Baltimore Metropolitan Diabetes Regional Partnership (BMDRP)

Catalyst Grant Application July 18, 2020

Submitted by Co-Applicants:

Johns Hopkins Health System and University of Maryland Medical Center





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Baltimore Metropolitan Diabetes Regional Partnership (BMDRP) Catalyst Grant Program Proposal

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Section I: Scope of Work

1. Summary of Proposal

Hospital Co-Applicants:	Johns Hopkins Health System and University of Maryland Medical
	Center
Hospital Members:	Johns Hopkins Hospital (JHH), Johns Hopkins Bayview Medical
	Center (JHBMC), University of Maryland Medical Center (UMMC)
	Downtown, UMMC Midtown, Howard County General Hospital
	(HCGH), Suburban Hospital
Health System Affiliations:	Johns Hopkins Health System and University of Maryland Medical
	System
Funding Track:	Diabetes Prevention and Management
Total Budget Request:	\$45,410,914

Target Patient Population

The Johns Hopkins Health System (JHHS) and the University of Maryland Medical Center (UMMC) are collaborating to create the Baltimore Metropolitan Diabetes Regional Partnership (BMDRP) to address diabetes prevention and management within service areas in the State. Seventeen zip codes within Baltimore City are identified as the prediabetes target patient population to focus Centers for Disease Control and Prevention (CDC)-approved National Diabetes Prevention Program (DPP) activities. Residents in these zip codes have high prevalence of risk factors for incident diabetes and face numerous social determinant challenges. In addition to DPP, the BMDRP will implement American Diabetes Association-approved diabetes self-management training (DSMT) activities in a total of 37 zip codes representing partner hospital service areas in Baltimore City, Howard County, and Montgomery County. DSMT services will address the disproportionate diabetes burden among racial/ethnic minorities in each of these geographic regions, including higher diabetes prevalence, ED visits, and mortality rates due to diabetes.

Proposed Activities

BMDRP will build infrastructure and aim to increase access to DPP for the prevention of type 2 diabetes in 20% more of the population with prediabetes in the service areas and will aim to expand access to DSMT for management of diabetes in 25% more of the population with diabetes in the service areas. The following overarching activities will be implemented:

- Establish BMDRP DPP Centralized Management Services and DSMT Centralized Management
 Services in the region to work with community partner organizations that will become accredited
 sites for delivery of and CMS reimbursement for DPP and DSMT services.
- Partner with a diverse range of community collaborators to ensure *access to DPP right in the communities where people live, work, and receive routine care* (i.e. faith organizations, senior centers, community engagement centers, and FQHCs).
- **Expand DSMT sites beyond hospital outpatient clinics** to community-based ambulatory care clinics and to community pharmacy locations.
- Seamlessly integrate social needs wrap around services with DPP and DSMT through collaborators
 addressing social determinants of health (SDOH) including food insecurity and transportation, and
 build technology infrastructure for information transfer throughout the state.

BMDRP pairs evidence-based DPP and DSMT programming with key innovations, including: a CRISP inventory of DPP programs across the City/State which is available to providers for patient referrals, Epic EMR integration and implementation of remote monitoring of diabetes patient data for DSMT, establishing community pharmacies as ADA accredited DSMT programs with reimbursement, integrating an ADA-recognized Diabetes Support program for long-term impact in communities, provider Patient Engagement Training, and health equity-focused trainings for workforces to facilitate equity in DPP and DSMT access and outcomes.

Measurement & Outcomes

The BMDRP will utilize an evaluation strategy including structure, process, and outcome measures that are typically used within health care organizations. Structure measures will be used primarily in the first planning year as the governance structure and committees are formed and workforces are hired. Process measures will target the throughput of the grant activities, DPP and DSMT program scaling, and will include the numbers and types of referrals to wrap-around services, as well as qualitative feedback from participants. Internal program-specific measures will be utilized to evaluate for program efficiencies and effectiveness in achieving DPP and DSMT performance outcomes. For HSCRC scale target outcomes, BMDRP will use reporting tools that the HSCRC is developing with CRISP to measure progress toward scale targets. Additional tools and program-specific measures are proposed, as per the RFP, to enable statistical evaluation of effectiveness, equity, and sustainability of the DPP, DSMT, and wrap around services.

Scalability & Sustainability

Sustainability will be ensured through:

- Initiating a local health improvement coalition (LHIC) with the Baltimore City Health Department to
 focus on diabetes and promote diabetes health education and type 2 diabetes prevention. HCGH and
 Suburban Hospital will collaborate with the existing Howard and Montgomery County LHIC in
 achieving goals.
- Utilizing the American Diabetes Association's \$25,000 commitment to the BMDRP to create a Shared Learning Bridge with out-of-state DPP initiatives, fostering a national learning collaborative.
- Improvements in DPP and DSMT billing and reimbursement infrastructure and processes.
- Rigorous outcomes evaluation and financial sustainability analyses (ROI, PAU, reimbursements).

Governance Structure

The governance structure of BMDRP consists of a Governance Council at the highest level with input from both a Patient, Family and Community Advisory Committee and a Financial Sustainability Committee. A BMDRP Management Committee will have grant administration and oversight and will be supported by two Executive Directors — one each from JHHS and UMMC. The Executive Council, responsible for the daily activity implementation and oversight, will lead four workgroups that support the DPP and DSMT Centralized Management Services and Wrap Around Services core: Patient Ascertainment and Engagement, Provider Education and Referral, Intervention Quality and Coordination, and Data, Monitoring & Evaluation. This structure will be developed and implemented during the first planning year of the grant. Improvements and revisions to the structure will be made on an ongoing basis as needed throughout the grant period.

Participating Partners & Financial Support

BMDRP will partner with numerous national and local community organizations, FQHCs, the faith community, and the Baltimore City Health Department to fulfill all of the grant requirements and to meet the identified scale targets. Both organizations (UMMC and JHHS) bring a wealth of experience in working with community partners currently, and through this grant, collaborative partnerships will be expanded. The many participating partners bring additional strengths to the proposed activities through the provision of wrap-around services, hosting community classes, providing referrals to programs, promoting classes and services, local coalition building, and leadership of evidence-based programs. These partnerships are key to the success of BMDRP, and UMMC and JHHS look forward to expanding these partnerships in the community.

Implementation Plan

An accompanying Implementation Work Plan outlines the numerous process steps which will be undertaken to deploy this proposal. The Implementation Work Plan spreadsheet is presented in pdf form.

Budget & Expenditures

UMMC and JHHS are co-applicants in the BMDRP, and therefore separate health system budgets have been developed and submitted. The total funding requested by the BMRDP is \$45,410,914. UMMC's portion of the funding request is \$16,348,586, and JHHS's portion of the funding request is \$29,062,328. The two health systems have collaborated on creation of a Shared Initiatives budget totaling \$3,955,944 with 65% allocated to JHHS and 35% allocated to UMMC. The amounts per each health system are included in their overall UMMC and JHHS budget request, though the Shared Initiatives budget detail is included in a separate spreadsheet document. Achieving the ambitious overarching goals of the BMRDP will require significant efforts including recruitment and establishment of central management functions: leadership, project management, data analytics, and governance support functions; recruitment, training and retention of highly qualified staff for DPP and DSMT programs; and coordination of social needs wraparound service provision with vendors and CBOs to ensure seamless integration with DPP and DSMT services.

2. Target Populations

BMDRP, a partnership between Johns Hopkins Hospital (JHH), Johns Hopkins Bayview Medical Center (JHBMC), University of Maryland Medical Center (UMMC) Downtown, UMMC Midtown, Howard County General Hospital (HCGH), and Suburban Hospital, proposes to address diabetes prevention within BMDRP Baltimore City service areas and will address diabetes management within BMDRP Baltimore City, Montgomery County, and Howard County service areas. See Appendix A for maps of the service areas for BMDRP DPP activities and the service areas for DSMT activities, respectively.

2.a. Baltimore City Target Population for Diabetes Prevention

JHH/JHBMC and UMMC are proud to serve patients from the East and West side communities of Baltimore City and will target Medicaid and Medicare populations with prediabetes in the zip codes within each Baltimore City partner hospital's service area (Table 1). Nationally, 34.5% of adults have prediabetes, with 90% of people with prediabetes unaware. In Maryland, an estimated 10.5% of adults report prediabetes, and 33.7% of Baltimore City residents have obesity, an important risk factor for prediabetes. There is racial

¹CDC. National Diabetes Statistics Report, 2020. Accessed at https://www.cdc.gov/diabetes/data/statistics/statistics-report.html
June 19, 2020

² 2014-2018 Maryland BRFSS. Accessed at https://ibis.health.maryland.gov June 19, 2020

disparity in obesity prevalence in the City at 22.2% among White, Non-Hispanic adults and 42.0% among Black, Non-Hispanic adults.²

Table 1. Target Population for Diabetes Prevention

Zip	Hospital	Adult Population ³	Medicaid Population ⁴	Medicaid Prediabetes Population (pop x 10.5%)	Medicare Population ⁵	Medicare Prediabetes Population (pop x 10.5%)
21201	UMMC Downtown/Midtown	3,140	785	82	524	55
21202	JHH/JHBMC	4,407	1,102	116	736	77
21205	ЈНН/ЈНВМС	3,520	880	92	588	62
21206	JHH/JHBMC	22,169	5,542	582	3,702	389
21213	JHH/JHBMC	7,496	1,874	197	1,252	131
21215	UMMC Downtown/Midtown	23,643	5,911	621	3,948	415
21216	UMMC Downtown/Midtown	7,537	1,884	198	1,259	132
21217	UMMC Downtown/Midtown	6,866	1,716	180	1,147	120
21218	JHH/JHBMC and UMMC Downtown/Midtown	17,578	4,394	461	2,936	308
21219	JHH/JHBMC	6,894	1,723	181	1,151	121
21222	JHH/JHBMC	29,734	7,433	781	4,966	521
21223	UMMC Downtown/Midtown	6,539	1,635	172	1,092	115
21224	JHH/JHBMC	23,388	5,847	614	3,906	410
21229	UMMC/Midtown	16,458	4,114	432	2,748	289
21230	UMMC/Midtown	15,038	3,760	395	2,511	264
21231	JHH/JHBMC	5,197	1,299	136	868	91

Life expectancy in Baltimore City varies widely. There is nearly a 20 year difference in life expectancy between the communities of North Baltimore/Guilford (84 years) and Madison/East End (68.9 years) and Southwest Baltimore (68 years). Several social determinants of health (SDOH) negatively affect persons in the BMDRP target zip codes and increase the risk of development of prediabetes and diabetes. In Baltimore City, 29% of families live in poverty. The zip codes served by both hospitals have some of the highest Hardship Indices in the state (at 51 on a scale of 1-100 for Baltimore City), while the Madison/East End, Upton, Sandtown, Midway/Coldstream, and Southwest Baltimore neighborhoods have the top five worst Hardship Indices in the City. Lack of financial resources severely limits individuals' ability to acquire needed medications, medical supplies, healthy food, public transportation, and cell phone service, among other needs. Approximately 24% of Baltimore City residents live in a defined healthy food priority area (HFPA) also known as a food desert. In a joint Baltimore City resident survey during UMMC's and JHH/JHBMC's Community Health Needs Assessment (CHNA) in FY18, 39% of residents stated that access to transportation was stated as a barrier to accessing healthcare. It is also noted that 30% of Baltimore City residents do not have a vehicle available. Reliance on public transportation may at times limit individuals' ability to attend health promotion classes, access health care, and/or access healthy food.

https://planning.baltimorecity.gov/sites/default/files/City%20Map%20Brief%20011218.pdf June 19, 2020

³ Maryland Census Data - ZIP Code Tabulation Areas https://data.imap.maryland.gov/datasets/eb706b48117b43d482c63d02017fc3ff

⁴ Maryland Medicaid eHealth Statistics. Accessed at https://md-medicaid.org/index.htm June 29, 2020

⁵ Centers for Medicare & Medicaid Services, Office of Enterprise Data and Analytics, Chronic Conditions Data Warehouse; United States Census Bureau.

⁶ Baltimore City Health Department (2017). Baltimore City Neighborhood Health Profile. Accessed at https://health.baltimorecity.gov/sites/default/files/NHP%202017%20-%2048%20South%20Baltimore%20(rev%206-9-17).pdf on June 19, 2020

⁶ Baltimore City 2018 Food Environment Brief. Accessed at

2.b. Target Population for Diabetes Management

Diabetes management activities will be implemented and scaled by all BMDRP partner hospitals for their "touch attributed" Medicare populations (Table 2).

Table 2. Target Population for Diabetes Management

Hospital	Zip Codes	Touch Attributed ¹ Medicare Diabetes Population
JHH		869
JHBMC	21202, 21205, 21206, 21213, 21218, 21219, 21222, 21224, 21231 ·	1413
UMMC Downtown	24224 24245 24245 24245 24240 24222 24222 24222	988
UMMC Midtown	21201, 21215, 21216, 21217, 21218, 21223, 21229, 21230	574
HCGH	20723, 20794, 21042, 21043, 21044, 21045, 21046, 21075	1692
Suburban Hospital	20815, 20817, 20850, 20852, 20853, 20854, 20874, 20878, 20895, 20902, 20904, 20906	1517
Total RP		7053

^{*}Columbia Medical Practice (Howard County DSMT community site) zip codes, touch attributed population =1245

Target population numbers were obtained from CRISP MADE reports (Medicare CCLF file) by choosing the criteria of Touch Attribution (IP &ED) and the diabetes chronic condition flag by hospital. Those rosters were then exported to excel to further limit the "n" by hospital service area zip codes (for that hospital only--not for all RP hospitals). Time period is CY 2019. I assumed that the target population denominators would not change over the five year grant period.

According to Maryland BRFSS data, 14.4% of Baltimore City adult residents and 26.9% of residents age 65 and older have diabetes, compared to 12.1% of adults statewide. Diabetes prevalence in Montgomery and Howard counties is 9.3% and 8%, respectively. Health inequities are present in all BMDRP regions. In Montgomery County, diabetes prevalence among White residents is 8.0%, compared to 10.2% among Hispanic residents and 11.8% among Black residents. In Howard County, the ED visit rate due to diabetes (per 100,000) is 309.8 for Black adults compared to 73.5 among White adults. In Baltimore City, mortality rates from diabetes are almost twice as high for Black residents than for White residents (44.5 vs 23.8 deaths per 100,000 population).

The proposed activities outlined in Section 3 will increase the capacity of BMDRP hospitals and community partners to offer DPP and DSMT directly in communities, and will also increase the number of referrals into these programs. The wrap-around services identified are critical elements of the BMDRP proposal to mitigate the effects of poverty, food insecurity, and transportation barriers. These services will support the success of individuals in the target population and their ability to achieve diabetes prevention and management goals which will support improved health outcomes.

https://www.hopkinsmedicine.org/howard county general hospital/ downloads/CommunityHealthNeedsAssessment FY19.pdf July 10, 2020.

⁸ Maryland Dept. of Health, BRFSS Data 2018. Accessed from https://ibis.health.maryland.gov/query/result/brfss18/Diabetes/AgeAdj.html June 10, 2020.

⁹ Howard County Health Assessment Survey. August 2019. https://www.howardcountymd.gov/LinkClick.aspx?fileticket=j-J6k8Gcpv4%3d&tabid=2540&portalid=0.

¹⁰ Howard County Community Health Needs Assessment 2019, Accessed from

¹¹ Baltimore City Heath Dept. State of Health in Baltimore: White Paper 2017. Accessed at https://health.baltimorecity.gov/state-health-baltimore-winter-2016/state-health-baltimore-white-paper-2017 June 1, 2020.

3. Proposed Activities

3.a. Diabetes Prevention Program (DPP)

3.a.1. DPP Model to be Implemented

BMDRP will expand the Johns Hopkins Brancati Center DPP model, a successful community-based DPP model since 2015. The model utilizes the expertise of the Johns Hopkins Brancati Center as a DPP umbrella organization, with DPP technical experts and community partners, as community experts, working together for the long-term goal of establishing and maintaining DPPs that are outcomes-driven and enduring. *In 2017, The Brancati Center became the first DPP in Baltimore City to achieve full CDC recognition*. To date, in conjunction with community partners, Brancati Center DPPs continue to achieve performance outcomes that exceed national DPP benchmarks [i.e. among 116 DPP participants (51% with Medicaid), 72% retention over 1 year, 86% attendance, and 5.6% weight loss at 12 months.]. Brancati Center also participated in the national Medicaid DPP demonstration (2016-2018), which informed reimbursement of the DPP for Medicaid members in Maryland. Brancati Center had the first Medicare DPP in Baltimore City and is one of the few approved HealthChoice (Medicaid) DPPs in Maryland. BMDRP expands infrastructure and capacity, and reach. The BMDRP will expand UMMC's Community DPP model significantly, which will increase their footprint of DPP in West Baltimore

3.a.2. Target Population for DPP: JHH/JHBMC and UMMC will expand DPP services in the BMDRP Baltimore City service area (Section 2, Table 1), a high-need geographic region with regard to obesity, diabetes incidence, and their inequities. HCGH and Suburban Hospital will not participate in DPP expansion to scale

targets in their counties under this funding mechanism. However, both hospitals will explore DPP implementation model strategy, partnerships, and leverage the Baltimore City DPP planning and capacity-building, including shadowing at sites.

Table 3 shows the combined number of Medicare and Medicaid participants needed to meet the HSCRC Catalyst Grant DPP scale targets for JHH/JHBMC and UMMC. Table 4 (below) outlines the plan for building and expanding DPP services with a focus each hospital's community's needs.

