Hospital Strategic Transformation Plan

Submitted to
Health Services Cost Review Commission

December 7, 2015

Saint Agnes Hospital
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Executive Summary:

In 1862, The Daughters of Charity began Saint Agnes Hospital, carrying on their centuries-old mission of service and for more than 150 years, Saint Agnes Hospital has continued the Daughter's mission and remains dedicated to the art of healing by providing exceptional care to the greater Baltimore area. Built on a strong foundation of excellent medical care and compassion, Saint Agnes and the physicians who practice here are committed to providing the best care for our patients. Saint Agnes Hospital is a member of Ascension, a faith-based healthcare organization and the largest non-profit health system in the U.S. and the world's largest Catholic health system. Ascension is dedicated to transformation through innovation across the continuum of care and is committed to delivering compassionate, personalized care to all with special attention to persons in poverty and struggling the most.

The first Catholic hospital in Baltimore, Saint Agnes was originally created to provide nursing care for the poor. Still today, our mission compels us to the following:

- *At Saint Agnes Hospital, we commit ourselves to spiritually-centered health care which is rooted in the healing ministry of Jesus.*
- *In the spirit of St. Elizabeth Ann Seton, and in* ***collaboration with others****, we continually reach out to all people in our community, with a* ***special concern for those who are poor and vulnerable.***
- *As a Catholic health care ministry and member of Ascension Health, we are dedicated to the art of healing to* ***sustain and improve the lives of the individuals and communities we serve****. We are also called to advocate for a just society.*
- *Through our words and deeds, our ministry is provided in an atmosphere of deep respect, love and compassion.*

Transformation to Population Health:

Saint Agnes Hospital has a long tradition of process transformation, collaboration, community outreach and providing care beyond the doors of our acute care beds. Whether through our decades old community care clinics...that ultimately transformed to a campus-based FQHC, the multi-prong Cardiac Access program to address health care disparities in cardiac care, our Red Dress Sunday program initially a partnership with 3 churches and today over 180 churches throughout Maryland wear red the second Sunday in February, joining with us to bring a voice to heart disease and live the message of "Red Dress Everyday", or our partnership in West Baltimore Care Health Enterprise Zone which seeks to engage the community in healthy living and build sustainable, innovative models of health care delivery, Saint Agnes has been at the forefront of transformation of the health care delivery system, particularly for West Baltimore.

Saint Agnes Hospital has made significant investments in efforts to improve population health through initiatives to reduce unnecessary utilization, improve quality of care and improve patient care outcomes. In FY2014 alone, Saint Agnes provided $26.7 million in community benefit. But, we recognize that more remains to be done to actualize the spirit of our Mission Statement and achieve the goals of the IHI Triple Aim.

Each year Saint Agnes cares for approximately 65,000 unique patients through the ED and acute care beds. In total, patients generated over 111,000 encounters in the ED, IN, or INO totaling $351M in gross patient charges at Saint Agnes. Annually, there are over 2,000 unique inpatients that experience 30-Day readmission/revisit potentially avoidable encounters following an acute care IN admission with one-third of revisit patients those identified as high need. The revisit PAU volume accounts for over 3,000 encounters and $27.9M in gross patient charges. Within the total patient population, approximately 1,000 patients are identified as high need (>= 3 bedded care encounters within 12 months) and 170 are identified as high need – high cost (HN-HC). The HN-HC patients experienced an average of 6.9 encounters per patient and average gross charges of over $111K. Additionally, in FY 15, Saint Agnes experienced over 2,000 acute care IN discharges that were identified as PQI related volumes

Saint Agnes Hospital prioritizes its commitments to the objectives of the Maryland Demonstration Model and the goals of CMS's Three Part Aim of improved care, improved health, and reduced cost of care. During the first two years of the new waiver, Saint Agnes has worked diligently and successfully to implement and promote initiatives to shift patient care to more appropriate settings, improve community access to care, enhance care coordination across the continuum of care, reduce non-ER acute care utilization, reduce readmissions and other Potentially Avoidable Utilization ("PAU"), and improve the health status of the community. Saint Agnes works together with local community organizations and other area health providers to target the diverse needs of its community. Saint Agnes's investments in population health management have been supported in part by $2.8 million of HSCRC infrastructure funding. These investments were targeted at high-risk populations with chronic conditions or multiple morbidities; through June 2015, Saint Agnes had a 9.99% decrease in its readmission rate, which currently exceeds the 9.30% 2-year reduction target.

This Hospital Strategic Transformation Plan outlines the initiatives that Saint Agnes will utilize that capitalize on the solid foundation of population health infrastructure yet enhance and expand our efforts, in collaboration with our partners to achieve even higher levels of performance towards the Triple Aim goals.

In addition to the strategies outlined in this plan, Saint Agnes is committed to a healthier West Baltimore and has committed to rebuild the former Cardinal Gibbons High School campus to recreate Gibbons Commons, a unique urban community space located across Caton Avenue from Saint Agnes Hospital. Gibbons Commons is a vibrant, 32-acre, mixed-use community, being developed and designed by Saint Agnes Hospital at the site of the former Cardinal Gibbons High School, in order to provide southwest Baltimore residents with a safe and healthy place to live, work, play and learn. The project will provide green space, community services, recreational facilities, and community housing and is expected to phase openings through 2017. Partners in the project to date include Bon Secours Health System, Enterprise Homes, Catholic Charities of Baltimore, Royal Farms, Cal Ripken Jr. Foundation, Y of Central Maryland, and The Caroline Center.

Overall Strategic Transformation Goals:

- Enhance relationships among primary care providers, hospitals, post-acute providers, and community based organizations to transform healthcare delivery in West Baltimore.
- Develop and implement clinical models that assist patients and providers such that that necessary clinical care is provided in the appropriate setting, by an appropriate provider, to achieve the best clinical outcome at the lowest costs and reduce acute care cost and utilization.
- Improve overall quality of care and reduce health care disparities among the most vulnerable.
- Improve patient outcomes and quality of life.
- Enhance provider and patient satisfaction levels.

Major Strategies:

- Readmission Nurse Navigation
- High Utilizer Task Force
- Community-Based Care Management
- Primary Care in West Baltimore
- West Baltimore Health Enterprise Zone
- West Baltimore Collaborative
- Palliative Care Program
- Comprehensive Wound Care Center
- Specialty Care Services
- Obstetric Services at BMS at Saint Agnes

Strategy:	Readmission Nurse Navigation
Description:	A team consisting of clinicians and social workers that provide comprehensive discharge planning, patient education, and linkages with PCPs that support engagement of the acute care discharge patient back into community care team. Nurse Navigation supports the team-based chronic disease model through coordination of care including patient appointments, medication monitoring, and self-care compliance for patients at high risk for PAU due to chronic conditions through the 31 days following and acute care admission for target patient population.
Target Population:	All acute care discharges determined to be at high risk for readmission, particularly Medicare patients within CMS PfP diagnosis groups of CHF, AMI, Pneumonia, COPD, and hip and knee joint replacements.
Metrics:	• 30-Day Readmission Rate • 30-Day Revisit Rate • Readmission per 100 discharges for Medicare PfP diagnosis groups. • Percent of Patient Consults Identified High Utilizers/High Risk • Percent of Patient Consults discharged Home Care/SNF • Percent of Patient Consults referred to PCP • Percent of Patient Consults referred to CHF/COPD outpatient program Note: Please see attached copy (Appendix A) of current Readmission, Revisit and PAU Dashboard Report utilized by Saint Agnes to track PAU performance improvement efforts. In addition to this report, 30-Day Readmission Rate, 30-Day Revisit Rate, and relevant PQI diagnosis are included on all Clinical Institute Performance Dashboards (Cancer, Cardiovascular, Metabolic, Ortho-Spine, Reconstructive Plastic, and Women & Children) specific to each Institute's patient population.
Strategy Partners:	None.
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions.

Strategy:	High Utilizer Task Force
Description:	This program, developed by our emergency physician group, focuses on a pre-identified cohort of patients who have proven to be difficult to manage with high rates of admissions and emergency department visits. Extra care and resources are dedicated to these patients with the goal of reducing both emergency and inpatient utilization. Customized care plans are developed for each patient by our emergency physicians that can be uploaded to the CRISP portal making them available to clinicians and care coordinators at other facilities in the area. Social work and nurse navigators housed in the emergency department work closely with community health workers at HCAM to provide wrap around services to ensure people have the resources and the knowledge needed to care for them at home. As a compliment to the work being done by the High Utilizer Task Force, St. Agnes has engaged *Optum* to provide a $0.6 million healthcare analytics platform to enable better decision-making for these high cost patients by combining hospital and outpatient electronic health records into one easily accessible location.
Target Population:	Patients with 3 or more Bedded Care encounters (IN or INO >23 hours)within 12 month period and total charges for all encounters (IN, INO or ED) that are in top two quartiles of all patients. Exclude patients age 0-17 or 80+, primary oncology diagnosis or disposition of expired.
Metrics:	• 30-Day Readmission Rate • 30-Day Revisit Rate • Saint Agnes Hospital Encounters Total and per capita • Saint Agnes Hospital Charges (IN, INO, ED) Total and per capita • High Need – High Cost CHURN Rate • Percent High Need – High Cost Patient Active last four months Note: Please see attached copy (Appendix A) of current Readmission, Revisit and PAU Dashboard Report utilized by Saint Agnes to track PAU performance improvement efforts.
Strategy Partners:	CEP America (ED Physician Group) Saint Agnes Medical Group Specialty Care Physicians
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions.

Strategy:	Community-based Care Management
Description:	Saint Agnes first introduced post-discharge community-based care management with West Baltimore Care, first with their Community Health Workers, and then in the Fall of 2015 engaged with The Coordinating Center (HEZ vendor contract). This initiative provided supportive services for HEZ residents that were discharged home from Saint Agnes and transitioning back to the community setting. In the Summer of 2015, Saint Agnes began discussion with HealthCare Access Maryland to expand the work the RN Navigator Team and extend care management into the community. Working with our partners at HCAM, St. Agnes is now developing a comprehensive outpatient care management program that will focus on high utilizers with multiple high risk conditions. Launching in January 2016, the program will consist of an integrated hand-off system that coordinates discharge planning at the hospital with outpatient care management teams. HCAM will provide home visits using outpatient nurses and community health workers, perform telephonic monitoring and be available 24 hours per day, 7 days per week to address issues to prevent unnecessary hospitalizations. At-home services provided by HCAM include medication compliance, health education, coordination with care-givers and scheduling of follow-up appointments.
Target Population:	Patients with 3 or more Bedded Care encounters (IN or INO >23 hours)within 12 month period and total charges for all encounters (IN, INO or ED) that are in top two quartiles of all patients. Exclude patients age 0-17 or 80+, primary oncology diagnosis or disposition of expired.
Metrics:	• 30-Day Readmission Rate • 30-Day Revisit Rate • Saint Agnes Hospital Encounters Total and per capita • Saint Agnes Hospital Charges (IN, INO, ED) Total and per capita • High Need – High Cost CHURN Rate • Other metrics under development in partnership with external program evaluator engaged by HCAM.
Strategy Partners:	HealthCare Access Maryland (HCAM) West Baltimore Primary Care Access Collaborative and The Coordinating Center (West Baltimore HEZ zip codes)
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions.

