seen in Map 1, Northern Territory (NT), Western Australia (WA), and South Australia (SA) had the highest state prevalence of youth self-harm (irrespective of intent).

Dot density maps (self-harm cases per sq km, *not shown*) found high density areas were mainly located in the capital cities and some larger regional towns in each state and territory.

Maps created using ESRI ArcGIS Pro software

Percentile is the value below which a percentage of data falls. For example, you see to the right, if 80% of people are shorter than you, this means you are in the 80th percentile.

The concept of percentiles is important for interpreting Map 1. In the current study, all SA2 areas in Australia were ranked from the area with the lowest proportion of young people who self-harmed, to the SA2 with the greatest proportion. The SA2 areas that are in the >90th percentile were areas where the proportion of young people who self-harmed was higher than 90% of all SA2 regions in Australia.

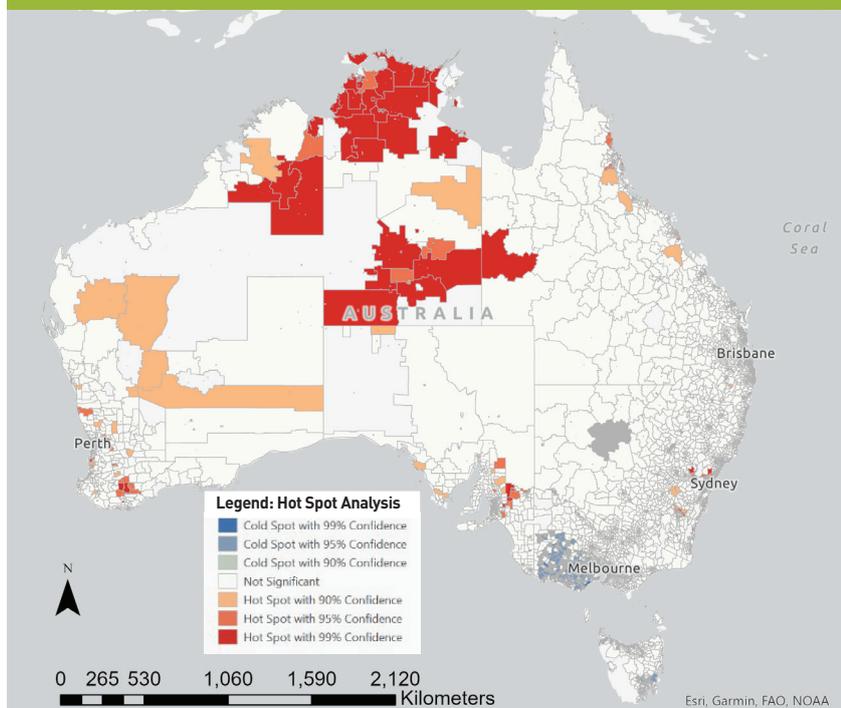


Remember, **synthetic estimates** are prevalence estimates for small areas like a suburb. They are not direct estimates but rather are produced from modelling data from multiple sources (survey, census), to produce estimates for more granular populations. These maps (on pg. 25-26) present synthetic not direct estimates of self-harm; they are based on a model with a set of assumptions. See Chapter 2 for a summary of assumptions, and Glossary for terminology definitions.

Self-Harm Hot Spot Analysis

Map 2 shows nationwide hot spot analysis of estimated youth self-harm prevalence (at the SA3 level) using the ArcGIS Hot Spot Analysis (Getis-Ord Gi*) tool. The below map shows statistically significant high-value and low-value clusters of the primary outcome (self-harm prevalence irrespective of intent) with 90-99% confidence.

Map 2: Hot spot analysis of 12-month self-harm prevalence (2019)



Interpretation of Map 2

“Dark Red” regions indicate ‘hot spots’ of statistically significant clustering of high self-harm prevalence (with 99% confidence), “Dark Blue” regions indicate ‘cold spots’ of statistically significant clustering of low self-harm prevalence (with 99% confidence). “White” regions are areas with no evidence of self-harm clustering.

As seen in Map 2, hot spot analyses showed significant clustering of youth self-harm prevalence (irrespective of intent) across metro, regional and remote parts of WA, regional and remote parts of NT, regional parts of Northern and Central QLD, metro and regional areas of NSW (particularly outer Western Sydney), Eastern metro areas of Melbourne, and outer South-Eastern regions of Adelaide.

Confidence is how statistically confident we are that an area is either a ‘hot spot’ or ‘cold spot’ for self-harm prevalence. 99% confidence interval is a range of values that you can be 99% certain contains the true value of the population. These spatial analyses can only provide an indication of what may be happening locally.

It is also important for the reader to recognise that for both Map 1 and Map 2, self-harm prevalence is based on the proportion of the population aged 12-17 years. What this means is that prevalence is not just higher in hot spots because there are more young people living in these areas – the self-harm rate is estimated to be higher.

Chapter 5: Risk and Protective Factors

Risk & Protective Factor Key Findings	Implications
<p>Poor mental health and lower parent employment (area-level) were key risk factors of youth self-harm. Areas with high percentages of families with overseas-born parents was associated with markedly reduced odds of youth self-harm.</p> <p>Largely consistent predictors were identified for primary (self-harm irrespective of intent) and secondary outcomes.</p> <p>(ABS Census & YMM survey data)</p>	<p>These variables should inform general (national) targets for future youth self-harm/suicide prevention initiatives, including targets for further research inquiries.</p> <p>This includes further investigations into the potential protective elements of being a child of parents born overseas.</p>
<p>Associations between all risk/protective factors and self-harm differed geographically across Australia (in size and direction). Not just social determinants and economic issues as predicted, but also psychological variables. Most factors had differing association patterns for regional versus metro areas.</p> <p>Example: Socio-economic status and self-harm largely showed strong negative relations across the nation (i.e., low socioeconomic advantage and high self-harm prevalence), but most capital cities showed reversed pockets (i.e., areas of high socio-economic advantage and high self-harm prevalence).</p> <p>(ABS Census & YMM survey data)</p>	<p>To best account for this self-harm relationship diversity, metro-based suicide prevention commissioning activities may need to be guided by local-level data i.e., data below the Primary Health Network (PHN) level.</p>
<p>Self-identified risk/protective factors in our youth focus groups were largely consistent with the national survey data analysis, providing additional confirmation and needed richness to the identification of known risk and protective factors.</p> <p>(YMM survey & Focus group data)</p>	<p>These findings emphasise that both quantitative and qualitative research should be guiding policy makers and service planners in the youth self-harm and suicide prevention space (not just one or the other).</p>
<p>Overall, the home, high school, and digital environments were perceived as the environments which were most influential in relation to self-harm and suicide by youth focus group participants.</p> <p>(Focus group data)</p>	<p>These settings should be priority areas in ongoing and future youth suicide prevention and intervention initiatives. Youth participants recognised opportunities for delaying social media access, and for social media platforms to implement more comprehensive safety mechanisms (including monitoring of self-harm/suicide related content). TikTok and Tumblr were identified in particular as lacking comprehensive monitoring systems with respect to managing triggering content.</p> <p>Education opportunities for parents and school staff were also identified, focused on young people's gender and sexuality, mental health, and self-harm, including education related to reduced access to dangerous means in the home.</p>
<p>Youth focus group participants discussed strategies that they have devised in each environment to counter risk factors, plus bolster protective factors (i.e., to stop them from engaging in self-harming and suicidal behaviour). For example, strategies young people have devised to create their own safe spaces across the multiple environments in which they occupy.</p> <p>(Focus group data)</p>	<p>These are useful strategies to be shared with other young people and service providers, including service providers or school and tertiary systems attempting to create safe spaces for young people.</p>
<p>Qualitative themes related to financial barriers, transportation issues, and small-town effects were more prominent in regional than metro areas.</p> <p>(Focus group data)</p>	<p>Such findings should assist PHNs and other service planners with understanding the most pertinent specific (regional) targets for preventing and managing self-harm and suicidality among young Australians, across the environments in which they live, work, learn, and play.</p> <p>These findings should also provide service planners with a better understanding for where best to situate certain youth support services in regional versus metro areas.</p>

Factors associated with Self-harm

Key risk and protective factors identified in quantitative (YMM survey and Census data) and qualitative (focus groups) analyses are presented below and on the following pages. It's important to keep in mind the constructs below:

Risk factor: something that increases your likelihood of developing an illness or bad health outcome.

Protective factor: something that promotes good health and reduces the risk of you becoming unwell.

Individual (or person) level: denotes information about individuals, e.g. individual respondents of a survey.

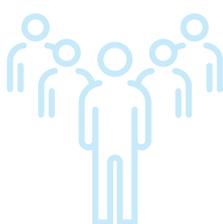
Area level: denotes information about an area, like a suburb e.g., proportion (%) of houses in a suburb which are rental properties. Relationships found at an area-level may not hold at the person-level.



Quantitative Nationwide Analyses – Risk & Protective Factors

Overall, poor mental health (major depression disorder, high psychological distress) and high area-level proportions of single unemployed parents were key risk factors of self-harm in quantitative nationally representative analyses. Other key predictors were areas with moderately high percentages of youth identifying as Aboriginal and/or Torres Strait Islander (12-17 years) and low socio-economic indicators (i.e., areas with low socio-economic advantage). Areas with high percentages ($\geq 30\%$) of families with parents born overseas was associated with markedly reduced odds of self-harm.