3.a.3. Services and Interventions Patients will Receive: Participants enrolled in the DPP will

Table 3. DPP population numbers to meet scale targets*

Hospital partner	Year 2	Year 3	Year 4	Year 5
Referrals	10%	20%	30%	40%
JHH/JHBMC	531	1062	1592	2123
UMMC	517	1033	1550	2066
Enrollment	0.5%	2%	6%	12%
JHH/JHBMC	27	106	318	637
UMMC	26	103	310	620
Retention	0.1%	0.4%	2.1%	12.4%
				471
JHH/JHBMC	5	21	111	350
UMMC	5	21	108	341
Weight loss outcomes	n/a	n/a	n/a	1.8%
JHH/JHBMC	n/a	n/a	n/a	96
UMMC	n/a	n/a	n/a	93
*combined Medicare and Medicaid populations				

receive the 2012 CDC-Developed Curriculum,¹² which focuses on reducing risk through long-term lifestyle changes. Primary program elements are improving nutrition, increasing physical activity, and achieving a goal of 5-7% weight loss over 12 months. Strategies include self-monitoring of food intake and physical activity, increasing self-efficacy, utilizing social support, and basic problem-solving to achieve lifestyle change goals. The Brancati Center's curriculum is led, evaluated, and updated by a Senior Interventionist from the original (NIH) DPP randomized trial and CDC Master Select trainer. The curriculum includes the standard sessions

¹² CDC. Diabetes Prevention Resources. Accessed from https://www.cdc.gov/diabetes/prevention/resources/curriculum.html on May 15, 2020.

developed by the CDC as well as additional CDC-approved sessions developed by the Brancati Center to meet additional content needs ("Emotions and You", "Grocery Shopping on a Budget").

Table 4. DPP Expansion by Hospital Partners

Hospital partner	Currently Operating DPP Sites	Planned DPP expansion	Population focus	
ЈНН/ВМС	• 5 sites at CBOs*	 Continuation at existing sites (n=5) New sites[†] (n=27 over grant period) Online DPP (act₂, CDC-approved) 	 Overall reach Latinx population People with comorbidities HealthChoice members Medicare members 	
UMMC	2 on-site at UMMC1 site at a CBO (Forest Park Senior Center)	 Continuation at existing sites (n=3) New sites[†] (n= 20 over grant period) with multiple cohorts per site Online DPP (act₂, CDC-approved) 	 Overall reach High-risk populations Medicare members HealthChoice members 	
*Zion Baptist Church, Memorial Baptist Church, Garden of Prayer Christian Church, Israel Baptist Church, Under Armour House †Number of sites is lower if more than one group at a given site and depending on uptake of online DPP				

<u>In-person sessions</u>: In-person programs will be delivered in collaboration with community-based organizations (e.g., churches, senior centers, FQHCs) whose spaces provide a private area for weigh-ins and a suitable area for classroom-style, group learning for sessions. Based on DPP participant feedback, both UMMC and Brancati Center offer 33 sessions over the yearlong program (minimum required by CDC is 22), beginning weekly during the first five months and then transitioning to every-other-week thereafter

<u>Distance learning sessions</u>: Make-up sessions are offered via distance learning, most commonly through telephone calls between coach and participant. During COVID-19, in-person programs were converted to distance learning via Zoom and will continue, as needed. BMDRP anticipates a combination of in-person and distance learning for our in-person programs. Zoom sessions have been well-received with 96% attendance across 38 sessions.

Online DPP: During the national Medicaid DPP demonstration, approximately one half of Medicaid members selected to participate in an online, rather than in-person, DPP. Understanding the interest of this underserved population in an online DPP, the Brancati Center subsequently developed a CDC-recognized online DPP, Act Today to Prevent Type 2 Diabetes (act₂), which launched January 2020. Act₂ utilizes synchronous and asynchronous communication capabilities of an online platform to deliver a tailored, CDC-approved intervention. JHH/JHBMC will offer act₂ to Medicaid HealthChoice members who prefer an online modality. During year 2, UMMC will similarly implement an online DPP option, such as act₂.

<u>Wrap-around services</u>: DPP wrap around services (see Section 3.c.) support session attendance and lifestyle change. CHWs are integrated into the DPP to connect participants to services. CHWs get to know each participant, attend groups regularly, and assist with SDOH as they arise during the program. Over the past 2.5 years, Brancati Center CHWs have made 23 referrals for DPP participants (30% related to healthy food, 26% related to transportation, 17% other SDOH). UMMC DPP participants also have a 30% referral rate to wrap around services. Social workers are brought in for appropriate follow-up as needed.

3.a.4. Roles of the Participating Partners in DPP

Participating hospitals will work together and with community partners across the collective BMDRP service area to implement the DPP, as shown in Figure 1.

<u>Brancati Center</u>: The Brancati Center will provide DPP Centralized Management Services for BMDRP. Center faculty and staff will use their expertise to assist partner hospitals and community partner sites with

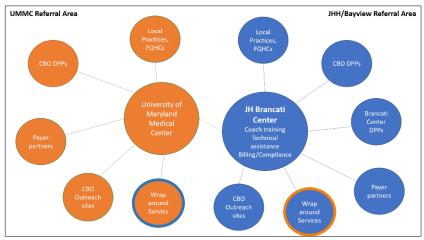


Figure 1. Hub and spoke model for DPP expansion in Baltimore City

infrastructure building (e.g., referral mechanisms, data needs), closely advise on program implementation, provide DPP Lifestyle Coach training and CDC certification, quality assurance, and closely track program outcomes.

<u>UMMC</u>: The UMCDE will facilitate expansion of DPP delivery for the UMMC's Downtown and Midtown Campuses in coordination with leadership in their Community and Population Health departments. UMMC will designate DPP

leadership to serve with The Brancati Center in BMDRP DPP Centralized Management Services roles.

<u>Community partners</u>: The Brancati Center has historically implemented two models of DPP in partnership with community organizations (Figure 2). In Model 1, The Brancati Center plays the major role in implementation and oversight for the DPP partner site, and the DPP is launched under the JHHS/Brancati Center's CDC organization code as the umbrella DPP organization. Model 2 shifts the primary delivery to the community-based organization under their own CDC organization code, with the intent that after the first year of program delivery, the community partner will be independent in delivering the DPP. BMDRP DPP partner sites will determine their long-term goals and which model is best for their organization. It is anticipated that most partners will choose Model 1 (umbrella DPP) based on past experience.

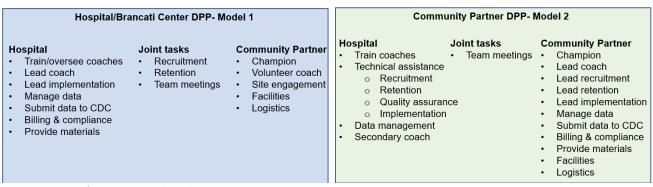


Figure 2. Models for Community-based DPPs

3.a.5. Implementation Components

The majority of Year 1 will be devoted to planning for launch of DPPs. BMDRP will work with CBOs to orient them to the DPP and determine the model (above) under which they wish to provide DPP at their sites. Tasks include establishment of outreach and recruitment procedures; identification and training of community coaches; execution of MOUs; set up of data procedures, including what data collection system community partners will use; and implementation of recruitment procedures. Key aspects of planning and implementation topics are described below. Planning occurs in each year as new DPPs are established.

DPP Technology Infrastructure Building

Technology will be an essential innovation for participant identification and outreach, referral processes, and program performance monitoring. Tasks are described in Table 5.

Table 5. DPP Technology Infrastructure Building Tasks

Technology Component	Description
Identifying Eligible Participants	Leverage existing tracking tools within Epic to create best practice advisories for
(provider level)	patients with prediabetes
Identifying Eligible Participants	Refine Epic report that refreshes on a daily basis identifying eligible participants
(population level)	based on hemoglobin A1c and BMI in past year and absence of diabetes
	diagnosis
Referring Eligible Participants	Development and implementation of Epic referral process for the DPP
Outcomes Tracking (internal	Develop a tableau dashboard to track each of the scale target outcomes
reporting)	
CRISP Tracking (external	Work with CRISP to ensure to ensure that data sources and target population
reporting)	definitions are in alignment with internal outcomes tracking
CRISP DPP Class Network	UMMC to begin work with CRISP to develop embedded DPP class referral system
	accessible to all community providers with access to CRISP; to be utilized by both
	JHH/JHBMC and UMMC
Social Media Presence	A marketing/PR firm will be consulted for advice regarding strategies to market
	the DPP and engage participants through the use of social media platforms
Online DPP	Integration of the act ₂ platform with Johns Hopkins' electronic health records
	system (EPIC), as well as establishing billing processes and procedures

DPP Workforce

JHH/JHBMC: The Brancati Center's existing infrastructure, with a rigorous, outcomes-based training curriculum, will support DPP implementation as follows: 1) DPP Master Select Trainer will train new lifestyle coaches to deliver the DPP program with a focus on program objectives/metrics, curriculum content, roles and expectations for lifestyle coaches, and documentation (CDC Lifestyle Coach Training and Certification); 2) Lifestyle coaches will complete training in participant confidentiality, cultural competence, data integrity as well as training to increase their knowledge of barriers to lifestyle change most frequently experienced by people in the community and potential solutions/available resources to address barriers identified by participants; 3) The Brancati Center has a physician, a Registered Dietician, and a Research Data Manager with content expertise in the DPP and data management/analysis; 4) Two additional staff will become DPP Master Trainers and 4) Continuous, year-round performance evaluations, quality assurance meetings, and feedback when the programs are implemented.

UMMC: The existing infrastructure of the UMCDE will be expanded significantly to support the migration of DPP into numerous new community sites in West Baltimore. Two staff will become DPP Master Trainers to perform new DPP Lifestyle Coach Training and Certification. One new CDE position, 3 additional CHWs, 2 Lifestyle Coaches, a Referral Coordinator, Case Manager, Social Worker, and Data analyst will be added to form a robust UMMC DPP operational infrastructure. The current medical staff of the UMCDE will continue to provide oversight to the new structure with leadership from Population and Community Health.

Participant Identification for DPP, including Provider Engagement and Referral

<u>Epic EMR</u>: BMDRP will leverage existing tracking tools within Epic to identify patients with prediabetes, including development and refinement of a prediabetes registry and development and implementation of an Epic referral process (Table 5).

<u>CRISP</u>: UMMC will take the lead to work with CRISP to develop a process for streamlined referral to community DPP classes for any provider with access to CRISP (Table 5). During the COVID crisis, CRISP was leveraged to list all available community testing sites throughout the state. UMMC leadership worked with the Baltimore City Health Department on this initiative, and discovered the broader application of this for DPP class referrals. CRISP intends to build this DPP referral system (See CRISP Letter of Support).

<u>Clinic-based referral</u>: BMDRP will work with providers within the respective health systems, with a focus on primary care given that is the location of most care of patients with prediabetes, to provide provider education, deploy a usable referral process (Table 5), and determine appropriate work-flows to identify and refer patients with prediabetes to a DPP. BMDRP will also do outreach to providers/clinics not within our health systems to increase referrals to the DPP, to supplement the CRISP-based DPP cross-referral process.

<u>Community outreach</u>: Roughly 80% of the Brancati Center's DPP participants have come from community outreach. BMDRP will work with each community site hosting a DPP to determine the most appropriate recruitment procedures for their community. Common community-based outreach mechanisms have included: advertisement and co-hosting of DPP Open Houses at community sites; co-led appeals at church services; word-of-mouth from prior participants; social media outreach; and posting of flyers. Community outreach will also occur via a formal marketing and public health campaign (see Section 3.d).

<u>Direct referrals from payers</u>: BMDRP will work with payers to determine and implement outreach approaches for their members that are informed by methods Brancati Center has done successfully with payers.

DPP Participant Engagement

<u>Screening</u>: Participant screening is a critical aspect of recruiting eligible and appropriate participants for the yearlong DPP. BMDRP will build best practices into workflows, including a standardized screening process that is associated with increased success with implementation of DPP. This screening process includes: 1) a structured questionnaire administered by telephone, in which a trained DPP lifestyle coach confirms clinical eligibility (i.e., age, absence of diabetes diagnosis, prediabetes, and elevated body mass index), and 2) a brief behavioral interview to determine if the participant is prepared to engage in the yearlong DPP. Potential barriers are determined (e.g., transportation) and get addressed for starting the program.

Retention and achievement of DPP outcomes: Screened and eligible participants are invited to a Session 0 of the DPP. They attend this initial group session to get a sense of the DPP experience and determine if this is the right program for them. Participants who attend Session 1 subsequently are considered enrolled. After enrollment, several approaches are taken to enhance participation and outcomes achievement, including: Individualized feedback on food and activity trackers, brief one-on-one meetings with lifestyle coaches to discuss progress and goals, follow up within 24 hours after a missed session using a standard retention protocol, an assigned Community Health Worker (CHW) to each DPP group to address barriers, and bimonthly DPP supervision meetings with DPP lifestyle coaches and CHWs with the Director for DPP Intervention. UMMC will utilize a peer mentor program to engage participants in their lifestyle learning and wrap-around services.

DPP Billing and Reimbursement Infrastructure Building

The Brancati Center is an approved Medicare and HealthChoice DPP supplier. UMMC will work during grant years 1-2 to become a Medicare and Medicaid DPP supplier. The Brancati Center launched its first Medicare-billable program in September 2019 (Zion Baptist Church) and plans to launch its first Medicaid-billable program (Memorial Baptist Church) in the fall of 2020. The Johns Hopkins Epic team has built custom flow

sheets for the DPP, and the Johns Hopkins billing department has configured the system to release claims in accordance with Medicare's and Medicaid's rulings. The Brancati Center will continue to build out sites in Epic to increase the number of billable sites. UMMC Downtown and Midtown and JHBMC will build the same infrastructure in grant year 1. The Brancati Center is currently contracted with two Managed Care Organizations, Priority Partners and Jai Medical Systems, as well as Johns Hopkins' Medicare Advantage plan. The BMDRP will conduct additional payer outreach (e.g., Medicare Advantage plans and MCOs) and establish contracts with new payers.

Data Collection for DPP Performance Measures and Outcomes

Table 6 outlines the measures and outcomes that will be collected and the method of data collection to evaluate program implementation and effectiveness as BMDRP proceeds toward meeting scale targets. Program data that are required by CDC for reporting every six months include self-reported sociodemographics, session attendance, physical activity minutes, and weight.

Table 6. DPP Process and Performance Measures

Measure	Brief definition	Data collection	
Process measures for DPP implementation	 Milestones outlined in the Implementation Work Plan Completion of DPP Session 1 	Program staff report on completion of meetings/tasks using tracking spreadsheet	
DPP reach measures	Screening yields, enrollment yields, and retention by recruitment modality	Data entered by program staff into database	
Participant data	Sociodemographic data required for CDC reporting	Self-reported by participant to coach on survey which is entered into database	
DPP effectiveness measures			
Session attendance	Presence/absence/make-up	Recorded by DPP coach into database on day of session	
Physical activity minutes	Minutes of physical activity in past 7 days	Self-reported by participant and recorded by DPP coach into database on day of session	
Weight	Weight on day of session	In-person: Measured by trained DPP coach using calibrated scale and entered into database Distance learning session: self-reported by participant using DPP-provided scale and entered into database	
Billing measures	Claims submitted, claims paid, and payment rates	Extracted by Billing and Compliance staff and exported to csv file	
* REDCap database (JHH/JHBMC) or Workshop Wizard (UMMC)			

3.b. Diabetes Self-Management Training (DSMT)

3.b.1. DSMT Target Population and Model to be Implemented

The target population for DSMT is shown in Section 2, Table 2. To reach the HSCRC's yearly scale targets, the BMDRP will establish 10 new accredited DSMT program locations across the service areas. The DSMT model will follow the National Standards for Diabetes Self-Management Education and Support (DSMES).¹³

¹³ 2017 National Standards for Diabetes Self-Management Education and Support. Diabetes Care Oct 2017, 40 (10) 1409-1419. Beck J, Greenwood DA, Blanton L, et al. 2017 National Standards for Diabetes Self-Management Education and Support. Diabetes Educ. 2020;46(1):46-61.

<u>DSMT Centralized Management Services</u>: JHH/JHBMC and UMMC have a long history of recognition as accredited DSMT programs under the Education Recognition Program (ERP) of the American Diabetes Association (ADA). Given the expertise and experience of these large academic medical centers in delivering DSMT, they will serve as the core hub for development and expansion of new DSMT clinic sites throughout the hospitals' service areas. In Year 1, the focus will be on either a) expanding clinic sites under the existing accreditation of the regional partner hospitals or b) development of new ADA accredited programs. The DSMT Centralized Management Services of the BMDRP will define and document a mission statement and goals, seek ongoing stakeholder input (DSMT instructors, referring providers, patients, community partners), and evaluate the communities served by BMDRP to determine the optimal resources, design, and delivery methods of the DSMT programs that will best align with the population's need. This comprehensive needs assessment may reveal opportunities for improvement of the existing ADA accredited programs at JHH/JHBMC and UMMC; however, the existing models of DSMT in place at these academic medical centers institutions will serve as the foundation for the new programs.

ADA Approved DSMT Curricula: The ADA's Life with Diabetes (6th edition) and Diabetes Conversation Maps will be used as the DSMT curricula, both of which meet the National Standards for DSMES. Life with Diabetes is a series of teaching outlines that offers a detailed and complete guide to diabetes topics, with illustrations, visual teaching aids, patient handouts, participant assessments, education records, and an extensive support material section. Diabetes Conversation Maps, which were developed in 2007, were designed to shift group DSMT instruction away from a lecture-style format to more of a discussion. Through the regional partnership, DSMT instructors will have access to and, as desired, expert training in, more than one ADA-approved curriculum to further enhance program quality and maximize the benefit.

Instruction Modalities: Both in-person and telehealth DSMT services will be offered to participants to increase access and engagement. As a result of COVID-19, the Centers for Medicare and Medicaid Services (CMS) has issued the 1135 waiver allowing DSMT services to be provided by qualified providers remotely to a patient in the patient's home via video (audio permitted if audio/video is not possible). Given uncertainty with the trajectory of the COVID-19 pandemic in Maryland, BMDRP anticipates that this waiver will remain in place at least through the end of 2021 or when a vaccine or effective treatment for COVID-19 becomes available. Since April, 2020, the DSMT programs at JHH/JHBMC and UMMC have been offering video visits for group and in-person instructions, and participants have expressed positive feedback about this modality. In fact, DSMT patient volumes have increased significantly as a result of this telehealth option. Considering that transportation can be a barrier to in-person attendance of DSMT, it is hoped that the more convenient telehealth modality will remain a long-term reimbursable option.

