



Ada R. Amaya, MSN, RN, CMSRN * Liliana Colunga, MSN, RN, CMSRN, CDCES * Guadalupe Garcia, BSN, RN-BC Roxanna Lara, BSN, RN, CDCES

Background/Significance

- The emergency department (ED) is highly overutilized for treatable and preventable conditions such as diabetes and its complications.
- * According to the Centers for Disease (CDC), approximately 17 million ED visits were reported with a diagnosis of diabetes.
- Readmissions of people with diabetes reflect the quality of healthcare delivery and cause an economic strain on the ED.
- The annual cost of diagnosed diabetes in America was \$327 billion, with more than half of the medical expenses spent only on two factors—hospitalizations (30%) and medicinal treatment for complications (30%).

Purpose

* A Diabetes Education team from a large safety-net healthcare organization launched an evidence-based practice (EBP) study to determine the impact of receiving diabetes education and formal transition of care from an ED setting to an outpatient interdisciplinary team to decrease ED readmissions.

PICO Question

Among people with type 2 diabetes (P), does diabetes education in the ED with care transition to primary care and community services (I), compared to standard ED medical management (C), reduce ED readmissions (O)?

Emergency Department Transfer to Outpatient Diabetes Education Prevents Readmissions

Johns Hopkins Nursing EBP Model



Methodology

Sources of Evidence: PubMed, CINAHL, EBSCOhost, and Elsevier Scientific Direct.

- The search yielded research and non-research articles (N=35); 8 articles met the specific inclusion criteria stipulated in the PICO.
- Johns Hopkins Nursing EBP criteria were used to appraise research and non-research articles critically.

Findings

Research

Level I: n = 2

Level II: n= 3

Level III: n= 1

Non-Research Level IV: n=1

Level V: n=1

JHNEBP Strength of Evidence

Level I: Randomized Controlled Trials (RCT); Meta-analysis of RCTs

- Level II: Quasi-experimental
- Level III: Non-experimental; Qualitative; Metasynthesis
- Level IV: Systematic Review; Clinical Practice Guidelines

Level V: Organizational (e.g., Quality) Improvement); Expert Opinion; Case Study; Literature Review

* The diabetes transition of care program from the hospital includes patient-centered discharge education, hemoglobin A1C-based adjustment of diabetes therapy upon discharge, and post-discharge support, which decreases readmissions/ED visits among high-risk patients with diabetes (Rubin et al., 2022).

A specialized diabetes team (SDT) member, such as the diabetes care and education specialist (DCES),

provides a diabetes discharge/transition plan versus the primary service team to hospitalized diabetes patients. Patients are more likely to complete the transition of care to the PCP and/or endocrinologists and improve adherence to follow-up plans (Bansal et al., 2018). interdisciplinary approach can reduce ED visits among patients with diabetes (Bhalodkar et al., 2020; Gao et

Outpatient diabetes education programs with an

al., 2022).

Programs aligned with the Chronic Care Model (CCM) and diabetes self-management education and support (DSMES) with an interdisciplinary approach. The interaction and collaboration are based on shared decision-making and flexible documentation process for healthcare professionals involved in the patient's diabetes care (Whitley et al., 2020).

Translation into Practice



The DCES will:

- moment.



HARRISHEALTH SYSTEM

Center for Nursing Scholarship

Implications for Nursing

The DCES will provide DSMES in the ED to patients with

diabetes type 2 referred by the provider.

- Complete an assessment

- Provide education and problem-solving

- Refer to the outpatient interdisciplinary team

- Input the transition plan

- Support successful transitions

* At discharge, the bedside nurse can provide appointment

referral dates and addresses, prescriptions, and ensure diabetes

medications and supplies are correct.

Bedside nurses can reinforce diabetes education, such as blood

glucose checks, insulin injection techniques, target levels for

blood glucose, and sick day management at any teachable

References

Bansal, V., Mottalib, A., Pawar, T. K., Abbasakoor, N., Chuang, E., Chaudhry, A., Sakr, M., Gabbay, R. A., & Hamdy, O. (2018). Inpatient diabetes management by specialized diabetes team versus primary service team in non-critical care units: Impact on 30-day readmission rate and hospital cost. BMJ Open Diabetes Research & Care, 6(1), e000460. https://doi.org/10.1136/bmjdrc-2017-000460

Bhalodkar, A., Sonmez, H., Lesser, M., Leung, T., Ziskovich, K., Inlall, D., Murray-Bachmann, R., Krymskaya, M., & Poretsky, L. (2020). The effects of a comprehensive multidisciplinary outpatient diabetes program on hospital readmission rates in patients with diabetes: A randomized controlled prospective study. Endocrine Practice, 26(11), 1331–1336. https://doi.org/10.4158/ep-2020-0261

Gao, Y., Xu, C., Yang, A., Greco, A., Horodezny, S., Barnet, C., & Gucciardi, E. (2022). How outpatient diabetes education programs can support local hospitals to reduce emergency department visits for adults with diabetes. Canadian Journal of Diabetes, 46(8), 797–803. https://doi.org/10.1016/j.jcjd.2022.05.006

Rubin, D. J., Gogineni, P., Deak, A., Vaz, C., Watts, S., Recco, D., Dillard, F., Wu, J., Karunakaran, A., Kondamuri, N., Zhao, H., Naylor, M. D., Golden, S. H., & Allen, S. (2022). The diabetes transition of hospital care (DiaTOHC) pilot study: a randomized controlled trial of an intervention designed to reduce readmission risk of adults with diabetes. Journal of Clinical Medicine, 11(6), 1471.

http://dx.doi.org/10.3390/jcm11061471

Whitley, H. P., Smith, W. D., Hanson, C., & Parton, J. M. (2020). Interdisciplinary speed dating augments diabetes self-management education and support to improve health outcomes. Patient Education and Counseling, 103(11), 2305–2311. https://doi.org/10.1016/j.pec.2020.05.015