

Youth Mental Health in Australia Over a Decade: Temporal Patterns in Burden and Hospitalisations

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Introduction

Youth mental health is a major public health issue and places a substantial and growing demand on health systems. In Australia, about one in seven children (4–17) and nearly two in five young people (16–24) experiencing a mental disorder each year. Effective planning requires a clear view of how population need and service utilisation evolve together over time.

Aim

- Quantify trends in hospitalisations among those aged <25 between 2013–14 and 2023–24.
- Compare these trends with population-level burden (DALYs) for key youth diagnostic groups.

Method

- Retrospective, population-based study; FY 2013–14 to 2023–24
- Population: Young Australian people aged 0–25 years.
- Data sources: Administrative hospital separations (overnight + same day) and GBD 2023 for incidence, prevalence, DALYs.
- Case definition (hospital): Mental health-related separations if the care type was recorded as mental health and the principal diagnosis was a mental or behavioural disorder; non-MH/external cause records excluded.
- Diagnostic scope: ICD 10 AM F10–F19, F30–F39, F40–F48; mapped to GBD categories
 - Depressive: F32–F33.9, F34.1
 - Bipolar: F30–F31.9, F34.0
 - Anxiety: F40–F44.9, F93–F93.2
 - Substance use: F10–F19.99
- Measures: Age specific and age standardised rates per 100,000 by diagnostic group, sex, year.
- Trend analysis: Joinpoint regression to estimate annual/segment trends.

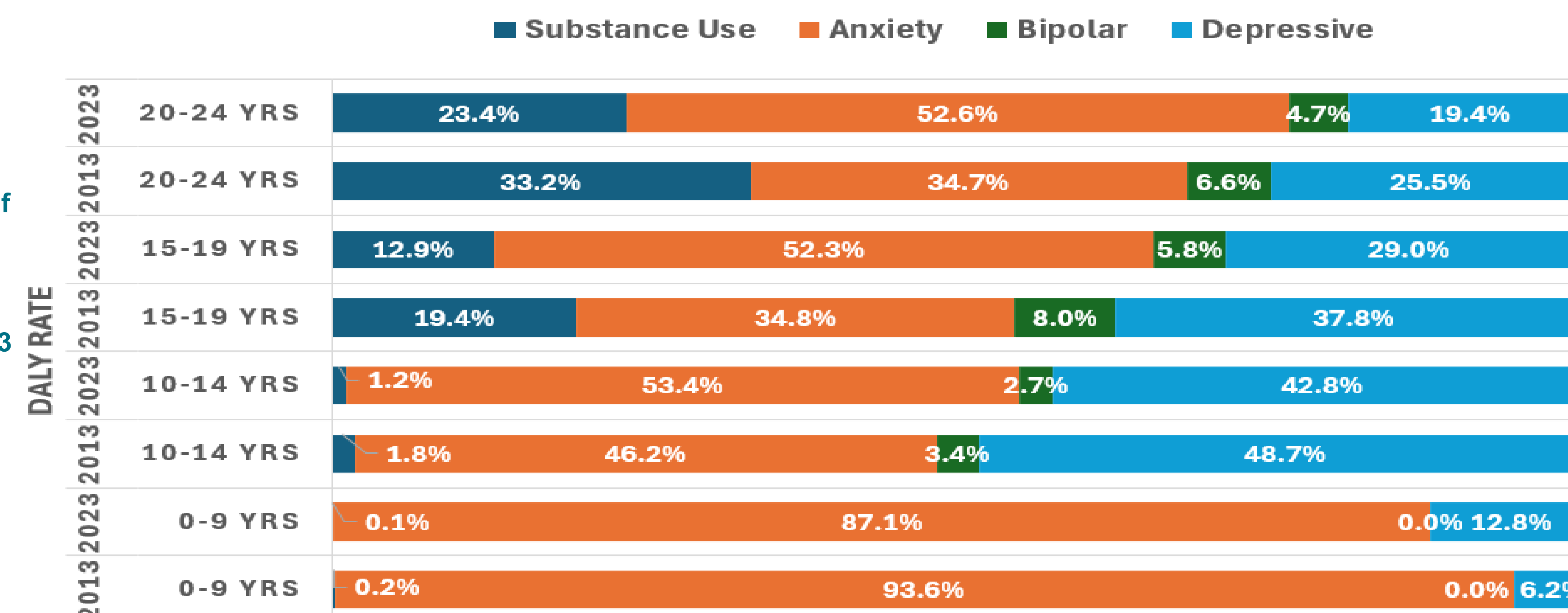
Results

- Depression: Separations increased to 2021 (+3.4% APC), then decreased 20.8% (AAPC -2.0%); DALY share still large in 2023, indicating high burden.
 - Anxiety: Separations increased +3.8%/yr to 2021, then decreased 10.2%; DALYs steady rise (+6.5% AAPC); leading DALYs cause in youth.
 - Bipolar: Separations increased +5.1% to 2021, then decreased 14.3%; net +0.9%; DALYs stable, indicating ongoing long term care needs.
 - Substance use: Peak 2019; then decreased 7.6% (AAPC -1.6%); DALYs slight decrease, proportion is high at 15–24y.
- ❖ Sex differences:
- Females: net increase in bipolar (+2.1%) and anxiety (+1.9%) separations.
 - Males: substance use decreased (-2.9%).
 - Post 2019/2021 declines generally steeper in females.
 - Burden: emotional > in females; behavioural/substance > in males.

