Feasibility of a mobile phone delivered intervention to reduce harmful drinking and injury among trauma patients

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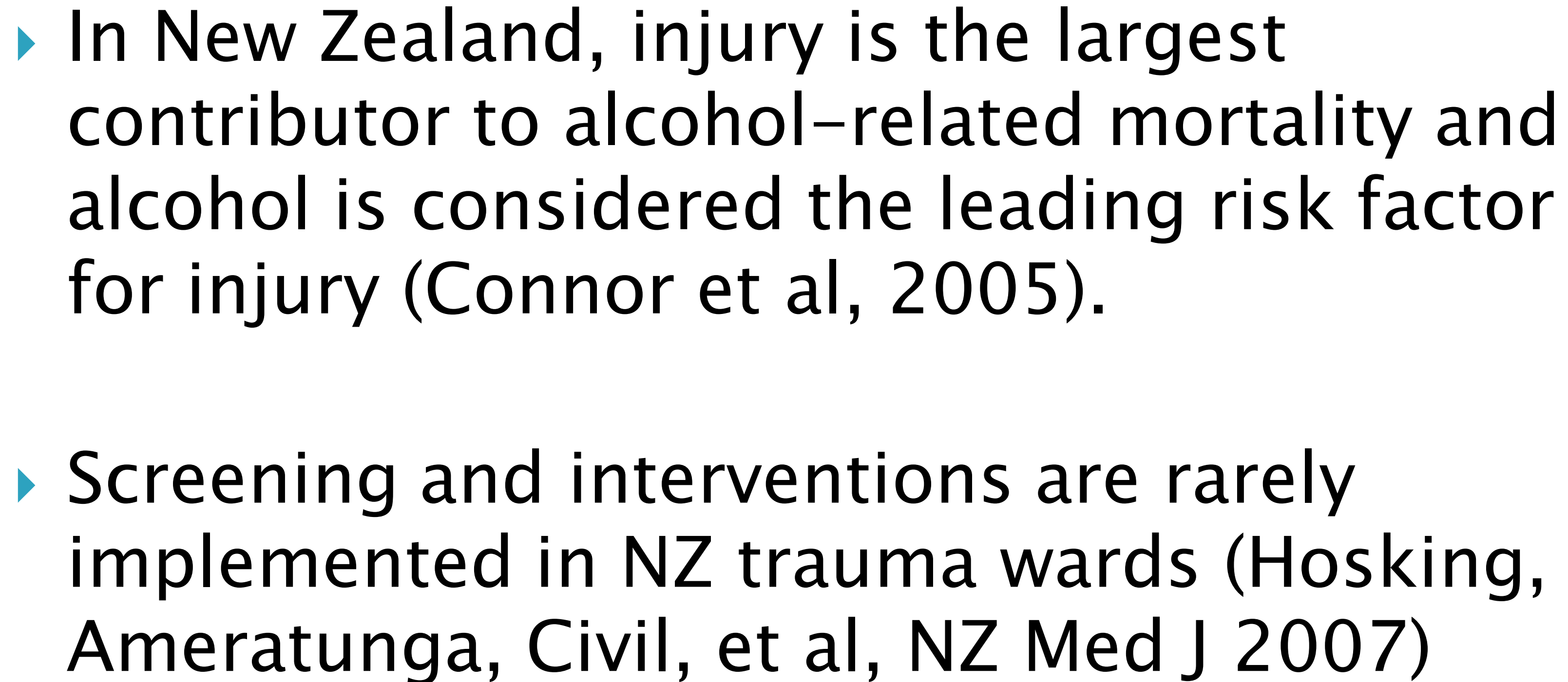
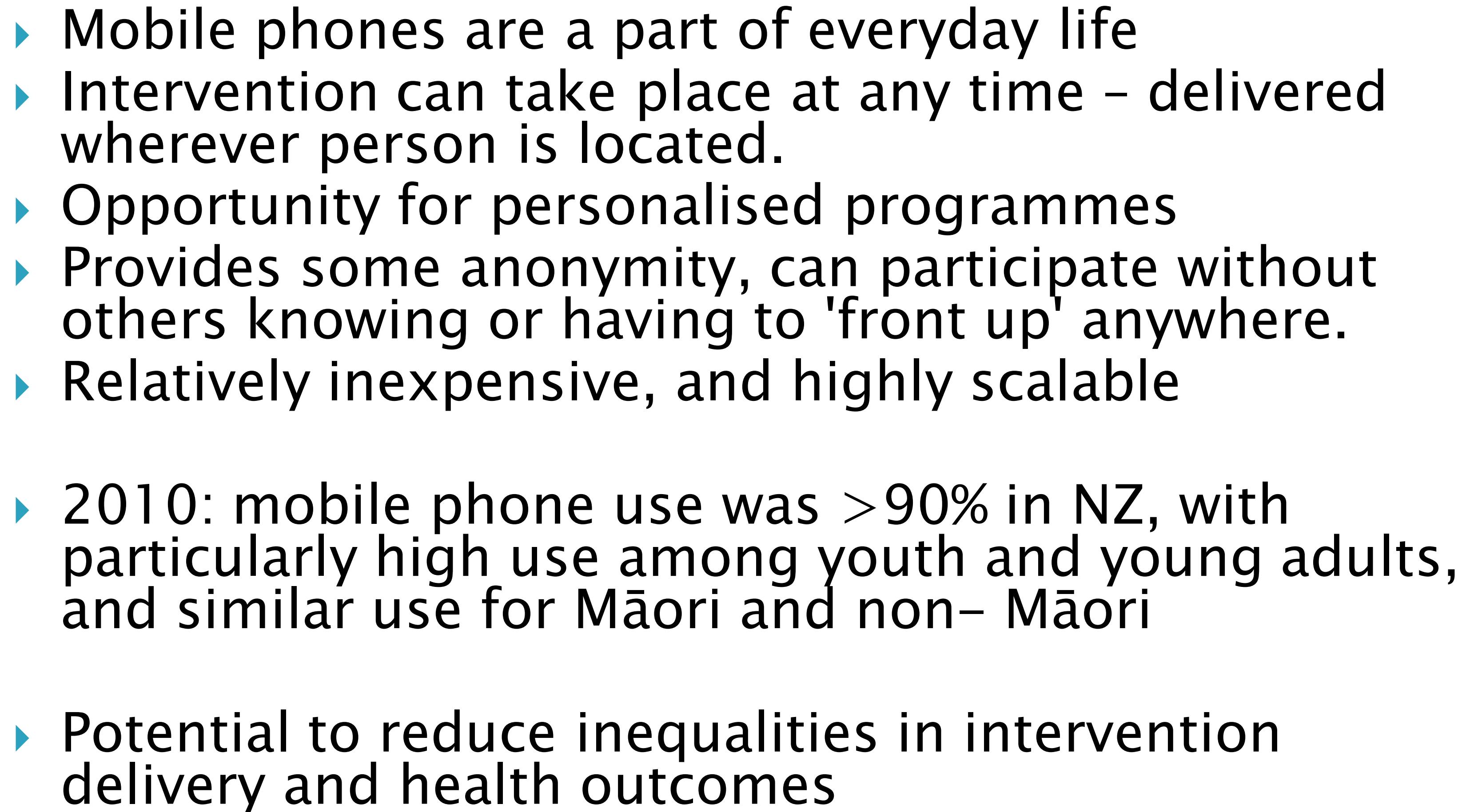
Background