<u>Individualization:</u> An individualized DSMES plan, developed in collaboration with the participant based on their priorities and needs, will be designed for each participant at the initial visit. For participants who are followed in hospital-based clinics affiliated with JHH/BMC or UMMC, the individualized DMSES plan will be entered into Epic, the electronic medical record, using a recently developed DSMES smartform and episodes tracker (available with November 2020 version of Epic), which allows for seamless tracking and monitoring of participant progress in the EMR.

<u>Diabetes Support Programs:</u> In 2019 ADA launched a Diabetes Support Program Directory of ADA-vetted and recognized programs for long-term support following DSMT. DECIDE, an ADA-recognized Diabetes Support Program, will be incorporated into CBOs. In addition, several peer support strategies will be available (see further Details in Table 7 in the next section).

3.b.2. Services and Interventions DSMT Patients will Receive

Individual and group DSMT will be provided by qualified healthcare professionals in both face-to-face and telehealth hospital-based outpatient clinics, community-embedded ambulatory clinics, and community pharmacy (Walgreens) clinics. JHH/JHMBC and UMMC have existing remote patient monitoring (RPM) programs that will provide real-time support to assist participants in achieving their goals. Since 2013, JHH has had a partnership with Johns Hopkins Home Care Group to provide RPM for patients discharged from the hospital, providing weight, blood pressure, and diabetes data monitoring for high-risk patients. The DSMT team will review and respond to remote participant data to provide just-in-time and adaptive support. Table 7 presents several additional DSMT intervention enhancements that will be used to improve program implementation and patient outcomes, including clinical decision support, healthy nutrition for diabetes self-management, weight loss goals, and a social media and in-person peer support communities.

Table 7. Established DSMT Interventions and BMDRP DSMT Innovations

Intervention	Description
Formal DSMT	·
ADA-approved curricula	ADA's Life with Diabetes (6th edition) and Diabetes Conversation Maps
Delivery modalities	Individual DSMT assessment, Individual DSMT, Group DSMT
Remote Patient Monitoring	
Weight tracking	Participant weight monitoring using Bluetooth-enabled scale
Physical activity tracking	Apps for step tracking/sharing (Pacer?)
Glucose monitoring	Use connected glucose meter (e.g. OneTouch Reveal) for remote glucose data monitoring/sharing
Clinical Decision Support	
Personalized insulin titration	DreaMed Advisor Pro ⁶ (Type 1 diabetes) is an FDA approved, cloud-based Al system that aggregates and transforms dynamic, real-time patient data into actionable insulin treatment recommendations; Mellitus Health Insulin Insights ⁷ for precision insulin dosing. Utilized by UMMC
Remote data sharing instructions	Web page with instructions on how to download and share data from various diabetes devices (pumps, meters, CGMs) with clinic team
Diabetes resource centers	Kiosks with videos of diabetes facts, information on diabetes, exercise and food resources within given neighborhoods at recreation centers, churches
CRISP Community DPP Class Network	Development of listing of all community DPP classes within CRISP for streamlined referrals by any provider with access to CRISP
Universal diabetes data management platform	Glooko ³ syncs with 95% of diabetes devices simplifying the syncing and sharing process of diabetes devices
Nutrition	
In-person grocery store tours	Nutritionist-led grocery store tours to help participants identify variety of healthful options, review nutrition facts and labels, and sample new foods
Virtual grocery store tours or videos	Recorded nutrition-led grocery store tours (alternative to in-person option given social distancing limitations)
In-person cooking classes	Cooking classes led by nutritionists or invited culinary experts
Virtual cooking classes or videos	Live streaming or pre-recorded cooking classes led by nutritionists or invited culinary experts

Healthy recipe submissions	Challenge participants to submit a healthy recipe they tried, with group voting (e.g. Facebook group)
Seven-day NO challenges	Group challenges to avoid certain unhealthy foods (junk foods, soda, chips, etc.) for 7 days. Group members check in each day to talk about how they are doing and benefits they are experiencing (e.g. Facebook)
Physical Activity	
Fitness trainer instruction	Invited fitness trainers to speak at group classes
Physical activity video library	Create educational video library of a variety of physical activities, including those for patients with underlying comorbidities (e.g. arthritis)
Physical activity coaching apps	Noom, Omada apps provide automated or virtual coaching for physical activity
Walking trails or mile markers	Partner with the Dept. of Recreation to identify safe walking/running/biking trails and place mile markers at locations within each service area
Group mileage challenges	Group challenge to achieve collective walking/running/cycling mileage in a defined timeframe. Results updated in real time in group forum (e.g. Facebook).
Weight Management	
Group weight loss challenges	"Lose a ton" challenge, in which all participants enrolled in the program work together to achieve a group weight loss goal
Weight management programs	Compile a list of weight management programs in the service area and liaise with programs to develop streamlined referral processes
ADA Diabetes Support Directory	https://www.professional.diabetes.org/content-page/diabetes-support-directory
DECIDE Self-Management Support Program www.hopkinsdecideprogram.com	Evidence-based, ADA-recognized Diabetes Support Program (Research Tested) led by trained lay DECIDE facilitators in community settings. DECIDE improves long-term health-related problem solving for self-management in the context of real life barriers, and improved clinical and behavioral outcomes in participants with diabetes and comorbidities.
Peer support	
Social media groups (Facebook, Twitter)	CDE-led Facebook and Twitter pages with live sessions, question & answer forum, invited speakers, and educational materials listed above.
Peer mentoring program	Identify existing patients who have successfully completed DSMT program as a patient who have a desire to share success stories with and support current participants in the program.

3.b.3. Target Patient Population(s)

Medicare beneficiaries who have at least one inpatient or emergency department encounter in a regional partnership hospital (JHH, JHBMC, HCGH, Suburban, UMMC) AND an ICD-10 code for diabetes mellitus within the hospital service area zip codes will be the target patient population for this regional partnership (Section 2.b). A targeted screening approach using EMR "opportunity reports" (to be developed in Year 1) will be used to identify patients who have the greatest need for this service (e.g. new diagnosis, A1C >8%, recent hospitalization or ED visit for glucose-related issue, relevant SDOH).

3.b.4. Roles of the Participating Partners in DSMT

Hospital Partners

<u>JHH/JHBMC/UMMC:</u> These hospital outpatient DSMT partners will serve as the DSMT centralized management services core, as described in Section 3.b.1.

<u>HCGH/Suburban Hospital</u>: To ensure that patient experience and benefits related to DSMT services are consistent and standardized across JHHS, two of the JHHS community hospitals, HCGH and Suburban Hospital will collaborate for DSMT program-building and extending DSMT services into community partner clinical sites. Neither hospital currently has ADA accredited DSMT. Each hospital will identify a quality coordinator to work with the DSMT centralized services core for the DSMT program-building, accreditation, and activities.

Community Partners

CMS policy requires specific clinical venues for delivery of DSMT, and lay persons are not permitted to deliver DSMT.¹⁴ In addition to the hospital outpatient services above, community-embedded ambulatory clinics, FQHC, and community pharmacies are approved sites that will be utilized.

Community Ambulatory Clinics/FQHCs: Johns Hopkins Community Physicians (JHCP) has identified 8 community-based clinics in Baltimore City, Baltimore County, Howard County, and Montgomery County that serve a large proportion of the target population for the JHHS regional partnership hospitals. JHCP will identify a QI lead to serve on the advisory group of the DSMT core to help identify current barriers to DSMT referral and proposed solutions, assist in the interviewing and recruitment process of qualified certified diabetes care and education specialists (CDCES) to provide DMST instruction in JHCP locations, assist with coordination of clinical scheduling to accommodate existing CDCES staff at JHCP locations, assist in the development of marketing materials to increase JHCP provider awareness of DSMT services, identify additional community resources to increase awareness of local DSMT programs, and conduct community health fairs and/or diabetes expos at JHCP clinic sites. Chase Brexton, an FQHC, has expressed interest in exploring partnership for delivery of DSMT as well.

<u>Columbia Medical Practice (CMP)</u>: CMP is the leading multi-specialty group in Howard County, with 30 providers. A large proportion of the DSMT target population for HCGH (~1700 patients per year) is cared for at this practice, and there is currently a lack of DSMT programs to support this practice. In Year 1 of this grant, the DSMT core hub will assist CMP in training and recruitment of a CDCES and help set up the clinic to attain ADA accreditation.

Community Pharmacies: Walgreens Pharmacy and Johns Hopkins Health System have a long-standing history of collaboration (see Letter of Support). In Year 1, three possible models for collaboration: a) assist in training of existing Walgreens pharmacists to become CDCES who deliver and bill for DSMT, b) new Walgreens CDCES hire(s) to build and deliver DSMT, c) assign JHH/JHBMCs or UMMC DSMT instructors to rotate through Walgreens pharmacy clinic. In addition, there is an opportunity to develop training videos and informational materials to link DSMT directly to diabetes testing supplies sold in Walgreens stores, or expanding use of telehealth services. Additional pharmacy partnerships will be explored in Year 1. For example, Suburban Hospital has a partnership with Foer's Pharmacy.

<u>Baltimore City and Maryland Departments of Health</u>: The BMDRP will partner with city and state health departments to promote and market DPP and DSMT programming. DSMT regional partnership webpage will be linked to both health department pages to help patients easily identify their closest DSMT program. Also see Section 3.d.

3.b.5. DSMT Implementation Components. Planning and implementation activities begin in Year 1 and continue throughout the grant period, as new DSMT programs are built, accredited, and launched for enrollment (see *Implementation Work Plan*).

¹⁴ Medicare Reimbursement Guidelines for DSMT https://www.cdc.gov/diabetes/dsmes-toolkit/reimbursement/medicare.html

The DSMT centralized management support will include clinical experts from JHH/JHBMC and UMMC. Year 1 will consist of knowledge transfer and sharing of best practices, development of new workflows, establishment of remote patient monitoring tools, collaboration with community partners, EMR programming, and dashboard building to effectively monitor performance of the joint initiative over the 5-year period. In addition, core hub leadership from JHH and JHBMC will plan and implement new DSMT programs at CMP serving HCGH, Suburban Hospital, JHCP, and Walgreens pharmacy. Collaboration of the DSMT initiative will be done using Microsoft Teams, a unified communication and collaboration platform that combines persistent workplace chat, video meetings, file storage (including collaboration on files), and application integration.

<u>Community partners</u>: BMDRP will work with CMP, JHCP, and Walgreens clinic sites to orient them to DSMT programs and establish their interest in providing DSMT under the model described in Section 3.b.2. DSMT Centralized Management will work with each site to recruit DSMT instructors and quality coordinators, provide information about CDCES certification, execute MOUs, set up data procedures (including ADA ERP reporting database and any additional data collection system non-Epic clinic sites will use) and implement recruitment procedures. Chase Brexton has indicated an interest in partnering with the BMDP to offer DSMT. This potential partnership will be planned during Year 1.

Payers/reimbursement: A prerequisite to billing Medicare for DSMT services is obtaining accreditation through ADA or ADCES as both organizations meet or exceed CMS quality standards for DSMT as outlined by the National Standards for Diabetes Self-Management Education Support. University of Maryland Medical System (UMMS) has a single ADA accredited program across 5 affiliated sites. The JHH DSMT service currently holds accreditation through the American Diabetes Association, with JHH as the "parent site" and JHBMC as a "multi-site," or semi-independently operating location. Prospective DSMT sites for BMDRP include SMH, HCGH, several JHCP sites and, a community Walgreens. It is anticipated that each site will operate semi-independently with oversight from the parent site. Sites must be able to provide DSMT and meet documentation standards before an application can be submitted. This will require harmonization of DSMT specific EMR tools at each location. The JHH DSMT quality coordinator will provide and oversee training related to the ADA DSMT standards to multi-site team members. In order to meet the scale targets outlined by the HSCRC, DSMT sites must have the ability to bill Medicare prior to January 1, 2022. Prospective DSMT sites should have multi-site accreditation applications submitted on or around 8/1/2021 to allow time for application revisions, if required.

DSMT Technology Infrastructure Building

Table 8 outlines opportunities to make enhancements in the EMR for patient ascertainment, streamlined referrals, tracking of participant progress, and tracking of population outcomes (i.e. scale targets). Established Epic programmers within JHHS and UMMC to refine existing tools at each of these steps and ensure standardization across both health systems.

Table 8. DSMT Technology Infrastructure Building

Technology Component	Description
Identifying Eligible Participants	Leverage existing tracking tools within Epic to create best practice advisories or
(provider level)	patient header flags to increase provider awareness
Identifying Eligible Participants	Create an Epic report that refreshes on a daily basis identifying eligible
(population level)	participants, most recent A1C, diabetes-related complications, and key SDOH.
	Increase awareness of DSMES Benefits Tracker (see Appendix B. Current DSME
	Benefit Tracker in Epic)

Referring Eligible Participants	Streamline electronic referral form, including automated entry of relevant questions (e.g. complications, diabetes diagnosis type), simplification of referral form, and/or "teed up" referrals by DSMT team
MyChart messaging to Eligible Participants	Outreach eligible patients directly via Epic MyChart messages with information about DSMT, available programs and schedules, and direct sign up
Individualizing/documenting DSMT plan	Use "Episodes of Care" functionality in Epic to create and document an individualized education plan (available with Nov 2020 upgrade; see Appendix C. New Epic DSMES Worfklow)
Tracking DSMT plan	Use built-in Epic DSMES tracker to monitor progress of participant across the program (available Nov 2020 upgrade)
Remote Patient Monitoring (RPM)	Explore the use of Healthy Planet (part of EPIC) as an interface with RPM
Patient Webpage	Develop a regional partnership website linked to respective webpages of hospital and community partners

DSMT Workforce

Studies have shown that DSMT is most effective when delivered by a multidisciplinary team. ¹⁵ Each DSMT program will be comprised of: 1) Certified Diabetes Care and Education Specialists (registered nurse, registered dietician, pharmacist holding certification as a CDCES, who will deliver DSMT instruction and bill for services); 2) *Quality Coordinator* responsible for oversight of each ADA accredited program, evaluation of program effectiveness, and continuous QI; 3) *Social workers* responsible for integration of social needs into diabetes care; 4) *CHWs* providing peer, culturally-informed outreach, linkage to community resources, education reinforcement, social support, and advocacy in community/home settings; 5) *Administrators*; and 6) *Referral coordinators* responsible for identifying referrals, scheduling patients, reviewing IT-driven opportunity reports to identify eligible participants and "teeing up" referrals for primary care physicians.

DSMT Patient Ascertainment and Engagement

The first step in increasing access to DSMT is identifying individuals who are eligible for the benefit. Unfortunately, busy primary care physicians do not have time during an encounter to search through the EMR to verify whether a patient has previously received DSMT. Although Epic has a built-in DSME benefit tracker visible in the snapshot view for each participant, many clinicians may not be aware that this tracking system exists or the information may be buried. Two solutions will be implemented. The first is Technology Infrastructure Building previously described. The second is the Johns Hopkins Patient Engagement Program (PEP). Some patients who are eligible for DSMT may be initially reluctant to engage in the program. Providers need additional motivational interviewing training and resources to motivate patients to initiate DSMT. PEP at Johns Hopkins offers training to increase providers' ability to engage patients as active partners in their care. Year 1, PEP training materials aimed at increasing patient engagement around DSMT will be developed.

Provider Engagement and Referral

There are multiple provider-level barriers to DSMT referral, including lack of knowledge about DSMT, lack of awareness of availability of local DSMT programs, lack of available DSMT programs, perceived lack of benefit from the service, confusing referral process, lack of understanding about reimbursement for DSMT, concerns about insurance coverage and costs to the patient, and lack of relationships between hospitals where DSMT services are offered and community clinics where eligible patients are seen.

¹⁵ Beck J, Greenwood DA, Blanton L, et al. 2017 National Standards for Diabetes Self-Management Education and Support. Diabetes Educ. 2020;46(1):46-61.

Medicare requires a detailed referral to justify DSMT services. Completion of such a detailed referral form is daunting and time consuming, and it is a deterrent for busy PCPs. Providers would welcome assistance with identifying and referring eligible participants.

To overcome many of these barriers, in Year 1 a systematic needs assessment will be implemented to prioritize CDC-proposed strategies to overcoming these barriers, including: a) reducing burden of referral process; b) closing referral loop to reinforce buy-in; c) establish referral network through use of promotional materials; d) create care pathways and EMR automation; e) identify and partner with relevant specialists (podiatrists, ophthalmologists, wound care specialists, etc.) to refer people with uncontrolled diabetes.¹⁶

The Association of Diabetes Care & Education Specialists provides a list of "tips for reaching prescribers," which will be systematically incorporated into our existing and new programs. The CDC providers sample provider letters and flyers that will be adapted for our program. Using the CDC's DSMT health communication and marketing toolkit as a framework, a marketing/PR firm will be consulted to identify optimal strategies for communicating with healthcare providers.

DSMT Billing and Reimbursement Infrastructure Building

Each DSMT site must obtain ADA accreditation and submit a copy of their program certificate to the Medicare MAC in order to become eligible to receive CMS reimbursement for DSMT. Outpatient hospital locations included in BMDRP will provide DSMT in regulated space and claims will be submitted to Medicare Part B utilizing their hospital or facility NPI number. All outpatient hospital locations are currently enrolled with Medicare Part B, therefore professional team members need not be CMS approved providers to bill under the facility, however, must meet DSMT educator standards per the American Diabetes Association. Hospital charges corresponding to individual and group DSMT training codes; G0108 and G0109 will be built within the EMR for each site. Professional team members who will furnish DSMT in regulated space include but are not limited to RNs; RDs; PharmDs; and NPs.

For locations that are considered unregulated space, claims must be submitted under the NPI number of an individual Medicare Part B provider. Notably, an individual provider cannot enroll with Medicare solely to bill DSMT, and thus must be able to bill Medicare Part B for at least one other non-DSMT service [(such as a Registered Dietitian who provides medical nutrition therapy (MNT)]. The following provider types are permitted per CMS to bill independently; RDs, MDs; PAs; NPs; LSWs, nurse midwives and clinical psychologists. The appropriate professional fee charge captures corresponding to the individual and group DSMT training codes, G0108 and G0109 will be made available within Epic at each JCHP location.

Per CMS regulations, for any single patient, only one entity or individual provider can bill Medicare for initial and follow up training. To ensure payment in unregulated space, a primary educator will be identified at each JHCP site, and their NPI number used to bill all DSMT claims.

