

11-14-2025

Staff Education Program to Improve Nurses' knowledge of Diabetes Self-Management Education (DSME) Toward Reducing Readmissions

Vivian Adaora Okechukwu
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Nursing Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Nursing

This is to certify that the doctoral study by

Vivian A. Okechukwu

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Mattie Burton, Committee Chairperson, Nursing Faculty

Dr. Diane Whitehead, Committee Member, Nursing Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2025

Executive Summary: Staff Education Project
Staff Education Program to Improve Nurses' Knowledge of Diabetes Self-Management
Education (DSME) Toward Reducing Readmissions

by

Vivian A. Okechukwu

MS, University of Phoenix, 2011

BS, University of Phoenix, 2009

Executive Summary Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

August 2025

Summary

This project was a staff development program implemented due to the high incidence of hospital readmission for diabetic patients at a local organization. Implementing this project required the services of several stakeholders, including my preceptor, site nurse manager, and staff nurses, whose roles were crucial to the project's success. At the project site organization, diabetes was found to be the third-leading cause of hospitalization and accounted for life-threatening health complications. The purpose of this Doctor of Nursing Program capstone project was to use a staff education program to improve nurses' knowledge of diabetes self-management education (DSME) in enhancing Type 2 diabetes care and, consequently, reducing readmission. The practice-focused question was: For staff in an inpatient unit, will an educational program on a DSME program improve knowledge toward preventing readmission? Surrounding the implementation of the education program, I used a pre- and posttest to evaluate participants' knowledge acquisition. The findings showed a mean difference of 32.4% between the pretest ($M = 67.20\%$) and posttest ($M = 99.60\%$), indicating that training led to improvements in knowledge. To build on the success of this project in preventing hospital readmissions for diabetic patients, I recommend improving patient education during transitions of care, offering essential post-discharge reinforcement, and empowering patients to engage in lifestyle changes. The implications of this project for positive social change are that when DSME is integrated into the care facility, it can enhance patients' knowledge, skills, and treatment adherence by improving awareness of evidence-based practice and reducing the cost burden for both healthcare organizations and patients.

Background

The Centers for Disease Control and Prevention (2023) reported that in the United States, about 38.4 million Americans of all ages have diabetes, and Type 2 diabetes constitutes between 90% and 95% of all diabetes cases. At the local organization, diabetes was found to be the third-leading cause of hospitalization and accounted for life-threatening health complications. Rubin (2018) noted that hospital readmission of diabetic patients is a crucial healthcare quality measure and driver of costs, and decreasing readmission rates has a synergetic effect of enhancing care delivery and significantly reducing the cost burden to patients and the healthcare facility.

Prominent risk factors for readmission consist of being an ethnic minority, of lower socioeconomic status, being urgently admitted, having a more significant burden of coexisting conditions, being on public insurance, and having a history of recent prior hospitalization (Rubin et al., 2023; Soh et al., 2020). Soh et al. (2020) reported that offering better management and monitoring of multiple coexisting conditions related to diabetes is highly instrumental in delaying the progression of complications associated with diabetes mellitus and, consequently, decreasing the risk of 30-day unplanned hospital readmission rates.

Leadership at the project clinical site noted that nurses lacked the distinctive competencies to teach DSME to patients before discharge, leading to more patient readmissions. This lack of training was thought to result in high rates of readmission. Literature supports diabetes education as an essential way to increase self-efficacy skills and decrease hospital readmission rates (Hussain et al., 2020). Against the backdrop of the prevalence and incidence of Type 2 diabetes mellitus plaguing patients and the

resulting hospital readmissions, providing a staff educational program to improve nurses' knowledge of DSME was thought to improve Type 2 diabetes care, thus decreasing readmission. According to Macedo (2019), a significant portion of admissions for diabetes mellitus occurs as a direct result of patients' inability to comply with medication adherence and inadequate understanding of diabetes mellitus.

