

Mental health consumers' access to planned and emergency surgery in NSW

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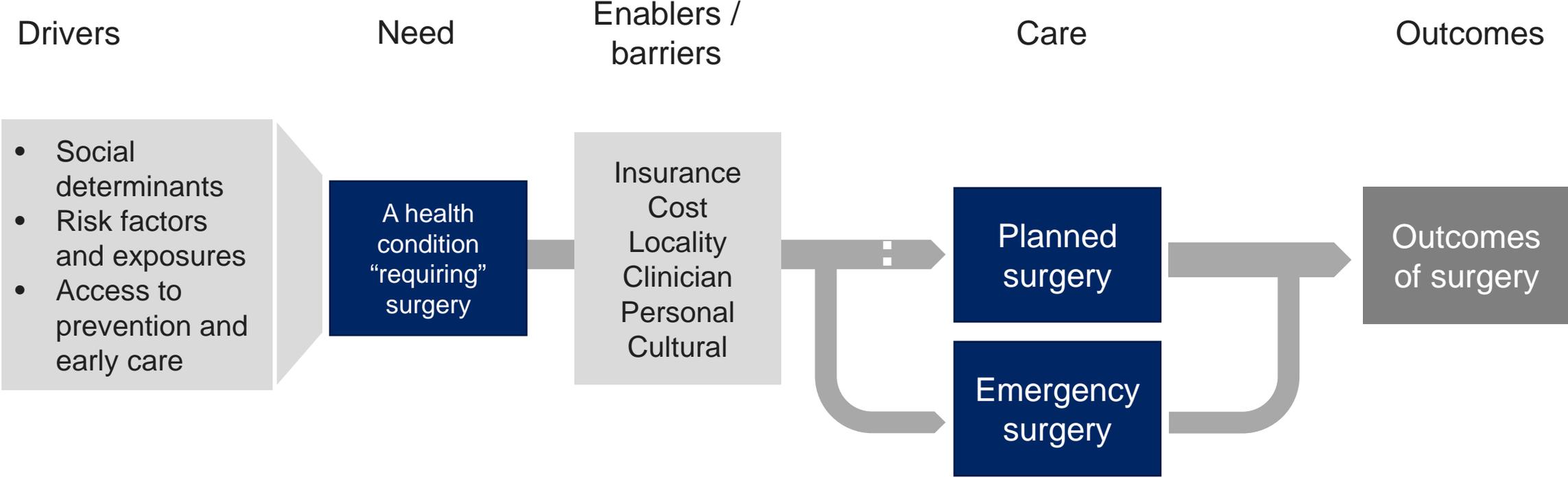
Acknowledgement

The Yugambah/Kombumerri people on whose lands we meet

People who have used NSW hospital or community mental health services, whose data we use with gratitude and respect



Surgical care is essential : do MH service users get equal care ?



People living with mental ill health may experience ...

↑ risk factors
↓ early care

↑ need

↑ barriers

↓ access

???

↓ outcomes

This study asks: what is the rate of surgery for people using MH services in NSW (i) overall (ii) planned vs emergency ?

