A POPULATION HEALTH APPROACH TO IMPLEMENTING DSMT SERVICES IN A HOSPITAL-BASED SETTING

Margie Hackett, BSN, BC-RN, ACM-RN

Manager of Population Health, Care Coordination, Suburban Hospital, Bethesda, Maryland

Background

- Type 2 diabetes is a progressive chronic illness that will affect more than 500 million people worldwide by 2030 (Office of Disease Prevention and Health Promotion, n.d.).
- Those with diabetes are at significant risk for complications such as myocardial infarction, stroke, nephropathy, retinopathy, peripheral arterial disease, neuropathy which can lead to amputation, kidney failure and other illnesses.
- Of the current population that have diabetes, about 1 in every 10 have a diagnosis of diabetes and 1 in 5 don't know they have diabetes. One of every $7 for healthcare is spent on diabetes care (Laursen et al., 2017).
- Suburban established an outpatient Diabetes Self-Management Training (DSMT) program. Participants receive individual time with a certified diabetes educator to learn about their health care needs and self-management techniques. The educator and patient collaborate to set SMART goals which are reviewed at the start of each session. Those who participate truly feel more in control of their diabetes and in their overall health.

Objectives

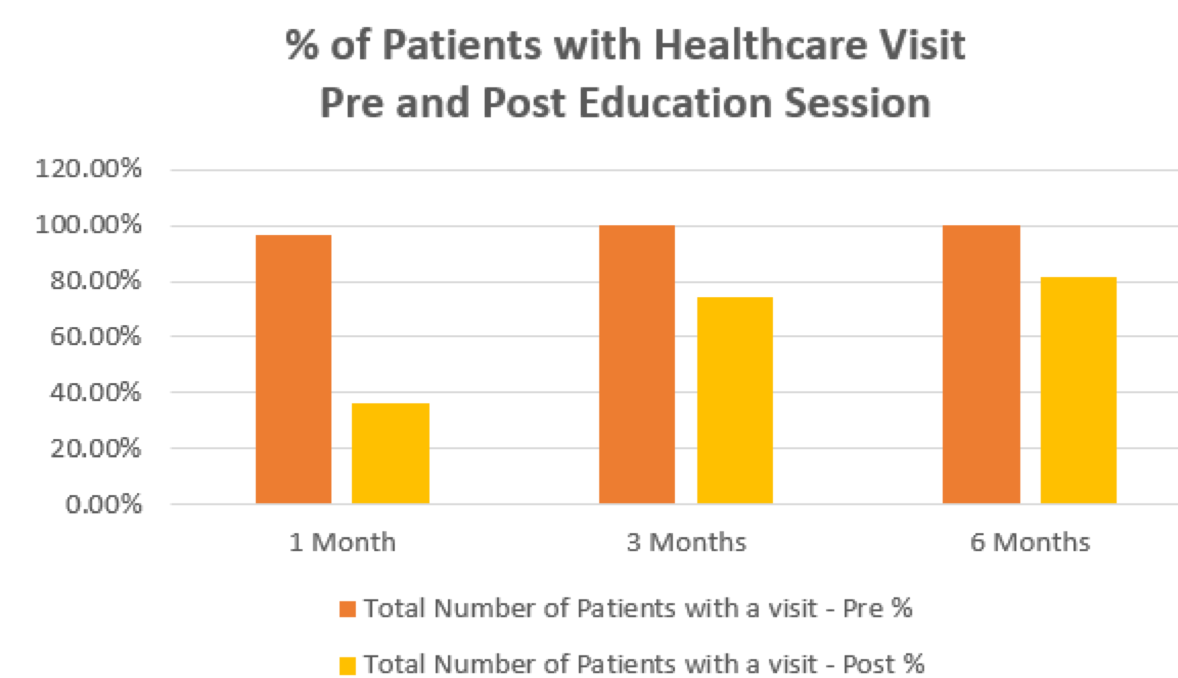
1. Identify program goals to increase access to diabetes self-management training to more participants.
2. Recognize the importance for patient engagement and habit building through individualized and personalized consultations.
3. Utilize increased understanding of diabetes care to decrease overall healthcare costs associated with diabetes.
4. Implement population-based strategies for diabetes through case management and community health workers.

