Development of a Sustainable Model to Embed Smoking Cessation Interventions in an Australian Health Service: A Systems Thinking, Co-Design Approach

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Introduction

Smoking cessation is a global public health priority with established benefits for those with/without a cancer diagnosis.

'Ask, Advise, Help' (AAH; Figure 1) is a model that supports clinicians to engage with patients about smoking cessation, and is endorsed by national peak organisations.

Implementation of this model within routine care remains a challenge, and there is limited evidence of the application of systems dynamics theory to the issue.

Figure 1: Ask, Advise, Help (AAH) Model

3-step brief advice for smoking cessation

Ack

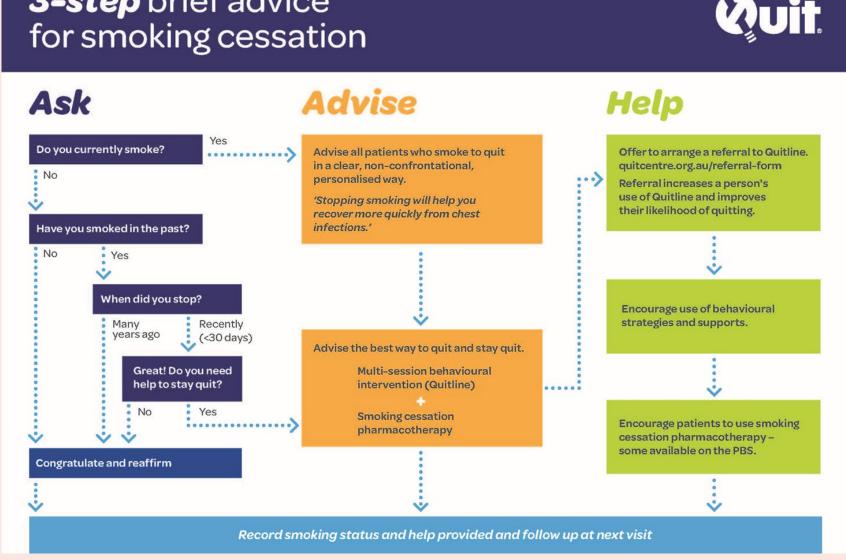


Image source: https://www.quit.org.au/how-support-your-clientcolleague-become-smoke-free





Methods

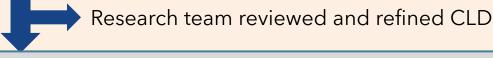
Researchers partnered with key stakeholders, including staff and consumers, to understand the current system and co-design actions that could support routine implementation of the AAH model within Monash Health, the largest public health service in Victoria, Australia.

Figure 2: Study design - GMB workshop series and stakeholder survey

Group Model Building (GMB) Workshop 1 (n=17)

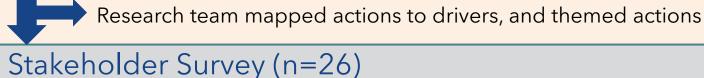
Aim: Create a shared understanding of the drivers influencing the implementation of the AAH model within Monash Health

Output: Initial Causal Loop Diagram (CLD)



GMB Workshop 2 (n=11)

Aim: To finalise CLD and develop a set of practical actions to address some of the identified drivers **Output:** Finalised CLD & Initial prioritisation of actions



Aim: To consult with a broader range of stakeholders within Monash Health to prioritise the proposed actions

Output: Prioritised set of actions



Research team used survey/GMB2 data to finalise priority actions

GMB Workshop 3 (n=15)

Aim: To consult with stakeholders to rate prioritised actions for feasibility and fit, and then complete implementation planning for highest rated actions.

Output: Early implementation plans

We utilised Group Model Building (GMB), underpinned by systems dynamics theory. The GMB process (Figure 2) involved three online group workshops, supported by Deakin University's systems modelling software, Systems Thinking in Community Knowledge Exchange (STICKE). Within these workshops, stakeholders were guided through the process of creating a causal loop diagram (CLD), which was used to identify potential actions, and develop early implementation plans.

Results

The final CLD encompassed 21 factors perceived by stakeholders to be driving or impeding implementation of the AAH model at Monash Health. The most favoured actions within each action area are detailed in Table 1.

Table 1: Three key action areas and their most favoured actions

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Action area	Most favoured actions
Enhanced smoke-free treatment options and pathways of care	Establishment of a dedicated smoke-free clinic.
Improved staff education and training	Communication skills training.
Enhanced smoke-free communication	Creation of electronic medical record templates to document smoking cessation care.

Conclusion

A multifaceted range of actions is required to address key drivers influencing the implementation of brief smoking cessation models of care. This project provided a blueprint for co-designing actions tailored to the unique contexts of individual healthcare services.