Remote patient monitoring is a financially sustainable service, as there are currently CPT codes (99453, 99454, and 99457, 99458) that cover initial patient monitoring equipment and setup (\$21), device transmission fee (\$69/month), and monitoring and treatment (\$53/month).¹⁷

¹⁶ Beck J, Greenwood DA, Blanton L, et al. 2017 National Standards for Diabetes Self-Management Education and Support. Diabetes Educ. 2020;46(1):46-61.

¹⁷ Physician Fee Schedule Search. Centers for Medicare & Medicaid Services. (https://www.cms.gov/apps/physician-fee-schedule/search/search-criteria.aspx). Accessed July 11, 2020.

Data Collection for DSMT Performance Measures and Outcomes Monitoring

Table 9 shows primary performance measures and outcomes data that will be monitored

Table 9. DSMT Process and Performance Measures

DSMT Measures	Description			
Outcomes Tracking	Develop a tableau dashboard to track each HSCRC scale target progression			
CRISP tracking (external	Work with CRISP to ensure that data sources and target population definitions are in			
reporting)	alignment with internal outcomes tracking			
DSMT Process	DSMT enrollment, participation, retention, and completion. DSMT Instructor			
Measures	documentation of participant attendance and completion of program, and survey-			
obtained satisfaction ratings				
ADA ERP Outcomes	Process Outcomes (https://erp.diabetes.org/resources/blank forms/blank erp app Org ALL.php)			
	Performance Outcomes			
	A1C: % of participants with decrease			
	 A1C: Actual decrease in value (mean, SD) 			
	ER Visits due to diabetes: % of participants with decrease			
	Hospital admissions due to diabetes: % of participants with decrease			
	Weight change: % of participants with decrease			
	Weight change: actual decrease in value			
Sociodemographics and	Age, gender, race/ethnicity, zip code, Area Deprivation Index, Epic SDOH wheel (useful			
Needs	also to assist the DSMT team in coordinating the necessary wrap-around services or			
	referrals to ancillary programs to best support participants).			

Participant progress will be monitored using built-in tracking tools in EPIC. EPIC EMR data from all clinic sites in BMDRP will be captured by CRISP for outcome evaluation. For participants who are seen at community health clinics outside of the health-system, data will be captured using RedCap.

3.c. Wrap Around Services

Wrap around services are designed to mitigate known barriers that stand in the way of people with prediabetes and diabetes: 1) enrolling in, attending, participating in, and completing DPP and DSMT; and 2) having the ability to carry out the behavioral and lifestyle change activities that are the focus of DPP and DSMT. SDOH, health system barriers, community level barriers, and individual level barriers stand in the way of people both participating in DPP and DSMT and carrying out the lifestyle change behaviors. The National Academy of Medicine recommends a model of integrating social needs into medical care to address SDOH as a primary barrier to achieving population health outcomes, especially in minority and underserved communities of health inequity in the U.S. ¹⁸ In addition, diabetes-specific models demonstrate the role of everyday life barriers and challenges in impeding the integration of diabetes lifestyle and self-care behaviors, resulting in worse disease outcomes. ¹⁹ Based on these models, BMDRP wrap around services are designed facilitate and support achievement of DPP and DSMT program goals.

In addition, Because diabetes and prediabetes are known diseases of health disparity, **Health Equity Trainings**, including Unconscious Bias trainings for providers at hospital and community-based care sites, and Race, Ethnicity and Language (REaL) and sexual orientation and gender identify (SOGI) trainings will be

¹⁸National Academies of Sciences, Engineering, and Medicine. Integrating social care into the delivery of health care: moving upstream to improve the nation's health, National Academies Press: 2019.

¹⁹ Hill-Briggs F. Problem solving in diabetes self-management: A model of chronic illness self-management behavior, Annals of Behavioral Medicine, Volume 25, Issue 3;2003. pp 182–193.

available to workforces to mitigate unintended biases that impact outcomes of care. These formal trainings will be conducted by the Office of Diversity, Inclusion, and Health Equity at JHHS, and available on-site at partner organizations (see Letter of Support).

3.c.2. Specific Wrap Around Services, Participating Partners, and Data

Table 10 presents a sampling of the wrap around service interventions, partners, and data for process and performance evaluation.

Table 10. Wrap Around Specific Services, Partners, and Performance Measures

	rvices, Partners, and Performance Measure	
Specific Services and	Partners for Wrap Around Services	Data for Process and Performance
Interventions		Measurement
Food Access and Insecurity. Access to healthy foods in alignment with DPP and DSMES/DSMT nutrition recommendations.	 Hungry Harvest, Moveable Feast East Baltimore Partnership Food Network UMMC Mobile Market UMCDE Food Pantry 	 # of referrals to food support partners % of population requiring food support Amount of food support per person Food Insecurity Pre- and Post-Tests Pounds of rescued produce re-distributed
Medication access and affordability. Ensure able to secure and afford prescribed medications/supplies, especially insulin.	 Diabetes Center supports: Patient Assistance Foundations, TAP, and Medication Assistance tool https://www.mat.org/ Foer's Pharmacy 	 # of referrals for medication/supply support % of population requiring medication/supply support Amount of medication/ supply per person
transportation. Ensure supports to attend programs and classes	Lyft, RoundtripParking passes for fee parking in paid parking garages	 # of referrals to transportation support partners % of population requiring transportation support Cost of transportation support per person
Community Health Worker (CHW) services	Brancati Center CHWsUMMC CDE CHWsDiabetes Center CHWs	# referrals to CHWsBarriers/needs identifiedServices and interventions
Community Care Teams (CCT)	 Care coordination, care management by Community Health Nurse (RN), Community Social Worker (LCSW-C) and CHW 	 # referrals to CCT % of DPP and DSMT populations requiring CCT CCT service-specific outcomes
Psychosocial and behavioral health services in alignment with standards of DSMES and psychosocial care ²⁰	 Diabetes psychological services (CMS-reimbursed). See CPT codes and fee schedule. 	 # of referrals to psychologist services % of population requiring behavioral health support Diagnostic prevalences
Provider DPP/DSMT education and skills training to facilitate patient engagement in programs	 Patient Engagement Program (PEP), interdisciplinary modules and workshops for providers (See Letter of Support) 	 % of workforces enrolled in PEP (physicians, nurses, care managers, CHWs) DPP/DSMT referrals and participation rates associated with provider PEP training
Health Equity Trainings	 Race, Ethnicity, and Language (REaL) and sexual orientation and gender identity (SOGI) access Unconscious Bias 	 % of identified workforce/roles enrolled in trainings, and association of REaL/SOGI trainings with equity data Association of Unconscious Bias trainings with program referrals and outcomes

3.c.3. Target Populations for and Implementation of Wrap Around Services

²⁰ Young-Hyman D, de Groot M, Hill-Briggs F, Gonzalez JS, Hood K, Peyrot M. Psychosocial Care for People With Diabetes: A Position Statement of the American Diabetes Association. Diabetes Care Dec 2016, 39 (12):2126-2140.

SDOH wrap around services will be available to all DPP and DSMT populations in the BMDRP service areas implementing the programs. SDOH needs and wrap around services are currently assessed and managed by personnel within the DPP and DSMT program themselves, by partner hospitals, and by community care teams in some service areas. During Year 1 BMDRP will complete planning for needs assessment, coordination of wrap around services, and technology infrastructure for streamlined referral and follow-up, as well as documentation and tracking for wrap around service evaluation of effectiveness in achieving BMDRP goals. Provider/workforce wrap arounds (PEP and Health Equity Trainings) will also be available to all workforces.

3.d. Innovations

Each of the Proposed Activities described (DPP, DSMT, wrap around services) includes innovations. First, all will rely on new technologies for operational efficiency and linkages both within organizations and across regional partnership organizations and regions. A particular innovation will be the CRISP inventory of DPP programs across the City/State which is available to providers for patient referrals. Second, the implementation and Epic EMR integration of Glooko, a universal diabetes device download software, is a major innovation of this proposal. To our knowledge, the BMDRP would be the first program in the country to have a fully EMR-integrated universal diabetes device software for remote monitoring of a broad range of diabetes patient data. By pulling Glooko flowsheet statistics directly into Epic, there are unprecedented opportunities to develop targeted workflows to identify at-risk patients for proactive outreach for DSMT, to tailor DSMT further to individual patients' clinical needs, and to track the impact of DSMT on immediate glycemic outcomes. A third innovation is the community extension of DSMT through an ADA-approved Diabetes Support program, DECIDE, that enables long-term life skills enhancement for managing diabetes in the context of daily life, proven especially effective with populations of health inequity (lower socioeconomic status, racial/ethnic minorities, and persons with vision or cognitive impairment). Additional, peer-based formal support programs are also integrated. Fourth, community pharmacy locations will be established as ADA accredited DSMT programs with reimbursement. Finally, provider supports are innovative, including PEP trainings for skills to increase patient engaging in DPP and DSMT, and health-equity trainings to address dynamics that contribute to prediabetes and diabetes inequities See Letters of Support for each). Each innovation within this proposal will be disseminated to population health audiences through shared learning networks and to evidence-based practice audiences through publication, with a goal of advancing best practices and evidence.

3.e. Marketing and PR Campaign

A Marketing and PR firm will be hired in Year 1 to provide strategy for and implement a Baltimore City-wide public health campaign for DPP and DSMT over the 5-year period. Reach will include broad as well as targeted communications within communities most in need, and social media. In addition, the firm will provide tailored marketing and PR strategy to serve HCGH and Suburban Hospital service areas in Howard and Montgomery counties, respectively. Additional opportunities are partner site-specific communication campaigns (e.g. pamphlets, videos on plasma screens in hospital spaces and clinical waiting areas).

4. Measurement and Outcomes

The BMDRP will utilize reporting tools that the HSCRC is working with CRISP to develop to measure progress toward scale targets. HSCRC will make these tools available to the RP as they are developed. In this section, additional tools and program-specific measures are described that the BMDRP will use to coordinate and measure its progress toward scale targets. Measures used to assess the quality and outcomes within health

care organizations and systems typically rely heavily on the Donabedian²¹ model of structure, process, and outcome measures. Described are structural, process, and performance measures that will be used to achieve outcomes as defined in the expected scale targets. In addition, program-specific (internal) outcome evaluation is described.

4.a. Structural Measures

Structural measures are defined as elements which define the "capacity, systems, and processes" which must be in place to deliver high quality health care. These elements must be in place in order to provide a sound foundation for the remaining four years of the grant period. For purposes of this application, the following structural measures will be assessed at the conclusion of the first year of the grant, CY 2021. Implementation of the following groups during the first quarter of Year 1, with a designated schedule: BMDRP Governance Council (with representation from JHM and UMMC), Management Committee, Operations Committee, Community Advisory Committee. By conclusion of Year 1 convening the Baltimore City LHIC with Director in place, Epic build-out of Prediabetes and Diabetes Registries with connectivity to CRISP for program community class listings and CHW access, and staff hired for JHHS and UMMC's BMDRP expansions.

4.b. Process Measures

Process measures are defined as actions taken by health care professionals to maintain and/or improve an individual or population's health. These actions drive progress to the expected or anticipated outcomes and are used to measure progress towards the scale targets. The DPP and DSMT process measures and data collection are described in Tables 6 and Table 9, respectively. These dashboards and documentations will be used in real-time to guide any modifications to strategy implementation for processes including participant outreach, enrollment, retention, and completion. CRISP reports to be developed for this HSCRC diabetes RP grant will be critical for coordinating data across BMDRP and its partner hospitals for quality monitoring.

4.c. Performance Measures

Performance measures indicate effectiveness of the programs in achieving behavioral and clinical outcomes. The CDC-required performance measures for DPP (attendance, physical activity, weight loss) and the ADA ERP specific performance measures for DSMT (A1C, ER visits, hospitalizations, weight loss) are also reported in Tables 6 and Table 9. These will be evaluated at 6 month- and 12-month time points during program scaling and implementation Years 2 – 5.

4.d. Program-Specific Outcomes Evaluation

An internal evaluation will be planned to answer questions necessary for JHHS and UMMC decision-making regarding DPP and DSMT impact and future program investment. Preliminary evaluation objectives are to: 1) examine whether the programs are associated with potentially avoidable utilization (PAU), i.e. reductions in ED visits, hospitalizations, and readmissions associated with enrollment in DSMT and DPP, respectively, vs. comparator groups; 2) track incident diabetes over 5 years in the prediabetes population that receives DPP vs comparator in order to quantify prevention or delay in progression to type 2 diabetes/risk reduction in our regional partnership population(s); 3) evaluate questions of health equity, such as benefits from DPP, DSMT enrollment, and completion by race/ethnicity, age, gender, service area zip codes, and other population demographics; 4) examine patterns of use of and benefits from Wrap Around Services in achievement of DPP and DSMT outcomes; 5) determine performance of individual partner sites with regard to program outcomes and mediators and modifiers of effect; and 6) participate with the Finance Team in cost and cost savings analyses.

²¹ Agency for Healthcare Research and Quality (2015). Types of healthcare quality measures. Retrieved from: https://www.ahrq.gov/talkingquality/measures/types.html

5. Scalability and Sustainability

For sustainability of the Baltimore City-wide diabetes prevention and management programs, across RPs, The BMDRP commits investment in Initiating a **local health improvement council (LHIC)** with the Baltimore City Dept. of Health to focus on diabetes and promote diabetes health education and type 2 diabetes prevention. For regional and national sustainability efforts for DPP and DSMT, the American Diabetes Association is committing \$25,000 to BMDRP, if funded, to **create a Shared Learning Bridge** with other East Coast area initiatives, fostering a national learning collaborative for diabetes population health.

Regarding DPP and DSMT sustainability, specifically, these programs were selected by HSCRC because of their evidence of effectiveness in reducing diabetes burden via prevention or delay of type 2 diabetes (DPP) and via improvement in clinical markers associated with reduced risk of diabetes complications and excess utilization (DSMT). To sustain and continue to disseminate DPP and DSMT programming after the funding is discontinued, building the infrastructure for CMS billing and reimbursement both for DPP and DSMT are a priority in Year 1 in order to achieve scale target measurement. Billing and reimbursement can cover the program costs of DSMT. However, billing and reimbursement are not necessarily sufficient for financial sustainability of DPP or for DSMT depending on scale of program growth, program features, and what health care professionals serve as instructors. Consequently, it is imperative that DPP and DSMT both demonstrate additional sustainability. In this section we describe billing and reimbursement and return on investment (ROI). PAU, derived from formal evaluation, will be available to BMDRP partner organizations. In addition, Community Benefits are an additional sustainability option for DPP and for wrap around services described for some partners.

5.a. DPP Sustainability

5.a.1. CMS Billing and Reimbursement for DPP. CMS reimbursement is available for DPP delivery to Medicare and Medicaid beneficiaries. Nationally and statewide, the available reimbursement for DPP is underutilized. One primary goal of the HSCRC funding is to increase the number of claims for DPP, an indicator of reach of reimbursed programs to service areas. Table 11 shows the DPP Billing Codes and CMS Payments for milestones achieved for Medicare and Medicaid beneficiaries. DPP is delivered in community settings by (usually unsalaried) lay persons who are trained as DPP Lifestyle Coaches.

Medicare Billing Codes	Description	CMS Payment	Medicaid Billing Codes	Description	CMS Payment
G9873 or G9890	First session attended	\$25	G9873, E1639, or 0488T	First session attended	\$100
G9875	9 core sessions attended	\$90	G9875 G9875	Sessions 5 – 9 Retention; Milestone 3	\$140
G9878, G9879, G9880, G9881	5% or 9% Bodyweight loss achieved or maintained	5%: \$160 9%: \$25	G9878, G9879, G9880, G9881	5% or 9% Bodyweight loss achieved or maintained	5%: \$100 9%: \$50

Lay person workforces generally are not eligible for CMS reimbursement. The reimbursement is new revenue for lay workforces providing DPP in JHHS service areas. Maximum reimbursement is \$725 per participant over 2 years for Medicare, and maximum reimbursement is \$670 per participant over 1 year for Medicaid. As shown in Table 11, reimbursement is dependent on an individual's performance (i.e., attendance and weight loss). Reimbursement offsets the DPP program costs in Medicare by approximately 40%. In Medicaid,

maximum reimbursement (\$670) would cover the cost of the 12 month program (\$617), but would be estimated at lower than 100% cost coverage based on population averages for target achievement.

- **5.a.2. DPP ROI.** The American Medical Association (AMA) Cost Saving Calculator 22 utilizes evidence-based algorithms derived from over a decade of data on costs and costs savings for DPP. For example, for the JHH/JHBMC service area, based on the Brancati Center's DPP program cost of \$617 per participant, a 3 5 year ROI of 4% (lower limit) to 18% (upper limit) is expected. Using the same AMA calculator, UMMC's DPP cost of \$586 per participant, and HSCRC's scale targets for enrollment and completion, UMMC expects to generate a positive ROI beginning in year 4 of the grant.
- **5.a.3.** Community Benefits. Community benefits are defined by the HSCRC as "a planned, organized, and measured approach, by a non-profit healthcare organization, to meeting identified community health needs within its service area." Both UMMC and JHM annually report community benefits to the HSCRC and the IRS. The UMMC has included Diabetes Prevention Programming in their annual report, because they have not collected any type of patient reimbursement for these programs. If grant funding is awarded and the organizations pursue reimbursement either through billing or other funding, both will no longer count DPP programming as a community benefit. Long-term sustainability of these programs will be based on the ability to bill CMS, and therefore, would not qualify for community benefits.

5.b. DSMT Sustainability

5.b.1. CMS Billing and Reimbursement for DSMT. Currently, billing for DSMT by the personnel within the BMDRP is variable. Some instructors and sites routinely bill, while others do not. For Medicare populations, accredited DSMT program costs can be directly offset by reimbursement. Based on estimates from the DSMT programs at JHH and JHBMC, the annual cost per participant (two hours of DSMT) is \$185. This cost assumes DSMT instruction is provided by RD/RN who is a certified diabetes educator, as these are the predominant disciplines represented in DSMT instruction.