INDIVIDUAL-LEVEL



RISK

Depression disorder (OR=3.9)

Youth and parent reported

Psychological distress (OR=9.3)

Lack of family connectedness (OR=3.6)

YMM Survey

Note: Odds ratio (OR) is an effect size.

OR >1 means increased risk, OR <1 means reduced risk.

OR larger than 3 → moderate-to-large association⁴⁵

AREA-LEVEL



Youth identifying as Aboriginal and/or Torres Strait Islander (12-17 years) (OR=1.8)

Single unemployed parents (OR=1.8)

High prevalence of depression/anxiety disorders* (highest quintiles) (OR=2.2)

Low socio-economic indicators

ABS Census & Synthetic data*

PROTECTIVE

Overseas-born parents** (OR=0.7)

ABS Census

Other Australian suicide studies⁴⁶ have found similar findings. Second-generation migrants (i.e., born in Australia but with at least one parent from overseas) may have lowered suicide risk as they generally have higher education and income, compared to Australian-born third generation (i.e., both child & parent born in Australia). Also growing up in a bicultural environment might provide a bigger repertoire of skills and attitudes, rendering a young person to be more flexible and resilient⁴⁶.

**This overseas-born finding requires further follow-up investigation, within the broader context of the unique needs and experiences of culturally diverse populations of Australia.

Note: these predictors are not deterministic e.g., poor mental health is noted to be strongly predictive of self-harm, but this does not mean that all young people with poor mental health will engage in self-harm.

Youth Focus Groups – Self-Identified Risk & Protective Factors

Discussions focused on the environments in which young people live, work, learn, and play, and how these impact on young people’s self-harming and suicidal behaviours, i.e., the most pertinent risk/protective factors in each of these environments.

A diverse range of risk and protective factors were identified (see Technical Report for more detail). Some variables were complex and were considered both a risk and protective factor depending on the context. This included relationships with family members in the household, teachers, school peers, as well as interactions with public green spaces (e.g., parks) and engagement in sports. The latter (parks, sports) were not inherently positive experiences or settings for young people. Participants also recognised the overall complexity of the online world, where social media platforms were viewed as either good or bad depending on the people and content they were exposed to. Highlighted below are key qualitative themes in each environment.

Key RISK FACTOR themes

HOME	WORK / STUDY	PLAY	DIGITAL
<ul style="list-style-type: none"> • Easy access to dangerous self-harm items • Poor housing quality • Negative impact of other household members • Lack of social connectedness 	<ul style="list-style-type: none"> • High pressure or expectations to perform • Outdated institutional policies and practices • Lack of general institutional support 	<ul style="list-style-type: none"> • Exposure to unsafe or uncomfortable environments • Systemic barriers (e.g., financial and accessibility/transport issues) • Outdated societal attitudes/approaches (e.g., work/play imbalances) 	<ul style="list-style-type: none"> • Early age access to social media • Toxic attitudes and behaviours online • Access to triggering content (e.g., self-harm, eating disorder related) 



RECENT ENVIRONMENTAL STRESSORS/EVENTS

(e.g., COVID-19, climate change, bush fires)

- Sense of hopelessness (climate change)
- Uncertainty/unpredictability (COVID-19)
- Difficulties with working/studying from home (COVID-19 lockdowns)

Note, many of these factors are defined in more detail on pg. 31-32.

Some participants drew direct connections between this (climate change) hopelessness and their will to live:

“It could also be like justifier for like suicide, in a way, because it’s like, if it’s all going to go down, why not now [...]”

(Female, 17, metro)



Note: PLAY (or local wider community) was defined as anything outside of the home that is not related to work or study, like hobbies or leisure activities.

Key PROTECTIVE FACTOR themes

HOME	WORK / STUDY	PLAY	DIGITAL
<ul style="list-style-type: none"> • Having/creating their own space <ul style="list-style-type: none"> – Having their own bedroom – Having control over their own space (e.g., able to personalise or decorate) • Pets in the household • Creating a comfort or reasons to live toolbox 	<ul style="list-style-type: none"> • Having autonomy and self/time management • Institutional-level supports (e.g., extensions and flexible learning options) • Access to safe/calming spaces (e.g., breakout rooms at school) 	<ul style="list-style-type: none"> • Having access to safe/calming/comfortable spaces (e.g., familiar spaces or walk-in support spaces) • Partaking in social activities and groups (emphasis is on enjoyment, not competitiveness) • Sense of connectedness (via community and university-based friendships) 	<ul style="list-style-type: none"> • Having strategies/tools for creating their own digital safe spaces • Exposure to positive/informative/inspiring content (e.g., content that empowers you and makes you feel represented) • Staying connected with friends/family (at night)
			



RECENT ENVIRONMENTAL STRESSORS/EVENTS

(e.g., COVID-19, climate change, bush fires)

- Sense of hopefulness (climate change – doing actions together, climate action rallies, commitment to living sustainably, e.g., not buying fast fashion to combat climate changes)
- Sense of community collectiveness (COVID-19 – we're all in this together)
- Being appreciative of the silver linings (e.g., COVID-19 lockdowns gave me a break from life)
- Sense of connectedness (COVID-19) – Remaining connected to friends and family via online phone calls was helpful, but can become repetitive and exhausting



Note: PLAY (or local wider community) was defined as anything outside of the home that is not related to work or study, like hobbies or leisure activities.

HOME and DIGITAL environments were perceived as particularly risky

Easy access to dangerous self-harm items

Poor housing quality e.g., messy unclean, noisy

Home Themes



Difficulty living with family while recovering:
"it was very very very hard, because I shared a bathroom with my brother too."
(Gender fluid, 17, regional)

Excessive noise and lights:
"That's overstimulating - that's a big factor for me"
(Female, 19, metro)

"Allows self-harm to happen if I have easy access to dangerous items [...]"
(Non-binary, 18, metro)

"have housemates and they have [...] left dishes in the sink for days, and [...] the thought of that being in my personal environment [...] it's revolting to me."
(Female, 17, metro)

Too much alone time *

"I am left alone with my thoughts, and I tend to spiral."
(Non-binary, 18, metro)

Negative impact of others (family context/history/intergenerational)

"Overthinking and not being able to have anyone to talk to when I'm in that dark space"
(Female, 21, regional)

Busy, noisy, pressure cooker households:
"Every family goes through issues [...] because it was so compact [...] was just a pressure cooker"
(Male, 20, regional)

"The abuse I went through at home effecting the self-harming behaviour [...] It was a cycle of cause and effect"
(Gender fluid, 17, regional)

*Balance of alone time vs. time with others was recognised as ideal

Digital Themes

“I don’t think that social media could be worse for anyone’s health at the moment”

(Female, 17, metro)

Toxic attitudes and behaviours online

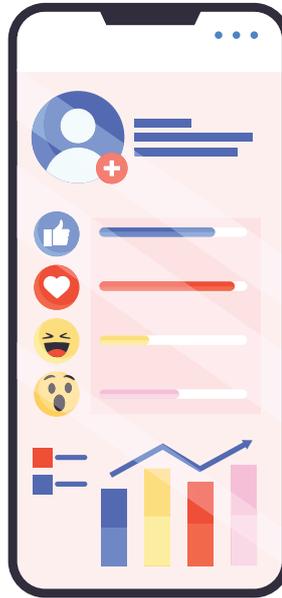
- Cyberbullying/harassment/trolling
- Grooming & sexualisation of youth
- Competitive nature of platforms
- Toxic influencer behaviour (targeting vulnerable young girls)

“Negative toll on one’s mental health [...] feel unsafe and [...] start to believe the negative comments”

(Female, 18, metro)

“Makes you feel worse about yourself”

(Non-binary, 18, metro)



Early age access to social media

- Not understanding the dangers of the internet at a young age
- Easy to download any app these days
- Can be really detrimental to young people’s mental health

“I didn’t know at a young age, what to do with it [...] there was no one really to safeguard what you were posting.”

(Male, 17, regional)

Access to triggering content

Prominent triggering content: self-harm, eating disorders, glamourising mental health, and encouraging comparative thinking. Particularly prevalent on TikTok, Instagram, and Twitter.

Self-harm content –

“[self-harm scars] it’s triggering to people who are going through that, but also people who have been through that want to also not have to hide everything all the time [...]”

(Female, 17, metro)



In **work/study discussions**, youth participants viewed **High School** as another particularly risky environment. They reported having to navigate extreme pressures to perform and outdated institutional policies and practices (i.e., sex education, bullying management, and mental health and self-harm education and supports). Regional-based high school staff (in particular) reportedly had a superficial (and sometimes damaging) understanding of self-harm and related appropriate responses. Such experiences were directly connected with a young person being less willing to seek support, and instead suffering in silence. Those that had left school (and are now at university/TAFE or in the workforce) had experienced noticeable improvements in their quality of life and personal relationships.

“The whole pressure cooker [school] environment [...] I did fairly well. I did a lot of things, but it was just under the surface, totally destroying me [...]”

