



College of Emergency
Nurses New Zealand
Ngā Ringa Ringa Aroha NZNO

Roopu nei | Plenary

Equitable mental health care in ED – gaps and opportunities

Dr Silke Kuehl | Te Whare Wānanga o Otākou ki Pōneke – University of Otago, Wellington



CENNZ CONFERENCE 2023



Equitable mental health care in ED – Gaps and opportunities

DR SILKE KUEHL | UNIVERSITY OF OTAGO WELLINGTON

Coming up

Part 1

Mental health related ED presentations

Part 2

Findings from a Co-Response Team pilot

Part 3

Integrated Primary Mental Health and Addiction Services



Equity

Equity

The access to or distribution of resources according to need

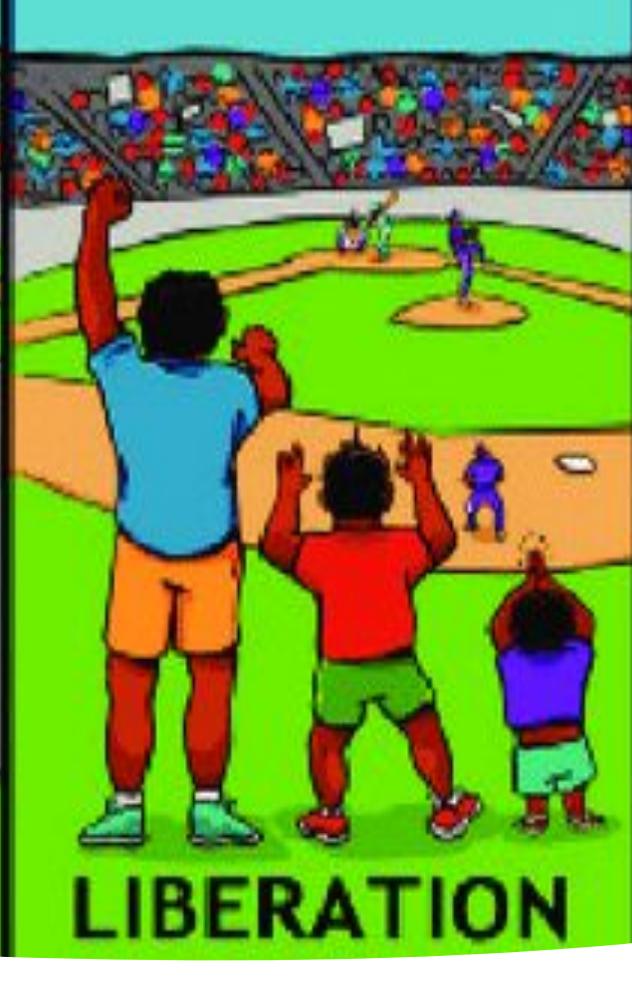
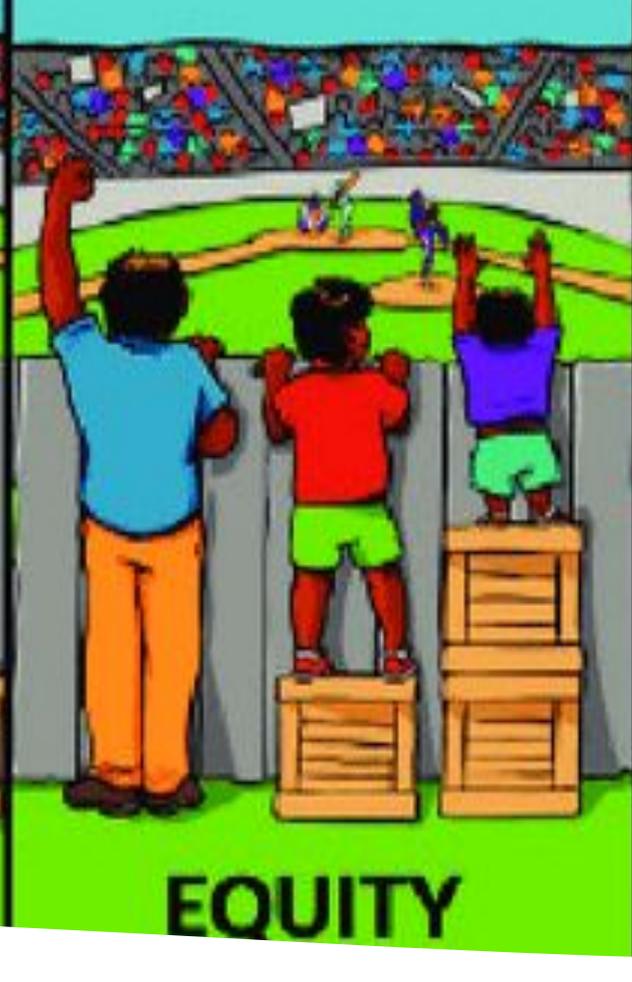
Equality

The access to and distribution of a set of resources evenly across individuals



Where there's inequity in a community, it means injustice, unfairness, and bias are being perpetuated.

