HSCRC Transformation Grant

FY 2018 Report

Submitted by Trivergent Health Alliance on behalf of the three partner hospitals:
Western Maryland Health System,
Frederick Memorial Hospital,
And
Meritus Medical Center

FY 18 Year-End Report Narrative Template
Performance Year 2

Presented to the
Maryland Health Services Cost Review Commission (HSCRC)

September 14, 2018

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*The Health Services Cost Review Commission (HSCRC) is reviewing the following for FY 2018: 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	Trivergent Health Alliance Regional Partnership
RP Hospital(s)	Western Maryland Regional Medical Center, Frederick Memorial Hospital, and Meritus Medical Center

RP POC	Kristie Carbaugh, Project Management Director Raymond Grahe, CEO
RP Interventions in FY 2018	**1. Behavioral Health:** 1.1 Community Based Behavioral Health Case Management 1.2 Integration of Behavioral Health Professionals in Primary Care **2. Complex Care Management:** 2.1 Implementation of Community Health Worker Service 2.2 Expansion of existing outpatient care management platforms to address multidisciplinary clinical and care coordination needs of identified high utilizers. o WMHS: Mobile Clinical Resources o FMH: Expansion of Care Clinic Services and Mobile Integrated Health Pilot o MMC: Case Management Services added to Specialty Care **3. ED PAU*:** 3.1 Improved care coordination and transitions by increasing integration with CRISP and creation of Care Alerts in alignment with Maryland Hospital Association/CRISP/HSCRCs state wide goal to improve care coordination. 3.2: Reduction of PAU will inherently be achieved through implementation of the CCM and BH interventions as described above 3.3: Implementation of Mobile Integrated Health program as funding sources are identified and in alignment with state and county EMS regulatory compliance. **These interventions are carried out simultaneously in conjunction with the CCM and BH interventions detailed through 1 and 2 above. The primary focus of the CCM intervention work is to decrease preventable inpatient utilization and secondarily focuses to decrease ED PAU. The BH interventions primarily focus to decrease ED PAU. ED PAU measurement is incorporated into the BH and CCM process and outcome measures. Reporting for 3.2 and 3.3 will be inherently embedded within the BH and CCM specific intervention sections. Reporting associated with 3.1 will be addressed within the CRISP Key Indicators section of this narrative template.* 4. **Create a Regional Care Management Education Center (RCMEC)** Implement standardized, evidence based, case management education and training regionally.
Total Budget in FY 2018 *This should equate to total FY 2017 award*	FY 2018 Award: $2,790,000 in total, distributed equally among the three member hospitals: $930,000- Western Maryland Regional Medical Center, $930,000- Frederick Memorial Hospital, and $930,000- Meritus Medical Center

Total FTEs in FY 2018	**Regional Totals:** Contracted FTE- 15.5 Employed FTE- 21.95 Total # of Grant funded FTE= 37.45 To view grant funded FTE by role per strategy, reference separate submission file titled: *RCT FY 18 Budget Narrative,* Table 2. Regional Care Transformation Grant Funded FTE; page 7.
Program Partners in FY 2018 *Please list any community-based organizations or provider groups, contractors, and/or public partners*	Potomac Case Management Service, Inc. Lighthouse, Inc. Archway Station, Inc. Institute for Public Health Innovation Washington County Commission on Aging Asian American Center Frederick County Union Rescue Mission City of Westernport City of Lonaconing City of Mount Savage CRISP Frederick County Emergency Medical Services (EMS)

Overall Summary of Regional Partnership Activities in FY 2018

(Free Response: 1-3 Paragraphs):

- Community based Behavioral Health Case Management (BH CM) services were performed for 1868 patients over the course of FY 18. Patients who received these community based BH CM services experienced consistently lower than targeted ED revisit and inpatient readmission rates, as displayed in *Table 1. Community Based BH Case Management Process Metric Results; FY 18*, page 27 of the appendix.

- As of June 30, 2018, 46% of all adult patients treated by Regional Partnership member employed primary care practices have been screened utilizing a standardized depression screening tool; a significant increase from 24% in FY 15. Early detection facilitates early intervention to prevent escalation and crisis. In FY 18, 11,709 interventions were performed to meet identified needs, for 2,574 unique patients.

- Of the 951 new calendar year (CY) 2016 Regional Care Transformation (RCT) targeted high utilizers identified, 509 of those patients have been engaged in Complex Care Management (CCM) services. Internal data analysis enabled our Regional Partnership to compare CY 16 to CY 17 utilization details for the CCM engaged and patients quantified over $14.9M in reduced charges achieved from reduced inpatient, ED, and observation visits. $5.5M of the $15M in reduced charges was achieved through a reduction of 372 readmissions, and 331 less PQIs.

- Implemented refined metric monitoring processes based on lessons learned throughout performance year 1.

  - As our regional partnership continuously learns and improves performance tracking, data analytics remains to be a heavy lift as every iteration leads to new insight with new questions and statistics to be generated to dig deeper.
  - A number of metric tracking processes have been automated, while there are some that remain a challenge; thus requiring time intensive manual tracking and analysis.

- Improved outcome and process metric alignment throughout the Regional Partnership.

- Hardwired and improved newly implemented performance year one processes.

- Operational management of RCT program: processes, workflow, barriers, and turn-over.

- It is not obtainable to reach approximately 500,000 patients as quantified by the denominator utilized in the RP analytic file population values. Denominators specific to the number of eligible patients for our Regional Partnership (RP) per intervention with the RCT program have been calculated and detailed within the Intervention template section of this report. The RP specific denominators are an accurate representation of the number of eligible patients yet are only a fraction, (ranging from 1-9% depending on the intervention), of the RP analytic file population based denominator. While our RCT grant funded positions are reaching, engaging, supporting the target population and achieving significant positive impact, the resources are finite.

- Impact achieved is dependent on the existing hospital funded CCM and BH infrastructure, without which these results would not be achievable.

- Given the significant decrease in utilization and impact to quality metrics achieved through the RCT Grant work, the Medicare demonstration project stands to accumulate greater savings if additional investments were made to facilitate extending the reach of interventions to engage additional rising risk and high risk patients.

- Alignment of grant work and additional opportunities outside of grant funded interventions that can work in tandem to help our partnership members' pursuit to manage TCOC, reduce avoidable utilization, and improve quality of care while exceeding customer service expectations.
  - Trivergent Regional Partnership members are collaborating on Behavioral Health and Telehealth initiatives with LifeBridge, Adventist HealthCare and Peninsula Regional Medical Center through active participation within the Advanced Health Collaborative. The hospital funded Advanced Health Collaborative work will synergistically support our grant funded Behavioral Health and Complex Care Management interventions.

