

HSCRC Transformation Grant

FY 2019 Report

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

FY 19 Year-End Report Narrative Template Performance Year 3

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

September 2019



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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	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 2019	<p><u>1. Behavioral Health:</u></p> <p>1.1 Community Based Behavioral Health Case Management</p> <p>1.2 Integration of Behavioral Health Professionals in Primary Care</p> <p><u>2. Complex Care Management:</u></p> <p>2.1 Implementation of Community Health Worker Service</p> <p>2.2 Expansion of existing outpatient care management platforms to address multidisciplinary clinical and care coordination needs of identified high utilizers, and the under-served, population at-risk to become high utilizers.</p> <ul style="list-style-type: none"> ○ FMH: Expansion of CARE Clinic Services and Mobile Integrated Health Pilot Program ○ MMC: Embedded Case Management Services added to Specialty Care ○ WMHS: Union Rescue Mission Clinic and Hometown Healthy Program <p><u>3. ED PAU*:</u></p> <p>3.1 Improved care coordination and transitions by increasing integration with CRISP and creation of Care Alerts in alignment with Maryland Hospital Associate/CRISP/HSCRCs state wide goal to improve care coordination.</p> <p>3.2: Reduction of PAU will inherently be achieved through implementation of the CCM and BH interventions as described above</p> <p>3.3: Implementation of Mobile Integrated Health program as funding sources are identified and in alignment with state and county EMS regulatory compliance.</p>

	<p><i>*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.</i></p> <p><u>4. Create a Regional Care Management Education Center (RCMEC)</u></p> <p>Implement standardized, evidence based, case management education and training regionally.</p>
<p>Total Budget in FY 2019 <i>This should equate to total FY 2018 award</i></p>	<p>Initial Award: \$3,100,000; distributed equally among the three member hospitals. FY 2019 Award: \$2,480,000 in total, distributed equally among the three member hospitals:</p> <p>\$826,667- Western Maryland Regional Medical Center, \$826,667- Frederick Memorial Hospital, and \$826,667- Merits Medical Center</p>
<p>Total FTEs in FY 2019 = <u>38.65</u></p>	<p>Employed: 26.15 Regional Total</p> <p>Contracted: 12.5 Regional Total To view grant funded FTE by role per strategy reference the separately attached submission file titled: <u>2. THA RCT FY 19 Budget Narrative_Final 9.2019</u>; Table 2. Regional Care Transformation Grant Funded FTE; page 8.</p>
<p>Program Partners in FY 2019 <i>Please list any community-based organizations or provider groups, contractors, and/or public partners</i></p>	<p>Potomac Case Management Service, Inc. (PCM); Lighthouse, Inc.; Archway Station, Inc.; Washington County Commission on Aging; Asian American Center Frederick County; Emergency Medical Services (EMS): Frederick County and Allegany Counties; Allegany County Health Department; Allegany County Department of Social Services (DSS); Union Rescue Mission Maryland Area Health Education Center West (AHEC); Allegany County Human Resources Development Commission (AHRDC);</p>

	Western Maryland Food Bank; Associated Charities; Local Management Board; CRISP
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Overall Summary of Regional Partnership Activities in FY 2019

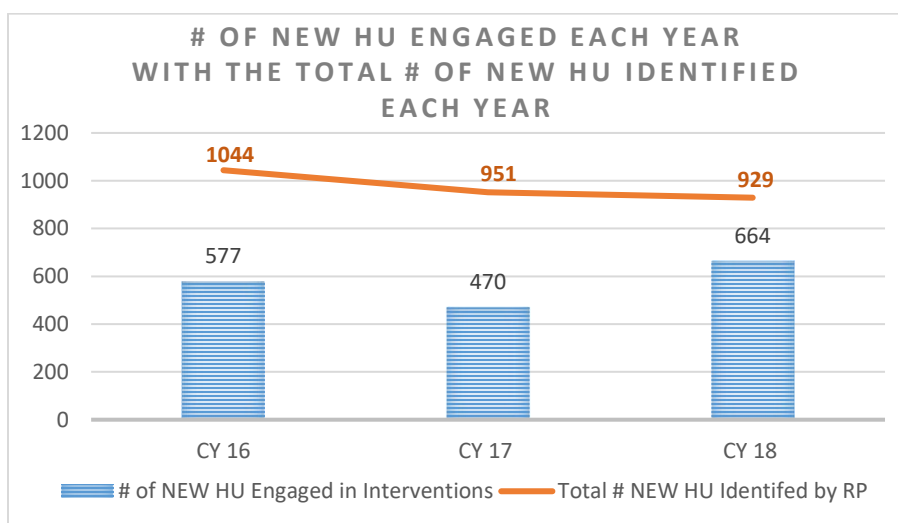
(Free Response: 1-3 Paragraphs):

- During Fiscal Year (FY) 2019 a total of 12,199 patients were engaged through the Regional Care Transformation grant funded interventions. The table below lists the number of patients engaged by intervention. Hospital specific values are provided within Figure 1, appendix, page 28.
 - o Based on lessons learned in FY 2018, not all interventions focused on programmatic growth to exceed prior volumes. For some interventions, it was determined necessary to decrease caseloads thus creating capacity for care team members to heighten the depth and quality of the intervention with the patient; thus facilitating longer lasting clinical outcomes.

Table 1: FY 2019 total number of patients engaged through the Regional Care Transformation (RCT) program by intervention type.

RCT Program Intervention:	FY 18- RP Number of Engaged Patients	FY 19- RP Number of Engaged Patients
Behavioral Health- Strategy 1:		
1.1 Community Based Behavioral Health Case Management	1,868	1,459
1.2 Integrated Behavioral Health Professional in Primary Care	2,574	3,031
Complex Care Management- Strategy 2:		
Number of Targeted High Utilizers Engaged in CCM services	470	664
2.1 Community Health Worker Service:		
- Inpatient CHW	923	2,697
- Outpatient CHW	926	1,477
2.2 Expansion of Care Management existing infrastructure to include the following services:		
- URM clinic and Hometown Healthy Partnership (new FY 19)	310	750
- Care Clinic	379	1,488
- Embedded Care Management services in specialty care practices	220	633
Total # of patients engaged in RCT Interventions *	8,146	12,199

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- Within the graphic above, the number of “new” high utilizers identified each year are displayed via the orange values. (These “new” high utilizers had not met the criteria previously, yet now meet the RP’s initial targeted high utilizer definition.) The blue columns serve to communicate the total number of new high utilizers the partnership has been able to engage each year. Effective management of the high utilizers is difficult but critically necessary to make lasting change that will ultimately drive the cost curve to decrease overall.
 - o Calendar year (CY) 2016 the Regional Partnership (RP) engaged 577 (or 55%) of the 1044 High Utilizers identified from calendar year 2015 data analysis.
 - o Calendar Year (CY) 2017 the RP engaged 49% of the 951 new High Utilizers identified from calendar year 2016 data analysis.
 - o Calendar Year (CY) 2018 the RP engaged 71% of the 929 new High Utilizers identified from calendar year 2017 data analysis.
- While our program continues to identify new high utilizers each year, there are some current high utilizers that graduate from specific interventions, and others that continue to require engagement in services (albeit to a lesser degree in most circumstances, yet- not always).
- Impact of interventions on PAU (as quantified to date by two of our three hospital members):
 - o Calendar year (CY) 2017 Engaged High Utilizers had 1,049* less PAUs in calendar year 2018 than calendar year 2017.
 - Of the 1,049 PAU eliminated:
 - 680 were PAU Readmissions (\$9.8M in total charges)
 - 369 were PQIs (\$3.7M in total charges)
 - o This reduction in PAU represents \$13.5M of the total reduced charges.
- ***We emphasize the need for a mechanism to be available to support the continuation of the care management programs implemented via the initial regional partnership grant program. The value of this work has been demonstrated to the benefit of the patients, care partners, health systems, and the Medicare Demonstration Project.***

- The resources deployed are finite, and these resources are not sufficient to engage all eligible patients into these care management services. It is important to acknowledge:
 - o Medicare population has increased further demonstrating that just as quickly as we are able to graduate patients from our programs, we are replacing them with new high utilizers and those with rising risk Medicare beneficiaries, many of whom have chronic conditions.
 - o Patients graduate from programs, but will still need engagement to a lesser degree to ensure they do not return to the HU list.
 - o New High Risk Patients and Rising Risk are being identified continuously
- Addressing populations with rising risk requires longer term intervention; potentially yields greater impact, and results are harder to measure.
- Hospitals have created and sustained the infrastructure that provides the launch for these grant initiatives. The infrastructure is not funded by the grant program and has been more fully developed over the last 3 years. Without the infrastructure the grant program would not be nearly as successful.

