CRICOS: 00233E | TEQSA: PRV12076

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Offending outcomes for individuals experiencing contact with outpatient mental health services from childhood to early adulthood in an Australian birth cohort

Queensland Australia

ANZAPPL, Hobart, December 2025

Make it matter

Disclaimer & Acknowledgements

We gratefully acknowledge the contributions and support of the Queensland Government Statistician's Office; Queensland Police Service; Queensland Department of Justice; the Queensland Department of Youth Justice and Victim Support; the Queensland Department of Families, Seniors, Disability Services and Child Safety; the Queensland Registry of Births, Deaths and Marriages; Statistical Analysis and Linkage Unit of the Statistical Services Branch (SSB), Queensland Health; Mental Health Alcohol and Other Drugs Branch, Queensland Health; Queensland Department of Premier & Cabinet; Queensland Corrective Services; and the Griffith University Social Analytics Lab.

The opinions discussed within this presentation are those of the authors and do not represent the opinions of the above Departments.

Please note that the results provided in this presentation are preliminary

No financial disclosures.

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Public mental health service contact

- Public MH services a key component of the system responding to and treating mental illness in the community
- Understanding how and when people contact MH services can inform system design and early intervention efforts
    - Identifying patterns in variation for how people experience MH service contacts
- What other systems do people also have contact with (e.g., criminal justice)?
- Limited lifespan research of longitudinal MH service contacts
    - Using administrative data
    - Application of Group-Based Trajectory Modelling (GBTM)

Research questions

Using GBTM:

1. Are there distinct trajectories based on timing and frequency of MH contacts?
2. Is there variation across trajectories (sex, First Nations status, SES, diagnoses)?
3. Do criminal justice outcomes differ across trajectories?

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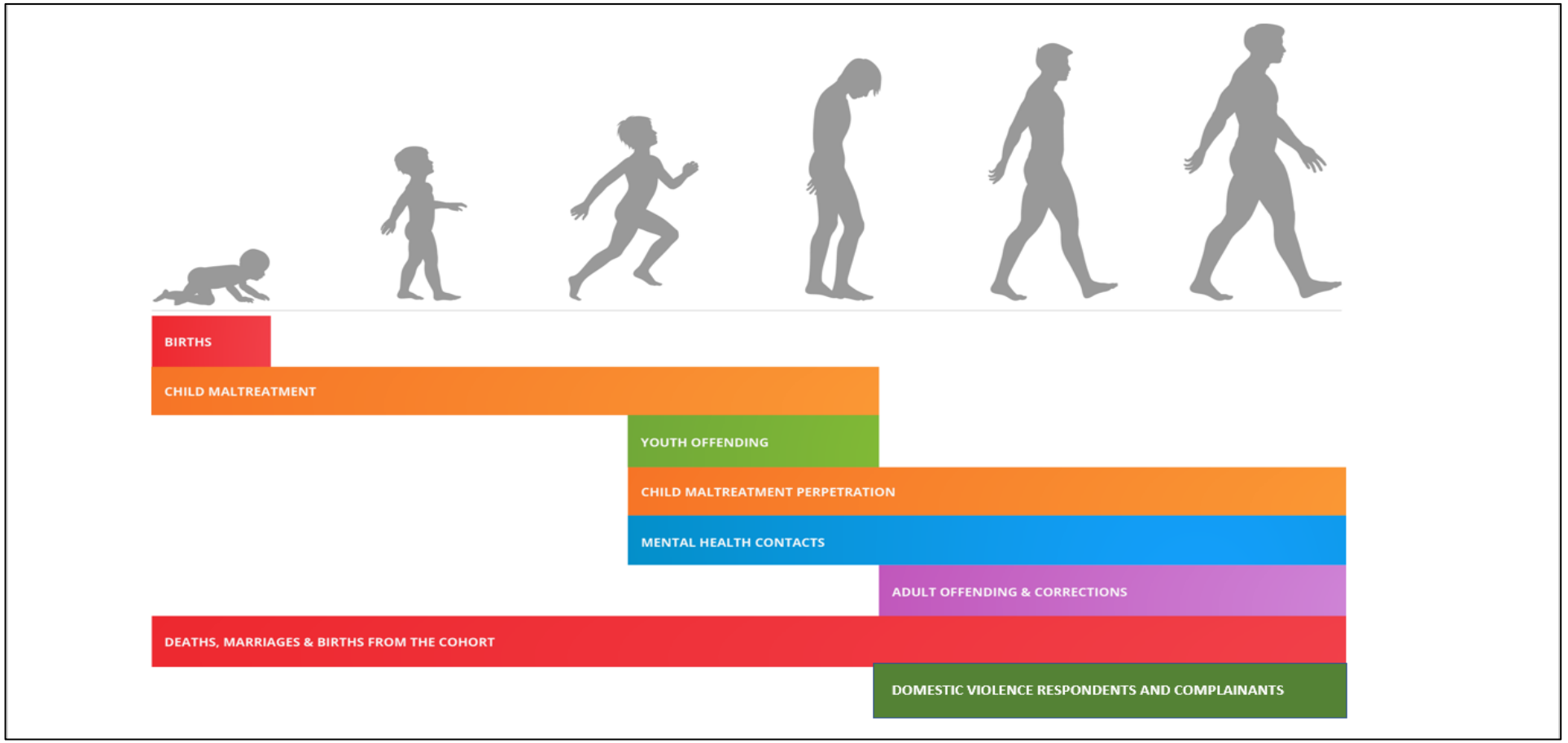
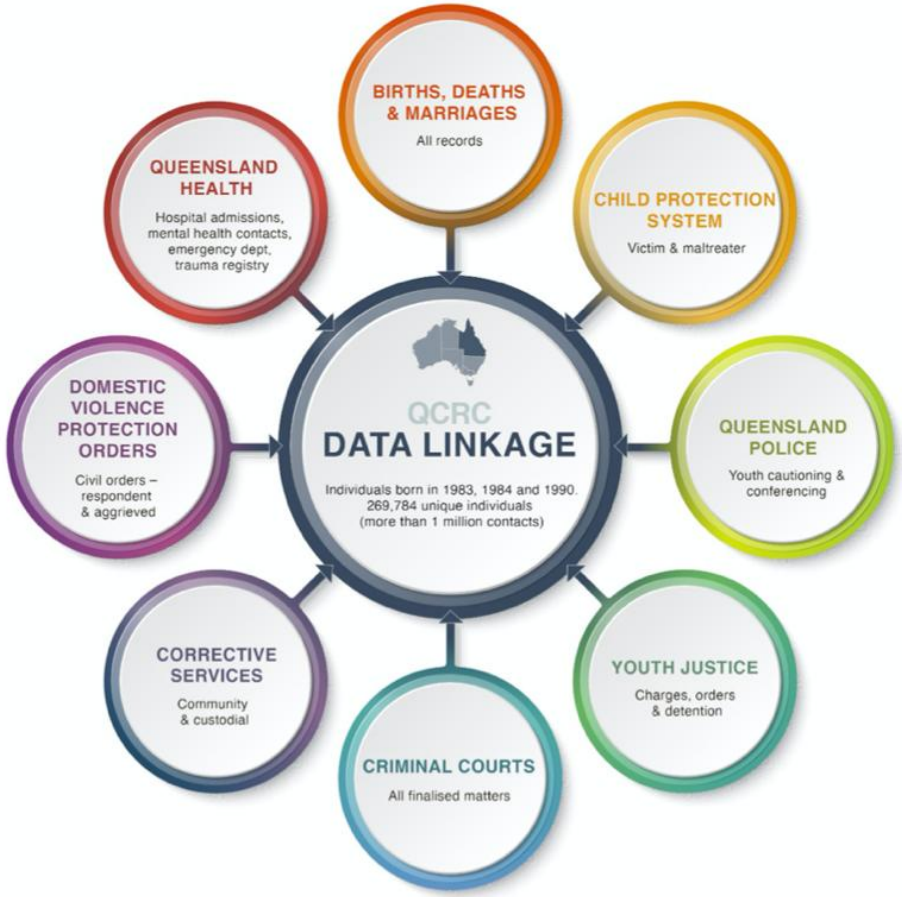
QCRC data holdings