- FY 18 total number of patients engaged through the Regional Care Transformation (RCT) program by intervention summary:

RCT Program Intervention:	FY 18- Number of Engaged Patients
1.1 Community Based Behavioral Health Case Management	1,868
1.2 Integrated Behavioral Health Professional in Primary Care	2,574
2. Complex Care Management- # Targeted High Utilizers Engaged	509
2.1 Community Health Worker Service: - Inpatient CHW	923

- Outpatient CHW	1,402
2.2 Expansion of Care Management existing infrastructure to include the following services: - Mobile Clinical Resources - Care Clinic - Embedded Care Management services in specialty care practices	 310 379 220

Intervention Program

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

BEHAVIORAL HEALTH STRATEGY of Regional Care Transformation Program

Intervention 1.1 Community Based Behavioral Health Case Management (BH CM)

Intervention or Program Name	1.1: Community Based BH Case Management
RP Hospitals Participating in Intervention *Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.*	All RP Hospitals are participating.
Brief description of the Intervention *2-3 sentences*	Implementation of Community based Behavioral Health Case Management (BH CM) leverages the best practice model at WMHS, as upon discharge from the ED, it provides patients with specialized behavioral health case management resources to bridge the gap from discharge to connection with appropriate community based services. This service has reduced readmissions and ED revisit rates for program participants.
Participating Program Partners *Please list the relevant community-based organizations or provider groups, contractors, and/or public partners*	BH CM: Potomac Case Management Service, Inc. Lighthouse, Inc. Archway Station, Inc. Union Rescue Mission
Patients Served (BH CM) *Please estimate using the Population category that best applies to the Intervention, from the CY 2017 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, 2018: 1868** (Value is equal to the # of unique patients served in FY 18)
	Denominator #1 of Eligible Patients: 489,457 (Source of denominator # 1, as requested by HSCRC: RP Analytic file for 01Jan 2017-31Dec17_yearly downloaded from CRISP on 9/11/18; 3+ IP or Obs>=24 visits; *Column C-Population*; downloaded 9/11/18 as the file was refreshed 9/10/18 by CRISP.) **RP Denominator (intervention specific): 43,917** Source: Calendar year 2017 data posted by HSCRC regarding Behavioral Health inpatient and emergency department (ED) volumes.

	Inpatient BH unique patient volume admitted through ED: WMHS- 4,535 FMH-6,456 MMC- 6,394 ED Behavioral Health unique patient discharge volumes: WMHS- 4,612 FMH- 10,091 MMC- 11,829
Pre-Post Analysis for Intervention (optional) *If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.*	Community based BH CM targets to support behavioral health patients after inpatient or emergency department (ED) discharge to prevent ED revisits and/or readmission. **At FMH** 30, 60, and 90 day internally calculated pre/post results are calculated to quantify intervention impact for patients engaged with this service. A copy of the calendar year 2017 results achieved through FMH's BH CM is provided on pg. 27, *Table 2. FMH- Behavioral Health Community Based Case Management 30, 60, and 90 Day Pre/Post Analytic Results* within the appendix. Key impacts quantified include: - $1.3M in savings achieved as the result of 92 avoided inpatient visits during the 30 day window after engagement with our Community based Behavioral Health Case Management (BH CM) intervention. -$19,000 in reduced ED charges was achieved by 39 avoided ED visits. -$20,000 in reduced charges was achieved by 2 avoided readmissions. At WMHS and MMC results for this intervention are measured and tracked by comparing inpatient and emergency department utilization for patients post engagement, to the utilization of a defined control group. **WMHS** results show a great reduction in inpatient and ED utilization for Jan. 1, 2017 through March 3, 2018 at the 30 day mark for patient's engaged in BH CM, in comparison to the control group that did not engage. - Engaged inpatient visit count= 75 - Control groups inpatient visit count = 640 - Engaged patient's ED visit count= 100 - Control groups ED visit count= 1,101

	A full copy of the WMHS BH CM results is provided via *Table 3. WMHS: Community Based BH CM Post engagement utilization statistics for patients engaged in the service compared against a defined control group utilization stats,* on page 28 of the Appendix. September 1, 2018, MMC went live with their EPIC EHR implementation and have focused heavily to adequately support this massive implementation to ensure supporting safe patient care. MMC's post comparative analytics are forthcoming. MMC's process measures are reported out within the next section and show the readmission and ED revisit rates for BH CM program participants are consistently, month over month exceeding targets throughout FY 18. Consumption/performance metrics are generated internally as capability to filter results for targeted Behavioral Health diagnosis needed to measure impact for intervention is not possible with current CRISP tools due to external limitations regarding the protection of BH records.
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.*	<u>Community based BH case management:</u> • MMC and FMH: ED revisit rate and readmission rate was below target for program participants 12 out of 12 months for Fiscal Year (FY) 18. • WMHS: ED revisit rate and readmission rate was below target for program participants 11 out of 12 months for FY 18. • Number of unique patients engaged is tracked monthly, as well as they unique patient count for FY. ○ In FY 18, a total of 1868 unique patients engaged in BH CM intervention. A copy of the FY 18 actual readmission and ED revisit rates for program participants are provided in *Table 1: Community Based BH Case Management Process Metric Results; FY 18* on page 27 of the Appendix.
Successes of the Intervention in FY 2018 *Free Response, up to 1 Paragraph*	<u>Community based BH case management:</u> • Validation of work, as each hospital is seeing this outreach program impact ED visits for the patient population working with BH CM services. • More awareness across the board since BH case management in now working with other multidisciplinary team members within the health care system. • BH CM is now becoming comfortable with the team members and those team members' extended capabilities to also support the patients to more

	cohesively address identified needs. This team work and comradery is helping to break down the stigma, as more diverse care teams more frequently have crucial conversations regarding mental health needs; team members outside of the mental and behavioral health arena are now more open to asking for referrals to engage BH CM services when needed.
Lessons Learned from the Intervention in FY 2018 *Free Response, up to 1 Paragraph*	• Having BH CM meet with patients face to face prior to discharge has been key. Engagement with patients prior to discharge increases likelihood for patients to engage with the BH CM service. It can be very challenging to reach patients after discharge, if a face to face connection has not been made first. • Open lines of communication between Accountable Care Organization (ACO) case managers and BH CM care team members alleviates duplication of case management services and promotes appropriate coordination of care. • Importance of frequent communication with BH CM service providers. It is vitally important for both parties to be acutely aware of ED and inpatient visits, as now each are able to work together better to achieve better outcomes for the patients served. • Importance of meeting with BH CM service provider monthly, and connecting the direct care providers daily. These increased communication lines regarding patient care needs and barriers have proven that our team members are flexible, focused and driven to meet patient needs. • Important to address social determinants of health, especially transportation, housing and food. The BH CM has been key with early interventions to prevent admissions.
Next Steps for the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	<u>Community based BH case management:</u> • Learn more about what services patients are being referred to, and what results are achieved from that point and beyond. Studying this part of the continuum of care will allow us to understand areas of greatest need, and what interventions at that point are making the greatest impact within this patient population. Increasing knowledge in this area will help prioritize needs to drive results. • As part of the Advanced Health Collaborative work, members are looking at the feasibility to implement resources to expand access to crisis services given their current limited availability. When crisis services are not

	readily available, this causes delays in care and increases TCOC.
Additional Free Response (Optional)	