Strategy:	Primary Care in West Baltimore
Description:	Seton Primary Care Office on the St. Agnes Campus - This freestanding primary care office on-campus provides care to the underserved, high-risk patients who do not qualify for FQHC services, or are not able to be seen in a timely manner. It functions on a number of levels: • St. Agnes has operationalized a referral system directly from the Emergency Room to the Seton Primary Care Office for patients who have no primary care provider. • Providing follow-up care after an admission. • Providing ongoing, effective care coordination for high-risk patients. The clinic currently serves more than 6,000 patient visits per month. Baltimore Medical System (FQHC) Expansion – In 2012, St. Agnes increased its community benefit grant to its long standing partnership with BMS to help support a significant 50% expansion and renovation of its on-campus clinic to more than a 20,000 square foot FQHC clinic found on the St. Agnes campus. The increased annual $600,000 grant helped supported the hiring of five additional clinicians and allowed BMS to greatly expand its interpreter services, which is needed for approximately 21% of the patients visiting the FQHC. Primary, OB/GYN and other visits to BMS have more than doubled over the past ten year period (17,000 in 2005 to nearing 40,000 in 2015) supporting the demand for access to healthcare services for residents of West Baltimore. This on-campus FQHC has provided a much needed relief valve and lower-cost alternative to St. Agnes' high volume emergency department – a clear winner under the Triple-Aim.
Target Population:	• Saint Agnes ED and Bedded Care Patients identified as not having a primary care physician. • Saint Agnes service area residents needing primary care (Adult and Pediatrics) and OB/GYN services
Metrics:	• Number of New Patients to Practice (Seton Saint Agnes and BMS) • Total number of visits (Seton Saint Agnes and BMS) • Total number OB pre-natal visits (BMS) • High Need – High Cost Patients Referred and Attended Visit (Seton Saint Agnes)
Strategy Partners:	Baltimore Medical System, Inc.
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions. Additionally, part B professional revenue can be collected from patients that have third party insurance.

Strategy:	West Baltimore Health Enterprise Zone
Description:	The West Baltimore Primary Care Access Collaborative is an unprecedented partnership of a diverse group of prominent institutions working together to strengthen the health care system, improve access to care, and reduce persistent and profound health disparities in a large section of West Baltimore. The mission of the Collaborative is to create a sustainable, replicable system of care to reduce health disparities, improve access to health care, reduce costs and expand the primary care and community health workforce. The Collaborative is focused on neighborhoods in four Baltimore zip codes – 21216, 21217, 21223 and 21229 – that have some of the highest disease burden and worst indicators of social determinants of health in Maryland. Through its partners, West Baltimore Care will continue to design, develop and implement short- and long- term strategies that will create optimal, innovative care coordination, chronic disease management and community engagement. The HEZ has provided Saint Agnes with a forum for coordinated investment plans and positioning of new resources for outreach, prevention, and clinical manpower. The HEZ has positioned outreach teams to identify residents for health education, screenings, and prevention programs, and has helped steer residents to Saint Agnes cardiac care programs and the Pre-Diabetes Education Program, all toward the aim of better care and reducing unnecessary utilization.
Target Population:	Residents and patients living in communities in zip codes 21216, 21217, 21223, and 21229
Metrics:	While West Baltimore Care is collecting and tracking a wide range of primary care and other metrics, Saint Agnes is primarily focused on reduction of PAU volumes for patients from HEZ zip codes. As such, as part of the overall monthly Readmission/Revisit Report, 30-Day Readmission and Revisits Rates are tracked.
Strategy Partners:	• **Hospital:** Bon Secours Baltimore Health System, Sinai Hospital, Saint Agnes Hospital, University of Maryland Medical Center, Midtown Campus, University of Maryland Medical Center • **FQHCs:** Baltimore Medical System, Total Health Care, Inc. , Park West Health System, Inc., People's Community Health Centers • **Community Organizations:** Coppin State University, Equity Matters, Light Health and Wellness Comprehensive Services, Inc., Mosaic Community Services, National Council on Alcohol and Drug Dependence, Maryland, Maryland Senator Verna Jones-Rodwell, University of Maryland, Baltimore
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions.

Strategy:	West Baltimore Collaborative
Description:	This broad-based regional partnership of hospitals and community-based organizations that together serve five local communities is focused intensely on high quality, effective care coordination for chronic disease patients, shared infrastructure for care management, and service configuration to reduce the total costs of care and achieve system savings. The shared infrastructure includes data analytics to guide population health planning efforts, joint investments, and high opportunity potential initiatives. Most recently, the West Baltimore Collaborative has worked on a data-intensive effort to identify, stratify, and profile the high utilizer patient population, develop a coordinated plan to expand primary care capacity, and build a shared infrastructure for effective care management of high need/high risk residents in the community. Its central focus is to create a chronic disease management program in partnership with faith-based partners, West Baltimore CARE, the Archdiocese of Baltimore, and Baltimore Medical Systems. *Please see attached West Baltimore Regional Partnership Final Report (Appendix B)
Target Population:	Patients with 3 or more Bedded Care encounters (IN or INO >23 hours)within 12 month period, Medicare/ Dual Eligible Age >50, most recent encounter to Bon Secours, Saint Agnes, UMMC, or UM-Midtown, and without Major Behavioral Health Diagnosis (Bi-polar, Schizophrenia, Other Major Psychotic Disorders)
Metrics:	As a potential grantee under the HSCRC Transformation Implementation program, the WBC is committed to
Strategy Partners:	• University of Maryland Medical System (UMMC and UM-Midtown) • Bon Secours Hospital • Mercy Medical Center • Saint Agnes Medical Group • Total Healthcare • Baltimore Medical System (BMS) • Chase Brexton • University of Maryland Rehabilitation & Orthopedic Institute • University of Maryland Faculty Physicians, Family Medicine • Bon Secours affiliated physicians • University of Maryland Faculty Physicians, Community Psychiatry • B'more Clubhouse
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions. Additionally, as noted, the collaborative is pursuing funding for local area Foundations.

Strategy:	Palliative Care Program
Description:	This program supports patients with high risk of death, high symptom burden, or significant psychosocial dysfunction by matching medical treatments to informed patient and family goals. The team identifies and coordinates resources to ensure a seamless care plan across a spectrum of settings. Preliminary metrics show that patients have a discharge survival rate of 73% and a readmission rate of 2.3%, which is believed to be a historical improvement for this patient population.
Target Population:	Patients diagnosed with one or more chronic conditions whose quality of life could be improved with multi-disciplinary care focusing on symptom management (pain, shortness of breath, fatigue, constipation, nausea, loss of appetite, difficulty sleeping and depression).
Metrics:	• Total Number of Consults • 30-Day Readmission Rates • Percent of Palliative Care Patients Discharged Alive
Strategy Partners:	None
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions. Additionally, part B professional revenue can be collected from patients that have third party insurance for services provided by the Nurse Practitioner providing care.

Strategy:	Comprehensive Wound Care Center
Description:	The Wound Care Center provides specialized treatment for chronic or non-healing wounds; especially those caused by diabetes, and are a necessary component of the Hospital's outpatient chronic disease management program.
Target Population:	Patients within Saint Agnes network or general community with chronic or non-healing wounds, especially those caused by diabetes.
Metrics:	• Total Number New Patients • Total Number Visits • Total Number HBO Treatments • Percent of Wounds Healed • Median Days to Heal • Percent of Wounds Not Healed within 14 weeks
Strategy Partners:	Healogics, Inc.
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions.

Strategy:	Specialty Care Services
Description:	In addition to the primary care and prevention efforts described above, St. Agnes has invested significant resources in aligning specialty care resources to support the high volume of patients served in the FQHC on campus and in the Emergency Room. St. Agnes has subsidized physician services provided both in the hospital and at the FQHC.
Target Population:	Under insured or Uninsured patients within the Saint Agnes network or general community that require access with a specialty care physician.
Metrics:	• Total Number of Clinic Visits
Strategy Partners:	Community-based employed and independent specialty care physicians
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions.

Strategy:	Obstetric Services at BMS at Saint Agnes
Description:	OB hospitalist coverage for BMS FQHC patients – St. Agnes subsidizes OB hospitalist coverage for those OB patients from the FQHC so that these FQHC patients can deliver at St. Agnes. This clinic is staffed by 2 full-time perinatologists and functions as a referral site for a large number of patients from Baltimore Medical System's FQHC.
Target Population:	Women of child-bearing age in the Saint Agnes service area, particularly the communities of West Baltimore.
Metrics:	• Total Number of prenatal visits • Elective Inductions >37<39 week gestation and % conversion to C/S • Birth Trauma • Neonatal Mortality and Unplanned transfer to NICU • Injury to Brachial Plexus • Perineal Lacerations • Annual reporting of Maryland Prenatal Dataset to MIEMSS
Strategy Partners:	Baltimore Medical System, Inc.
Financial Sustainability:	It is expected that this initiative will be funded through the global budget revenue (GBR) mechanism which includes population health infrastructure funding and cost savings generated through PAU and other utilization reductions. Additionally, part B professional revenue can be collected from patients that have third party insurance for services provided by the employed OB/GYN physicians.