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 <i>Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.</i>	All RP Hospitals are participating.
Brief description of the Intervention <i>2-3 sentences</i>	Implementation of Community based Behavioral Health Case Management (BH CM) leverages the best practice model at WMHS, as it provides patients upon discharge from the ED with specialized behavioral health case mgmt. resources to bridge the gap from discharge until connected with appropriate community based services. This service has reduced readmissions and ED revisit rates for program participants.
Participating Program Partners <i>Please list the relevant community-based organizations or provider groups, contractors, and/or public partners</i>	BH CM: Potomac Case Management Service, Inc. Lighthouse, Inc. Archway Station, Inc. Union Rescue Mission
Patients Served	# of Patients Served as of June 30, 2019: <u>1,459</u> (Value is equal to the # of unique patients served in FY 2019.)

<p><i>Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.</i></p> <p><i>HSCRC acknowledges that the High Utilizer/Rising Risk or Payer designations may over-state the population, or may not entirely represent this intervention's targeted population.</i></p> <p><i>Feel free to also include your partnership's denominator.</i></p>	<p>Denominator of Eligible Patients: <u>489,799</u></p> <p>(Source of denominator # 1, as requested by HSCRC: RP Analytic file for 01Jan 2018-31Dec18_yearly downloaded from CRISP on 8/13/19; 3+ IP or Obs>=24 visits; Column C- Population.)</p> <p>RP Denominator (intervention specific): <u>6,558</u></p> <p>Source: Unique number of patients discharged from BH inpatient unit or the ED with primary BH ICD-10 codes F10-F69, F80-F99.</p>
<p>Pre-Post Analysis for Intervention (optional)</p> <p><i>If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.</i></p>	<p>Community based BH CM targets to support behavioral health patients after inpatient or emergency department (ED) discharge to prevent ED revisits and/or readmission.</p> <p>FMH: A copy of the calendar year 2018 CRISP Pre/Post report results demonstrated via FMH's BH CM in partnership with Potomac Case Management, Inc. is provided as Figure 2: <i>Community Based Behavioral Health Case Management: CRISP Pre/Post report for patients engaged in services calendar year (CY) 2018; Frederick Memorial Hospital, appendix pg. 29.</i></p> <p>Key impact summarized from this CRIPS Pre/Post report includes:</p> <ul style="list-style-type: none"> - Change in Pre/Post Total Charges at the 12 month mark quantifies that patients engaged in this service generated \$2,480,123 less in charges after engagement, than required prior to engagement. This reduction in charges is the result of reduced utilization, as the patients engaged need 153 less visits after engagement than they had required prior to engagement. - Visits per 10 members reduced at the following rates: <ul style="list-style-type: none"> 3 month mark: -9.8 (less visits) 6 month mark: -8.7 (less visits) 12 month: -6.1 (less visits) - While this intervention is aimed to reduce ED avoidable utilization through providing BH patients needed care transition and coordination, the results demonstrate the impact extends out to the 1 year mark post engagement.
<p>Intervention-Specific Outcome or Process Measures (optional)</p> <p><i>These are measures that may not have generic definitions across</i></p>	<p><u>Community Based BH Case Management:</u></p> <ul style="list-style-type: none"> • The Regional Partnership's ED revisit rate of program participants, met or outperformed the target 89% of the time during Fiscal Year 2019.

<p><i>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.</i></p>	<ul style="list-style-type: none"> • Regional Partnership readmission rate of program participants, met or outperformed the target 75% of the time during Fiscal Year 2019. • Fiscal year 2019 a total of 1,459 unique patients were engaged in the Behavioral Health Case Management intervention. <p>A copy of the actual readmission and ED revisit rates for program participants are provided in Figure 3: <i>Community Based BH Case Management Process Metric Results; FY 2019</i>, appendix page 29.</p>
<p>Successes of the Intervention in FY 2019 <i>Free Response, up to 1 Paragraph</i></p>	<p><u>Community based BH case management:</u></p> <ul style="list-style-type: none"> • Results/impact to Readmission and ED Revisit rates as detailed within Figure 3, appendix pg. 29. • Continuation of collaborative work with other disciplines. • Ability to engage clients in the program and see impact in their subsequent utilization.
<p>Lessons Learned from the Intervention in FY 2019 <i>Free Response, up to 1 Paragraph</i></p>	<p><u>Community based BH case management:</u></p> <ul style="list-style-type: none"> • Year over year, a higher population of eligible patients in need of this service is present. • It is of vital importance to address social determinants of health (transportation, housing, and food); as addressing these needs is key to admission/readmission prevention. • With the increased incidence of opioid and alcohol addiction, there is greater need for the services provided by peer recovery specialists than can be met with existing resources. • Use of this intervention for patients with a prior high use of BH services versus, engagement of patients upon first presentation to ED for an “avoidable” encounter requires two different approaches to measurement approaches when trying to capture impact beyond readmission and ED revisit rates. <ul style="list-style-type: none"> ○ FMH: Program enrollment is initiated for patients with an established utilization pattern and has found the CRISP pre/post report useful in quantifying impact for patients enrolled in the service. ○ MMC and WMHS: Patients that present with BH conditions, that typically if effectively managed in a community based setting, do not require ED or inpatient treatment are referred to participate in the program. Thus, aimed to avert the start of high utilization patterns and does not require a prior utilization pattern to refer the patient for

	engagement in the program. Without prior utilization patterns, use of pre/post utilization analysis is not a meaningful way to measure impact. Our Partnership is still working to articulate an effective process to quantify the outcomes gained financially.
Next Steps for the Intervention in FY 2020 <i>Free Response, up to 1 Paragraph</i>	<ul style="list-style-type: none"> Secure a funding source to implement BH Virtual Visits, as this program would expand access to resources timely in crisis, and increase outpatient focus and outpatient psychiatry capacity. FMH CARE Clinic is looking to add a Behavioral Health Nurse Practitioner. WMHS is working to open a crisis house in late spring of 2020, which will serve as another Behavioral Health Community Based Case Management referral source. Exploration of how to further leverage collaborative efforts with local law enforcement divisions and the BH Community Based CM service.
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 <i>Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.</i>	All regional partnership hospitals are participating.
Brief description of the Intervention <i>2-3 sentences</i>	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 <i>Please list the relevant community-based organizations or provider groups, contractors, and/or public partners</i>	Lighthouse, Inc. Archway Station, Inc. Union Rescue Mission

<p>Patients Served</p> <p><i>Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.</i></p> <p><i>HSCRC acknowledges that the High Utilizer/Rising Risk or Payer designations may over-state the population, or may not entirely represent this intervention's targeted population.</i></p> <p><i>Feel free to also include your partnership's denominator.</i></p>	<p># of Patients Served as of June 30, 2019: <u>3,031</u> (Value = # of unique patients engaged with Integrated Behavioral Health Professional fiscal year 2019.)</p> <p>Denominator of Eligible Patients: <u>489,799</u> (Source of denominator # 1, as requested by HSCRC: RP Analytic file for 01Jan 2018-31Dec18_yearly downloaded from CRISP on 8/13/19; 3+ IP or Obs>=24 visits; Column C- Population.)</p> <p>RP Denominator (intervention specific): <u>9076</u> Value is derived using the following logic: (# Adult MMC, FMH, and WMHS patients of employed PCP practices in calendar year 2018 + # of eligible adult FMH Care Clinic patients + # of eligible adult WMHS Clinical Resource Center patients) times 20%. Note: MRNs are cross referenced to ensure a unique patient count. Next, a factor of 20% is applied to account for the incidence of depression in the United States.</p>												
<p>Pre-Post Analysis for Intervention (optional)</p> <p><i>If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.</i></p>	<p>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.</p>												
<p>Intervention-Specific Outcome or Process Measures (optional)</p> <p><i>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.</i></p>	<p>RP Integration of BHP in Primary Care Process Metric Results for Fiscal Year 2019 Summarized for the Regional Partnership:</p> <table border="1"> <tr> <td>% of hospital employed PCPs utilizing std. depression screening tool (PHQ 2/9).</td><td>Target of 80% has been exceeded every month throughout FY 19.</td></tr> <tr> <td>Total #- PHQ 9's administered (adults) within Employed Primary Care Providers</td><td>8,878</td></tr> <tr> <td># Unique adult patients who were screened via PHQ 2 or 9 in prev. 12 mos.</td><td>45,257</td></tr> <tr> <td># of unique pt. visits in previous 12 mos.</td><td>78,229</td></tr> <tr> <td>% of unique adult patient within RP screened FY 18</td><td>58%; which exceeded the baseline of 24% twofold, and steady increase from the fiscal year 2018 value of 46% screened.</td></tr> <tr> <td>Total # of interventions completed by BHPs in FY 19</td><td>12,334</td></tr> </table>	% of hospital employed PCPs utilizing std. depression screening tool (PHQ 2/9).	Target of 80% has been exceeded every month throughout FY 19.	Total #- PHQ 9's administered (adults) within Employed Primary Care Providers	8,878	# Unique adult patients who were screened via PHQ 2 or 9 in prev. 12 mos.	45,257	# of unique pt. visits in previous 12 mos.	78,229	% of unique adult patient within RP screened FY 18	58% ; which exceeded the baseline of 24% twofold, and steady increase from the fiscal year 2018 value of 46% screened.	Total # of interventions completed by BHPs in FY 19	12,334
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Total # of interventions completed by BHPs in FY 19	12,334												