M-health delivery: what's the buzz....



Clinical Trials Research Unit's m-health programs

R Whittaker, A Rodgers, et al

Mobile-health Delivery to Reduce Alcohol in the Trauma Environment (MoDeRATE) Trial

- Single blind RCT of patients ≥ 16 years, from all trauma units in Auckland over 1 year
- Randomised to receive mobile-phone delivered intervention or control / usual care
- Tailored intervention delivered as text message questions/prompts; time-sensitive motivational messages and access for help
  - Number expected to be screened: ~ 6,000
  - Risky drinkers for randomisation: ~ 1,400

MoDeRATE Trial

Alcohol Screen (AUDIT-C)

Negative Screen
AUDIT-C <3

Low to high risk:
AUDIT-C 3-7

Randomised

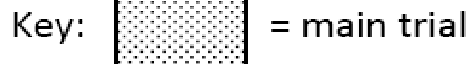
Control

BIH intervention

High to very high risk:
AUDIT-C ≥8

Referral to drug and alcohol services by clinical team

Follow-up:
3 month: AUDIT-C   6 month: AUDIT-C; survey   9 month: AUDIT-C
12 month: AUDIT-C; survey; linkage to ACC and morbidity & mortality data collections

Key:  = main trial

Feasibility study

- Aim: To explore perspectives of the ethnically diverse patient population in trauma wards re:
  - appeal and acceptability of proposed intervention
  - barriers & facilitators that may influence participation
- Qualitative study of 30 general trauma patients who had mobile phones
  - Purposive sampling – Maori, Pacific, Asian and European/White ethnicity aged 16+
  - Participants varied with regard to use of mobile phones, socio-economic status and AUDIT scores

Appeal and Acceptability

- Strong sense of significant problem, valued intent, relevance personally and for community

"I think it'd be good, 'cause it'd make you feel a bit guilty about your drinking and it would make you aware of it. And the idea that someone else is aware of it too, you know, like the idea of someone saying to you, 'What you're about to do is a problem' or something like that, it's kind of confrontational without being, you know, rude, but it is a little bit in your face."