Intervention 1.2 Integration of Behavioral Health Professionals in Primary Care

Intervention or Program Name	1.2 Integration of Behavioral Health Professionals in Primary Care
RP Hospitals Participating in Intervention *Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.*	All regional partnership hospitals are participating.
Brief description of the Intervention *2-3 sentences*	Implementation of standardized depression screening tool to screen all adults within health system employed practices for depression. Grant resources have been utilized to create or expand access to Behavioral Health Professionals (BHPs) embedded in Primary Care among regional partnership members. A standardized approach to depression screening leads to early detection and early intervention, allowing BHPs and primary care providers in coordination to develop collaborative treatment plans with the patient. These efforts support early detection and treatment to ward off escalation and crisis, which often lead to avoidable ED and inpatient utilization.
Participating Program Partners *Please list the relevant community-based organizations or provider groups, contractors, and/or public partners*	Lighthouse, Inc. Archway Station, Inc. Union Rescue Mission City of Westernport City of Lonaconing City of Mount Savage
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2017 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, 2018**: **2574** (Value = # of unique patients engaged with Integrated Behavioral Health Professional fiscal year 2018.)
	Denominator of Eligible Patients: 489,799 (Source of denominator # 1, as requested by HSCRC: RP Analytic file for 01Jan 2017-31Dec17_yearly downloaded from CRISP on 9/11/18; 3+ IP or Obs>=24 visits; *Column C-Population*; downloaded 9/11/18 as the file was refreshed 9/10/18 by CRISP.) **RP Denominator (intervention specific): 22,053** Value is derived using the following logic:

<table>
<tr><td></td><td>(# Adult MMC, FMH, and WMHS patients of employed PCP practices in CY 17 + # of eligible adult FMH Care Clinic patients) multiplied by 20%.
Note: Number of FMH employed practice and Care Clinic MRNs are cross referenced to ensure clean unique patient count. A factor of 20% is applied to account for the incidence of mental health in the United States.</td></tr>
<tr><td>Pre-Post Analysis for Intervention
(optional)
If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.</td><td>This intervention aims at early detection to provide early intervention to prevent escalation and progression of needs. Provided high utilization is not part of this programs engagement criteria, pre/post analytics yield null results and would not be an effective method to measure impact.</td></tr>
<tr><td>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.</td><td><u>RP Integration of BHP in Primary Care Process Metric Results for FY 18 Summarized</u>
<table>
<tr><td>% of hospital employed PCPs utilizing standard depression screening tool (PHQ 2/9).</td><td>All RP hospitals have exceeded the target of 80% every months of FY 18.</td></tr>
<tr><td>Total #- PHQ 9's administered (adults) within Employed Primary Care Providers</td><td>7,425</td></tr>
<tr><td># Unique adult patients who were screened via PHQ 2 or 9 in prev. 12 mos.</td><td>37,930</td></tr>
<tr><td># of unique pt. visits in previous 12 mos.</td><td>83,272</td></tr>
<tr><td>% of unique adult patient within RP screened FY 18</td><td>46%; which exceeded the baseline of 24%.</td></tr>
<tr><td>Total # of interventions completed by BHPs in FY 18 (Intervention= telephonic, face to face, or home support)</td><td>11,709</td></tr>
</table></td></tr>
<tr><td>Successes of the Intervention in FY 2018
Free Response, up to 1 Paragraph</td><td><u>Integration of BHP in Primary Care</u>
• # of adult patients screened for risk of depression has doubled since the baseline value was compiled in FY 15.
• Patients that screen positive for significant risk of depression are being referred to Integrated BHP in primary care where available.
• Increased awareness of depression overall.
• The embedded CM has facilitated many patients being managed by their PCP on mental health medications and</td></tr>
</table>

	avoiding long waits for mental health services in the community. The communication between the PCP and the mental health medication prescribing provider has increased.
Lessons Learned from the Intervention in FY 2018 *Free Response, up to 1 Paragraph*	• There are a greater number of patients screening positive for moderate risk of depression than can be treated with existing resources. • It is difficult to gain buy-in for depression screening for ALL adult patients, given limited availability of BH resources should patient screen positive, lack of incentives for early detection and early intervention for non- ACO patients. • There is opportunity to increase the overall % of unique adults patients screened.
Next Steps for the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	<u>Integration of BHP in Primary Care:</u> • Increased awareness has led to increased requests for community outreach and Mental Health First Aid (MHFA) trainings. Teams are working to facilitate meeting training requests by increasing communication and transparency of MHFA training session availability. • RP is actively participating in implementation planning efforts to deploy a pilot program to conduct Behavioral Health virtual visits into the ED using a shared Advanced Health Collaborative BH virtual provider group. Pending demonstration of phase I pilot outcomes, the Advanced Health Collaborative (AHC) BH work team is planning to expand the virtual visit platform to support additional phases, one of which would allow this platform to be utilized by the embedded Integrated BHP clinicians to expand their reach to patients with identified need/risk. Currently this work is pending financial feasibility aspects to be addressed.
Additional Free Response (Optional)	

COMPLEX CARE MANAGEMENT STRATEGY of Regional Care Transformation (RCT) Program:

Intervention 2.1 Addition of Community Health Worker Service Program

Intervention or Program Name	Community Health Worker Service
RP Hospitals Participating in Intervention *Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.*	All RP Hospitals are participating.
Brief description of the Intervention *2-3 sentences*	2.1: Community Health Worker (CHW) service implemented as an extension of existing outpatient care management infrastructure to provide high touch care to increase patient engagement, assess for social determinants of health needs, and connect patients with appropriate community based resources. The outpatient Community Health Workers are supported by a clinically strong, multidisciplinary team to address clinical patient needs. All RP Hospitals are participating. WMHS repurposed FTEs to expand their existing outpatient CHW service to now reach inpatients with identified high and moderate risk for readmission, prior to discharge. WMHS's inpatient CHW service facilitates scheduling of outpatient follow up appointments and ensuring roadblocks to attending the follow up appointments are mitigated. MMC partnered with Commission of Aging to implement an outpatient CHW Service targeting high utilizers. FMH partnered with Asian American Center to implement a hybrid model through which CHW representatives can make a warm connection with the patient prior to discharge from inpatient status, and then follow up to address need via the outpatient CHW service.
Participating Program Partners *Please list the relevant community-based organizations or provider groups, contractors, and/or public partners*	Washington County Commission on Aging Frederick County Asian American Center Western Maryland Health System had an existing CHW program which has been expanded using grant funded resources.
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2017 RP Analytic Files.* *HSCRC acknowledges that the High Utilizer/Rising Risk or Payer designations may over-state the population, or may not entirely*	**# of Patients Served as of June 30, 2018: 509** Value = Number of targeted high utilizers "engaged" within Care Management Platform.
	Denominator of Eligible Patients: 489,457 (Source of denominator # 1, as requested by HSCRC: RP Analytic file for 01Jan 2017-31Dec17_yearly downloaded from CRISP on 9/11/18; 3+ IP or Obs>=24 visits; *Column C- Population*;

represent this intervention's targeted population. *Feel free to **also** include your partnership's denominator.*	downloaded 9/11/18 as the file was refreshed 9/10/18 by CRISP.) **RP Denominator (CCM High Utilizer target population specific): <u>951 High Utilizers</u>** Value = Number of targeted Calendar Year 16 new high utilizers that meet our initial target population inclusion criteria.
Pre-Post Analysis for Intervention (optional) *If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.*	Summarized results quantified through Regional Partnership internal pre/post utilization analysis of CY 16 New HU engaged with Care Management Services and displayed in Table 4 below. The delta display was calculated subtracting CY 16 from CY 17 values per line item within the table. • **CCM program quantified $14.9M in reduced charges through reduced utilization among engaged targeted high utilizers.** • **1500 visits were reduced from CY 16 to CY 17 for program participants.** • **Significant reductions in Readmission and PQI's were achieved.** • **This interventions goal to reduce inpatient utilization, readmissions, and PQIs was achieved as summarized within results summary table provided as *Table 4. Complex Care Management CY 16 High Utilizer CY 16 to CY 17 Utilization Comparison Results* immediately below.** **Table 4: Complex Care Management CY 16 High Utilizer CY 16 to CY 17 Utilization Comparison Results**