(Non-binary, 20, metro)

“I found that I guess the [school] staff weren’t really as knowledgeable on, like, self-harm [...] I would self-harm at school, but it would never be picked on by anyone because it wasn’t one of your normal stereotypical ways of self-harm.”

(Female, 15-17, regional)

Having or Creating Safe Spaces was a Recurring Protective Theme

Outlined below are the typical safe spaces accessed or created by our youth focus group participants across the various environments in which they occupy. Participants commented that creating (or accessing) such spaces positively impacted their mental health and wellbeing, including protecting them from engaging in self-harming and suicidal behaviour.



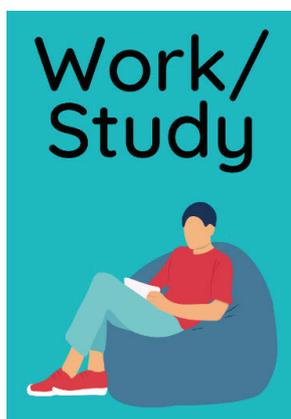
Home

Own bedroom

Typically, the young person's bedroom was viewed as a safe space, which involved personalising or decorating it to help them feel safe and comfortable.

"I have my bedroom and it's like, it's covered in posters of stuff [...] that is related to my special interests in there, stuff like that. Um, yeah it really helps me."

(Female, 17, metro)



Work/Study

School breakout/quiet rooms

Having access to breakout or quiet rooms at school. This gave them the time and space to think through mental health issues and to connect with friends and support staff.

"They [breakout rooms] are there just so you are able to de-stress. Like [...] for students [...] going through mental health issues and stuff like that [...] it was a really good thing to have going through high school."

(Male, 17, regional)



Play

Going to familiar outdoor spaces

Having access to various safe to calming spaces, including going to familiar public spaces or nearby walk-in support spaces.

"I always go to the same supermarket because I know exactly where everything is. So I don't have to worry about [...] the anxiety of having to ask somebody [...]"

(Non-binary, 21, metro)

"ReFrame [walk-in-support space] is wonderful [...] Like you can go, you can sit down, and you can be like, hey look, this is my issue"

(Non-binary, ≤21, regional)



Digital

Self-monitoring, staying alert strategies

Developing and applying their own strategies to create their own digital safe spaces, such as self-monitoring and staying alert strategies. For example, managing the negative impact of social media algorithms.

"I have like my main account and then a different one [...] if I am in a [bad] place [...] I at least try and look on my different accounts so that it [triggering content] won't come up on my main account."

(Non-binary, 18, metro)

Other Recurring Protective Themes:

Autonomy/Self-Management/Personal Boundaries – Young people felt safest from engaging in self-harming or suicidal behaviour when they had freedom and control over the space around them.

Change of Environment – For example going from home to the shops, or home to the university campus was largely viewed as protective, providing a sense of purpose, break from work/study, and an escape from negative homes.

Sense of Connectedness – This was achieved via different means across the different settings. For example, home (having pets), work/study (university peers, special interest groups), digital (online support groups).

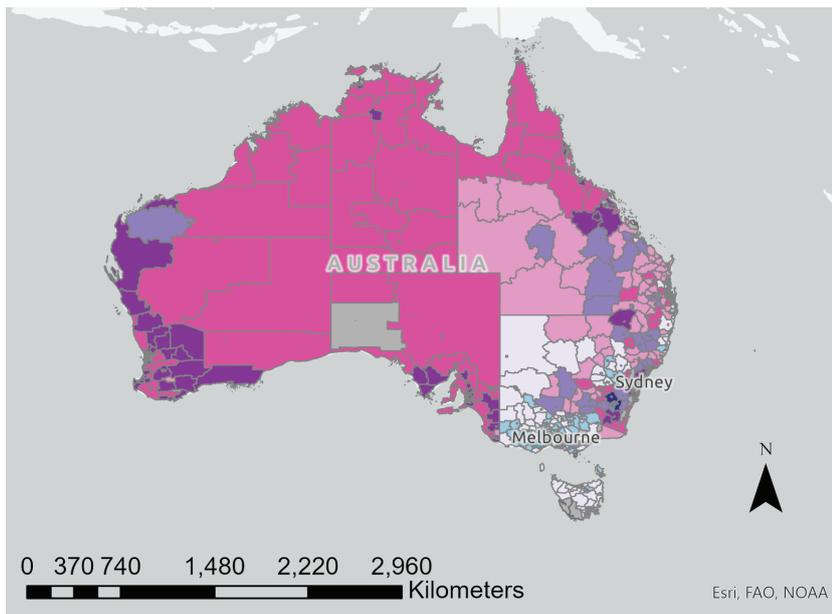
Regional versus Metro Comparisons



Quantitative

Using the bivariate mapping tool in ArcGIS, we investigated regional variability of *area-level* (or suburb-level) associations between self-harm and key risk/protective factors across the nation. Associations between all risk/protective factors and self-harm differed geographically across Australia (in size and direction). Not just social determinants and economic issues as predicted, but also psychological variables. Most factors had differing association patterns for regional versus metro areas; where, for the latter, there was overall greater diversity in relationship size and direction.

Example: Socio-economic status and self-harm largely showed strong negative relations (i.e., low socio-economic advantage and high self-harm prevalence) across the nation (“Dark Pink” areas in map below), However, most capital cities showed reversed pockets i.e., areas of high socio-economic advantage and high self-harm prevalence.



Legend: Area-Level Socioeconomic – Self Harm Association

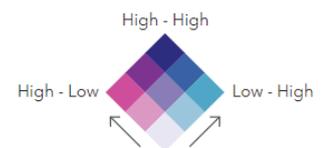
Self Harm - IRSAD Decile

Relationship

↖ SA2_SelfHarmComposite_2019

↗ SA2_IRSAD_Decile_2016

■ Excluded



High self-harm
Low socioeconomic

Low self-harm
High socioeconomic

Indicator definition: SA2-level (suburb-level) Index of Relative Socio-economic Advantage and Disadvantage (IRSAD), derived from 2016 Census data⁹. High IRSAD scores indicate relatively low financial disadvantage. These indices are assigned to areas, not to individuals.

Qualitative

We also investigated any differences between **REGIONAL** versus **METRO** focus groups, in terms of risk and protective factor themes across the different environments (home, work/study, play, digital).

Qualitative themes that were more prominent in REGIONAL groups:

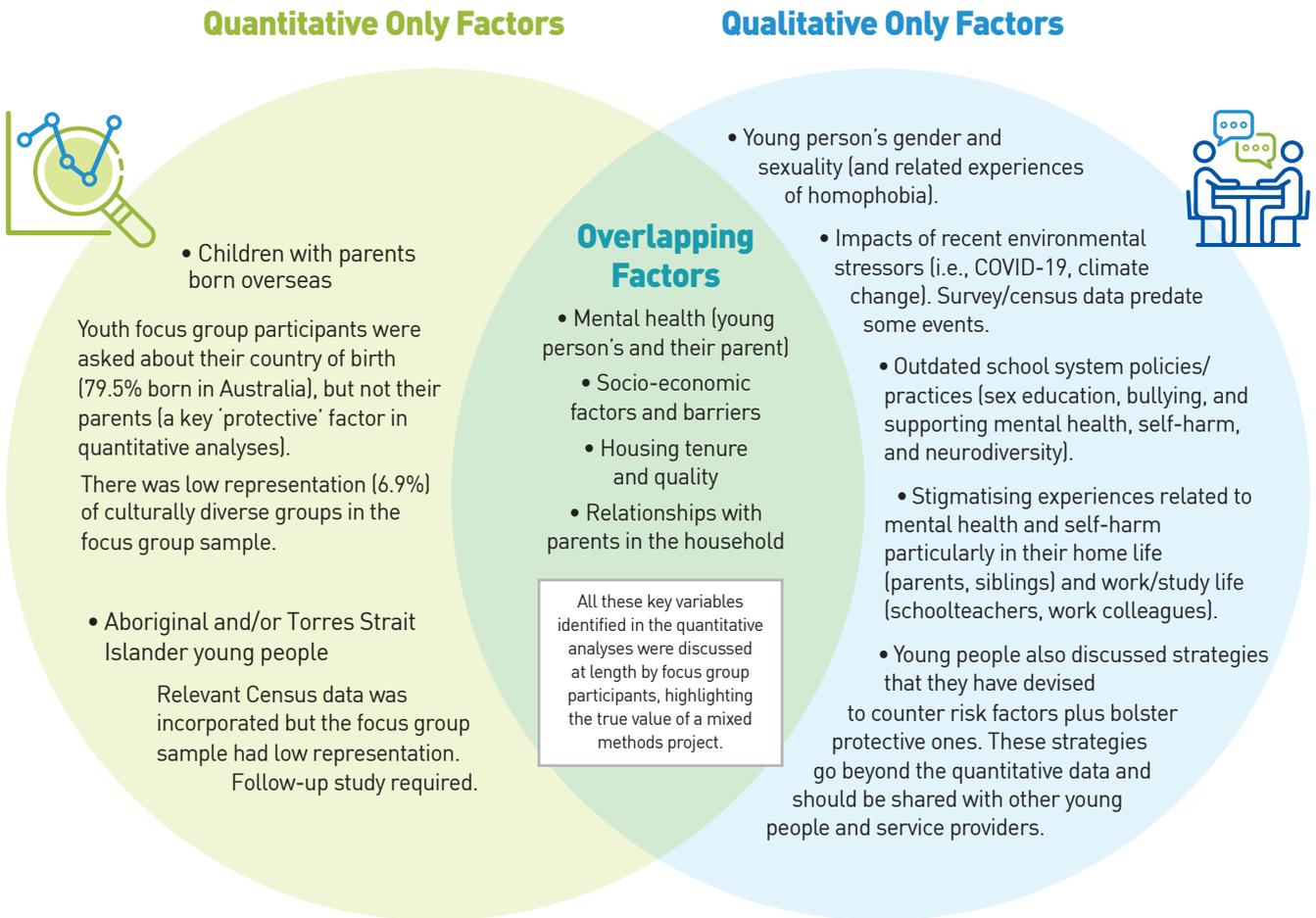
- **Financial Barriers**, particularly related to affording engagement in community activities, social events, formal supports, and being able to live sustainably.
- **Transportation Issues**
 - Participants expressed frustration with public transport wait times, *“Yeah, there’s about a bus every three hours (Facilitator IC: What?!). Yeah, so if you miss the bus, like you, you’re walking.”* (Female, 17, regional)
 - Getting their drivers licence was a big deal for regional-based young people, viewed as a newfound autonomy and freedom *“um I think that getting your licence is probably the most freeing thing, ever”* (Female, 17, regional), and for some, an escape from a negative home environment *“once I got my licence, like being able to take myself away from the situation.”* (Female, 20, regional)
- **In-Person Socialising and Support Seeking Preferences**, in-person friendship meetups out in the community were perceived as particularly important among regional young people.
- **Small Town Effects** were perceived as a ‘mixed blessing’ i.e., great for community connectedness but can also be a barrier for seeking supports.
- In terms of **unexpected positives**, young people in regional areas reported the openness of where they live and living on large properties was a positive aspect, where it’s easier to find quiet spaces to mentally unwind and escape negative home environments.