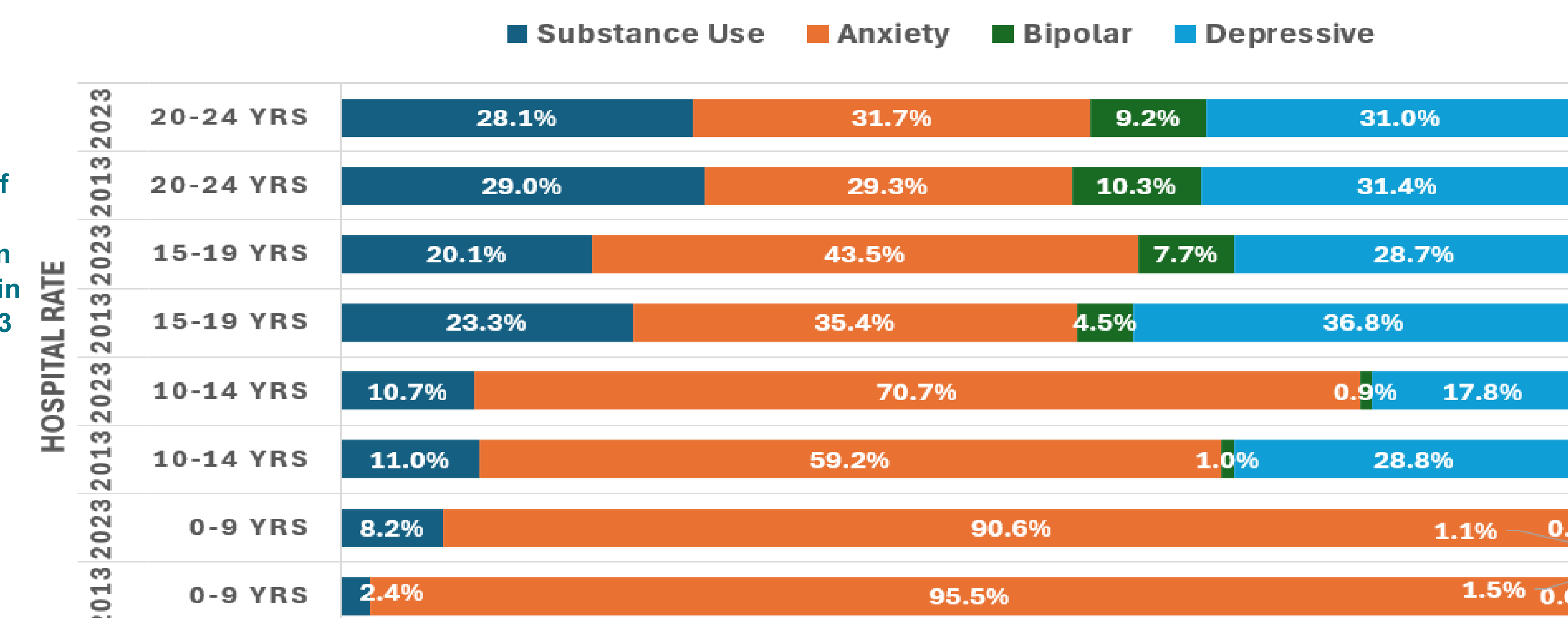
Trend in mental health hospitalisation rate and DALYs in Australian youth (<25 years) related diagnosis

	Measure	Segment 1 (Period)	Segment 1 APC (95% CI)	Segment 2 (Period)	Segment 2 APC (95% CI)	AAPC (95% CI)
Substance use	Hospital separations	2013–2019	2.7* (0.1, 12.6)	2019–2023	-7.6* (-19.1, -3.0)	-1.6 (-3.9, 0.9)
	DALYs	2013–2019	-0.2 (-0.5, 0.8)	2019–2023	-1.02* (-2.1, -0.6)	-0.5* (-0.7, -0.3)
Depressive disorder	Hospital separations	2013–2021	3.4* (2.7, 4.2)	2021–2023	-20.8* (-23.9, -17.9)	-2.0* (-2.7, -1.4)
	DALYs	2013–2023	1.7* (0.4, 3.0)	—	—	1.7* (0.4, 3.0)
Bipolar	Hospital separations	2013–2021	5.1* (4.3, 6.3)	2021–2023	-14.3* (-18.3, -7.2)	0.9* (0.1, 1.8)
	DALYs	2013–2023	-0.1 (-0.2, 0.0)	—	—	-0.1 (-0.2, 0.0)
Anxiety	Hospital separations	2013–2021	3.8* (2.8, 5.6)	2021–2023	-10.2* (-16.2, -2.2)	0.8 (-0.4, 2.0)
	DALYs	2013–2018	5.3* (2.5, 6.2)	2018–2023	7.7* (6.8, 10.8)	6.5* (5.9, 7.1)

Proportion (%) of mental disorder DALYs in each age group in 2013 versus 2023



proportion (%) of mental disorder hospitalisation in each age group in 2013 versus 2023



Key Findings

- Hospitalisation for depressive, anxiety, bipolar, and substance-use disorders rose up until 2021, then declined.
- GBD estimates show anxiety burden increased steadily (AAPC 6.5%), depression grew slightly (1.7%), and substance-use burden fell slightly (-0.5%).
- Despite fewer hospitalisations, overall burden stayed high—suggesting better community care rather than a real drop in prevalence.
- From 2013–2023, anxiety consistently led youth DALYs and grew in share, making it the most persistent and widespread MH burden among young Australians.

Discussion and Implications

- Given that overall burden of youth mental disorders remains high despite a recent decline in hospitalisations, expanding integrated community care—especially across the transition to adulthood—while safeguarding timely ED/inpatient access for high-risk cases is recommended.
- Given the rising anxiety and depression burden, early, school-embedded primary care and digital supports for internalising disorders in mid-to-late adolescence should be prioritised.
- To translate access into measurable recovery, tracking relapse, readmissions and wait times, and linking hospital–community data are required.

References

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