HSCRC Transformation Grant Budget FY2019 Report

Prepared by:

University of Maryland St. Joseph Medical Center

Due September 30th , 2019

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	*UM SJMG Transitional Care- Behavioral Health Center*
RP Hospital(s)	UM St. Joseph Medical Center
RP POC	Alice Siawlin Chan, Dir. Of Population Health
RP Interventions in FY 2019	*Pharmacological Management; Individual psychotherapy, Group therapy, Cognitive Behavioral Therapy, Dialectical Behavior therapy, Substance abuse therapy, and family support interventions*
Total Budget in FY 2019 *This should equate to total FY 2017 award*	FY 2019 Award: $1,147,000
Total FTEs in FY 2019	Employed: 8.9 FTE
	Contracted: 3.2 FTE
Program Partners in FY 2019 *Please list any community-based organizations or provider groups, contractors, and/or public partners*	*Maxim CBCM, SJMG Primary Care Providers, VNA Home Health and The Center for Eating Disorders, Baltimore County Department of Health, Department of Aging, CRISP, Transformation Grant Regional Partnership Collaborative*

Overall Summary of Regional Partnership Activities in FY 2019

(Free Response: 1-3 Paragraphs):

Addressing and managing the behavioral health population has many unique challenges. In the initial two years of this program, we have made necessary refinements and improvments to the structure of the program to better meet the needs of our patients and referrers with an enhanced handoff process. We learned that as a bridge clinic providing individual and group treatment for patients as well as case management services, it is much easier to facilitate a handoff to a community therapist accepting Medicare / Medicaid, however we are challenged to find an adequate number of community psychiatrists accepting new Medicare patients and this poses issues for throughput. In FY19, we

reorganized our model to include 2 full time LCSWC psychotherapists, a psychiatrist and a psychiatric nurse practitioner to facilitate greater hours and access to care for = our patients.

In terms of referrals, we continue to have strong partnerships with primary care providers, community health workers (CHWs) and VNA home health. PCPs in our community historically have managed mental health patients without adequate support, and now view the TCC-BHC as a resource to help in the mangagment of complex cases. With the formation of MDPCP in 2019, many of our primary care providers in our Medical Group have utilized this resource to refer high risk patients for mental health evaluation and treatment.

We also work with our community partners who see patients in their home setting, identifying critical mental health needs for their clients. They are utilizing the TCC-BHC as a resource for comprehensive behavioral managment. Most importantly, our main referral source is our inpatient psych unit which often allows earlier discharge by providing a supportive bridge clinic setting for them to continue the process of recovery with ongoing evaluation while transitioning back to the community. We recognize the severity substance abuse and opiate overdose in our community, and we are working diligently with the Baltimore County Department of Health and governmental agencies on a multitude of programs to curb this deadly epidemic.

In terms of patient management, we have found it useful to analyze differences in pre- and post- BHC health care utilization and follow outcomes to 12 months. In our Transitional Care Center, we address two population (somatic medicine and. behavioral health) in differing paradigms. In TCC-Medicine, we have been able to demonstrate that patients who received care at our center have a better outcome (reduced hospital utilization) than patients who returned directly to the community without TCC support following hospital discharge. Patients utilizing TCC-Medicine show improved outcomes over the 12 months period On average, patients visit TCC-Medicine an average of 2.7 times before transfer to a community provider. For TCC-Behavioral Health, patients *are managed for 90 days before discharge to a community provider. Although we do not have a comparison of this population to patients who were seen by their own providers, it is interesting to see an improved pre-post- utilization during the 90 days, with no huge difference at 12 months in comparison to the No Show population. Based on this year's operation, we have decided to roll up TCC-Med and BHC staffing since there is a high referral crossover between the two departments, and added a primary care provider (and additional PCP staffing) to augment community hand off support. You will see in the budget spreadsheet that this addition causes an increased in expense to the budgeted column.*