<https://www.health.com/mind-body/health-diversity-inclusion/equity-vs-equality>



Part 1



Mental health clients in ED

Researchers:

- Associate Professor Ruth Cunningham
- Dr Silke Kuehl
- Abigail Freeland
- Dr Catherine Werkmeister
- Associate Professor James Stanley

Funding: New Zealand Lotteries Grant



Background



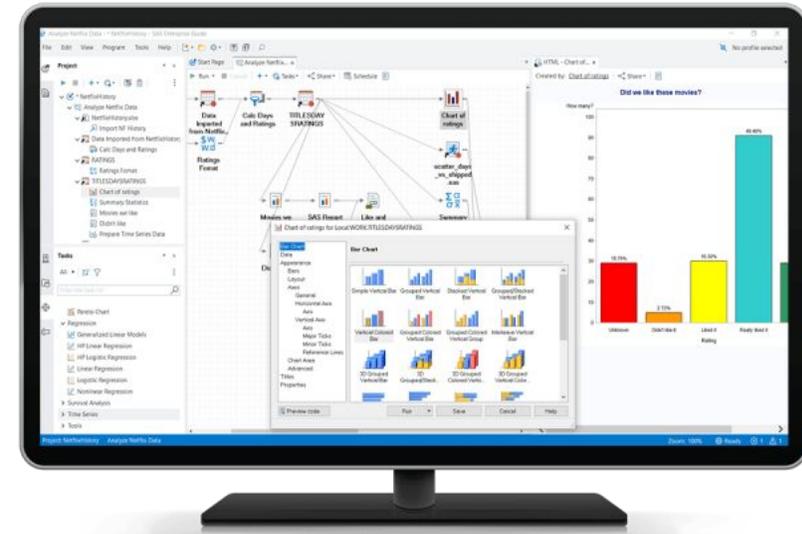
“Epidemic of mental distress and addiction”^[1]



- ED presentations classified by
 - ICD-10 code
 - MH referral (seen by crisis/liaison team)
- Clients of mental health services
 - vulnerable to unequal treatment, physical illness, and adverse health outcomes ^[3]
 - have a more than doubled premature mortality rate compared to the general population ^[4]
 - often disengage with mental health services (11% - 46%) ^[5]
- People presenting to ED for self-harm often present for other health issues within a short timeframe - ?risk ^[6]

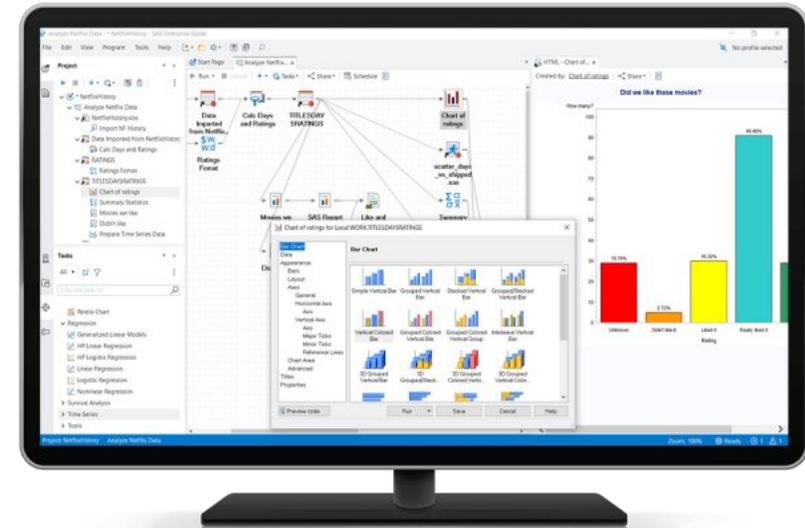
Method – data extraction, variables

- 2017/18 CCDHB ED data, presentations by people
 - =>10 years,
 - demographic information,
 - MH services' client status (current, prior in last 5 years, non-user)
- Clinical information:
 - triage priority
 - mental health referral
 - ED discharge diagnosis
 - ICD diagnoses
 - assigned admission specialty
 - LOS



Method - Analysis

- CD10 codes/ED discharge diagnoses (all presentations) categorized:
 - ‘mental health related’
 - ‘potentially mental health related’
 - ‘not mental health related’
- ED discharge diagnoses (MH clients) categorized: ABCDE adapted framework
- Descriptive description



Findings – demographic information



- ❖ 49,170 ED presentations
- ❖ 33,597 distinct people
- ❖ MH clients made 8,874 presentations (18.1 %)
 - ❖ 6.7 % by current clients
 - ❖ 11.4 % by prior clients

Sociodemographic information	Detail	Current MH client (%)	Prior ¹ MH client (%)	Non-MH client (%)
Age	10-34	49.7	47.4	37.7
	35-64	44.0	39.6	34.2
	65+	6.3	13.0	28.1
Gender ²	Female	56.9	53.3	51.2
	Male	43.0	46.7	48.8
Ethnicity (prioritised)	Māori	16.3	16.6	9.6
	Pacific	4.8	6.4	9.5
	Asian	3.3	4.1	10.2
	Other	75.6	72.9	70.8
NZDep 2018 deprivation quintile ³	1 + 2	34.8	40.6	50.5
	3	29.4	29.1	25.7
	4 +5			
		35.9	30.4	23.8