	(Intervention= telephonic, face to face, or home support for WMHS, FMH, and MMC)	
Successes of the Intervention in FY 2019 <i>Free Response, up to 1 Paragraph</i>	Integration of BHP in Primary Care <ul style="list-style-type: none"> • # of adult patients screened for risk of depression has increased by 19% among the partnership. • Patients are receptive to engaging with the integrated BH specialist embedded in primary care; as receiving care from within their primary care providers office is not seen with the same stigma associated with walking into a branded behavioral health care center. Thus allowing patients in need of BH counseling to ultimately receive the care needed. After engaging with the Integrated BH specialist, if it is determined longer-term BH services are needed, clients are more susceptible to engaging (i.e. evidence the stigma that once prevented their engagement is being overcome- as the benefits of such care is experience). • Patient's that screen positive for significant risk of depression are being referred to Integrated BHP in primary care where available. • Awareness of depression continues to increase. • Embedded BH case management continues to facilitate many patients to be managed by their PCP on mental health medications and avoid 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 2019 <i>Free Response, up to 1 Paragraph</i>	<ul style="list-style-type: none"> • Primary Care practices embrace having access to embedded Behavioral Health Specialists. • Opportunity remains to increase the overall % of unique adults patients screened. • Calendar year 2018, MMC was heavily focused on preparing to replace their Meditech inpatient EHR and outpatient Allscripts based ERH to a seamless EPIC EHR (inpatient and outpatient). Go-Live of the new EHR occurred in Sept. of 2018. Before, during, and after implementation, clinical resources were focused providing high quality care and execution of a prioritized approach to system problem solving to optimize use of the new EHR and its capabilities. Users are now familiar with the new EHR and new work flows that commenced post EHR implementation. Efforts are now focused on improving the visibility of the depression screening assessment tools embedded within the EHR to re-center efforts on depression screening to assess patient risk 	

	for depression to facilitate early detection of at-risk adults within the Primary Care Practices.
Next Steps for the Intervention in FY 2020 <i>Free Response, up to 1 Paragraph</i>	<u>Integration of BHP in Primary Care:</u> <ul style="list-style-type: none"> • Focused improvement efforts to increase the overall percentage of all adult patients screened for depression. • FMH will be onboarding a second Integrated Behavioral Health Specialist to support the community providers. • RP is actively working to identify a viable funding source to deploy a pilot program to conduct Behavioral Health virtual visits within the ED and inpatient units using a shared Advanced Health Collaborative BH virtual provider group. Once implementation funding is secured, the AHC outcomes, the Advanced Health Collaborative (AHC) BH work team is planning to expand the virtual visit platform to support additional phase, 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 <i>Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.</i>	All RP Hospitals are participating.
Brief description of the Intervention <i>2-3 sentences</i>	2.1: <u>Community Health Worker</u> (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.

	<p>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</p>
<p>Participating Program Partners <i>Please list the relevant community-based organizations or provider groups, contractors, and/or public partners</i></p>	<p>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.</p>
<p>Patients Served <i>Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.</i> <i>HSCRC acknowledges that the High Utilizer/Rising Risk or Payer designations may overstate the population, or may not entirely represent this intervention's targeted population.</i> <i>Feel free to also include your partnership's denominator.</i></p>	<p># of Patients Served as of June 30, 2019: <u>664</u> Value = Number of targeted high utilizers "engaged" within Care Management Platform.</p> <p>Denominator of Eligible Patients: <u>489,799</u> (Source of denominator # 1, as requested by HSCRC: RP Analytic file for 01Jan 2018-31Dec18_yearly downloaded from CRISP on 8/13/19; 3+ IP or Obs>=24 visits; Column C- Population.)</p> <p>RP Denominator: <u>929 High Utilizers</u> Value = Number of targeted calendar year (CY) 2017 new high utilizers that meet our initial target population inclusion criteria.</p>
<p>Pre-Post Analysis for Intervention (optional) <i>If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.</i></p>	<p>Summarized results quantified CRISP pre/post utilization analysis of calendar year (CY) 2017 New HU engaged with Care Management Services are displayed in Table 3 (next page).</p> <ul style="list-style-type: none"> Hospital Specific CRISP Pre/Post reports for the Engaged calendar year 2017 (CY 17) High Utilizes are provided with the Appendix: <ul style="list-style-type: none"> Figure 4 – WMHS; appendix pg. 30 Figure 5 – MMC; appendix pg. 31 Figure 6 – FMH; appendix pg. 32 The goal, as stated within the grants RFP documents and our approved program, to reduce inpatient utilization, readmissions, and PQIs was achieved and exceeded initially projected thresholds.

Table 3: Complex Care Management calendar year 2017 High Utilizer: CY 2017 to CY 2018 Utilization Comparison Results

CY 17 HU Utilization in CY 18	Engaged Patients- Aggregated	
# of Engaged High Utilizers by RP:	664	
# of Engaged High Utilizers- Insurance Type: Medicare	440	
	Encounters	Charges
Total Pre	5913	\$ 46,367,852
Total Post	3183	\$ 19,772,328
Total change in utilization: Savings of:	-2730	\$ (26,595,524)
	# of Reduced Occurrences	Reduction in Total Charges
Readmission	680	\$9,821,252
PQI	369	\$3,720,560
Total Change in PAU (reductions)	1,049	\$13,541,812

- **71% of identified CY 17 High Utilizers were engaged in services by the RP in CY 18.**
- **CCM program quantified \$26.6M less in charges as the CRISP pre/post report tabulates that the post engagement in patients utilized 2700 visits less than they had consumed pre-engagement.**
- **Program participants had 1,049 less PAU after engagement in services.**

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.

Outpatient CHW service (MMC and FMH)

Process Measure	RP Aggregated Value
Total # of unique patients care for through the CHW Service in fiscal year 2019	926
Total # of referrals made by CHW to connect patients' to additional services based on need	1,814 *footnote inserted within the "additional free response" section on page 17.
Quality of life assessment scores completed pre and post CHW service engagement	Patients engaged with the CHW service at each member hospital demonstrate a higher quality of life score after engagement in the service, in comparison to their pre-engagement self-assessment score. Actual results are detailed per hospital member