- Importance of a research base

"I don't know the details but I remember there's been a study on using mobile phones on smoking and I know that's been very successful... I'd love to think that you know the lessons learnt from that would apply to this."

Barriers to engagement…

- *"If you are sending messages willy-nilly, it's going to be an utter irritation…. Some real work would need to be done in terms of how you would actually target, when and how texts would be sent…"*

- *"I think it would be akin to having a nagging mother, you start to ignore what they say and then start to do the opposite"*

- *"I guess being too judgemental, yeah, and too sort of confrontational…. You'd turn people away if you just jumped on them"*

Text messages preferred option – but some technical issues:

- *"I'm not really big techno…."*
- *"A txt isn't going to be as explicit as a pxt"*

Message deliverer…

- *“If you don’t know who it’s coming from, it’s hard to respect a text coming from an anonymous source…”*
- *“I’m a private person and so I tend to be very hesitant to receive unsolicited communications”*

Mixed response re ‘celebrity’ endorsement:

- *“Yeah, that’s never done anything for me… it just seems like they’re doing it for the publicity than because they actually care…”*

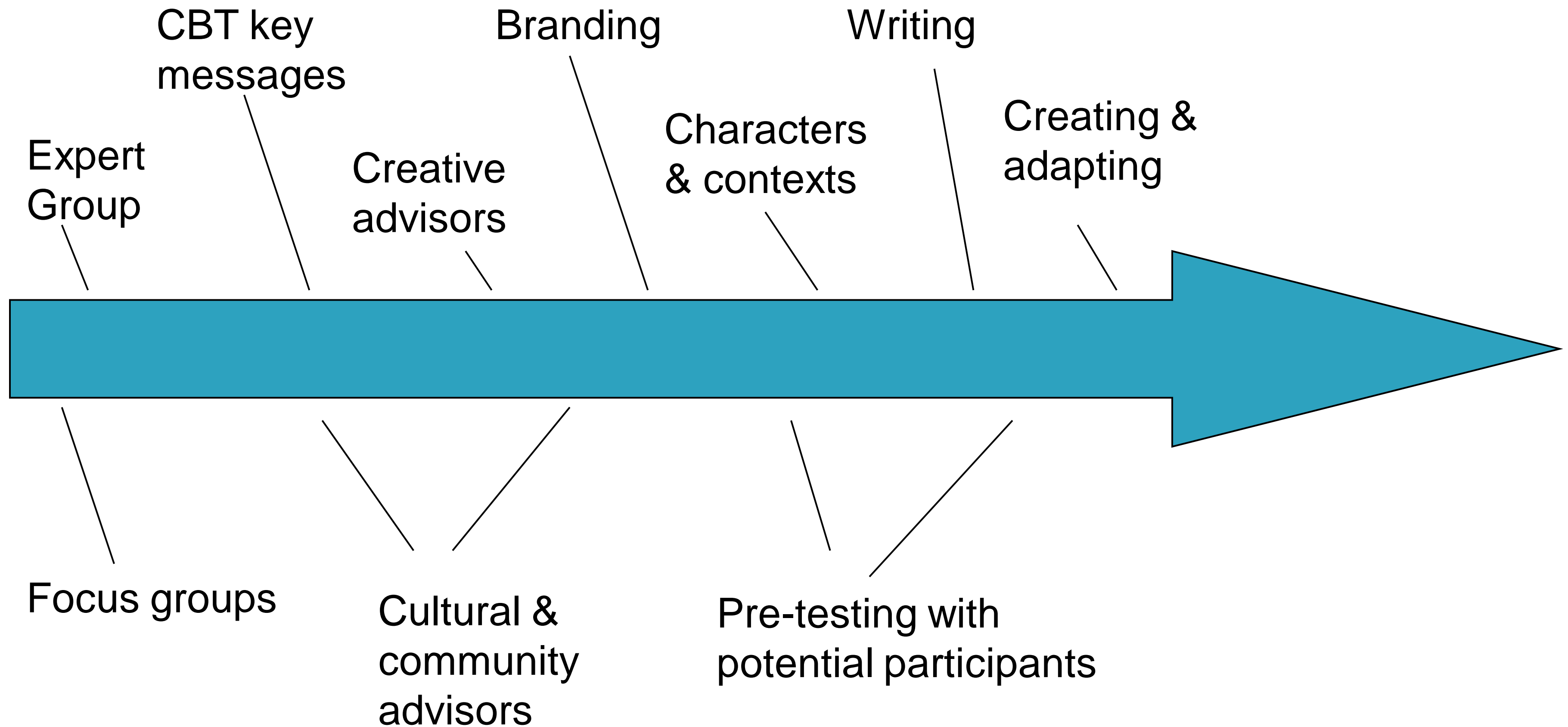
Novelty aspect….