Appendix A

November 2015

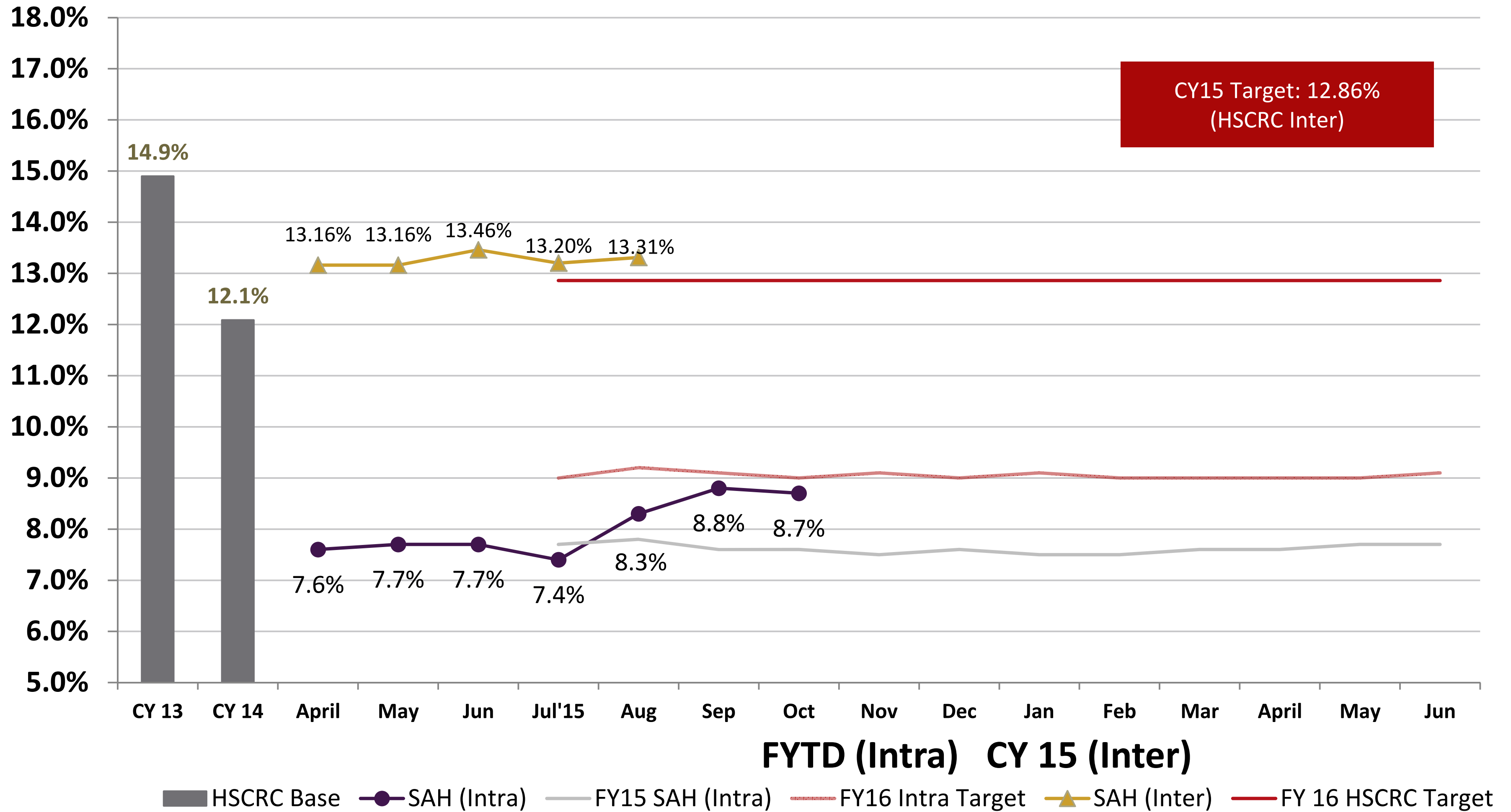
FY16 PAU Dashboard – October 2015

FY 16 PAU Reduction Performance Metrics	Trend	QTR 1	QTR 2	QTR 3	QTR 4	FYTD 16 Actual	FY 16 Target	Progress Indicator	FYTD 16 Variance
IP 2 IP Readmit High Utilizer Patients (Baseline = CY 13 less 13.69%)									
30-Day Readmission Rate HU (Intrahospital, Unadj, 12 ME Oct 15)	↑	32.3%	12.0%			31.4%	48.7%		35.5%
30-Day Revisit Rate HU (Intrahospital, Unadj, 12 ME Oct 15)	↓	74.4%	20.9%			75.8%	71.7%		-5.7%
IP 2 IP Readmit Patients from HEZ (Baseline = CY 13 less 13.69%)									
30-Day Readmission Rate HEZ (Intrahospital, Unadj, 12 ME Oct 15)	↓	11.2%	2.7%			10.1%	3.6%		-180.6%
30-Day Revisit Rate HEZ (Intrahospital, Unadj, 12 ME Sep 15)	↑	25.2%	12.0%			24.8%	11.7%		-112.0%
IP 2 IP Readmit Patients (Baseline = CY 13 less 13.69%)									
30-Day Readmission Rate (Intrahospital, Unadj, FYTD Oct 15)	↓	8.8%	8.4%			8.7%	8.98%		3.1%
30-Day Readmission Rate (Interhospital, Adj, CYTD Aug 15)	↑					13.31%	12.86%		-3.5%
30-Day Revisit Rate (Intrahospital, Unadj, 12 ME Oct 15)	↑	17.8%	7.6%			18.40%	19.80%		7.1%
ED High Utilizer Patients (Target CY 13 baseline less 13.69% and reduce visits by one per HU patient)									
ED High Utilizers (% HU Patients to Total ED Patients, FYTD Oct 15)	↓	1.5%	0.4%			1.5%	3.8%		60.5%
ED Visits per HU Patient, FYTD Oct 15	↓	5.00	4.52			5.10	4.50		-13.3%
CMS PfP Readmission Rate per 100 Discharges (Unadjusted; Target 13.69% below CY 13)									
All Diagnosis	↑	12.30	16.91			13.55	14.94		9.3%
Congestive Heart Failure (CHF)	↓	13.04	12.20			12.82	19.89		35.5%
Acute Myocardial Infarction (AMI)	↓	20.59	6.25			16.00	9.70		-64.9%
Community Acquired Pneumonia (CAP)	↑	6.15	30.77			13.19	13.86		4.8%
Chronic Obstructive Pulmonary Disease (COPD)	↑	21.05	29.03			23.36	21.14		-10.5%
Hip/Knee Replacement	↓	3.95	-			3.06	4.33		29.4%

High Need - High Cost Target Patient Popualtion	12 ME June 2015	12 ME Sep 2015	12 ME Dec 15	12 ME Mar 16	12 ME Jun 16
Unique Patients (ED, INO, IN)	64,139	64,923			
High Need Patients (>= 3 Bedded Care Encounters)	966	978			
High Need - High Cost Patients * (Total Charges Top 2 Quartiles)	163	170			
TBC >= 10 Encounters	7	10			
TBC 5 ≥ ≤ 9 Encounters	54	60			
TBC 3 ≥ ≤ 4 Encounters	102	100			
Medicare	100	111			
DUAL Eligibile	7	3			
Medicaid	27	32			
COM/HMO	29	24			
Total Encounters (ER, IN, INO)	1,290	1,173			
Total Charges	$ 22,548,784	$ 18,929,656			
Average Encounters/Person	7.9	6.9			
Average Charges/Person	$ 138,336	$ 111,351			
% HC-HC Active w/in last 4 Months	66.9%	74.7%			
% HN-HC Carry Forward		58.2%			
# New HN - HC Patients Identified		71			
# HN-HC Patients CHURN		64			

*Excludes Expired, Oncology patients, Age 0-17, and >=80+,
Cases with charge >= $75K excluded for charge quartile criteria, but included in total activity.

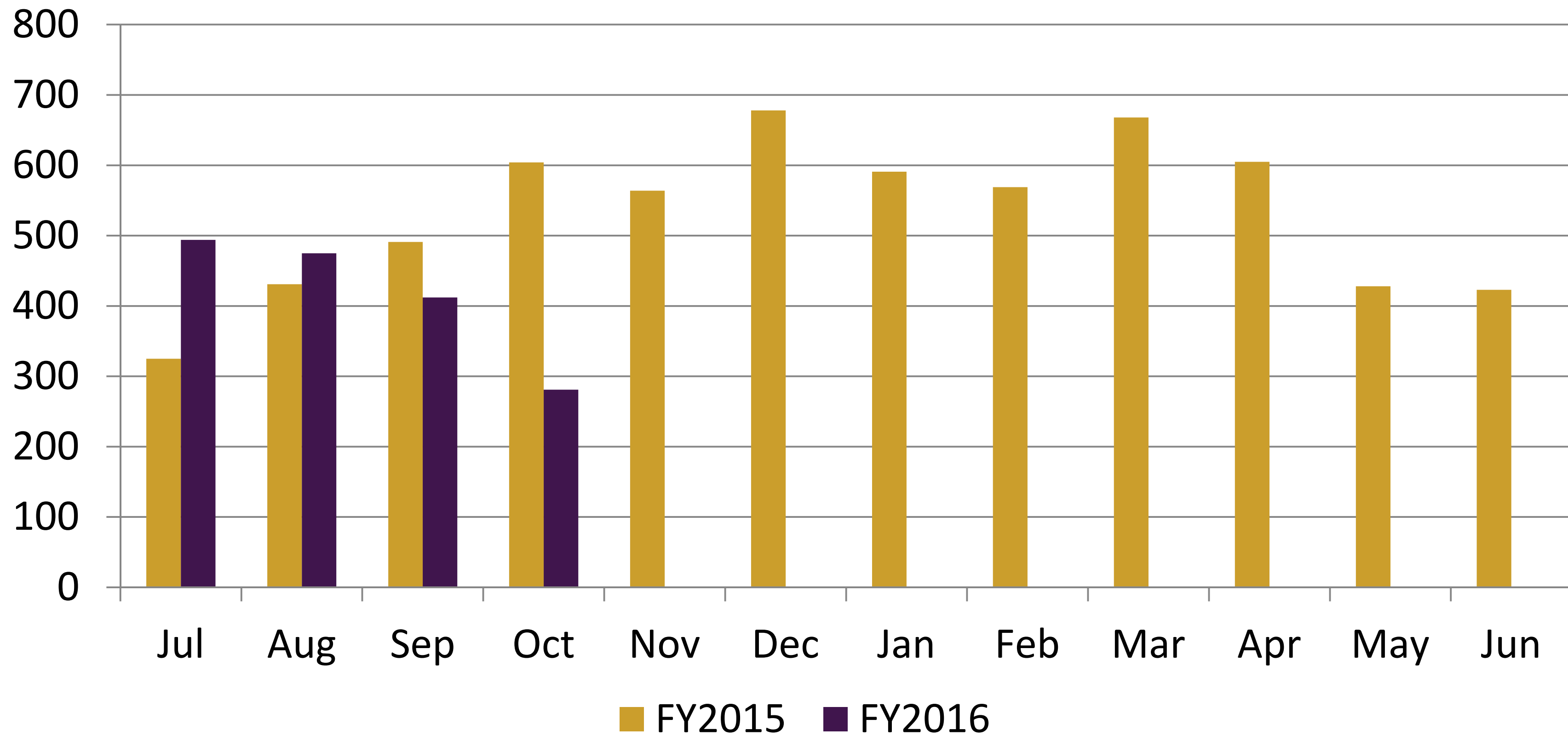
Readmission Rate Trend



*SAH Intra-hospital Unadjusted Readmission Rate

SAINT AGNES HOSPITAL

Nurse Navigators – Patients Followed



Represents patients followed by Nurse Navigators by date of focus.
Data currently excludes the CHF and ED Nurse Navigators.

