

Setting the Standard: Scaling DSMES in Baltimore and Beyond

Gene Arnold, MS, RD, CDCES, Caitlin Nass, CRNP

Clara Gitau MMCi, RN, CCRN, Kaylynn Stephens Nestoras Mathioudakis, MD, MHS, Nisa Maruthur, MD, MHS Alice Siawlin Chan, MS, MBA





The Division of Diabetes, Endocrinology and, Metabolism Johns Hopkins University School of Medicine, Baltimore, MD, USA The Johns Hopkins Health System Office of Population Health, Baltimore, MD, USA





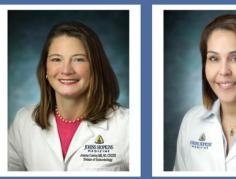












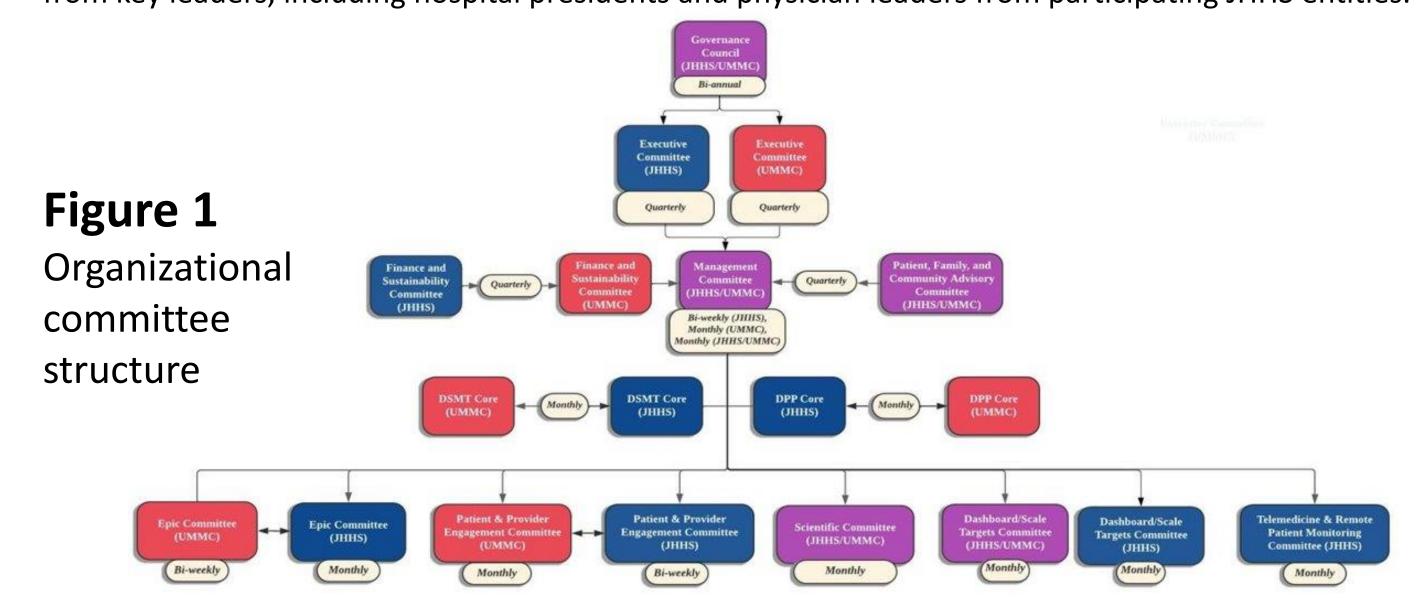
Background

The 2022 National Standards for DSMES Standard 1: Support for DSMES Services describes the importance of organizational support as an essential component for building a successful and longstanding Diabetes Self-Management Education and Support (DSMES) service. Common barriers related to reimbursement, health system infrastructure, social determinants of health, and provider awareness and engagement can only be overcome with unwavering organizational support. This poster outlines the unpaved road taken by the Johns Hopkins Health System to maximize system-wide engagement in DSMES expansion, and the initial outcomes of large-scale growth of the DSMES service from 2021-present.

