

HSCRC Transformation Grant

FY 2020 Report

The Health Services Cost Review Commission (HSCRC) requires the following information for FY 2020 Regional Partnership Transformation Grant Program participants: this Report, the Budget Report, and the Budget Narrative. Whereas the Budget Report distinguishes efforts between each hospital, this Summary Report should consolidate information and describe all hospitals, if more than one, that are in the Regional Partnership.

Regional Partnership Information

Regional Partnership (RP) Name	MedStar Total Elder Care Collaborative
RP Hospital(s)	MedStar Good Samaritan Hospital & MedStar Union Memorial Hospital
RP Point of Contact	Julie Beecher, AVP Operations
RP Interventions in FY 2020	<ul style="list-style-type: none"> ● Ongoing growth & expansion of MedStar Total Elder Care—now called MedStar House Call Program ● Planning & launch of large marketing campaign to increase awareness and enrollment ● Completion of cost savings impact evaluation ● Simulation methodology work with HSCRC on Care Transformation Initiative impact measure for home-based primary care
Total Budget in FY 2020 <i>This should equate to total FY 2017 award</i>	FY 2020 Award: \$330,759
Total FTEs in FY 2020	Employed: 8 FTEs
	Contracted: 0
Program Partners in FY 2020 <i>Please list any community-based organizations or provider groups, contractors, and/or public partners</i>	See list below of our program partners and regional activities

Overall Summary of Regional Partnership Activities in FY 2020

The HSCRC grant funded the expansion of MedStar’s successful DC home-based primary care program into Baltimore City, Maryland. We began seeing patients in July, 2016. As of October,

2016 the Baltimore practice was fully-staffed and our efforts turned toward patient recruitment. In Year 2 of the HSCRC implementation grant (July 2017 – June 2018), the Baltimore team continued to expand. In Year 3 (July 2018 – June 2019), our sights remained focused on scaling the model and demonstrating impact on total costs of care. Year 4, we learned of HSCRC's approval to use of a portion of funds through June 2020. We mobilized for the following:

- Continue care model and aggressive patient enrollment efforts by using the latest attributed patient lists, streamlining PCP referrals, and launching a local marketing campaign
- Finish the total cost of care evaluation with external health economist team (JEN/Westat) and share those findings with state policymakers. While patient enrollment has been less than anticipated, impact on cost savings has been high, as we expected with preliminary results.
- Collaborate with HSCRC to simulate a fair methodology for impact measurement in home-based primary care work under the HSCRC Care Transformation Initiatives, using data already available from TCOC evaluation.

From the start of the program through June 30, 2020, the Baltimore team enrolled a total of 563 patients, with an active census of 169 patients. This is up from an active census of 139 as of June 2019. Approximately 90% of patients are covered by Medicare FFS, and 10% have Medicare Advantage. The number of Medicare Advantage patients has declined since inception due to MedStar's termination of their Medicare Advantage plan. 35% of the patients are also dual-eligible for Medicaid. The program accepted all frail elders who qualified for home-based primary care services in our service catchment. (For purposes of HSCRC initiative, none of the funds were used for Medicare Advantage patients). House Call patients are very ill and complex, with a mortality rate of about 36% per year.

Our Baltimore partners include:

- **Transportation:** Action in Maturity, MedStar Transport
- **Home PT/OT, Skilled Nursing & Hospice:** MedStar VNA, Hopkins Home Care, Gilchrist Hospice, VITA Hospice
- **Sub specialists & inpatient rehabs:** all the local sub-acute facilities
- **Hospital & ER care:** all local hospitals where our patients might land. Notified via CRISP alerts. Our physicians provide inpatient care at MedStar Good Samaritan Hospital.
- **Labs & Radiology:** Providers draw labs-in home and use MedStar Good Samaritan lab to process. Initially the team tried LabCorp, but results weren't easily available to clinicians. Mobile radiology services through Mobile Medical
- **Delivery of Medication and Equipment:** through local Medicare agencies. MedStar Pharmacy at Good Samaritan hospital provides home delivery and customized blister packaging for patients who opt for that service. Otherwise, any local pharmacy partners with our clinicians and receives electronic prescriptions.