The Centers for Medicare and Medicaid Services (CMS; 2024) reported that the 30-day readmission rates serve as a crucial healthcare quality indicator precipitated by inadequate quality of hospital care, poor discharge planning, and ineffective coordination of post-discharge services. Evidence from the literature indicated that offering multifaceted intervention bundles consisting of pre-discharge patient education, medication reconciliation, executing a discharge checklist, and post-discharge follow-up will have a synergetic effect in reducing readmission rates (CMS, 2024; Dhaliwal & Dang, 2024). Moreover, studies have demonstrated that DSME significantly reduces hospital readmission rates for 30 days and 365 days after discharge, enhances clinical outcomes, and improves positive behavioral changes (Bhalodkar et al., 2020; Powers et al., 2020).

The purpose of this capstone project was to use a staff education program to improve the nurses' knowledge of DSME in enhancing Type 2 diabetes mellitus self-care, with the idea that this would reduce hospital readmissions. The practice-focused question for this project was: For staff in an inpatient unit, will an educational program on the DSME program improve knowledge toward preventing readmission? This question was foundational to the success of the project and played a crucial role in

identifying relevant studies and resources in DSME intervention for reducing hospital readmissions for diabetic patients.

Considering the evidence that supported the project change, the current situation at the local organization demonstrated that diabetes and related complications accounted for frequent hospital readmissions. Leadership deemed this a significant practice problem and regarded the project as vital to effective patient care. The approaches deployed to identify the gap at the local organization revolved around direct physical observations of the nurses' activities, discussions with significant stakeholders and nurses as to the root causes of hospital readmission for diabetic patients, inspection of records and reports, and a review of electronic health records. This research indicated that the gap in practice was due to nurses' lack of understanding of pre-discharge education, medication reconciliation, executing discharge checklists, post-discharge follow-ups, and empowering patients to engage in lifestyle changes. The variability in nurses' adherence to DSME was due to the lack of staff training to improve DSME knowledge.

I found significant evidence to support this change. The growing body of evidence indicates that well-recognized clinical interventions and care transition strategies have been found to improve Type 2 diabetes outcomes and reduce preventable readmissions. Evidence from the literature revealed that providing DSME to care providers and offering multifaceted intervention bundles consisting of pre-discharge patient education, executing a discharge checklist, medication reconciliation, and post discharge follow-up will have a synergetic effect in reducing readmission rates (CMS, 2024; Dhaliwal & Dang, 2024; Joint British Diabetes Societies for Inpatient Care, 2022). Harding et al. (2019) and Davis et al. (2022) stated that diagnosing diabetes and

instituting optimal control at the commencement of disease progression is paramount to decreasing diabetes-related health complications, including retinopathy, nephropathy, cardiovascular disease, stroke, amputations, and neuropathy. The strength of the evidence supporting the project change was strong because as nurses acquire distinctive competencies in pre-discharge patient education, executing a discharge checklist, medication reconciliation, and post discharge follow up, it plays a crucial role in empowering diabetic patients to engage in therapeutic adherence, self-care behaviors, lifestyle changes, and active collaboration with the health care team, thus reducing readmission rates.

Staff Education Project Development

The setting for this staff education project was a primary care medical center, where 25 clinical nurses participated in the DSME program to improve Type 2 diabetes care and reduce hospital readmissions. The objective of this staff education program was to improve care providers' knowledge and skills in diabetes management to empower them to offer optimum patient care delivery to individuals with diabetes. In line with the objective, I designed this staff education program to enhance nurses' knowledge and skills of pre-discharge patient education, knowledge of executing discharge checklists, knowledge of post-discharge follow-up and medication reconciliation, knowledge of readmission risk factors, and knowledge of engaging patients in diabetes self-care management and medication adherence. The training was presented using slides and delivered face-to-face (see Appendix B).