- *"I think it's great [using mobile phones] because it's just new, …. Very versatile and very powerful in that social network context"*
- *"There'd be a honeymoon or there'd be an initial impact but it may not necessarily be sustainable or tenable over a long period of time in terms of its being effective"*

What's *your* message to the researchers?

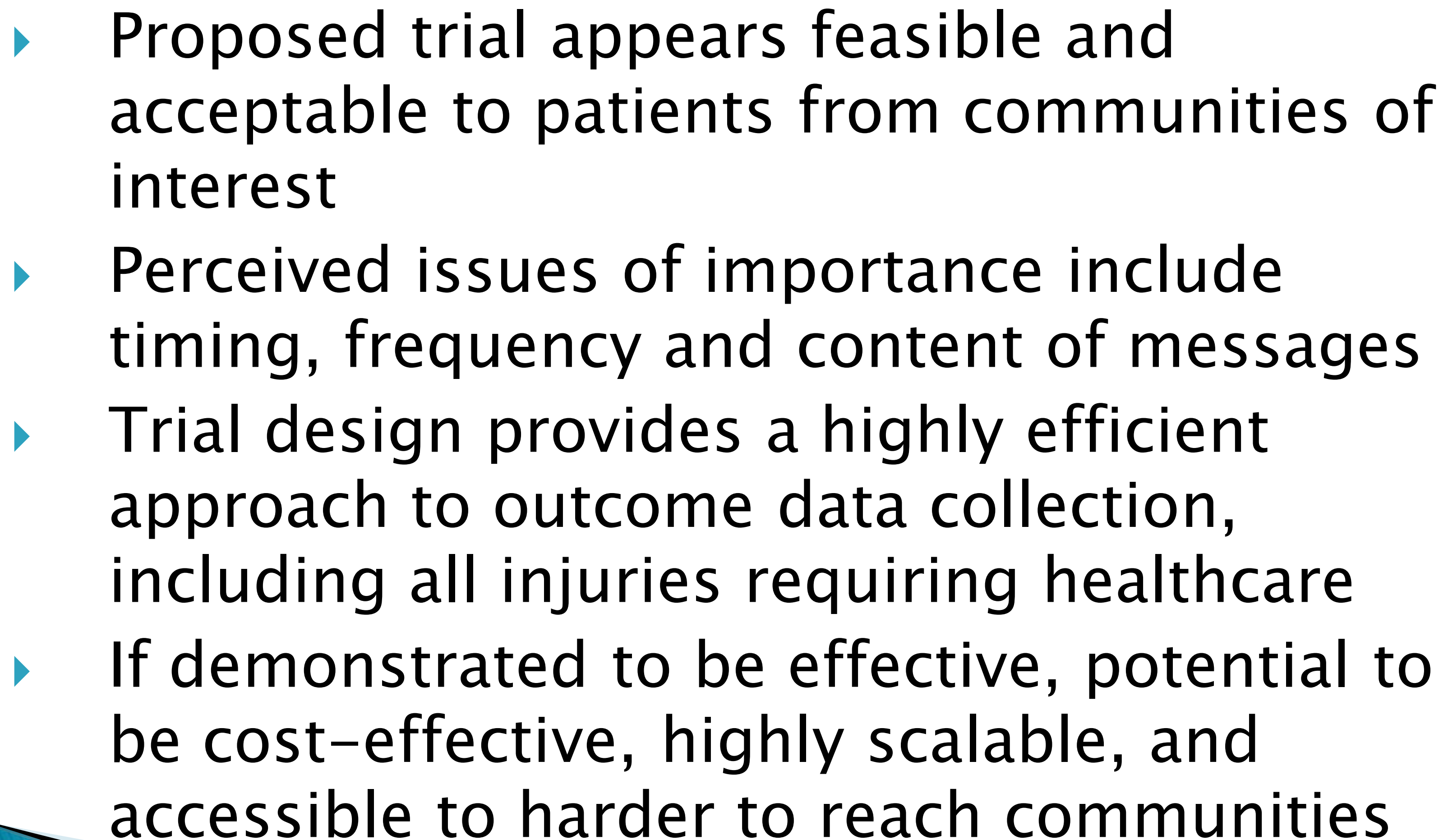
- *"Person must be ready and willing to change"*
- *"It needs to be as part of a bigger campaign first that sets in motion that change of attitude completely towards drinking. You need to do that first I think. …. I think little reminders once it's hit home is okay but the start needs to be something much bigger."*