CY 16 HU Utilization in CY 17	Engaged Patients Delta Summary Count	Charges
Aggreagted Utilzation Details:		
# of pt's that met this criteria	334	
Inpatient (all cause)	-1040	($13,829,387)
Outpatient (all cause)	-226	($874,058)
ER (all cause)	-311	($224,866)
Readmission (all cause)	-372	($5,519,140)
PQIs (all cause)	-331	($2,936,691)
Mortality	43	
Percentage of pt's expired	13%	
Medicare	152	
Regional Patient Count (n) 2017	334	
Total Charges in 2016		$26,052,751
Total charges in 2017		$11,124,439
Total Reduction in Charges		($14,928,311)
Percentage of change charges	-57%	
Visits 2016	2981	
Visits 2017	1404	
Total Reduction in Visits	-1577	
Percentage of Change in visits	-53%	

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.

Inpatient CHW service (MMC and FMH)

Process Measure	RP Aggregated Value
Total # of unique patients care for through the CHW Service in FY 18	923
Total # of referrals made by CHW to connect patients' to additional services based on need	2,642
Quality of life assessment scores completed pre and post CHW service engagement	Reference values detailed per RP member via *Figure 1: CHW Quality of life assessment questions and scoring parameters* on page Appendix page 29.
Total # graduated from program	FY 18 = 273

Inpatient CHW service (WMHS)

# of patients engaged with Inpatient CHW service FY 18	1,402
% of patients who engage with the CHW, and attend their follow up appointment within 7 days and are readmitted had a significantly lower readmission rates for 9 out of the 12 months in FY 18. • Actual monthly results are provided in *Table 5: Inpatient CWH Program Process Metrics on page 29 of the Appendix.*	

Successes of the Intervention in FY 2018
Free Response, up to 1 Paragraph

<u>CHW Service:</u>

- CHW inpatient service has been expanded to include approaching patients assessed with moderate risk for readmission to participate in the inpatient CHW service. (When initially implemented, only patients assessed with high risk for readmission were engaged).
- Collaborative working relationships between the CHW and multidisciplinary Care Management Team members.
- Number of referrals CHW are able to process and facilitate in order to connect patient to needed community based services.
- Ability of CHWs to develop trusting relationships with patients.

Lessons Learned from the Intervention in FY 2018 *Free Response, up to 1 Paragraph*	• Implications of contracted vs employed service. • Having the CHWs be on site which effectively builds up their knowledge and skill base, and fosters the trust needed for multidisciplinary teams to highly function. • Having connection with patient prior to discharge increases patients' willingness to participate in the program. • Found patients were being supported by CHW service for too long. • Implementation of self-sufficiency matrix created a measurable way to focus interactions, collaboratively set goals, and establish clear criteria for graduation from this service. • Found patients were being discharged from CHW service too soon while other patients were only connected on a limited level; not fully connected. • Identified need to execute retraining to ensure all CHWs are functioning at same level, thus ensuring patients are fully connected to right resources.
Next Steps for the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	<u>CHW:</u> • One RP member will onboard CHW resources to be employed positions. This transition from contracted to employed status allows for expansion of hours the resources are available, helps with administrative challenges, ensures resources are focused to serve the target population, and allows for CHW employees to have health insurance and benefits not available to them as a contracted position. • Transition from geographically assigned CHWs to aligning CHWs to disease processes/service lines. First will be diabetes and the next will be COPD and Heart Failure. CHWs will receive focused disease specific training. • Spread out retraining in phases to ensure all CHWs are functioning at same level. Converting to EPIC, so CHW and CM documentation will then be transparent across the health system. Improve upon the inpatient CHWs engagement among multidisciplinary discharge planning team members 3 days a week.
Additional Free Response (Optional)	

Intervention 2.2 Expansion of existing outpatient care management platforms.

Intervention or Program Name	Expansion of existing outpatient care management platforms.
RP Hospitals Participating in Intervention *Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.*	Each hospital is participating in this initiative via the following complex care management platform expansion programs: ○ FMH: Expansion of FMH's Care Clinic and implementation of a Mobile Integrated Health Pilot in collaboration with Frederick County EMS. ○ WMHS: Mobile Clinical Resources (MCR) ○ MMC: Expansion of embedded Care Management Services into specialty care practices. All RP Hospitals are participating in the intervention but expanding upon existing resources and infrastructure to speed impact of grant resources via shovel ready interventions without duplicating existing programs.
Brief description of the Intervention *2-3 sentences*	**Care Clinic:** Expansion of access to the existing multidisciplinary outpatient Care Clinic focused on providing disease based follow up care and care coordination from 2 days a week, to 5 days a week. Implementation of new Mobile Integrated Health pilot in collaboration with Frederick County EMS to provide initial proactive home visits for ED and/or EMS high utilizers. This service will be deployed with a nurse or nurse practitioner from FMH's Care Transitions team. Subsequent visits will be with paramedic and appropriate discipline (Pharm, RN, SW, Dietitian, etc.). Additional community resources will be engaged when there is an identified need (i.e. Behavioral Health Case Management, Hospice, Home Health, Community Health Worker Service, etc.). **Mobile Clinical Resources:** Deployment of Mobile Clinical Resources (MCR) to support both the BH and CCM strategy while increasing access to primary care (a challenge found specific to Allegany County during the data analysis in the planning phase). The MCR is a mobile expansion of their existing multidisciplinary outpatient Clinical Care Resources (CCR) clinic which provides care coordination, and care transition support to patients with complex chronic care needs. **Embedded Care Management in Specialty Care:** Expansion of existing Integrated Care Management services in primary care to include two specialty practices (Pulmonary and

	Cardiology). Integrated Care Management team provides multidisciplinary care coordination, and care transition support from the primary or specialty care outpatient office in collaboration with the provider and their office based team.
Participating Program Partners *Please list the relevant community-based organizations or provider groups, contractors, and/or public partners*	Frederick County Emergency Medical Services (EMS) Union Rescue Mission City of Westernport City of Lonaconing City of Mount Savage
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2017 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, 2018**: **1487** **Denominator of Eligible Patients: 489,457** (Source of denominator # 1, as requested by HSCRC: RP Analytic file for 01Jan 2017-31Dec17_yearly downloaded from CRISP on 9/11/18; 3+ IP or Obs>=24 visits; *Column C-Population*; downloaded 9/11/18 as the file was refreshed 9/10/18 by CRISP.) **RP Denominator (intervention specific): 15796** Value is = Sum of MMC + WMHS + FMH Eligible patients
Pre-Post Analysis for Intervention (optional) *If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.*	**Care Clinic:** CRISP Pre/Post Analysis report for Care Clinic patients quantifies significant reduction in visits at 1 month, 3 month, and 6 month intervals. In alignment with this intervention's objective to reduce avoidable utilization, the Pre/Post report quantifies significant decreases in following post engagement with Care Clinic services: the rate and average charge per member, rate of visits per 10 members, and average charge per visit. Care Clinic Pre/Post Report excerpt is presented in *Table 6. Care Clinic CRISP Pre/Post Summary of Results* the top of the next page to summarize the results. A copy of the entire CRISP report summary is provided as *Figure 2: CRISP Pre/Post Analysis Results for patients engaged with Care Clinic* on page 30 in the Appendix.