To adequately address the project objective, I conducted a comprehensive literature review to obtain evidence-based approaches for managing and improving Type

2 diabetes and ultimately reducing readmission. After choosing the DSME framework to build the educational program, I decided to use a multiple-choice approach to assess nurses' knowledge of DSME in reducing readmission. The 10 multiple-choice questions (see Appendix A) chosen to assess care providers' knowledge were adapted using the research findings of Fitzgerald et al. (2016) and the Joint British Diabetes Societies for Inpatient Care (2022). These questions were used in the pre- and post-training questionnaires and were analyzed using simple descriptive statistics.

Results

Twenty-five care providers in an inpatient primary care setting participated in the staff education program out of 44 total nurses working in the medical-surgical unit at the project site (i.e., 56% of all nurses). Project site leadership supported the project by giving nurses time away from work to engage in the training. All participants had an RN credential, and their work experience ranged from 2 to 25 years.

The care providers' mean pretest score was 67.20%, but after training, the mean posttest score rose to 99.60%. Thus, the findings showed a mean difference of 32.40% between the mean knowledge assessment score before DSME training and after taking DSME training, demonstrating that DSME training improved the nurses' knowledge of diabetes and related readmissions.

The findings have shown potential for improvements in clinical outcomes at the local organization as a direct result of enhanced knowledge acquired by the care providers. The project results generated profound interest and enthusiasm among participants to know current, evidence-based interventions to reduce hospital

readmissions for diabetic patients, garnered stakeholders' buy-in to a standardized educational training session, and enhanced efficiency among the care providers.

The limitations were negligible for the project. The care providers' perceptions of change and pressures in clinical settings accounted for the small sample size of 25 participants. It was also difficult to pull participants away from busy work schedules to account for more trained staff.

The project results will be disseminated to various external stakeholders via ProQuest publication. The rationale behind the broader dissemination of the project results to relevant external stakeholders is to equip professionals in practice with the impact of the DSME intervention in reducing hospital readmission for patients with diabetes.

Conclusions

The findings of this staff education project support the efficacy of DSME in improving diabetes mellitus and self-care, potentially reducing hospital readmission. Equipping care providers with DSME via educational training can significantly improve their understanding of pre-discharge patient education, executing a discharge checklist, medication reconciliation, post-discharge follow-up, and empowering patients to engage in lifestyle changes, leading to better patient education and care as well as a resulting decrease in readmissions.

My key recommendations for reducing hospital readmissions for diabetic patients include that care providers should provide DSME to patients and families to empower them in the areas of self-management of diabetes. Staff training in DSME should be

incorporated into annual competency assessments and made a part of onboarding for those nurses caring for diabetic patients.

The project findings demonstrated that when DSME is coordinated and integrated into the care facility, it has the potential to contribute to positive social change, diversity, equity, and inclusion by enhancing awareness of evidence-based interventions for improving Type 2 diabetes care and, accordingly, reducing hospital readmissions that disproportionately affect vulnerable populations. This also results in positive social change by reducing the financial burdens to both healthcare organizations and patients. As for the implications for nursing practice, the project findings showed that enhancing care providers' knowledge and skills in managing diabetes can account for cascading positive outcomes, including empowering individuals with diabetes to enable them to engage in therapeutic adherence, better self-management of diabetes, adoption of a healthier diet, and increasing physical activity, which potentially reduces hospital readmission rates.