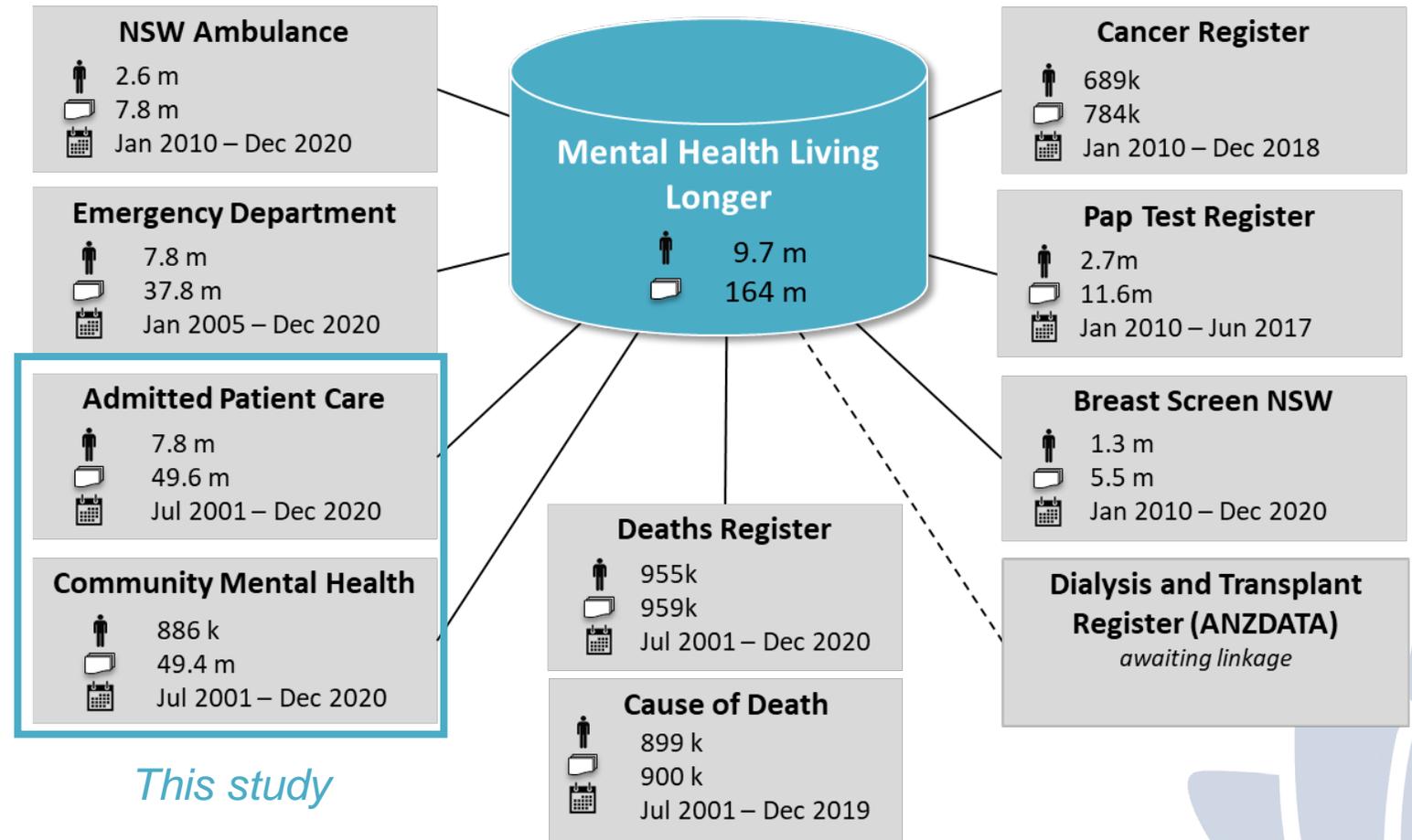


NSW Health *Mental Health Living Longer* data linkage

Supporting policy and system improvement to reduce premature mortality in people using mental health services

6 monthly linkage of:

- Hospital (public and private)
- ED and Ambulance
- Cancer screening and care
- Community MH
- Dialysis and Transplant
- Deaths



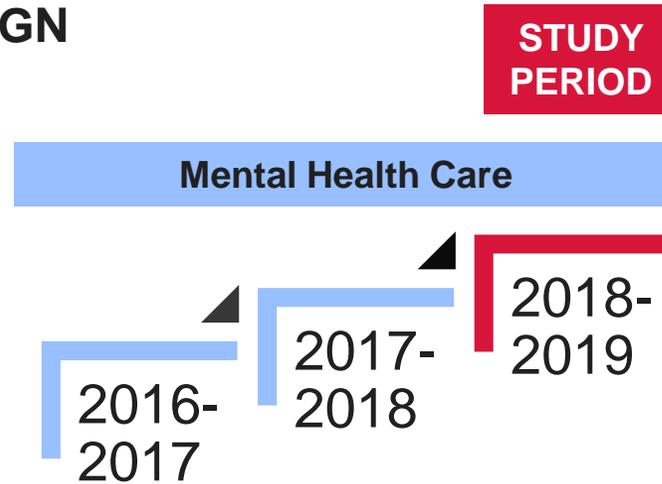
Methods

OUTCOME MEASURE

Surgical procedures per 1000 people

In NSW public or private hospitals

STUDY DESIGN



MENTAL HEALTH CARE DEFINITION

1. Public or private hospital mental health admission, or
2. Any NSW community MH service contact

(No data on private, PHN or NGO mental health care)

ANALYSIS

Rates and Incidence Rate Ratios (IRR) for planned, emergency and total surgeries

adjusted for age, sex, disadvantage, rurality (aIRR)

Odds Ratio (OR) for equivalent procedures, comparing emergency vs. planned

INCLUSIONS / EXCLUSIONS

Inclusion:

- NSW residents, all ages, acute admissions to public or private hospitals

Exclusion:

- Non-surgical procedures in "Not elsewhere classified" block (allied health, medication etc), radiology, obstetric procedures, anesthetics, ECT
- Hospital episodes for mental health care, rehab/non-acute care, palliative care, obstetrics and childbirth

MH service users had a higher per capita rate of surgery

2.17m in scope procedures in 2018-19

	MH service users	Other NSW residents
People	256,253	8,034,684
Procedures	96,607	2,075,330
Rate per 100k	377	267
IRR	1.41 (1.40-1.42)	

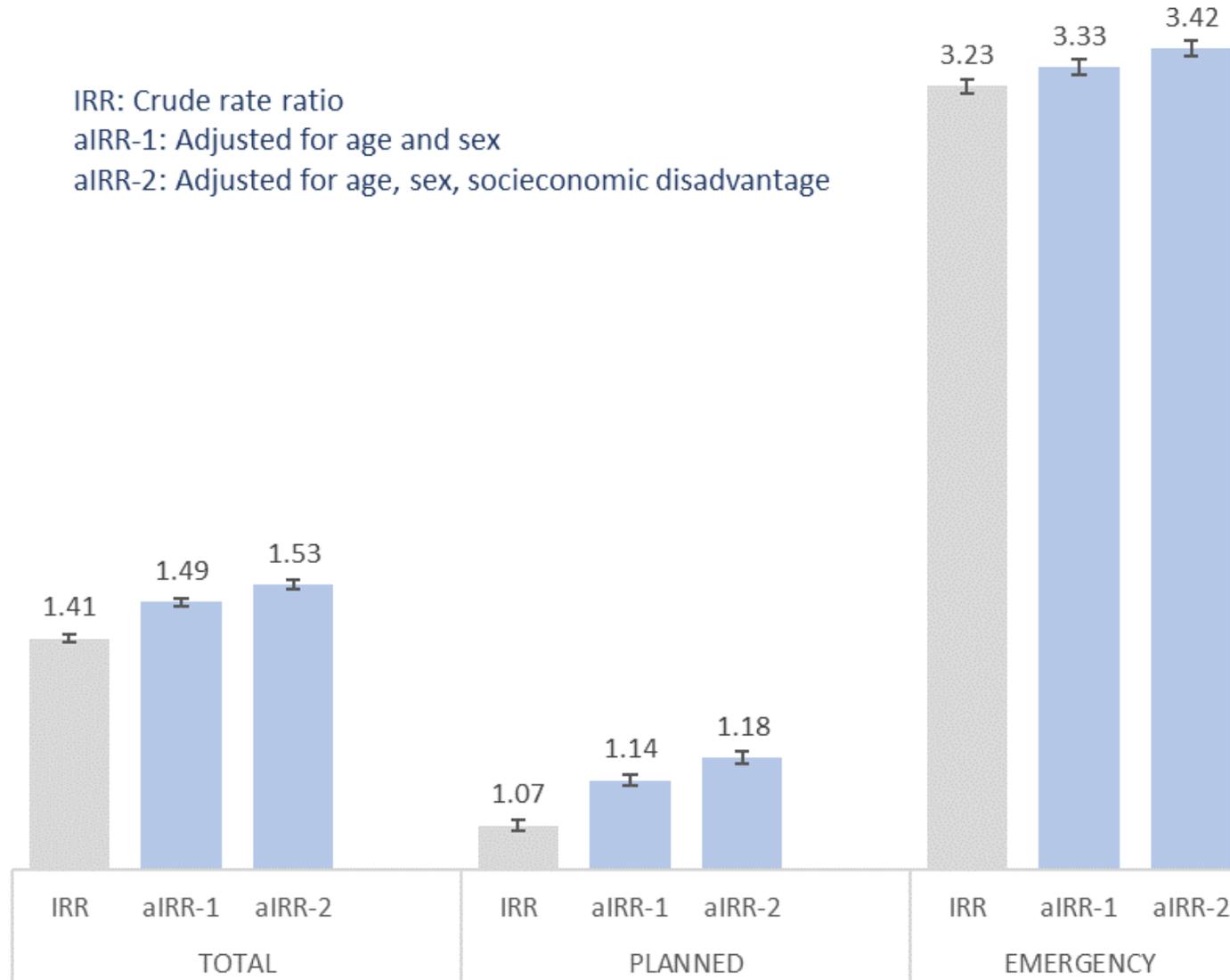
Mental health service users are younger and more likely to live in disadvantaged areas than the rest of the NSW population

However, adjusting for those differences slightly *increases* the rate compared to the NSW population



Most of the increase was due to emergency procedures

IRR: Crude rate ratio
aIRR-1: Adjusted for age and sex
aIRR-2: Adjusted for age, sex, socioeconomic disadvantage



Mental health service users had more than three times the per capita rate of emergency procedures

Defined by occurring during an emergency or unplanned admission

Around 80% of procedures occur during planned admissions

IRR = 1 (Same rate as other NSW residents)

Preliminary findings

What procedures are increased the most?