See Table 12 for the Medicare DSMT Benefit, billing codes, and 2020 CMS Payment rates. ²⁴ The majority of the benefit is group program delivery. DSMT groups generally comprise up to 10 patients for a 60 minute duration. For a Medicare service line therefore, reimbursement is \$121.14 per hour of individual DSMT and up to \$33.68 per hour of group DSMT.

5.b.2. DSMT ROI and PAU. Assuming that approximately 30% and 70% of DSMT will be delivered via group and individual instruction, respectively, Medicare reimbursement for an

Table 12. DSMT Billing Codes for Medicare

DSMT CPT	Description	CMS Payment
G0108	Individual, per 30 minutes	\$60.57 per 30 min unit
G0109	Group (2 or more patients), per 30 minutes	\$16.84 per patient, per 30 min unit
DSMT Type	Medicare Benefit	
Initial	10 hours (1 hour individual, 9 hours group*) must be furnished within 12 consecutive months starting with the first date of service	
Follow-up	2 hours per year o	n a calendar basis
		lable groups, barriers to ditional insulin training

average patient receiving two hours of DSMT instruction per year by an RN or RD is approximately \$210, which exceeds the per-patient cost of the program of \$185. Therefore, **the DSMT program costs are expected to be directly covered by reimbursement alone.** In addition, numerous studies have demonstrated the DSMT

²² American Medical Association. DPP Cost Saving Calculator. https://ama-roi-calculator.appspot.com/.

²³ HSCRC. Community Benefit Reporting Guidelines and Standard Definitions FY 2019.

https://hscrc.maryland.gov/Documents/HSCRC Initiatives/CommunityBenefits/DataCollectionTools/2019/FY19 CommunityBenefitsGuidelinesandD efinitions pdf

²⁴ Physicians Fee Schedule 2020. http://www.cms.gov/apps/physician-fee-schedule/search/search-criteria.aspx.

programs provide cost savings to health systems from reductions in potentially avoidable utilization (ED visits, hospitalizations, and readmissions) as well as reduced lifetime healthcare expenditures related to lower risk of diabetes-related complications. Studies have demonstrated that DSMT programs can achieve hemoglobin A1C decreases of ~0.6% to 1.0% in people with diabetes. Considering that each 1% increase in hemoglobin A1C is associated with an approximate 35% increased risk of diabetes-related complications, this degree of A1C lowering is clinically meaningful. PAU resulting from DSMT in BMDRP will be evaluated.

5.c. Wrap Around Services Sustainability. Over the course of the grant period, BMDRP will engage actively with CBOs and agencies that are effective in serving the social needs of diabetes and prediabetes patients and communities, as described in this grant. However, as SDOH are not limited to patients with diabetes and prediabetes in our service areas; these needs must be addressed systematically. For sustainability, therefore, an essential goal of the grant is collaboration with hospital partner leadership on solutions at the institutional level that will be implemented and sustained across patient populations and diseases, beyond this RP grant. BMDRP will also collaborate with local and state officials and committees seeking address sustainable SDOH and health inequity solutions. At JHHS, for example, with the Office of Diversity, Inclusion, and Health Equity, there are workgroups on processes including identification and documentation of social needs, and Epic workflows to respond to social needs. The COVID-19 response mobilized a Baltimore City-wide collaborative, inclusive of JHHS and UMMS, to address social needs among vulnerable and at-risk patients. BMDRP allows for examination of reach of these regional and institutional efforts to people with diabetes and prediabetes in RP service areas, and enables collaborative planning to ensure that following the HSCRC grant period, the emerging regional and institutional infrastructure for social needs is and remains accessible to patients in the service areas.

6. Participating Partners and Decision-Making Process

The BMDRP has proposed an initial governance structure (See Appendix D). This structure is composed of a Governance Council that will have key leaders from both JHHS and UMMC) and input from a Patient, Family and Community Advisory Committee and a Finance and Sustainability Committee. The BMDRP Management Committee will oversee all grants administration and management. The Executive Council, responsible for the daily activity implementation and oversight, will lead four workgroups that support the DPP and DSMT Centralized Management Services and Wrap Around Services core: Patient Ascertainment and Engagement, Provider Education and Referral, Intervention Quality and Coordination, and Data, Monitoring & Evaluation. All of these committees and workgroups will have representation and decision-making from both JHM and UMMC to lead this initiative.

BMDRP collaborators that will partner to carry out the DPP, DSMT, and wrap around services activities include national and community organizations, the faith community, and the Baltimore City Health Department to fulfill all of the grant requirements and to meet the identified scale targets. Both organizations (UMMC and JHHS) bring a wealth of experience in working with community partners currently, and through this grant, collaborative partnerships will be expanded. The many participating partners bring additional strengths to the proposed activities through wrap-around services, hosting community classes, providing referrals to programs, local coalition building, L3 and leadership of evidence-based programs. For a complete list of partners and their roles and responsibilities, see Appendix E. Letters of Support are attached at the end of Appendix E.

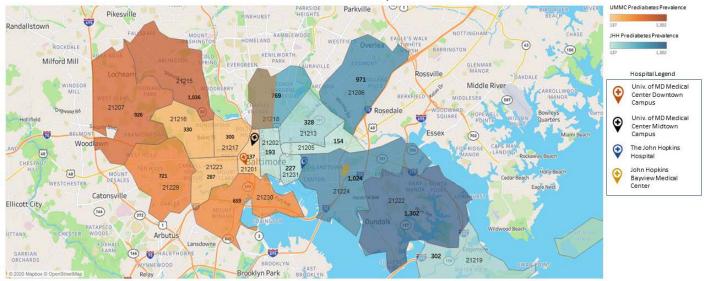
7. Implementation Work Plan

For a detailed timeline of activities, see attached Implementation Work Plan excel spreadsheet in pdf.

APPENDICES

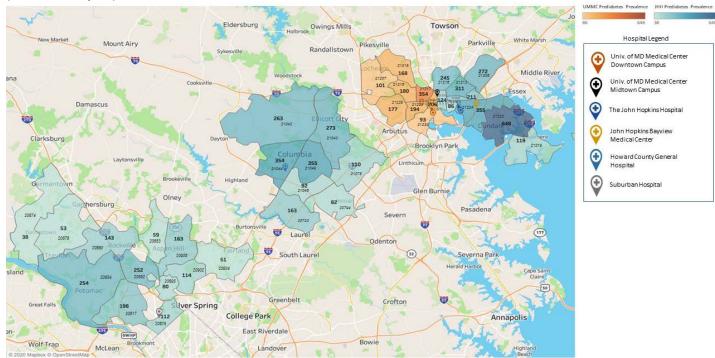
Appendix A. Maps of BMDRC Prediabetes and Diabetes Service Areas

Prediabetes Prevalence within JHH/JHBMC and UMMC Baltimore City Service Areas for BMDRP DPP Activities



Map based on latitude (generated) and longitude (generated) of zip codes. Prediabetes population estimated by applying 10.5% BRFSS prediabetes prevalence to adult Medicaid + Medicare population by zip code. Colors and shading represent population density. Orange indicates a UMMC attributed zip code. Blue indicates a JHH attributed zip code. Both hospitals share the 21218 service area.

Diabetes Prevalence within Baltimore City (JHH/JHBMC, UMMC), Howard County (HCGH), and Montgomery County (Suburban Hospital) Service Areas for BMDRP DSMT Activities



Map based on latitude (generated) and longitude (generated) of zip codes. Diabetes population identified from CRISPMADE report including Touch Attributed patients with the diabetes chronic condition flag by hospital service area zip code. Colors and shading represent population density. Orange indicates a UMMC attributed zip code. Blue indicates a JHH attributed zip code. Both hospitals share the 21218 service area.

Appendix B. Current DSME Benefit Tracker in Epic

DSME Tracking Benefit Hours from encounters over the past 365 days No data recorded
MNT Tracking Benefit Hours from encounters over the past 365 days No data recorded
Time spent Individual or Group from encounters over the past 365 days
Health Behavior Goal Accomplishment from encounters over the past 365 days No data recorded
DSME Assessment from encounters over the past 365 days No data recorded
DSME Learning Assessment from encounters over the past 365 days No data recorded
DSME Intervention from encounters over the past 365 days

Appendix C. New Epic DSMES Workflow (Nov 2020 Upgrade)

Courtesy of Beth Klassen, Epic Implementation Services

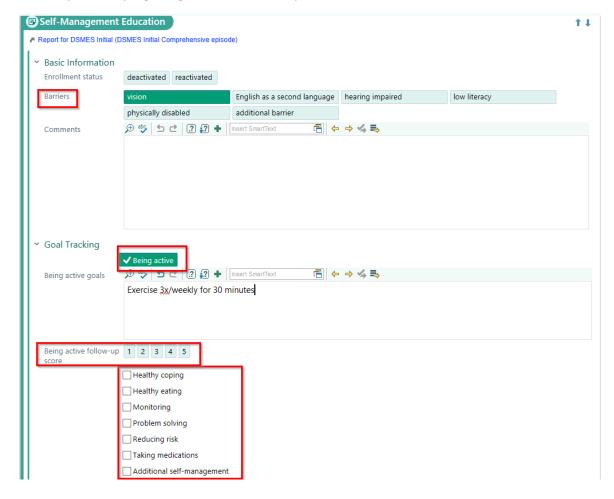
Create Episode of Care

• DSMES Initial, DSMES Post, MNT Initial, MNT Post are options depending on patient's referral



Use DSMES Smartform

• Document whether patient was deactivated/reactivated, document barriers to education, set patient's program goal. Track follow-up score

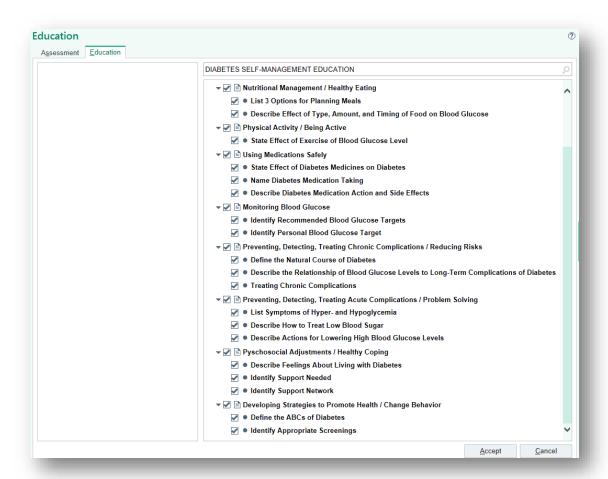


Document Education

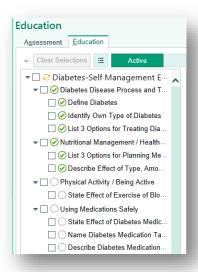
Select Hyperlink within navigator



Create Education Plan

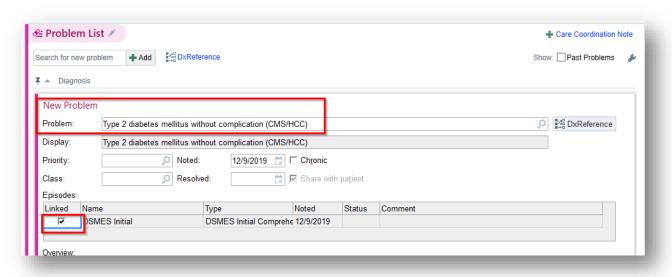


Track, resolve, re-educate



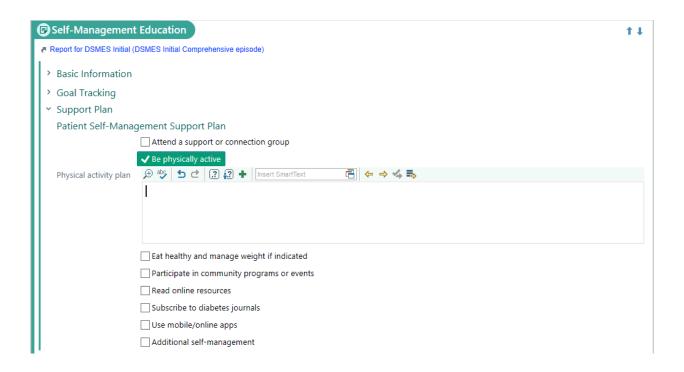
[Provider] Create problem that matches referring diagnosis

• Link to patient's episode for better tracking



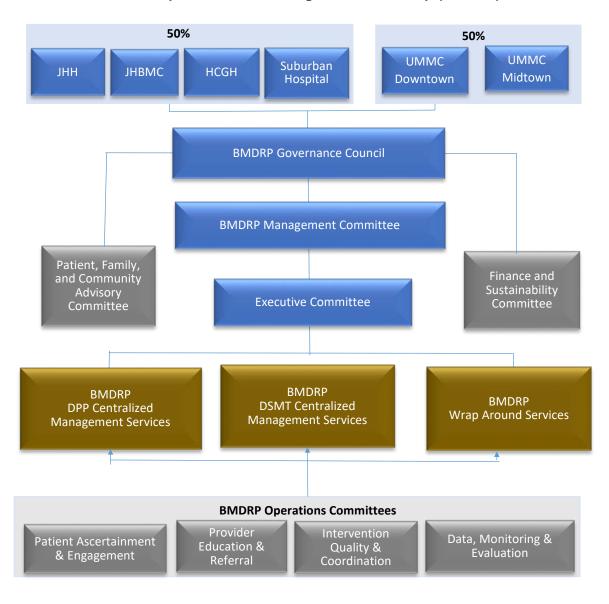
Self-Management Support Goal

 At the end of the patient's program, record their self-management support goal within the DSMES Smartform



Appendix D: Initial Governance Structure

Baltimore Metropolitan Diabetes Regional Partnership (BMDRP)



BMDRP Governance and Decision-Making Committees

Governance Council

Comprises leaders from each partner hospital, key partner organization, and stakeholder groups. The Council is responsible for provision of advising and guidance to the project's Executive Committee and has decision-making responsibilities about long-term sustainability and financing of the project (post HSCRC funding). The Council receives status reports and updates on a scheduled basis. Council meetings will be held quarterly.

BMDRP Management Committee

Overall grant oversight, partnership management; operations and implementation alignment; overarching grant goal monitoring, evaluation and reporting to HSCRC; financial accountability; project management and timeline; administrative functions; contracting, DUAs, BAAs.

Executive Committee

Comprises leaders directly involved in and providing oversight for the project implementation (planning, execution, and daily operations). Members include DPP and DSMT program clinical leaders at partner hospitals and organizations and Operations Subcommittee chairpersons. Executive Committee meetings are held weekly/bi-weekly.

Patient, Family and Community Advisory Committee

The Community Advisory Board comprises diabetes and prediabetes patient and family stakeholders and CBO representatives who will be involved in the grant and DPP and DSMT programmatic planning, implementation, and monitoring. The Advisory Committee will meet monthly.

Finance and Sustainability Committee

Evaluation of program costs, monitoring of charges/billings and reimbursements/payments, cost savings modeling based on program outcomes, PAU and ROI analyses based on program outcomes.

Operations Subcommittees

Responsible for project implementation activities. Subcommittees meet weekly or bi-weekly, depending on stage of execution.

Patient Ascertainment & Engagement

Epic programming for Prediabetes Registry and Diabetes Registry, BPA programming based on eligibility criteria, MyChart invitations and surveys, criteria and workflows for patient addition to or removal from project registries. Community outreach and activities for community-based/community partner-based recruitment and engagement.

Provider Education & Referrals

Provider referrals and referral workflows in Epic, planning and implementation of provider education about DPP and DSMT programs and referral processes including the Johns Hopkins Patient Engagement Program (PEP) shared resource and the Health Equity Trainings (Unconscious Bias, REaL and SOGI for access).

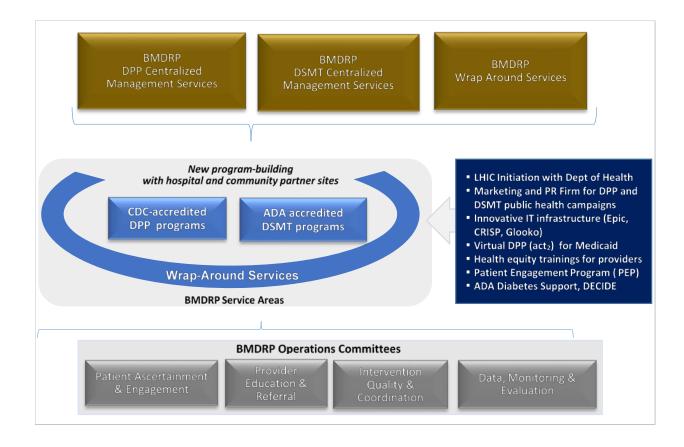
Intervention Quality and Coordination

Responsible for integration and coordination of the targeted programs and services, workflows for Wrap-Around Services provision, oversight of wrap around service partnerships and quality.

Data, Monitoring & Evaluation

Internal monitoring and evaluation, methodologies for scale targets in alignment with HSCRC, dashboards, data extraction (e.g. CRISP, Epic, data warehouse) for outcome measure monitoring and reporting, data analyses.

Operations Structure



Appendix E. Listing of BMDRP Collaborators (Tables Follow)

Note. Due to the COVID-19 pandemic some community collaborators were not available or able to participate in collaboration meetings during the grant preparation phase. Further collaborations/roles will be confirmed during the initial year of the grant, if awarded. The list below are represented either in the Collaborator Tables that follow and/or in the Letters of Support (i.e. hospital partners, legislators).