- **Social Services & Legal:** triaged through MedStar House Call social worker to various community agencies. Guardianship attorney (on contract by MedStar) engaged when appropriate for patient/family situation.
- **Housing:** Over 100 group homes and senior assisted living facilities were identified in our catchment. Our staff has cultivated relationships with many of them to foster awareness and referrals. They routinely offer ice cream socials, participate in health fairs, and community events. Stadium Place, St. Mary’s Roland View, Walker Mews, & Kirkwood House are a few of the senior residence facilities that are strong partners.

Intervention Program

Please copy/paste this section for each Intervention/Program that your Partnership maintains, if more than one.

<p>Intervention or Program Name</p>	<p>MedStar House Call Program (MHCP) (Home-Based Primary Care)</p>
<p>RP Hospitals Participating in Intervention <i>Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.</i></p>	<p>MedStar Good Samaritan Hospital (MGSH) & MedStar Union Memorial Hospital, but not exclusively.</p> <p>MHCP uses the CRISP Health Information Exchange (HIE) to upload weekly patient panels and receive real-time alerts when any utilization events at any hospital in the region occurs. All hospitals are considered partners, as our staff follow-up with respective hospitals and patients within 48 hours after a discharge. MHCP team tries to intervene early to prevent unnecessary hospital admissions and coordinate admission if medically indicated.</p> <p>MHCP deliberately co-housed its administrative offices on campus of MGSH to promote relationship and participation in high risk inpatient rounding.</p> <p>We adjusted our staffing model to deploy more mid-level providers since inpatient care by geriatricians proved impractical.</p>
<p>Brief description of the Intervention <i>2-3 sentences</i></p>	<p>A nationally recognized model of primary care with proven consistent cost savings over the past five years (~ 12-30%), this intervention consists of modular, geographically targeted teams who serve the most ill subgroup of elders in a catchment area, usually within a 20-minute driving radius. The core element of success is our ability to offer a single, comprehensive source of home-based medical and social services for patients and their families. Core services include home-based primary care (and now expanded telehealth with Covid-19 pandemic), 24/7 on call medical staff, continuity to</p>

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	<p>the hospital, intensive social services, and coordination of all specialty and ancillary services.</p>
<p>Participating Program Partners <i>Please list the relevant community-based organizations or provider groups, contractors, and/or public partners</i></p>	<p>See earlier list above of our partners.</p>
<p>Patients Served <i>Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.</i> <i>HSCRC acknowledges that the High Utilizer/Rising Risk or Payer designations may over-state the population or may not entirely represent this intervention’s targeted population.</i> <i>Feel free to also include your partnership’s denominator.</i></p>	<p># of Patients Served as of June 30, 2020: 563 patients served since the launch of our Baltimore practice in May 2016</p> <p>Note: Our patient population has had an attrition rate of 36.5% (largely due to death), which means an ongoing enrollment of new patients – and an evolving patient panel. This holds implications for how our metrics are assessed outlined below.</p> <p>Denominator of Eligible Patients: We do not have a reliable denominator of eligible patients, nor have we been asked to provide this data as part of the RFP.</p> <p>Since start-up in Maryland, MHCP has actively tried to identify and target potential patients. Work with the earlier HSCRC hospital attribution lists proved highly inaccurate. MHCP attempted a targeted approach using Care Journey’s proprietary high-risk tool on ACO attributed patients. We found high risk tool effective though many eligible patients deceased due to old data. Our challenge was and remains competing incentives in a large health system. Some primary care providers are reluctant to relinquish patients for fear of losing contractual RVU bonuses, despite a proven care delivery model.</p>
<p>Pre-Post Analysis for Intervention (optional) <i>If available, RPs may submit a screenshot or other file format of the Intervention’s Pre-Post Analysis.</i></p>	<p>Not applicable—will share the health economic Westat/JEN analysis</p>
<p>Intervention-Specific Outcome or Process Measures (optional) <i>These are measures that may not have generic definitions across Partnerships or Interventions and that your Partnership</i></p>	<p>We track several metrics that contribute to the mission of supporting patients wishing to remain in the home with dignity</p> <ul style="list-style-type: none"> ● Only 14% of patients went to nursing homes ● “Good” death metrics <ul style="list-style-type: none"> ○ Died at home – 43%