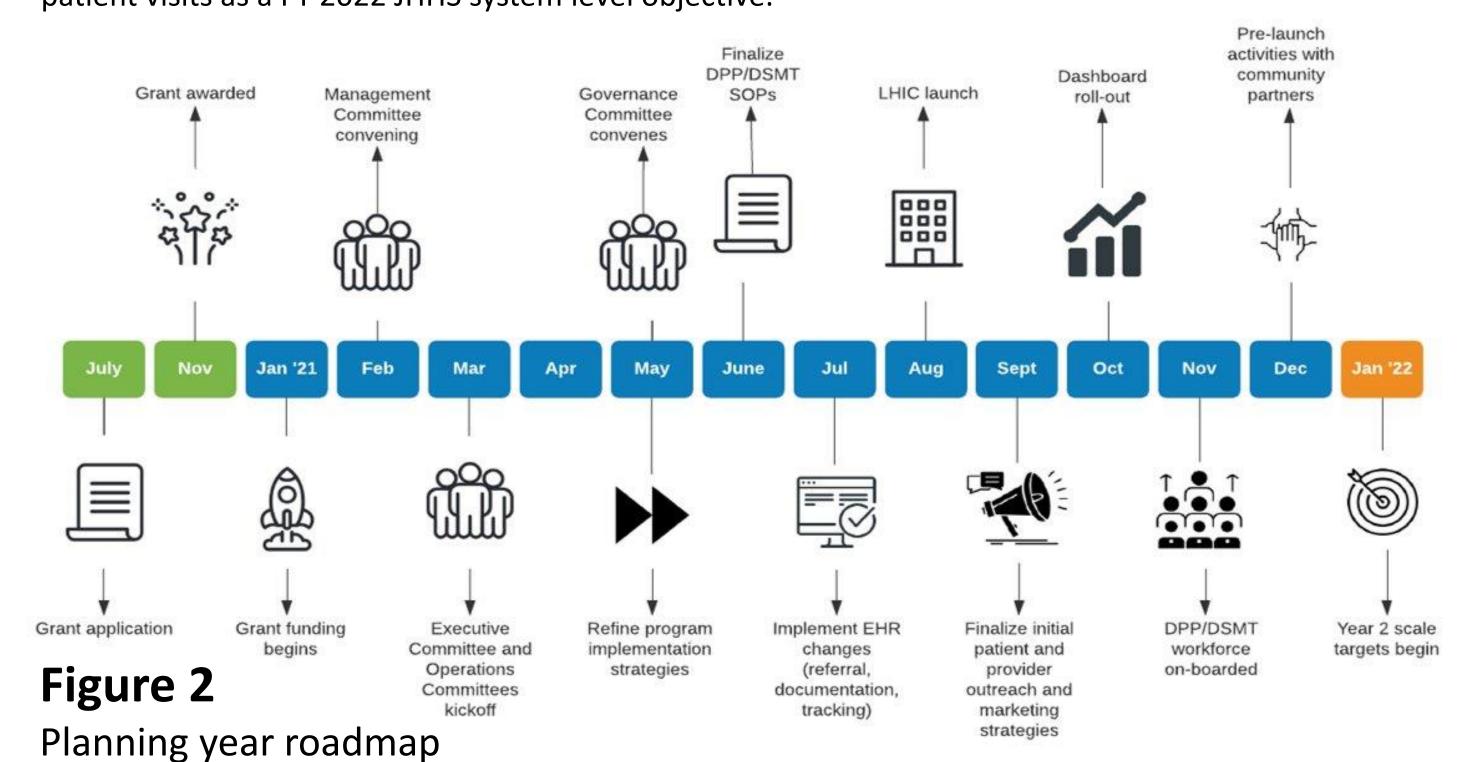
In 2020, the Maryland Health Services Cost Review Commission (HSCRC) awarded Johns Hopkins Health System (JHHS) and the University of Maryland Medical Center (UMMC) an unprecedented joint 5-year funding (\$28 million and \$16 million, respectively) to improve access to both DSMES and Diabetes Prevention Program for Marylanders in the communities at highest risk for developing diabetes and diabetes complications. Prior to receiving the award, formal DSMES at JHHS was delivered exclusively in the comprehensive diabetes center by a sole RD, CDCES. Securing top-level leader's support for DSMES as the standard of care for people with diabetes (PWD) began during the funding application process and has proven critical to program innovations including the DCES performing at the top of their licensure, reimbursement reform, marketing strategies, and methods to enhance health system and provider engagement.

Process year 1

The first year of the award was a dedicated planning year. In 2021, committees involving senior organization stakeholders convened regularly. This gave everyone a voice and ensured participation from key leaders, including hospital presidents and physician leaders from participating JHHS entities.



- Five diabetes care and education specialists (DCES) and two referral coordinators were hired and trained.
- American Diabetes Association DSMES accreditation was obtained for each new site.
- Key electronic health record (EHR) builds and upgrades were completed, including DSMES documentation refinements and a streamlined DSMES referral.
- Clinician DSMES champions presented several times per month to dozens of JHHS clinical departments. Physician to physician education regarding the benefits of DSMES, why they should refer patients, and how to do it was conducted system-wide.
- Health system leadership agreed to prioritize DSMES, pinning DSMES referrals and the number of new patient visits as a FY 2022 JHHS system level objective.