QCRC Cohorts: Longitudinal data over the life-course to age ≈ 31 years old (1983 cohort), 30 years old (1984 cohort) and 24 years old (1990 cohort). *Note: Exact periods of life-course vary based on dataset and cohort.*

See: Thompson, C., & Allard, T. (2021). Queensland Cross-Sector Research Collaboration (QCRC). Griffith Criminology Institute, Griffith University.

Birth cohort for current study



- Queensland Cross-sector Research Collaboration 1990 birth cohort
  - 45,422 individuals
  - 2,869 (6.3%) First Nations
  - 22,039 (48.5%) female
- At least one outpatient MH contact
  - 5,359 (11.8%) individuals

Mental health datasets

- Queensland Health – public health system provider
- Consumer Integrated Mental Health and Addiction (CIMHA)
    - Service contacts with outpatient community mental health services
    - Sept 2000 -> December 2013
    - ~ 10 – 23 years
- Queensland Hospital Admitted Patient Data Collection (QHAPDC)
    - Hospital admissions involving mental illness diagnosis
    - ICD-10 codes

Criminal justice system datasets

- Courts (childrens and adult)
    - Offences finalised in court
    - Sentencing outcomes
- Police diversions
    - Cautions and conferences
- Youth Justice orders and detention
- Queensland Corrective Services
    - Prison segments, classifications and assessments

Analytic approach

- Group-based trajectory modelling
    - *FLXMRglm* driver in *flexmix* package for *R*
- Examine variation in sex, First Nations status, SES and mental disorder diagnoses across trajectory groups
- Explore variation in criminal justice outcomes across trajectory groups

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MH contacts up to age 24 years by demographic group

	Total cohort		MH contact	
	n	%	n	%
First Nations females	1,280	2.8	386	7.2
First Nations males	1,589	3.5	459	8.6
Non-First Nations females	20,759	45.7	2,315	43.2
Non-First Nations males	21,794	48.0	2,199	41.0
Total	45,422	100.0	5,359	100.0