“I don’t think I would have coped on, you know, classic half acre suburban block.”
(Male, 20, regional)

Note: For these Metro vs Regional comparisons throughout the report, ‘regional’ is used to denote all non-metro areas, like the PHN classification system.

Overlap: Qualitative Focus Group & Quantitative data

Self-identified risk/protective factors in each of the environments (except for digital) were largely consistent with key factors identified in our YMM nationwide quantitative analysis. Overlapping variables (identified in both qualitative and quantitative analyses) are listed below. There were also factors not included in the quantitative analysis (due to limited availability of recent national-level adolescent data, and question limits imposed on national surveys) that were pertinent in our youth focus group discussions. Considering the variables listed in 'Qualitative Only Factors' below, future nationwide youth mental health surveys should potentially expand their included topics/questions.



Overlapping Factor Example: Relationships with Parents in the Household

- Low family connectedness was a key risk factor of self-harm identified at the individual-level, in YMM nationwide quantitative analyses. At an area-level, relationships with and characteristics of parents in the household were also key. Including their relationship and employment status, as well as their country of birth (see pg. 28).
- In focus group discussions, there was a particularly strong focus on the young person's relationship with their parents in the household. These relationships were complex and considered both a risk and protective factor by youth participants depending on the context.
- Many recognised that parents can be helpful at times (and that they generally mean well), but at other times they can make things more challenging for the young person.
 - **Negative or risky aspects** of these parental relationships included: poor communication, violating personal boundaries, and a lack of understanding related to the young person's mental health, sexuality, and self-harming behaviour.
 - **Positive or protective aspects** of these relationships included: parent's mental health literacy, open communication, cognitive reframing, and being supportive of their child as a person (including their sexuality, spirituality, and special interests).



Chapter 6: Service Use and Help Seeking Barriers

Service Use and Barriers – Key Findings	Implications
<p>Around 70% of young people reporting self-harm or suicidality did not use services for their mental health in the previous 12 months. Nearly half of this group reported an unmet need for care.</p> <p>(YMM survey data)</p>	<p>This should ring alarm bells for policy makers and service planners – the sector is not offering enough services for young people in this cohort, or not offering enough services that are appropriate, suitable, and welcoming.</p>
<p>Main barriers to help seeking/receiving:</p> <ul style="list-style-type: none"> • Poor service availability (long wait times for receiving supports/therapy, and travel times) • Invalidating or disrespectful experiences • Mental health stigma (both community and staff) • Mental health literacy • Broader financial/structural issues related to a disconnected system <p>(YMM survey & Focus group data)</p>	<p>Collectively, these barriers or issues could help explain the low mental health service utilisation estimates (of 31%) found in the nationally representative YMM data analysis.</p>
<p>Regional variability was apparent in focus group qualitative themes, but not the quantitative data.</p> <p>Prominent regional (vs. metro) themes included:</p> <ul style="list-style-type: none"> • Financial barriers to mental health (particularly affording psychiatrists) • Travel distances to mental health appointments and services • Community-level stigma <p>The latter focused on the small-town effect, whereas in metro groups, the most problematic was stigmatising comments from hospital staff.</p> <p>(Focus group data)</p>	<p>These findings should provide Primary Health Networks (PHNs) and service planners with a better understanding of the more pertinent mental health service needs or barriers faced by young Australians living in regional versus metro areas.</p>
<p>Both metro and regional groups faced similar broader issues or barriers (related to mental health stigma and service accessibility), and hence little regional variability was found in national-level analyses. However, the nature of these problems differed in metro versus regional youth qualitative themes.</p> <p>(YMM survey & Focus group data)</p>	<p>These findings emphasise that (1) quantitative and qualitative research should be guiding policy makers and service planners in youth self-harm and suicide prevention, and (2) national-level data may inadvertently obscure local-level nuances related to service needs and barriers.</p>

On the following pages, we present descriptive statistics for mental health service utilisation and barriers to help-seeking, as reported in the nationally representative Young Minds Matter (YMM) survey, as well as related qualitative themes from the youth and staff focus groups.



Limitations to consider for quantitative analyses on next page:

Only young people aged 13 years or older were asked service use questions in the YMM survey (8.4% under 13 years were missing due to this reason). Also, only a subsample was asked questions related to help-seeking/receiving barriers (325/790; 41.1% of total eligible sample). Future studies using more detailed help-seeking survey questions (and higher-powered subsamples of young people reporting self-harm) may be required. Another key limitation is that the YMM data are >5 years old, so patterns of service use may have changed (e.g., more headspace centres opening, emergence of Safe Spaces).

Quantitative Nationwide Analyses – Service Use and Barriers

SUBSET – For service use analyses, a subset of YMM survey respondents was created, comprising of those respondents who reported self-harm or suicide ideation ever (n=790; 29.8% of total YMM sample aged 12-17 years).

Any services
31.3%

of young people had used services (any) for their mental health in previous 12 months

This means that ~70% of young people reporting self-harm or suicidal ideation did not use MH services in past 12 months. 39% of this group had an unmet need for care.

Telephone
7.4%

used telephone counselling services (e.g., Kids Helpline) in previous 12 months

headspace
12.7%

used headspace services in previous 12 months

Online
39.6%

used online services in previous 12 months

Self-harm/
suicide attempt
hospitalisation

75.1%

of young people did not receive medical treatment following their last suicide attempt; and 90.1% following their last self-harm episode

Young people and their parents reported similar service use levels for the child's mental health problems, except for telephone counselling services (e.g., Kids Helpline), with 11.7% of parents reporting that they 'didn't know' whether their child had or had not used such services.

70% of young people reporting self-harm or suicidality did not use services for their mental health in the previous 12 months, and 39% of this group reported an unmet need for care.



Youth Focus Groups – Service Use and Barriers

Focus Group Probing Question (What’s Existing): What programs or initiatives are currently available in your local area to support young people with lived experience of self-harm and/or suicidality?

Youth participants were overwhelmingly negative about the general mental health system and hospitals/emergency departments (public more so than private). Common issues raised are outlined below. There were more mixed discussions about community initiatives/programs and online/telephone supports depending on the type of service.

Negative Experiences

GENERAL MENTAL HEALTH SYSTEM

Poor service availability long wait times for receiving supports/therapy (~4 months for headspace services, ~6 months for specialists/psychiatrists), services largely available between 9-5, travel times to appointments in regional/rural areas

Stigma – both community (concerns for being seen for seeking mental health supports) and staff (insensitivities)

Invalidating or disrespectful experiences – feeling like you must be really unwell to get any professional help or to be taken seriously, and feeling like you’re not listened to

Broader financial & structural issues related to a disconnected system and psychological supports being too expensive (particularly for those already financially struggling)

“I’ll be on a waitlist for a long time um. By which point I’ll usually get worse. So I need more support”

(Female, 19, metro)

HOSPITALS / EMERGENCY DEPARTMENTS

Invalidating or disrespectful experiences particularly hospital staff attitudes/comments. For some, their interactions with staff were described as dehumanising and humiliating.