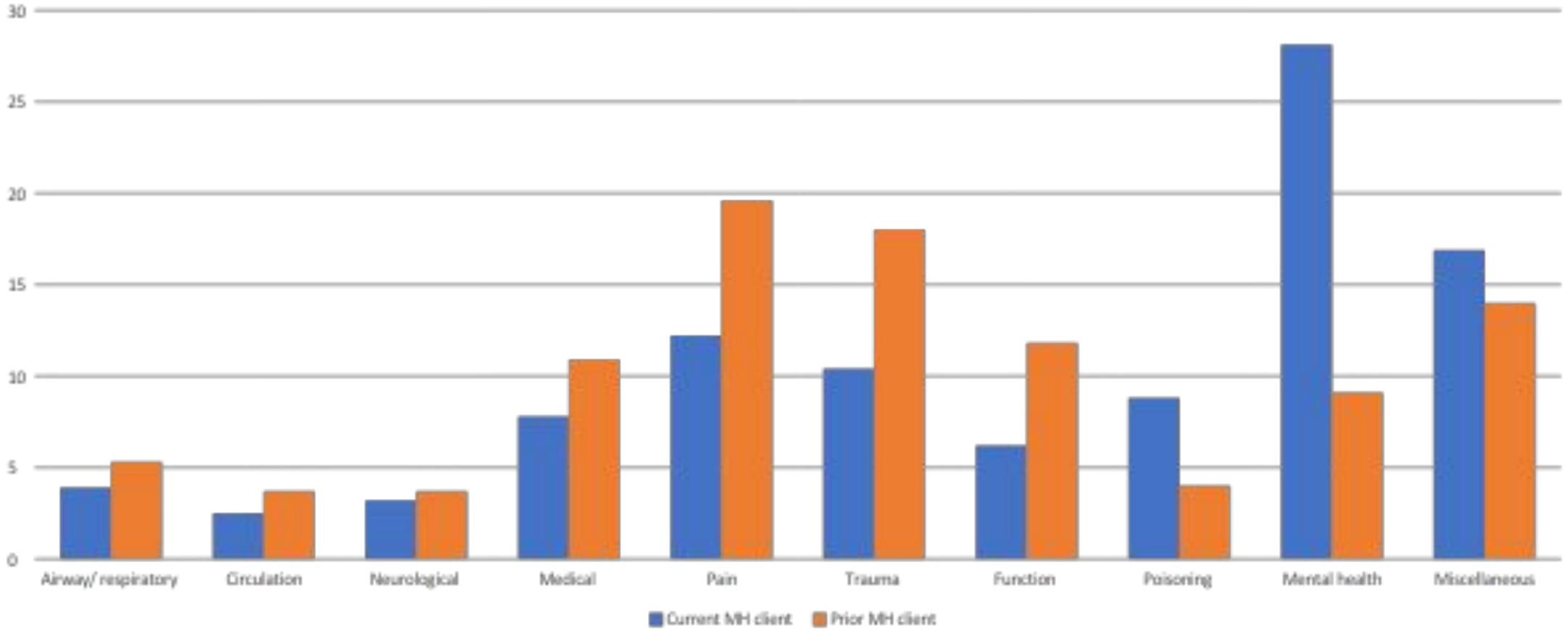
¹Within last 5 years; ² Unknown = 0.1% Current MH clients; ³1=lowest deprivation and 5=highest deprivation