Table 6. Care Clinic CRISP Pre/Post Summary of Results

Time period	Total # Visits Pre	Total # Visits Post	Total Charges Pre	Total Charges Post
1 Month	700	273	$4.6M	$975K
3 Months	849	567	$5.2M	$2.4M
6 Months	526	368	$2.3M	$1.7M

Care Clinic Pre/Post reduced charges summarized from *Table 6* above:
1Month: $ 3.6M
3 Moth: $ 2.7M
6 Month: $ 628K

Mobile Clinical Resources: Internal Pre/Post Analysis are posted in *Table 7. MCR Pre/Post analysis results* for program participants comparing CY 2016 utilization to CY 2017. Reduction in utilization is demonstrated for inpatient visits and readmissions; indicating shift from higher cost, more complex to lower level need!

Table 7: MCR Pre/Post Analysis Results

Utilization Metric	Calendar Year 2017 Value	Calendar Year 2016 Value	Reduction/ Increase % of Change
Total Visits	141	126	12
Total Charges	$ 349,082	$ 403,967	-14
Inpatient Visits	23	38	-39
Inpatient Charges	$ 221,504	$ 315,278	-30
ED Visits	110	83	33
ED Charges	$ 85,295	$ 63,269	35
OBS Visits	8	5	60
OBS Charges	$ 42,283	$ 25,420	66
Readmission Visits	5	12	-58

Readmission Charges	$ 153,875	$ 198,132	-22
ALOS	5.09	3.79	34

Embedded Care Management in Specialty Practices:
CRISP Pre/Post Analysis Results for patients engaged with Embedded Care Management in two Specialty Practices are summarized in *Table 8*.

Table 8. Embedded CM in two Specialty Practices: CRISP Pre/Post Summary of Results

Time period	Total # Visits Pre	Total # Visits Post	Total Charges Pre	Total Charges Post
1 Month	121	42	$1.1M	$400K
3 Months	201	127	$1.5M	$1M
6 Months	275	218	$1.9M	$1.3M
12 Months	284	220	$1.4M	$1.2M

Embedded Care Management CRISP Pre/Post reduced charges summarized from *Table 8* above:
1Month: $ 700K
3 Moth: $ 500K
6 Month: $ 700K
12 Months: $ 200K

A copy of the CRISP Pre/Post report summary is provided in *Figure 3: CRISP Pre/Post Analysis Results for patients engaged with Embedded Care Management within two Specialty Practices* on page 31 of the Appendix.

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.

Care Clinic Process Metrics:
- FY 18 Average # of Care Clinic scheduled visits/month= 257
- FY 18 # of Unique Care Clinic patients treated= 379

Mobile Integrated Health Process Metrics:
- Pilot planning and training for implementation was executed 4th quarter of FY 18.

Mobile Clinical Resource Process Metrics:
- 310 Patients seen.
- 155 Patients without a Primary Care Provider (PCP) were established with a PCP.
- 35 Patients were referred to assistance to address social determinants.

	<u>Embedded Care Management in Specialty Practices:</u> - FY 18 # of unique patients care for= 230
Successes of the Intervention in FY 2018 *Free Response, up to 1 Paragraph*	• Mobile Integrated Health pilot program planning completed. • Reduced utilization achieved through all 3 initiatives: Mobile Clinical Resources, Care Clinic, and embedded case management in specialty care. • Collaborative working relationship between embedded Case managers and specialist, which facilitates providers to refer patients in need of CM services. • All planned hot spot Mobile Clinical Resources sites planned were implemented. • Addition of full time provider for the Care Clinic has increased capacity to see more patients. • Co-location of Care Clinic with Immediate Care ensured provider coverage is consistently available 5 days a week; if NP is not available in Clinic, patients can be seen by co-located Immediate Care provider.
Lessons Learned from the Intervention in FY 2018 *Free Response, up to 1 Paragraph*	Mobile Clinical Resources: • We will no longer provide a Nurse Practitioner and Licensed Practical Nurse at these 4 hot spot locations: Westernport, Lonaconing, Frostburg and Mt. Savage. The MCRs moving forward will be called 'Population Health Centers'. We are changing this because there were minimal people in those areas coming for clinical services 1-2 a week. However, the need for other services that will address 'The Social Determinants of Health' is huge. The Population Health Center will assist patients/clients with signing up for insurance, diet classes associated with both chronic conditions and weight loss, cooking demos, pre-diabetic classes, smoking cessation classes, and utilize "Aunt Bertha" (a web based needs assessment and on line referral service), as well as other needed services identified through a community based need/interest survey.
Next Steps for the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	<u>Expansion of CCM Programs:</u> • Care Clinic is looking to expand access to BH professionals, expand access to NP and multidisciplinary access based on patients' needs- dietician access for example, as their schedules are fully booked and additional need exists.

	Mobile Integrated Health Pilot- Planned MIH performance metrics to be tracked FY 19 include: CRISP Pre/Post analysis for program participants, readmission data for any patient with an inpatient visit(s). Mobile Clinical Resources • URM MRC site to expand hours from 0.5 to full day given need for service. • WMHS is planning to utilize shared database to assess for social determinants of health (Aunt Bertha), and make referrals for additionally needed support and services • MCR resources adjusted to focus skill level to match resources needed, i.e. living healthy classes, peer support, and risk assessments to address rising risk and promote health of the population. Communities in which MCR sites located will be surveyed to confirm newly formed program offerings at MCR sites will match areas of need per site. (Note all programs shared: health classes, cooking classes, pre-diabetic classes, diabetic support, peer support for heart failure and diabetes mellitus, conduct risk assessments: diabetes, Hepatitis C, Parenting, TED talks.) • MCR to redefine measures of success and how to get the word out regarding these service opportunities. • Promote health of the population. Communities in which MCR sites located will be surveyed to confirm newly formed program offerings at MCR sites will match areas of need per site. (Note all programs shared: health classes, cooking classes, pre-diabetic classes, diabetes support, peer support- Heart Failure & diabetes, risk assessments: Diabetes Mellitus, Hepatitis C, Parenting, TED talks.)
Additional Free Response (Optional)	4**. Regional Care Management Education Center (RCMEC).** Objective: Establish a regional center to offer standardized and responsive care management education programs serving the regional partnership's interdisciplinary care management team working with high utilizing patients, and at-risk patients. -Regional Partnership members contracted with Compass to implement access to evidenced based American Case Management Association training material that are updated yearly to ensure the content is relevant and current. Access to this educational material is key to ensure our team members across our partnership are current with best

	practices, have access to relevant continuing education for growth, and are aware of applicable regulatory changes.