Strategies

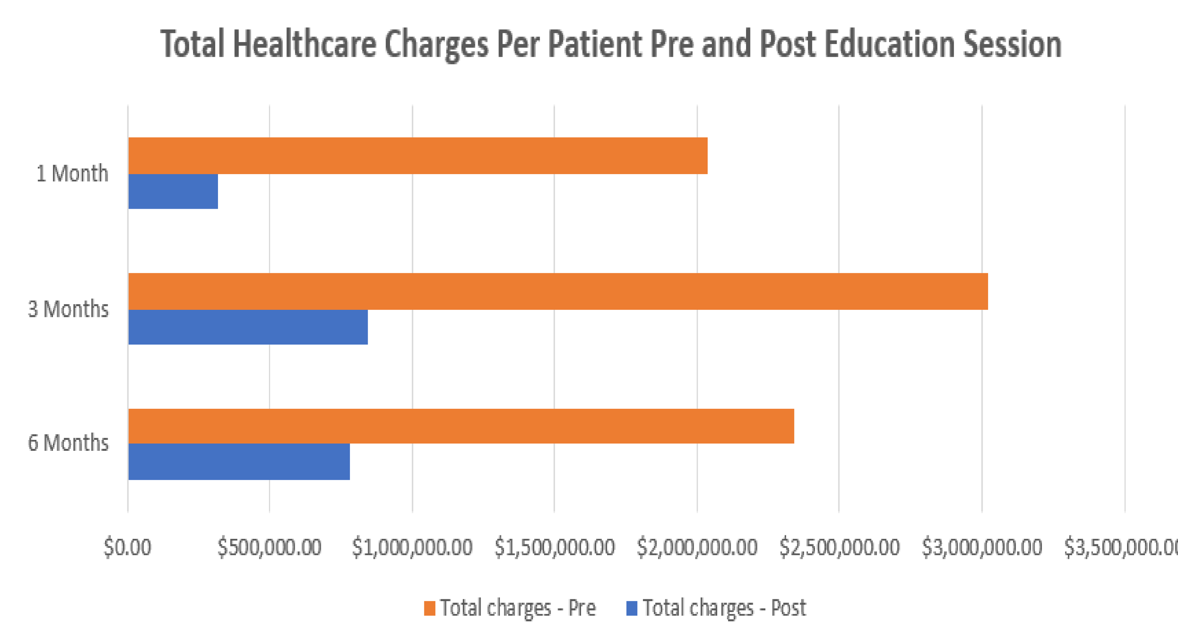
1. *Onboard team: educators, community health workers, case management, referral coordinators, marketers, administration and clinical support.*
2. *Focus on referral process, scheduling, and connection to educators.*
3. *Determine criteria for participation:*
   - *Diagnosis of diabetes*
   - *Over 18*
   - *Not in skilled rehab stay*
   - *Not currently receiving active home health services*
4. *Support those with billing inquiries, insurance co-pays, and uninsured.*
5. *Provide wrap-around services for social determinants of health (SDoH) as appropriate.*
6. *Inform providers regarding engagement of their patients to participate and referral entry.*
7. *Share the info with hospital teams and community providers*
8. *Track data related to healthcare costs, appointments, no-shows, and more.*

learn tips and tools to **live well & thrive** with diabetes

Participant Data



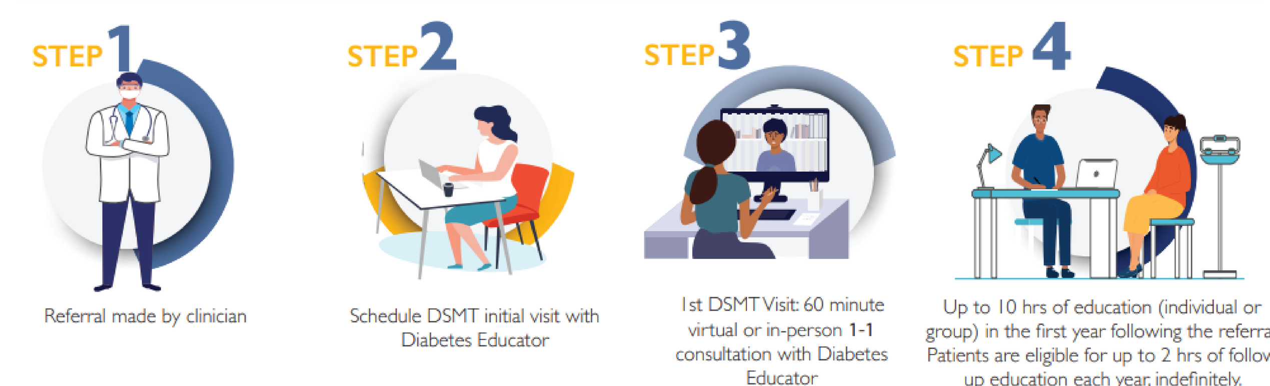
Data obtained from Chesapeake Regional Information System for our Patients, 2023

