HSCRC Regional Partnership Transformation Grant Narrative

Year 3 - FY 2019

Bay Area Transformation Partnership (BATP)

Anne Arundel Medical Center

and

University of Maryland Baltimore Washington Medical Center

Submitted: 9/30/19

Submitted by: Cynthia Gingrich, BATP Program Management Consultant

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HSCRC Regional Partnership Transformation Grant

FY 2019 Report

The Health Services Cost Review Commission (HSCRC) is reviewing the following for FY 2019: this Report, the Budget Report, and the Budget Narrative. Whereas the Budget Report distinguishes between each hospital, this Summary Report should describe all hospitals, if more than one, that are in the Regional Partnership.

Regional Partnership Information

Regional Partnership (RP) Name	Bay Area Transformation Partnership
RP Hospital(s)	Anne Arundel Medical Center University of Maryland Baltimore Washington Medical Center
RP POC	Cynthia Gingrich, Project Management Consultant
RP Interventions in FY 2019	Total Interventions in FY19: **12,125** AAMC: 9,602 UM BWMC: 2,523
Total Budget in FY 2019 (Per FY17 award)	FY 2019 Award: **$3,831,141**
Total FTEs in FY 2019	Employed: 28 AAMC: 18 FTE's (12 direct, 6 indirect) UM BWMC: 10 FTE's
	Contracted: 15.5 FTE's The Coordinating Center (AAMC): 5.25 The Coordinating Center (UM BWMC): 5.25 Anne Arundel County Dept of Aging Senior Triage Team (UM BWMC): 4 BATP Project Manager (.5 for AAMC, .5 for UMBWMC) 1.0
Program Partners in FY 2019 *Please list any community-based organizations or provider groups, contractors, and/or public partners*	**Participating Community Based Organizations *for whom grant funding is used:*** Anne Arundel County Department of Aging and Disabilities Senior Triage Team The Coordinating Center Fire/EMS Queen Anne's County - Department of Health Mobile Integrated Care Unit SilverStay for Assisted Living Facility Collaborative (AAMC)

Program Partners in FY 2019 (continued)	**Additional Participating Community Based Organizations (*not grant funded*):** Anne Arundel County Department of Health Department of Aging and Disabilities Department of Mental Health Adfinitas Health (skilled nursing facility providers and hospitalist groups) Arundel Lodge CareFirst Chesapeake Palliative Medicine CRISP Eastern Shore Psychological Services Fire/EMS Prince Georges County Anne Arundel County Skilled Nursing Facility Collaborative Medical Directors, Administrators, Directors of Nursing and Corporate representation for: Cadia Healthcare of Annapolis Caroline Nursing and Rehab CommuniCare Marley Neck CommuniCare South River Crofton Care and Rehab Fairfield Nursing Center Futurecare Capital Region Futurecare Chesapeake Futurecare Irving Genesis Corsica Hills Genesis Severna Park Genesis Spa Creek Genesis Waugh Chapel Ginger Cove SAVA Glen Burnie SAVA Heritage Harbor SAVA North Arundel Signature Health Chesapeake Shores Signature Health Mallard Bay Hospice Organizations Hospice of the Chesapeake Season's Hospice Heartland Hospice Primary Care (22 offices) and Specialist (69) Practices, Collaborative Care Network Primary Care and Specialist Practices, UM BWMC, UM Medical Group (16 practices)

Overall Summary of Regional Partnership Activities in FY 2019

The Bay Area Transformation Partnership between Anne Arundel Medical Center, the University of Baltimore Medical Center and over forty (40) program partners, including four (4) with direct funding this year, have joined forces over the past three years to improve patient care through improved cross-organizational care coordination. **The primary focus was to concentrate on reducing the total cost of care (TCOC) by focusing on higher utilizers of expensive hospital and emergency departments.** Through our planning grant in FY16, the HSCRC asked us to reduce potentially avoidable utilization (PAU) by concentrating on the higher utilizer Medicare FFS, dual-eligible and All-Payer populations, and required a yearly return on investment strategy. Our TCOC reduction strategy, as outlined in our proposal, is based on finding the higher utilizers with whom long-term impact can be made by assisting with ***chronic condition management, non-medical services and support, and integrated behavioral health with primary care.*** In FY19, BATP applied interventions to over 12,000 patients and offered services to thousands more (Figure 1).

The strength of the Bay Area Regional Partnership lies in the identification of cross-organizational communication and information gaps, analysis of current and future state workflows coupled with the use of industry standards, EHR and CRISP tools for data and information sharing. We have built relationships across the state and with community partners, have taught one another about what is most important for *each* care team member to know and when, and designed and adapted charting and communication practices to meet those needs. This streamlines care, bridges gaps in knowledge around patient medical, behavioral health, non-medical needs and factors related to home life that contribute to unnecessary utilization**.** ***Our over-arching goal has been to improve patient care and reduce PAU and associated costs through direct communication and by providing relevant, actionable data at the point of care for each care team member, with a 'no walls' approach across the continuum of care.***

BATP interventions have assisted more than the higher utilizers, additionally reaching rising risk (2 or more visits of any type within 12 months prior to assistance) and pre-rising risk patients, often with undiagnosed behavioral health needs identified in primary care settings. With over 432,000 secure text messages sent across 105+ different care settings[1] in FY19, the depth and breadth of the partnership efforts to increase coordination of care across community and hospital partners is evident.[2]

In addition to exceeding return on investment goals and significantly reducing potentially avoidable utilization as outlined in the ROI section of this report, our major accomplishments this year include:

- Primary care providers and staff know within their own workflow (Epic inbasket) when their attributed patients are discharged from any hospital or skilled nursing facility, and can reach-out and document their action to align follow-up appointments (AAMC live, UMBWMC analysis phase).
- Hosted a 3rd year of quarterly Skilled Nursing Facility (SNF) Collaboratives with leadership from 19 facilities and other community partners, using CRISP/hMetrix risk-adjusted data to compare performance, identify top performers and hear presentations on how they operationalize improvements in patient engagement and care. Identified several gaps in data and communication, developed material for patients and families to communicate the differences between hospital and SNF environments to reduce readmissions.

[1] AAMC 29 specialist areas, 19 skilled nursing facilities, 22 primary care offices, Queen Anne's County Mobile Integrated Care unit, Hospice of the Chesapeake, Chesapeake Palliative Medicine, CareFirst, Prince George's County Fire/EMS, Eastern Shore Psychological Services, Arundel Lodge Behavioral Health Home, Adfinitas Health and 18 other AAMC departments. UMBWMC has their own instance of Halo secure texting, which is above and beyond the usage noted here.

[2] Halo secure texting general usage report for FY19, CRISP instance of Halo.

- Provided intensive, home-based community care management to over 1,300 patients through three (3) separate programs, resulting in an -$8.3M decrease in change in charges[3].
- Assisted 1,160 patients across the partnership with behavioral health psychotherapy/psychiatrist alignment, with referrals from community providers, ED and inpatient staff.
- Developed innovative, advanced use of CRISP Encounter Notification Service (ENS) for providers and community partners, based on workflow redesign and integration that delivers patient movement within provider, staff and care management workflows (Epic inbaskets, Halo secure texting).
- Made significant progress with CareFirst case management and IT leadership to bring payer care management into the BATP care coordination conversation, using Shared Care Alerts, Care Planning and Secure Texting to assist in coordinating the coordinators, providing PCP and Specialist communication and enabling program outcome measurement.
- Anne Arundel Fire/EMS data sharing contracts have been signed and collaboration is underway to assist high utilizer patients of 911 and ED services with medical and non-medical support services available through BATP and the Department of Aging & Disabilities.
- Contributed financial support and work closely with Queen Anne's County Fire/EMS, a highly successful Mobile Integrated Community Health (MICH) service.