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<p><i>maintains and uses to analyze performance.</i> <i>Examples may include: Patient satisfaction; % of referred patients who received Intervention; operationalized care teams; etc.</i></p>	<ul style="list-style-type: none"> ○ Hospice at end of life -45% ○ DNR at end of life – 49% ● Advance directive reviewed within last 18 months – 71.5% ● Annual assessment of goals of care – 93% ● Annual patient satisfaction survey – 100% of respondents would recommend MHCP to friends and family (our leading source of referrals)
<p>Successes of the Intervention in FY 2020 <i>Freeform Narrative Response, up to 1 Paragraph</i></p>	<ul style="list-style-type: none"> - Carry-over funds were used to plan and launch a regional marketing campaign targeted to caregivers and clinicians in the Baltimore catchment. Campaign was delayed due to Covid-19 pandemic and launched mid-September 2020. - MHCP presented preliminary results on total costs of care (TCOC) evaluation to HSCRC leaders. Matched cohort results are available upon request. - In preparation for HSCRC Care Transformation Initiatives (CTI). MHCP collaborated with HSCRC to simulate a potential methodology for HSCRC to use to measure impact and show future ROI using Medicare claims data.
<p>Additional Freeform Narrative Response (Optional)</p>	

Core Measures

Please fill in this information with the latest available data from the in the CRS Portal Tools for Regional Partnerships. For each measure, specific data sources are suggested for your use– the Executive Dashboard for Regional Partnerships, or the CY 2019 RP Analytic File (please specify which source you are using for each of the outcome measures).

Note: The CRS Portal has a few limitations that preclude its use here. First, the regional partnerships dashboard uses a single static panel when our patients are enrolling in our practice steadily over time. Second, the dashboard appears to display year-to-date (cumulative) values that decrease over time, which does not inspire confidence in the accuracy of the data. As a work-around, we track our own CRISP utilizations throughout the year based on an evolving patient population and this is the data we analyzed for the measures below. For this report, MHCP will present the data that we have available.

Utilization Measures

Measure in RFP	Measure for FY 2020 Reporting	Outcomes(s)
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<i>(Table 1, Appendix A of the RFP)</i>		
Total Hospital Cost per capita	<p>Partnership IP Charges per capita</p> <p>This data is not available based on our patient panel. As mentioned above, our enrollment is continuous churn – not a single static panel.</p>	<p>IP Charges per Capita</p> <p><i>Per the note above, the only charge info we have that encompasses all hospitals come from CRS. The CRS does not permit an evolving patient panel and is therefore inaccurate.</i></p>
Total Hospital Discharges per capita	<p>Total Discharges per 1,000</p> <p>In past reports, we’ve cited discharges per patient-year, which we believe to be a more descriptive rate for our practice. Patients are sometimes with our practice for a few months, sometimes for many years. Total Discharges per Patient-Year helps us standardize the measurement across all enrollees.</p>	<p>Total Discharges per Patient-Year</p> <p>0.51 (based on 93 admissions)</p>
ED Visits per capita	<p>Ambulatory ED Visits per 1,000</p> <p>Same as above. An evolving patient panel necessitates a rate based on patient-years rather than simply the number of enrollees.</p>	<p>Ambulatory ED Visits per Patient-Year</p> <p>0.46 (based on 84 visits)</p>

Quality Indicator Measures

Measure in RFP <i>(Table 1 in Appendix A of the RFP)</i>	Measure for FY 2020 Reporting	Outcomes(s)
Readmissions	<p>Unadjusted Readmission rate by Hospital (please be sure to filter to include all hospitals in your RP)</p> <p>Readmissions here are defined as number of admissions that are within 30 days of the previous discharge over a denominator of all admissions. Our rate is based on our rolling practice panel and includes all</p>	<p>Readmission Rate by Practice</p> <p>32% (30 of 93 all-cause admissions were within 30 days of discharge)</p>

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	admissions accounted for by the CRISP encounter notification system (ENS)	
PAU	<p>Potentially Avoidable Utilization</p> <p>PAUs are defined here at those admission and ED visits that have a clear cause of CHF, COPD, diabetes exacerbation. Because complaint/diagnosis is often omitted from the CRISP ENS data set, the number report here is likely lower than actual.</p>	<p>Potentially Avoidable Utilizations (per CRISP ENS notifications)</p> <p>1.3% (4 of 93 admissions were PAU)</p>

CRISP Key Indicators (Optional)

These process measures tracked by the CRISP Key Indicators are new, and HSCRC anticipates that these data will become more meaningful in future years.