Intervention Program

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

Intervention or Program Name	*UM SJMG Transitional Care – Behavioral Health Center*
RP Hospitals Participating in Intervention *Please indicate if All; otherwise, please indicate which of the RP Hospitals are participating.*	UM SJMC
Brief description of the Intervention *2-3 sentences*	- *At the Behavioral Health Center, the psychiatrist and psychiatric nurse practitioner perform a full diagnostic workup on each patient. A transitional treatment plan is developed with an emphasis on intensive relapse prevention and reintegration to community, with comprehensive case management. Each patient is assigned to a licensed clinical social worker who conducts individual psychotherapy, and patients are assigned to selected group therapies including cognitive behavioral therapy, dialectical behavior therapy, substance abuse therapies if indicated, and family counselling. Patients are seen for pharmacological visits by the psychiatrist or psychiatric nurse practitioner. The goal is to provide a high intensity treatment for up to 90 days which will prevent the need for re-hospitalization or repeating emergency room visits.*
Participating Program Partners *Please list the relevant community-based organizations or provider groups, contractors, and/or public partners*	- *UM SJMC, UM SJMG, Maxim CBCM, SJMG Primary Care Providers, VNA Home Health and The Center for Eating Disorders, Baltimore County Department of Health*
Patients Served *Please estimate using the Population category that best applies to the Intervention, from the CY 2018 RP Analytic Files.* *HSCRC acknowledges that the High Utilizer/Rising Risk or Payer designations may over-state the population, or may not entirely represent this intervention's targeted population.*	# of Patients Served as of June 30, 2019: From CY16 opening thru June 30, 2019= 679
	Denominator of Eligible Patients: From RP Analytic file CY18, total patients eligible=815

*Feel free to **also** include your partnership's denominator.*	
*Feel free to **also** include your partnership's denominator.*	Uniquely to our program, since inception in CY16 thru June 30th 2019, # unique patients served = 684 with an eligible denominator of 1,085. Specific to FY19, # unique patients served = 284 with an eligible denominator of 436.
Pre-Post Analysis for Intervention (optional) *If available, RPs may submit a screenshot or other file format of the Intervention's Pre-Post Analysis.*	See Appendix A.
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.*	See Appendix B
Successes of the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	Patients participating in the TCC-BHC intensive bridge program demonstrate a significant lower 30 day hospital utilization rate. More importantly, these patients historically tend to have frequent ED visits. In Appendix A, Figures 3 and 4, we show that patients attending TCC-BHC sessions have lower ED visit rates for an entire year when compared to a "control" population that were BHC "no shows" with no participation .
Lessons Learned from the Intervention in FY 2019 *Free Response, up to 1 Paragraph*	The complexity in co-managing the behavioral health population is illustrated in the long term outcome analysis. Although we show success in reducing 30-90 day re-hospitalization, it continues to be challenging to sustain this reduction as we move beyond the 90 days BHC participation period. The next iteration of the program will work in alignment with the newly formed MDPCP partnership with PCPs to provide a longer term, ongoing, comprehensive care continuum. In terms of ROI, it is especially difficult to discern impact in a span of 36 months as mental health determinants generally require longer term tracking and

	analysis in order to determine longer term benefits of the extant BHC treatment.
Next Steps for the Intervention in FY 2020 *Free Response, up to 1 Paragraph*	The program will complete more than 36 months of fully staffed operations by FY2020. We intend to perform a retrospective analysis to determine the participants demographics, utilization patterns including ER visits, correlation with PQIs as well as psychiatric readmissions and medical hospitalizations. We also intend to use this data set to determine the most reliable and appropriate methodology to best calculate ROI.
Additional Free Response (Optional)	

Core Measures

Please fill in this information with the latest available data from the in the CRS Portal Tools for Regional Partnerships. For each measure, specific data sources are suggested for your use– the Executive Dashboard for Regional Partnerships, or the CY 2018 RP Analytic File (please specify which source you are using for each of the outcome measures).