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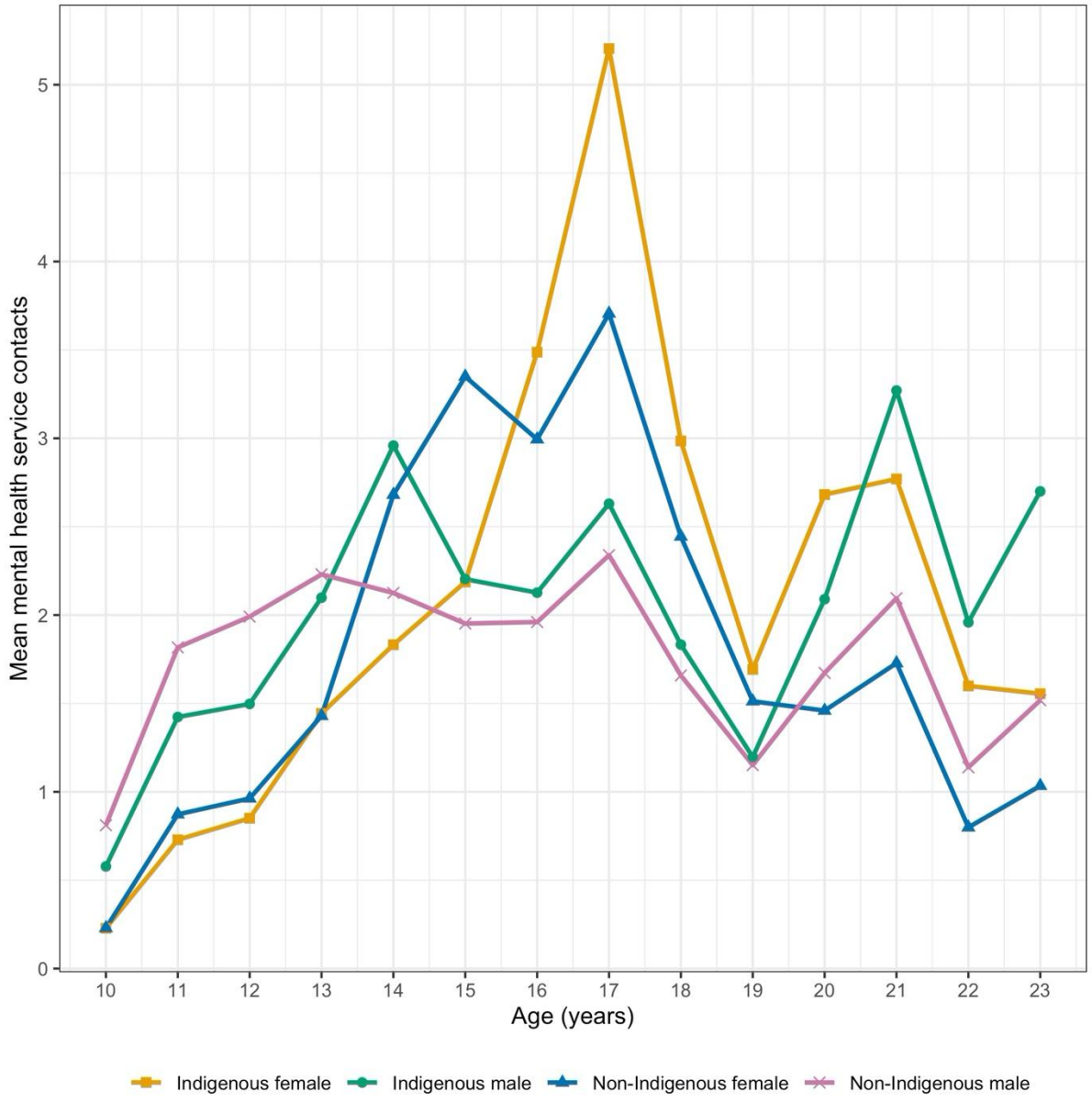
MH contacts over time

- 5,359 individuals responsible for 136,507 MH contacts
- 15.73 years mean age at first contact
- Age-graded differences in MH contact – varies across sex and First Nations status
- Peaks in mean MH contacts at 17 and 21 years



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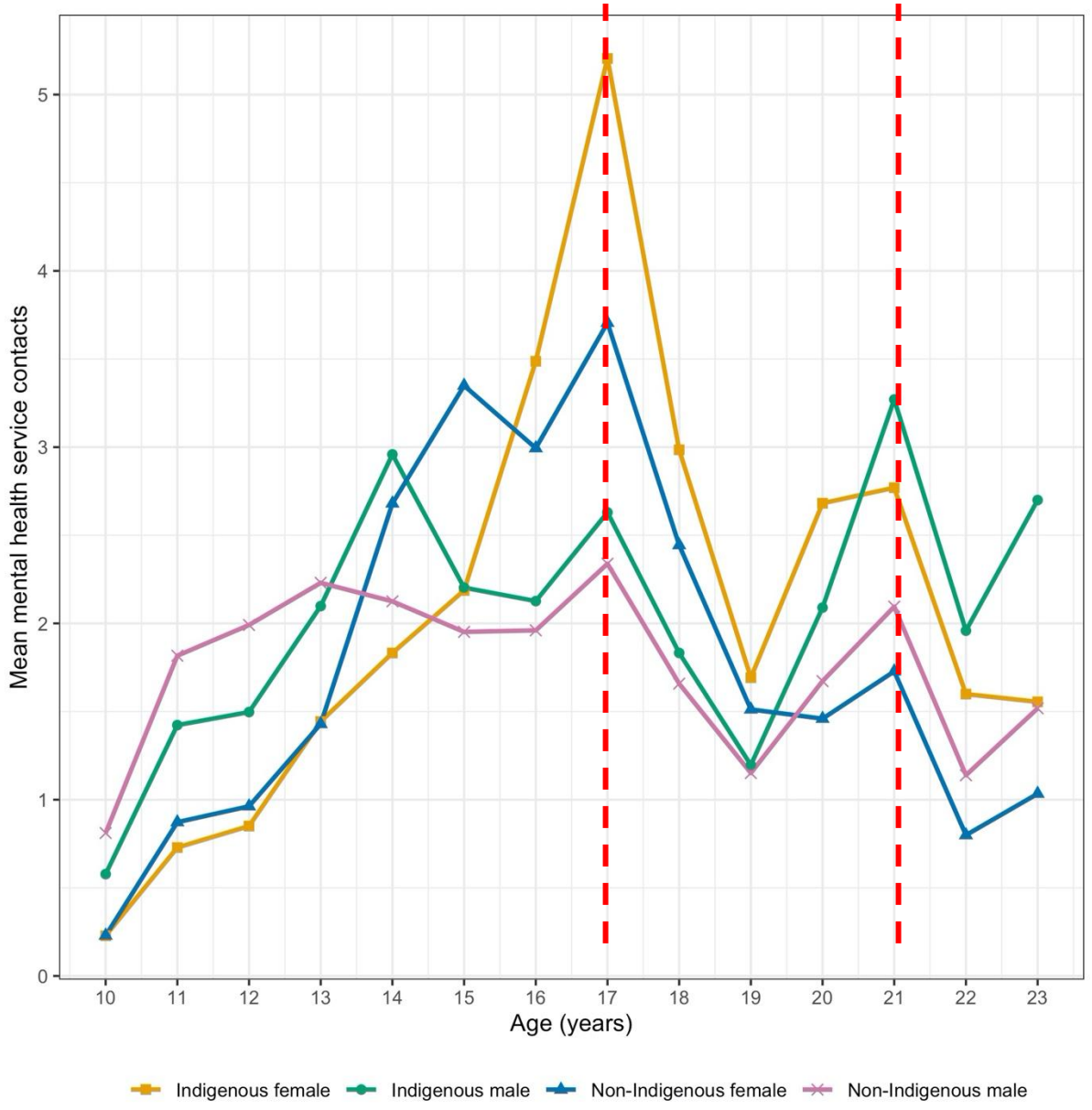