Hospital/Health System Collaborators

Johns Hopkins Health System:
Johns Hopkins Hospital
Johns Hopkins Bayview Medical Center
Howard County General Hospital
Suburban Hospital
University of Maryland Medical System:
UMMC Downtown
UMMC Midtown

Legislators/Policy Makers

Nick J. Mosby, Maryland House of Delegates, District 40 Joseline A. Peña-Melnyk, Maryland House of Delegates, District 21 Kristerfer Burnett, Baltimore City Councilmember, 8th District

Regional and National Stakeholder Collaborators

Jennifer L. Martin, Deputy Commissioner of Health, Baltimore City Health Department CRISP American Diabetes Association

American Diabetes Association

American Heart Association

DPP and DSMT Collaborators

The Brancati Center for the Advancement of Community Care⁴
University of Maryland, Baltimore, Community Engagement Center⁴
University of Maryland Division of Endocrinology, Diabetes & Nutrition/ Center for Diabetes and Endocrinology¹
Johns Hopkins University Division of Endocrinology, Diabetes & Metabolism/Diabetes Center¹

Health Resources Community Collaboration² Masjid ul Haqq² Perkins Square Baptist Church² Zion Baptist Church² Columbia Medical Practice³ Johns Hopkins Community Physicians (JHCP)³ Canton Crossing, Remington, Greater Dundalk, White Marsh, Green Spring Station/Lutherville, Howard County, Downtown Bethesda Center for Salud/Health and Opportunity for Latinos^{3,8} Chase Brexton⁵ Jai Medical Center⁵ Priority Partners MCO⁶ Potomac Physician Associates³ Montgomery County Senior Recreation Centers⁴ Bethesda Newtrition and Wellness Solutions (BNWS) 3,8 Armstrong Institute Diabetes Clinical Community Walgreens Pharmacies⁷

Wrap Around Services Collaborators

Foer's Pharmacy⁷

Baltimore CONNECT⁸

Hungry Harvest/Produce in a Snap⁸
Manna Food Center⁸
Lyft⁸
Roundtrip⁸
Villages of Montgomery⁸
JHHS Office of Diversity, Inclusion & Health Equity⁹
Patient Engagement Program (PEP) ⁹

¹Hospital partner outpatient clinic. ²Faith Community. ³Community-based ambulatory clinic. ⁴Health-focused nonprofit. ⁵Federally Qualified Health Center (FQHC). ⁶Payor. ⁷Community pharmacy. ⁸Social Services/Social Need Partner Organization. ⁹Provider Resources and Trainings

Letters of Support





110 S. Paca Street Baltimore, Maryland 21201 410-328-0050 charlescallahan@umm.edu

July 10, 2020

Subject: Baltimore Metro Diabetes Regional Partnership

Dear Sir or Ma'am

The leaders of the University of Maryland Medical Center Downtown and Midtown campuses have been briefed and will support the Baltimore Metro Diabetes Regional Partnership proposal if it is funded by the HSCRC.

Sincerely

Charles W. Callahan, DO, FAAP Vice President, Population Health Professor of Pediatrics,

Military & Emergency Medicine

F. Edward Hebert School of Medicine Uniformed Services University of the Health Sciences, Bethesda, Maryland

Scott A. Berkowitz, MD, MBA, FACC, FAHA

Chief Population Health Officer and Vice President,
Population Health, Johns Hopkins Medicine
Associate Professor of Medicine, Division of
Cardiology
Executive Director, Johns Hopkins Medicine Alliance
for Patients, LLC

733 North Broadway Miller Research Building G46 Baltimore, MD 21205 443-287-4519 Telephone 410-955-1443 Fax sberkow3@jhmi.edu



July 17, 2020

Adam Kane Chair Health Services Cost Review Commission 4160 Patterson Avenue Baltimore, MD 21215

Re: Regional Partnership Catalyst Grants

Dear Chairman Kane,

Diabetes remains a major threat to the health of our patients and communities. The Baltimore Metro Diabetes Regional Partnership (BMDRP) aims to expand access to two evidence based models that assist with improving diabetes prevention and management: the Diabetes Prevention Program (DPP) and Diabetes Self-Management Training (DSMT). The BMDRP proposal aligns with our developing Johns Hopkins Medicine Office of Population Health and has been reviewed with health system and hospital care coordination, finance and other leadership, and we will support the program if approved for funding by the HSCRC.

Thank you in advance for your consideration.

Sincerely,

Scott A. Berkowitz, MD, MBA

NICK J. MOSBY
Legislative District 40
Baltimore City

Ways and Means Committee

Subcommittees

Election Law

Finance Resources

Revenues



The Maryland House of Delegates 6 Bladen Street, Room 205 Annapolis, Maryland 21401 410-841-3520 · 301-858-3520 800-492-7122 Ext. 3520 Fax 410-841-3199 · 301-858-3199 Nick.Mosby@house.state.md.us

THE MARYLAND HOUSE OF DELEGATES Annapolis, Maryland 21401

July 16, 2020

Adam Kane Chair Health Services Cost Review Commission 4160 Patterson Avenue Baltimore, MD 21215

Re: Regional Partnership Catalyst Grants

Dear Chairman Kane,

Thank you for your commitment to preventing and reducing the burden of diabetes for Maryland citizens through the Health Services Cost Review Commission (HSCRC) Regional Partnership Catalyst Grant Program. Diabetes is a serious condition, and while prediabetes may be reversible, diabetes has no cure. It is critically important to address this potentially life altering disease as early as possible. Race and ethnicity affect the risk of diabetes. In my work on health disparities, I strongly believe that the prevalence of diabetes in minority populations can only be addressed and improved through enhanced population health strategies.

The Baltimore Metro Diabetes Regional Partnership aims to expand access to evidence-based models that will prevent the onset of the disease through Diabetes Prevention Program (DPP) and reduce health care complications associated with diabetes through Diabetes Self-Management Training (DSMT). The Baltimore Metro Diabetes Regional Partnership proposal targets disadvantaged communities and population that will greatly benefit from enhanced focus and services.

The Baltimore Metro Diabetes Regional Partnership includes a diverse range of community partners and shifts focus on diabetes from inside the walls of hospitals to community-based interventions and clinics. I strongly support the application for the Baltimore Metro Diabetes Regional Partnership and hope you will give this proposal consideration for funding.

Sincerely,

Nick J. Mosby, District 40

Joseline A. Peña-Melnyk

Legislative District 21
Prince George's and
Anne Arundel Counties

Vice Chair Health and Government Operations Committee

Subcommittees
Government Operations and
Long Term Care

Chair, Public Health and Minority Health Disparities



The Maryland House of Delegates Annapolis, Maryland 21401

June 16, 2020

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Joseline.Pena.Melnyk@house.state.md.us

District Office P. O. Box 1251 College Park, Maryland 20741-1251

Mr. Adam Kane, Chairman Health Services Cost Review Commission 4160 Patterson Avenue Baltimore, MD 21215

SUBJ: Regional Partnership Catalyst Grants - Letter of Support

Dear Chairman Kane,

Thank you for your commitment to preventing and reducing the burden of diabetes for Maryland citizens through the Health Services Cost Review Commission Regional Partnership Catalyst Grant Program. The prevalence of diabetes in minority populations is a true concern. It must be addressed and improved through enhanced population health strategies.

The Baltimore Metro Diabetes Regional Partnership (BMDRP) aims to expand access to evidence-based models that will prevent the onset of the disease through the Diabetes Prevention Program and reduce health care complications associated with diabetes through Diabetes Self-Management Training. The BMDRP proposal targets disadvantaged communities and populations that will greatly benefit from enhanced focus and services.

The BMDRP includes a diverse range of community partners and shifts focus on diabetes from inside the walls of hospitals to community-based interventions and clinics. I strongly support the Baltimore Metro Diabetes Regional Partnership's application. I encourage you to give this proposal conscientious consideration. I am available to answer any questions that may assist you in reaching your final decision.

Sincerely,



Room 521, City Hall 100 N Holliday Street Baltimore, Maryland 21202 Office (410) 396-4818 Fax (410) 396-4828

July 16, 2020

Adam Kane, Chair Health Services Cost Review Commission 4160 Patterson Avenue Baltimore, MD 21215

Re: Regional Partnership Catalyst Grants

Dear Chairman Kane,

Thank you for your commitment to preventing and reducing the burden of diabetes for Maryland citizens through the Health Services Cost Review Commission (HSCRC) Regional Partnership Catalyst Grant Program. The prevalence of diabetes in Baltimore City is a true concern and can only be addressed and improved through enhanced population health strategies.

The Baltimore Metro Diabetes Regional Partnership aims to expand access to evidence-based models that will prevent the onset of the disease through Diabetes Prevention Program (DPP) and reduce health care complications associated with diabetes through Diabetes Self-Management Training (DSMT). The Baltimore Metro Diabetes Regional Partnership proposal targets disadvantaged communities and population that will greatly benefit from enhanced focus and services.

The Baltimore Metro Diabetes Regional Partnership includes a diverse range of community partners and shifts focus on diabetes from inside the walls of hospitals to community-based interventions and clinics.

I strongly support the application for the Baltimore Metro Diabetes Regional Partnership and hope you will give this proposal consideration for funding.

Sincerely,

City Councilmember

8th District



1001 E. Fayette Street • Baltimore, Maryland 21202 Bernard C. "Jack" Young, Mayor Letitia Dzirasa, M.D., Commissioner of Health

July 10,2020

Tequila Terry, Deputy Director Health Services Cost Review Commission 4160 Patterson Avenue Baltimore, MD 21215

Dear Ms. Terry:

The Baltimore City Health Department is pleased to support the Baltimore Metropolitan Diabetes Regional Partnership grant application for the Health Services Cost Review Commission's *Regional Partnership Catalyst Grant supporting Diabetes Prevention and Management*. As a long-time partner, with Johns Hopkins Health System and UMMC as lead agencies, we will have our Local Health Improvement Council (LHIC) focus on diabetes and promote their diabetes health education classes, including the Diabetes Prevention Program and Diabetes Self-Management Training.

This partnership will help the Baltimore Metro Diabetes Regional Partnership identify and educate community members in an effort to prevent and manage diabetes. The project will help the families we serve by bringing health resources to a vulnerable, underserved community. In addition, this partnership will fund our LHIC Director after our Accountable Health Communities Project Director funding ends.

We look forward to partnering with Johns Hopkins Health System and UMMC on this exciting opportunity to prevent and manage diabetes in Baltimore City, and we hope that the Health Services Cost Review Commission will favorably review and fund this vital project.

Sincerely,

Jennifer L. Martin

Deputy Commissioner of Health



Brandon Neiswender, COO CRISP Health 7160 Columbia Gateway Drive Suite 100 Columbia, Maryland 20146

6/5/2020

Tequila Terry
Deputy Director, Center for Payer Reform and Provider Alignment
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Tequila,

On behalf of CRISP, please accept this letter in support of the University of Maryland Medical Center (UMMC) and its affiliate hospitals' grant applications for the 2021 Regional Partnership Catalyst Grant Program. As a partner with UMMC, we have agreed to support the development of a referral and registration process that community providers would utilize to refer overweight, obese and pre-diabetic patients to Diabetes Prevention (DPP) Program and Diabetes Self-Management Training (DSMT) course offerings.

This partnership will allow for the expansion of diabetes prevention and management programming across the State and will build the necessary infrastructure for sustainability within the Maryland healthcare system. We expect this to result in significant improvements in pre-diabetes and diabetes related health outcomes.

If you have any further questions about our support of UMMC and its affiliate hospitals, or our contribution to the regional partnerships, please do not hesitate to contact me at brandon.neiswender@crisphealth.org

Thank you,

Brandon Neiswender

5C1C681037A2D871F93BD5CFCB7B6C42

contractworks.

Brandon Neiswender

COO



Connected for Life

To: Health Services Cost Review Commission 4160 Patterson Avenue Baltimore, Maryland 21215

June 22, 2020

Re: American Diabetes Association support for Johns Hopkins Regional Partnership Catalyst Grant

To whom it may concern:

On behalf of the American Diabetes Association (ADA), please accept this Letter of Support for Johns Hopkins' Regional Partnership Catalyst Grant application. ADA seeks to facilitate national reach and learnings from regional diabetes population health initiatives, such as this, in support of our mission "to prevent and cure diabetes and to improve the lives of all people affected by diabetes." ADA will commit \$25,000 to support Hopkins' Regional Partnership Catalyst Initiative in Year 1. These funds will be used to create a Shared Learning Bridge between Hopkins' proposed Diabetes Prevention & Self-Management Programs and several concurrent ADA led and steered regional improvement projects in the Greater Philadelphia area:

- ADA is leading a 3-year project focused on improving clinical management for patients with diabetes and CVD by working with the American Heart Association, Jefferson Health, Penn Medicine, Temple Health, Hackensack University Medical Center, Hopkins, and HealthShare Exchange, the regional HIE.
- ADA is on the steering committee of an American Medical Association and Jefferson College of Population Health collaboration focused on improving nDPP capacity and enrollment in city of Philadelphia and surrounding counties.
- ADA is on the regional steering committee of a global initiative called Cities Changing Diabetes, which has selected Philadelphia as its next US city and focuses primarily on community health engagement strategies.

The goal of ADA's commitment to Hopkins in support of Maryland's state-wide Regional Partnership Catalyst Program is to bilaterally share learnings and institutional and program data (through data sharing agreements between Hopkins institutions and ADA) that support improvements in diabetes population health. These will include clinical workflow interventions, data use best practices including the role of HIEs, operational interventions such as building capacity and enrollment efficiency for DPP and DSME programs, and awareness and engagement strategies to better work with community health stakeholders.

Sincerely,

Charlotte M. Carter Chief Financial Officer Phone: +1 (703) 549-1500 x6503 ccarter@diabetes.org

—DocuSigned by:

Charlotte M. Carter

2020 June 26

Greg Liptak Vice President, Quality Improvement Services

Phone: +1 (267) 216-4100 gliptak@diabetes.org

Med Spick 1#

2451 Crystal Drive Suite 900 Arlington, VA 22202



July 7, 2020

Health Services Cost Review Commission 4160 Patterson Avenue Baltimore, MD 21215

Dear Review Committee,

We are very pleased to write this letter in support of the Baltimore Metro Regional Diabetes Partnership application for DPP and DSMT expansion. As vice president of Health Strategies for the American Heart Association, I have worked with both Johns Hopkins and the University of Maryland Medical System on prior initiatives in Baltimore City. The mission of the American Heart Association (AHA) is to be a relentless force for a world of longer, healthier lives, and this application represents the kind of work that the AHA wants to support.

Of particular relevance to this application is the Know Diabetes by Heart Initiative in which the AHA and the American Diabetes Association are working together to address heart disease and stroke in people with type 2 diabetes. Know Diabetes by Heart aims to comprehensively combat the link between type 2 diabetes and cardiovascular disease by empowering people living with type 2 diabetes to lower their risk for cardiovascular disease by providing the necessary tools and resources to drive more informed conversations between people living with type 2 diabetes and their doctors.

One of the unique aspects of the AHA's presence in Baltimore City is the Simple Cooking with Heart Kitchen (SCWH Kitchen). Launched in 2014, the mission of the SCWH Kitchen is to teach participants how to prepare simple, delicious and inexpensive meals at home so they can enjoy the benefits of eating healthier and feel more confident cooking for their families. Starting in 2018, we began a partnership with the Brancati Center around the kitchen, "The Heart of Diabetes" initiative. The Brancati Center has started a DPP program at the Under Armour House (location of the kitchen) in which the DPP participants participate in eight cooking classes sponsored by the AHA with the goal of supporting healthy changes in their nutrition by building real-world, practical cooking skills with a focus on healthy nutrition and food safety. We have worked in conjunction with the Brancati Center to integrate eight cooking class modules with the DPP. These classes are ongoing (now virtually) and have been extremely well-received by participants. We have also begun offering cooking classes to other Brancati Center DPPs.

As part of the Baltimore Metro Regional Diabetes Partnership, we pledge our support to work with Johns Hopkins and University of Maryland Medical System to provide in-person and virtual

cooking classes, advertise DPPs, and provide Know Diabetes by Heart clinical support tools which we think will be especially beneficial for DSMT participants.

The current application for funding is a natural extension of the work that the AHA has started with the Brancati Center, and we look forward our collaboration with the Baltimore Metro Regional Diabetes Partnership.

Sincerely,

Rhonda Ford Chatmon

Bhonle For Clatrian

Vice President

American Heart Association





June 8, 2020

Tequila Terry
Deputy Director
Health Services Cost Review Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Ms. Terry:

On behalf of the University of Maryland, Baltimore (UMB), I would like to write this letter in support of the University of Maryland Medical Center's (UMMC) grant application for the Health Services Cost Review Commission's Regional Partnership Catalyst Grant supporting Diabetes Prevention and Management. As a long-time partner with UMMC, as the lead agency, we have agreed to help promote their diabetes health education classes, including the Diabetes Prevention Program and Diabetes Self-Management Training, and to provide space at our UMB Community Engagement Center located in the Poppleton community of West Baltimore.

This partnership will assist UMMC in identifying and educating numerous community members in an effort to prevent and manage diabetes. This grant will assist the families we serve by bringing needed health resources to a vulnerable, underserved community. We look forward to partnering with UMMC on this exciting opportunity to prevent and manage diabetes in West Baltimore.

If you have any further questions about our support of UMMC or our contribution to this grant, please feel free to reach me at troper@umaryland.edu.

Thank you,

Tyrøne Roper

Director, Community Engagement Center

CC: Ashley Valis, Executive Director, Office of Community Initiatives & Engagement



The Brancati Center for the Advancement of Community Care

Department of Medicine, Division of General Internal Medicine 2024 East. Monument Street / Room B-303 Baltimore, MD 21205 USA 410-614-6441

July 7, 2020

Dear Review Committee:

As the Executive Director of the Johns Hopkins Brancati Center for the Advancement of Community Care, I am pleased to offer my highest support for the HSCRC Regional Partnership Catalyst Grant application entitled "Baltimore Metro Diabetes Regional Partnership."

The mission of the Brancati Center is to improve the health of communities by developing, evaluating and disseminating new models of healthcare that leverage the skills of a diverse range of healthcare providers. Founded in 2014, the Center chose to focus early efforts on diabetes prevention because of the lack of existing prevention resources as well as the high incidence of diabetes in our local community. In 2015 the Brancati Center began working with two churches, Memorial Baptist Church and Zion Baptist Church, to deliver the first National Diabetes Prevention Programs (DPP) in East Baltimore. 100% of our participants completed the program and the group met all CDC requirements at 12 months. As a result, the program was the first DPP to receive full recognition by the CDC in Baltimore City and the Brancati Center has been approved as a Medicare and HealthChoice DPP provider. The Brancati Center continues to implement 5-8 DPP programs each year in the East Baltimore community. To date, 168 people have enrolled in Brancati Center DPPs.