PLANNED

Neurological (3x)

- includes many pain procedures

Most “blocks” increased by 50- 100%

Some increased by 10-50%

- Gynaecological
- Male genital / prostate
- Plastics
- Oral surgery

Only one block reduced

- Eye surgery

EMERGENCY

Greatest increases for

- Thyroid and parathyroid (18x)
- Dental (9x)
- Most substantially increased
- Numbers for some blocks are small

Are higher emergency rates due to different conditions or different care?

Exclude procedure blocks with

- Low mix of planned or emergency (<5% of either): 52% of procedures
- Low volume, <100 per year : 0.9% of procedures
- Retains: 807,294 procedures (47% of total) in 423 blocks

For procedures with a reasonable mix of planned/emergency, are MH service users more likely to have emergency surgery compare to other NSW residents, after controlling for other factors? (binary logistic regression, clustered by procedure block).

Emergency surgery was more likely if : under 40 or over 80, male, disadvantaged, or born outside Australia.

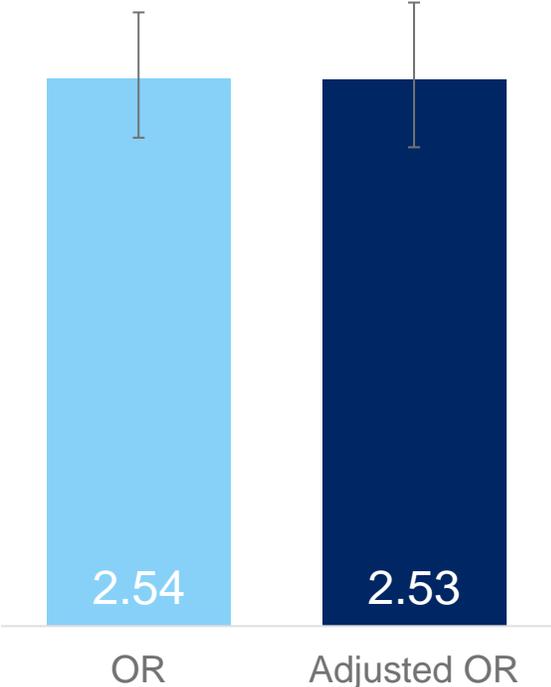
Recent MH contact is strongest single predictor of emergency care (OR 2.54).

Adjusting for age, sex, disadvantage, country of birth makes little difference.