30-Day Readmissions: Intra Hospital Unadjusted October 2015

(Product Line Assignment based on APR-DRG of Initial Admission)

30-Day Readmissions by Product Line

Product Line	FYTD 15 Readmits	FYTD 15 Readmit Rate	FYTD 16 Readmits	FYTD 16 Readmit Rate
Births	2	0.3%	8	1.1%
Antepartum	5	29.4%	2	13.3%
OB Subtotal	**7**	**1.0%**	**10**	**1.3%**
Pediatrics	**1**	**0.5%**	**2**	**1.6%**
Cardiology - Interventional	9	10.8%	10	9.2%
Cardiology - Medical	53	12.0%	62	13.0%
General Medicine	88	11.9%	68	8.9%
GI Medical	46	11.2%	37	9.7%
Hematology/Oncology	22	15.6%	17	12.2%
Lmtd Services	-	0.0%	1	11.1%
Nephrology	34	12.7%	38	13.1%
Neurology	26	7.5%	36	10.2%
Psych/Substance Abuse	1	2.9%	1	3.6%
Pulmonary	48	10.7%	61	12.8%
Med Subtotal	**327**	**11.2%**	**331**	**10.9%**
Bariatrics	4	2.0%	8	4.1%
Thoracic Surgery	-	0.0%	-	0.0%
Vascular Surgery	17	18.7%	23	21.5%
General Surgery	21	9.1%	25	9.8%
Major GI Surgery	9	12.3%	9	12.2%
Orthopaedic	28	8.3%	16	4.6%
Other Subspec Surg	1	16.7%	2	25.0%
Plastic Surgery	2	10.5%	3	17.6%
Spine	3	2.2%	10	7.5%
Urology	4	8.3%	14	18.7%
GYN	4	8.0%	2	3.0%
Surg Subtotal	**93**	**7.7%**	**112**	**8.6%**
M/S Subtotal	**420**	**10.2%**	**443**	**10.2%**
Grand Total	**428**	**8.5%**	**455**	**8.7%**

30-Day Readmissions by Payor

Payor	FYTD 15 Readmits	FYTD 15 Readmit Rate	FYTD 16 Readmits	FYTD 16 Readmit Rate
Charity	2	8.0%	1	2.7%
Charity Subtotal	***2***	**8.0%**	***1***	**2.7%**
Blue Cross	45	6.0%	31	4.5%
Kaiser	12	5.6%	12	4.4%
Aetna	2	1.5%	6	5.0%
United	3	2.3%	9	6.4%
Other	14	5.1%	19	6.4%
Commercial/HMO Subtotal	***76***	**5.1%**	***77***	**5.0%**
Medicaid	15	13.0%	14	9.2%
Priority Partners	11	7.4%	18	11.5%
Americaid	10	4.4%	11	5.1%
United	10	6.5%	9	7.1%
MD Physicians Care	16	8.2%	14	7.1%
Other	11	3.3%	10	3.1%
Medicaid Subtotal	***73***	**6.2%**	***76***	**6.5%**
Medicare	235	11.9%	281	12.7%
Bravo/HealthSpring	25	16.6%	8	7.3%
Aetna	2	3.6%	2	15.4%
United	2	9.5%	2	8.7%
Other	13	13.4%	7	8.9%
Medicare Subtotal	***277***	**12.0%**	***300***	**12.3%**
Self Pay	-	0.0%	1	2.4%
Other	-	0.0%	-	0.0%
Self Pay/Other Subtotal	-	**0.0%**	***1***	**2.0%**
Grand Total	**428**	**8.5%**	**455**	**8.7%**

30-Day Readmissions: Medicare PfP October 2015

(Diagnosis Assignment by Prin ICD-9 & ICD-10 [*effective October 1, 2015*] Diagnosis Code)

Integrated Scorecard

(Medicare Cohort)

	FYTD 15		FYTD 16	
	Readmits	Readmit Rate	Readmits	Readmit Rate
All Cases	277	12.0%	300	12.3%
CHF[1]	26	18.2%	20	14.5%
AMI[2]	2	7.4%	8	15.7%
Pneumonia[3]	10	11.6%	12	14.0%
COPD[4]	6	9.0%	25	24.8%
Hip/Knee[5]	-	0.0%	3	3.1%
Subtotal	*44*	11.0%	*68*	14.4%

CMS PfP

	FYTD 15		FYTD 16	
	Readmits	Readmit Rate	Readmits	Readmit Rate
All Cases	428	8.5%	455	8.7%
CHF[1]	35	16.8%	34	14.9%
AMI[2]	5	15.2%	13	12.4%
Pneumonia[3]	14	9.2%	15	9.8%
COPD[4]	23	13.5%	34	18.8%
Hip/Knee[5]	6	3.8%	4	2.5%
Subtotal	*83*	11.5%	*100*	12.0%

[1] CHF determine by ICD-10 PriDx in the initial visit of I11.0, I13.0, I13.2, I50.1, I50.20-150.23, I50.30-I50.33, I50.40-I50.43, and I50.9

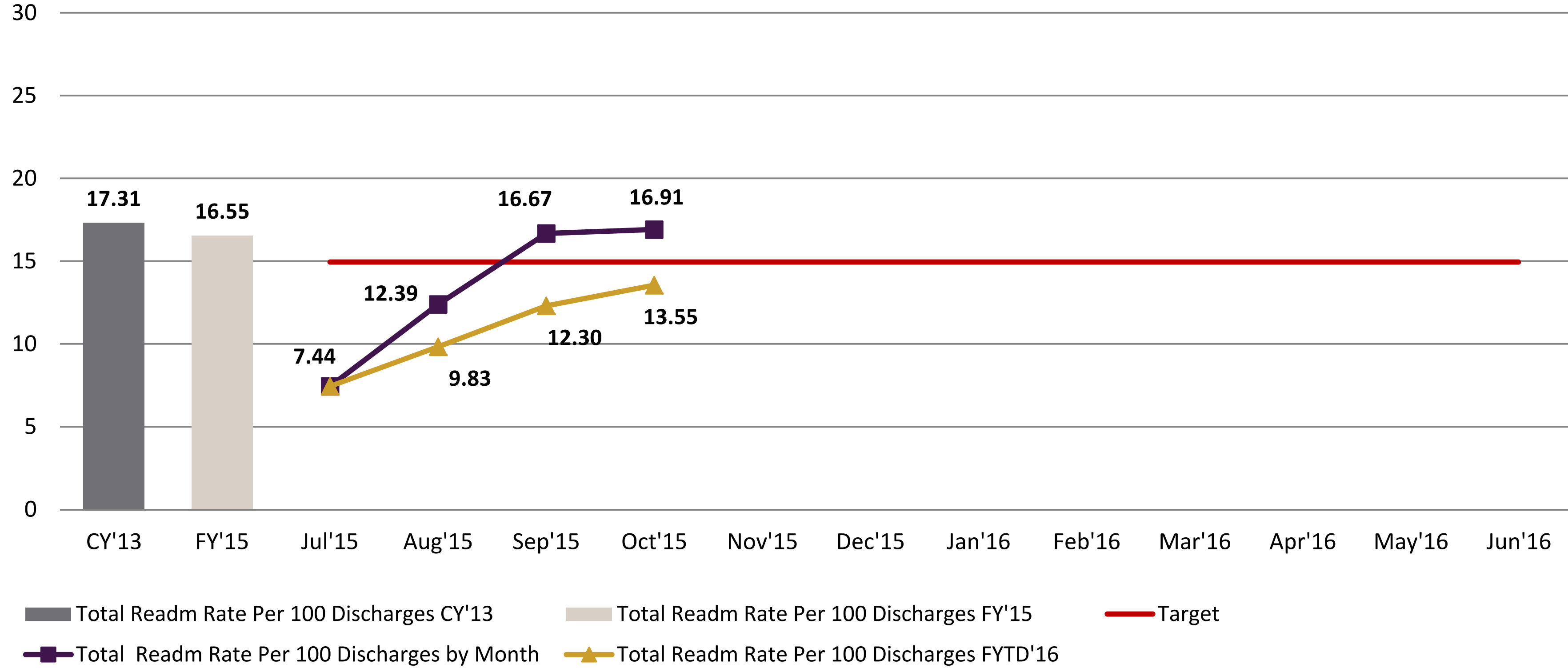
[2] AMI determined by ICD-10 PriDx in the initial visit of I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I22.0-I22.2, I22.8, I22.9

[3] PN determined by a PriDx in the initial visit of A48.1, J10.00, J19.10, J10.08, J110.11, J11.08, J12.0-J12.3, J12.81, J12.89, J12.29, J13.0, J14.0, J15.0, J15.1, J15.20, J15.211, J15.212, J15.20, J15.3-J15.9, J16.0, J16.8, J18.0, J18.1, J18.8, J18.9

[4] COPD determined by ICD-10 PriDx in the initial visit of J41.8, J42.0, J430-J43.2, J43.8, J43.9, J44.0, J44.9, J80, J96.00-J96.02, J96.20-J96.22, J96.90-J96.92, R092 (Some exclusions apply)

[5] Hips/Knees determined by ICD10 ProcDx in the initial visit of 0SR90JZ, 0SR90KZ, 0SRB019, 0SRB01A, 0SRB01Z, 0SRB029, 0SRB02A, 0SRB02Z, 0SRB039, 0SRB03A, 0SRB03Z, 0SRB049, 0SRB04A, 0SRB04Z, 0SRB07Z, 0SRB0J9, 0SRB0JA, 0SRB0JZ, 0SRB0KZ, 0SRC07Z, 0SRC0J9, 0SRC0JA, 0SRC0JZ, 0SRC0KZ, 0SRD07Z, 0SRD0J9, 0SRD0JA, 0SRD0JZ, 0SRD0KZ, 0SRT07Z, 0SRT0JA, 0SRT0J9, 0SRT0JZ, 0SRT0KZ, 0SRU07Z, 0SRU0J9, 0SRU0JA, 0SRU0JZ, 0SRU0KZ, 0SRV07Z, 0SRV0J9, 0SRV0JA, 0SRV0JZ, 0SRV0KZ, 0SRW07Z, 0SRW0J9, 0SRW0JA, 0SRW0JZ, 0SRW0KZ (Some exclusions apply)

Medicare Readmission Rate, All PfP Diagnoses



Total Medicare PfP	Jul'15	Aug'15	Sep'15	Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	Apr'16	May'16	Jun'16
All Cause Readmissions	9	14	22	23								
CHF Discharges	121	113	132	136								
CHF Readm Rate Per 100 Discharges by Month	7.44	12.39	16.67	16.91								
CHF Readm Rate Per 100 Discharges FYTD'16	7.44	9.83	12.30	13.55								