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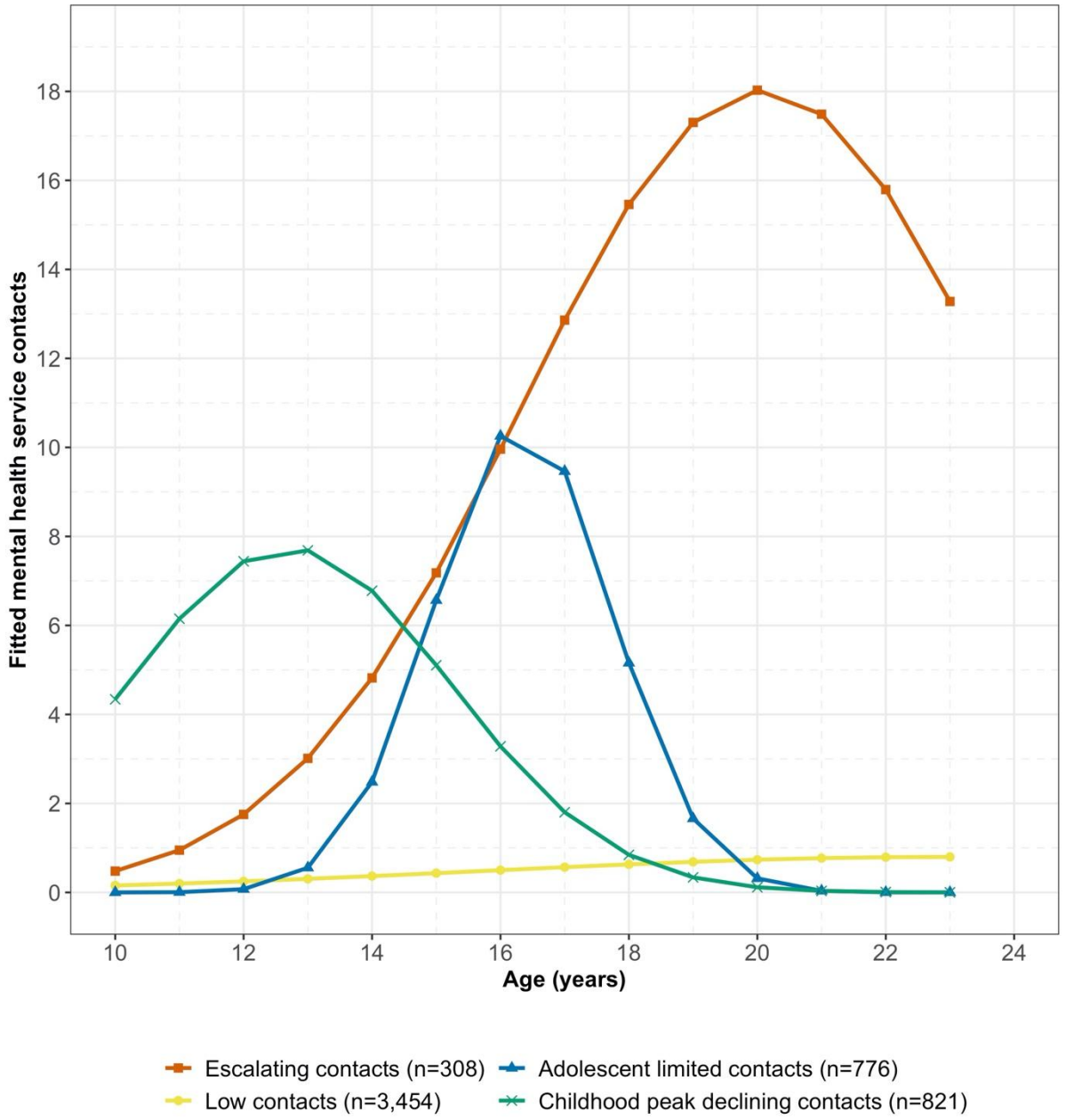
MH contact trajectories

- Four groups provided best fit
  - Escalating (5.8%)
  - Low (64.5%)
  - Adolescent limited (14.5%)
  - Childhood peak declining (15.3%)