BATP Intervention Totals	**FY19 thru June 2019**	
	All Payer	
	AAMC	**UM BWMC**
Unique Patients		
Non Behavioral Health Interventions	2091	1476
Behavioral Health Interventions	624	496
# of unique patients	**2715**	**1972**
Non-Unique Interventions	**AAMC**	**UM BWMC**
Shared Care Alerts (written in fiscal year)	698	1004
The Coordinating Center (Comm Care Mgt)	637	490
Senior Triage Team	N/A	199
One Call Care Management	1198	334
Behavioral Health in Primary Care	75	496
Behavioral Health Navigator ED	239	N/A
Behavioral Health Navigator Community	350	N/A
# of non-unique interventions :	**3197**	**2523**
Patient Panel Coordinators	6331	N/A
	9528	**2523**
Total Interventions = 12,051		
Total Cost of Services	**$ 2,203,496**	**$ 1,629,676**
Annual cost per intervention	**$ 231.27**	**$ 645.93**
Annual cost per patient	**$ 811.60**	**$ 826.41**

Figure 1 BATP Intervention Summary FY19

Figure 2 BATP Intervention Summary FY19

[3] Using May casemix, July 1 2018 through Feb 28 2019 patients receiving community care management services, 3-months pre/post.

BATP Interventions

Shared Care Alerts

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

Intervention or Program Name	Shared Care Alerts
RP Hospitals Participating in Intervention	All
Brief description of the Intervention *2-3 sentences*	A Care Alert is special cross-encounter, multidisciplinary note, designed to provide a single location in the medical record for the most important, actionable information about a patient's medical and non-medical needs, for and by the entire Care Team. Care Teams include clinicians and social workers both within the hospital and in the community, who have a treatment or working relationship with the patient. Care Alerts are shared in real-time from Epic to and via CRISP and are sent and received to/from over 100 organizations / offices statewide, regardless of EHR vendor. UMBWMC 2.0 FTE's (Medical and Behavioral Health) AAMC .25 FTE
Participating Program Partners *Please list the relevant community-based organizations or provider groups, contractors, and/or public partners*	Anne Arundel Medical Center and UM Baltimore Washington Medical Center; Emergency Department Physicians and staff, Primary Care Providers, Specialists, Hospitalists, Nursing, Social Workers. • The Coordinating Center (community care mgt) • Anne Arundel County Department of Aging & Disabilities – Senior Triage Team (community care mgt) • Arundel Lodge • Hospice of the Chesapeake • End State Renal Disease Seamless Care Organization (ESCO) • Prince George's and Queen Anne's County Mobile Integrated Health Unit • Primary Care Providers (UMG)
Patients Served	# of Patients Served as of June 30, 2019: **1,702** Care Alerts Written in FY19 - AAMC: 698 UMBWMC: 1,004 Cumulative *Active* Care Alerts during FY19: **4,502** AAMC: 1,489 UMBWMC: 3,013
	Denominator of Eligible ***Population***: 550,445 Denominator of Eligible ***Patients***: 3,820 From CY2018 RP Analytic File: 3+ IP or Obs>=24 (All Payer)

Pre-Post Analysis for Intervention	AAMC: FY19 3-mo Pre/Post 698 patients (433 of which were Medicare FFS), -$4.7M reduction in total charges, -13.6 visits per 10 members. ROI 48.74 UMBWMC: FY19 3-mo Pre/Post 1,004 patients (507 of which were Medicare FFS), -$9.2M reduction in total charges, -10.8 visits per 10 members. ROI 32.50 FY18 – Patients who have Care Alerts since FY18 (full 6-month pre/post for each patient): AAMC: FY18 6-mo Pre/Post 360 patients (210 of which were Medicare FFS), -$4.9M reduction in total charges, -13.6 visits per 10 members. ROI 33.60 UMBWMC: FY18 6-mo Pre/Post 1,227 patients (750 of which were Medicare FFS), -$22.5M reduction in total charges, -11.2 visits per 10 members. ROI 53.31 Please see Appendix A for cumulative Care Alert pre/post report summaries, both hospitals.
Intervention-Specific Outcome or Process Measures (optional)	Multi-disciplinary teams (ED providers, nursing, care management, PCP representatives) meet to approve and contribute to extended (patient-specific) Care Alerts. We track the number of brief care alerts (program-based) and the number of extended care alerts (patient-specific with suggested plans).
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Our primary focus is on creating and maintaining high-quality Care Alerts. Care Alerts, while one part of our toolkit for care coordination, when measured separately show the highest return on investment and reductions in PAU and readmissions. Continued focus on our guiding principles of creating and maintaining high quality, multi-disciplinary Care Alerts that are durable, respectful, concise and actionable, have resulted in positive feedback from ED, PCP and care management staff, who use them to save time and improve care coordination. Some ED providers copy and paste the Care Alert into their notes as supporting documentation; they also reference the content if/as needed with patients, as cross-health-system collaboration toward improved care.
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Extended Care Alerts, with patient-specific information gathered from community and hospital clinicians and staff, with suggested plans: - Are most effective and yield higher ROI. - Require more resource(s), approximately 3 to 4 hours per Care Alert, plus monthly multi-disciplinary team review and approval. - The time investment in patient-level alerts yields long-term value across health systems and community partners, as they stay relevant for many months/years.

	Brief Care Alerts (same care alert for all patients within a program) can be created and maintained with minimal staff, are helpful to ED providers re: available program resources and how/when to reach out to care team members. The ROI is also positive.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	• BATP hospitals will hold a poster session on Shared Care Alerts at the Institute for Healthcare Improvement (IHI) conference in December 2019 • This tool will continue to be used at both hospitals. • AAMC plans to write extended care alerts using a multi-disciplinary review process for approximately 70 patients. • The Shared Care Alert technical team (BATP, AAMC, UMMS, CRISP, Epic) will continue to maintain the interfaces and processing necessary for alert sharing.

The Coordinating Center Community Care Management

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

Intervention or Program Name	The Coordinating Center – Community Care Management
RP Hospitals Participating in Intervention	All
Brief description of the Intervention *2-3 sentences*	The Coordinating Center provides 30-day LOS community care management with a focus on health coaching. Health coaches perform in-home visits and follow-up to facilitate chronic condition management, PCP and Specialist utilization, and align patients with non-medical services/support. For each hospital, staffing included 3 health coaches, .5 Hospital Liaison, .5 RN Program Lead, 1 Intake Coordinator and .25 Program Manager.
Participating Program Partners	The Coordinating Center also refers patients to other appropriate levels of care including: Hospice of the Chesapeake, Palliative Care, Anne Arundel County Department of Aging & Disabilities Programs, home health agencies, the Senior Triage Team (for UMBWMC), and various other county and state programs.
Patients Served *Please estimate using the Population category that best*	# of Patients Served as of June 30, 2019: **1,106** AAMC referred 1,297 unique patients, ***616*** participated in the program. UMBWMC: referred 1,560 unique patients, ***490*** participated in the program.

<table>
<tr><td>applies to the Intervention, from the CY 2018 RP Analytic Files. 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.
Feel free to also include your partnership's denominator.</td><td>Denominator of Eligible Patients: 66,823
Population Category: 3+ IP/Obs>=24 Visits, Medicare FFS
Using the CY2017 RP Analytic File

BATP Denominator of Eligible Patients: 1,463
Patient Total Hospitalization (PaTH) Report – BATP Target Population: All payer high utilizers, 65 years or older, 2 to 6 chronic conditions, prioritizing Medicare FFS then All Payer

Also refer rising risk patients (>=2 visits in 12 months) and some pre-rising risk (1 ED or bedded visit).</td></tr>
<tr><td>Pre-Post Analysis for Intervention (optional)</td><td>AAMC 616 patients (58% Medicare FFS), -$2.79M change in total charges, -$4,308 change in per patient charges, -9.9 visits per 10 members.