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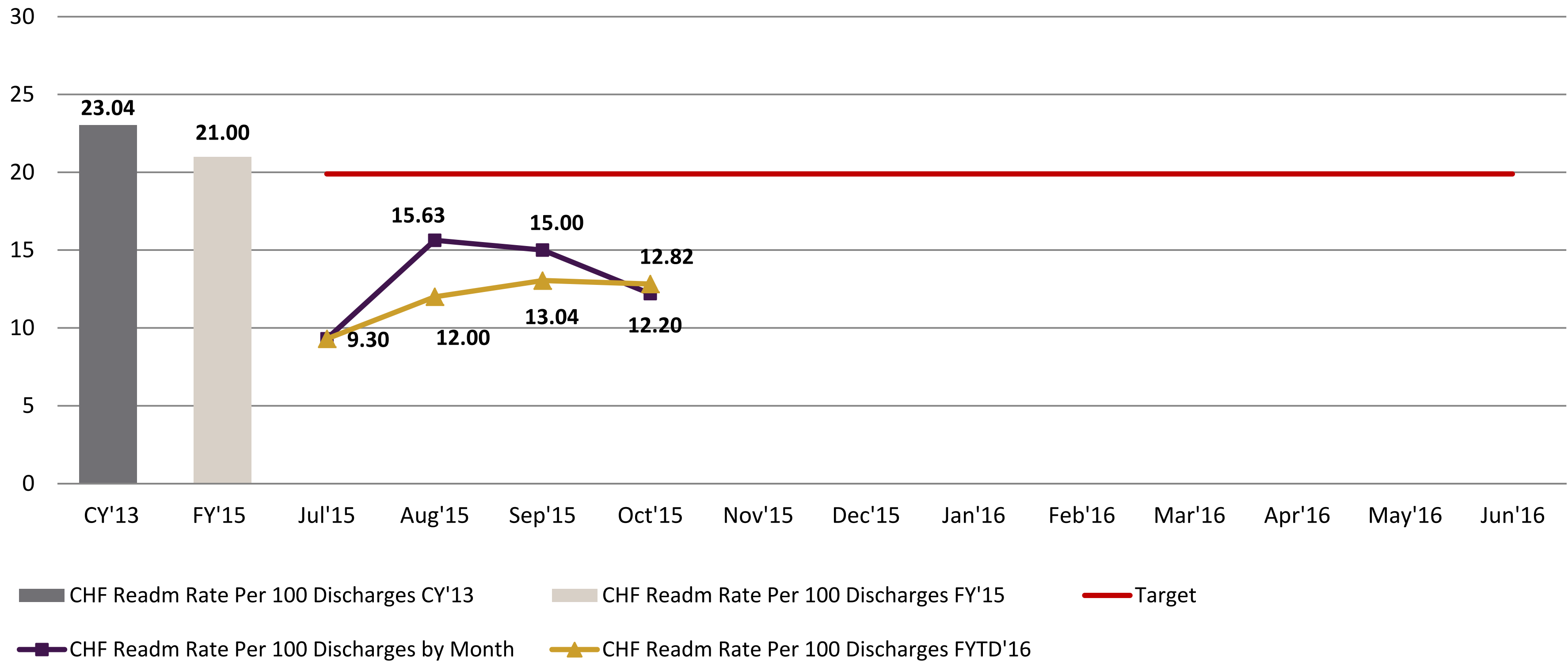
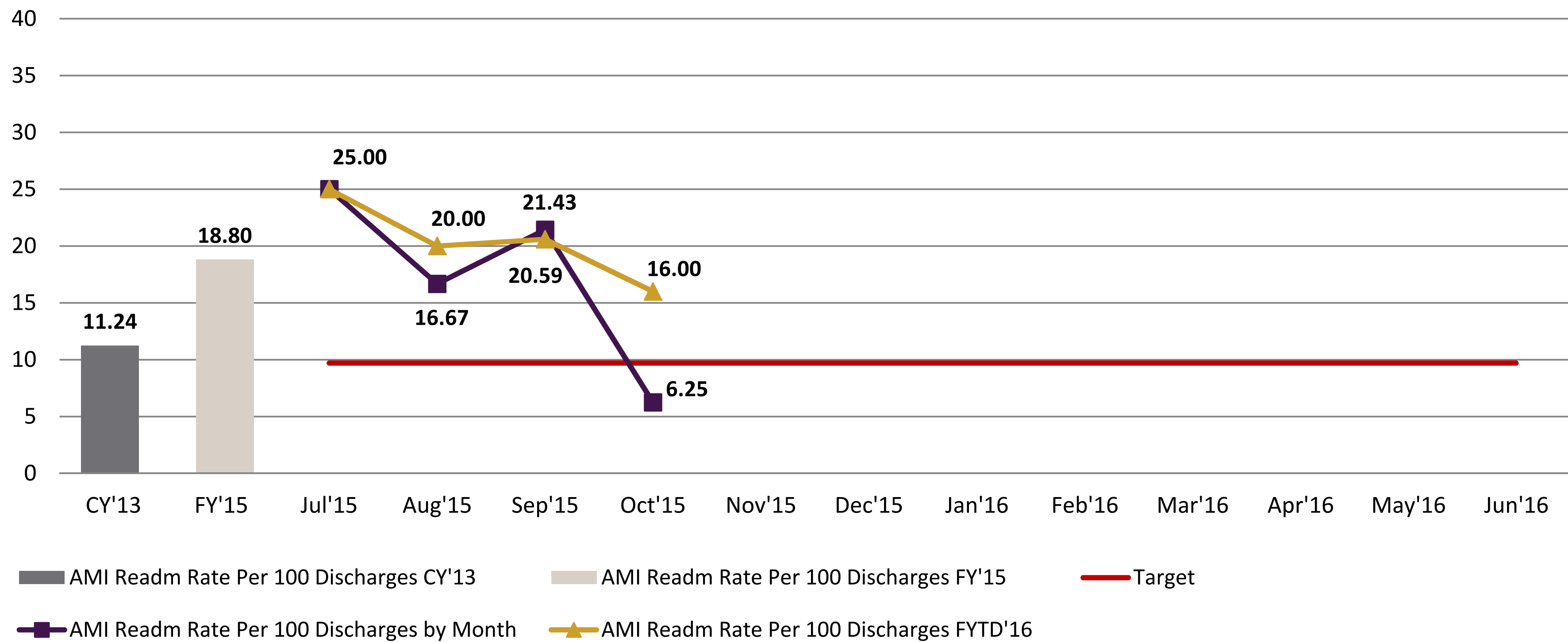
Medicare PfP Readmission Rate - CHF



Medicare CHF PfP	Jul'15	Aug'15	Sep'15	Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	Apr'16	May'16	Jun'16
All Cause Readmissions	4	5	6	5								
CHF Discharges	43	32	40	41								
CHF Readm Rate Per 100 Discharges by Month	9.30	15.63	15.00	12.20								
CHF Readm Rate Per 100 Discharges FYTD'16	9.30	12.00	13.04	12.82								

Medicare PfP Readmission Rate - AMI



Medicare AMI PfP	Jul'15	Aug'15	Sep'15	Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	Apr'16	May'16	Jun'16
All Cause Readmissions	2	2	3	1								
AMI Discharges	8	12	14	16								
AMI Readm Rate Per 100 Discharges by Month	25.00	16.67	21.43	6.25								
AMI Readm Rate Per 100 Discharges FYTD'16	25.00	20.00	20.59	16.00								

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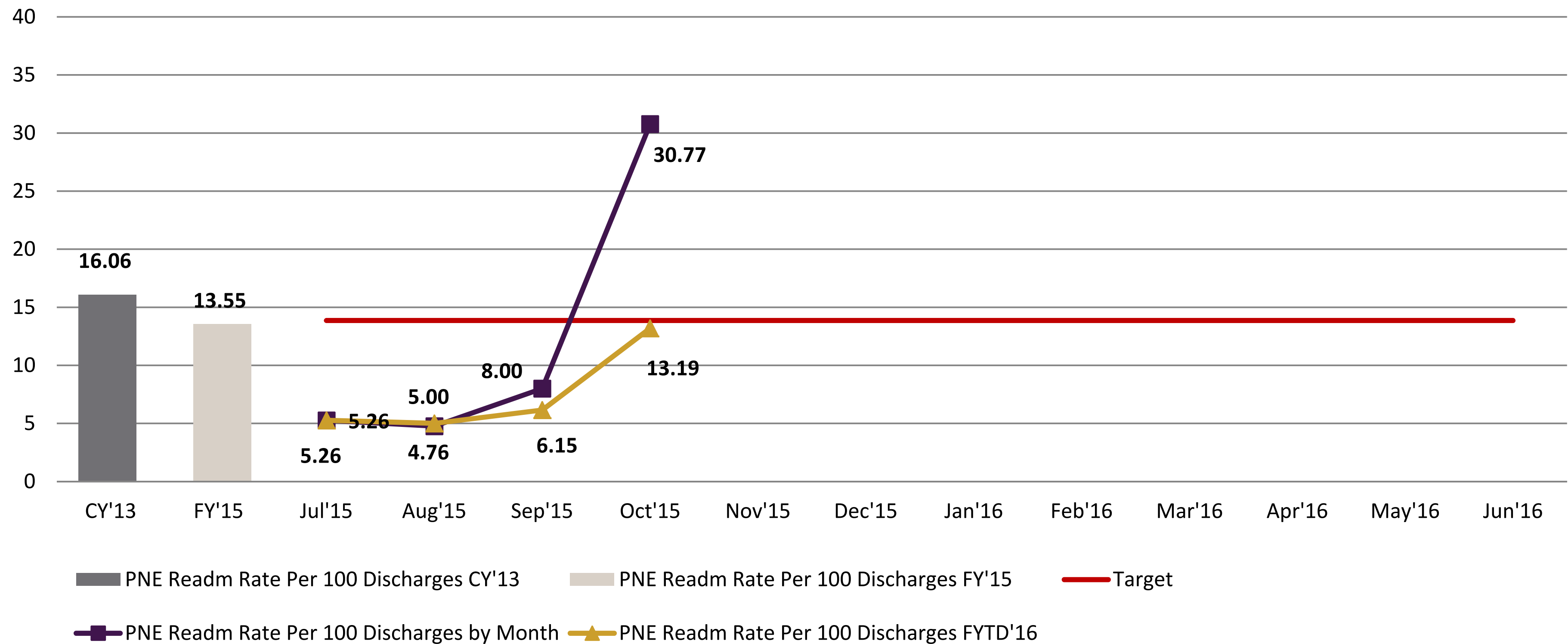
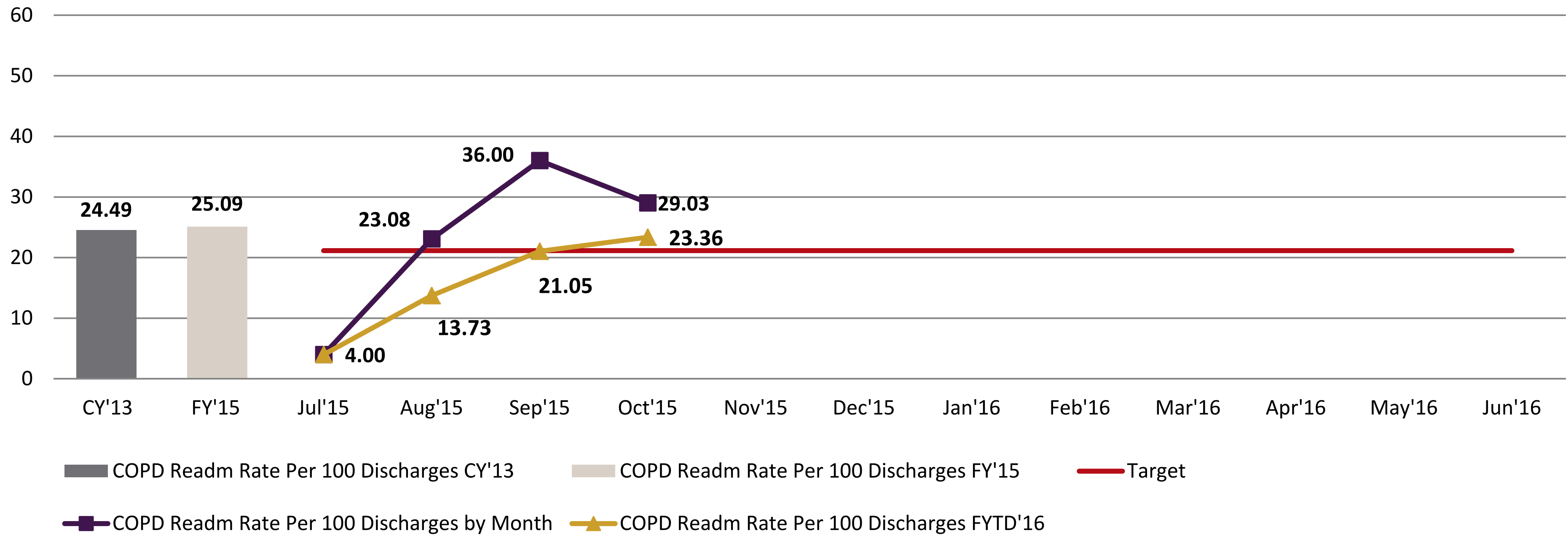
Medicare PfP Readmission Rate – Pneumonia (PNE)