References

- Bhalodkar, A., Sonmez, H., Lesser, M., Leung, T., Ziskovich, K., Install, D., Murray-Bachmann, R., Krymskaya, K., Intall, D., & 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://www.endocrinepractice.org/action/showCitFormats?doi=10.4158%2FEP-2020-0261&pii=S1530-891X%2820%2948196-0>
- Centers for Disease Control and Prevention. (2023, November 29). *National diabetes statistics report*. <https://www.cdc.gov/diabetes/data/statistics-report/index.html#:~:text=of%20Diagnosed%20Diabetes-,Among%20the%20US%20population%20overall%2C%20crude%20estimates%20for%202021%20were,US%20youths%20E2%80%94had%20diagnosed%20diabetes>
- Centers for Medicare and Medicaid Services. (2023, August 14). *Care coordination*. <https://www.cms.gov/priorities/innovation/key-concepts/care-coordination>
- Centers for Medicare and Medicaid Services. (2024, April). *The guide for reducing disparities in readmissions*. https://www.cms.gov/about-cms/agency-information/omh/downloads/omh_readmissions_guide.pdf
- Davis, J., Fischl, A. H., Beck, J., Browning, L., Carter, A., Condon, J. E., Dennison, M., Francis, T., Hughes, P. J., Jaime, S., Lau, K. H. K., McArthur, T., McAvoy, K., Magee, M., Newby, O., Ponder, S. W., Quraishi, U., Rawlings, K., Socke, J., ... & Villalobos, S. (2022). National Standards for Diabetes Self-Management

Education and Support. *Science of Diabetes Self-Management Care*, 48(1):44–59.

doi: 10.1177/26350106211072203

Dhaliwal, J. S., & Dang, A. K. (2024). *Reducing hospital readmissions*. StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK606114/>

Fitzgerald, J. T., Funnell, M. M., Anderson, R. M., Nwankwo, R., Stansfield, R. B., & Piatt, G. A. (2016). Validation of the Revised Brief Diabetes Knowledge Test (DKT2). *Diabetes Education* 2(2), 178–187.

<https://doi.org/10.1177/0145721715624968>

Goyal, R., Singhal, M., & Jialal, I. (2023). *Type 2 diabetes*. StatPearls Publishing.

<https://www.ncbi.nlm.nih.gov/books/NBK513253/>

Harding, J. L., Pavkov, M. E., Magliano, D. J., Shaw, J. E. & Gregg, E. W.

(2019). Global trends in diabetes complications: A review of current evidence. *Diabetology* 62, 3–16. <https://doi.org/10.1007/s00125-018-4711-2>

Hussain, Z., Alkharaji, M., & Idris, I. (2020). Evaluating the effect of inpatient diabetes education on length of stay, readmission rates, and mortality rates: A systematic review. *The British Journal of Diabetes*, 20(2).

<https://doi.org/10.15277/bjd.2020.256>

Joint British Diabetes Societies for Inpatient Care. (2022, January). *Discharge planning for adults with diabetes*.

https://abcd.care/sites/default/files/site_uploads/JBDS_Guidelines_Archive/JBDS_10_Discharge_Planning_Guideline_January_2022_Archive.pdf

- Macido, A. (2019). A nurse-led inpatient diabetes self-management education and support program to improve patient knowledge and treatment adherence. *Journal of Health Education Teaching, 10*(1), 1-10.
- Powers, M. A., Bardsley, J. K., Cypress, M., Funnell, M. M., Harms, D., Hess-Fischl, A., Hooks, B., Issacs, D., Mandel, E. D., Maryniuk, M. D., Nortons, A., Rinker, J., Siminerio, L. M. & Uelman, S. (2020). Diabetes self-management education and support in adults with Type 2 Diabetes: A consensus report of the American Diabetes Association, the Association of Diabetes Care & Education Specialists, the Academy of Nutrition and Dietetics, the American Academy of Family Physicians, the American Academy of PAs, the American Association of Nurse Practitioners, and the American Pharmacists Association. *Diabetes Care, 43*(7), 1636–1649. <https://doi.org/10.2337/dci20-0023>
- Rubin, D. J. (2018). Correction to: Hospital readmission of patients with diabetes. *Current Diabetes Report, 21*(2018). <https://doi.org/10.1007/s11892-018-0989-1>
- Rubin, D. J., Maliakkal, N., Zhao, H., & Miller, E. E. (2023). Hospital readmission risk and risk factors of people with a primary or secondary discharge diagnosis of diabetes. *Journal of Clinical Medicine, 12*(4), Article 1274. <https://doi.org/10.3390/jcm12041274>
- Soh, J. G. S., Wong, W. P., Mukhopadhyay, A., Quek, S. C., & Tai, B. C. (2020). Predictors of 30-day unplanned hospital readmission among adult patients with diabetes mellitus: A systematic review with meta-analysis. *BMJ Open Diabetes*