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 2017 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 2018 Reporting**	**Outcomes(s)**
Total Hospital Cost per capita	**Partnership IP Charges per capita** Analytic File: 'Charges' over 'Population' (Column E / Column C)	RP Analytic File, 3+IP or OBS >24 =visits $276,194,669.79 / 489,457*1000 = **$564,287.91**
Total Hospital Discharges per capita	**Total Discharges per 1,000** Analytic File: 'IPObs24Visits' over 'Population' (Column G / Column C)	RP Analytic File, 3+IP or OBS >24 =visits (14,145 / 489,457) *1000= **28.90**
Total Health Care Cost per person	**Partnership TCOC per capita – Medicare** Total Cost of Care (Medicare CCW) Report 'Regional Partnership Cost of Care': 'Tab 4. PBPY Costs by Service Type' – sorted for CY 2017 and Total	RP Analytic File, 3+IP or OBS >24 =visits **Calendar Year- CY 2017** **Service Type- Total*** **Measure –Full year per Beneficiary Costs** **Total PBPY Cost: $10,941** **% of Change from Previous Year: 4.01%** **Total Members to Date: 317,304**
ED Visits per capita	**Ambulatory ED Visits per 1,000** Analytic File 'ED Visits' over 'Population' (Column H / Column C)	RP Analytic File, 3+IP or OBS >24 =visits (9,498 / 489,457) * 1000 = **19.41**

Quality Indicator Measures

Measure in RFP *(Table 1 in Appendix A of the RFP)*	**Measure for FY 2018 Reporting**	**Outcomes(s)**
Readmissions	**Unadjusted Readmission rate by Hospital** (please be sure to filter to include all hospitals in your RP) Analytic File: 'IP Readmit' over 'EligibleforReadmit' (Column J / Column I)	RP Analytic File, 3+IP or OBS >24 =visits 3605 / 10751 = **0.335**
PAU	**Potentially Avoidable Utilization** Analytic File: 'TotalPAUCharges' (Column K)	RP Analytic File, 3+IP or OBS >24 =visits **$79,448,606**

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 2018 Reporting**	**Outcomes(s)**
Established Longitudinal Care Plan	**% of patients with Care Plan recorded at CRISP** Executive Dashboard: 'High Needs Patients – CRISP Key Indicators' – % of patients with Care Plan recorded at CRISP, reported as average monthly % for most recent six months of data *May also include Rising Needs Patients, if applicable in Partnership.*	
Portion of Target Population with Contact from	**Potentially Avoidable Utilization** Executive Dashboard:	

Assigned Care Manager	'High Needs Patients – CRISP Key Indicators' – <u>% of patients with Case Manager (CM) recorded at CRISP</u>, 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

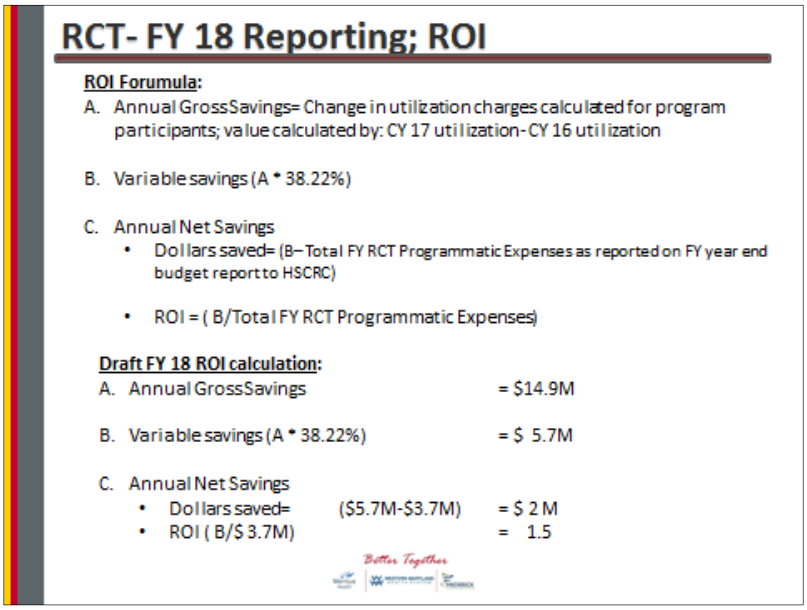
Please describe any partnership-level process measures that your RP may be tracking but are not currently captured under the Executive Dashboard. Some examples are shared care plans, health risk assessments, patients with care manager who are not recorded in CRISP, etc. By-intervention process measures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

All RCT process and outcome metrics have been communicated and populated into either the pre/post or process metrics section with the Intervention section of this template.

Return on Investment

Indicate how the Partnership is working to generate a positive return on investment. Free Response, please include your calculation if applicable.

The following ROI calculation is in alignment with the initial RFP ROI calculation except that it factors in total FY programmatic expenses for the interventions serving all payers, and utilizes a variable savings factor of 38.22% as opposed to 50%. The 38.22 % is utilized in alignment with the typical percentage of charges for which costs are actualized by the health system in relation to charges. A high fixed rate cost is associated with the RCT work. Our RPs FY formula and ROI calculation is as follows:



Conclusion

Please include any additional information you wish to share here. Free Response, 1-3 Paragraphs.

- While WMHS has served notice of withdrawal from Trivergent Health Alliance as of June 30, 2018, there will be no change in level of engagement and/or participation associated with the Regional Care Transformation Regional Partnership.

- Regional partnership work within the Complex Care Management strategy targets identified High Utilizers defined as those patients with 3 or more inpatient and/or observation stays within a calendar year, yet patients with need are not turned away or left unaddressed if the individual does not meet the exact target population criteria. Utilizing clinical discretion, our team members have been able to demonstrate significant cost savings utilizing this approach. Through utilization of this workflow, patients with rising risk are engaged, coached, and connected to community based services upon discovery of need.

- Our Regional Partnership recognizes it is extremely important that we continue to operationalize the RCT interventions regardless of payer source, acknowledging an effective means to reduce and manage future Medicare costs is to ensure patients that are 15-20 years out from meeting Medicare eligibility requirements have the resources needed to detect chronic conditions early on, and are taught how to self-manage early. Early detection and effective self- management is a truly effective means which can reduce progression of chronic conditions and subsequent condition management which drives heavy resource demands.

- As of August 2018, access needed to leverage CRISPs Pre/Post analytic reports has been secured to support all members of our RP. For FY 19, our RP, in collaboration with CRISP, will explore additional capability to leverage this tool moving forward.

Appendix:

Table 1: Community Based BH Case Management Process Metric Results; FY 18

1.1 Community Based BH Case Mgmt. Process Measures		Baseline FY 15	Target	July	Aug	Sept	Oct	Nov	Dec	Jan.	Feb	March	April	May	June
WMHS	ED revisit rate for pt's in	Avg 20%	At or below 20%	12%	15%	13%	13%	13%	17%	12.00%	11%	15.00%	13%	8%	9%
	Readmission rate for program participants	Avg 12%	At or below 12%	5%	6%	4%	3%	3%	4%	8.00%	3%	4%	5%	9.70%	14%
MMC	ED revisit rate for pt's in	Avg 20%	At or below 20%	5.20%	11.53%	7.05%	0.00%	6.84%	1.49%	9.45%	1.09%	6.25%	10.93%	11.11%	3.22%
	Readmission rate for program participants	Avg 12%	At or below 12%	3.12%	3.84%	2.35%	1.56%	4.10%	1.49%	9.45%	0.00%	2.50%	7.81%	5.55%	1.61%
FMH	ED revisit rate for pt's in	Avg 20%	At or below 20%	3.51%	5.66%	5.00%	8.16%	6.98%	5.88%	3.03%	6.67%	3.80%	5.06%	5.48%	1.39%
	Readmission rate for program participants	Avg 12%	At or below 12%	7.02%	3.77%	5.00%	10.20%	4.65%	1.96%	4.55%	2.67%	3.80%	0.00%	2.74%	1.39%