UMBWMC 490 patients (54% Medicare FFS), -$4.1M change in total charges, -$10,161 change in per patient charges, -14.1 visits per 10 members.

See Appendix for Pre/Post Summaries, which show sustained reductions in utilization and costs at 6 and 12 months.</td></tr>
<tr><td>Intervention-Specific Outcome or Process Measures</td><td>Process Metrics
Monthly tracking of totals and average referrals, declines (in-hospital and after discharge), # of active clients (actively engaged), # graduated successfully, # deceased, # transferred to other programs (hospice, etc.):
<table><tr><td>Metric</td><td>AAMC Average/Month</td><td>UMBWMC Average/Month</td></tr><tr><td>Referrals</td><td>248</td><td>175</td></tr><tr><td>Declines</td><td>120 (48%)</td><td>71 (41%)</td></tr><tr><td>Average # of Active Clients (had an initial home visit)</td><td>65 (26%)</td><td>47 (27%)</td></tr><tr><td>Graduated Successfully</td><td>49 (75%) of active</td><td>25 (53%) of active</td></tr></table>
Caseloads in FY19 were between 19-23 patients per health coach across hospitals.</td></tr>
<tr><td>Successes of the Intervention in FY 2019
Free Response, up to 1 Paragraph</td><td>Centralized charting in Epic by hospital and community care management provided all care team members with longitudinal plan of care information around patient-approved goals and status and home environment factors that contribute to safe, effective care and support decisions.

Return on Investment[4]: AAMC ROI 4.02, UMBWMC ROI 6.45

Patients who participated in this program had a decrease of -9.9 visits (AAMC) and -14.1 visits (UM BWMC) per ten members (3-month pre/post). Importantly,</td></tr>
</table>

[4] ROI = (Change in all hospital total charges pre to post) minus the cost of the service, divided by the cost of the service.

	the decrease in all-hospital visits, costs and utilization is maintained or improved through 6- and 12-months post-intervention. See Appendix for Pre/Post.
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	The information gathered and shared via home-based care management is a vital part of understanding and changing high utilization for patients who need chronic condition management and non-medical services/support. Participation is approximately 25% - 30% of referrals, with 40% of patients being unable to contact after discharge. We continue to obtain updated phone numbers, caregiver/emergency contact numbers, and sometimes manually add our program phone number to patient phones so that they recognize the number when we call. Having a Hospital Liaison from The Coordinating Center work with the Inpatient Care Management team and follow-up with patients is helpful in increasing patient acceptance of the service and strengthening care coordination between hospital, liaison and patient/family. The most challenging aspect for this service is the low percentage of referred patients who participate in the program. A small percentage of active clients expire. This may be attributable to our referral assessment of higher utilizers *who will benefit* from chronic condition management and non-medical supports.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	Both hospitals are creating the ability to place referrals to outside services in Epic so that we have real-time analytics on caseloads and to improve awareness of referral status to avoid duplicate referrals across programs. UMBWMC will continue the program with The Coordinating Center given the positive ROI and reduction of PAU and Readmissions for the patients who receive the service. AAMC will transition to an internal team for community care management mid-way through FY20, discontinuing this program with The Coordinating Center. The new internal program is modeled after the University of Pennsylvania program.

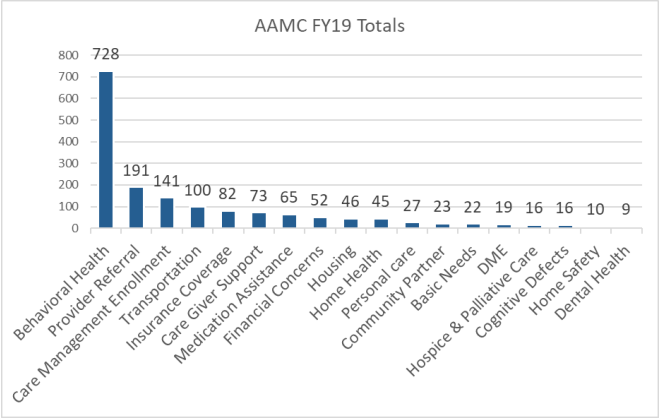
Senior Triage Team Community Care Management

Intervention or Program Name	Senior Triage Team - Community Care Management Anne Arundel County Department of Aging & Disabilities
RP Hospitals Participating in Intervention	UM Baltimore Washington Medical Center
Brief description of the Intervention *2-3 sentences*	An intensive 60-day community care management program for UMBWMC most complex, high utilizer Medicare FFS patients. Resourced by 2 RN's, 2 social workers, a team lead and an administrator. The team was designed around Medicare FFS high utilizers and has been working with BATP since 6/1/16. They have advanced knowledge of all services and supports in Anne Arundel County, and how to streamline requests for and access to services, including financial analysis and housing assistance.
Participating Program Partners	The Senior Triage Team model has a built-in support system called the Silver CRICT Team, an aging/senior population Community Resource Initiative Care Team, comprised of the Department of Social Services, the Housing Commission, Department of Mental Health, Core Service Agency, Crisis Response and others. The team develops a multi-agency action plan to assist with long term connections to support in addition to immediate assessment and care management provided by the Triage Team.
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.* *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.* *Feel free to **also** include your partnership's denominator.*	# of Patients Served as of June 30, 2019: **199**
	Denominator of Eligible Population: **66,961** RP Analytic File Denominator of Eligible Patients: **1,528** CY2018 RP Analytic File, 3+ IP or Obs>=24 Visits Medicare FFS BATP Denominator of Eligible Patients: **873** CRISP PaTH report UM BWMC eligible target patients are Inpatient/Observation high utilizers (3+ bedded stays in the last 12 months), 2 to 6 chronic conditions, Medicare FFS, 65+ years.
Pre-Post Analysis for Intervention (optional)	ROI: 2.41 $1.39M decreased all-hospital charges, -16 decreased visits on average (per 10 members). This service consistently shows the highest decrease in visits per 10 members of all interventions. 85% (170) patients are Medicare FFS. Reductions in utilization continue at 6 and 12 months per Pre/Post analysis. Please see the Appendix for Pre/Post Summary

Intervention-Specific Outcome or Process Measures (optional)	Monthly process metrics are reported for # of new referrals, # of pending referrals, # who declined the service (in hospital versus after discharge), number of active clients (those who have had an initial in-home visit), # graduated successfully, # disengaged, # deceased, # enrolled in hospice, # referred to other programs, # closed for other reasons, LOS in the program, admissions/readmissions during service, ED/Obs visits to any hospital during service.
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	In collaboration with CRISP, the BATP PM and IT teams designed and implemented the capability to send ENS notifications via secure text to the Senior Triage Team care managers based on their care team and program assignment in Epic. Adding themselves and their program to the care team in Epic automatically creates a panel at CRISP and sends ENS alerts for admissions via Halo secure text. Care Managers can reach out to the ED or to the patient/family or caregiver to offer support. Other community organizations wish to use this same capability and efforts are in progress to offer it. Through this relationship, the Anne Arundel County Department of Aging and Disabilities provided intensive, half-day training on 22+ programs to 65 BATP, hospital and community staff this year. A 3rd training since we began the partnership.
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	This service is highly effective in putting long-term services/supports in place, reducing PAU and readmissions in Medicare FFS high utilizers. The Senior Triage Team has expert knowledge and streamlined access to community services, and they continue to share it with other services across the partnership. Undiagnosed behavioral health issues are particularly challenging as some services require a diagnosis in order to access.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	Continual process improvement (study gaps in communication, offer solutions for bridging communication and resolve delayed or missing data across care teams). UMBWMC looks to increase referrals to meet the 60-active client goal.