Research and Care, 8(1), Article e001227. [https://doi.org/10.1136/bmjdr-2020-](https://doi.org/10.1136/bmjdr-2020-001227)

001227

Appendix A: Pre- and Posttest Questionnaire

1. Effective discharge planning is vital for:
 - a. Improving patient experience
 - b. Reducing the length of stay
 - c. Reducing readmission rates
 - d. All the above
2. Effective discharge planning calls for all except:
 - a. Discharge planning for people with diabetes in a hospital setting should begin at the time of admission.
 - b. All patients with diabetes should be involved in discharge planning.
 - c. Discharge needs of diabetic patients should be assessed within 24 hours of admission to collect pertinent information
 - d. Patient's carers should not be involved in discharge planning.
3. The discharge needs of people with diabetes should be assessed within 24 hours of admission to gather information regarding:
 - a. Patient's knowledge of their diabetes condition.
 - b. Patient's knowledge of self-management skills
 - c. Education and social circumstances
 - d. All the above.
4. On admission of inpatients with diabetes, discharge planning requires care providers to do all except:
 - a. Asses clinical issues and impact on glycemc control and prompt diabetes team referral if required.

- b. Assess the patient's ability to self-care, including self-management of diabetes.
 - c. Assess social support.
 - d. No need to reconcile medication.
5. Which of the following is not a general classification of diabetes?
- a. Type 1 diabetes
 - b. Type 2 diabetes
 - c. Type 3 diabetes
 - d. Gestational diabetes
6. Which of the following is not a component of lifestyle management for diabetes?
- a. DSMES
 - b. Physical activity
 - c. Diabetes food hub
 - d. Medical nutrition therapy
7. Diabetes diet is:
- a. The way most American people eat
 - b. A healthy diet for most people
 - c. Too high in carbohydrates for most
 - d. Too high in protein for most people
8. Eating foods lower in fat decreases your risk of:
- a. Nerve disease
 - b. Kidney disease

- c. Heart disease
 - d. Eye disease
9. Which is the best method for home testing?
- a. Urine testing
 - b. Blood testing
 - c. Using a smartwatch to measure blood glucose directly
 - d. Using a smart ring to measure urine glucose level directly
10. High blood glucose may be caused by:
- a. Not enough insulin
 - b. Skipping meals
 - c. Delaying your snack
 - d. Skipping your exercise

Appendix B: Materials and Delivery Method

PowerPoint Presentation on Diabetes Self-Management Education (DSME).

INTRODUCTION

Overview of DSME

- Definition and importance
- The process of teaching diabetic patients how to manage their condition effectively.
- Empowers patients with the knowledge and skills needed to take control of their health, leading to better outcomes and quality of life.
- DSME covers various aspects of diabetes care,:
 - Medication management,
 - Diet and exercise,
 - Monitoring blood glucose levels.
 - Lifestyle Modifications (Powers et al., 2022)



Goals of DSME

The primary goals of DSME are to:

Improve
clinical
outcomes

Enhance quality of life

Reduce healthcare costs

Promote patient empowerment

Support behavior change (ADA, 2018; Ture, et al., 2023; Powers et al., 2020)

UNDERSTANDING DIABETES pathophysiology

What is diabetes:

- ▶ Chronic condition characterized by hyperglycemia (high blood glucose levels) due to defects in insulin secretion, action, or both (Sapra et al., 2024)

TYPES OF DIABETES :