Utilization Measures

Measure in RFP *(Table 1, Appendix A of the RFP)*	**Measure for FY 2019 Reporting**	**Outcomes(s)**
Total Hospital Cost per capita	**Partnership IP Charges per capita** Executive Dashboard: 'Regional Partnership per Capita Utilization' – Hospital Charges per Capita, reported as average 12 months of CY 2018 -or- Analytic File: 'Charges' over 'Population' (Column E / Column C)	Using the RP analytical file for CY18, 'Charges' over 'Population' =$237.74
Total Hospital Discharges per capita	**Total Discharges per 1,000** Executive Dashboard:	Using the RP analytical file for CY18, Total hospital discharges per capita = 9.5

	'Regional Partnership per Capita Utilization' – Hospital Discharges per 1,000, reported as average 12 months of FY 2019 -or- Analytic File: 'IPObs24Visits' over 'Population' (Column G / Column C)	
ED Visits per capita	**Ambulatory ED Visits per 1,000** Executive Dashboard: 'Regional Partnership per Capita Utilization' – Ambulatory ED Visits per 1,000, reported as average 12 months of FY 2019 -or- Analytic File 'ED Visits' over 'Population' (Column H / Column C)	Using the RP analytical file for CY18, Total ED visits per capita = 1.65

Quality Indicator Measures

Measure in RFP *(Table 1 in Appendix A of the RFP)*	**Measure for FY 2019 Reporting**	**Outcomes(s)**
Readmissions	**Unadjusted Readmission rate by Hospital** (please be sure to filter to include all hospitals in your RP) Executive Dashboard: '[Partnership] Quality Indicators' – Unadjusted Readmission Rate by Hospital, reported as average 12 months of FY 2019 -or- Analytic File:	Using the RP analytical file for CY18, Readmissions is 1.08

	'IP Readmit' over 'EligibleforReadmit' (Column J / Column I)	
PAU	**Potentially Avoidable Utilization** Executive Dashboard: '[Partnership] Quality Indicators' – Potentially Avoidable Utilization, reported as **sum** of 12 months of FY 2019 -or- Analytic File: 'TotalPAUCharges' (Column K)	Using the RP analytical file for CY18, Total PAU Charges = $456,131,998.87

CRISP Key Indicators (Optional)

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

Measure in RFP *(Table 1 in Appendix A of the RFP)*	**Measure for FY 2019 Reporting**	**Outcomes(s)**
Portion of Target Population with Contact from Assigned Care Manager	**Potentially Avoidable Utilization** Executive Dashboard: 'High Needs Patients – CRISP Key Indicators' – % of patients with Case Manager (CM) recorded at CRISP, reported as average monthly % for most recent six months of data *May also include Rising Needs Patients, if applicable in Partnership.*	See Appendix C. The primary metric to follow in the behavioral health population focuses in readmit and re-hospitalization, less of PQI indicators.

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.

A standard PHQ9 assessment is performed during new patient assessment. This process was standardized in the last 8 months and a report will be generated for the FY20 reporting period.

Return on Investment – (Optional)

Annual Cost per Patient as calculated by:

*The Transitional Care Center's mission is to serve post discharge patients with a significant risk of high medical utilization and relapse. In our Behavioral Health unit, we are gradually seeing steady growth and benefit of the programs. Our slow ramp up of appropriate staffing levels directly impacts our FY19 sustainable volume and creates a challenge in developing a proper ROI calculation. Our patient collection rate for FY19 is *annualized to be $118,085, and the operational expense for the entire Transitional Care Center suite is $1,743,834.*

We will continue to grow referral volume in FY20 and continue to work with our UMMS EPIC team to track PAU correlation with the behavioral health population. We have had challenges in accurately tracking PAU and chronic condition illnesses in behavioral health patients. Further, we have had continuing challenges in receiving timely discharge information on many of our behavioral health population who are readmitted to other facilities due to federal disclosure policies. We hope to partner with CRISP in the coming year to develop methodologies to receive timely information on these patients that will allow for an accurate calculation of the ROI in the FY20 report.

**Collection was annualized as there is a 3 to 6 months lag in payment for filed behavioral health claims.*

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

See Excel attachment.

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.