One Call Care Management

Intervention or Program Name	One Call Care Management
RP Hospitals Participating in Intervention	All
Brief description of the Intervention *2-3 sentences*	A single phone number for Primary Care Providers and their staff to call to refer patients in need of non-medical assistance. Our One Call Care Managers then call the patient to discuss the reason for the referral, discover other needs and assist patients in obtaining the services they need. Some examples of non-medical assistance include transportation, insurance, behavioral health navigation, housing, community care management assistance, hospice or palliative care, dental needs, provider referrals, DME, caregiver support/respite care, support groups. This service fills an important need for patients who may not need a full community care management service but who benefit from la carte services. It also 'coordinates the coordinators' (aligns Care Management resources to avoid duplication of services).
Participating Program Partners	Primary Care Providers refer patients to the One Call Care Management service. Our One Call Care Management services refer to: Anne Arundel County Department of Health (Healthy Start, REACH, Dental Program), house call providers, Hospice of the Chesapeake, Palliative Care, Mobile Integrated Care Unit (MICH), Food Bank, Partners in Care, The Coordinating Center, Behavioral Health Navigators, Pharmacists, Johns Hopkins Home Care, Chronic Condition support programs, etc.
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.* *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.* *Feel free to **also** include your partnership's denominator.*	# of Patients Served as of June 30, 2019: **1,532** AAMC: 1,198 (2.0 FTE's) UMBWMC: 334 (1.0 FTE)
	Denominator of Eligible Population: **550,445** CY2018 RP Analytic File, All Payer Population Denominator of Eligible Patients: **174,947** CY2018 RP Analytic File, All Payer Patients
Pre-Post Analysis for Intervention (optional)	Interestingly, although this service primarily assists pre-rising risk or rising risk patients, about 9% of the patients had prior utilization and that portion of the population alone resulted in a positive ROI of 5.32 for the entire service. Please see the Appendix for Pre/Post summary and results. Pre/Post for this service does not include the behavioral health referrals which are measured separately under Behavioral Health Navigator Community.

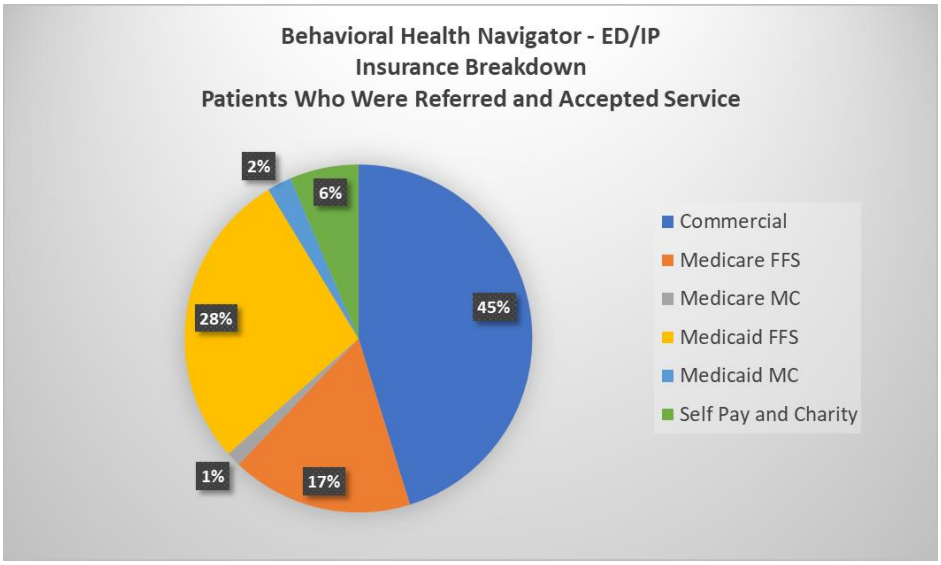
Intervention-Specific Outcome or Process Measures (optional) *These are measures that may not have generic definitions across Partnerships or Interventions and that your Partnership maintains and uses to analyze performance.* *Examples may include: Patient satisfaction; % of referred patients who received Intervention; operationalized care teams; etc.*	Process measures include monthly metrics on the number and types of referrals, number of unique providers and number of unique offices referring. This data informs how we prioritize improving or adding service options. AAMC's service with 2.0 FT's had the following reasons for referral:  *Figure 3 AAMC One Call Care Management Reasons for Referral FY19* The UM BWMC service with 1.0 FTE, received 474 referrals and successfully assisted 334 patients in FY19. The top 5 reasons for referral to this service are: transportation, caregiver support, housing, financial concerns and insurance coverage/questions.
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	High acceptance rates: 91% of patients who are referred by their primary care provider accept this service. Provider Satisfaction: Primary care providers can refer to this service for any patient who has non-medical needs, resulting in efficient operational processes and high provider satisfaction. The service can handle a large number of referrals as compared to the more expensive full community care management services, and can address focused, non-medical needs.
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	With 43% of AAMC One Call Care Management referrals being for behavioral-health assistance, AAMC integrated the behavioral health navigator position into the OCCM team in FY19, streamlining hand-off and coordination. Continual marketing and education to providers - The AAMC service is marketed through the Collaborative Care Network (integrated care network). For UMBWMC, the One Call Care Manager continually markets to primary care provider offices, visiting in-person on a regular basis to remind providers that they have an 'easy button' to address non-medical needs.

Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	Expert training - As other initiatives such as MDPCP and CTO begin, new community-based resources will benefit from the extensive knowledge and expertise the One Call Care Managers have obtained over the past 3 years. UM BWMC continues to market this service to primary care provider offices, noting that ongoing visits and networking are key to maintaining referrals.

Behavioral Health Navigator – Emergency Department

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

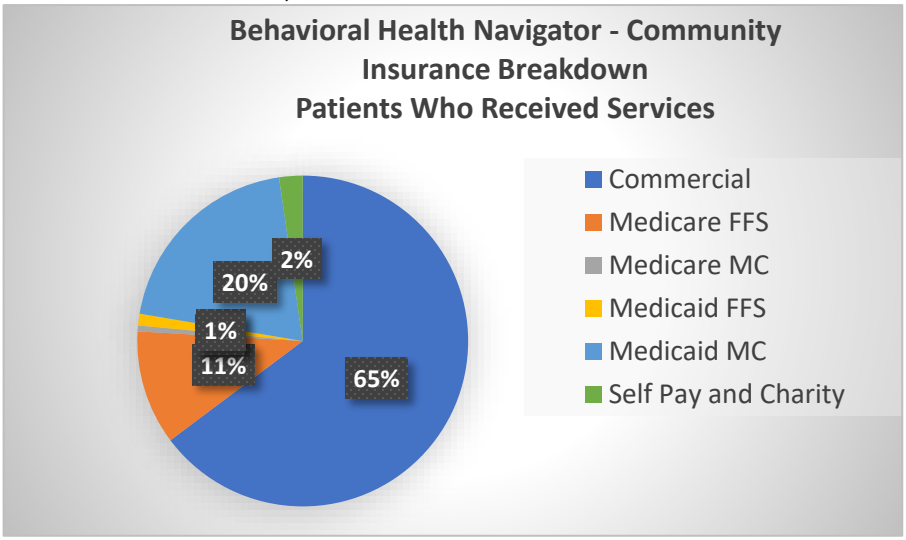
Intervention or Program Name	Behavioral Health Navigator – Emergency Department
RP Hospitals Participating in Intervention	Anne Arundel Medical Center
Brief description of the Intervention *2-3 sentences*	The ED Behavioral Health Navigator receives referrals from both the emergency department and inpatient providers. The behavioral health navigators establish relationships, workflows and referral processes with community partners. They create training material for PCPs, including patient-facing brochures with insurance and referral sources. Their primary role is to speak with patients, evaluate their need and align them with services that match their insurance, timeline, therapy and medication needs. They follow-up 30, 60 and 90 days after referral.
Participating Program Partners	Anne Arundel Medical Center
Patients Served	# of Patients Served as of June 30, 2019: **239**
	Denominator of Eligible Patients: 550,445 CY2018 RP Analytic File, All Payer Population BATP Denominator: 81,088 CRISP Patient Total Hospitalizations (PaTH) report, filtering on AAMC, all patients, All payer, patients who had an ED or Inpatient visit in FY19.
Pre-Post Analysis for Intervention (optional)	This behavioral health intervention captures patients with prior utilization. Patients who receive this service have a decrease of 8.1 visits per 10 members 3-months pre/post and -7.8 visits per 10 members 6 months pre/post. Please see Appendix for Pre/Post summary.

