

USING A SYSTEMS-THINKING APPROACH TO ELUCIDATE PROGRAMME THEORY UNDERPINNING THE EFFECTIVENESS OF SUPERDOT-C: A PHARMACY-LED TEST AND TREAT PATHWAY FOR PWIDS WITH HEPATITIS C INFECTION PRESCRIBED OPIOID SUBSTITUTION THERAPY

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Background: Increasing access and linkage to care for hepatitis C (HCV) are fundamental requirements for achieving the WHO target of elimination by 2030. The SuperDOT-C research programme designed and evaluated an HCV test and treat pathway delivered with direct-acting antivirals, through community pharmacists. As part of the process evaluation of the intervention, causal loop diagramming (CLD) was used as a tool to help understand complexity and generate hypotheses about causal mechanisms.

Methods: A systematic literature review and series of community-based participatory research activities were undertaken to inform the design and understand the acceptability of the SuperDOT-C intervention. Qualitative work included implementation of seven focus groups with service users and carers (41 participants), discrete choice experiment with service users (103 participants), semi-structured interviews on service acceptability with service users (14 participants) and staff providers (36 participants). All transcripts were thematically analysed.

A causal loop diagram was constructed with contributors defined as: health worker performance; health care environment; patient behaviors and attitudes; patient environment. Components were identified then assigned polarity and arranged into feedback loops associated with the contributors, with reinforcing (R) and balancing (B) effects. The resultant CLD was used to examine system components and the dynamic relationships between them.

Results: 34 components were identified from the literature review and qualitative work and plotted onto a CLD. The CLD was reviewed and two reinforcing loop and three balancing loops determined. The reinforcing loops described positive patient relationships, proximity to the community and role enhancement as factors promoting uptake of the care pathway. The balancing loops described factors such as experience of stigma and fear of treatment side-effects, but also the factors such as homelessness, healthcare policy and budgetary restraints.

Conclusion: A systems-thinking approach using CLD is helpful in the evaluation of complex public health interventions and forming hypotheses about causal mechanisms.

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