In summary, the TCC-Behavioral Health Center, made possible through the HSCRC innovation grant investment in population health has led to a stable and successful component of the mental health continuum of care at UM-SJMC. We now have established outpatient mental health setting with a talented multidisciplinary staff with a singular vision of reducing the burden of chronic mental illness and its associated impact on repeating hospital and emergency department stays. On the inpatient side, the UM-SJMC inpatient unit now can more rapidly discharge high risk patients and securing a

timely post discharge outpatient follow up.. Further, the Emergency Department now can refer repeating, high risk chronic patients to the clinic. With the establishment of MDPCP program and its focus on mental health well-being of the population, our primary care providers and the community are also able to get rapid consultation and support on difficult patients through the Center. We see this change in payor demographic between FY18's shift to FY19, where previously we reported a 27% commercial payor panel, and for FY19, a half fold increase to 50% commercial payor panel. The formation of UM SJMG Transitional Care Center (TCC) and its Behavioral Health department has helped pave the workflow for an outpatient focused care continuum infrastructure for this high risk population.

Appendix A: Pre-Post Analysis

Figure 1. FY19 All payor panel that completed at least 1 session. Pre –Post- analysis for Inpatient admission. *The data shows a readmission rate of under 8% for the first 30 days post index hospitalization during the participation of this program. Subsequent inpatient recidivism for the next 12 months remains under 30%.*

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	73	18	31.5%	7.8%	-23.7%
3 Months	82	31	42.1%	15.9%	-26.2%
6 Months	65	36	49.6%	27.5%	-22.1%
12 Months	9	5	45.0%	25.0%	-20.0%

Figure 2. ***FY19 All payor panel that no showed to appointments. Pre –Post- analysis for Inpatient admission.*** *The data shows a readmission rate of 11% for the first 30 days post index hospitalization. Subsequent inpatient recidivism for the next 12 months shows a higher percentage when compared to the show cohort shown in Figure 1.*

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	75	16	51.0%	10.9%	-40.1%
3 Months	68	23	58.1%	19.7%	-38.5%
6 Months	56	28	63.6%	31.8%	-31.8%
12 Months	14	5	73.7%	26.3%	-47.4%

Figure 3. ***FY19 All payor panel that completed at least 1 session. Pre –Post- analysis for ED Utilization.*** *The data shows an ED utilization rate of 20% for the first 30 days post index visit during the participation of this program. For this subset of population, this shows at least a 60% decreased in ED utilization during the participation of the program.*

Percent of Members on the Panel with 1 or more Visits

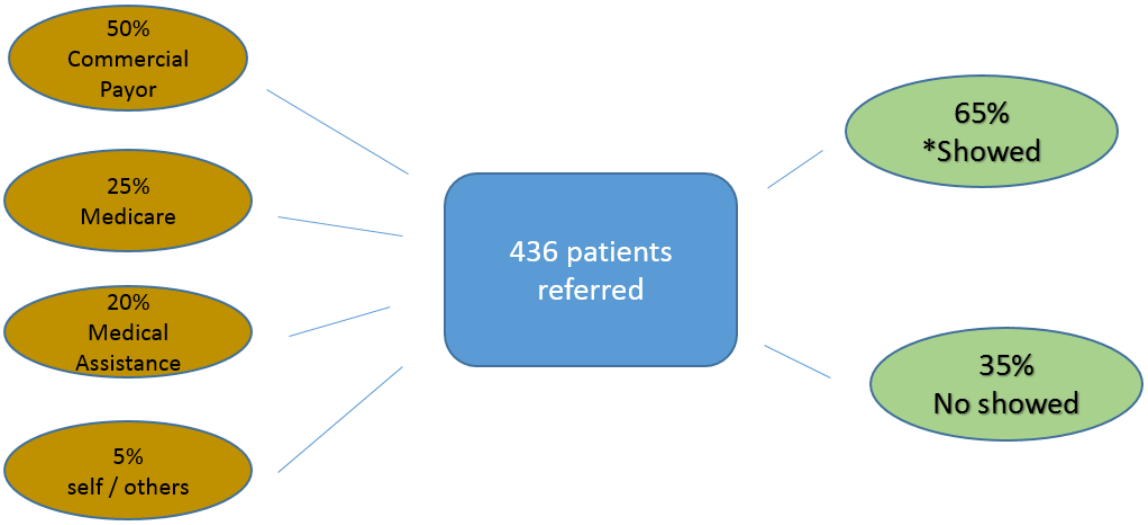
Time Period	Total Number of Patients with a visit - Pre	Total Number of Patients with a visit - Post	Total Number of Patients with a visit - Pre %	Total Number of Patients with a visit - Post %	Change in Number of Patients
1 Month	69	16	87.3%	20.3%	-67.1%
3 Months	79	40	81.4%	41.2%	-40.2%
6 Months	64	38	84.2%	50.0%	-34.2%
12 Months	9	5	75.0%	41.7%	-33.3%