We are off to a good start, but we know we can do more to reach others at risk of developing diabetes in our communities. Given our experience and prior success, our team is in a strong position to develop the methods, tools and strategies to increase enrollment and retention in DPP programs. Our health system and community partners agree. Our partners are eager to continue and other sites have expressed interest in implementing the DPP. In addition, the Johns Hopkins Strategic Planning Executive Council recently invested \$787,000 in the Brancati Center's diabetes prevention efforts. The funds requested in this application are essential to designing and achieving large-scale implementation of effective community-based DPPs across diverse communities utilizing other community sites. As Executive Director, I am fully committed to providing faculty and staff support for these programs.

In summary, I give my full support for Johns Hopkins Hospital's application to expand access to Diabetes Prevention Programs, and will hard to implement the plan that is outlined.

Sincerely,

Jeanne M. Clark, MD, MPH

n Clark MD

'Frederick L. Brancati, MD' Professor of Medicine and Epidemiology

Director, Division of General Internal Medicine

Executive Director, Brancati Center for the Advancement of Community Care





Kashif Munir, M.D.
Associate Professor of Medicine
Division of Endocrinology, Diabetes & Nutrition
Department of Medicine
827 Linden Avenue
2nd floor
Baltimore, MD 21201
443-682-6800

kmunir@medicine.umaryland.edu www.medicine.umaryland.edu/endocrinology

July 11, 2020

Tequila Terry
Deputy Director
Health Services Cost Review Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Ms. Terry:

On behalf of the University of Maryland Medical Center, I would like to write this letter in support of our joint grant application for the Health Services Cost Review Commission's Regional Partnership Catalyst Grant supporting Diabetes Prevention and Management.

The Baltimore Metro Diabetes Partnership leverages over 10 years of Johns Hopkins University/JHHS and University of Maryland/UMMC collaboration to train diabetes providers and researchers and to discover the most effective approaches to improve the health of highest risk and underserved populations with diabetes. The Baltimore Metro RP will build infrastructure and scale to provide access to DSMT to 25% more of the population with diabetes in our service area and will expand access to DPP for the prevention of type 2 diabetes in 20% more of the population with prediabetes.

We look forward to partnering together on this exciting opportunity to prevent and manage diabetes in Baltimore.

If you have any further questions about our support of our contribution to this grant, please feel free to reach me at kmunir@som.umaryland.edu.

Thank you,

Kashif M. Munir, MD

Associate Professor of Medicine, University of Maryland School of Medicine Director, University of Maryland Center for Diabetes and Endocrinology Vice-

Rexford S. Ahima, MD, PhD

Bloomberg Distinguished Professor of Diabetes Professor of Medicine, Public Health, Nursing Director, Division of Endocrinology, Diabetes and Metabolism The Johns Hopkins University

Department of Medicine
Division of Endocrinology, Diabetes
and Metabolism
1830 East Monument Street, #333
Baltimore, MD 21287
ahima@jhmi.edu



Ms. Tequila Terry, MPH, MBA Deputy Director, HSCRC

July 8, 2020

Dear Ms. Terry,

The Division of Endocrinology, Diabetes & Metabolism at the Johns Hopkins University School of Medicine is thrilled to participate in the **Baltimore Metropolitan Diabetes Regional Partnership's** Diabetes Self-Management Training program. Our mission is to provide superb evidence-based care for patients with diabetes and endocrine disorders, foster innovative clinical and translational research, and provide outstanding educational programs for medical students, residents, endocrine fellows, clinicians, and the community.

Diabetes self-management training is a fundamental and evidence-based component of diabetes management. We are pleased that the HSCRC recognizes the importance of increasing patient access to this important service through this regional partnership. The current ADA accredited program at the Johns Hopkins Outpatient Center and Johns Hopkins Bayview Medical Center is overseen by our Division through our Comprehensive Diabetes Center, which opened in 1984 for the purpose of improving the lives of people with diabetes through education at all levels, original research, and direct patient services. Patient education is integral to good care and is the responsibility of our health care members. Our clinical team are the health system leaders for all community diabetes outreach efforts. We organize annual diabetes screenings and awareness campaigns for our patients and employees.

Our expert team of endocrine physicians and fellows, advanced practice providers, nurses, and registered dieticians provide care to over ~5,300 patients with diabetes per year. Of these, approximately 1,200 (23%) are Medicare beneficiaries age 65 and older. Thus, we see a large volume of the patients who are the target of this DSMT initiative. Despite our successful ADA accredited DSMT program, we recognize many opportunities to improve patient engagement and increase referrals across our health system. In addition, the community-based endocrinologists in the Johns Hopkins Health system have adjunct faculty appointments in our Division, and are engaged actively in our mission. I could not recommend a better leader for this DSMT program than Dr. Nestoras Mathioudakis, who has served as the Clinical Director of our Division since 2016. He is an energetic, innovative, and committed leader and I have confidence that he will mobilize all resources at his disposal to achieve the scale targets outlined by the HSCRC.

The Johns Hopkins Division of Endocrinology, Diabetes & Metabolism wholeheartedly supports the important work proposed by the Baltimore Metropolitan Diabetes Regional Partnership DSMT core. I am excited to see the benefits that this program will bring to our patients, clinicians, and community.

Sincerely,

Rexford S. Ahima, M.D. Ph.D.

Director, Division of Endocrinology, Diabetes & Metabolism

Professor of Medicine, Public Health & Nursing

Bloomberg Distinguished Professor of Diabetes



Pastor Marshall F. Prentice, DDiv 1700 N. Caroline Street Baltimore, Maryland 21213 410-837-4181

July 7, 2020

Health Services Cost Review Commission 4160 Patterson Avenue Baltimore, MD 21215

Re: Baltimore Metro Diabetes Regional Partnership

Dear Review Committee,

On behalf of the Health Resources Community Collaboration, we wish to indicate our strongest support for the Diabetes Prevention Program application submitted by the Johns Hopkins Hospital.

The Health Resources Community Collaboration is a coalition of more than 20 church leaders in the East Baltimore community. Three of our member churches (Zion Baptist Church, Memorial Baptist Church, and Israel Baptist Church) have partnered with the Johns Hopkins Brancati Center to implement the diabetes prevention program for our congregation and surrounding community; we have been working with the Brancati Center since 2015. We would be pleased to take part in this expansion of the DPP that will be nurtured by our own community members and in which we will take a leadership role with professional guidance from the Brancati Center. We are pleased to offer sites, health ministry members to serve as ambassadors, and qualified persons to serve in an advisory role to the project team.

We cannot state strongly enough how important it is to build a model for a neighborhood-centered, church-based prevention program. The churches in our community serve all people, not just members of our congregation. Community service is a strong mission at all of our churches. "Therefore, as we have opportunity, let us do good to all people..." Galatians 6:10

The Health Resources Community Collaboration is pleased that the HSCRC is taking action to address the serious problem of diabetes in our communities. We are dedicated to the program's success.

In His name,

Marshall 7. Prentice

Dr. Marshall F. Prentice Pastor, Zion Baptist Church

Pastor William E. Johnson, Jr.

Community Chaplain

William E. Johnson, Jr.

JHBMC



Masjid ul Haqq

Over 60 Years Serving the Baltimore Community

514 Islamic Wav **Baltimore, Maryland 21217** (410) 728-1363

July 15, 2020

Tequila Terry **Deputy Director Health Services Cost Review Commission** 4160 Patterson Ave. Baltimore, MD 21215

Dear Ms. Terry:

On behalf of Masjid ul Hagq, Incorporated, I would like to write this letter in support of the University of Maryland Medical Center's (UMMC) and Johns Hopkins Medicine (JHM) joint grant application for the Health Services Cost Review Commission's Regional Partnership Catalyst Grant supporting Diabetes Prevention and Management. As a community partner with UMMC, we have agreed to help by offering our membership database to inform members about the programs, services and classes as well as the use of available space in our building.

Masjid ul Haqq, Incorporated, has a 70-year history in the Upton Community of Baltimore City. The Masjid first opened its doors at its current location in 1959, then known as Muhammad Mosque Number Six.

As one of the oldest and largest mosques in the State of Maryland, many mosques in the Baltimore Metropolitan Area has had their origin out Masjid ul Haqq. From feeding the homeless to providing resources to some of Baltimore most vulnerable residents, Masjid ul Hagg continuously look for ways to serve the community.

This partnership will assist UMMC and JHM by access to our faith community and buildings so that diabetesrelated classes can be offered directly in the community.

We look forward to partnering with the University of Maryland Medical Center and Johns Hopkins on this exciting opportunity to prevent and manage diabetes in Baltimore.

If you need any additional information, feel free to contact me by phone, 443-865-0358 or by email, Masjidulhaqq@protonmail.com.

Moses "Musa" Hammett

Masjid ul Haqq Board of Trustee



July 16, 2020

Tequila Terry, MPH, MBA
Deputy Director
Health Services Cost Review Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Ms. Terry,

Columbia Medical Practice (CMP) is excited to participate as a community partner in the **Baltimore Metropolitan Diabetes Regional Partnership's** Diabetes Self-Management Training program.

CMP is the largest multi-specialty primary practice in Howard County with over 30 providers, including internal medicine and family practice providers. Collectively they serve over 10% of the population of the County. This includes a large number of patients with diabetes and have long recognized the need for dedicated DSMT program to serve our patients.

Given our close working relationship with Howard County General Hospital, one of the regional partner hospitals, we believe that our participation in this partnership would help to meet the scale targets of this proposal by increase access to DSMT services for their "touch attributed" populations.

Through this partnership, we look forward to working to provide DSMT services at our practice, including training existing staff to become CDCES or arranging for existing CDCES staff within the regional partnership to rotate at our practice. We recently switched to Epic as our EMR through our affiliation with Johns Hopkins. This provides a shared medical record and ability to offer video visits for more effective clinical care of our patients.

Incorporation of diabetes self-management training into the overall treatment plan for our patients with diabetes aligns with our commitment to the principles of the patient centered medical home to promote successful medical outcomes and enhance patient satisfaction.

We look forward to partnering with the clinical DSMT experts from Johns Hopkins Health System to bring this evidence-based intervention to our patients.

Sincerely,

DeWayne Oberlander, MPH, MBA

ReWayne Olustander

Chief Executive Officer

Johns Hopkins Community Physicians, Inc. Research Department 6225 Smith Ave./ B-300 Baltimore, Maryland 21209 410-735-4792 / Phone



July 10, 2020

Ms. Tequila Terry, MPH, MBA Deputy Director, HSCRC

Re: Baltimore Metropolitan Diabetes Regional Partnership's Diabetes Self-Management Training program

Dear Ms. Terry,

Johns Hopkins Community Physicians (JHCP) is enthusiastic to serve as a community partner for the **Baltimore Metropolitan Diabetes Regional Partnership's** Diabetes Self-Management Training (DSMT) program. JHCP offers primary care and specialty services to patients throughout Maryland. Indeed, a large proportion of the attributable population for the regional partnership hospitals (Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Howard County General Hospital, and Suburban Hospital) receive primary medical care at nearby JHCP community sites. Despite the large patient population followed by JHCP primary care physicians, there is currently no DSMT program offered at any of our community-based clinic sites. Considering that the majority of patients with diabetes in the Johns Hopkins Health System are cared for by primary care physicians rather than diabetes specialists, this represents a significant clinical care gap, which we are excited to address.

In Year 1 of this proposal, JHCP is eager to explore one of more of these strategies to enhance our patients' access to DSMT services:

- Engaging with our primary care physicians to identify current barriers to DSMT referral and proposing solutions
- Recruiting qualified certified diabetes care and education specialists (CDCES) to provide services in JHCP locations
- Arranging for existing CDCES staff in other JHHS sites to provide remote or in-clinic DSMT instruction at our JHCP locations
- Assisting in the development of marketing materials to increase JHCP provider and patient awareness of DSMT services
- Identifying additional community resources to increase awareness of local DSMT programs, including barber shops, beauty salons, faith-based organizations, YMCAs, or civic organizations near our clinic locations
- Conducting community health fairs and/or diabetes expos at our clinic sites

We identified that a large percentage of the target population for this proposal receives care at one of our JHCP sites. Based on our preliminary review data, the following JHCP clinic sites would be interested in receiving DSMT services, either as expansion sites or by having existing DSMT staff brought to these clinics on a rotating basis:

Johns Hopkins Community Physicians, Inc. Research Department 6225 Smith Ave./ B-300 Baltimore, Maryland 21209 410-735-4792 / Phone



Baltimore City:

- Canton Crossing, 1501 South Clinton Street, Baltimore, MD 21224
- East Baltimore Medical Center, 1000 East Eager Street, Baltimore, MD 21202
- Remington, 2700 Remington Avenue, Baltimore, MD 21211

Baltimore County:

- Greater Dundalk, 2112 Dundalk Avenue, Baltimore, MD 21222
- White Marsh, 4924 Campbell Boulevard, Nottingham, MD 21236
- Green Spring Station/Lutherville, 10751 Falls Road, Lutherville, MD 21093

Howard County:

• Columbia, 6350 Stevens Forest Road, Columbia, MD 21046

Montgomery County:

• Downtown Bethesda, 7315 Wisconsin Avenue, Bethesda, MD 20814

JHCP offers an infrastructure to assure the best quality, access, information, integration, and innovation. We have a strong commitment to patient satisfaction and safety. This DSMT program, through its use of innovative remote patient monitoring tools, telehealth, and other non-traditional patient support approaches, is innovative. As an evidence-based program that is lacking in our JHCP sites, our participation will help to ensure increased patient access to this service and the best quality care of care possible. JHCP is excited to collaborate with the regional partnership hospitals on this important initiative.

Sincerely,

Wendy L. Bennett, MD, MPH

Associate Professor of Medicine

Division of General Internal Medicine

Director of Research, Johns Hopkins Community Physicians

Perkins Square Baptist Church Rev. Dr. Cleveland T. A. Mason, II Way 2500 Edmondson Avenue Baltimore, MD 21223

Office of Church Administration

Reverend Dr. Cleveland T. A. Mason 2nd Senior Pastor

Wednesday, July 15, 2020

Tequila Terry
Deputy Director
Health Services Cost Review Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Ms. Terry:

On behalf of the Perkins Square Baptist Church and the United Baptist Missionary Convention and Auxiliaries for the State of Maryland, Inc., I would like to write this letter in support of the University of Maryland Medical Center's (UMMC) and Johns Hopkins Medicine (JHM) joint grant application for the Health Services Cost Review Commission's Regional Partnership Catalyst Grant supporting Diabetes Prevention and Management. As a community partner with UMMC, we have agreed to help by offering our corporate capacity in community, facilities and resources.

This partnership will assist UMMC and JHM by access to our faith community and buildings so that diabetes-related classes can be offered directly in the community. We look forward to partnering with the University of Maryland Medical Center and Johns Hopkins on this exciting opportunity to prevent and manage diabetes in Baltimore.

If you have any further questions about our support of our contribution to this grant, please feel free to reach me at NullifeMin@aol.com.

Thank you,

Reverend Dr. Cleveland T. A. Mason, 2nd
Senior Pastor, Perkins Square Baptist Church
President, United Baptist Missionary Convention & Auxiliaries for the State of MD, Inc.

Telephone: 410-945-0445 | Fax: 410-945-0005 | Website: www.



Center for Salud/Health and Opportunity for Latinos

Johns Hopkins University School of Medicine Mason F. Lord Bldg, Center Tower Suite 4200 5200 Eastern Avenue Baltimore MD 21224 410.550.1129 | centrosol@jhmi.edu

Baltimore, July 9th 2020

Re: Baltimore Metro Regional Diabetes Regional Partnership

Dear Review Committee:

Johns Hopkins Centro SOL, located at Bayview Medical Center, is committed to promoting equity in health and opportunity for Latinos by advancing clinical care, research, education, and advocacy in partnership with community organizations. Founded in 2013, Centro SOL has many longstanding partnerships with community organizations in the Latinx community, including the Latino Providers Network, Comité Latino de Baltimore, Esperanza Center and several faith-based organizations.

In 2015 Centro SOL piloted the Diabetes Prevention Program (DPP) in Spanish in partnership with a local school. Pilot participants were local Latino immigrants who faced competing demands on their time and a lacked an understanding of diabetes and its seriousness. As such, we encountered challenges with recruitment and retention. Our experience taught us that to ensure success we needed to culturally and linguistically tailor the program to serve the growing Latino population in our city which is a new destination for Latino immigrants. The Baltimore Metro Diabetes Regional Partnership provides an excellent opportunity for us to share what we learned from piloting the Spanish language Diabetes Prevention Program, to tailor the program for Latino immigrants in new destinations and for immigrants elsewhere and thereby increase the reach of the DPP to Latinos

In support of this application, Centro SOL commits faculty and staff time for further tailoring of the National DPP for the Latino population, and we will work closely with the Brancati Center on implementation of the National DPP. In addition, we will provide wraparound support from our bilingual community health workers to address barriers participants may have to program enrollment and completion.

Centro SOL is eager to partner with the Brancati Center to expand access to the DPP. Latinos bear a disproportionate burden of diabetes and deserve access to proven prevention programs. The proposed project capitalizes on the combined strengths and expertise of our two Centers to better serve the local community with the aim of reducing health disparities.

Sincerely,

Sarah Polk, M.D., Sc.M. Co-Director, Centro SOL

Assistant Professor of Pediatrics

Johns Hopkins School of Medicine



July 2, 2020

Tequila Terry
Deputy Director
Health Services Cost Review Commission
4160 Patterson Ave.
Baltimore, MD 21215

Dear Ms. Terry:

On behalf of Chase Brexton Health Care, I would like to share this letter in support of the University of Maryland Medical Center's (UMMC) grant application for the Health Services Cost Review Commission's Regional Partnership Catalyst Program supporting diabetes prevention and management. Chase Brexton has identified diabetes as an organizational priority in the coming years, and we are enthusiastic to participate in a citywide partnership with UMMC and Johns Hopkins, which has the potential to have a significant impact on the incidence and morbidity of diabetes in Baltimore.

As a grant partner, Chase Brexton will participate in the development of mechanisms to enhance the identification and referral of eligible patients in community provider settings into Diabetes Prevention Program and Diabetes Self-Management Training classes. During the initial planning year we will work with the partnership to further define our role, which may include referring patients to existing DPP and DSMT classes, offering space at our facilities for on-site diabetes education classes, participating in a diabetes learning collaborative, and/or working toward independent CDC or ADA accreditation to provide and bill for classes.