Service accessibility of emergency departments – long wait times of up to 8 hours when in crisis, and wait rooms in emergency departments (or general hospital facilities) can be traumatising for some young people.

Structural issues related to strict and backward criteria for mental health wards where young people felt they needed to hurt themselves to receive any inpatient supports (putting them at even greater risk).

“In your little teenage brain you go. Okay, cool, that means I have to get worse.”

(Female, 21, metro)

Mixed Experiences – Online/chat-based/telephone supports

HOTLINES OR CRISIS LINES (LIFELINE, KIDS HELPLINE, 1800 RESPECT)

- Long call wait times (1-2 hours, particularly at night)
- Inexperienced frontline staff (particularly for Kids Helpline and Lifeline)
 - Young person feeling like they’re not taken seriously/listened to
 - Call sometimes ended abruptly
- HOWEVER, if assigned a well-trained and respectful caller (reportedly 50:50), it was a helpful experience in those crisis moment.



CHAT-BASED SERVICES (E.G., HEADSPACE)

- Youth participants were more positive overall about online chat-based services
 - More flexible and less intimidating
 - More anonymous and confidential
- Chat responses can be generic and impersonal
- Still fairly long wait times (~1 hour)

Staff Focus Groups – Services and Barriers

Focus Group Probing Question (What's Existing): What services are currently available at your organisation (and wider PHN region) to support young people with lived experience of self-harm and/or suicidality? What's working vs. not working (and why)?

In terms of What's Existing themes, community mental health staff had overall more balanced perspectives than youth participants, providing insights on both the positive and negative aspects of the mental health system and existing community initiatives/organisations. Common positive and negative experiences discussed are summarised below.

Negative Experiences & Difficulties	Positive Experiences
<p>Funding issues</p> <ul style="list-style-type: none"> • time limited funding for self-harm/suicide specific support services • lack of funding for allied health staff positions • lack of funding for parent/family supports • government funding structure does not reflect full scope of work being done (particularly related to out-of-session supports, family sessions, development disorder supports) 	<p>Wide scope of services, including services designed to be available to most young people; holistic offering of services related to mental health, alcohol and other drugs, homelessness; suite of services on offer are largely connected (in some way) to suicide prevention; and offering non-traditional non-clinical therapies.</p>
<p>Long wait times and limited service availability for youth clients (due to staff resourcing, the number of services in regional areas, and limited out of hours care). This tends to result in prioritisation of young people with no supports.</p>	<p>Communication/collaboration with other services (via hosting interagency meetings) covers some of the gaps in the industry and has allowed youth clients to be referred more efficiently between services.</p>
<p>Lack of crisis care, often requiring referrals to external services (that are sometimes not youth-friendly), and overall limited youth-specific crisis supports.</p>	<p>Flexible service delivery for young people – driven by client preferences and presenting problems; meeting youth clients out in the community/where they feel comfortable; offering adjunct walk-in support services.</p>
<p>Complexity and ever-changing nature of the system. Many staff noted that it can take a long time to develop a good understanding of the scope and remit of youth mental health services in the local area.</p>	<p>Inclusion of youth and peer workers. Staff noted many benefits, including helping a young person to navigate the complex system, having someone relatable in the system, and assisting clinicians with further building rapport with their youth clients and for maintaining continuity of care.</p>

Mixed Experiences – Suicide prevention/risk assessment training

- **Rigid and 'checked box' approaches** to suicide risk assessment training were viewed negatively, leaving staff lacking in confidence, particularly with respect to conducting comprehensive safety planning. Reportedly more so the case for online as opposed to in-person training options.
- **Opportunities for in-person risk assessment training** in Australia can also be 'hit and miss' for some regional-based staff (see Regional Comparisons on pg. 41).
- **Comprehensive, in-person risk assessment training** received positive feedback from staff, assisting clinicians to better understand why young people become suicidal, and simplifying their overall approach to risk assessment to focus on a couple of key factors. As a result, clinicians can be more present with a young person during those critical crisis moments.
- More broadly, many staff commented that suicide risk assessment/prevention training is generally gathered through clinical experience over many years, and therefore, young professionals tend to be lacking in this area requiring training.

Regional versus Metro Comparisons



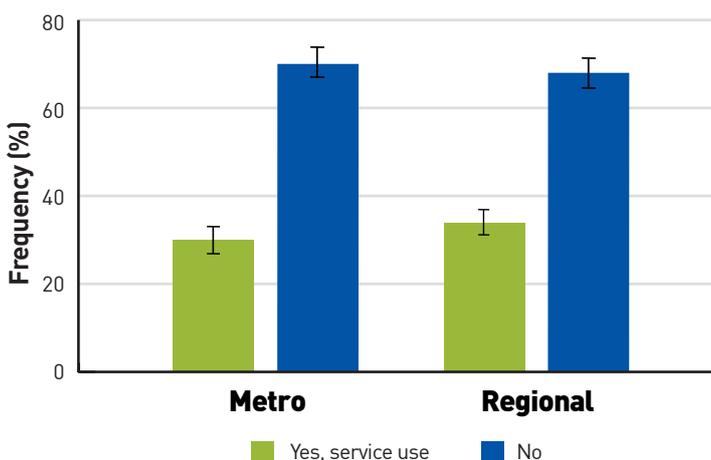
Quantitative

There was **no evidence** that service use variables (primary or secondary) in the YMM quantitative analysis varied by state, region, remoteness, or strata (see Table 1 and Figure 1). This is consistent with other Australian studies which have found a lack of urban versus rural differences in service use for adults with mental-ill health³¹. This is indicative that overall, challenges to accessing mental health services are apparent in both metro and regional areas of Australia.

Table 1. Estimated distribution of 12-month service use prevalence by Australian state, based on subset reporting self-harm ever (n=790)

State	Service use prevalence
	Proportion (95%CI)
NSW	0.34 (0.27-0.41)
VIC	0.32 (0.26-0.38)
QLD	0.26 (0.19-0.33)
SA	0.33 (0.21-0.45)
WA	0.28 (0.17-0.39)
TAS	0.47 (0.30-0.64)
NT	0.52 (0.13-0.91)
ACT	0.26 (0.09-0.43)
Overall	0.31 (0.28-0.35)

Figure 1. 12-month service use in self harming subset (n=790) by metro vs. regional (or non-metro) areas of Australia



The same was found for reported **barriers to help-seeking/receiving** in the YMM survey. The main barriers being mental health literacy (31.8%), mental health stigma (31.7%), and issues with service accessibility (17.9%); reported by both the parent and their child. Ultimately, both metro and regional groups faced similar broader issues or barriers to help-seeking.

Regional versus Metro Comparisons

Qualitative

We also conducted detailed regional comparisons of service-related barriers and themes discussed in the focus groups. The visual summary below illustrates the more prominent qualitative themes in either regional or metro focus group discussions (staff and youth). This should help increase understanding of the more pertinent service needs or barriers faced by young Australians in regional versus metro areas.

Youth Focus Groups	REGIONAL 	Financial barriers to mental health support particularly affording psychiatrists (and other mental health practitioners)	VERSUS	METRO 	
	Travel distances to mental health appointments and services	Youth Focus Groups			Service availability (e.g., 'long wait times' and 'services only available 9-5')
	Community-level stigma related to the small-town effect feeling seen and judged by people you know can be a barrier	Staff Focus Groups			Youth Focus Groups
		Difficulties providing flexible mental health services or crisis care			
		Limited funding and capacity to provide family/parental supports			
		Inaccessible and inconsistent in-person suicide prevention/risk assessment staff training (e.g., ASIST)			

"if you've ever been to headspace you sort of get to the door and you're like, okay, I hope no one sees me going in right now, I go like sneak in because you know, there's so much stigma about it."
 (Female, 21, regional)

"I had them [new staff] enrolled in [ASIST] that then got cancelled and cancelled again, and it was two years before we actually had them trained [...]"
 (Female staff, 50, regional)

Suicide Risk Assessment Training for Staff

There are a number of different staff training packages available in Australia. One example is the LivingWorks Applied Suicide Intervention Skills Training (ASIST) where you learn how to prevent suicide by recognising signs⁴.

Regional staff noted that the in-person ASIST training is one of the better training models available in Australia for suicide risk assessment training. However, it is not always offered or available to staff in regional areas, particularly Central Queensland services. Hence, online training is typically sought, but regional staff expressed that these are not the same as in-person training.



QUALITATIVE and QUANTITATIVE OVERLAP

Mental health stigma – identified as an overall barrier in the YMM national analysis. Both regional and metro youth focus groups noted stigma as a key barrier for support seeking, but metro groups focused on stigmatising comments from hospital staff, whereas regional groups focused more so on community stigma related to the small-town effect.

Service accessibility issues – also identified as overall barrier in YMM analysis. Both focus groups had extensive discussions about this topic, however, metro groups focused on 'long wait times' and 'services largely available 9-5', whereas regional groups focused more so on lack of services and travel times to see counsellors.