- ▶ Type 1
- ▶ Type 2
- ▶ Gestational Diabetes (ADA, 2024; Sapra et al., 2024)



Purpose of the Practice Project

The purpose of this project is to:

- ▶ Evaluate the care providers' knowledge of DSME
- ▶ Assess the impact of knowledge of DSME in reducing readmission
- ▶ Assess nurses' knowledge of pre-discharge patient education.
- ▶ Improve nurses' knowledge of executing discharge checklists.
- ▶ Assess nurses' knowledge of post-discharge follow-up.
- ▶ Assess medication reconciliation.
- ▶ Assess nurses' knowledge of readmission risk factors.
- ▶ Assess why patients lack engagement in diabetes self-care management and medication adherence (CMS, 2024; Macido, 2019; DSME, 2018; Powers et al., 2020; Rubin et al., 2018).

Key COMPONENTS OF DSME

The Key components of DSME include:

- ▶ Healthy eating
- ▶ Being active
- ▶ Monitoring
- ▶ Taking medication
- ▶ Problem-solving
- ▶ Healthy coping
- ▶ Reducing risks (Ture et al., 2023; Lugner et al., 2024; Powers et al., 2022; Tamiru et al., 2023; Uсутupa et al., 2019)



ROLE OF NURSES IN DSME

- ▶ **Nurses' Responsibilities**
 - ▶ Educating patients
 - ▶ Supporting self-management
 - ▶ Monitoring progress/follow-up
 - ▶ Providing resources
 - ▶ Advocacy
 - ▶ Counselling (ADA, 2018; Ture et al., 2023; Dailah, 2024; Tamiru et al. 2023).

Lifestyle Management for Diabetes

The components of lifestyle management include:

- ▶ DSMES
- ▶ Medical nutrition therapy
- ▶ Physical activity
- ▶ Smoking cessation counseling
- ▶ Psychosocial care (American Diabetes Association (ADA), 2018).

Diabetes Self-Management Education and Supports (DSMES)

- ▶ DSMES is a component of lifestyle management for diabetes
- ▶ DSMES aims to facilitate appropriate diabetes selfcare and enhance clinical outcomes, health status, and quality of life.
- ▶ Patients with diabetes should engage in DSME to improve knowledge, skills, and ability in diabetes selfcare
- ▶ The four essential times to assess the need for DSMES include at diagnosis, annually, when complicating factors arise, and when transitions in care occur.
- ▶ Effective DSMES should be patient-centered, may be given in group or individual settings or using technology, and should help guide clinical decisions

(ADA, 2018; Powers et al., 2020).

Medical Nutrition Therapy (Nutrition Therapy)

- ▶ Nutrition therapy is a component of lifestyle management for diabetes
- ▶ nutrition therapy aims to encourage and support healthy eating patterns
- ▶ Engaging in healthy eating patterns is instrumental in accomplishing and maintaining body weight, blood pressure, glycemic, and lipid objectives
- ▶ Improving nutritional diets requires eating a healthy diet like most people, eating foods lower in fat to reduce the risk of heart disease, and eating free food that is less than 20 calories per serving.
- ▶ High blood glucose could be due to not having enough insulin and the method for home glucose tests is blood testing
- ▶ Engaging in nutrition therapy is crucial in addressing access to healthful foods, and personal and cultural preferences (ADA, 2018; Powers et al., 2020).

Psychosocial Care

- ▶ Psychosocial care is a component of lifestyle management for diabetes
- ▶ The fundamental aim of psychosocial care for diabetic patients is to enhance their health outcomes and general wellbeing through managing their behavioral, emotional, cognitive, and social needs.
- ▶ Psychosocial care for diabetic individuals consists of:
 - ▶ Screening
 - ▶ Patient-centered care
 - ▶ Interventions
 - ▶ Referrals (ADA, 2018).