Measure in RFP <i>(Table 1 in Appendix A of the RFP)</i>	Measure for FY 2020 Reporting	Outcomes(s)
Portion of Target Population with Contact from Assigned Care Manager	Percent of Target Population Contacted by Care Manager	Care management is embedded in the multidisciplinary team approach to patient care. Every patient is screened on all health needs including psychosocial needs. A tailored plan is implemented on all enrolled patients based on mutually established goals of care.

Self-Reported Process Measures

Please describe any partnership-level measures that your RP may be tracking but are not currently captured under the Executive Dashboard. Some examples are shared care plans, health risk assessments, patients with care manager who are not recorded in CRISP, etc. By-intervention process measures should be included in ‘Intervention Program’ section and don’t need to be included here.

MHCP uses the Electronic Health Record to order and track partner referrals. These include episodic skilled nursing referrals, hospice, pharmacy, DME, and social service needs.

Return on Investment – (Optional)

Annual Cost per Patient as calculated by:

Total Patients Served (all interventions) / Total FY 2020 Expenditures (from FY 2020 budget report)

Using the formula outlined above to determine annual cost per patient is flawed for this intervention. Grant expenditure by patient does not reflect the infrastructure investment required to stand-up a new care model in a new geography. If insistent on this crude estimate, patient-years would be a better measure due to the churn of patients and intensity.

\$1,198,650 (HSCRC grant expenditures recognized in FY'20)/216 patients = \$5,549 per patient

\$1,198,650 (HSCRC grant expenditures recognized in FY'20)/181.5 patient years = \$6,604 per patient-year

To support the HSCRC return on investment, MHCP conducted an impact study with third-party health economist group JEN/Westat. Total cost of care results are available to HSCRC upon request.

Summary findings:

- MHCP cases vs. matched controls:

Total Cases vs. Controls: Performance Summary

Scale for Cases relative to Controls:	Significantly Lower	Lower	Neutral	Higher	Significantly Higher
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Outcome ¹	Adjusted Mean Difference (Cases - Controls) obtained from Regression Models						
	Years Relative to Index						Entire Follow-up Period
	-1	Index	+1	+2	+3	+4	
ER Visits	17.76	1.62	-30.32	-35.04	-45.08	-76.10	-63.40
Inpatient Acute Episodes	1.94	-5.99	-12.52	-17.94	-18.46	-12.78	-30.02
Potentially Avoidable Hosp	4.48	0.84	-2.49	-4.96	-7.18	-3.38	-5.10
Inpatient Discharge to SNF	3.12	0.66	4.08	0.53	5.44	-2.41	0.46
30 Day Readmissions	4.25	3.12	-2.02	-6.55	-2.36	-4.47	1.18
Institutional Days	-1.08	-8.90	-6.47	-5.43	-6.82	-1.45	-19.22
Total Medicare Expenditures	-\$421	-\$571	-\$3,208	-\$4,794	-\$5,624	-\$2,310	-\$6,749

¹ All outcomes except institutional days and Medicare expenditures are the rate per 100 qualifying beneficiaries.

- The time relative charts show that the total cases had higher rates of utilization and Medicare costs pre-index, but these measures fell below or to the same level as their matched controls by the end of the observation period.
- **The results of the multivariate analysis show that after adjusting, cases had significantly lower rate of ER visit, inpatient acute episodes, institutional days, and total Medicare dollars over the entire post-index period than their matched controls.**

- MHCP had the greatest impact on participants of medium or high frailty, and the least impact on those with lower frailty at index.
- The 30-day readmission rate fell for all case cohorts when compared to their pre-index rate.
- Incident Baltimore cases had the highest rates on inpatient acute episodes prior to index, but the lowest rate two years post-index.
- Both Incident DC and Baltimore cases had higher rates of ED visits than Prevalent DC cases prior to index; rates converged post-index.
- Incident Baltimore cases were younger, more racially diverse, had a higher mean frailty (JFI) at index, and a higher prevalence of most chronic conditions than either the Incident or Prevalent DC cohorts.