Medicare PNE PfP	Jul'15	Aug'15	Sep'15	Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	Apr'16	May'16	Jun'16
All Cause Readmissions	1	1	2	8								
PNE Discharges	19	21	25	26								
PNE Readm Rate Per 100 Discharges by Month	5.26	4.76	8.00	30.77								
PNE Readm Rate Per 100 Discharges FYTD'16	5.26	5.00	6.15	13.19								

Medicare PfP Readmission Rate - COPD



Medicare COPD PfP	Jul'15	Aug'15	Sep'15	Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	Apr'16	May'16	Jun'16
All Cause Readmissions	1	6	9	9								
COPD Discharges	25	26	25	31								
COPD Readm Rate Per 100 Discharges by Month	4.00	23.08	36.00	29.03								
COPD Readm Rate Per 100 Discharges FYTD'16	4.00	13.73	21.05	23.36								

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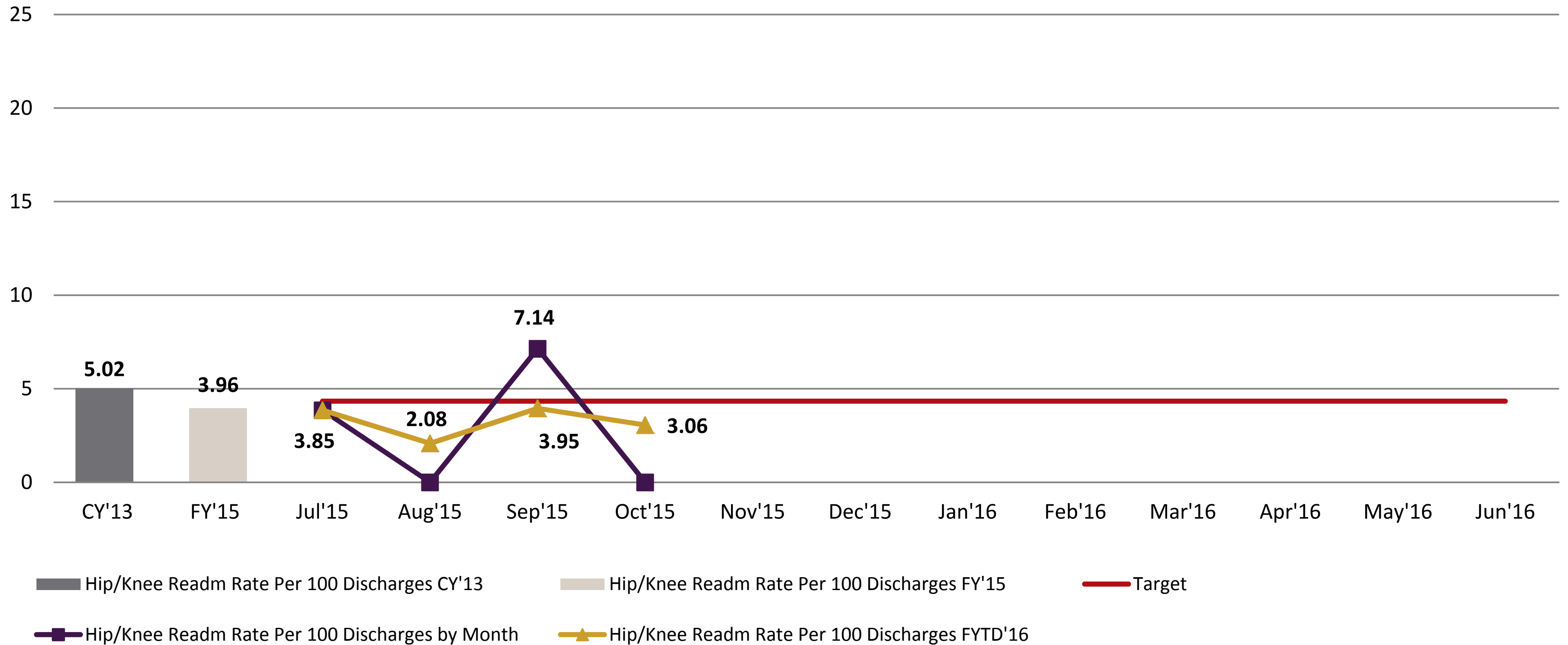
Medicare PfP Readmission Rate – Hip/Knee



Medicare Hip/Knee PfP	Jul'15	Aug'15	Sep'15	Oct'15	Nov'15	Dec'15	Jan'16	Feb'16	Mar'16	Apr'16	May'16	Jun'16
All Cause Readmissions	1	-	2	-								
Hips/Knees Discharges	26	22	28	22								
Hips/Knees Readm Rate Per 100 Discharges by Month	3.85	-	7.14	-								
Hips/Knees Readm Rate Per 100 Discharges FYTD'16	3.85	2.08	3.95	3.06								

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30-DAY REVISITS

(INTRA-HOSPITAL, UNADJUSTED)

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30-Day Revisits (All Patients) – 12 ME Oct 15

	Index Visits by Location			
	ED	IN	INO	Total
Index Visit	8,751	2,134	1,796	12,681

		30-Day Revisits by Index & Revisit Location			
		Index Visit Location			
		ED	IN	INO	Total
Revisit Location	ED	10,372	1,197	897	12,466
	IN	1,129	1,438	1,045	3,612
	INO	952	479	817	2,248
	Total Revisits	12,453	3,114	2,759	18,326

	Total Charges for Index Visits by Location			
	ED	IN	INO	Total
Index Visit	$ 4,558,031	$32,808,706	$ 6,104,006	$43,470,743

		30-Day Revisits by Index & Revisit Location			
		Index Visit Location			
		ED	IN	INO	Total
Revisit Location	ED	$ 4,494,400	$ 798,645	$ 611,716	$ 5,904,761
	IN	$ 13,339,790	$24,803,834	$10,536,372	$48,679,996
	INO	$ 4,513,557	$ 2,389,395	$ 1,972,152	$ 8,875,103
	Total Revisits	$ 22,347,747	$27,991,874	$13,120,239	$63,459,860

Potential 30-Day Revisit PAU volume.

30-Day Revisit: High Utilizers – 12 ME Oct 15

	Index Visits by Location			
	ED	IN	INO	Total
Index Visit	368	804	241	1,413

		30-Day Revisits by Index & Revisit Location			
		Index Visit Location			
		ED	IN	INO	Total
Revisit Location	ED	320	338	165	823
	IN	319	928	212	1,459
	INO	150	254	105	509
	Total Revisits	789	1,520	482	2,791

	Total Charges for Index Visits by Location			
	ED	IN	INO	Total
Index Visit	$ 251,376	$13,592,620	$1,431,290	$15,275,286

		30-Day Revisits by Index & Revisit Location			
		Index Visit Location			
		ED	IN	INO	Total
Revisit Location	ED	$ 200,974	$ 249,252	$ 125,445	$ 575,670
	IN	$ 3,812,875	$16,120,942	$2,837,029	$22,770,846
	INO	$ 940,675	$ 1,326,950	$ 600,736	$ 2,868,361
	Total Revisits	$ 4,954,524	$17,697,144	$3,563,210	$26,214,878

Potential 30-Day Revisit PAU volume.

Revisit Trend by Month (IN as Initial Location)

	30 Day Revisits by Month - All Patients													
	Nov	**Dec**	**Jan 15**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Recent Trend**	**Oct*** *(as of 9/30/15)*	**Total 12 ME Oct 15**
Index IP Admission	150	150	168	171	167	184	184	162	176	165	166	→	79	1,922
Revisit Encounter by Loc														
ER	88	84	80	98	91	127	110	102	82	70	78	→	58	1,068
IN	107	99	117	101	115	152	118	99	116	115	98	↓	29	1,266
INO	35	38	36	41	29	41	44	36	47	39	28	↓	9	423
Total Revisits	230	221	233	240	235	320	272	237	245	224	204	↓	96	2,757
Only Admits	1,028	1,106	1,184	998	1,081	1,069	1,025	1,075	1,099	1,069	1,108		1,188	13,030

Note: Revisits are caluclated on a rolling 30-day period and attributed back to the month of the index IP admission, not when the revisit occurs.

High Utilizer Revisit Trend by Month (IN as Initial Location)

	30 Day Revisits by Month - High Needs Patients													
	Nov	**Dec**	**Jan 15**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Recent Trend**	**Oct*** *(as of 9/30/15)*	**Total 12 ME Oct 15**
Index IP Admission	50	57	62	54	75	78	66	62	62	70	66	↑	19	721
Revisit Encounter by Loc														
ER	21	24	27	28	22	53	32	25	22	22	20	→	5	301
IN	58	62	77	58	85	105	71	71	69	77	55	↓	15	803
INO	24	24	14	22	17	25	28	21	15	20	14	→	3	227
Total Revisits	103	110	118	108	124	183	131	117	106	119	89	↓	23	1,331
Only Admits	86	85	104	85	89	92	85	93	96	58	70		91	1,034

Note: Revisits are caluclated on a rolling 30-day period and attributed back to the month of the index IP admission, not when the revisit occurs.

HEZ Revisit Trend by Month (IN as Initial Location)

	30 Day Revisits by Month - HEZ Residents													
	Nov	Dec	Jan 15	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Recent Trend	Oct* *(as of 9/30/15)*	Total 12 ME Oct 15
Index IP Admission	50	49	36	57	56	54	54	44	55	56	54	⇨	29	594
Revisit Encounter by Loc														
ER	33	29	16	41	32	32	34	37	26	29	22	⇨	24	355
IN	44	32	28	38	36	50	34	23	39	37	36	⇨	8	405
INO	15	14	3	20	11	15	10	8	9	14	11	⇧	3	133
Total Revisits	92	75	47	99	79	97	78	68	74	80	69	⇨	35	893
Only Admits	240	261	268	225	257	272	241	253	237	242	241		263	3,000

Note: Revisits are caluclated on a rolling 30-day period and attributed back to the month of the index IP admission, not when the revisit occurs.