	<table border="1"> <tr> <td data-bbox="581 205 979 348"></td><td data-bbox="979 205 1411 348">via Figure 7: <i>Quality of life Pre/Post Engagement with CHW service assessment questions results</i>; appendix pg. 33.</td></tr> <tr> <td data-bbox="581 348 979 426">Total # graduated from program</td><td data-bbox="979 348 1411 426">Fiscal Year 2019 = 241</td></tr> </table> <p>Inpatient CHW service (WMHS)</p> <table border="1"> <tr> <td data-bbox="581 533 979 642"># of patients engaged with Inpatient CHW service fiscal year 2019</td><td data-bbox="979 533 1411 642">2,697</td></tr> </table> <p>Patients assessed with High or Very-High risk for readmission who engaged with inpatient CHW service, and attended their follow up appointment within 7 days, and readmitted, had a significantly lower readmission rates for 10 out of the 12 months in FY 19. Patients assessed with Moderate risk for readmission, engaged with the CHW service and attended their follow up appointment within 7 days, and readmitted, had a significantly lower readmission rates 12 out of 12 months in FY 19.</p> <ul style="list-style-type: none"> Actual monthly results are provided in Figure 8: <i>Inpatient CWH Program Process Metric Performance</i>; appendix page 33. 		via Figure 7: <i>Quality of life Pre/Post Engagement with CHW service assessment questions results</i> ; appendix pg. 33.	Total # graduated from program	Fiscal Year 2019 = 241	# of patients engaged with Inpatient CHW service fiscal year 2019	2,697
	via Figure 7: <i>Quality of life Pre/Post Engagement with CHW service assessment questions results</i> ; appendix pg. 33.						
Total # graduated from program	Fiscal Year 2019 = 241						
# of patients engaged with Inpatient CHW service fiscal year 2019	2,697						
<p>Successes of the Intervention in FY 2019 <i>Free Response, up to 1 Paragraph</i></p>	<p><u>CHW Service:</u></p> <ul style="list-style-type: none"> Improvement/refinement of referral criteria, and the articulation of program “graduation” criteria. One of the community based partners has completed the certification requirements to be a “CHW Trainer”. This resource is now capable of training new “CHW” recruits. Patients assessed to have moderate risk, high risk, or very-high risk for readmission that engaged with the inpatient CHW service and attended their follow up appointment within seven days demonstrated significantly lower readmission rates than those patients who did not engage with the service and did not attend their follow up appointment within seven days. FMH has successfully transitioned a portion of the contracted CHW service to be delivered by the health system. This reconfiguration of how the resources are deployed enables the CHWs fulfilling these roles to be eligible for health benefits, and affords the CHWs to work more closely with multidisciplinary care coordination 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. 						

<p>Lessons Learned from the Intervention in FY 2019 <i>Free Response, up to 1 Paragraph</i></p>	<ul style="list-style-type: none"> • Importance of having the CHWS be on site to effectively build up their knowledge and skill base, and foster 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 the need to decrease the overall CHW caseload to foster deeper more meaningful connection with clients in order to more completely address each engaged client's need. • Implications of contracted vs employed service. • To continuously improve based on fiscal year 2018 lessons learned, during fiscal year 2019 one RP member changed the configuration of the CHW contracted resources. As of Jan. 2019, 3.5 CHW full time employees (FTE) have on boarded with FMH and two FTEs remain contracted. This transition from contracted to employed 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 the employed CHW to have health insurance and benefits not available to them as a contracted position. • During the first quarter of fiscal year 2019 MMC executed a plan to increase the quality of the interactions between CHW and patients to ensure that upon graduation from the program, all needed goals were met. The impact of conducting this re-training resulted in more in-depth care and better coordination of care, yet required a decrease in overall caseload per CHW FTE. MMC has confirmed that the investment in a higher quality service yields greater benefit to the patient and is evident in clients post engagement reduction in avoidable utilization.
<p>Next Steps for the Intervention in FY 2020 <i>Free Response, up to 1 Paragraph</i></p>	<p><u>CHW:</u></p> <ul style="list-style-type: none"> • WMHS- Sustainment of CHW deployment in alignment to disease processes/service lines: Diabetes, COPD, and Heart Failure. With this model CHWs receive focused disease specific training. • FMH- Monitoring and tracking of CHW performance metrics to monitor effects and drive outcomes desired post programmatic changes made in fiscal year 2019. • MMC- Increased ability to extract performance data from within EPIC. • MMC and FMH: Provided the Washington County Commission on aging, as of the fiscal year 2019, now has a resource qualified to train new CHW's, this resource's new skill set will be leveraged to on board new CHW's. Both CHWs programs will monitor the quality of the education provided to ensure all CHWS are well prepared to engage with patients as referred.

Additional Free Response (Optional)	*Total number of referrals made by outpatient CHW to connect patients' to additional services is only representative of the referrals place by FMH and their partner. Asian American Center of Frederick County. With the implementation of EPIC at MMC during FY 2019, a newly configured EPIC based report will be created. Once the report is configured and validated this volume will resume being tracked and available to report.
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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 <i>Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.</i>	<p>Each hospital is participating in this initiative via the following complex care management platform expansion programs:</p> <ul style="list-style-type: none"> ○ FMH: Expansion of FMH's Care Clinic and implementation of a Mobile Integrated Health Pilot in collaboration with Frederick County EMS. ○ WMHS: Union Rescue Mission Clinic and implementation of Hometown Healthy Partnership ○ MMC: Expansion of embedded Care Management Services into specialty care practices. <p>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.</p>
Brief description of the Intervention <i>2-3 sentences</i>	<p>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. A Mobile Integrated Health pilot program has been implemented in collaboration with Frederick County EMS to provide proactive home visits for ED and/or EMS high utilizers. A paramedic initially meets with referred client. Subsequent visits are conducted with the paramedic and any additional disciplines (Pharm, RN, SW, Dietitian, etc.) deemed appropriate. Additional community resources are engaged based on identified need (i.e. Behavioral Health Case Management, Hospice, Home Health, Community Health Worker Service, etc.).</p> <p>Union Rescue Mission Clinic: Sustainment of this service supports 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), by extending the reach of the existing multidisciplinary outpatient Clinical Care Resources (CCR) clinic. Sustainment of this service enables pro-active engagement with the</p>

	<p>underserved population in need of connection with a primary care provider, screening for early detection of issues that need attention and management, and resources capable of providing assessing and addressing needs related to social determinants of health.</p> <p><u>Hometown Healthy Partnership:</u> This strategy aims to meet the community members where they are. HH Partners will attend established community events (steak and chicken dinners, summer festivals, bingo nights, etc.) in areas where the Social Determinants of Health are prevalent. Joining these established events with community leaders, be they elected officials or informal leaders from that area; targets building trust and rapport with community members. WMHS is hoping that over time these trust building measures will increase the likelihood of community engagement and participation in health & wellness activities.</p> <p><u>Embedded Care Management in Specialty Care:</u> 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.</p>
<p>Participating Program Partners <i>Please list the relevant community-based organizations or provider groups, contractors, and/or public partners</i></p>	<p>Emergency Medical Services (EMS): Frederick County and Allegany Counties; Allegany County Health Department; Allegany County Department of Social Services (DSS); Union Rescue Mission Maryland Area Health Education Center West (AHEC); Allegany County Human Resources Development Commission (AHRDC); Western Maryland Food Bank; Associated Charities; Local Management Board;</p>
<p>Patients Served <i>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 overstate the population, or may not entirely represent this</i></p>	<p># of Patients Served as of June 30, 2019: <u>2871</u></p> <p>Denominator of Eligible Patients: <u>489,799</u> (Source of denominator # 1, as requested by HSCRC: RP Analytic file for 01Jan 2018-31Dec18_yearly downloaded from CRISP on 8/13/19; 3+ IP or Obs>=24 visits; Column C- Population.)</p> <p>RP Denominator (intervention specific): 16,005 Value is = Sum of MMC + WMHS + FMH Eligible patients</p>

*intervention's targeted population. Feel free to **also** include your partnership's denominator.*

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 the 1 month, 3 month, and 6 month intervals. In alignment with this interventions 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.

The fiscal year 2019 internally calculated readmission rate for program participants is only 6%.

CARE Clinic Pre/Post Report excerpt is presented in Table 4. *Care Clinic CRISP Pre/Post Summary of Results* to summarize the outcomes quantified.

Table 4. Care Clinic CRISP Pre/Post Summary of Results

Time period	Total # Visits Pre	Total # Visits Post	Total Charges Pre	Total Charges Post
1 Months	1,502	590	\$9.6 M	\$2.3M
3 Months	2,464	1,515	\$14.5M	\$7.1M
6 Months	3,334	2,535	\$18.1M	\$11.6M
12 Months	3,253	2,696	\$17.9 M	\$12.7M

CARE Clinic Pre/Post reduced charges summarized from *Table 4* above:

1Month: \$ 7.3M

3 Moth: \$ 7.4M

6 Month: \$ 6.5M

12 Month: \$ 5.2M

A copy of the entire CRISP report summary is provided as Figure 9: *FY 2019 CRISP Pre/Post Analysis Results for patients engaged with CARE Clinic* appendix, pg. 34.

Union Rescue Mission Clinic: Internal Pre/Post Analysis are posted in Table 5. *MCR Pre/Post analysis results* for program participants by comparing calendar year 2017 utilization to that of calendar year 2018. Reduction in utilization is demonstrated for inpatient, ED, OBS visit, and readmissions counts; indicating shift from higher cost, more complex to lower level need!

Table 5: Union Rescue Mission Clinic Pre/Post Analysis Results

Utilization Metric	Calendar Year 2018 Value	Calendar Year 2017 Value	% of Change (Reduction)
Total Charges	\$ 186,023	\$ 349,082	-47%
Total Visit Count	79	141	-44%
Inpatient Visit Count	14	23	-39%
ED Visit Count	61	110	-45%
OBS Visit Count	4	8	-50%
Readmission Visit Count	1	5	-80%

2016 – 2019 year over year, Union Rescue Results are provided within Figure 10, appendix page 35.