Figure 4. ***FY19 All payor panel that "no showed" to appointments. Pre–Post- analysis for ED Utilization.*** *The data shows a 50% more ED utilization during the first 30 days of post index discharged in comparison to the cohort that is participating in the program, as shown in Figure 3. Subsequent inpatient recidivism for the next 12 months shows a higher percentage when compared to the show cohort shown in Figure 1.*

Percent of Members on the Panel with 1 or more Visits

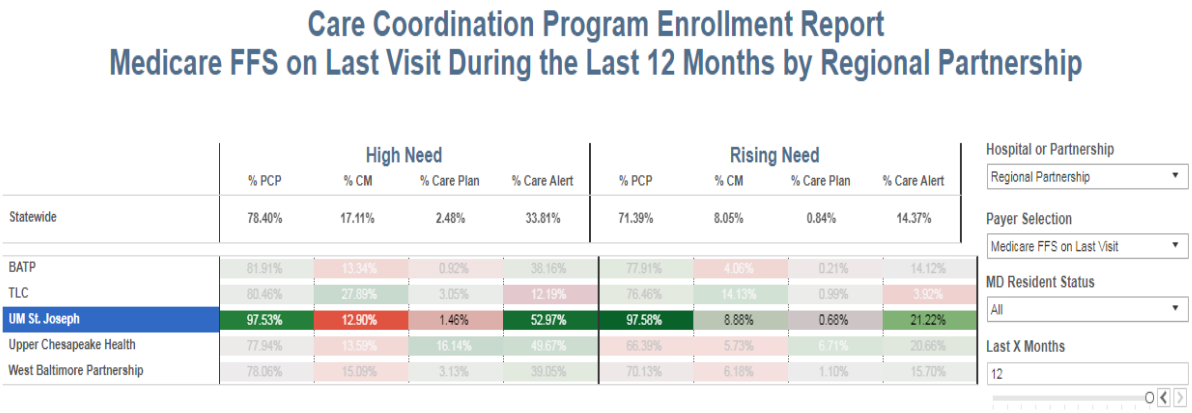
Time Period	Total Number of Patients with a visit - Pre	Total Number of Patients with a visit - Post	Total Number of Patients with a visit - Pre %	Total Number of Patients with a visit - Post %	Change in Number of Patients
1 Month	68	30	86.1%	38.0%	-48.1%
3 Months	72	43	84.7%	50.6%	-34.1%
6 Months	62	41	86.1%	56.9%	-29.2%
12 Months	13	11	86.7%	73.3%	-13.3%

Appendix B: FY19 Referral volume, payer distribution and show / no show rate for TCC-BHC



*"Showed" indicates patients completed at least 1 session to TCC-BHC

Appendix C: * Targeted population with Care Assignment from CRISP report



Care Coordination Program Enrollment Report
Medicare FFS on Last Visit During the Last 12 Months by Regional Partnership

	High Need				Rising Need			
	% PCP	% CM	% Care Plan	% Care Alert	% PCP	% CM	% Care Plan	% Care Alert
Statewide	78.40%	17.11%	2.48%	33.81%	71.39%	8.05%	0.84%	14.37%
BATP	81.91%	13.34%	0.92%	38.16%	77.91%	4.06%	0.21%	14.12%
TLC	80.46%	27.89%	3.05%	12.19%	76.46%	14.13%	0.99%	3.92%
UM St. Joseph	97.53%	12.90%	1.46%	52.97%	97.58%	8.88%	0.68%	21.22%
Upper Chesapeake Health	77.94%	13.59%	16.14%	49.67%	66.39%	5.73%	6.71%	20.66%
West Baltimore Partnership	78.06%	15.09%	3.13%	39.05%	70.13%	6.18%	1.10%	15.70%

Hospital or Partnership: Regional Partnership
Payer Selection: Medicare FFS on Last Visit
MD Resident Status: All
Last X Months: 12

*The targeted population has a greater than 90% care coordination assignment rate with the provider within UM SJMC EPIC records. There has been a misalignment between EPIC and CRISP bidirectional data sharing that shows a low care plan engagement in Appendix C. At the present time, the technologists from both parties are working to align the data sharing capability between the two systems.