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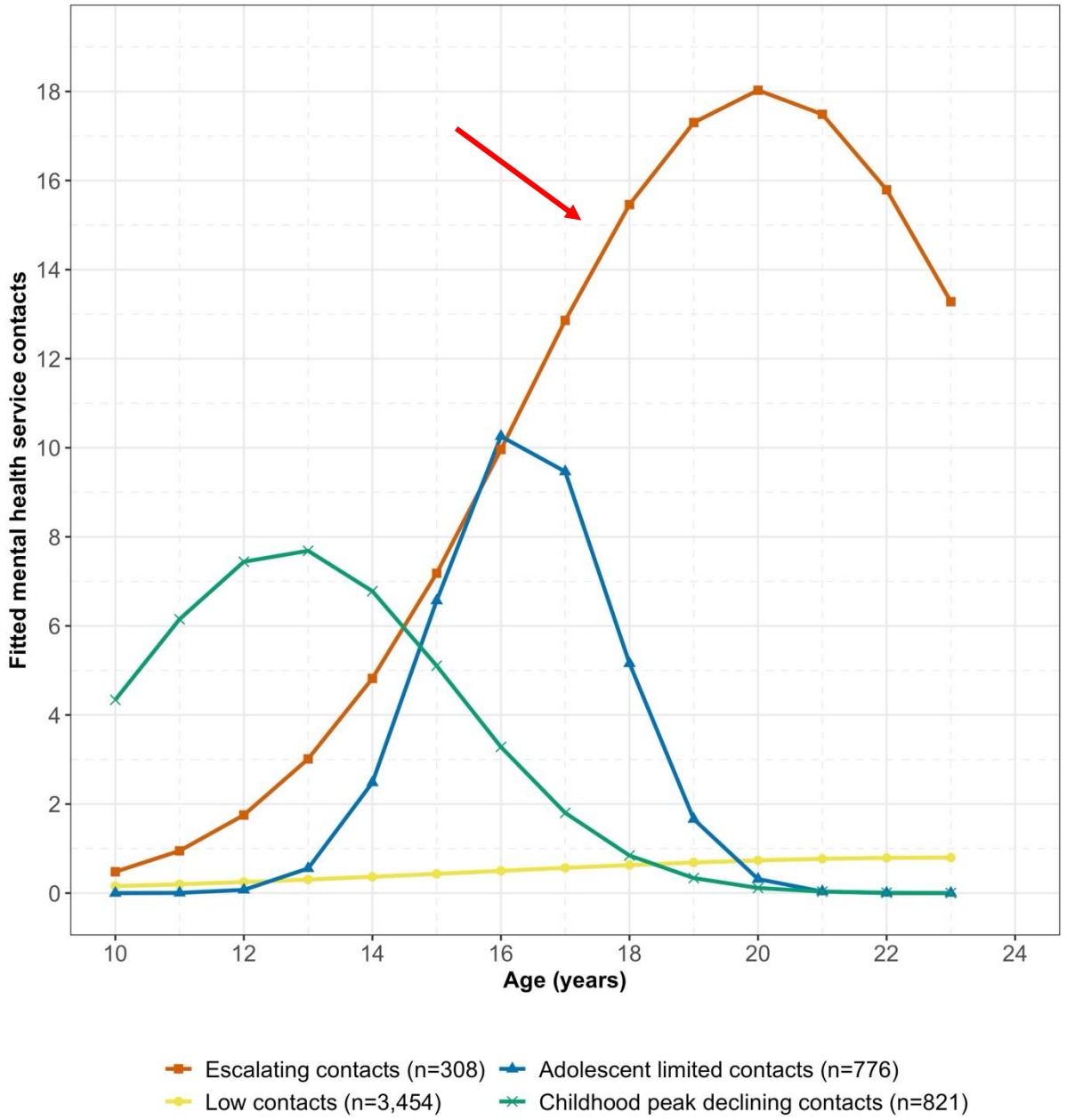