Findings – clinical information

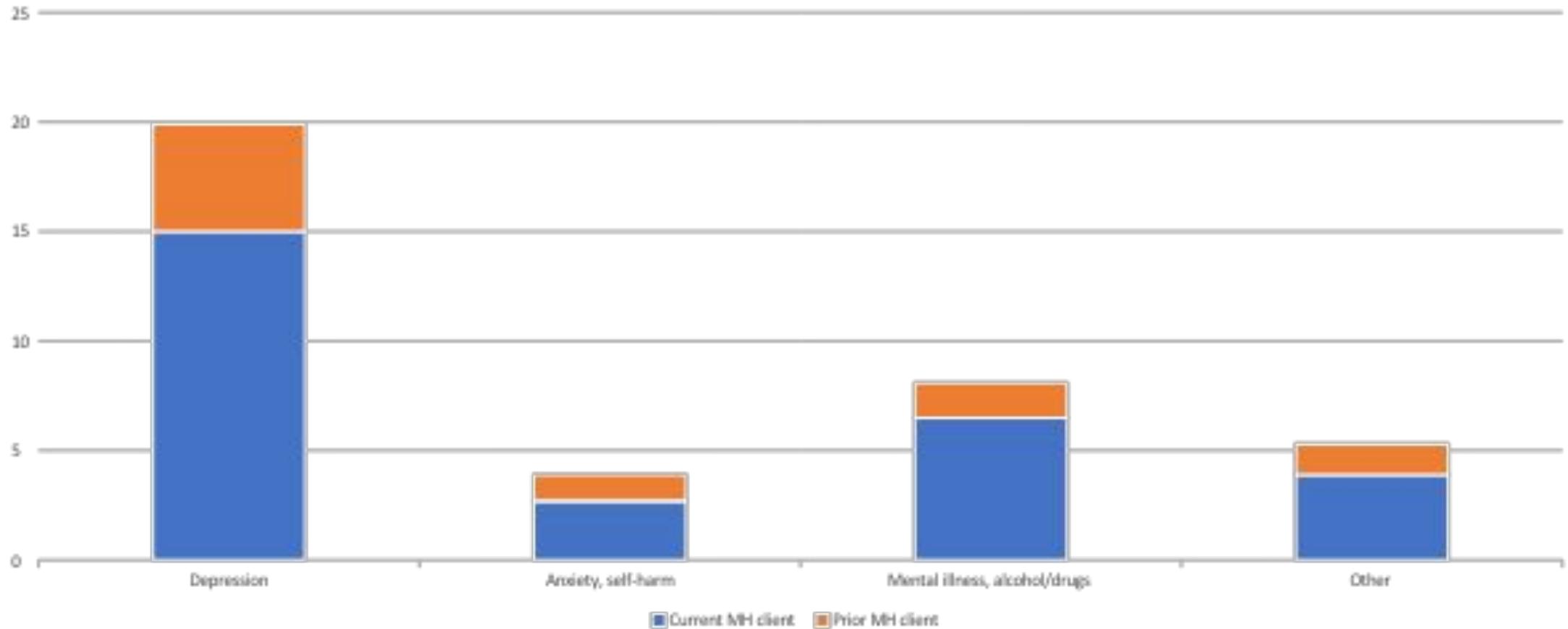


- Triage codes 1-3
 - Current mental health clients 61.4%
 - Non-mental health clients 56.6%
- Referral to mental health services (mental health event)
 - Current MH clients 29.2%
 - Previous MH clients 9.0%
 - ED patients not known to MH services 1.0%
- Mental health diagnoses (relevant ICD code assigned)
 - Current MH clients 30.0%
 - Previous MH clients 12.0%
 - ED patients not known to MH services 2.0%