Intervention-Specific Outcome or Process Measures (optional) *These are measures that may not have generic definitions across Partnerships or Interventions and that your Partnership maintains and uses to analyze performance. Examples may include: Patient satisfaction; % of referred patients who received Intervention; operationalized care teams; etc.*	
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	ROI of 8.56 ED and Inpatient teams assess patients who could benefit from and would like assistance with behavioral health therapy/medication management, and have a resource who will provide initial alignment with services as well as 30, 60- and 90-day follow-ups. Maintained relationships and referral processes with several behavioral health services in the community for efficient communication and referrals. Publish a quick reference list of the behavioral health resources in the community for clinician, staff and patient/family use for those who wish to navigate on their own.
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Initial and ongoing training of referring clinicians and staff, to offer the brochure as well as ask if the patient would like assistance in obtaining services prior to referring, ensures that patients are expecting the phone call and have agreed to assistance.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	Continue accepting referrals from inpatient and ED and expand coverage by collaborating with some inpatient psych facilities to whom our highest number of inpatient discharges go.

Behavioral Health Navigator - Community

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

Intervention or Program Name	Behavioral Health Navigator - Community
RP Hospitals Participating in Intervention	Anne Arundel Medical Center
Brief description of the Intervention *2-3 sentences*	The Community Behavioral Health Navigator receives referrals from primary care providers. The behavioral health navigators establish relationships, workflows and referral processes with community partners. They create training material for PCPs, including patient-facing brochures with insurance and referral sources. Their primary role is to speak with patients, evaluate their need and align them with services that match their insurance, timeline, therapy and medication needs. They follow-up 30, 60 and 90 days after referral.
Participating Program Partners	This service refers to 15 behavioral health organizations.
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.* *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.* *Feel free to **also** include your partnership's denominator.*	# of Patients Served as of June 30, 2019: **350**
	Denominator of Eligible Patients: 550,445 CY2018 RP Analytic File, All Payer For Community BH Navigator: 179,000 (approximate) Since referrals to the Community BH Navigator come from Collaborative Care Network (AAMC's integrated care network) PCP offices, the denominator for this population is all patients who see providers who are part of the CCN.
Pre-Post Analysis for Intervention (optional) *If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.*	The pre/post report shows that the average cost *per patient* prior to referral is $2,195 in 3 months prior to receipt of service and $4,593 if looking 6 months prior. These are **pre** rising risk patients (those who have less than 2 IP, ED or Obs>23 visits to any hospital in the 12 months prior to referral). Pre/Post detail is useful for the below process metrics (insurance breakdown, age distribution), but overall change in charges is not useful with pre rising risk patients.
Intervention-Specific Outcome or Process Measures (optional) *These are measures that may not have generic definitions across Partnerships or Interventions and that your Partnership*	PCP's referred 730 patients to this service in FY19. 48% (350) patients accepted the service and were provided navigation to behavioral health services. 160 (46%) of those patients had at least 1 IP, ED or Obs visit in the 12 months prior to being referred, 190 of the patients had no prior IP, ED or Obs visits in the 12 months prior.

maintains and uses to analyze performance. *Examples may include: Patient satisfaction; % of referred patients who received Intervention; operationalized care teams; etc.*	65% of patients receiving this service have commercial insurance, 11% have Medicare FFS, 20% have Medicaid MC.  Age distribution of the 160 patients who had prior utilization: **Age** / **# of Patients** <=17: 40 18 to 40: 58 41 to 64: 44 >=65: 18 61% of patients are 40 years old or younger.
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	This single FTE service built and maintained relationships with and facilitated improved processes to streamline referrals to 15 community behavioral health service organizations. These are pre or rising risk patients, so this service is preventing future behavioral health crises and associated utilization.
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	AAMG Primary care providers are referring pre-rising risk patients, the majority are commercial payer and younger than 64 years of age (the Medicare population of tomorrow).
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	AAMC has integrated this service with the One Call Care Management, as the referrals come from PCP's to OCCM and are then passed to the behavioral health navigator, community. The position was moved under MDPCP funding for FY20.

Integrated Behavioral Health in Primary Care

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

Intervention or Program Name	Integrated Behavioral Health in Primary Care
RP Hospitals Participating in Intervention	UM Baltimore Washington Medical Center
Brief description of the Intervention *2-3 sentences*	UMBWMC, through UM Medical Group, has 2 psychotherapists, a psychiatrist and an administrative assistant who provide services to patients from six (6) primary care clinics.
Participating Program Partners	
Patients Served	# of Patients Served as of June 30, 2019: **496**
	Denominator of Eligible Patients: 550,445 CY2018 RP Analytic File, All Payer
Pre-Post Analysis for Intervention (optional) *If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.*	The patients who receive behavioral health therapeutic services within the primary care setting do not have prior utilization of emergency or inpatient services. We track utilization for the patients seen by this service, and they are not going to ED or inpatient settings post-intervention. Therefore, this is a preventative intervention.
Intervention-Specific Outcome or Process Measures (optional)	The Behavioral Health staff also track number of encounters and unique patients per month. Their no-show rate is very low (10%).
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Provider feedback is very positive, as this service increases access to primary care by moving behavioral health needs to the appropriate level of care and giving PCP's more time for medical appointments. Patients express gratitude with receiving this service in a primary care setting. This service is consistently full, with new referrals being scheduled 1 to 2 months out.
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	In this population of pre rising risk patients, stress and depression can be related to the lack of control over non-medical challenges. This service refers many patients to the One Call Care Management service for assistance with community services/support.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	Continue serving six (6) clinics with the psychotherapy and psychiatrist services. Examine ED High Utilizer population and integration of behavioral health support models.

Skilled Nursing Facility Collaborative

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

Intervention or Program Name	Skilled Nursing Facility Collaborative
RP Hospitals Participating in Intervention	Anne Arundel Medical Center UM Baltimore Washington Medical Center
Brief description of the Intervention *2-3 sentences*	The BATP Skilled Nursing Facility Collaborative includes leadership from 19 SNFs, 2 community care management agencies and three (3) Hospice organizations to identify and prioritize problems with patient and family satisfaction and PAU. The SNF Collaborative uses subject-matter-expert based workgroups to develop solutions that take advantage of the care team care coordination tools and services developed as part of the regional partnership work (Care Alerts, secure texting, Care Plans, etc.). The deliverables include new, redesigned cross-organizational workflows (standardized across organizations), patient-facing material and provider and staff training material.
Participating Program Partners	Skilled Nursing Facility Collaborative Medical Directors, Administrators, Directors of Nursing and Corporate representation for: Cadia Healthcare of Annapolis Caroline Nursing and Rehab CommuniCare Marley Neck CommuniCare South River Crofton Care and Rehab Fairfield Nursing Center Futurecare Capital Region Futurecare Chesapeake Futurecare Irving Genesis Corsica Hills Genesis Severna Park Genesis Spa Creek Genesis Waugh Chapel Ginger Cove SAVA Glenburnie SAVA heritage Harbor SAVA North Arundel Signature Health Chesapeake Shores Signature Health Mallard Bay Adfinitas Health (SNF Providers) Hospice Organizations Hospice of the Chesapeake Season's Hospice Heartland Hospice