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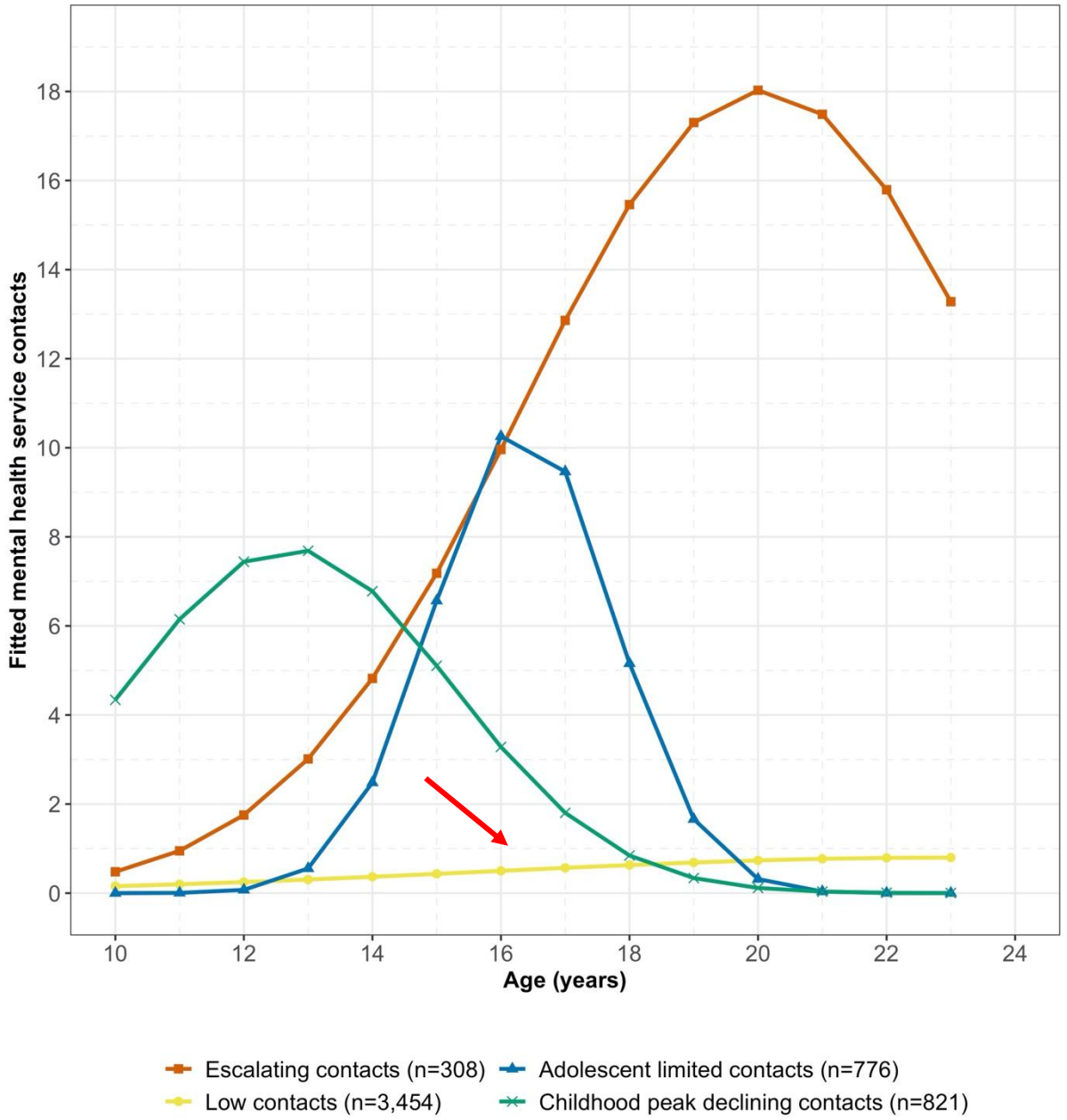

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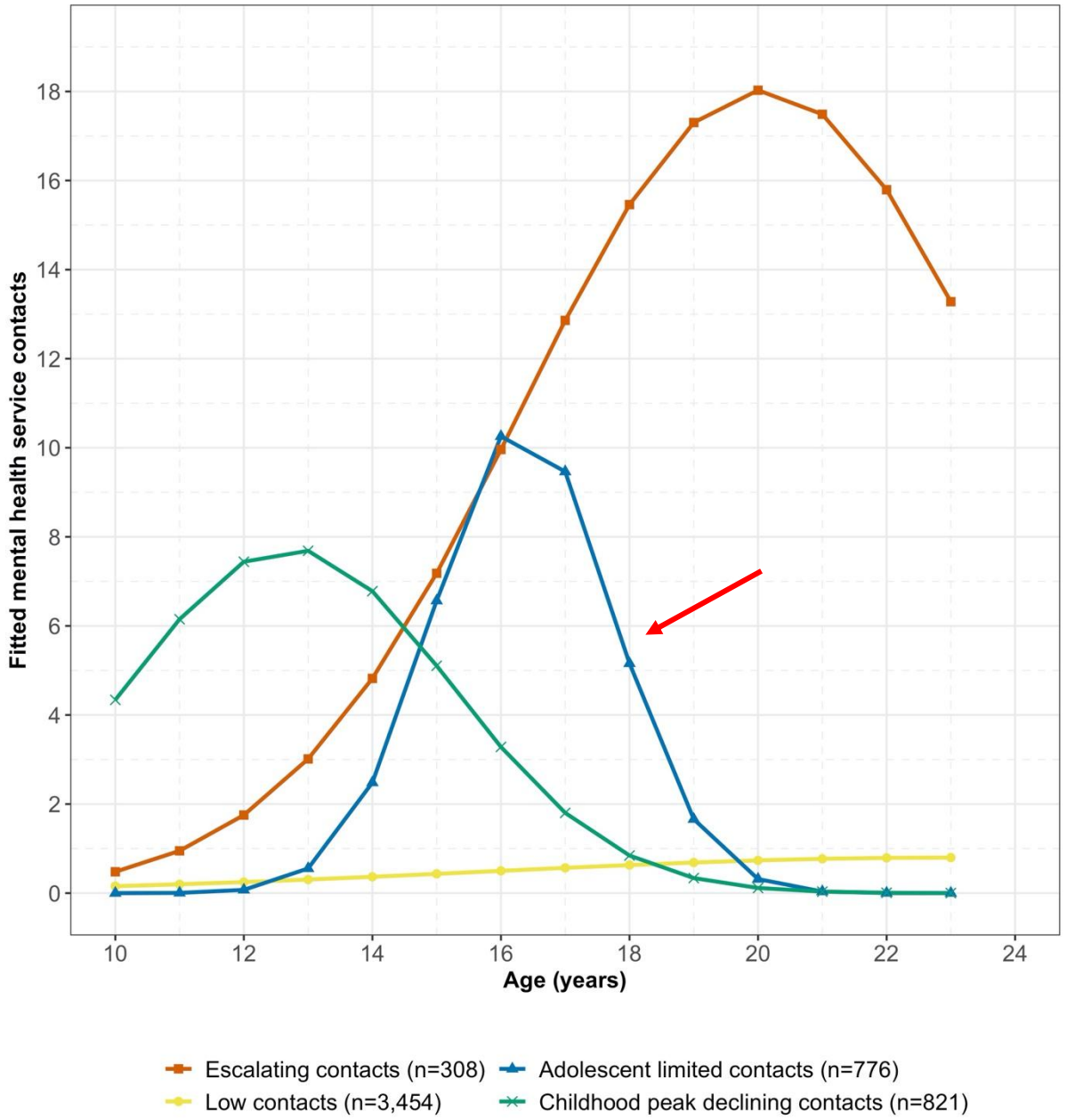