Hometown Healthy Partnership:

Hometown Healthy Partnership is a collaboration between local health and social service providers in Allegany County and community leaders to help improve the health and well-being of the community. During fiscal year 2019 eight Hometown Healthy Partnership events were conducted collaboratively by more than eight agencies, engaging a combined total of 705 unique community residents.

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 6.

Table 6. 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 Months	426	172	\$5.0M	\$852K
3 Months	616	363	\$6.3M	\$2.1M
6 Months	587	402	\$5.2M	\$2.6M

	<p>Embedded Care Management CRISP Pre/Post reduced charges summarized from <i>Table 6</i> (on previous page):</p> <p>1 Month: \$ 4.1M 3 Month: \$ 4.2M 6 Month: \$ 2.6M</p> <p>A copy of the CRISP Pre/Post report summary is provided in <i>Figure 11: CRISP Pre/Post Analysis Results for patients engaged with Embedded Care Management within two Specialty Practices</i>, appendix page 36.</p>
<p>Intervention-Specific Outcome or Process Measures (optional)</p> <p><i>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.</i></p>	<p><u>CARE Clinic Process Metrics:</u></p> <p>- Fiscal year 2019 average number of CARE Clinic scheduled visits per month increased to 314 per month from FY 18 average value of 257 per month.</p> <p><u>Mobile Integrated Health (MIH) Process Metrics:</u></p> <ul style="list-style-type: none"> - July 2016- July 2017: MIH application written and submitted. - July/Aug. 2017: Application approval notification received and implementation work began. - Nov/Dec. 2017: On boarding/orientation of Paramedic. - Jan/Feb 2018: Began enrolling participants. Slow ramp up, problem solved challenges and determined initial paramedic was not the best fit for the program, new candidate search commenced. - July 2018: New paramedic on boarded. Ramp up of program demonstrated through increased participation and engagement of clients identified by EMS and hospital (high utilizers). EMS embedded a referral mechanism into the EMR enabling all paramedics to refer potential participants into the program. - June 2019- Current paramedic promoted, recruitment of 3rd paramedic is under way. - July 2019- Successful on board of new paramedic. Work continues to stabilize and grow the program.
<p>Successes of the Intervention in FY 2019 <i>Free Response, up to 1 Paragraph</i></p>	<ul style="list-style-type: none"> • The fiscal year 2019 total number of unique patients engaged in this series of interventions almost double from fiscal year 2018 totals. (Fiscal year 2018: 1487 patients were engaged in services; fiscal year 2019: 2871 patients engaged in services.) • Reduced utilization achieved through all 3 initiatives: Union Rescue Mission Clinic, 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.

<p>Lessons Learned from the Intervention in FY 2019 <i>Free Response, up to 1 Paragraph</i></p>	<ul style="list-style-type: none"> • Near the end of fiscal year 2018 WMHS confirmed need to reconfigure their mobile clinical resources intervention into a Hometown Health Partnership program. This change in focus was determined necessary align the programs service offering with that of the patient need which gathered from the community through various surveys. The program and resource reconfiguration planning work was executed during the first half of fiscal 2019, and the Hometown Healthy Partnership program was deployed mid FY 2019. • As mentioned previously, it would be of great value to add a behavioral health nurse practitioner's skill set to the CARE Clinic in fiscal year 2020 to expand capacity to address BH specific need beyond that which can be addressed by the existing integrated behavioral health specialist.
<p>Next Steps for the Intervention in FY 2020 <i>Free Response, up to 1 Paragraph</i></p>	<p><u>Expansion of CCM Programs:</u></p> <ul style="list-style-type: none"> • 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. • MMC Embedded CM in specialty practices: Sustainment of existing program. Identify and pursue opportunities for improvement. • Mobile Integrated Health: Programmatic growth and measurement of performance measures. • Union Rescue Mission Clinic and Healthy Hometown Partnership: <ul style="list-style-type: none"> ○ Promote growth and reach of Hometown Healthy Partnership activities to expand connection to community members through which to promote community health and wellness activities ○ WMHS continue to utilize shared database to assess for social determinants of health (Aunt Bertha), and make referrals for additionally needed support and services
<p>Additional Free Response (Optional)</p>	<p>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 in 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.</p>

Core Measures

Please fill in this information with the latest available data from the in the CRS Portal Tools for Regional Partnerships. For each measure, specific data sources are suggested for your use– the Executive Dashboard for Regional Partnerships, or the **CY 2018 RP Analytic File** (please specify which source you are using for each of the outcome measures). Trivergent Regional Partnership utilized the RP Analytic File dated 01Jan18_31Dec18 which was retrieved via download on Aug. 13, 2019 from CRISP.

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)	CY18 RP Analytic File, 3+IP or OBS >24 =visits $(\$284,198,069.94 / 489,799) = \underline{\$580}$
Total Hospital Discharges per capita	Total Discharges per 1,000 Executive Dashboard: 'Regional Partnership per Capita Utilization' – <u>Hospital Discharges per 1,000</u> , reported as average 12 months of FY 2019 -or- Analytic File: 'IPObs24Visits' over 'Population' (Column G / Column C)	CY18 RP Analytic File, 3+IP or OBS >24 =visits $(13,762 / 489,799) * 1000 = \underline{28.097}$
ED Visits per capita	Ambulatory ED Visits per 1,000 Executive Dashboard: 'Regional Partnership per Capita Utilization' – <u>Ambulatory ED Visits per 1,000</u> , reported as average 12 months of FY 2019 -or- Analytic File 'ED Visits' over 'Population' (Column H / Column C)	CY18 RP Analytic File, 3+IP or OBS >24 =visits $(9,337 / 489,799) * 1000 = \underline{19.063}$

Quality Indicator Measures

Measure in RFP (Table 1 in Appendix A of the RFP)	Measure for FY 2019 Reporting	Outcomes(s)
Readmissions	<p>Unadjusted Readmission rate by Hospital (please be sure to filter to include all hospitals in your RP)</p> <p>Executive Dashboard: '[Partnership] Quality Indicators' – <u>Unadjusted Readmission Rate by Hospital</u>, reported as average 12 months of FY 2019</p> <p>-or-</p> <p>Analytic File: 'IP Readmit' over 'EligibleforReadmit' (Column J / Column I)</p>	CY18 RP Analytic File, 3+IP or OBS >24 =visits (3116/9,627) = <u>0.324</u>
PAU	<p>Potentially Avoidable Utilization</p> <p>Executive Dashboard: '[Partnership] Quality Indicators' – <u>Potentially Avoidable Utilization</u>, reported as sum of 12 months of FY 2019</p> <p>-or-</p> <p>Analytic File: 'TotalPAUCharges' (Column K)</p>	CY18 RP Analytic File, 3+IP or OBS >24 =visits (Column K) = <u>\$74,690,562</u>

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)
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Portion of Target Population with Contact from Assigned Care Manager	<p>Potentially Avoidable Utilization</p> <p>Executive Dashboard: ‘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</p> <p><i>May also include Rising Needs Patients, if applicable in Partnership.</i></p>	
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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, and 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 – (Optional)

Annual Cost per Patient as calculated by:

Total FY 2019 Expenditures (from FY 2019 budget report) / Total Patients Served (all interventions)
\$ 3,560,492 (FY 19 RP Total Expense) / 12,199 patients served (sum of all interventions) = **\$292.**

Trivergent Regional Partnership projected to actual outcomes summary.

