

The Effectiveness of Quality Improvement (QI) Strategies on Diabetes Management

Summary

This paper synthesized the results of 142 studies examining the effects of quality improvement (QI) initiatives on diabetes management using rigorous systematic review methods. QI interventions targeted to health systems, professionals, and patients significantly improved clinical indicators of diabetes care. The results of this research are of interest and use to health care professionals, clinical policy makers, and researchers.

Implications

Policies encouraging the clinical treatment of diabetes as part of a broad chronic disease management and prevention strategy should be discussed and considered. Policymakers should aim to impact clinical practice by encouraging quality improvement and team-based, inter-professional patient care.

Reference: Tricco AC, Ivers NM, Grimshaw JM, et al. Effectiveness of quality improvement strategies on the management of diabetes: a systematic review and meta-analysis. *Lancet*. 2012;379(9833): 2252-61.

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What is the current situation?

- Patients are not receiving or engaging in management interventions that could result in better health outcomes (i.e. gap in care).
- The optimal approach to closing this care gap remains unclear.
- The objective of this research study was to determine the effectiveness of quality improvement interventions, which aim to close the care gap, on various clinical outcomes of diabetes management.

How was the review conducted?

- Rigorous systematic review methods were used.
- Included studies were randomized clinical trials (RCTs), which provide the highest possible level of evidence.
- All studies had to include health systems or professional changes as a QI intervention strategy, even if the targeted end user of the intervention was the patient.
- The included RCTs were critically appraised for quality.

What did the review find?

- 142 RCTs with a total of 123,529 patients were included.
- QI interventions effectively decreased HbA1c levels (average blood sugar levels over three months – a clinical indicator of diabetes management) and other clinical outcomes.
- Changing the structure or organization of the professional team and the relay of patient information to clinicians by means other than the existing medical record were strategies associated with strong effects.
- QI strategies targeting the entire system of chronic disease management were associated with the largest effects on outcomes overall.
- Overall, QI strategies worked better in patients with poorer diabetes control