Chapter 7: Blue Sky Thinking for Service Innovation

Blue Sky Thinking – Key Findings	Implications
<p>Young people suggested improvements focused on:</p> <ul style="list-style-type: none"> • increasing service availability (including increased after hours support at nights/weekends, more 24/7 community-based non-clinical supports, and more text-based supports), • more inclusive and diverse supports (including more gender inclusive services, moving away from strict inclusion criteria for services, and including more peer workers across the sector), • community and staff mental health literacy/training (including hospital staff being more respectful of young people’s boundaries, and developing a greater understanding of self-harm), and • financial (equity-based services) and structural innovations (focused on increasing in-between services and designing more health facilities for adolescents and young adults). <p>(Focus group data)</p>	<p>These areas should provide direction to policy makers, clinicians, and service planners about key changes young people want to see in the mental health and suicide prevention sector.</p>
<p>There was overlap between youth and staff suggestions, including increasing afterhours supports, more missing middle services and services with multidisciplinary teams, structural changes (focused on increased mental health-school system connections, and separate, less clinical pathways to safe spaces), and including peer workers at all levels. In addition, both regional youth and staff recognised the challenges and opportunities for change with respect to small-town effects.</p> <p>(Focus group data)</p>	<p>Barriers or suggested improvements commonly identified by both staff and youth with lived experience suggest areas of greatest priority. Policy makers and service planners should focus on these areas, as they appear to impact on the key stakeholders involved in self-harm/suicide support services.</p>
<p>Regional variability was apparent in ‘Blue Sky Thinking’ qualitative themes, for youth and staff.</p> <p>For youth, improved intake processes, financial solutions, increased availability of youth-specific inpatient facilities, and housing supports were more prominent in regional than metro areas.</p> <p>For staff, addressing community stigma (via anti-stigma campaigns), the need for youth suicide prevention initiatives to be less clinical, greater health-school system linkages, and more accessible in-person suicide risk assessment training (for clinical and non-clinical staff) were more prominent in regional areas.</p> <p>(Focus group data)</p>	<p>These findings should provide Primary Health Networks (PHNs) and service planners with guidance for the more pertinent solutions for youth self-harm/suicide prevention in regional versus metro areas of Australia.</p>

On the following pages, we present qualitative Blue Sky Thinking themes from the youth and staff focus groups, i.e., themes focused on suggested improvements for the sector in terms of how best to support young people with lived or living experience (i.e., both past and present) of self-harm or suicidality. We also present regional comparisons of those themes to be better understand the more pertinent solutions for youth self-harm/suicide prevention in regional versus metro areas of Australia.

Youth Focus Groups – ‘Blue Sky Thinking’ Themes

Focus Group Probing Question: Can you think of any community programs or initiatives for young people with lived experience of self-harm and/or suicidality that would be useful but seem to not exist, or are currently not available in your local area?

The final section of the youth focus groups encouraged participants to think big in terms of their ideas for improving services and supports for young people with lived experience of self-harm and suicidality.

General Mental Health System

Below is a visual high-level summary of young people’s suggested improvements for the general mental health system. Youth participants had many great ideas, providing rich information on several different domains and topics. Ultimately, youth participants felt strongly about the central role of youth in service innovation; that young people have lots of knowledge about the system and services that should be shared and respected. As one participant astutely noted:

“I have been in and out of the public mental health system since I was 16, so that’s 5 years of experience of the good, the bad, and the ugly”

(Female, 21, regional)

Service accessibility improvements

- More supports at nights/weekends when young people most vulnerable
- More text based supports
- A night bus to safely connect young people with afterhours supports

More inclusive/diverse supports

- Gender inclusive supports
- Peer workers at all levels
- Moving away from strict inclusion criteria
- Respecting/listening to young people



Financial innovations

- More equity based services
- Bulk billed psychiatrists (particularly regional areas)

Structural innovations

- More mental health hospitals/facilities designed for youth
- More in-between services
- Increased connectivity between mental health system and schools

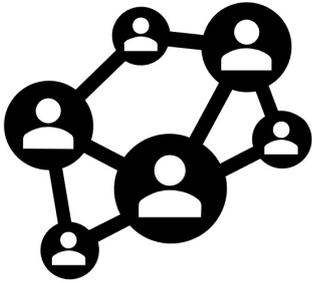
Community/staff MH training + literacy

- Staff training focused on sensitivity & stigma (particularly hospital staff)
- More resources for parents



Community Initiatives/Organisations

Youth participants discussed key ideas related to **better intake procedures** (including more check-ins and less paperwork) and **more inclusive and diverse supports** (where services are overall less clinical and business-like), in addition to **service accessibility improvements** (similar to ones outlined above) and **structural innovations**, particularly focused on better connections between the mental health and school system.



Hospitals and Emergency Departments

Young people felt that hospital facilities need to better cater for mental health patients, and have a greater separation of youth from child or adult inpatient facilities (to provide safer and better tailored treatments for young people). They also discussed improvements to staff/attitudes training (e.g., greater sensitivities towards involuntary patients, management of clinical staff burnout), having a dedicated accessibility support service (for mental health inpatients), and increasing equity-based services.

Youth participants also suggested making these inpatient facilities feel less clinical and more homely and welcoming. They suggested incorporating an outdoor/green space, planned hospital activities (where people can get up and about), allowing young people to wear their own clothes, and allowing them to take breaks to visit family and friends. Ultimately, youth participants suggested that we need to be bringing into these inpatient facilities all the things we know work for promoting good mental health, across the environments in which young people live, work, learn, and play.

In terms of inpatient facility design, one participant noted,

“If there’s a part that’s an outdoor garden [...] that you can walk through or sit at, like having bits of plants around [...] could potentially help.”

(Female, 21, regional)

Staff Focus Groups – ‘Blue Sky Thinking’ Themes

- **Better defined scope of services** – setting clearer boundaries to provide a better support service, as well as more holistic, non-clinical approaches to psychosocial care.
- **Broad structural improvements** – increased linkages between the mental health and school system, and child protection services; increased age limits to see clients below 12 years of age; and overall embracing a systems-based approach to mental health care. In terms of the latter, one staff participant (male staff, regional) noted, *“Yeah, and that’s that’s why we try to take a systems approach, a systems lens. So it’s by default being the systems therapist, isn’t it? [...] who is part of this [young person’s] world, who can contribute in an effective way.”*
- **Increased financial resources** – dedicated funding for suicide prevention, family therapies, and allied health positions to reduce reliance on Medicare rebates.
- **Improvements for staff suicide risk assessment training** – an overall more consistent approach across the sector; training specific to supporting families/parents of young people who are suicidal (e.g., having conversations with them and supporting them with their child’s safety planning); and more regular and accessible in-person training for clinical and non-clinical staff in regional areas (see more Regional Comparisons on pg. 47).
- **Improvements to community mental health training and literacy**– normalising mental health concerns via anti-stigma campaigns, and changes to high school frameworks, including moving away from an academic-only focus and taking more of a strengths-based approach to building student’s soft skills and mental health literacy.

YOUTH AND STAFF OVERLAP

Areas of thematic overlap for youth and staff ‘blue sky thinking’ themes are outlined below. It is important for policy makers and service planners to understand the commonalities of staff and youth participants identifying the same barriers or same suggested changes/improvements – these should be areas of greatest priority.

 YOUTH	 STAFF
Greater afterhours care	
<p>Youth participants reported being most vulnerable in the evenings, but they are often unable to access night-time supports (either face-to-face or online).</p>	<p>Staff also acknowledged this issue, but currently have limited funding to provide afterhours services. Staff hoped that increased sector funding would allow them to hire more staff to provide adequate afterhours care, and to help reduce long wait times (up to 6 months for specialist care).</p>
Increasing missing middle services (i.e., service gap between community/primary health care and hospitalised care)	
<p>Youth expressed frustration about being declined access to support services, due to their condition ‘not being severe enough’ according to strict inclusion criteria. Many youth participants felt they needed to get worse (e.g., having to hurt themselves) before receiving actual supports. Being told they were “too complex” to receive supports was damaging, furthering feelings of low self-worth and suicidality.</p>	<p>Staff also acknowledge the need for more missing middle services, but that they are currently limited by the scope of their service (which is somewhat dictated by PHN/ government funding) and the training and capacity of their staff.</p>
Increase specialised training for hospital/emergency department (ED) staff	
<p>Many participants shared direct experiences of being invalidated and disrespected when seeking support from hospitals whilst in crisis. Youth suggested hospital staff training could focus on developing a greater understanding of mental health/self-harm and greater sensitivity towards the needs and concerns of young people.</p>	<p>Staff also shared similar views to young people’s regarding hospital staff (general hospitals/emergency departments) who tend to have limited training with managing youth mental health conditions and suicidality, hence more specialised training is needed. For some but not all staff, emergency departments were seen as a last resort for their youth clients, particularly for LGBTQI+ identifying clients (EDs can be traumatising).</p>