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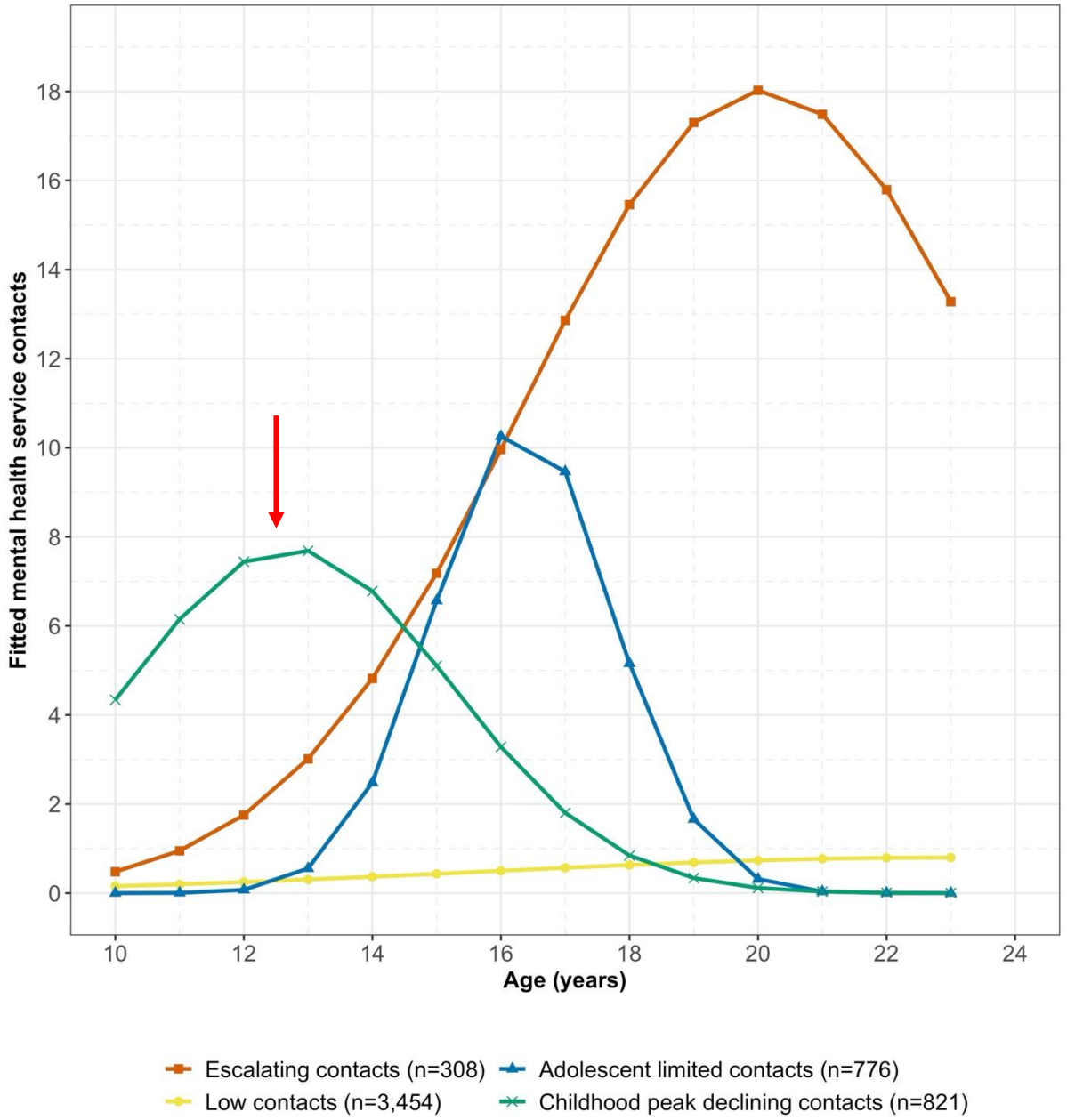