	CRISP hMetrix The Coordinating Center Lifespan
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.* *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.* *Feel free to **also** include your partnership's denominator.*	# of Patients Served as of June 30, 2019: 5,887 Source: CRISP MADE CCLF SNF Utilization Report
	Denominator of Eligible Population: 66,961 RP Analytic File, Medicare FFS population Denominator of Eligible Patients: 11,952 CRISP PaTH Report (Medicare FFS, >=65 years old, 2 or more chronic conditions)
Pre-Post Analysis for Intervention (optional)	Not applicable at this time.
Intervention-Specific Outcome or Process Measures (optional)	CRISP/hMetrix SNF Monitoring Reports (Medicare Claims) to compare risk-adjusted readmissions, lengths of stay and charges across facilities.
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Quarterly meetings with consistently high attendance from 19 SNFs (medical directors, administrators, directors of nursing and corporate), focused on: - Using risk-adjusted Medicare readmission data to unify hospitals, SNFs and other partners, with presentations from skilled facilities who have notably reduced risk-adjusted readmissions explaining how they reduced PAU. - Collaboratively identifying, prioritizing and developing solutions to improve hand-offs, improve documentation accuracy and timeliness and improve communication using partnership tools and services. - To reduce avoidable utilization attributable to patient and family's expectations around SNF stays, the Collaborative formed a workgroup and developed patient-facing material to manage those expectations. It explains the differences between hospital versus skilled nursing facility environments (a top reason why patients return to the hospital, as they expect hospital-level care).
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Having risk-adjusted Medicare readmissions, LOS and charge data in CRISP has been instrumental in providing a first-ever apples-to-apples comparison across SNFs, and has been a *pivotal tool* for unifying this collaborative. Our continual process improvement approach through this Collaborative is key to prioritizing and solving problems associated with communication and improving patient experience and care. This process includes problem

	identification, prioritization, workgroup formulation, and cross-organizational workflow redesign that considers each care team member's contribution and data needs. What do they know that would help one another, what have they done for and with the patient, where do they chart, and how can we share data and enable immediate outreach across the care team? The SNF Collaborative has expanded to include other post-acute care team members, including three (3) primary Hospice organizations, our community care management leads. Thus, the cross-organizational workflow analysis and redesign using real-time data analytics and tools that save time, provide targeted information at the point of care, are being considered across the *entire* care continuum, not just hospital and SNF.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	The collaborative has identified an additional twelve (12) opportunities to reduce avoidable utilization, focusing on: - Improving accuracy, timeliness and consolidated patient and care information, available within cross-organizational, multi-disciplinary workflows. - Redesigning workflows across the hospital, SNF, hospice, community care management, palliative teams so that accurate, succinct data is available at hand-off and there is an easy way to quickly connect with other care team members. Assist hMetrix with review of user interface/content for adjusted MADE/CCLF reports as they move from the current RUG methodology to using PDPM logic. Both hospitals are implementing software for predictive analytics to monitor early warning signs in Skilled facilities to prevent utilization of hospital/ED systems. AAMC's Realtime software is part of the grant work for FY19. UMMS is implementing a solution outside of the grant.

Queen Anne's County Mobile Integrated Community Health

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

Intervention or Program Name	Queen Anne's County Mobile Integrated Community Health (MICH) Program
RP Hospitals Participating in Intervention	Anne Arundel Medical Center
Brief description of the Intervention *2-3 sentences*	The Queen Anne's Mobile Integrated Community Health program is a highly successful program which provides home-based visits by community health nurses to assess patient needs for medical and non-medical support. The team includes an addictions counselor, pharmacist support and peer specialist as well as programmatic support (IT, Office, administration). The focus is on high utilizers of emergency services and emergency departments. AAMC contributes 15% of the funds for this service. The goal of this program is to reduce 30-day readmissions for high utilizing patients. QA MICH program goal is to keep patients out of the hospitals and ED's for at least 30 days, noting that the results show a reduction in visits 90-days post intervention.
Participating Program Partners	
Patients Served	# of Patients Served as of June 30, 2019: **217**
	Denominator of Eligible Patients: 49,667 Population of Queen Anne's County, 2019 census
Pre-Post Analysis for Intervention (optional) *If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.*	Please see Appendix for Pre/Post Summary. Above and beyond goal, 3-month pre/post shows total cost reduction of $454,551 (32% reduction from pre to post) and total visit reduction of 105 visits (36% reduction).
Intervention-Specific Outcome or Process Measures (optional) *These are measures that may not have generic definitions across Partnerships or Interventions and that your Partnership maintains and uses to analyze performance.* *Examples may include: Patient satisfaction; % of referred patients who received Intervention; operationalized care teams; etc.*	QA MICH captures many process metrics so that they can study the program and make operational changes or adjustments to outreach as needed. Total and average monthly: Initial and follow-up visits Referrals Unique patients Visit time and mileage Demographics zip code, age, race, gender Top Primary Diagnoses Telehealth medicine consults Average number of medications per patient Problems identified in medication reconciliation

Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Patients and staff view this program as highly successful, and the results of their decreased utilization is quantified by pre/post. This program has resulted in reducing visits and costs of $1.3M (69% reduction) and total visits (59% reduction or 199 visits post). Above and beyond the 30-day reduction goal, the 90-day pre/post shows total cost reduction of $454,551 (32% reduction from pre to post) and total visit reduction of 105 visits (36% reduction).
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	By using ENS and pre/post, this program can tell when, approximately, their patients begin to utilize hospital services again, and adjust accordingly. By using ENS, QA MICH noticed that people began using hospital/ED services again after 6 months, so they adjusted their program to include additional follow-up with patients. After the initial engagement, they call at 90 days, have a 2nd home-visit at 6 months, then call again at 9 months.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	Continue to measure process and outcome metrics to inform continual process improvement to increase impact of the service. Build relationships with local PCPs so that we can include them as referral sources. Explore the possibility of future utilization of iSTAT for point of care lab values as ordered by the patient's PCP or specialist.

SilverStay Assisted Living Collaborative

Intervention or Program Name	SilverStay Assisted Living Collaborative
RP Hospitals Participating in Intervention	Anne Arundel Medical Center (AAMC)
Brief description of the Intervention *2-3 sentences*	This intervention is a Collaborative between AAMC and SilverStay Assisted Living Facilities. Our goal is to operationalize changes in high utilizing ALFs that will reduce readmission and utilization rates and produce positive patient outcomes. The Collaborative will also focus on understanding individual ALF capabilities, sharing performance data and best practices to improve the quality of care and reduce utilization, making care transitions safer while reducing PAU and TCOC.
Participating Program Partners	SilverStay Annapolitan Care Center Regency Park ALF Heartlands Assisted Living at Severna Park

	Atria Manresa Brightview South River Spring Arbor of Severna Park Somerford Place Annapolis HeartHomes at Pasadena HeartHomes at Bay Ridge 2-Memory Care Oak Lodge Senior Home HeartHomes at Piney Orchard Hanover Assisted Living Household of Angels Assisted Living Severna Park LaCasa Golden Arms Assisted Living Rutherford Manor Walker's Group Assisted Living Kind Hearts Home Assisted Living Assisted Living of Annapolis Our House ALF HeartHomes at Bay Ridge 1-AL Jones Acres Assisted Living Fernbrook Manor Lyla Haven Assisted Living Marian's Manor ALF Spring Arbor of Crofton Brightview Severna Park LLC Brightview Annapolis Assisted Living Well Compassionate Care Household of Angels In Crofton Rutherford Manor II Serenity Homes Sunrise of Annapolis Sunrise Senior Living at Severna Park Arbor Terrace Waugh Chapel Kris-Leigh Assisted Living The Arbor at Baywoods Ginger Cove Autumn Meadows Kris-Leigh Assisted Living At Birdsville Road, LLC Kris-Leigh Assisted Living At Gambrills Country Home Assisted Living and Respite Care Marian's Assisted Living Cranberry Cottage Watts Group Assisted Living Sunshine House II Riva Terrace Specialized Elder Care Quality Life Care In Comforting Arms, LLC Marivic House I Homeplace Grove Estates