YOUTH	STAFF
Improving emergency department (ED) waiting rooms/ separate entries to safe spaces or havens	
<p>Youth and staff participants both suggested improving emergency department waiting rooms to be less clinical and cold, and the need for having an alternative entrance to safe spaces/havens that is separate from the general emergency department entrance.</p>	<p>Staff recognised that safe spaces were great in theory (just like youth) but that there are currently issues related to local-level accessibility (even in non-rural areas) and that clinical staff are still inclined to send young people to emergency departments if they are really worried.</p>
More services with multidisciplinary teams	
<p>Youth and staff agreed that community mental health organisations need to be offering more services with multidisciplinary teams, where a young person can have their mental health team in one place.</p>	<p>Staff recognised the value of this in terms of having to rely less on external referrals. This was also a demand from staff for suicide prevention specialists and Aboriginal and/or Torres Strait Islander health specialists to be co-located in broader youth mental health organisations.</p>
Move to or continuation of online and text-based supports	
<p>Although issues with these types of supports were identified (e.g., long wait times for hotlines and chat responses being too generic), the key advantages identified by youth were being more anonymous with their support seeking, as it can be intimidating to seek support over the phone. Also, these services have helped some youth participants overcome privacy issues with respect to crowded and volatile households.</p>	<p>Staff also recognised the value of the anonymity and flexibility it provides youth clients (who can access support at any time and place), whilst also acknowledging the challenges associated with this online/text-based medium.</p> <p>Staff participants also highlighted issues that need to be resolved for maintaining online services. These include accessibility barriers for people with no device or internet problems, safety and privacy considerations, and caring for vulnerable or homeless young people via these channels.</p>
Linkage between health and other systems (e.g., school or child protection)	
<p>Youth recognised the need for better awareness and promotion of local support services via the school systems.</p>	<p>Staff expressed how stronger connections with schools would allow them to provide better, more holistic supports to young people. In addition, strengthening links between the health and child protection systems is recognised as incredibly important for youth suicide prevention.</p>
Less academic-based school systems	
<p>Over-emphasis on academic achievement by schools, and related negative impacts on mental health was discussed at length in youth focus groups. Youth participants expressed the desire to learn more life skills, and for schools to take a more holistic approach to learning.</p>	<p>Staff have witnessed first-hand the negative impacts of this hyper academic focus on a young person's mental health. Like youth, staff also highlighted the importance of schools embracing more of life-skill or strength-based approach.</p>
More peer workers with lived experience across all levels of the sector	
<p>Youth participants reported finding it easier to communicate with peer workers (than clinicians in the system), as they felt safe, heard, and understood.</p> <p>Young people want to see peer workers included in all services.</p>	<p>Staff also acknowledged the importance of peer workers for building rapport with their youth clients, for demonstrating the possibility of getting better, and for providing supports when clinicians are unavailable. Peer workers can also help walk their clients through the complex mental health system.</p>
Mental health literacy and anti-stigma campaigns to overcome small-town effects (regional areas)	
<p>Both regional youth and staff acknowledged the 'mixed blessing' nature of living in a small town, i.e., stronger sense of community, but concerns for running into someone they know (a barrier to help seeking).</p> <p>Youth suggested more community mental health training, including training specifically for parents.</p>	<p>Staff working in regional areas expressed a greater need for anti-stigma campaigns to help normalise mental health concerns.</p>

Regional versus Metro Comparisons



Youth needs – More prominent in regional than metro areas:

- **Improved intake processes** – for example, reduced paperwork, less clinical and business-like
- **Financial solutions** – more bulk billing services (particularly psychiatrists in regional areas) or equity-based services, e.g., services based on one's needs or implementing a system similar to legal aid
- **Housing/homelessness supports** – improved accessibility to housing supports for homeless youth (only discussed in regional focus groups)
- **Youth friendly hospital facilities** – increased availability in certain regional areas (e.g., Armidale, Tamworth). One participant noted, *“we don't have a youth inpatient mental health facility in the Tamworth LGA [local government area], and I think that's pretty necessary”* (Non-binary, 17, regional).
 - Armidale Hospital offers general mental health services, with no specific facilities for young people. This is currently the same for Tamworth Hospital however, plans are being finalised for the Banksia Adolescent Mental Health Unit.

Staff needs – More prominent in regional than metro areas:

- **Solutions to address community stigma** – community stigma appears to be a more prominent issue for regional than metro areas. Regional staff expressed a greater need for anti-stigma campaigns to help normalise mental health concerns.
- **Less clinical/non-traditional approaches and therapies** – living in regional areas can also be confining (due to finances, inaccessibility, lack of transport), and regional staff more so than metro staff recognised the need for youth suicide prevention initiatives to be less clinical and more focused on helping a young person to widen their horizons (e.g., getting out of their current environment via field trips). This was reflected in regional youth focus groups where they often talked about lack of public transport and issues related to *“getting stuck in a place, in an environment that they don't want to be”* (Female, 17, regional), as well as recurring protective themes focused on a change of environment (e.g., going outside to get away from a negative home environment).
- **Increased linkage between health and school systems** – this included embedding more social workers in schools, viewed as particularly helpful by regional staff.
- **Diverse & flexible supports to combat travel distances** – regional staff recognised the value of ongoing telehealth/online services to combat long distances travelled by their youth clients (some required to travel up to 2 hours for in-person services). However, most staff recognised that this cannot fully replace face-to-face. The latter is consistent with regional youth's stronger preference for in-person socialising and support seeking.
- **In-person suicide risk assessment training** – More accessible in-person suicide risk assessment training, for clinical and non-clinical staff. Described as currently *‘very hit and miss’* in regional areas of Australia, with staff in some areas (e.g., Central Queensland) waiting up to 2 years for an ASIST trainer to visit their organisation.
- Most other Blue Sky Thinking ideas were discussed across both metro and regional groups. Improvements mentioned **exclusively by metro-based staff** focused on increased funding for extension or specialised programs, increased resources to offer more services internally, and setting clearer service boundaries.

COVID Challenges & Unexpected Service Innovations



COVID-19 appeared to have greater impact on service delivery in regional than metro areas, in terms of challenges with transitioning services from face-to-face to online (e.g., security, client referrals). In saying that, both regional and metro staff groups recognised the positives of this transition, including flexible options for service engagement and increased social connectedness with youth clients via online group sessions. Overall, staff would like to see these new online service innovations to continue post-COVID-19. However, accessibility barriers (clients with no phones), as well as safety and privacy issues need to be resolved for maintaining these innovations. Online services were generally well received by young people (for its flexibility, and ability to be more anonymous and confidential). Staff did note however that some youth clients had an enduring preference for face-to-face sessions. This created an additional services accessibility barrier for these young people during COVID-19 lockdowns.

Chapter 8: Conclusions and Recommendations

This was the first nationwide Australian study to examine regional variability of youth self-harm, and related risk and protective factors. This was achieved by analysing the Young Minds Matter (YMM) survey, a nationally representative survey of Australian adolescents, and by conducting focus groups with young people with lived experience and other key stakeholders in geographically diverse areas.

Overall, there was large regional variation in the prevalence and experience of self-harm (non-suicidal and suicidal) among young Australians, providing further support for the National Suicide Prevention Strategy of a systems-based regional approach. Findings across both the quantitative and qualitative project components highlight the value of embracing a systems-based social determinants perspective to youth suicide prevention³²⁻³⁵, where the environments in which young people live, work, learn, and play are considered collectively, and not in isolation.

The mental health of young people was an important factor in spatial analyses and focus group discussions, and should continue to be a key target in youth suicide prevention policy and planning. In addition, relations with parents and school peers, and a myriad of social determinants of health (parent employment and country of birth, housing quality, financial and transportation barriers) require equal consideration. Large and disruptive environmental stressors/events (climate change, COVID-19) also need to be factored into the sector's policy planning and service delivery; highlighted in youth focus group discussions as the backdrop of today's young people's lives. This systems-based approach was further reiterated by staff focus group participants, viewed as key to effectively managing youth self-harm and suicidality out in the community.



Part A QUANTITATIVE FINDINGS

In terms of specific implications from each project component, nationwide spatial analyses of self-harm prevalence provided clear rationale for where future youth self-harm and suicide prevention efforts should be prioritised across Australia. This included self-harm clustering in metro and regional areas across **Western Australia, Northern Territory, Queensland, Victoria, and New South Wales** (pg. 24-26). Spatial analyses can only provide an indication of what *may* be happening in local communities. This data gap should drive efforts towards establishing partnerships between hospitals, police, and other relevant data custodians, to make real-time localised data more readily available in self-harm regions of interest²¹.

Quantitative analyses also identified key factors that should inform general (national) targets for future youth self-harm/suicide prevention initiatives, including targets for further research inquiries. This includes continued concerted efforts for improving the **mental health** of young Australians (via mental illness prevention initiatives), improving **employment and socio-economic outcomes** of single parents, as well as further investigations into the potential protective elements of **being a child of parents born overseas**. Proportion of **young people identifying as Aboriginal and/or Torres Strait Islander** was another key factor in area-level spatial modelling, including self-harm clustering in regions with Aboriginal communities across Western Australia, Northern Territory, and North Queensland. The high rates of self-harm and suicide in Aboriginal and Torres Strait Islanders are the result of a complex mix of social, cultural, economic, and psychological dislocations – the root cause being British colonisation of Aboriginal and Torres Strait Island lands³⁶⁻³⁸. A separate follow-up study of adverse and protective experiences of Aboriginal and/or Torres Strait Islander young people is warranted, one which is led by Indigenous researchers and community leaders.