Grouped discharge diagnoses



MH-related discharge diagnoses



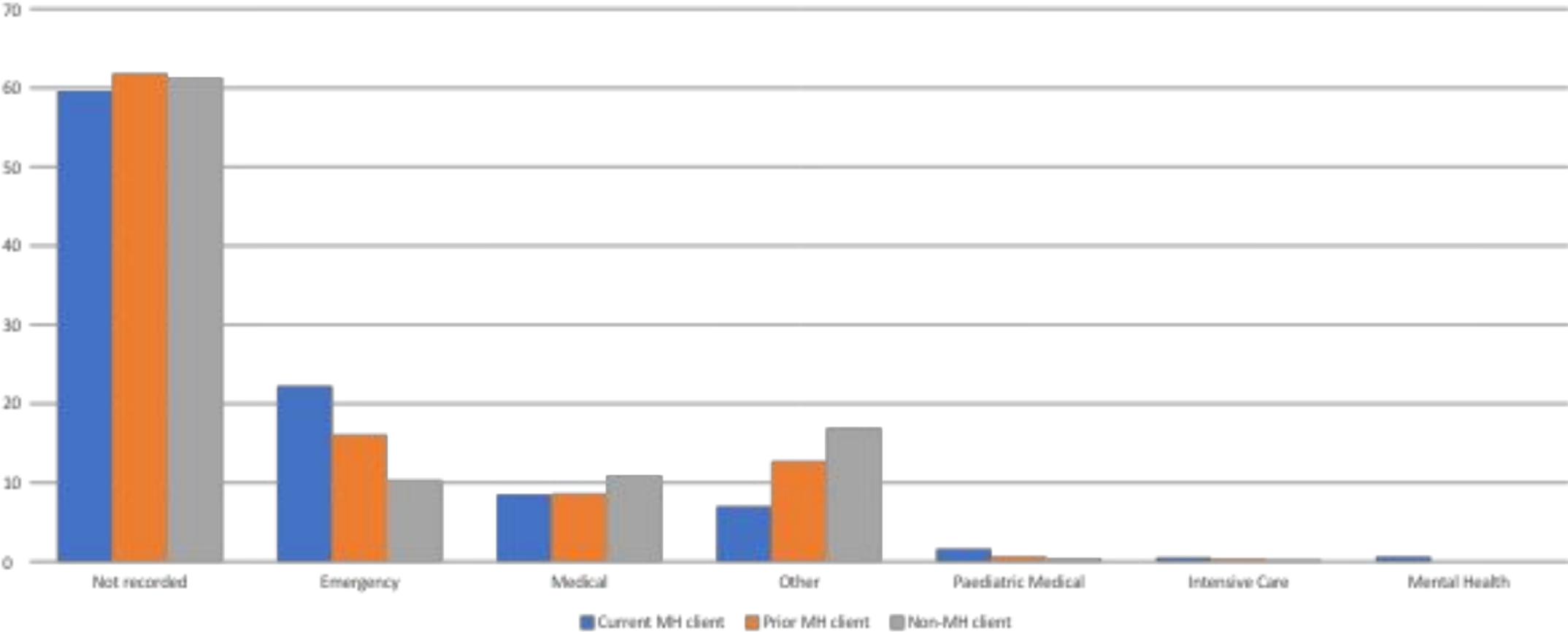
*from ED at CCDHB 2017/18

Admission specialty

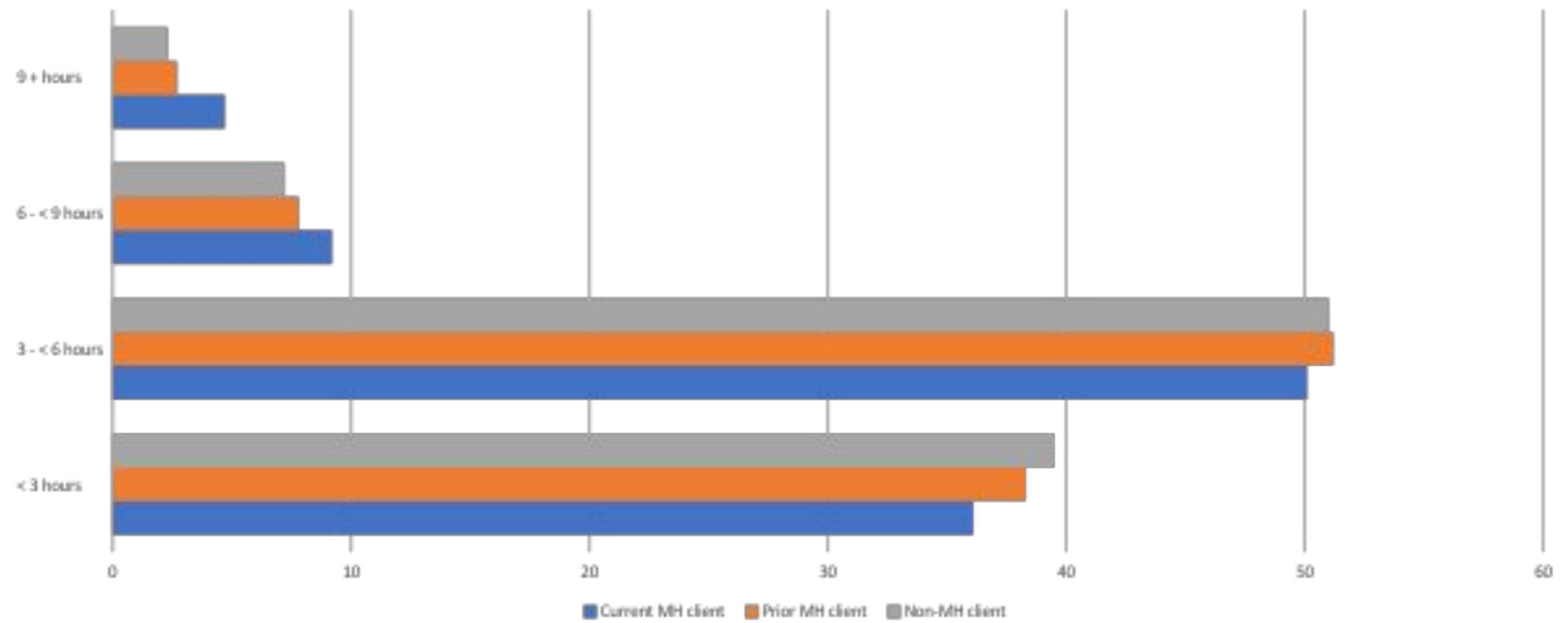


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Length of stay (LOS)



Limitation



- Data gaps – collected for clinical purposes
- Relied solely on primary ED discharge diagnosis
 - ❖ likely undercounted presentations with mental health aspects, e.g. wrist lacerations (see Werkmeister et al. reference)
- ED presentations lasting less than three hours had unassigned ICD codes – likely under-counting of mental health related presentations

Conclusion

- Mental health clients
 - present to ED for mental health concerns, pain or trauma
 - get more commonly admitted under ED rather than mental health services
- Current data does not identify self-harm behaviour
- Optimal ED management
 - requires a holistic approach and close links with mental health and community services
 - Improved ED mental health data capture and monitoring
- Equity team in ED

Assessing mental health clients' wellbeing and addressing their unmet needs is likely to reduce future ED presentations



Part 2

Wellington Co-Response Team Evaluation

Researchers:

Prof Susanna Every-Palmer
Dr Silke Kuehl
Dr Alice Kim
A/Prof Sarah Gordon

Evidence Based Policing Centre, NZ Police,
MHAIDS, Wellington Free Ambulance Service



The power of three brains



Sg Theresa William, Deidre Laban [MHAIDS], Christine (Chris) Galvin [WFA], A/Sn/Sg James Dunlop (Jim) [NZ Police], Missing: Ashlee (Ash) Passmore [MHAIDS]

Background



Increase demand for MH&A support

Increase mental health related 111-callouts

ED is the default location or police custody

People often in distress, not 'criminal'

CRT successful in other countries

Objectives

1. Does CRT work
2. Are there any issues/barriers and factors of success
3. Where expected outcomes achieved – how?
4. What was the impact on service/support networks



Methods



Focus group



Survey



Interviews



Quantitative
analysis



Focus group

Discussion with CRT before and after CRT pilot

- background
- views on mental health callouts
- training
- expectations/experiences of the CRT



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CRT training scenario (CRT manager)

How to respond to and assess the risk of a person in a mental health crisis

The paramedics were talking about agitated delirium, maybe sedation. The police were talking about risk and taser and number of police on scene. And I just remember the mental health team were like, “well, shall we just go and sit down next to them and talk to them?”