RN Navigator Trend by Month (IN as Initial Location)

	30 Day Revisits by Month - RN Navigator Patients													
	Nov	Dec	Jan 15	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Recent Trend	Oct* *(as of 9/30/15)*	Total 12 ME Oct 15
Index IP Admission	38	45	50	58	59	56	51	38	51	50	39	⇩	12	547
Revisit Encounter by Loc														
ER	1	0	0	0	1	0	0	0	0	0	0	⇨	0	2
IN	56	49	60	54	62	80	53	36	42	44	31	⇩	5	572
INO	11	9	9	15	12	10	5	10	10	9	4	⇩	1	105
Total Revisits	68	58	69	69	75	90	58	46	52	53	35	⇩	6	679
Only Admits	188	225	232	204	230	226	201	188	190	166	125		150	2,325

Note: Revisits are caluclated on a rolling 30-day period and attributed back to the month of the index IP admission, not when the revisit occurs.

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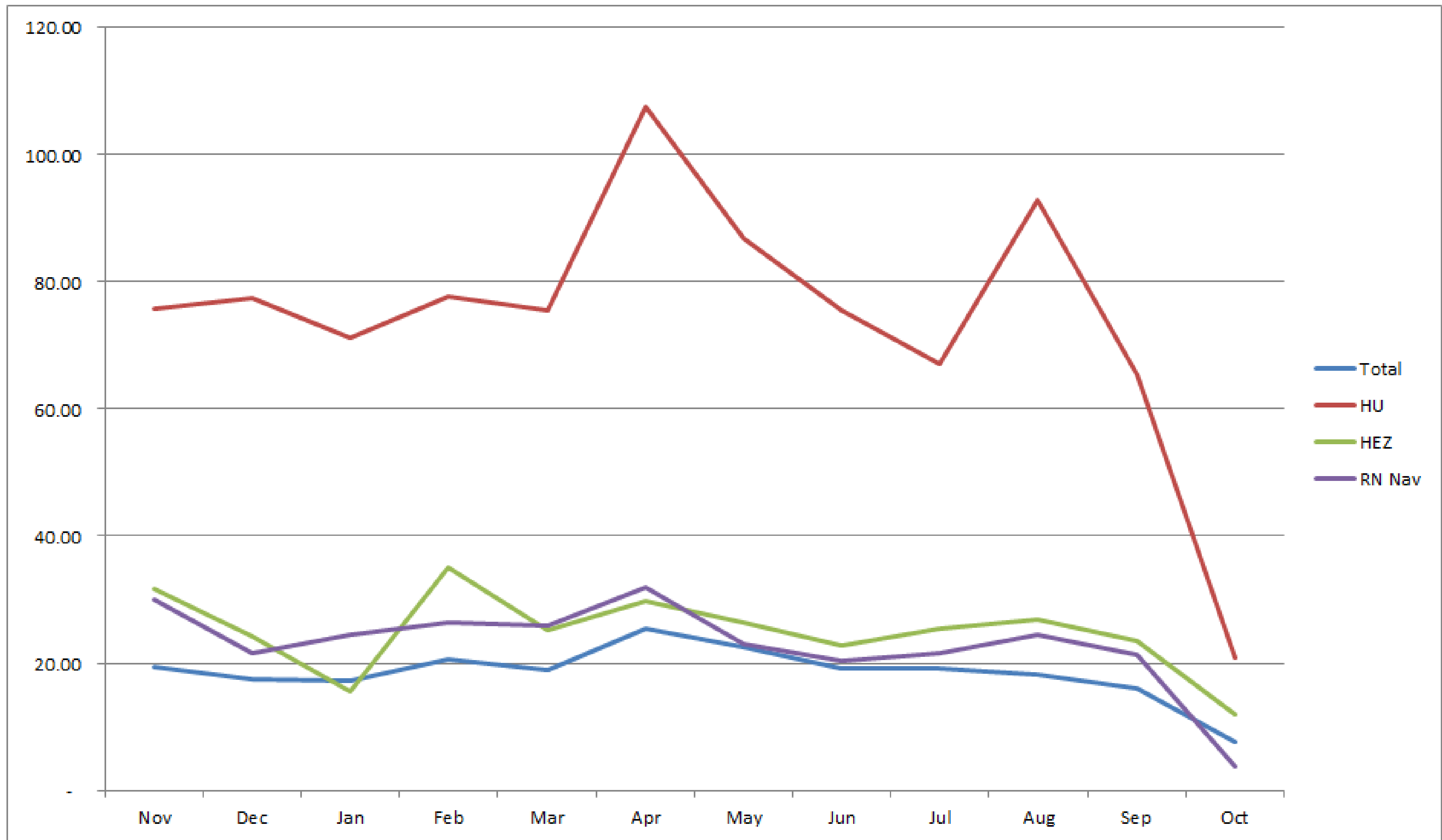
30-Day Revisit Rates by Month



Note: October 15 30-Day revisits are through Oct 31, 2015

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30-Day Revisit by Product Line

(12 ME Sep 15)

	IN Only	IN Index Admit	Revisits ED, INO, IN	Total Encounters	Revisit Rate
Medical Services					
Cardiology - Interventional	232	45	61	338	22.0%
Cardiology - Medical	1,062	233	352	1,647	27.2%
General Medicine	1,757	266	373	2,396	18.4%
GI Medical	784	177	295	1,256	30.7%
Hematology/Oncology	259	53	80	392	25.6%
Lmtd Services	13	1	2	16	14.3%
Nephrology	523	122	170	815	26.4%
Neurology	699	116	150	965	18.4%
Psych/Substance Abuse	63	10	19	92	26.0%
Pulmonary	1,211	212	328	1,751	23.0%
Subtotal	**6,603**	**1,235**	**1,830**	**9,668**	**23.3%**
Surgical Services					
Bariatrics	429	54	81	564	16.8%
General Surgery	449	86	136	671	25.4%
Major GI Surgery	135	32	56	223	33.5%
Orthopaedic	846	110	145	1,101	15.2%
Other Subspec Surg	15	3	3	21	16.7%
Plastic Surgery	25	4	4	33	13.8%
Spine	325	58	64	447	16.7%
Thoracic Surgery	53	4	4	61	7.0%
Urology	118	32	50	200	33.3%
Vascular Surgery	147	45	63	255	32.8%
Subtotal	**2,542**	**428**	**606**	**3,576**	**20.4%**
Women & Children					
Antepartum	25	11	23	59	63.9%
Births	1,342	64	75	1,481	5.3%
GYN	140	20	27	187	16.9%
Neonatal	273	29	35	337	11.6%
Normal Newborn	1,718	110	133	1,961	7.3%
Pediatrics	387	25	28	440	6.8%
Subtotal	**3,885**	**259**	**321**	**4,465**	**7.7%**
Total	**13,030**	**1,922**	**2,757**	**17,709**	**18.4%**

Note: Product line designation is based on the APR-DRG assignment of the initial IN admission.

Appendix B

Regional Partnership for Health System Transformation

Regional Transformation Plan – Final Report

Due: December 7, 2015

Regional Partner: West Baltimore Collaborative

Goals, Strategies and Outcomes

Articulate the goals, strategies and outcomes that will be pursued and measured by the regional partnership.

In order to better improve healthcare access and outcomes for patients with chronic conditions identified as high utilizers of hospital services, the four hospitals located in West Baltimore: Bon Secours, St. Agnes, University of Maryland Medical Center and University of Maryland-Midtown have collaborated to create the West Baltimore Collaborative (”WBC”). The WBC will contract with the Population Service Health Organization (“PHSO”), operated by the University of Maryland Medical System, to address the health and social concerns of individual patients who receive care from WBC member hospitals, PCPs, and other affiliated entities. The PHSO will hire and manage care team members and support staff, provide human resource functions to include record and schedule maintenance, and centralize IT infrastructure.

- The WBC will focus on a targeted patient population as defined by the criteria described below. While program participation will not be limited by a patient’s domicile, a portion of these patients who will be provided access to and benefit from the program are concentrated within West Baltimore, as defined by zip code;
- The goal of the WBC is to provide comprehensive, robust health management services to a targeted patient population of high utilizers of hospital services;
- Strategies include the development of care teams made up of an RN/Care Manager, a Social Worker, and a Community Health Worker. These teams will be responsible for the care of approximately 100 patients. Additionally, ancillary staff to include a Clinical Pharmacist would carry a caseload of 150 patients;
- Successful outcomes will be determined by patients’ ability to achieve goals established in their individualized care plans and to avoid hospital readmission and reduce utilization of hospital services.

Describe the target population that will be monitored and measured, including the number of people and geographical location.

- The targeted patient population will be comprised of patients from WBC member hospitals that meet the following criteria:
  - Medicare or Dual Eligible patients
  - In CY 2014, the patient had 3 or more bedded hospital encounters of greater than 24 hours in the following settings:
    - Inpatient

        - Inpatient Observation
        - ED
    - The patient suffers from 2 or more chronic conditions
    - The patient does not suffer from a Major Mental Health Diagnosis
        - Including Bipolarity, Schizophrenia, other Psychotic disorders
        - This criterion would ***not*** exclude mental health diagnoses of depression, anxiety, etc. Patients with these diagnoses who meet additional criteria would be eligible for the program.
- Based upon CY 2014 data of WBC members, there were approximately 1,500 patients that met the listed criteria. Future program iterations, expanding criteria to all payers, will capture approximately 3,600 patients
- Geographic consideration: patient domicile will not disqualify a patient from program participation, but each WBC member is located in and provides service to the West Baltimore community. The institutional collaboration manifested in the WBC formation will positively benefit the patient population of West Baltimore.

Describe specific metrics that will be used to measure progress including patient satisfaction, quality, outcomes metrics, process metrics and cost metrics. Describe how the selected metrics draw from or relate to the State of Maryland's requirements under the new model.

To ensure accuracy in the measurement of program success, the WBC will evaluate utilization of the balance of identified outcome, process and ROI metrics provided in the application as the program proceeds through rollout to full functionality and beyond. Understanding that the HSCRC and others, including CRISP, are still refining the recommended set of metrics, the WBC will make any necessary adjustments as the process evolves.

Programmatic Metrics will include:

- Does the patient have an appointment with a primary care provider prior to discharge and within 7 days of discharge?
- Did the patient connect with the scheduled primary care provider?
- Reduce emergency room visit rates
- Reduce readmission rates
- Was medication reconciliation completed prior to discharge?
- Was a follow-up call by the transitions team completed within 72 hours?
- Home visits within 30 days are completed
- Care Plans will be completed on all patients in care management
- HEDIS and MU measures for program
- Total hospital cost per capita
- Total hospital admits per capita
- Total healthcare cost per person
- ED visits per capita

These metrics, while focused on programs also lend to the overarching outcome metrics captured in the Core Outcomes Measures listed in Table A of the Implementation Grant Request for Proposals. Measures germane to the program, including reduction of PAU's, readmissions, and avoidable utilization of the emergency department will be captured.