Trivergent Regional Partnership		FY 17		FY 18		FY 19	
Projected to Actual		Projected	Actual	Projected	Actual	Projected	Actual
a	Grant Award	\$3.1M		\$3.1M		\$3.1M	
b	Reduction in Charges (Pre post change in utilization for targeted engaged HU)	\$ 6.2 M	\$12.8 M	\$ 7.8 M	\$ 14.9 M	\$ 8.64 M	\$ 26.6 M
c	Variable savings Factor	30%		40%		40%	
d	Variable Savings (b*c)	\$ 1.9 M	\$ 3.84 M	\$ 3.1 M	\$ 5.96 M	\$ 3.4 M	\$ 10.64 M
e	Program Expense (FY)	\$ 3.1 M	\$ 2.1M	\$ 3.1 M	\$ 3.08 M	\$ 3.1 M	\$ 3.6 M
f	ROI (d/e)	1.58	1.83	1.61	1.93	1.78	2.94
g	Accrual to Payors- shared savings	-	-	\$ 310K		\$ 620K	

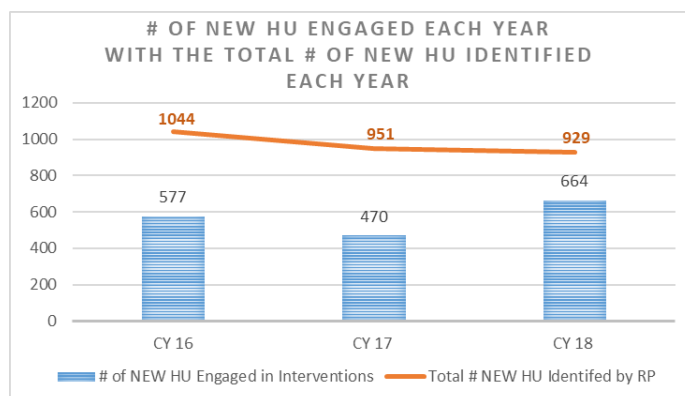
The ROI calculation detailed above year-over-year is in alignment with the initial RFP ROI calculation except that it factors in total FY programmatic expenses for the interventions serving all payers, and utilizes the variable savings factor detailed above, as was initially provided within the partnerships awarded proposal. The variable savings factored utilized is 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 as the impact actualized diffusely across the health system continuum for each of the RP members, as opposed to being actualized by a singular business unit, organizational division, or office.

The reduction in charges has been quantified via the delta for engaged high utilizers via the CRISP pre/post report. Program expense total detailed in the table have been derived from the year-end expense report submission total.

Conclusion

Please include any additional information you wish to share here. As a reminder, Commissioners are interested in tying RP annual activities to the activities initially proposed in the RFP. Free Response, 1-3 Paragraphs.

- Trivergent regional partnership has strongly demonstrated the effectiveness of the of RCT interventions deployed in alignment with the initial approved grant program.
- Within the past three fiscal years, \$9.3M has been awarded to the Trivergent Regional Partnership members, \$930K has been held back from the award to share savings with the payers. Through our Regional Partnership, member hospitals have engaged the targeted high utilizers- supporting them intensively and changing their healthcare consumption rates through coordination of care, care transition support, and teaching self-management techniques. The three year-cumulative gross reduction of charges totals \$54.3M, (three year sum of reduced charges for engaged HU as measured by pre/post engagement in services utilization analysis). The net variable savings is equal to \$20.44M. These results demonstrate it is possible to engage this target population and make a difference in their utilization pattern, which ultimately improves the quality of life experienced by these patients/clients residing in our communities.
- As evidenced by the table below, (referenced at the beginning of this year), each year: hundreds of new high utilizers are identified; demonstrating a need for the maintenance of services targeting identified high utilizers. Without intervention, the high rates of consumption evidenced by this population cannot be mitigated.



APPENDIX

Figure 1: FY 19 total number of patients engaged through the Regional Care Transformation (RCT) program per hospital by intervention type.

RCT Program Intervention:	WMHS FY18	MMC FY18	FMH FY18	FY 18- RP # of Engaged Patients	WMHS FY19	MMC FY19	FMH FY19	FY 19- RP # of Engaged Patients
Behavioral Health- Strategy 1:								
1.1 Community Based Behavioral Health Case Management	736	906	226	1,868	803	386	270	1,459
1.2 Integrated Behavioral Health Professional in Primary Care	557	1,563	454	2,574	652	1,522	857	3,031
Complex Care Management- Strategy 2:								
# Targeted High Utilizers Engaged in CCM services	102	107	261	470	182	271	211	664
2.1 Community Health Worker Service:								
- Inpatient CHW	N/A	N/A	N/A	923	2,697	N/A	N/A	2,697
- Outpatient CHW	479	544	379	1,402	551	246	680	1,477
2.2 Expansion of Care Management existing infrastructure to include the following services:								
- URM clinic & Hometown Healthy Partnership; <i>New FY 19</i>	N/A	N/A	N/A	310	750	N/A	N/A	750
- CARE Clinic	N/A	N/A	379	379	N/A	N/A	1,488	1,488
- Embedded Care Management services in specialty care practices	N/A	220	N/A	220	N/A	633	N/A	633
Total # of patients engaged in RCT Interventions *				8,146				12,199

Figure 2: Community Based Behavioral Health Case Management intervention: patients engaged in services CY 18; FMH

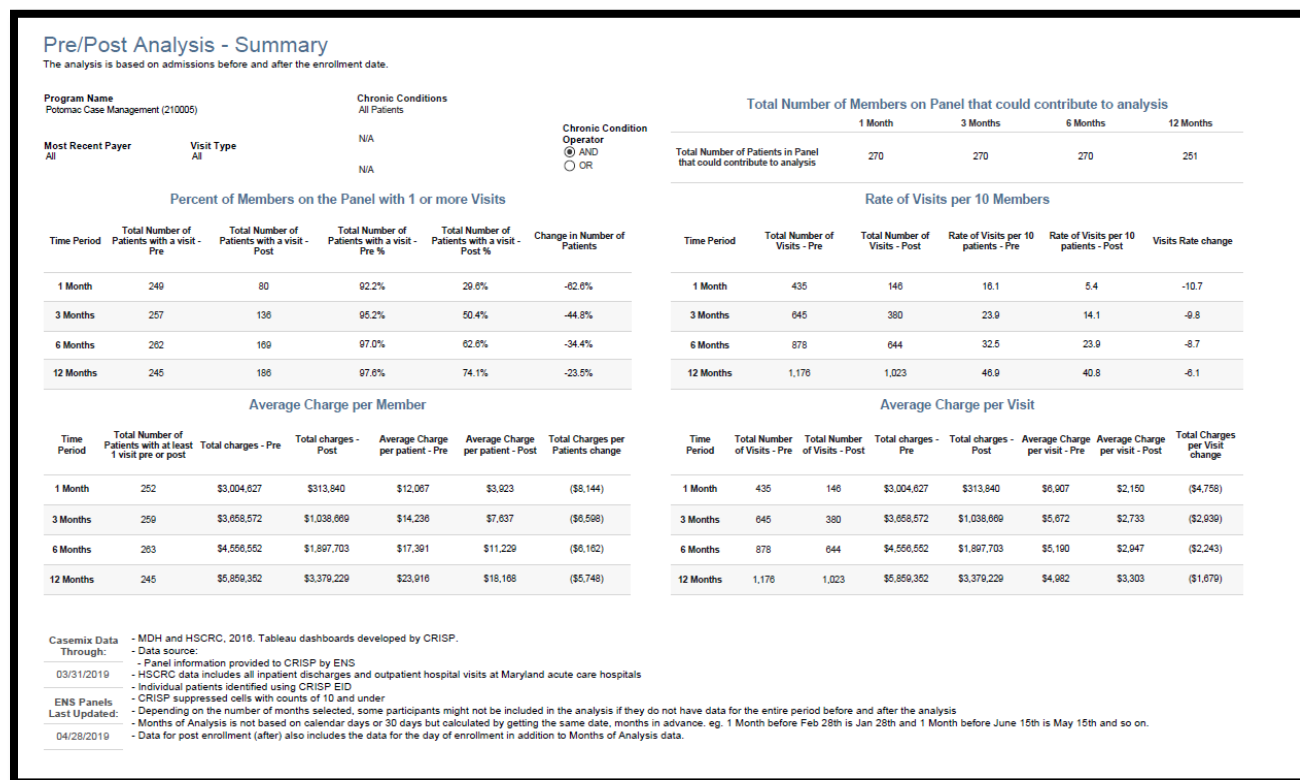


Figure 3: Community Based BH Case Management Process Metric Results; FY 19

Community Based BH Case Mgmt.		Fiscal Year 2019											
ED revisit rate for pt's in the program; Baseline: Avg. 20%; Target: At or below 20%		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	March	April	May	June
WMHS		6.00%	11.00%	12.00%	13.00%	12.00%	8.00%	10.20%	12.70%	15.00%	13.00%	10.00%	9.60%
FMH		4.23%	6.85%	4.41%	4.35%	1.69%	1.52%	7.41%	4.23%	2.50%	2.53%	2.38%	3.75%
MMC		50.00%	18.18%	15.38%	18.60%	32.00%	10.34%	17.24%	10.34%	3.03%	44.83%	24.00%	18.52%
Readmission rate for pt's in the program (inpt. re-hospitalization); Baseline: Avg- 12%; Target: At or below 12%		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	March	April	May	June
WMHS		7.69%	12.09%	11.54%	12.09%	6.76%	7.46%	12.65%	14.70%	13.33%	8.64%	10.25%	15.27%
FMH		7.04%	6.85%	0.00%	2.90%	1.69%	1.52%	5.56%	4.23%	1.25%	2.53%	4.76%	1.25%
MMC		8.82%	4.55%	12.82%	30.23%	28.00%	6.90%	3.45%	3.45%	0.00%	3.45%	0.00%	3.70%