Survey

Method



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Participants from Police (n=57), ambulance (n=29) & MH services (n=33).
Asked about

- background
- confidence
- training
- enjoyment
- knowing what to do
- time it takes
- safety
- processes
- working with other services
- Other comments



Survey Findings



- Police officers spent a significant time attending to mental health-related callouts
- Police and ambulance staff
 - felt ill-prepared, though they often felt they managed adequately
 - little/no support from MH services
 - working with mental health services
 - 7% easy
 - 14% neutral
 - 79% hard
- CRT staff were more prepared but also struggled with processes



Survey Findings



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... the majority of people sigh a collective groan when mental health jobs come in because police are the ambulance at the bottom of the cliff and a lot of the time, we have very little power to be able to do anything. (Police participant)

I hate trying to convince someone to come with me to ED, knowing full well that probably nothing is going to get fixed for them ... (Ambulance participant)

Conclusion: Frontline staff need urgent support with mental health-related callouts

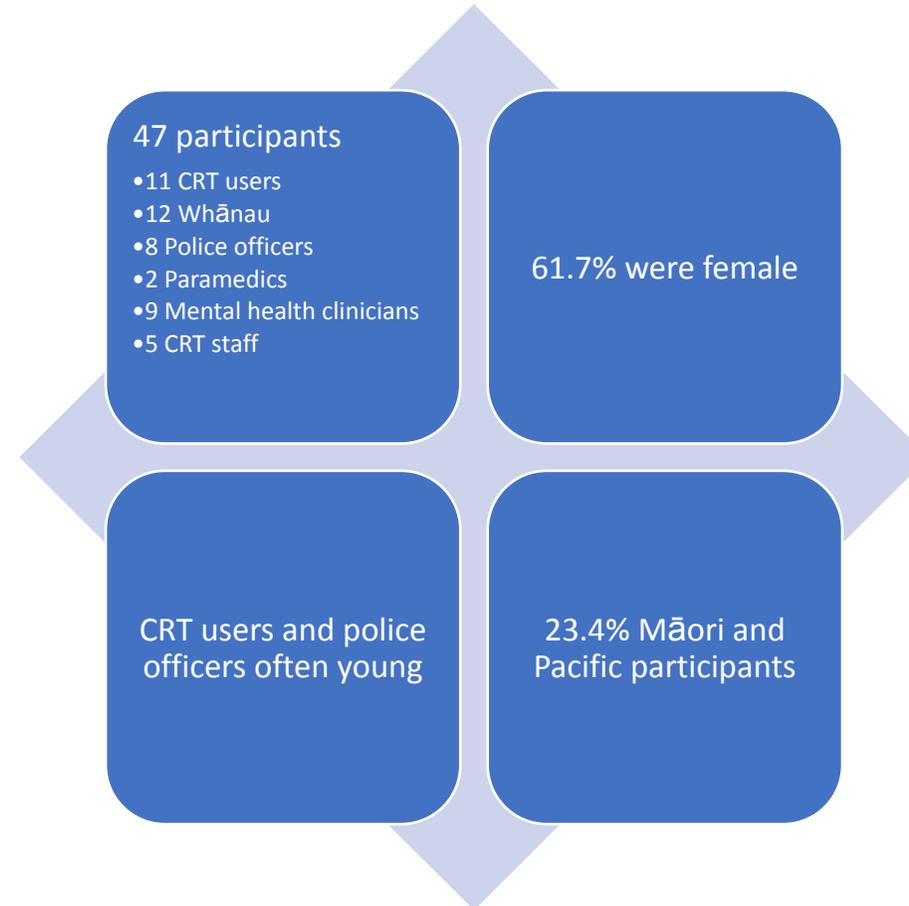


Interviews - method

- Recruitment via survey, CRT contact, snowballing
- Interview guide: experiences with the CRT
- Thematic analysis



Interviews - Findings



Interviews CRT users and whānau - findings



- Before CRT contact: 73% CRT users and 66.7% family/support people participants had contact with Police, mental health services, or the ED*
- Others initiate help; Getting help is difficult (“I had to keep on calling...”); Hazy memories
- Humanistic engagement: (*“She felt really comfortable, and she felt like these people were coming ... to help her and not to judge her”*); Good communication; *Being able to address the physical, the mental, the situational and the practical stressors; Doing things differently*
- *Good but not perfect: Frustrating return to mainstream services; Culture gaps; Conflicting feelings about the police being there*

*12 months

Interviews CRT users and whānau - findings



In the past ... I've noticed on the odd occasion with mental health that they can be a little bit lackadaisical, a little bit off point. And I've noticed with the Police sometimes that they, on their own, can be a little gung-ho about how they go about things. I think ... because you got three different agencies acting together, all of them pull their game up because of being observed by another two agencies.

I know other members of her family have been put under the Mental Health Act and it's always enormously distressing for the entire family. You know, once again I just visualise the co-response team turning up in the past and how very different it would have been.