Appendix D. Timeline of Program Implementation:

April 2016

- Interview with HSCRC, Final determination of Behavioral Health Center to be housed within Transitional Care Center.

May 2016

- Approval of HSCRC Funding

June 2016

- UM SJMG Ambulatory went Live on EPIC, along with Transitional Care Center
- Maxim Contract expansion:
    - Maxim Community Health Workers (CHW) expansion from inpatient access to Transitional Nurse Navigator and ambulatory offices.

July 2016

- Contracting process with Sheppard Pratt private psychiatry group and initiate recruitment process for the Behavioral Health Center (BHC).
- Standing meetings with BHC Steering Committee.
- Workflow processes with partners and stake holders for the BHC

Aug 2016

- Finalizing Contract with private psychiatry group, recruitment in process.
- Standing meetings with BHC steering committee for program development
- Finalize PCP and home health care screening criteria
    - Workflow standardization
    - Sub-acute partner workgroup
    - Primary care provider work group

Sept 2016

- First LCSW-C hired to start September 12th, 2016 with 1 week internal training and orientation
- Standing meetings with BHC steering committee for program development
- Formation of population health steering committee
- Continual recruitment for LCSW-Cs, psychiatrist and psychologist

October 2016

- Started seeing patients in October by 1 LCSW-C: Target is Medicare discharged inpatient psych unit with existing psychiatrist relationship.
- Standing meetings with BHC steering committee for program development
- Continual recruitment
- Engage CRISP in developing dashboard for measurable outcomes

November 2016

- Psychiatrist joined Nov 17th, 2016
- Ramp up on patients, target: Medicare discharged inpatient psych unit with and without existing providers
- Standing meetings with BHC steering committee for program development
- UMMS high risk clinic workgroup collaborative

December 2016

- Ramp up on patients, target: Medicare discharged inpatient psych unit with and without existing providers and Transitional Care Center referrals
- Standing meetings with BHC steering committee for program development
- UMMS high risk clinic workgroup collaborative
- Continual recruitment

January 2017

- Ramp up on patients, target: Medicare discharged inpatient psych unit with and without existing providers and ED high utilizers with multiple chronic co-morbid condition, and Transitional Care Center referrals
- Standing meetings with BHC steering committee for program development
- UMMS high risk clinic workgroup collaborative
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February 2017

- Hired midlevel psych NP to conduct group therapy
- Start group therapy, CBT sessions
- Joined Bay Area Transformation Grant Collaborative for best practices and develop dashboard with CRISP

April 2017

- Hired 2nd LCSWC, patient volume increased, continual referral from inpatient discharged and ED high utilizers. New referrals from Transitional Care Center (UM SJMC high risk center) high risk Cancer Center patients with underlying behavioral health factors impacting chronic care.

June 2017

- Hired 3rd LCSWC, patient volume increased, continual referrals from existing sources, new referrals from PCPs and Visiting Nurse Association

(VNA) home health agency.

- Established relationship with Lyft ride to enable ease of patient transportation.

Jan - June 2018

- Increased awareness of service with PCP partners and community health workers, increase referrals
- April and May 2018, LCSWc turn over, bottle neck in psychiatrist med-management due to increased community referral, re-start recruiting and reorganization to consist of 2 LCSWC, 0.6FTE nurse practitioner and 0.6 FTE psychiatrist.
- Improve operational workflow and refine therapy programs to maximize clinical benefit and relapse prevention to clinic patients.
- Establish ongoing free support groups for current and prior patients of BHC.

July 2018 – Jun 2019

- Stabilized clinical staffing infrastructure with 2 FTE LCSWc, 0.6 FTE psychiatric nurse practitioner, 0.6 FTE psychiatrist.
- Becoming a hub for PCP referral as part of MDPCP program, increased referral by 50% by PCPs.