Process year 2

- Reporting of DSMES encounters to the HSCRC commenced in 2022, the first implementation year. The service grew from 2 diabetes center locations to 10 practices across the state, 7 of which were Johns Hopkins Community Physicians Primary Care sites. Embedding the DCES within Primary Care has proven a highly effective strategy for sustained engagement from both patients and providers. 45% of referrals and 49% of all new patient visits were in Primary Care locations.
- A DCES guided insulin titration protocol, drafted by the DSMES core leadership team, was presented to a health system wide diabetes stakeholder group and approved as official JHHS policy.
- Internal marketing and education efforts targeting referring providers were launched. This included clinic and hospital-based TV screen advertisements, CEU modules for physicians pertaining to DSMES, DSMES leaders attending provider meetings, radio ads, podcasts and a health system sponsored "call to action video" featuring JHHS hospital presidents.
- DSMES leaders worked closely with the Johns Hopkins Office of managed care to develop enhanced billing logic. This resulted in enhanced collections and lower denial rates.
- Monthly referral and visit volume data were collated by the JHHS Office of Population Health. These data proved critical for gauging practice engagement, planning interventions and maintaining momentum.
- Two inpatient diabetes nurse navigators were hired to bridge the gap between hospitalizations and ambulatory follow-up DSMES encounters.
- An external marketing firm was hired to extend program reach to the greater Baltimore community, and to create co-branded materials with our partner organization, the University of Maryland Medical Center. https://www.healthier2gether.org/#programs

Clinical productivity Cumulative 07/2021 - 06/2023 Referrals 16000 14000 3011 12000 10000 8000 2000 1000

Figure 3:JHHS Cumulative referrals 7/1/2021 – 6/30/23 Total referrals since the inception of the program. July 2021 represents when the first DCES was hired and

Figure 4: JHHS Cumulative unique patient visits per year: Counts of unique patients who received DSMES each year. CY221 represents visit volumes prior to the



Figure 5: JHHS Total DSMES visits rendered

Total visits, including new patients and follow up visits across all locations.







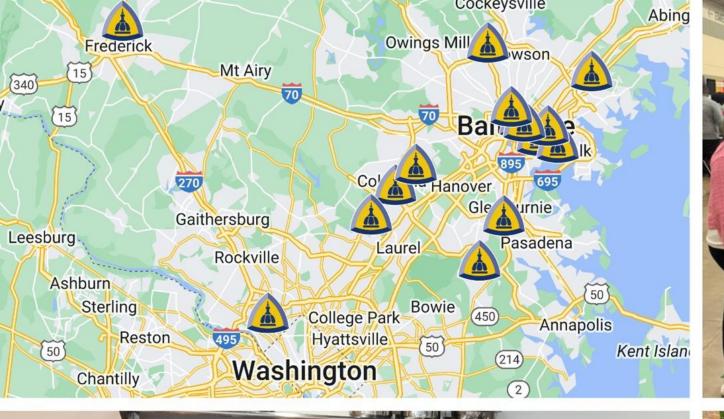










Figure 6

Map of DSMES locations and team photos

Conclusion

The Johns Hopkins Health System DSMES service has received over 12,000 referrals since the January 2022 launch. In the first year of operation, over 3,500 unique patients received DSMES, and the service is on track to exceed this figure in 2023. Growth of this magnitude was made possible by paradigm changing funding provided by the HSCRC. Equally transformational was referring provider engagement and acceptance of DSMES as the standard of care for people with diabetes. In hindsight, aligning the goals of the health system with the DSMES service has been instrumental for sustained action on all fronts and is a key ingredient not to be overlooked by aspiring DSMES services. From hospital presidents and CEOs, to physician champions, floor nurses and community health workers, it has truly been an "all hands-on deck" effort to raise awareness for DSMES and maintain momentum. The first 18 months for this service has been a tremendous success.

A short list of recommendations (in no particular order) for meeting Standard 1 is as follows:

- 1: Your ability to sell DSMES will be the ceiling for your service.
- 2. Embed the DCES within high opportunity practices (Primary Care, Endocrinology)
- 3. Establish a strong rapport and meet frequently with your billing and compliance departments.
- 4. Team up with a physician (or APP) champion who will personally vouch for DSMES.
- 5. Bi-directional engagement from top leadership, to front line staff will drive referrals and lead to completed visits.
- 6. Harness the diversity of clinician backgrounds within the DCES team to enhance patient care.
- 7. As your service grows and evolves, maintain stakeholder engagement via ongoing 5S process improvement.

We dedicate this poster to Felicia Hill Briggs, for without her vision and leadership, this service would not exist as it does today.

> Acknowledgements: The University of Maryland Medical Center The JHHS DPEP team The JHHS Office of Population Health

Felicia Hill-Briggs, PhD November 25, 1965 – June 23, 2023