Table 2. FMH- Behavioral Health Community Based Case Management 30, 60, and 90 Day Pre/Post Analytic Results

Enter Hospital Name Here: FMH
Time Frame: CY2017
Total Patients Consented: 207
Total Patient w/ Visits: 196

Method: Visits count within Category. (30 day visit will only count within 30 day totals)

		30 before start date			30 days after start date			Readmissions		ED Revisits		Savings				
30 Day Pre/Post Results	Patient Status	ER	IN	OBS	ER	IN	OBS	30 before start date	30 days after start date	30 before start date	30 days after start date	ER	IN	OBS	Readmissions	ED Revisits
	Visits	78	107	6	39	15	5	13	11	6	13	(39)	(92)	(1)	(2)	7
	Charges	$48,825	$1,550,545	$20,453	$29,717	$168,511	$15,611	$129,563	$109,544	$4,577	$13,208	($19,108)	($1,382,034)	($4,842)	($20,019)	$8,631
	Avg Visits (Row 5 values/B2)	38%	52%	3%	19%	7%	2%	6%	5%	3%	6%	-19%	-44%	0%	-1%	3%
	Avg Charges (Row 6 values/B2)	235.8696	$7,491	$99	$144	$814	$75	$626	$529	$22	$64	-$92	-$6,676	-$23	-$97	41.69565
	# of unique pt's with 30 day pre/post results:															

		60 before start date			60 days after start date			Readmissions		ED Revisits		Savings				
60 Day Pre/Post Results	Patient Status	ER	IN	OBS	ER	IN	OBS	60 days before start date	60 days after start date	60 days before start date	60 days after start date	ER	IN	OBS	Readmissions	ED Revisits
	Visits	13	22	3	19	13	5	2	4	1	4	6	(9)	2	2	3
	Charges	$7,728	$220,964	$8,733	$14,195	$166,818	$48,468	$25,490	$59,167	$1,397	$3,319	$6,467	($54,146)	$39,735	$33,677	$1,922
	Avg Visits (Row 13 values/B2)	6%	11%	1%	9%	6%	2%	1%	2%	0%	2%	3%	-4%	1%	1%	1%
	Avg Charges (Row 14 values/B2)	37.33333	$1,067	$42	$69	$806	$234	$123	$286	$7	$16	$31	($262)	$192	$163	$9
	# of unique pt's with 60 day pre/post results:															

		90 before start date			90 days after start date			Readmissions		ED Revisits		Savings				
90 Day Pre/Post Results	Patient Status	ER	IN	OBS	ER	IN	OBS	90 days before start date	90 days after start date	90 days before start date	90 days after start date	ER	IN	OBS	Readmissions	ED Revisits
	Visits	26	11	4	16	16	5	5	4	1	0	-10	5	1	(1)	(1)
	Charges	$15,897	$143,133	$15,029	$8,637	$133,113	$24,234	$45,616	$24,914	$734	$0	($7,260)	($10,020)	$9,205	($20,702)	($734)
	Avg Visits (Row 21 values/B2)	13%	5%	2%	8%	8%	2%	2%	2%	0%	0%	-5%	2%	0%	0%	0%
	Avg Charges (Row 22 values/B2)	76.7971	$691	$73	$42	$643	$117	$220	$120	$4	$0	($35)	($48)	$44	($100)	($4)
	# of unique pt's with 90 day pre/post results:															

Table 3. WMHS: Community Based BH CM Post engagement utilization statistics for patients engaged in the service compared against a defined control group utilization stats.

Western Maryland Health System
Time Frame: 1/2017 to 3/2018
Total Unique Patients 2514
2514 unique patients, 1027 engaged patients and 1622 in the control group.

		30 days after start date		Readmission	ED Revisits
30 Day Post/Post Results	Patient Status	ER	IN	30 days after start date	30 days after start date
	Visits engaged	100	75	28	7
	Charges engaged	$106,353.48	$542,619.96	214,165.81	$81,712.80
	Avg Charges PP (Row 6 values/B2)	$1,281.37	$7,433.15	7,932.07	$11,673.26
	Visits control group	1,101	640	44	6
	charges control group	$ 1,021,862.56	$4,799,058.95	$480,312.61	$31,323.84
	# of unique pt's with 30 day post/post results: 715 (881 engaged with no visits				

		60 days after start date			
60 Day Post/Post Results	Patient Status	ER	IN	60 days after start date	60 days after start date
	Visits engaged	126	98	37	10
	Charges engaged	$133,535.03	$720,780.01	$290,193.17	$96,163.35
	Avg Charges PP (Row 14 values/B2)	$1,335.35	$8,380.93	$9,068.54	$10,685
	Visits Control Group	1,101	640	44	6
	Charges Control Group	$1,021,862.56	$4,799,059	$480,321.61	$31,323.84
	# of unique pt's with 60 day post/post results: 738 . (859 with no visits)				

		90 days after start date			
90 Day Post/Post Results	Patient Status	ER	IN	90 days after start date	90 days after start date
	Visits engaged	110	101	41	15
	Charges engaged	$ 156,441.80	$873,861.88	$317,608.83	$127,789
	Avg Charges PP (Row 22 values/B2)	$1,422.20	$8,652.10	$7,746.55	$8,519.26
	Visits Control group	1,101	640	44	6
	Charges Control Group	$1,021,862.58	$4,799,058.95	$480,312.61	$31,323.84
	# of unique pt's with 90 day post/post results: 1,662 unique patients (	5,820,921.51			
	in control, 1,027 engaged (840 with no visits)				

Figure 1: CHW Quality of life assessment questions and scoring parameters

Quality of Life Assessment questions tracked and scale for scoring purposes:	A. Considering the last 2 weeks, how would you rate your quality of life? Please rate using a scale of 1-5. 5 Excellent 4 Very Good 3 Good 2 Fair 1 Poor B. How confident are you to be able to make healthier changes to reach your identified goals? (Specifically referring to the goals the client established with the CHW) Scale of 1-5: 5 Totally Confident 1 Not Confident at all	
Hospital	Average Pre-engagement with CHW Service Score	Average Pre-engagement with CHW Service Score
FMH	2.81	3.47
MMC	2.17	2.75
WMHS	2.33	2.74

Table 5: Inpatient CWH Program Process Metrics

Inpt CHW Program		July	Aug	Sept	Oct	Nov.	Dec	Jan	Feb	Mar	April	May	June
Had appt w/in 7 days and attended their appointment	Value as %	80%	79%	72%	50%	71%	56%	59%	57%	63%	64%	77%	58%
	# attend follou appointment with 7 days/ total patients that engage with Inpt. CHW	(40/106)	(49/124)	(50/126)	(30/121)	(64/132)	(36/64)	(71/121)	(73/127)	(84/133)	(70/109)	(75/97)	(83/142)
% attended their appt and readmitted	less than #	5%	16%	14%	20%	14%	19%	19%	16%	11%	12%	27%	25%
	who did not	(2/40)	(9/49)	(7/50)	(6/30)	(9/64)	(7/36)	(8/42)	(10/63)	(6/54)	(6/50)	(20/75)	(14/57)
% Appt outside of 7 days or not at all and readmitted	Value as %	27%	23%	26%	25%	10%	23%	26%	20%	22%	21%	8%	22%
	Readmission Incidence count/ total possible patients	(15/56)	(14/62)	(15/57)	(15/61)	(4/42)	(11/48)	(13/50)	(11/54)	(11/49)	(8/39)	(3/38)	(13/59)

Figure 2: CRISP Pre/Post Analysis Results for patients engaged with Care Clinic

Pre/Post Analysis - Summary

The analysis is based on admissions before and after the enrollment date.

