

Prevention of Diabetes-Related Hospital Readmission Following Initial Diagnosis of Diabetes in Patients Over the Age of Fifty: A Scoping Review

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Purpose

- Evaluate the efficacy of specific interventions in reducing the likelihood of diabetes related hospital readmission of patients with DM type 2 after initial diagnosis.
- Endeavor to determine which interventions, when implemented for patients, can decrease the likelihood of hospital readmission related to diabetes within 90 days when compared with those patients who did not receive or participate in follow-up.
- Determination of the appropriateness of a systematic review and/or cohort study to evaluate the efficacy of specific interventions.

Methods

Eligibility criteria

- Reliable resources from 2015 to current
- Specific to patients over 50 receiving interventions specifically aimed at reducing diabetes readmission
- excluded if patients were not newly diagnosed with type 2 diabetes or lacked data regarding hospital readmissions.

Information Sources

- The authors of this presentation were responsible for source selection
- Full-text sources were obtained through UTHSC library online, Google Scholar, and PubMed
- Search criteria were limited to peer-reviewed journal articles by MDs, PhD's, NP's, licensed clinical social workers, and clinical dietitians.

Characteristics of sources of evidence

From the results yielded the level of evidence of each article included:
 (2) Level I, (4) Level II, (1) Level III, (5) Level IV, (1) Level VI, (1) Level VII

Implications for Practice

- Coordination prior to discharge
 - Diabetes medication administration and nutrition education
 - Med-to-bed before discharge
 - Repeat education from different staff members
- Follow up after discharge
 - Coordinate with primary care provider and endocrine specialist, if applicable.
 - Calling patients to make sure they are following their sliding scale, etc.
 - Counseling patients and titrating insulins if sugars are not under control.
 - Support groups and team environments for newly diagnosed patients.
 - Helping patients to understand the importance of A1C checks, etc.
- While there are many treatment options and methods of promoting compliance, there is further need for innovation in treatment and advocating for health policy change.

Background

- Early buy-in and subsequent adherence to new routines, diets, and medication regimens is a goal all providers share for their patients. Early success in the treatment of any disease after a new diagnosis will contribute to better long-term outcomes, improve quality of life, and decrease the likelihood of comorbid complications.
- While many new diabetics realize adequate intervention utilizing daily oral medications, those that cannot have their lives even more complicated with the addition of daily (or more frequent) requirements for capillary blood glucose testing and scheduled/titrated administrations of subcutaneous insulin.
- Glucometer, supplies, and medication must be available at home and away, the test schedule must be observed, and the proper dose of insulin administered at the right time and in the proper sequence with respect to dietary intake. For the patient who has 'never needed to go to the doctor before,' these changes can represent an overwhelming deficit of knowledge and potential for harm as a result of mismanaged blood sugar. (Herrick & McGill, 2016)

Results

	Studies													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Reduced Readmission	✓-	✓↑	✓↓	✓↓	✓↑	✓	✓↑	✓	✓	✓	✓↑	✓↑	✓	✓
Telemedicine Follow Up	✓-	NE	✓	NR	NR	NR	NR	NE	NE	NE	✓	NR	NR	✓
Multidisciplinary Follow Up	NE	NE	NR	✓	✓	✓	NR	✓	NE	NE	✓	✓	✓	✓
Discharge Planning	✓-	NE	NE	NE	NR	✓	✓↑	✓	✓	✓	✓	✓	✓	✓
Lifestyle Modification	NR	✓↑	✓↓	NR	✓	✓	✓↑	✓	✓	✓	✓	NR	✓	✓
Comorbidity Improvement	NR	✓↑	—	—	✓	✓	✓↑	NE	✓	✓	NE	NR	✓	NR

Variables

↑ = Increased, ↓ = Decreased, — = No Change, NE = Not Examined,
 NR = Not Reported, ✓ = applicable or present

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