Impact of COVID-19 on Interventions – (Optional)

Please include information on the impact of COVID-19 on your interventions, if any. Freeform Narrative response, 1-3 paragraphs.

The Covid-19 pandemic was unprecedented and unplanned and continues to impact our patients and staff. It forced our entire health system's usual operations to a halt and caused considerable financial loss. Proudly, our mobile care teams quickly shifted to providing telehealth video visits and virtual phone visits to a most vulnerable population in response. We also continued urgent face to face visits using appropriate personal protective equipment (PPE). MHCP was one of the first programs provisioned on MedStar's telehealth platform which helped avoid any delays in patient care and prevent unnecessary hospitalizations. Our services also provided considerable 'peace of mind' and early education to patients and caregivers on mitigating exposure to Covid-19.

While we have been successful in providing telehealth video visits and virtual phone visits to a most vulnerable population, many of our patients don't have access to a Smart phone or internet service to permit a telehealth visit with their provider. Recently, MHCP received some additional emergency Covid 19 grant funding to provision some of our neediest patients with simple agnostic devices. MHCP is piloting deployment of these devices, anticipating better access to their providers and improved social isolation. Also unknown is how telehealth visits will be reimbursed after the public health emergency lifts.

Intervention Continuation Summary

Please include a brief summary of the successful interventions that have been supported by this grant program that will be continuing after the conclusion of the grant. Freeform Narrative Response, 1-3 paragraphs.

Expansion of home-based primary care to Baltimore region would not have been possible without start-up funding from HSCRC. While enrollment numbers have been lower than anticipated, the intervention continues to demonstrate cost savings and quality care. Despite these proven outcomes MHCP operates at a deficit and will continue to lose revenue under the traditional fee-for-service payment. Anticipating less HSCRC support coupled with Covid-19 financial impact, MHCP faced the difficult decision of laying off one clinician in June 2020 to preserve care model.

This past year, MHCP began a major undertaking to strategically restructure our program to align with other Geriatric and community-based programs within the MedStar health system across the region. All

geriatric services will be under one umbrella for system-wide coordination within Clinical Care Transformation under the leadership of Dr. Meena Seshamani. This merge will allow us to better align our services, streamline resources, bring together a broader team of clinical experts, and expand our services to other markets already serviced by MedStar hospitals. The goal for phase one is to have new organizational structure approved and in place by January 2021.

On the horizon, MHCP submitted applications to Medicare to participate in a new payment model [Primary Care First](#). Unfortunately, the Baltimore practice was not accepted due to low average beneficiary enrollment numbers for the lookback period. The DC practice was accepted, and the new payment model is scheduled to begin January 1, 2021. If effective, MedStar hopes to add more care teams and geographies as permitted by Medicare.

Opportunities to Improve – (Optional)

If there is any additional information you wish to share to help the HSCRC enhance future grant programs, please include the information here. Freeform Narrative Response, 1-3 paragraphs.

- As hoped and expected, the care model works and saves money in a new geography. Early on, MHCP found that geriatricians providing inpatient care inefficient. We changed the care model, stopped inpatient attending work and pivoted to tracking closely with hospitalists. Still lagging is a sustainable payment model in Maryland that supports this work.
- Start-up is hard and takes time. Hiring a skilled, cohesive, mission-driven team has been key. Establishing trust and reputation inside large health system, and in communities easily requires 1-2 years. MedStar is enormously proud of this team, most notable during the Covid-19 pandemic surge. HSCRC should consider longer investment timeframes to grow worthwhile interventions.
- The larger eco-system matters. Patients and families are reluctant to change medical providers despite hardship in getting to a doctor's office and no wrap-around services. Similarly, some primary care providers are reluctant to hand-off patients because of payment incentives. Still ahead--- building an accurate stratified patient identification/referral infrastructure that rewards hospitals and clinicians to hand-off care to more effective care models.
- Clearer guidance from HSCRC on the grant terms, extension, and tracking of grant funds through increased hospital rates. As part of this grant, MHCP proposed and built out modest office space. Unfortunately, MedStar could not recognize those costs because of HSCRC rate regulations. MHCP learned late that carry-over funds for Year 4 were possible. Enormously grateful, MedStar mobilized quickly to utilize.