(Maira-F)

Interviews CRT users and whānau - findings

CRT satisfaction	Service user <i>n</i> = 11	Family/support people <i>n</i> = 12	Total <i>N</i> = 23
5.0 (extremely satisfied)	6	10	16
4.5	0	1	1
4.0 (very satisfied)	2	0	2
3.5	1	0	1
1.0 (not at all satisfied)	1	0	1
Missing data	1	1	2
Mean score	4.25	4.95	4.62

Interviews CRT users and whanau - findings



“I calmed down as soon as she came and put monitors on my chest. She put things on my heart, she took my pulse, asked me a lot of questions, told me to breathe. With her explaining what it was [that was so helpful] ... I knew I'd been through it before and been in ambulances, having panic attacks. But no one had ever explained the physical process of it to me.”

They were wonderful. They were kind and gentle and they weren't scary. In my culture ... there's a lot of fear of services, like mental health, Police, ambulances. But because they were so kind, that didn't even come into the picture.”

(Aria-U)

Limitation

- Self-selection bias
- MH services have been struggling – not hard to do it better



Conclusion

- Service users and family/support people were very satisfied with the CRT
- What worked:
 - multi-agency
 - humanistic approach
 - providing informative and practical assistance
- Future recommendations:
 - An enhanced CRT model with improved follow-on processes in ED
 - strong equity lens
 - less prominent CRT police presence



Interviews – police, ambulance, mental health, CRT



- 24 in-depth interviews, thematic analysis.
- ‘*Dread, fear and failure*’ encapsulated the reactions toward usual practice
 - fears of inadequate support
 - coercive measures
 - risk
 - poor outcomes
- CRT a ‘*gamechanger*’ co-response
 - provided police and paramedics with supportive and accessible mental health expertise
 - Participants felt safer and better able to provide person-and family-centered input

Interviews – police, ambulance, mental health, CRT

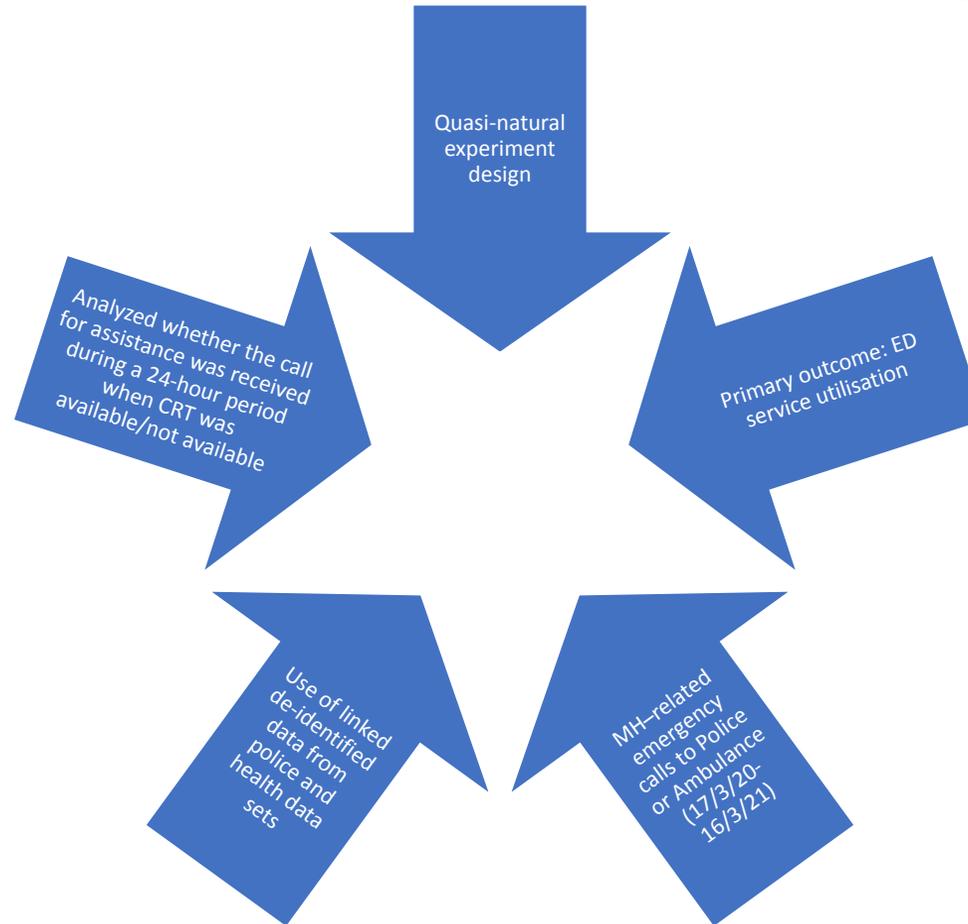


A normal police officer on a response team does not want to go to a mental health incident. A normal frontline young cop has joined the Police to help people, save lives, and drive fast cars

(Martin-P)



Quantitative Study



Results



- 1273 eligible MH emergency callouts (March 2020/2021, 12 months)
 - 392 on days without CRT availability
 - 881 on days with CRT availability
- CRT interventions were resolved faster, more often community-based
- ED admissions: 32% with CRT, 45% without CRT
- In following month, the number of ED and MH admissions reduced

RNZ news

30 Aug 2023



Police, ambulance and mental health co-response teams to be rolled out nationwide