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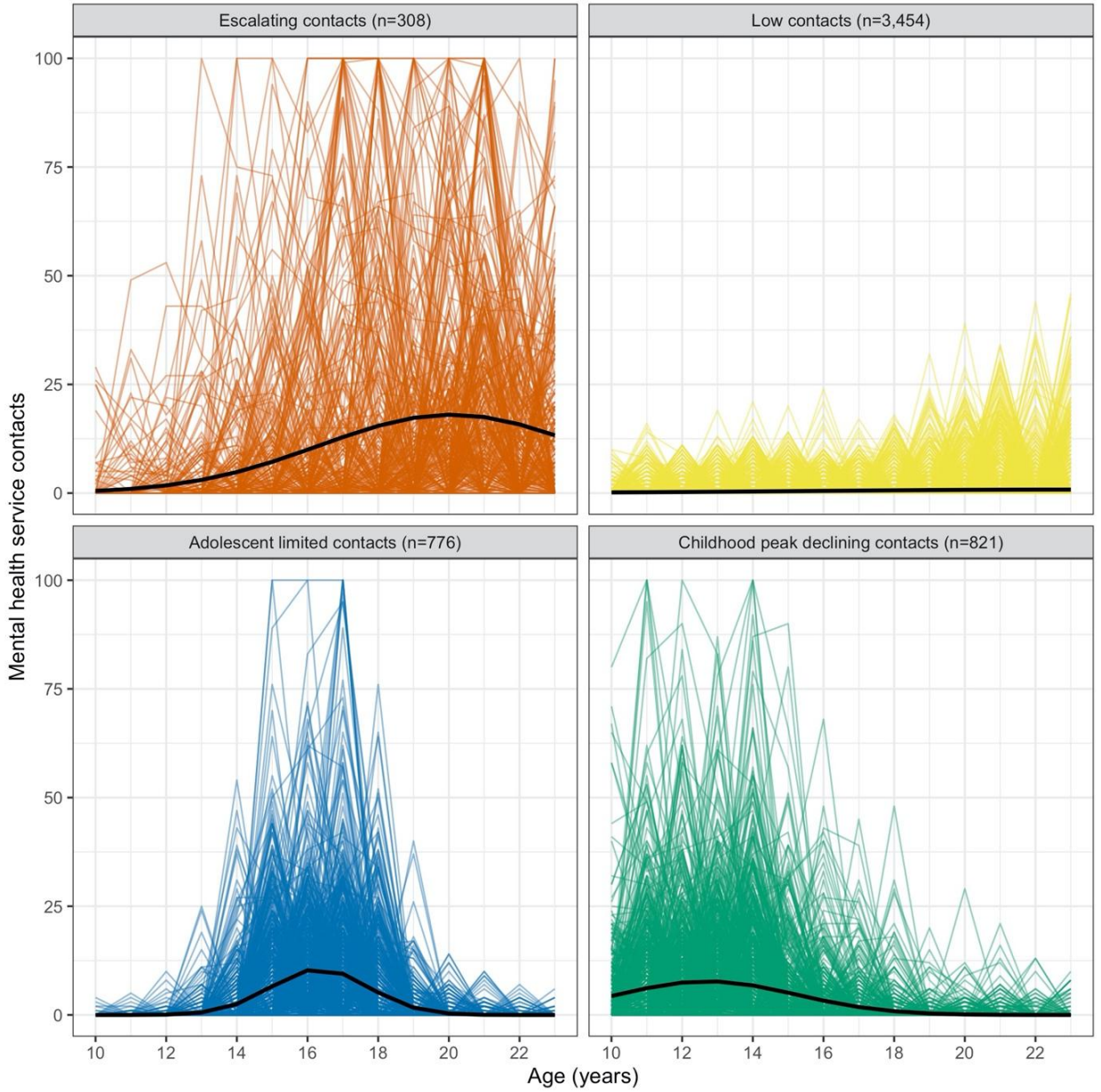
- Variation within groups
- Limitation of the method – highest probability of group membership



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MH trajectories contact characteristics

	Escalating	Low	Adolescent limited	Childhood peak declining
% sample	5.8%	64.5%	14.5%	15.3%
% total contact for sample	32.3%	18.8%	21.5%	27.5%
Mean contacts, M (SD)	138.38 (113.91)	7.17 (7.48)	36.53 (29.75)	44.20 (38.87)
Age first contact, M (SD)	15.54 (3.22)	16.84 (3.55)	15.22 (1.52)	11.61 (1.34)

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MH trajectories and demographics

	Escalating	Low	Adolescent limited	Childhood peak declining
% sample	5.8%	64.5%	14.5%	15.3%
% female	47.4%	50.0%	66.1%	38.5%
% First Nations	24.0%	16.6%	12.6%	12.3%
% lowest SES	17.8%	12.3%	9.7%	10.1%

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MH trajectories and diagnosed disorders

	Escalating	Low	Adolescent limited	Childhood peak declining
% sample	5.8%	64.5%	14.5%	15.3%
% any disorder	86.4%	30.4%	39.1%	30.6%
% psychotic disorder	54.6%	6.2%	7.9%	3.1%
% mood or anxiety	54.2%	15.5%	24.7%	13.5%
% substance use disorder	49.0%	13.7%	11.7%	9.7%

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MH trajectories and criminal justice outcomes

	Escalating	Low	Adolescent limited	Childhood peak declining
% sample	5.8%	64.5%	14.5%	15.3%
% any CJS contact	68.8%	53.0%	46.8%	51.4%
% juvenile contact (<17)	46.4%	26.4%	26.8%	36.4%
% adult court	59.1%	46.9%	37.8%	43.0%
% violent offence	29.9%	13.9%	12.6%	17.5%
Age first contact, M (SD)	15.88 (3.11)	16.98 (3.30)	16.57 (3.04)	15.44 (3.18)
% youth detention	10.7%	2.3%	4.5%	4.9%
% adult prison	19.2%	6.4%	5.2%	6.0%

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Key findings

- GBTM can illustrate variability in MH service contacts over the life course
- Longitudinal MH service contact patterns
    - Four trajectories: escalating, low, adolescent limited and childhood peak declining
    - Escalating contacts contained fewest individuals but highest proportion of contacts
    - Variation in demographics and mental illness across trajectories
- CJS outcomes varied across MH service trajectories
    - CJS contact high across all trajectories
    - Escalating group higher proportion with CJS contacts

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Implications

- Prospective identification of people likely to follow escalating contacts trajectory
    - Targeted early and intensive interventions
    - Importance of culturally responsive and appropriate services
    - Systemic treatment needs
- Complexity of vulnerabilities and needs in escalating contacts group
- Communication across MH and criminal justice systems
- Timing of MH and CJS contacts?

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Limitations

- GBTM and “group membership”
- Administrative records do not capture the true extent of MH service needs or mental illness
- Administrative records undercount offending
- Bias in CJS processes overrepresenting First Nations people
- First Nations status underestimated
- Did not examine the temporal ordering/sequencing of MH service and CJS contacts

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https://www.griffith.edu.au/criminology-institute/our-research/major-research-projects/qld-linkage-project

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