Program Name
CARE Clinic (210005)

Chronic Conditions
All Patients

Most Recent Payer
All

Visit Type
All

N/A

N/A

Chronic Condition Operator
(•) AND
( ) OR

Total Number of Members on Panel that could contribute to analysis

	1 Month	3 Months	6 Months	12 Months
Total Number of Patients in Panel that could contribute to analysis	635	459	201	<11

Percent of Members on the Panel with 1 or more Visits

Time Period	Total Number of Patients with a visit - Pre	Total Number of Patients with a visit - Post	Total Number of Patients with a visit - Pre %	Total Number of Patients with a visit - Post %	Change in Number of Patients
1 Month	489	156	77.0%	24.6%	-52.4%
3 Months	397	201	86.5%	43.8%	-42.7%
6 Months	175	98	87.1%	48.8%	-38.3%
12 Months	<11	<11			

Rate of Visits per 10 Members

Time Period	Total Number of Visits - Pre	Total Number of Visits - Post	Rate of Visits per 10 patients - Pre	Rate of Visits per 10 patients - Post	Visits Rate change
1 Month	700	273	11.0	4.3	-6.7
3 Months	849	567	18.5	12.4	-6.1
6 Months	526	368	26.2	18.3	-7.9
12 Months	<11	<11			

Average Charge per Member

Time Period	Total Number of Patients with at least 1 visit pre or post	Total charges - Pre	Total charges - Post	Average Charge per patient - Pre	Average Charge per patient - Post	Total Charges per Patients change
1 Month	512	$4,636,171	$975,158	$9,481	$6,251	($3,230)
3 Months	411	$5,173,118	$2,430,609	$13,031	$12,093	($938)
6 Months	180	$2,309,812	$1,680,948	$13,199	$17,153	$3,954

Average Charge per Visit

Time Period	Total Number of Visits - Pre	Total Number of Visits - Post	Total charges - Pre	Total charges - Post	Average Charge per visit - Pre	Average Charge per visit - Post	Total Charges per Visit change
1 Month	700	273	$4,636,171	$975,158	$6,623	$3,572	($3,051)
3 Months	849	567	$5,173,118	$2,430,609	$6,093	$4,287	($1,806)
6 Months	526	368	$2,309,812	$1,680,948	$4,391	$4,568	$177

Casemix Data Through:
06/30/2018

ENS Panels Last Updated:
07/21/2018

- MDH and HSCRC, 2016. Tableau dashboards developed by CRISP.
- Data source:
  - Panel information provided to CRISP by ENS
- HSCRC data includes all inpatient discharges and outpatient hospital visits at Maryland acute care hospitals
- Individual patients identified using CRISP EID
- CRISP suppressed cells with counts of 10 and under
- Depending on the number of months selected, some participants might not be included in the analysis if they do not have data for the entire period before and after the analysis
- Months of Analysis is not based on calendar days or 30 days but calculated by getting the same date, months in advance. eg. 1 Month before Feb 28th is Jan 28th and 1 Month before June 15th is May 15th and so on.
- Data for post enrollment (after) also includes the data for the day of enrollment in addition to Months of Analysis data.

Figure 3: CRISP Pre/Post Analysis Results for patients engaged with Embedded Care Management within two Specialty Practices

Pre/Post Analysis - Summary

The analysis is based on admissions before and after the enrollment date.

Program Name
Outpatient CM Pulm/Hag Heart 2017 (210001)

Chronic Conditions
All Patients

Most Recent Payer
All

Visit Type
All

N/A

N/A

Chronic Condition Operator
(•) AND
( ) OR

Total Number of Members on Panel that could contribute to analysis

	1 Month	3 Months	6 Months	12 Months
Total Number of Patients in Panel that could contribute to analysis	130	130	130	88

Percent of Members on the Panel with 1 or more Visits

Time Period	Total Number of Patients with a visit - Pre	Total Number of Patients with a visit - Post	Total Number of Patients with a visit - Pre %	Total Number of Patients with a visit - Post %	Change in Number of Patients
1 Month	71	32	54.6%	24.6%	-30.0%
3 Months	81	60	62.3%	46.2%	-16.2%
6 Months	90	73	69.2%	56.2%	-13.1%
12 Months	68	63	77.3%	71.6%	-5.7%

Rate of Visits per 10 Members

Time Period	Total Number of Visits - Pre	Total Number of Visits - Post	Rate of Visits per 10 patients - Pre	Rate of Visits per 10 patients - Post	Visits Rate change
1 Month	121	42	9.3	3.2	-6.1
3 Months	201	127	15.5	9.8	-5.7
6 Months	275	218	21.2	16.8	-4.4
12 Months	284	220	32.3	25.0	-7.3

Average Charge per Member

Time Period	Total Number of Patients with at least 1 visit pre or post	Total charges - Pre	Total charges - Post	Average Charge per patient - Pre	Average Charge per patient - Post	Total Charges per Patients change
1 Month	78	$1,096,710	$398,867	$15,447	$12,465	($2,982)
3 Months	92	$1,491,292	$968,810	$18,411	$16,147	($2,264)
6 Months	103	$1,850,535	$1,282,349	$20,562	$17,566	($2,995)
12 Months	78	$1,435,930	$1,245,662	$21,117	$19,772	($1,344)

Average Charge per Visit

Time Period	Total Number of Visits - Pre	Total Number of Visits - Post	Total charges - Pre	Total charges - Post	Average Charge per visit - Pre	Average Charge per visit - Post	Total Charges per Visit change
1 Month	121	42	$1,096,710	$398,867	$9,064	$9,497	$433
3 Months	201	127	$1,491,292	$968,810	$7,419	$7,628	$209
6 Months	275	218	$1,850,535	$1,282,349	$6,729	$5,882	($847)
12 Months	284	220	$1,435,930	$1,245,662	$5,056	$5,662	$606

Casemix Data Through:
08/30/2018

ENS Panels Last Updated:
08/04/2018

- MDH and HSCRC, 2016. Tableau dashboards developed by CRISP.
- Data source:
  - Panel information provided to CRISP by ENS
- HSCRC data includes all inpatient discharges and outpatient hospital visits at Maryland acute care hospitals
- Individual patients identified using CRISP EID
- CRISP suppressed cells with counts of 10 and under
- Depending on the number of months selected, some participants might not be included in the analysis if they do not have data for the entire period before and after the analysis
- Months of Analysis is not based on calendar days or 30 days but calculated by getting the same date, months in advance. eg. 1 Month before Feb 28th is Jan 28th and 1 Month before June 15th is May 15th and so on.
- Data for post enrollment (after) also includes the data for the day of enrollment in addition to Months of Analysis data.