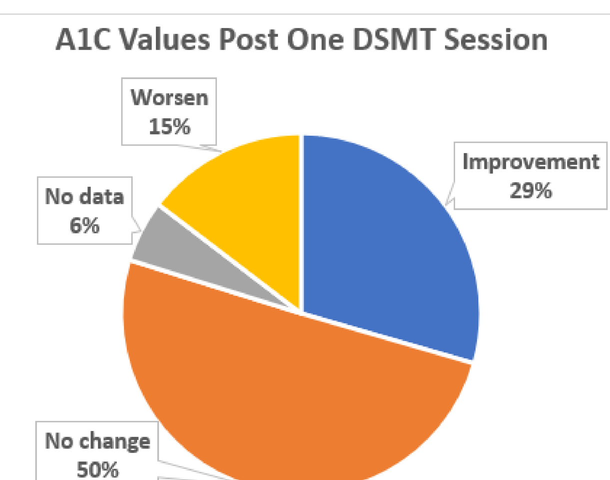


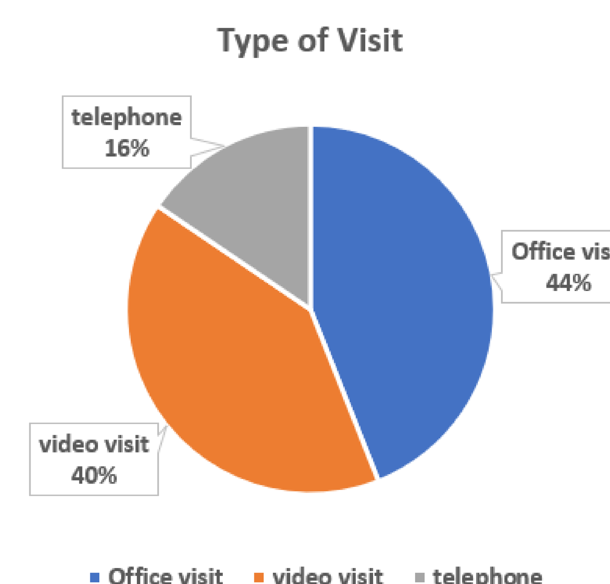
Data obtained from Chesapeake Regional Information System for our Patients, 2023

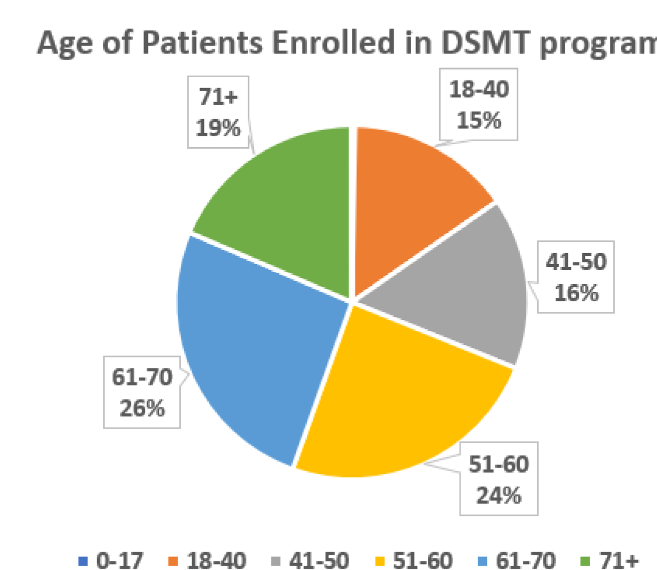
Data shown for all patients who have been referred for DSMT, scheduled an appointment, and met with the certified diabetes educator for the initial consultation. N = 638
Data showing healthcare utilization costs is for those patients who have been a patient at Suburban Hospital in the previous 36 months. N = 192