A final step of our quantitative analyses, small-area bivariate mapping, explored regional variation of risk and protective factor associations across the nation. This was further informative for identifying specific (regional) targets, where area-level associations between self-harm and all risk/protective factors differed geographically across Australia, both in size and direction, particularly socioeconomic-self-harm relations in metro areas. These results highlight the complexity of self-harm relations and the potential value of small area geographic data for guiding more targeted suicide prevention planning.

Overall, there was large regional variation in the prevalence and experience of self-harm (non-suicidal and suicidal) among young Australians, providing further support for the National Suicide Prevention Strategy of a systems-based regional approach.



Part B QUALITATIVE FINDINGS

Qualitative focus groups provided needed depth and richness to known risk and protective factors, as well as identified variables not well-captured in existing national-level quantitative datasets. This included the digital world, experiences related to sexual and gender orientation, recent environmental stressors (COVID-19, climate change), and outdated school system policies and practices to supporting student mental health and self-harm. Overall, the **home, high school, and digital** environments were perceived as the most influential by youth participants. Such settings should be priority areas for ongoing and future youth self-harm and suicide prevention/intervention efforts. Including e-safety policies focused on monitoring self-harm/suicide related content, as well as mental health, sexuality, and self-harm education programs for parents and school teachers (and other school staff).

Youth focus groups also provided new understandings of regional variability in **(1) self-identified risk and protective factors** (where themes related to financial and transportation barriers, and small-town effects were more prominent in regional than metro areas), and **(2) self-identified barriers to help seeking/receiving**. In terms of the latter, both metro and regional groups faced similar barriers, however, the nature of the problem differed with respect to service accessibility issues (wait times versus travel distances) and types of stigma faced (staff versus community). Such findings should provide primary health networks (PHNs) and other service planners with a better understanding of the more pertinent service needs and barriers faced by young people in regional versus metro areas. These are critical for the sector to better understand and address as national YMM analyses found about 70% of Australian youth reporting self-harm or suicidality did not use services for their mental health in the previous 12 months, and nearly half this group had an unmet need for care.

The final stage of focus group discussions covered **bold ideas and thinking for service innovations**. Youth and staff focus groups identified several common areas for suggested sector improvements including **(a)** increased afterhours supports; **(b)** greater provision of services for those whose needs are unable to be met by primary care services but are not severe enough for the state mental health systems or specialist care (missing middle services); **(c)** structural changes (increased mental health-school system connections, and separate, less clinical pathways to safe spaces); and **(d)** incorporating peer workers at all levels. These commonalities between staff and young people with lived experience should be areas of greatest priority for Australian policy makers and service planners in the youth suicide prevention sector.



Final Thoughts AND NEXT STEPS

Collectively, our mixed methods results are reflective of the wider literature focused on the intersection of geography and psychology, where place is critical for one's mental health and wellbeing^{17, 39, 40}. **Sense of place** is a complex and social constructed concept (beyond the objective physical context) providing a platform for the interplays among the reflective self, meaningful actions, and connections with social spheres and the wider community¹⁷. Reflecting on the current project's findings, place- and systems-based approaches⁴⁰⁻⁴² should be similarly embraced in the Australian youth self-harm and suicide prevention sector, where programs and solutions are designed to meet the general (national) and unique needs of a local area. Recommended next steps focus on establishing data partnerships, hosting e-safety and service barrier discussions, and devising education programs for parents and school staff (see next page). Current findings should assist Australian policy makers, service planners, and commissioners with planning and implementing regionally appropriate youth self-harm and suicide preventive initiatives and interventions, and in turn, ultimately help target resources where they are likely to have the greatest impact on youth suicide rates.

Collectively, our mixed methods results are reflective of the wider literature focused on the intersection of geography and psychology, where place is critical for one's mental health and wellbeing.

Recommended Next Steps

- Establishing partnerships between hospitals, coroners, police, and other relevant data custodians in youth self-harm clustering regions identified in nationwide hot spot analyses, to make real-time data more readily available, particularly at a localised level.
- Increased research efforts and program planning focused on improving youth mental health (via mental illness prevention efforts) and programs focused on improving the employment and socio-economic outcomes of single parents in Australia.
- E-safety discussions focused on monitoring online self-harm/suicide related content, and liaising with social media platforms to implement more comprehensive safety mechanisms.
- Education programs for parents and school staff (including teachers, principals) focused on improving understanding of youth mental health, self-harm, and gender and sexual diversity.
- Discussions with PHNs and other service planners about key service use barriers and suggested improvements provided by youth and staff focus group participants in regional versus metro areas.



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Support Services and Resources

Telephone and Online Support Services

If you or someone you know is feeling distressed, please contact relevant support services in your area. This may be your GP or a mental health or community support service. Some Australian services are listed below, including their phone numbers, websites, and links to their online chat-based services.

Crisis Support lines

Kids Helpline Ph: 1800 551 800 Web: www.kidshelpline.com.au

Australia's free confidential 24/7 online and phone counselling service for young people aged 5 to 25. They also offer an online chat support service.

Suicide Call Back Service Ph: 1300 659 467 Web: www.suicidecallbackservice.org.au

A nationwide service providing 24/7 telephone and online counselling to people affected by suicide. The suicide call back service offers services to anyone who is feeling suicidal, who is worried about, caring for or has lost someone to suicide. They also offer an online chat support service.

Lifeline Australia Ph: 13 11 14 Web: www.lifeline.org.au/

24 hour crisis support and suicide prevention services for all Australians experiencing emotional distress. They also offer an online chat support service.

MensLine Australia Ph: 1300 789 978 Web: www.mensline.org.au

MensLine offers free professional 24/7 telephone counselling support for men with concerns about mental health, anger management, family violence, addiction, relationships, stress and wellbeing. They also offer an online chat support service.

1800 Respect Ph: 1800 737 732 Web: www.1800respect.org.au

24 hour support for people impacted by sexual assault, domestic or family violence and abuse. They also offer an online chat support service.

13 YARN Ph: 13 92 76 Web: www.13yarn.org.au/contact-us-13yarn

13 Yarn is an Aboriginal & Torres Strait Islander free crisis support line available 24/7. This confidential service connects you to Aboriginal and Torres Strait Islander support people to yarn to about your needs, worries or concerns.

Non-Crisis Support Lines

headspace Ph: 1800 650 890 Web: www.eheadspace.org.au/

headspace provides supports for young people, including supports for mental health, physical health (including sexual health), as well as alcohol and other drug support services. They also offer an online chat support service.

Beyond Blue Ph: 1300 22 4636 Web: www.beyondblue.org.au

Beyond Blue provides information and support to help everyone in Australia achieve their best possible mental health, whatever their age and wherever they live. They also offer an online chat support service.

Butterfly Foundation Ph: 1300 789 978 Web: www.butterfly.org.au

Butterfly Foundation is there for anyone in Australia impacted by an eating disorder or body image issues. They provide information and referrals to health professionals. They also offer an online chat support service.

QLife Ph: 1800 184 527 Web: www.qlife.org.au

QLife provides anonymous and free LGBTI peer support and referral for people in Australia wanting to talk about sexuality, identity, gender, bodies, feelings, or relationships. They also offer an online chat support service.

Blue Knot supports adult survivors of childhood trauma and abuse, parents, partners, family, and friends as well as the professionals who work with them.

SP Peer CARE Connect is a suicide prevention 'warm-line' call back service. The service provides the opportunity to connect and be heard by another person with lived experience. They provide services to anyone who has lost someone to suicide, is caring for someone, has survived an attempt or has been living with suicidal thoughts.

Online Resources

Outlined below are websites of key mental health and suicide prevention organisations in Australia, particularly ones which provide information and resources for young people.

Centre for Best Practice in Aboriginal and Torres Strait Islander Suicide Prevention

The Centre for Best Practice team has collated a website that includes the most culturally appropriate Aboriginal and/or Torres Strait Islander related suicide prevention resources in one place. The website has been set up so that the user can choose the information/subsection most relevant to them. <https://cbpatsisp.com.au/the-manual-of-resources/>

QLife

QLife provides Australia-wide and anonymous LGBTI peer support. QLife has collated QGuides for health professionals working with LGBTI people. They describe and discuss a range of common, often complex topics, to help people feel able to work with and support all kinds of people on LGBTI matters. <https://qlife.org.au/resources>

Roses in the Ocean

Roses in the Ocean is Australia's leading organisation for lived experience of suicide. The organisation exists to save lives and reduce emotional distress and pain. By collaborating with members of the Australian lived experience community and suicide prevention sector, they have developed a lived experience of suicide online resource hub. The hub provides invaluable insights and perspectives of people with lived experience. <https://rosesintheocean.com.au/resources-hub/>

headspace

headspace offers resources for young people, people supporting young people, educators, health professionals, and employers. With 140 centres across Australia, headspace offers young people services to help with their mental health, physical health (including sexual health), as well as supports with their work and study. <https://headspace.org.au/>

Reach Out

Reach Out is an online service that offers self-help information, peer-support programs, and referral tools to help young people stay well. Reach Out also offers information for parents to help support their teenagers. Their online resources are based on the latest evidence and is designed with experts, and young people or their parents. <https://au.reachout.com/>

Contact

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