Physical Activity

- ▶ Physical activity is a component of lifestyle management for diabetes
- ▶ The fundamental goal of physical activity for people with diabetes is to improve blood sugar control, lower the risk of complications, and improve overall health
- ▶ Adults with type 1 and type 2 diabetes should embark in 150 minutes or more of moderate-to-vigorous aerobics per week for onward of three days per week.
- ▶ Evidence indicates that adults with type 1 and type 2 diabetes should embark on 2-3 sessions per week of resistance physical exercise on inconsecutive days.
- ▶ Older adults with type 2 diabetes should make reasonable efforts to reduce the amount of time spent in daily sedentary conduct (ADA, 2018).

STRATEGIES TO REDUCE READMISSION

- ▶ Personalized care plans
- ▶ Follow-up care/appointments
- ▶ Patient education sessions
- ▶ Utilizing Technology (e.g., telehealth/telemedicine)
- ▶ Continuous Glucose Monitoring (CGM
- ▶ Enhanced Patient Education
- ▶ Follow-Up Care
- ▶ Care Coordination
- ▶ Support system (CMS, 2024; Rubin, 2018;

Principles of Discharge Planning in Diabetes Care

Effective discharge planning is vital for

- ▶ Improving patient experience
- ▶ Reducing length of stay
- ▶ Reducing readmission rate
- ▶ Requiring discharge planning for diabetic patients to begin at the time of admission
- ▶ Requiring diabetic patients and carers to be involved in discharge planning
- ▶ Requiring discharge needs of diabetic patients be assessed within 24 hours of admission to collect patient pertinent information
- ▶ Requiring care providers to arrange for community support for diabetes management for patients unable to self-care before discharge
- ▶ Discharge planning requires care providers on admission of diabetic patients to assess clinical issues and impact on glycemic control,
- ▶ patient ability of self-care management of diabetes, social support, and medication reconciliation
- ▶ Discharge planning requires care providers on the day of discharge to provide specific diabetes information regarding drug therapy
- ▶ changes and plan for monitoring, provide a care plan, provide a discharge summary, and ensure that followup plans are provided
- ▶ Discharge summary should include the names of the patient's medication, dosage, frequency of dosing, and follow-up arrangements post-discharge (American Diabetes Association Professional Practice Committee. 2022-CMS. 2024- IRDS-IP. 2022)

Benefits of DSME

- ▶ Provides critical education and support for implementing a treatment plan
- ▶ Addresses weight maintenance or loss
- ▶ Enhances self-efficacy and empowerment
- ▶ Increases healthy coping
- ▶ Decreases diabetes-related distress
- ▶ Promotes lifestyle behaviors including
- ▶ Improves quality of life
- ▶ Reduces all-cause mortality
- ▶ Reduces emergency department visits, hospital admissions, and hospital readmissions
- ▶ Lowers A1C
- ▶ Reduces hypoglycemia (Powers et al., 2020).

Barriers to Implementing DSME in reducing readmission rates in an Inpatient Hospital.

- **Nurses' perception or resistance to change (Cheraghi et al., 2023)**
- **Time pressure in clinical settings (Pitsillidou et al. (2023)**
- **Lack of resource**
- **Poor communication among interdisciplinary teams (Elis et al., 2023)**
- **Lack of adherence to practice guidelines (Wang et al. 2023).**



SUMMARY

- ▶ DMSE is a very important tool in diabetic management
- ▶ It helps promote self-care
- ▶ Improves long-term health outcomes
- ▶ Decreases healthcare cost
- ▶ Help reduce unplanned readmission
- ▶ Provides patients the knowledge to effectively manage their disease
- ▶ Decreases or prevents complications
- ▶ DSMES helps ensure that all people with diabetes receive the support and education they need.

