

Perspectives on sustaining, spreading and scaling-up of diabetes quality improvement interventions

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Background: Quality Improvement (QI) evaluations rarely consider how a successful intervention can be sustained, nor how to spread or scale to other locations. A survey of authors of randomized trials of diabetes QI interventions included in an ongoing systematic review found that 78% of trials reported improved quality of care, but 40% of these trials were not sustained.

Objective: To explore why and how the effective diabetes QI interventions were sustained, spread or scaled.

Methods: A qualitative approach was used, focusing on case examples. Diabetes QI program trial authors were purposefully sampled and recruited for interviews. Authors were eligible if they had completed the survey, agreed to follow-up, and had a completed a diabetes QI trial they deemed "effective" by improving care for people living with diabetes. Snowball sampling was used if the participant indicated someone could provide a different perspective on the same trial. Interviews were transcribed verbatim. Inductive thematic analysis was conducted to identify factors associated with spread, and/or scale of the QI program. Case examples were used to show trajectories across projects and people.

Results: Eleven of 44 eligible trialists participated. Four reported that the diabetes intervention was "sustained" and nine were "spread," however interviews highlighted that these terms were interpreted differently over time. Participant stories highlighted the trajectories of how projects evolved and how research careers adapted to increase impact. Three interacting themes were identified: i) understanding the *concepts* of implementation, sustainability, spread and scale; ii) having the appropriate *competencies*; and iii) the need for individual, organisational and system *capacity*.

Conclusions: Trialists need to think beyond local effectiveness to achieve population-level impact, particularly in nutrition. Early consideration of whether an intervention is feasible and sustainable once research funding ends is necessary to plan for sustainability, spread and/or scale of effective QI programs.

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