Figure 4: WMHS- Hospital specific CRISP Pre-Post Results for Engaged CY 17 HU

Pre/Post Analysis - Summary

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

Program Name

2017 Engaged 8_19 (210027)

Chronic Conditions

All Patients

Most Recent Payer

All

Visit Type

All

Chronic Condition Operator

☒ AND
 ☐ OR

N/A

N/A

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	182	182	182	151

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	141	84	7.7	4.6	-3.1
3 Months	416	266	22.9	14.6	-8.2
6 Months	828	535	45.5	29.4	-16.1
12 Months	1,593	979	105.5	64.8	-40.7

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	79	58	43.4%	31.9%	-11.5%
3 Months	128	105	70.3%	57.7%	-12.6%
6 Months	151	124	83.0%	68.1%	-14.8%
12 Months	149	125	98.7%	82.8%	-15.9%

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	97	\$1,182,131	\$647,232	\$14,964	\$11,159	(\$3,805)
3 Months	138	\$3,091,892	\$1,813,916	\$24,155	\$17,275	(\$6,880)
6 Months	160	\$5,678,291	\$3,013,304	\$37,605	\$24,301	(\$13,304)
12 Months	149	\$11,309,925	\$5,425,841	\$75,905	\$43,407	(\$32,499)

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	141	84	\$1,182,131	\$647,232	\$8,384	\$7,705	(\$679)
3 Months	416	266	\$3,091,892	\$1,813,916	\$7,432	\$6,819	(\$613)
6 Months	828	535	\$5,678,291	\$3,013,304	\$6,858	\$5,632	(\$1,225)
12 Months	1,593	979	\$11,309,925	\$5,425,841	\$7,100	\$5,542	(\$1,558)

Casemix Data Through:

05/31/2019

ENS Panels Last Updated:

07/22/2019

- 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 5: MMC- Hospital specific CRISP Pre-Post Results for Engaged CY 17 HU

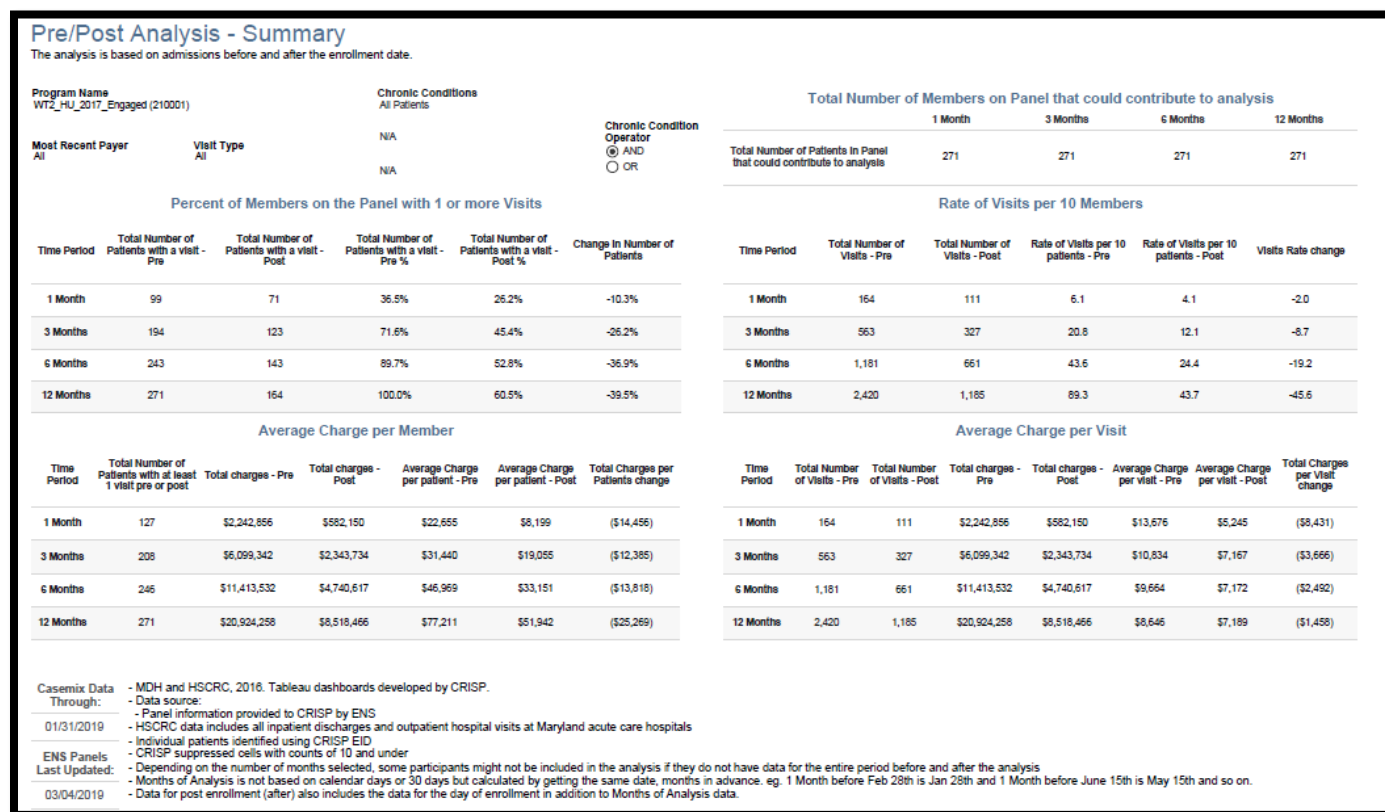


Figure 6: FMH- Hospital specific CRISP Pre-Post Results for Engaged CY 17 HU

Pre/Post Analysis - Summary									
The analysis is based on admissions before and after the enrollment date.									
Program Name Pop Health 2017 Engaged (210005)		Chronic Conditions All Patients		Chronic Condition Operator <input checked="" type="radio"/> AND <input type="radio"/> OR		Total Number of Members on Panel that could contribute to analysis			
Most Recent Payer All	Visit Type All	N/A	N/A				1 Month	3 Months	6 Months
						Total Number of Patients in Panel that could contribute to analysis	211	211	211
Percent of Members on the Panel with 1 or more Visits						Rate of Visits per 10 Members			
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	Time Period	Total Number of Visits - Pre	Total Number of Visits - Post	Rate of Visits per 10 patients - Pre
1 Month	90	68	42.7%	32.2%	-10.4%	1 Month	153	109	7.3
3 Months	149	112	70.6%	53.1%	-17.5%	3 Months	434	270	20.6
6 Months	194	138	91.9%	65.4%	-26.5%	6 Months	949	553	45.0
12 Months	211	149	100.0%	70.6%	-29.4%	12 Months	1,900	1,019	90.0
Average Charge per Member						Average Charge per Visit			
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	Time Period	Total Number of Visits - Pre	Total Number of Visits - Post	Total charges - Pre
1 Month	113	\$1,169,732	\$590,133	\$12,997	\$8,678	1 Month	153	109	\$1,169,732
3 Months	163	\$3,400,093	\$1,541,762	\$22,819	\$13,766	3 Months	434	270	\$3,400,093
6 Months	196	\$7,068,764	\$3,063,662	\$36,437	\$22,200	6 Months	949	553	\$7,068,764
12 Months	211	\$14,133,669	\$5,828,021	\$66,984	\$39,114	12 Months	1,900	1,019	\$14,133,669
Casemix Data Through: 02/28/2019 ENS Panels Last Updated: 03/31/2019 - 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 7: Quality of Life Metric Scores- Pre/Post Engagement with CHW Service