This partnership will be mutually beneficial to Chase Brexton and to UMMC and Johns Hopkins, as it will enable us to work together to offer important interventions to our patients to prevent or manage their diabetes. We look forward to this exciting opportunity.

If you have any further questions about our support of UMMC's regional partnership grant application, please feel free to reach me at pmutch@chasebrexton.org.

Sincerely,

Patrick Mutch
President & CEO

Priority Partners MCO 7231 Parkway Drive Hanover, MD 21076 410-424-4400



Maryland Health Services Cost Review Commission 4160 Patterson Avenue Baltimore MD 21215

Re: Baltimore Metro Diabetes Regional Partnership Application

July 8, 2020

Dear Review Committee:

On behalf of Priority Partners Managed Care Organization (PPMCO), I am pleased to provide this letter of commitment in support of the Baltimore Metro Diabetes Regional Partnership.

Priority Partners is the largest Maryland Medicaid managed care organization and is jointly owned by Johns Hopkins HealthCare LLC (JHHC) and Maryland Community Health Systems (MCHS). Priority Partners services over 300,000 members throughout the state of Maryland. We have more than 20,000 primary care providers and specialists in our network and we lead the industry in quality and member satisfaction among large plans. At Priority Partners, we are very interested in effective programs that can help our members, especially targeted approaches that reduce unnecessary future acute care use and promote preventive care which supports keeping people healthy.

In my role as Sr. Director at Priority Partners, I have been involved in programs to scale-up effective interventions such as the Maryland Diabetes Prevention Program demonstration grant through the Department of Health and Mental Hygiene (DHMH) which taught members within the targeted audience to lower their risk for diabetes or prevent diabetes. This program was part of the national demonstration project to determine if Medicaid would cover diabetes prevention across the nation.

PPMCO collaborated with the Johns Hopkins Brancati Center in the Medicaid Diabetes Prevention Program (DPP) Demonstration Project which laid the groundwork for Medicaid reimbursement for the DPP in Maryland. During that project, we worked closely with the Brancati Center, meeting at least weekly, to support the enrollment and retention of Priority Partners members in Brancati Center DPPs in the Baltimore Metro area. We were extremely pleased with the results; nearly 60% of those who attended 3 DPP sessions finished the entire yearlong program, and those 31 PPMCO members lost an average of 5.2% of their baseline weight by 12 months.

Specific to this application, we are pleased to continue our partnership with the Brancati Center. Priority Partners is committed to identifying and referring eligible members to diabetes prevention programs in all catchment areas established under this grant.

We wish the best of luck on this application and hope to work with you on this important initiative.

Sincerely,

Kathy Pettway, MAS

ARMSTRONG INSTITUTE FOR PATIENT SAFETY AND QUALITY



Ms. Tequila Terry, MPH, MBA Deputy Director, HSCRC

July 8, 2020

Dear Ms. Terry,

The Armstrong Institute's Diabetes Clinical Community is delighted to provide this letter of support for the **Baltimore Metro Diabetes Regional Partnership's** DSMT proposal. Formed in 2013, our Diabetes Clinical Community is self-governing network in the Johns Hopkins Health System comprised of physicians, advanced practice providers, nurses, registered dieticians, certified diabetes educators, pharmacists, and primary care physicians who have an interest in improving outcomes and experiences for our patients with diabetes. Our Clinical Community reports directly to the Vice President of Quality of the Johns Hopkins Health System (JHHS), and has decision-making authority for health system-wide diabetes-related protocol and policy changes.

Given the important focus of this proposal — increasing patient access to diabetes self-management education and support services — our team is well-positioned to assist the DSMT program's leadership in the development and implementation of DSMT programs throughout JHHS. Since Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Howard County Hospital, and Suburban Hospital are all represented in the Diabetes Clinical Community, we will leverage our existing partnerships to facilitate collaboration, sharing of best practices, marketing, and implementation of new protocols to ensure that patients receiving DSMT have similar experiences across all of our clinical sites.

We have a proven track record of successful programmatic implementation across our four JHHS partner hospitals. Our interdisciplinary team has developed and implemented ambulatory diabetes medication "smartsets" in Epic, a comprehensive tableau dashboard to compare diabetes clinical outcomes (e.g. glycemic control, length of stay, readmissions) across the health system, standardized hypoglycemia and hyperglycemia protocols in the inpatient setting, and electronic insulin dosing decision support tools. In addition, we have served as champions in JHHS to advocate for additional diabetes related resources at our hospitals and clinic sites. Dr. Nestoras Mathioudakis, who will be the DSMT Director for this proposal, serves as co-lead of our Clinical Community. Dr. Mihail Zilbermint, who is also co-lead of our Clinical Community, will serve as the physician champion for DSMT at Suburban Hospital. Their joint leadership which will help to synergize the work of this intervention with existing quality and systems work in our health system.

Considering the high prevalence of diabetes in Baltimore city and the surrounding areas, we believe that this partnership has the potential to make an important impact in the lives of our patients by increasing access to this proven effective intervention. Our team is committed to this effort, and we support this proposal with the highest level of enthusiasm possible.

Sincerely,

Dr. Nestoras Mathioudakis, MD MHS Associate Professor of Medicine

List late

Co-Lead, AI Diabetes Clinical Community

Clinical Director

Division of Endocrinology, Diabetes & Metabolism Johns Hopkins University School of Medicine

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Dr. Mihail Zilbermint, MD, FACE Assistant Professor of Medicine Co-Lead, AI Diabetes Clinical Community Chief of Endocrinology, Diabetes & Metabolism Suburban Hospital Johns Hopkins University School of Medicine



July 5, 2020

Health Services Cost Review Commission

Dear Colleagues:

I am writing this letter in strong support of the proposal from the Baltimore Metro Diabetes Regional Partnership to achieve their goal of addressing the need for diabetes prevention and treatment education. Their planned work is vitally important to the communities we serve in Baltimore. The members of Baltimore CONNECT are enthusiastic about working with the Partnership as members of the team.

I served as Principal Investigator of the PCORI funded research project (CD-12-11-4948) "Reverse innovation and patient engagement to improve quality of care and patient outcomes." A specific aim of the study was to create a network of community based organizations, neighborhood associations and churches to link more closely with the Johns Hopkins Health System (JHHS). The project led to the creation of Baltimore CONNECT (Community-based Organizations Neighborhood Network: Enhancing Capacity Together), a network of community-based organizations, faith based institutions and neighborhood associations.

When the grant ended, an unusual thing happened: Baltimore CONNECT continued to exist as a 501c3 organization. The continued mission is to enhance communication and build relationships between the health system and the community. I remain in a leadership role as Executive Director/Board President. Baltimore CONNECT now includes representatives from over 25 community organizations across Baltimore, as well as members from across the Johns Hopkins community. We have met at least monthly since our inception to build and expand a self-sustained, active network to better serve the residents of Baltimore. We have an additional focus on service and research projects to address specific community-identified needs. We have provided guidance to many research teams and faculty.

In my role as a general internist practicing in East Baltimore, I am continually aware of the great and disproportionate impact that diabetes has on people in Baltimore City. Baltimore CONNECT will commit to connecting the Baltimore Metro Diabetes Regional Partnership with Baltimore community leaders. Several of the proposed community partners are members of Baltimore CONNECT and will be enthusiastic about continuing to work together.

I look forward to working with the Baltimore Metro Diabetes Regional Partnership team. Please allow me to emphasize one last time: this work is crucial to the health and well-being of the people of Baltimore. Without it, we will not be able to take full advantage of the close partnership with community leaders that is so important in the prevention and treatment of diabetes.

Sincerely,

Albert W. Wu, MD, MPH

Professor of Health Policy and Management and Medicine Director, Center for Health Services and Outcomes Research Johns Hopkins University

Director, Baltimore CONNECT, Inc (501c3)

Baltimore CONNECT is a 501(c)(3) nonprofit corporation. No goods or services were received in exchange for this donation. Donations are tax deductible to the extent permitted by law. A copy of our current financial statement is available upon request. Documents and information submitted to the state of Maryland under the Maryland Charitable Solicitations Act are available from the Office of the Secretary of State for the cost of coping and postage.

624 N. Broadway Baltimore, MD 21205 410.955-6567 https://www.bmoreconnect.org/



Jill Angelone, Manager Healthcare Partnerships Lyft Business 185 Berry Street Ste 5000 San Francisco, CA **94107**

7/6/2020

Tequila Terry
Deputy Director, Center for Payer Reform and Provider Alignment
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Tequila,

On behalf of Lyft, please accept this letter in support of the University of Maryland Medical Center (UMMC) and Johns Hopkins Hospital (JHH) partnership for the 2021 Regional Partnership Catalyst Grant Program. As a partner with UMMC and JHH, we have agreed to serve as a regional partner in the community to expand the Diabetes Prevention Program (DPP) and Diabetes Self-Management Training (DSMT). Our partnership will benefit program participants by providing reliable and cost effective transportation for them to access wrap around services, such as follow up appointments and rides to food banks and/or grocery stores.

This partnership will assist UMMC and JHH increase program adoption, retention and completion rates by providing the necessary support for participants to successfully achieve the required health outcomes. We expect this to result in significant reductions in prediabetes and PQI93 rates among the communities served.

If you have any further questions about our support of UMMC and JHH, or our contribution to the regional partnerships, please do not hesitate to contact me at jangelone@lyft.com.

Thank you,

Till Angelone

Jill Angelone
Manager, Healthcare Partnerships

Sherita Hill Golden, M.D., M.H.S. Hugh P. McCormick Family Professor

of Endocrinology & Metabolism Vice President, Chief Diversity Officer **Johns Hopkins Medicine**

1620 McElderry Street (Reed Hall) Suite 420 Baltimore, MD 21205

Admin: 443-287-4827 sahill@jhmi.edu



July 13, 2020

Tequila Terry
Deputy Director
Health Services Cost Review Commission
4160 Patterson Ave.
Baltimore, MD 21215
Tequila Terry.

Dear Deputy Director Terry:

The Johns Hopkins Health System Office of Diversity, Inclusion, and Health Equity (ODIHE) is pleased to be a collaborator with the Baltimore Metropolitan Diabetes Regional Partnership (BMDRP) to address the need for increased number of and access to Diabetes Prevention Programs and Diabetes Self-Management Training programs. As an endocrinologist, a diabetes epidemiologist, and health equity researcher in addition to my leadership of the ODIHE, I am keenly aware of the numerous health system and social determinant factors that perpetuate diabetes inequities in our populations most at-risk.

As a wrap around service to increase success of the DPP and DSMT goals of this proposal, ODIHE is pleased to provide our health equity trainings and resources to increase equitable care for the populations to be served by this grant:

- Unconscious Bias Training for clinical and lay providers of newly established DPP and DSMT programs at hospital and community partner sites.
- Training in REAL and SOGI data collection for new hospital partners and community-based clinic partners (e.g. Columbia Medical Practice, Walgreens pharmacy) who will be sites for DPP and DSMT.
- A health equity analyst from my Office, who will work with the internal program monitoring and evaluation committee to monitor patterns of equity in program outreach, access, enrollment, participation, and performance outcomes. This information will be used as continuous performance improvement feedback for the BMDRP Governance Council and operations committees.

We are looking forward to this unique opportunity to help ensure the highest quality, equitable care to prediabetes and diabetes populations in our BMDRP service areas and to contributing to long-term improvements.

Sincerely,

Hugh P. McCormick Family Professor of Endocrinology and Metabolism

Vice President and Chief Diversity Officer, Johns Hopkins Medicine

Core Faculty, Welch Center for Prevention, Epidemiology, and Clinical Research

Core Faculty, Armstrong Institute for Patient Safety and Quality

July 2, 2020

Felicia Hill-Briggs, PhD
Professor of Medicine; Health, Behavior and Society; and Acute and Chronic Care
Senior Director, Population Health Research and Development
Johns Hopkins University and Medicine
2024 E. Monument Street, Suite 2-518
Baltimore, MD 21287

RE: Baltimore Metro Diabetes Regional Partnership

Dear Felicia,

We write in support of the *Baltimore Metro Diabetes Regional Partnership* project. As the faculty co-leaders of the Patient Engagement Program (PEP), we want to express our enthusiasm for this project that will address a critical need in Maryland and our willingness to participate as partners in providing training and program development services to ensure achievement of the grant goals.

PEP has significant previous experience collaborating with regional partnerships, including Johns Hopkins Community in Health (JCHiP), Community Health Partnership of Baltimore (CHPB), and the Howard County Health Partnership. These collaborations have resulted in improvement in partnership providers and staffs communication and relationship-building skills to deliver higher quality patient-centered care and increase patient engagement in care. Through our involvement in prior regional partnerships and our work with other health care organizations and institutions, PEP has developed and implemented a comprehensive training program that includes web-based programming, live skills workshops, and multi-modal skills maintenance activities as well assessment of learner knowledge, skill and attitude change.

In the current project, we propose a multi-level provider education and training approach. We have found offering various levels of training and maintenance activities depending on the responsibilities of providers, clinics and departments to be very useful and increase the feasibility and participation in the program. The PEP program is used by Johns Hopkins Health System entities and by health care companies and institutions nation-wide. Our evaluation studies consistently show that participating in PEP training is associated with significant improvements in relationship-building and communication skills that motivate patients to engage in chronic illness self-management behaviors.

Previous research has shown that merely making services available does not lead to adequate levels of patient engagement and participation. Providers across the care continuum need to have the skills to engage patients effectively. Unfortunately, many past projects have not adequately addressed the provider component in program implementation. We strongly support this projects efforts to provide wrap around services to reduce barriers to patient participation <u>and</u> provide education and training to improve provider engagement and their ability to engage enroll and retain patients in programs that have proven effectiveness.

In the context of this grant, we be pleased to collaborate to develop provider-facing referral processes and provider-facing and patient-facing education materials around referrals to DPP and DSMT. We will also well prepared to provide grant staff with training and support in effective provider-patient communication to increase referrals, enrollment, and completion rates in DPP and DSMT.

We look forward to working with you on this exciting and important project.

Sincerely,

Nicole Schechter, PsyD, ABPP-RP

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Faculty Co-Leader of the Patient Engagement Program (PEP)

Assistant Professor of Physical Medicine and Rehabilitation

Johns Hopkins University School of Medicine

Stephen T. Wegener, Ph.D., ABPP

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Faculty Co-Leader of the Patient Engagement Program (PEP)

Professor of Physical Medicine and Rehabilitation

Professor of Health Policy and Management, Bloomberg School of Public Health

Director, Division of Rehabilitation Psychology & Neuropsychology

Ms. Tequila Terry, MPH, MBA Deputy Director, HSCRC

July 8, 2020

Dear Ms. Terry,

Johns Hopkins Medicine and Walgreens work closely together on a variety of joint ventures which includes a Walgreens store owned jointly between our two institutions. On behalf of the board running the Joint Venture store, we are excited to serve as a community partner in the **Baltimore Metropolitan Diabetes**Regional Partnership's Diabetes Self-Management Training (DSMT) initiative. This important initiative by Johns Hopkins Medicine and Johns Hopkins Health System (JHHS) in partnership with the University of Maryland Medical Center (UMMC) is focused on improving patient access to diabetes self-management training (DSMT) services within their own communities. Both Walgreens and Johns Hopkins Medicine recognize the value of this initiative and are excited to explore potential strategies to leverage the hundreds of Maryland Walgreens stores to expand the reach of this clinical service within the communities served by the regional partner hospitals.

Walgreens and Johns Hopkins Health System have a long-standing history of collaboration, with creation of a joint venture Walgreens store adjacent to the Johns Hopkins Hospital East Baltimore Campus (900 N. Washington Street) in 2009. This partnership was started by Dr. Fred Brancati and Dr. Jay Rosan (VP at Walgreens) as a consulting agreement in four areas:

- Clinical framework review, in which Hopkins provided oversight of clinical guidelines and algorithms used in Walgreens healthcare clinics
- Research program incubation
- Development of training programs for Walgreens employees
- Clinical program development, such as new delivery models and creation of linkages across organizations

The joint venture store opened in November 2013, and has been used by clinicians affiliated with the Johns Hopkins Brancati Center for the Advancement of Community Care. Although Walgreens' pharmacists do not currently provide acute care services or diabetes self-management training, with this important initiative, we recognize an opportunity to leverage our existing partnership, qualified healthcare professionals, and instore clinical spaces to promote awareness of diabetes and increase access to important diabetes self-management training.



We understand that the first year of this regional partnership will be devoted to securing community and clinical partners and solidifying the DSMT interventions. We are supportive of exploring three possible models as a community partner:

- Train Walgreens pharmacists to become certified diabetes educators, enabling them to provide and bill for DSMT services directly in Walgreens community pharmacy locations as American Diabetes Associated (ADA) accredited DSMT sites. DSMT services are reimbursed by the Medicare and Medicaid Services if delivered in clinical settings such as Walgreens.
- Hire and support (through the grant budget) a full-time certified diabetes educator to build a DSMT program at the current joint venture location in East Baltimore, and help to grow the program at other Walgreens locations.
- Assign Hopkins clinical DSMT staff to staff Walgreens clinic locations, beginning with the flagship East Baltimore location. Use existing clinic and meeting rooms to provide one-on-one and group DSMT instruction.

Walgreens stores provide a large number of diabetes testing supplies, such as glucose meters, urine ketone test strips, and point-of-care hemoglobin A1C test kits. With this partnership, there is an opportunity to develop training videos and informational materials to link diabetes self-management education directly to the supplies sold in our stores. In addition, the Walgreens website offers tools, resources, and education related to diabetes. One such service, "Pharmacy Chat," allows patients to get confidential answers to general health and medication questions. These services could be expanded to include vetted diabetes self-management training materials developed by the DSMT regional partners. In addition, we are interested in exploring the possibility of using telehealth to deliver DSMT services remotely by our certified pharmacists. Linking the Walgreens website to the DSMT regional partner website is another approach that can help diabetes patients to identify their closest ADA accredited DSMT program.

We look forward to partnering actively with our collaborators at Walgreens to explore these and other innovative approaches to improving the health of the communities we serve.

Sincerely,

Mark A. Cochran, PhD

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Executive Director

Johns Hopkins Medicine

Johns Hopkins HealthCare Solutions