	Serenity Home Spirit of Life I Hyer Standards Assisted Living
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.* *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.* *Feel free to **also** include your partnership's denominator.*	# of Patients Served as of June 30, 2019: 0 Collaborative kickoff meeting between AAMC and SilverStay was held 6/25/19. No patients were served in FY19 as we kicked the collaborative effort off in late June 2019.
	Denominator of Population: 66,961 RP Analytics File Medicare FFS Denominator of Eligible Patients: 1,835 Source: ALF bed capacity
Pre-Post Analysis for Intervention (optional)	Not applicable at this time.
Intervention-Specific Outcome or Process Measures (optional) *These are measures that may not have generic definitions across Partnerships or Interventions and that your Partnership maintains and uses to analyze performance.* *Examples may include: Patient satisfaction; % of referred patients who received Intervention; operationalized care teams; etc.*	Obtain hospital readmission and utilization rates from a network of assisted living communities within the AAMC service area. - Will assess high utilizing ALFs two ways: (1) At a resident-level (3 hospital visits within 12 months) and (2) overall utilization as a percentage of beds and absolute number. Operationalize changes at high utilizing assisted living communities that will reduce readmission and utilization rates and produce positive patient outcomes. - Development of targeted Change Packages (CP) (e.g., transitional care bundle) and enhanced services for ALF communities identified as high utilizers. - Implementation of CP and enhanced services at the hospital and ALF communities. - Reduction in AL community readmission and utilization rates over a 120-day time period.
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Intervention was launched at the end of the FY19. Successes will be identified in the FY20 report.
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Not applicable at this time.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	Next steps are to launch the collaborative: - Hold four (4) Collaboratives over the fiscal year, supported by workgroup meetings in between large group Collaboratives - Collect and analyze utilization data

	- Create action steps to reduce readmission and utilization rates - Measure progress and adjust action plans as needed

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 2018 RP Analytic File (please specify which source you are using for each of the outcome measures).

Utilization Measures

Measure in RFP *(Table 1, Appendix A of the RFP)*	**Measure for FY 2019 Reporting**	**Outcomes(s)**
Total Hospital Cost per capita	**Partnership IP Charges per capita** Analytic File: 'Charges' over 'Population' (Column E / Column C)	$ 2,721.54 Inpatient Charges per Capita Charges = 1,498,055,429 divided by Population (All Payer) = 550,445
Total Hospital Discharges per capita	**Total Discharges per 1,000** Analytic File: 'IPObs24Visits' over 'Population' (Column G / Column C)	10.9% All Payer IPObs24Visits = 59,944 Divided by Population = 550,445
ED Visits per capita	**Ambulatory ED Visits per 1,000** Analytic File 'ED Visits' over 'Population' (Column H / Column C)	32.4% ED Visits = 178,382 Population (All Payer) = 550,445

Quality Indicator Measures

Measure in RFP *(Table 1 in Appendix A of the RFP)*	**Measure for FY 2019 Reporting**	**Outcomes(s)**
Readmissions	**Unadjusted Readmission rate by Hospital** (please be sure to filter to include all hospitals in your RP) Analytic File:	12% IP Readmissions = 4,624 Eligible for Readmission = 38,474

	'IP Readmit' over 'EligibleforReadmit' (Column J / Column I)	
PAU	**Potentially Avoidable Utilization** Analytic File: 'TotalPAUCharges' (Column K)	$ 1,419,549

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 *(Table 1 in Appendix A of the RFP)*	**Measure for FY 2019 Reporting**	**Outcomes(s)**
Portion of Target Population with Contact from Assigned Care Manager	**Potentially Avoidable Utilization** Executive Dashboard: 'High Needs Patients – CRISP Key Indicators' – % of patients with Case Manager (CM) recorded at CRISP, reported as average monthly % for most recent six months of data *May also include Rising Needs Patients, if applicable in Partnership.*	

Self-Reported Process Measures

Please describe any partnership-level process 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.

Return on Investment – (Optional)

Annual Cost per Patient as calculated by:

Calculation: Total FY 2019 Expenditures (from FY 2019 budget report) / Total Patients Served (all interventions)

	AAMC	UMBWMC
FY19 Grant Award (equivalent to FY17)	**$ 2,203,496**	**$ 1,629,676**
Total # of Unique Patients Receiving BATP Interventions	**2715**	**1972**
Total FY19 Grant / # of unique patients	**$ 811.60**	**$ 826.41**
Total # of Interventions (non-unique)	**9602**	**2523**
Total FY19 Grant / # of interventions	**$ 229.48**	**$ 645.93**

Return on Investment

Through the Regional Partnership Learning Collaborative, (a group of regional partnership representatives, CRISP and HSCRC who have met monthly since February of 2017), HSCRC has guided us on measurement, and CRISP has provided all-payer casemix data reports to measure outcomes. The primary tools used to measure our work are the Patient Total Hospitalizations (PaTH) report for target population measurement using inpatient/Obs and ED high utilizers, and the Pre/Post report for measuring all-hospital, all-payer inpatient, observation, ED and outpatient regulated space visits and charges prior to and after the start of an intervention or set of interventions for each patient. Pre/Post recently also provides visit-level detail so that we can measure the visits that were PAU, PQI or readmissions at any hospital, with related diagnoses.

To measure overall performance for the regional partnership interventions, in addition to having process and outcome metrics for *each* intervention, we create **combined panels** of patients who received services, regardless of the intervention they received. These combined panels use the first start date that a patient received one of the interventions, regardless of how many and when they received additional interventions. Utilization and charges for each patient is measured prior to and after the first intervention date. This pre/post analysis for the combined panels resulted in the following outcomes for FY19.

Using the HSCRC-provided transformation grant return on investment (ROI) calculator to measure outcomes (Figure 1) our FY19 goal was to meet a 1.67 ROI for the full original grant award. This ROI calculation has been used on a per-hospital basis as CRISP uses a single source for medical record numbers for the pre/post report, which also allows us to compare and contrast the same program across health systems.

Our original estimate for FY19 in Figure 1, was to assist 2,307 Medicare FFS and All Payer higher utilizer patients with an estimated $107M baseline charges and generate an annual gross savings of $12.8M, Variable Savings (annual gross *.5) of $6.4M and ROI of 1.67 for the entire BATP partnership.

Figure 4 is the original HSCRC calculator in our proposal appendix. Figure 5 shows the FY19 column from that calculator (the plan), with a column for each individual hospital and their calculated return on investment (the actual

results).