CHW Quality of Life Scores (Scored on 5pt scale; 5 highest)		Fiscal Year 2019											
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
WMHS	*Avg. Pre -Score	2	1.8	2.5	2	no prescore	1.67	n/a	2	2	2	2.7	2.2
	*Avg. Post- Post	2.66	2.4	3.5	3	2.5	n/a	n/a	2.2	2.33	2.8	2.9	2.9
MMC	*Avg. Pre -Score	2.13	2.35	2.2	1.67	3	1.5	2.2	1.5	2.4	3	3	3
	*Avg. Post- Post	2.52	2.71	3	2.67	3	2	2.6	2	2.4	3	3	4
FMH	*Avg. Pre -Score	2.94	3.25	2.72	2.77	3.3	3	2.46	2.9	2.76	3.21	3.43	2.42
	*Avg. Post- Post	3.89	4	3.89	3.75	4	3.86	3.63	3.75	3.23	3.38	3.33	4.28

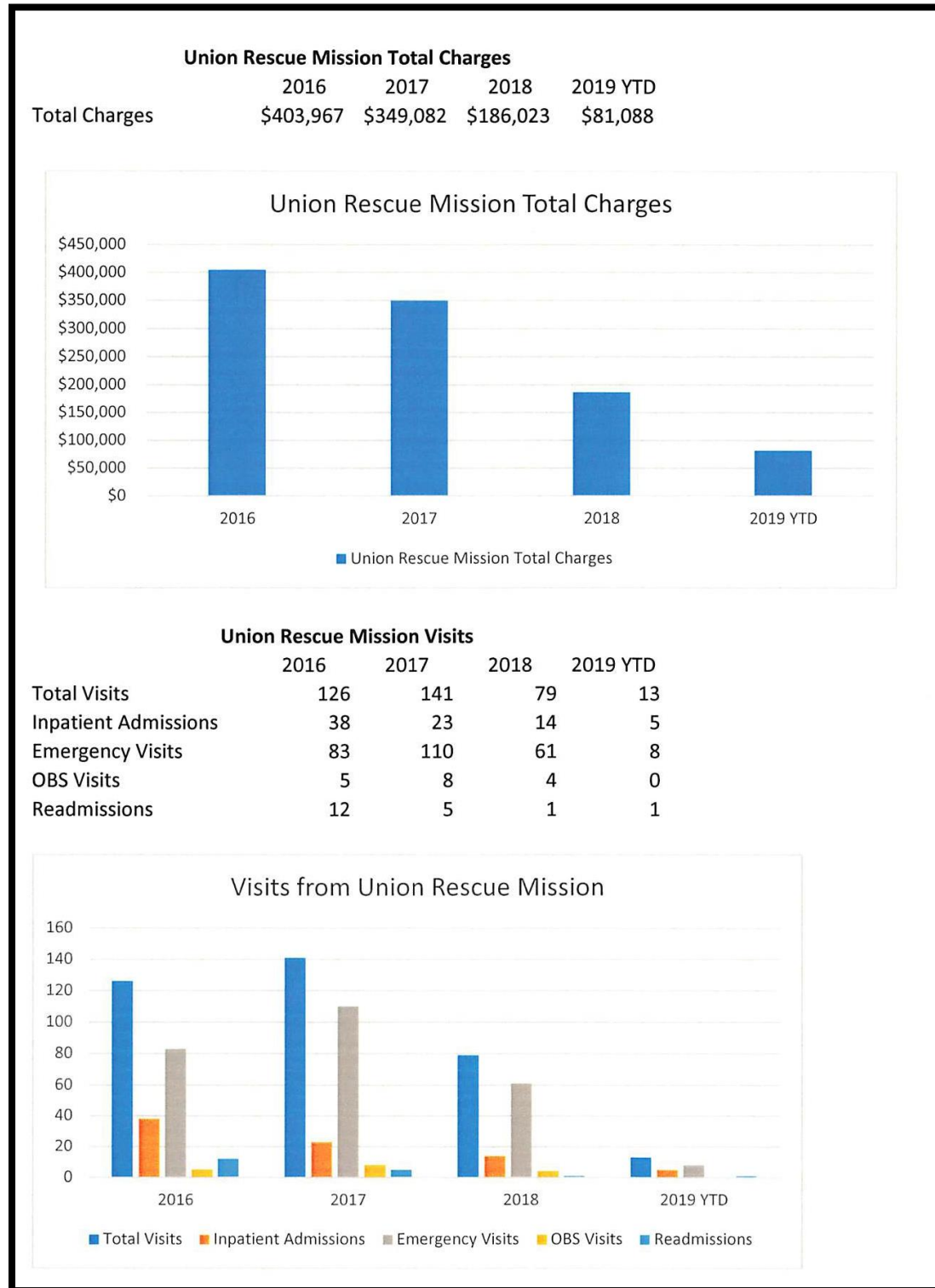
Figure 8: Inpatient CWH Program Process Metric Performance

		Fiscal Year 2019											
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Inpatients to be at: High or Very High Risk for Readmission	% attended their appt and readmitted	16%	28%	16%	20%	13%	16%	13%	13%	18%	22%	16%	19%
	% Appt outside of 7 days or not at all and readmitted	28%	16%	18%	29%	23%	24%	33%	33%	37%	22%	29%	42%
Inpatients to be at: Moderate Risk for Readmission	% attended their appt and readmitted	7%	10%	10%	16%	5%	6%	5%	9%	3%	7%	7%	4%
	% Appt outside of 7 days or not at all and readmitted	14%	24%	20%	23%	6%	11%	18%	16%	32%	17%	18%	12%

Figure 9: FY 2019 CRISP Pre/Post Analysis Results for patients engaged with Care Clinic; FMH

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		Total Number of Members on Panel that could contribute to analysis		
Most Recent Payer All	Visit Type All	NIA	1 Month	3 Months	6 Months
		NIA	12 Months		
			Total Number of Patients in Panel that could contribute to analysis	1,264	1,264
				1,169	762
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	949	320	75.1%	25.3%	-49.8%
3 Months	1,066	543	84.3%	43.0%	-41.4%
6 Months	1,022	654	87.4%	55.9%	-31.5%
12 Months	698	518	91.6%	66.0%	-23.6%
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
1 Month	989	\$9,579,118	\$2,272,599	\$10,094	\$7,102
3 Months	1,107	\$14,474,488	\$7,059,954	\$13,578	\$13,002
6 Months	1,058	\$18,080,343	\$11,568,952	\$17,672	\$17,690
12 Months	717	\$17,896,274	\$12,681,235	\$25,639	\$24,481
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	1,502	590	11.9	4.7	-7.2
3 Months	2,464	1,515	19.5	12.0	-7.5
6 Months	3,334	2,535	28.5	21.7	-6.8
12 Months	3,253	2,698	42.7	35.4	-7.3
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
1 Month	1,502	590	\$9,579,118	\$2,272,599	\$6,378
3 Months	2,464	1,515	\$14,474,488	\$7,059,954	\$5,874
6 Months	3,334	2,535	\$18,080,343	\$11,568,952	\$5,417
12 Months	3,253	2,698	\$17,896,274	\$12,681,235	\$5,501
Casemix Data Through: 08/30/2019 Data source: MDH and HSCRC, 2016. Tableau dashboards developed by CRISP. 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 ENS Panels Last Updated: 08/05/2019 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 10: 2016 – 2019 YTD (year over year) Union Rescue Results; WMHS



Source: WMHS Internal Analytics Platform

Figure 11: CRISP Pre/Post Analysis Results for patients engaged with Embedded Care Management within two Specialty Practices; MMC

Pre/Post Analysis - Summary

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

Program Name

OCM Pulm Hsg Heart 2018 (210001)

Chronic Conditions

All Patients

Chronic Condition Operator

AND

OR

Most Recent Payer

All

Visit Type

All

N/A

N/A

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	290	127	50.2%	22.0%	-28.2%
3 Months	291	181	62.3%	38.8%	-23.6%
6 Months	205	150	68.6%	50.2%	-18.4%
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	325	\$4,994,281	\$851,969	\$17,222	\$6,708	(\$10,513)
3 Months	330	\$6,273,085	\$2,067,610	\$21,557	\$11,423	(\$10,134)
6 Months	231	\$5,168,132	\$2,602,973	\$25,210	\$17,353	(\$7,857)

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	578	467	299	<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	426	172	7.4	3.0	-4.4
3 Months	616	363	13.2	7.8	-5.4
6 Months	587	402	19.6	13.4	-6.2
12 Months	<11	<11			

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	426	172	\$4,994,281	\$851,969	\$11,724	\$4,953	(\$6,770)
3 Months	616	363	\$6,273,085	\$2,067,610	\$10,184	\$5,696	(\$4,488)
6 Months	587	402	\$5,168,132	\$2,602,973	\$8,804	\$6,475	(\$2,329)

Casemix Data Through: 08/30/2019

ENS Panels Last Updated: 08/18/2019

- 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.