

FROM PROCESS MAPPING TO PRACTICE CHANGE: IDENTIFYING GAPS, TARGET BEHAVIOURS, AND IMPLEMENTATION STRATEGIES TO ENHANCE HEPATITIS C POINT-OF-CARE TESTING AND TREATMENT

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Background: Point-of-care testing improves HCV testing and treatment but is not being delivered at full scale. Implementing point-of-care testing and treatment requires understanding service-level processes, variations in practice, and factors influencing delivery. Process mapping, integrated with clinical data, provides a useful tool to map behaviours to target for change and develop strategies to optimise practice. This study aimed to examine barriers and enablers for point-of-care HCV testing and treatment and identify clinical practice variations within and between services and system and behavioural target areas for change.

Methods: Semi-structured interviews and focus groups were conducted with staff delivering HCV point-of-care testing and treatment in the Australian HCV Point-of-Care Testing Program. Process mapping was used to explore workflows and barriers/enablers to testing and treatment informed by the Consolidated Framework for Implementation Research (CFIR). Data on point-of-care testing, error/invalid results, current infection, and treatment initiation were integrated into process maps to identify gaps in the care pathway and target behaviours to support improvement. Strategies to address barriers/enablers were developed using evidence-based and experience-informed approaches using the Expert Recommendations for Implementing Change (ERIC) taxonomy.

Results: Twenty-two site-specific process maps were developed across seven models of care (e.g., outreach, drug treatment clinics), informed by interviews with 48 participants. The mean proportion of patients receiving testing as intended was 89% (range, 48%-98%) and receiving treatment was 39% (range, 0-73%). Identified target behaviours included ensuring appropriate testing is conducted by operators, timely communication of RNA results to patients, and supporting offer of same-day treatment. Five common barriers were identified. Identified strategies included establishing structured, context-specific follow-up mechanisms (e.g. incentives) and standardising protocols/resources to support timely treatment.

Conclusion: Combining process mapping with clinical data enabled identification of care gaps and barriers/enablers to inform the development of targeted strategies to optimise HCV point-of-care testing and treatment for evaluation in future clinical studies.

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