HSCRC Core Return on Investment (ROI) Calculator	FY17		FY18		FY19		FY20	
Feb 2017 Proposal								
Increase in # of patients each year			400		647		646	
High Utilizer Target #	1260		1660		2307		2953	
Table 3. Core Return on Investment Measures	Medicare and Aged Dual-Eligibles		Additional Medicare (PSA)		Begin to address 'All Payer'		Address 'all payer'	
	High Utilizers >=3							
	FY2017		FY2018		FY2019		FY2020	
Number of Patients (total high utilizers - all payers)	2,120		2,120		2,953		2,953	
Number of Target Population	1,260		1,660		2,307		2,953	
Annual Intervention Cost/Patient Using HSCRC Funding	$ 3,041		$ 2,308		$ 1,661		$ 1,297	
Annual Intervention Cost (B*C) (Annual HSCRC Funding, not including incremental reinvestment of savings)	$ 3,831,141		$ 3,831,141		$ 3,831,141		$ 3,831,141	
Annual Charges (baseline)	$ 58,000,000		$ 76,360,000		$ 107,027,800		$ 137,648,200	
Annual Gross Savings (x% * E)	$ 9,280,000	16%	$ 11,454,000	15%	$ 12,843,336	12%	$ 13,764,820	10%
Variable Savings (F * 50%)	$ 4,640,000		$ 5,727,000		$ 6,421,668		$ 6,882,410	
Annual Net Savings (G-D)	$ 808,859		$ 1,895,859		$ 2,590,527		$ 3,051,269	
HSCRC Funding ROI (G / D)	1.211		1.495		1.676		1.796	

Figure 4 HSCRC Transformation Grant Calculator

Using the same methodology as the original HSCRC calculator, using all-payer casemix data and the Pre/Post tool from CRISP, our actual FY19 ROI for the combined panel of interventions, using 9-months of patients and 3-months before and after they received an intervention, against 9 months of full grant cost, we measure at the hospital level with the following results:

Anne Arundel Medical Center ROI = 2.141
2,091 patients had $9,433,260 less charges 3 months post-intervention.

UM Baltimore Washington Medical Center ROI = 4.315
1,476 patients had $14,264,258 less charges 3 months post intervention.

Although we only show 3-month pre/post, the change in charges and savings, PAU and readmissions continue to decline at the 6-month mark.

	Table 3. HSCRC Core Return on Investment Measures	PLANNED PARTNERSHIP	ACTUAL AAMC	ACTUAL UM BWMC	
		FY2019	FY2019	FY2019	
A	Number of Patients (total high utilizers - all payers)	2,953	2,576	2,787	A # of Patients = total # of high utilizers (all payer) - not otherwise used in this calculator
B	Number of Target Population	2,307	2,091	1,476	B # of All Payer High Utilizers and Medicare / Dual = # of Med/Dual out of total patients
C	Annual Intervention Cost/Patient Using HSCRC Funding	$ 1,661	$ 812	$ 826	C Annual Intervention cost per patient = our ask (D) / # total # of unique patients we believe our interventions will reach
D	Annual Intervention Cost (B*C) (Annual HSCRC Funding, not including incremental reinvestment of savings)	$ 3,831,141	$ 2,203,496	$ 1,652,622	D Annual Intervention cost = # of interventions we plan to make * cost per patient
E	Annual Charges (baseline)	$ 107,027,800	$ 70,153,979	$ 85,043,232	E Annual Charges (Baseline) = our average cost per patient (for this population) * B total # of high utilizers who are medicare/dual eligibles
F	Annual Gross Savings (x% * E)	$ 12,843,336	$ 9,433,260	$ 14,262,258	F Annual Gross Savings = some percent of Annual Charges (how many of the interventions do we think will result in decreased IP admissions/observations)
G	Variable Savings (F * 50%)	$ 6,421,668	$ 4,716,630	$ 7,131,129	G Variable Savings = 50% of Annual Gross Savings (what we're allowed to claim as savings)
H	Annual Net Savings (G-D)	$ 2,590,527	$ 2,513,134	$ 5,478,507	H Annual Net Savings = (G-D) Variable Savings - Annual Intervention Cost
	HSCRC Funding ROI (G / D)	1.676	2.141	4.315	

Figure 5 ROI Calculator with Planned and Actual Results, FY19

Potentially Avoidable Utilization[5]

Anne Arundel Medical Center

Reduction in PAU for a combined panel of interventions, including Shared Care Alerts, The Coordinating Center community care management, One Call Care Management:

1,297 unique patients representing 3,603 visits totaling $24.4M all hospital charges, 8 months of patient, 3-months pre/post.

PAU= (IP readmissions, Obs>23 readmissions, PQI visits)

- 53% reduction in inpatient visits totaling $4,136,565
- 47% reduction in Obs>23 visits totaling $238,581
- 52% reduction in PAU visits (-362 inpatient visits, -44 Obs visits) totaling $4,375,146

Readmissions (RRIP IP Only)

- 65% reduction (-258 visits) totaling $4,048,659

PQI

- 67% reduction (-188 IP visits, -22 Obs visits) totaling 4,253,065

UM Baltimore Washington Medical Center

Reduction in PAU for a combined panel of interventions, including Shared Care Alerts, The Coordinating Center and the Department of Aging Senior Triage team community are management, and One Call Care Management:

1,256 unique patients representing 4,588 visits totaling $39.7M all hospital charges, 8 months of patients, 3-months pre/post.

PAU= (IP readmissions, Obs>23 readmissions, PQI visits)

- 39% reduction in inpatient visits totaling $4,397,654
- 18% reduction in Obs>23 visits totaling $149,813
- 36% reduction in PAU visits (-368 PAU visits) totaling $4,547, 467

Readmissions (RRIP IP Only)

- 56% reduction (-287 visits) totaling $4,098,035

PQI

- 67% reduction (-188 IP visits, -22 Obs visits) totaling 4,514,154

[5] Data source: CRISP Pre/Post detail for patients receiving at least one intervention between July 1, 2018 and Feb 28, 2019 (May casemix), 3-months pre/post.

Conclusion

When we started our regional partnership journey in FY17, we estimated that our programs could reach 800 high utilizer Medicare FFS patients in year 1, 1,260 in year 2, increasing to 2,307 high utilizers in year 3 (adding all payer) and finally reaching 2,953 all payer high utilizers in year 4. The purpose of focusing on higher utilizers was to reduce total cost of care while providing better, safer, more efficient care in the least-cost setting and putting community services/supports in place for non-medical needs. *Our year three results exceeded those goals*, not just in terms of number of all payer unique patients (over 4,000), but in terms of demonstrating that by using data analytics, shared charting and redesigning how and when care team members securely communicate, we can better serve our patients and impact the utilization of the patients we assisted. Per HSCRC requirements, we measured the patients who received our interventions, through the use of CRISP tools.

According to both our data analytics for measuring all-hospital utilization, changes to PAU and readmissions, provider and patient feedback, our key take-aways this year are:

- For higher utilizer patients with both chronic condition management and non-medical service needs, our ***combined*** portfolio of interventions is effective, reducing utilization through the use of tools that include a consolidated message from all care team members (Shared Care Alerts), Halo Secure Texting, Shared Care Plans (patient-approved goals) and applying home-based care management and/or One Call Care Management services. The impact is notable whether considering ROI or reduction in Inpatient, ED and Observation visits per above outcome metrics.
- The behavioral health in primary care intervention is preventative and schedules are full, with almost no ED / hospital utilization before or after therapy. Our ED Behavioral Health Navigator service does show a reduction in all-hospital ED visits.
- Our BATP post-acute work through the Skilled Nursing Facility Collaborative is concentrating on, together, solving the toughest challenges with avoidable utilization. The processes to use data analytics to identify and share effective operational practices are a standard part of our work, and the improvements from this work will benefit all 5,800 patients who are admitted from SNFs to our hospitals each year, as well as the providers and staff.
- Fire/EMS collaboration is key to reducing high use of 911 and ED services, and our work in these areas is active with Queen Anne's, Prince Georges and Anne Arundel County Fire Departments.

The concept of the regional partnerships has proven to be effective for the Bay Area Hospitals, in improving patient care through service alignment and improved care coordination across the state. Our outcome metrics are positive. We have built the foundation and relationships across the state to enable learning, sharing and continuous process improvement with our leading-edge health information exchange, CRISP, and their partner hMetrix, and through the Regional Partnership Learning Collaborative.

We look forward to a productive and innovative FY20 with a continued focus on relationships, collaboration, learning, improving and performing above and beyond our goals, so as to exceed expectations for our patients, families, caregivers and our extensive network of care teams, as well as the state organizations who have enabled this opportunity.