Development process

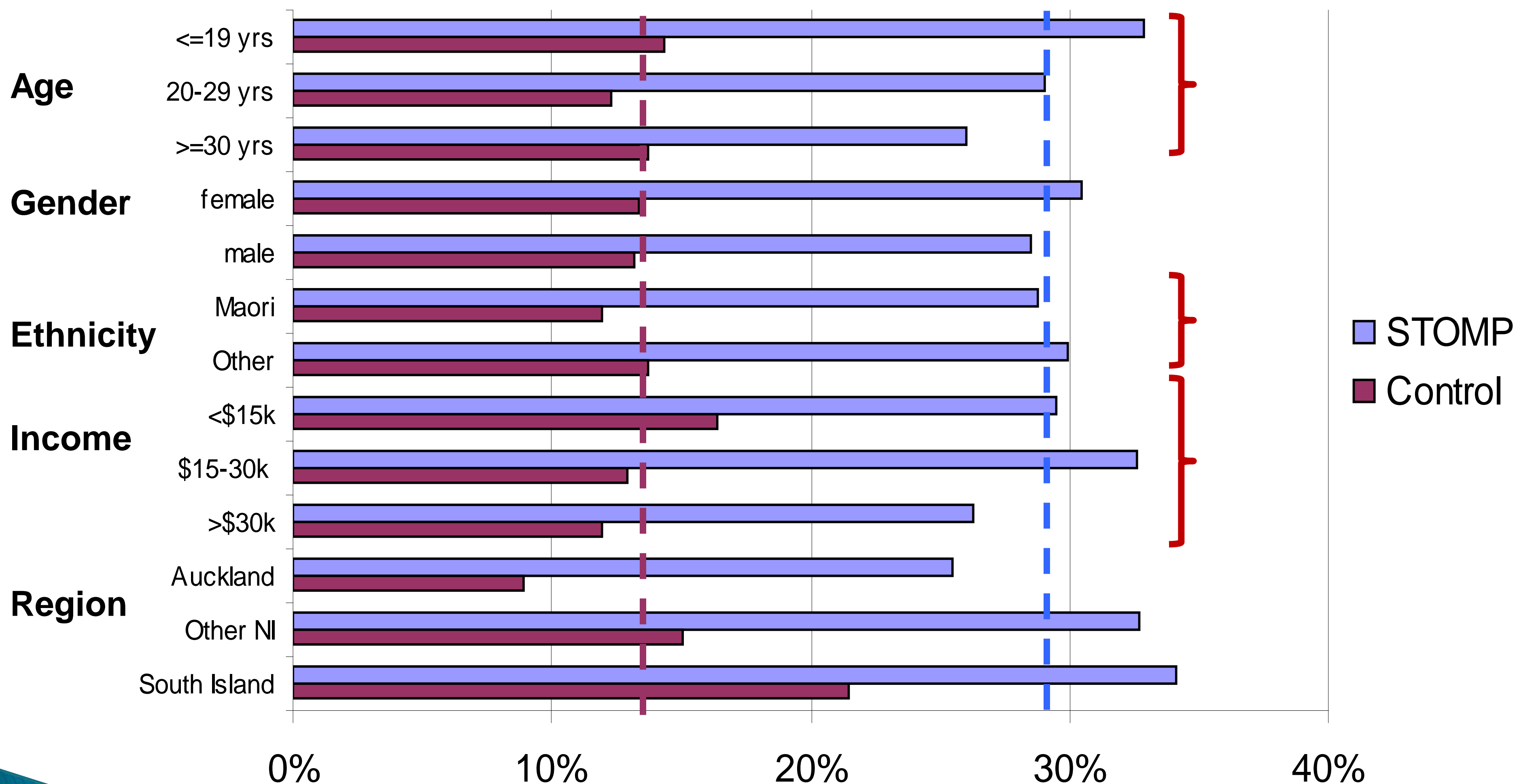


CTRU M-health program

Conclusions



STOMP trial: % quit at 6 weeks



Overall relative risk 2.8, 95% CI: 2.1–3.5, p <0.0001.

Acknowledgements

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