Part 3



Integrated Primary Mental Health and Addiction Services

Outcome of Mental Health and
Addiction Inquiry - Access and
Choice

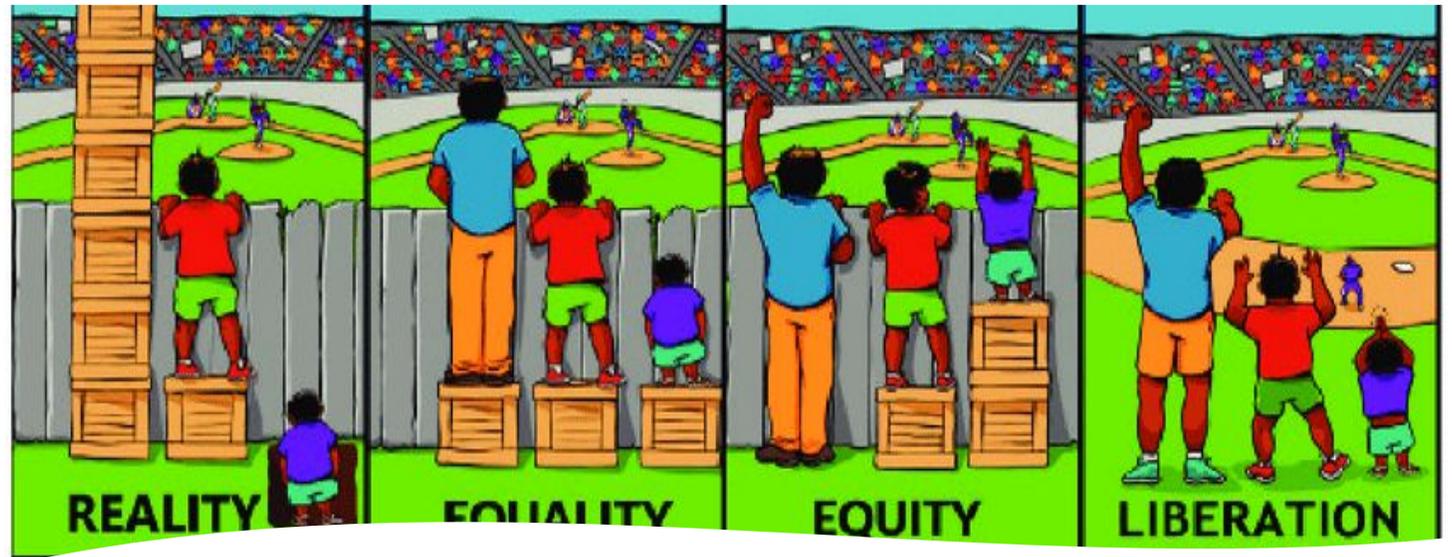
Health Improvement Practitioner

- ❖ National Hauora Coalition
- ❖ Across 3 GP clinics
- ❖ Easy access
- ❖ Try out new ways of doing things
- ❖ Pathway ED – primary care



Equity in ED

- Environment
- Processes
- ED staff MH training
- Culture
- Mental health staff
- Peer support



References



1. Paterson R, Durie M, Disley B, et al (2018) He ara oranga: Report of the Government Inquiry into Mental Health and Addiction. Wellington, New Zealand
2. Australasian College for Emergency Medicine (2019) Mental health service use: A New Zealand context. Melbourne, Australia
3. Gibb S, Cunningham R (2018) Mental Health and Addiction in Aotearoa New Zealand. Recent trends in service use, unmet need, and information gaps. EleMent Research Group, University of Otago Wellington, Wellington
4. Cunningham R, Peterson D, Sarfati D, et al (2014) Premature mortality in adults using New Zealand psychiatric services. N Z Med J 127:31–41
5. O'Brien A, Fahmy R, Singh SP (2009) Disengagement from mental health services: A literature review. Soc Psychiatry Psychiatr Epidemiol 44:558–568. <https://doi.org/10.1007/s00127-008-0476-0>
6. Kuehl S, Stanley J, Nelson K, Collings S (2021) The serious self-harm risk of “Mixed Presenters,” people who presented to New Zealand emergency departments for self-harm and other reasons: A cohort study. Arch Suicide Res 25:475–490. <https://doi.org/10.1080/13811118.2020.1715904>
7. Every-Palmer, S., Kim, A. H. M., Cloutman, L., & Kuehl, S. (2022). Police, ambulance and psychiatric co-response versus usual care for mental health and suicide emergency callouts: A quasi-experimental study. *Australian & New Zealand Journal of Psychiatry, 0(0)*. <https://doi.org/10.1177/00048674221109131>
8. Every-Palmer, S., Kuehl, S., & Kim, A. (2022). *Wellington Mental Health Co-Response Team Evaluation*. Wellington, New Zealand. Retrieved from <https://www.police.govt.nz/sites/default/files/publications/wellington-co-response-team-evaluation-report.pdf>
9. Werkmeister C, Cunningham R, Freeland A, et al (2022) Missed presentations, missed opportunities: A cross-sectional study of mental health presentation undercounting in the emergency department. EMA - Emerg Med Australas. <https://doi.org/10.1111/1742-6723.14114>
10. Kuehl S, Every-Palmer S, Kim A (2023) ‘An accident waiting to happen’ – the experiences of police officers, paramedics, and mental health clinicians involved in 911-mental health crises: a cross-sectional survey. J Psychiatr Ment Health Nurs 00:1–14. <https://doi.org/10.1111/jpm.12916>