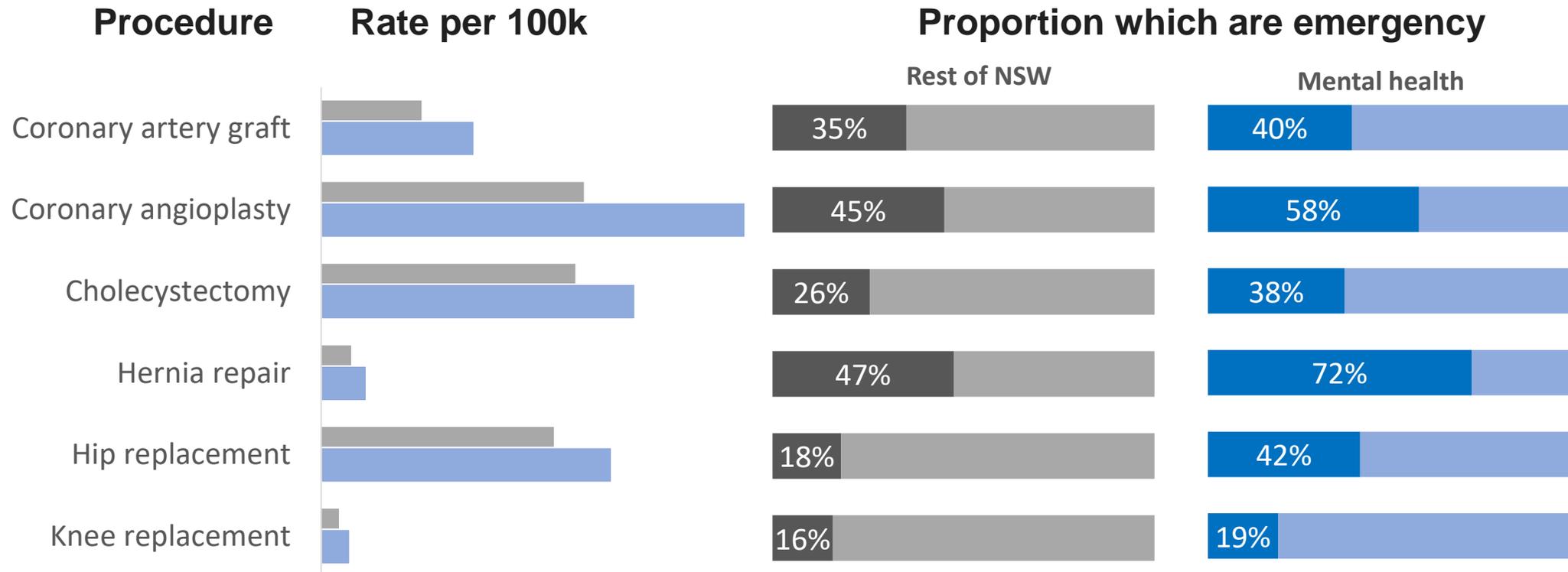


Preliminary findings

Relative risk (Odds Ratio) of emergency vs planned surgery in MH service users



AIHW “Access Sensitive” Procedures

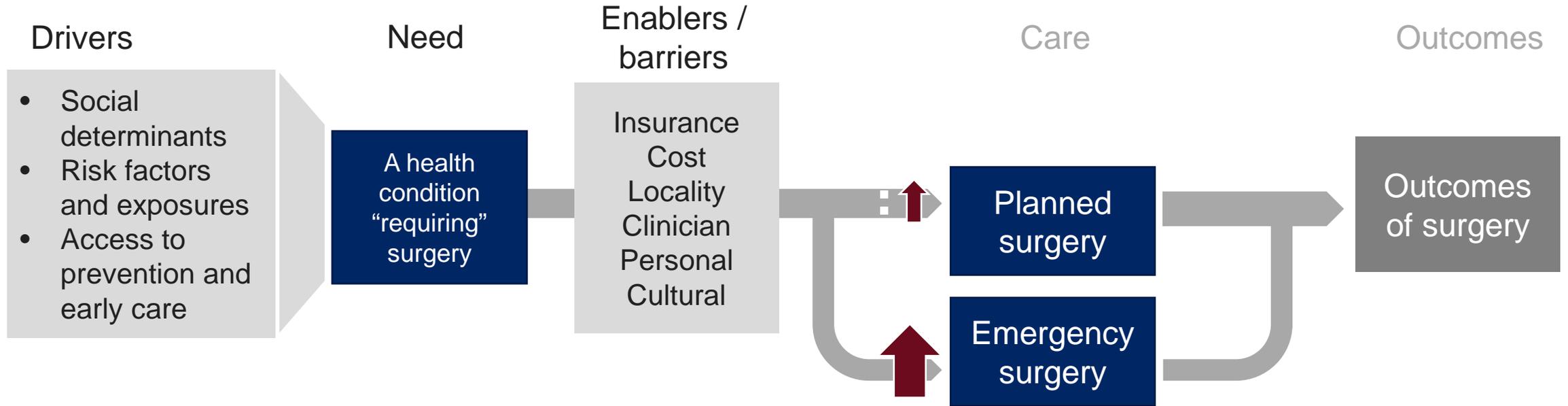


For MH service users

- Rate of these procedures per capita was 1.4 x higher
- Procedures were 1.8 x more likely to occur as an emergency after adjusting for other factors

Preliminary findings

In NSW MH service users



People living with mental ill health are likely to experience

- Increased need for surgical care
- Reduced access to care

We found increased surgical rates overall, and especially for emergency surgery

More work is planned

- Methods are complex
- How does this affect outcomes?

Thankyou

Julia Hamer MSc

Mental Health Living Longer project team and collaborators

- ▶ Steering Committee (Chair: Sharon Smith)
- ▶ Aboriginal Sovereign Steering Committee (Co-chairs: Ashley Brown, Pauline Ferkula)
- ▶ Academic Advisory Group: David Currow (Cancer Institute NSW), Philip Burgess (UQ), Matthew Large, Jackie Curtis, Faye McMillan (UNSW), Parashar Ramanuj (National Orthopaedic Hospital, London), Niels Mulder (Erasmus U)
- ▶ InforMH: Myu Arumuganathan, Wendy Chen, Fred Wu
- ▶ Department of Surgery, RPAH: Michael Solomon, Kate McBride