DSMT PATIENT JOURNEY

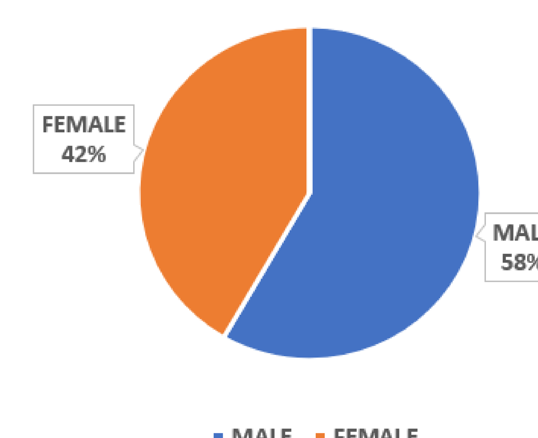








Gender of Patients who attended one DSMT session



Program Development

With a population health lens, Suburban Hospital worked with the Johns Hopkins Medicine (JHM) to start a Diabetes Self-Management Training (DSMT) program that would serve residents of the county and surrounding area as well as patients in the hospital. While JHM had an existing DSMT program, Suburban needed to create the infrastructure from the ground up. "Life with Diabetes", an ADA-preapproved curriculum, is the core reference used to develop the program (Johns Hopkins Medicine 2022). Our initial target for referrals was directed towards patients in the hospital with referrals from our inpatient endocrinology team, utilizing community health workers to visit patients in their hospital rooms and engage with patients and families about the benefits of the program. Patients are encouraged to respond to texts, answer phone calls, and schedule an appointment for DSMT. The goal of Case Management and Community Health Workers is to help with referrals and support patients to start the education which will help them learn how to manage their own individual diabetes care. Within a few months, the team began engaging with community providers to increase the visibility of the program and connect all people with diabetes to the DSMT program. DSMT is offered to people ages 18 and older, with a diagnosis of diabetes. Special outreach was made to those without insurance coverage as well. Suburban's program covers the cost for eligible persons who are unable to pay for DSMT services. Educational Sessions with a certified diabetes educator are offered virtual or in person. Occasionally, when some technical issues occurred, a virtual consultation may be converted to a telephone call.

Outcomes

The DSMT program opened late December 2021. In FY22, 638 patients had one education session with a diabetes educator. We had many others through the year attend four or more sessions with the educator. The data shows decreased healthcare visits and charges after one session with a certified diabetes educator and some improvement in A1c reduction after one visit. Information was tracked regarding the number of referrals, completed education sessions, and no-show appointments. Much work has been done to engage all people with diabetes who have a received a referral to the program actually spend time with the diabetes educator.

Summary

In summary, those who had a minimum of one session with an educator have made lifestyle changes. They are more confident working on their goals between visits, checking in with their physicians regularly, and genuinely managing their diabetes in ways they never imagined themselves being able to do. We plan to continue this program to benefit as many persons with diabetes as possible, knowing that unmanaged diabetes increases the incidence of hospital readmissions, creates more healthcare concerns, and negatively affects general quality of life.

References

Chesapeake Regional Information System for our Patients. (2023). *Pre/post report.* https://www.crisphealth.org/learning-system/crs/all-payer/pre-post-report/

Johns Hopkins Medicine (2023). *Office of population health diabetes prevention and education program.* https://www.hopkinsmedicine.org/population-health/dpep/

Laursen, D. H., Christensen, K. B., Christensen, U., & Frølich, A. (2017). Assessment of short and long-term outcomes of diabetes patient education using the health education impact questionnaire (HeiQ). *BMC Research Notes*, *10*(1), 213. https://doi.org/10.1186/s13104-017-2536-6

Office of Disease Prevention and Health Promotion. (n.d.). Diabetes. *Healthy People 2030.* U.S. Department of Health and Human Services. https://health.gov/healthypeople/objectives-and-data/browse-objectives/diabetes