REFERENCES

- American Diabetes Association (2018). Standards of Medical Care in Diabetes—2018 Abridged for Primary Care Providers. *Clinical Diabetes*, 36(1),14–37. <https://doi.org/10.2337/cd17-0119>
- American Diabetes Association Professional Practice Committee (2024). Diagnosis and Classification of Diabetes: Standards of Care in Diabetes—2024. *Diabetes Care* 2024;47(1), Article S20-S42. <https://doi.org/10.2337/dc24-S002>
- Cheraghi, R., Ebrahimi, H., Kheibar, N., & Sahebihagh, M. H. Reasons for resistance to change in nursing: An integrative review (2023). *BMC Nursing*, 22(1):310. doi: 10.1186/s12912-023-01460-0

References

- Dailah, H. G. (2024). The Influence of Nurse-Led Interventions on Diseases Management in Patients with Diabetes Mellitus: A Narrative Review. *Healthcare (Basel)*, *12*(3), 352. doi: 10.3390/healthcare12030352
- Ellis, L. A., Tran, Y., Pomare, C., Long, J. C., Churrua, K., Saba, M., Braithwaite, J. (2023) Hospital organizational change: The importance of teamwork culture, communication, and change readiness. *Front Public Health*, *11*, Article 1089252. doi: 10.3389/fpubh.2023.1089252
- Lugner, M., Rawshani, A., Helleryd, E. & Eliasson, B. (2024). Identifying top ten predictors of type 2 diabetes through machine learning analysis of UK Biobank data. *Sci Rep*, *14*(2102). <https://doi.org/10.1038/s41598024-52023-5>

REFERENCES

- Macido, A. (2019). A Nurse-Led Inpatient Diabetes Self-Management Education and Support Program to Improve Patient Knowledge and Treatment Adherence. *Journal of Health Education Teaching*, *10*(1), 1-10. <https://files.eric.ed.gov/fulltext/EJ1236325.pdf>
- Powers, M. A., Bardsley, J. K., Cypress, M., Funnell, M. M., Harms, D., HesFischl, A., Hooks, B., Isaacs, D., Mandel, E. D., Maryniuk, M. D., Norton, A., Rinker, J., Siminerio, L. M., & Uelman, S. (2022). Diabetes self-management education and support in adults with Type 2 diabetes: A consensus report of the American Diabetes Association, the Association of Diabetes Care & Education Specialists, the Academy of Nutrition and Dietetics, the American Academy of Family Physicians, the American Academy of PAs, the American Association of Nurse Practitioners, and the American Pharmacists Association. *Diabetes Care*, *43*(7), 1636-1649. <https://doi.org/10.2337/dci20-0023>



REFERENCES

- Pitsillidou, M., Noula, M., Roupa, Z., Farmakas, A. (2023). Barriers to the Adoption of EvidenceBased Practice in Nursing: A Focus Group Study. *Actual Information Medicine*, 31(4), 306-311. doi:10.5455/aim.2023.31.306-311.
- Rubin, D. J. Correction to Hospital Readmission of Patients with Diabetes. *Curr Diab Rep* 18, 21 (2018). <https://doi.org/10.107/s11892-018-0989-1>
- Rubin, D. J., Maliakkal, N., Zhao, H., & Miller, E. E. (2023). Hospital Readmission Risk and Risk Factors of People with a Primary or Secondary Discharge Diagnosis of Diabetes. *Journal of Clinical Medicine*, 12(4), Article 1274. doi: 10.3390/jcm12041274
- Sapra, A., & Bhandari, P. (2024). *Diabetes*. Treasure Island FL: StatPearls Publishing; 2024
<https://www.ncbi.nlm.nih.gov/books/NBK551501/>.
- Soh, J. G. S., Wong, W.P., Mukhopadhyay, A., Quek, S. C., & Tai, B. C. (2020). Predictors of 30day unplanned hospital readmission among adult patients with diabetes mellitus: A systematic review with metaanalysis. *BMJ Open Diabetes Res Care*, 8(1), Article e001227. doi: 10.1136/bmjdr-2020-001227.