Currently, based on CY 2014 WBC data, the baseline for the targeted patient population (TPP) reflects the following:

- WBC TPP
  - 1,491 Unique Patients
  - 8, 216 Total Visits
  - $130,740,898M Total Charges
- WBC TPP Revisit Information
  - Inpatient Readmissions
    - 1,540 Cases
    - $31,583,989 Charges
  - Observation Revisits
    - 346 Cases
    - $2,076,385 Charges
  - ER Revisits
    - 575 Cases
    - $680,763 Charges
- WBC TPP Prevention Quality Indicators
  - 677 Cases
  - $11,115,755M Charges

Additionally, there are efforts underway to identify and align with metrics across institutions citywide. These efforts will be further explained in the grant application. See Note (1), below.

Describe the regional partnership's current performance (target population) against the stated metrics.

In the first year, the West Baltimore Collaborative's targeted patient population is focused on approximately 1,500 patients; this is a combination of Medicare high utilizers and Dual Eligibles age 50 years and above. This target patient population has had 3 or more bedded encounters within the past 12 months. Patients are medically complex and without a major mental health diagnosis. The metrics which have been outlined above are geared towards care coordination and care management activities which will impact the utilization of the acute care setting.

Define the data collection and analytics capabilities that will be used to measure goals and outcomes.

Please see Data and Analytics section, in the subsection describing the regional partnership's plan for

capturing CRISP data. It is located on page 7 of this report.

List the major areas of focus for year one. (For the completion of this plan, if various areas of focus require different descriptions, please identify each area under the following sections of the plan.)

Within the first several months of funded operation, the WBC will bring organizational infrastructure online and begin program operations, endeavoring to meet the following schedule:

- Upon grant award,
  - Patients identified as eligible will be contacted
  - Securing program's physical space will occur
  - A refresh of inter-hospital data to confirm accuracy of metrics and patient capture
  - If necessary, program scalability will occur
  - Model implementation for Medicare and Dual Eligible Patients will commence at the member institutions
  - Candidate evaluations based upon prior position publication will commence
  - WBC appoints interim program Director to provide day-to-day leadership during recruitment process
- Within 30 days of grant award
  - Participating hospitals will execute a Memoranda of Understanding, which will dictate member association and organizational structure
  - FQHCs, hospital-affiliated practices and community-based physicians will begin to execute Participation Agreements
  - Vetting of potential hires will continue, and the beginning of the hiring process will commence
- Within 60 days of grant award
  - Initiation of practice assessments to identify practice needs and provide appropriate resources and support
- Within 90 days of grant award
  - Enrollment of patients into the program will begin
- Within 6 months of grant award
  - Analysis of captured data metrics will begin
  - Patient and Provider surveys will begin
- Within 9 months of grant award
  - It is anticipated that 75% of the target population will be enrolled
- Within 12 months of grant award
  - Evaluation of program performance will begin
  - Considerations will be made regarding expansion of the targeted patient population
  - Finalize budget for year 2

Formal Relationships and Governance

List the participants of the regional partnership such as hospitals, physicians, nursing homes, post-acute facilities, behavioral health providers, community-based organizations, etc. Specify names and titles where possible.

WBC primary participants will be the four hospitals located in West Baltimore, collaborating via executed Memoranda of Understanding.

- University of Maryland Medical Center (University and Midtown campuses))
  - Dana Farrakhan, SVP, Strategy, Community and Business Development
- Saint Agnes Hospitals-
  - F. Joseph Meyers, CSO
- Bon Secours Hospital
  - Katie Eckert, Director of Operations Finance

Additional participants and collaborators, many of whom have submitted letters of intent to participate in the WBC's mission include:

- Mercy Medical Center
  - Christopher Thomaskutty, Chief of Staff & SVP, Clinical Programs
  - Michael Mullane, Senior Advisor to the President & CEO
- St. Agnes Medical Group
  - Patrick Mutch, Interim President and CEO
- Total Healthcare
  - Faye Royale-Larkins, CEO
- Baltimore Medical System (BMS)
  - Shirley Sutton, President/CEO
- Chase Brexton
  - Richard Larson, CEO
- University of Maryland Rehabilitation & Orthopedic Institute
  - Cindy Kelleher, CEO
- University of Maryland, Faculty Physicians, Family Medicine
  - David Stewart, M.D., Chair
- Bon Secours affiliated physicians
  - Arsalan Sheikh, D.O., Chair, BSHS Department of Medicine
- University of Maryland, Faculty Physicians, Community Psychiatry
  - Jill RachBeisel, MD
- B'more Clubhouse
  - Jason Woody, Executive Director

Describe the governance structure or process through which decisions will be made for the regional partnership. List the participants of the structure/process.

The WBC will utilize the following governance structure

- West Baltimore Governing Council
  - Core membership will be CEOs, CFOs, CMOs and CIOs from Saint Agnes, Bon Secours, and UMMC (University and Midtown campuses)
  - Providing advisory resources and stakeholder perspectives to the Governing Council will be 2 panels:

- Community Advisory Committee
    - Medical Advisory Committee
  - Management Committee
    - Committee will directly manage activities of the WBC as it provides for patients
    - Committee will consist of 6 members (finance, care management and strategy) from the participating hospitals/health systems plus the WBC Director
    - The Committee will also manage the contract with the Population Health Services Organization ("PHSO")
      - The PHSO will provide patient services through the following mechanisms
        - Care management teams
        - Manage relationships with PCPs
        - Oversee network of providers
        - Collect patient data, review analytics and program performance

Identify the types of decisions that will be made by the regional partnership.

Decisions made by the WBC, through its governance structure will include

- Decisions regarding the scope of partners' and participant involvement
- Monitoring programmatic design to achieve targeted patient and financial outcomes
- Monitoring funds flow
- Directing decisions regarding program management
- Directing decisions on vendor contracts
- Decisions affecting savings management

Describe the patient consent process for the purpose of sharing data among regional partnership members.

- Upon determination of program eligibility by Collaboration member and WBC staff, identified patients will be enrolled during hospitalization, or shortly after discharge. Patients may also be identified by participating PCPs.
- There will be a standard enrollment form used by WBC staff advising patients of the program's data collection and sharing among the regional partners.
- Any sharing of data will be for the express purpose of patient care coordination and management

Describe the processes that will be used by the regional partnership to improve care and the MOUs or other agreements that will be used to facilitate the legal and appropriate sharing of care plans, alerts and other data as described in the process.

Data-sharing procedures among Collaborative members will be contained in executed MOUs. The WBC will also enter into an agreement with CRISP to capture and maintain data for enrolled patients.

Attach the list of HIPAA compliance rules that will be implemented by the regional partnership.

The sharing of patient level data will be governed by BAAs that will be executed among all parties participating in the WBC. Further HIPAA compliance rules regarding data collection, storage and security protection are currently covered by the existing policies and procedures of the WBC member organizations. A complete review of these policies and procedures will be complete to ensure

compliance within the operations of the WBC. Similar to the operations in the WBC member organizations, access to patient level data will be provisioned based on a staff member's roles and responsibilities in the patient care and/or program evaluation.

Data and Analytics

Define the data collection and analytics capabilities that will be used to measure goals and outcomes, including specific metrics and measures.

Data collection and analytics will be completed by analysts hired by the West Baltimore Collaborative via the PHSO. This will be an effort that combines CRISP, the West Baltimore medical records, publically available data, and data collected by care teams and PCPs.

Describe with specificity the regional partnership's plan for use of CRISP data.

Once MOUs have been signed between the participating entities, CRISP will provide a consolidated PATH report to the WBC. This will be used to support the WBC's targeted care management efforts. Additionally, the WBC will provide a panel of patients to CRISP in order to track the utilization of patients enrolled in the WBC program. This will enable the WBC to track utilization (including readmissions and other PAU metrics) and savings across the four hospitals of the collaborative and across the state of Maryland for enrolled patients. This will also enable the WBC and participating care providers to receive ENS alerts for WBC patients. The WBC is also working closing with CRISP to develop Care Profiles and Care Plans in CRISP. The WBC plans to communicate critical care management information via this new CRISP capability.

Risk Stratification, Health Risk Assessments, Care Profiles and Care Plans

Describe any plans for use of risk stratification, HRAs, care profiles, or care plans. Describe how these draw from or complement the standardized models being developed.

- Care profiles will be utilized via CRISP on all patients
- Care plans will be created by the primary care provider/care team and uploaded into CRISP
- Expectation that efforts to standardize ambulatory care plans across the WBC will continue
- HRA's will be completed by care managers and/or the transitions of care team
- Risk stratification will be completed by the health system
- Each of these tools will draw upon CRISP which is in the process of standardization across the state

For risk stratification, include the types of patients, risk levels, data sources, accountabilities (who is accountable to do what?)

- Assessments will be conducted on the identified high utilizer patients
- Risk stratification will be conducted by an RN Care Manager, and stored in CRISP or an

informatics and workflow program available to the WBC.

Data will be pulled from the EMR, where applicable. The accountable party will be the analyst who will be pulling data

For HRAs, include the types of screenings, who is accountable for completing, and where information is recorded.

- HRAs will be completed and recorded in the patient's medical record
- The RN/Care Manager and other members of the care management team are responsible for completing the HRA during the initial visit with the patient following program enrollment

For care profiles and/or care plans, include the key elements that will be included, the systems through which they will be accessible, the people who will have access. Standardized care profiles are anticipated to be developed by the state-level integrated care coordination infrastructure.

- Comprehensive, individualized care plans for WBC patients, in consultation with PCPs, will incorporate and contain the following elements:
  - Patient assessment and identification of health concerns
  - Tasks
  - Treatment goals
  - Timelines
  - Responsibilities of patient
  - Barriers
  - Disease management guidelines
  - Identified Providers and services
- Care profiles will include information regarding the patient's:
  - Lifestyle
  - Clinical history
  - Psychosocial Issues
  - Patient and family education and engagement
- Care Plans will be accessible by WBC team members responsible for the patient, and PCPs providing treatment. Parties will continually monitor the plan's efficacy
- Care plans will be accessible via CRISP

Identify the training plan for any new tool identified in this section.

All training will come through the PHSO, any new tools that are utilized by the West Baltimore Collaborative will be produced and implemented by the PHSO and training will be given on those tools.

Care Coordination

Describe any new care coordination capabilities that will be deployed by the regional partnership.

The WBC will contract with the University of Maryland Population Health Services Organization ("PHSO") to provide comprehensive care management services to enrolled participants. The PHSO will hire staff to provide services exclusively to WBC participants. These staff members, consisting of RN/Care Managers, Social Workers and Community Health Workers will be joined as teams, tasked with managing the care of about 100 patients. Teams will:

- assist the patient in obtaining a PCP
- complete HRAs
- coordinate care for those patients already seen by a PCP,
- perform medication reconciliation, HRA, risk stratification
- provide health education services,
- maintain a calendar of scheduled appointments and document results,
- follow the patient into the community to address social welfare needs

Team members will engage patients:

- While hospitalized
- By embedding in PCP practices, where appropriate
- At the patients' residences
- Via telephonic contact

The WBC will also maintain an information hub allowing remote contact by patients, providers and team members. The hub will employ a clinical pharmacist to complete medication reconciliation, an IT manager and Analysts to support evaluation and data analysis.

Identify the types of patients that will be eligible for care coordination and how they will be identified and by whom.

Patients eligible for care coordination will be those individuals identified by the WBC's target patient population criteria. These patients will be identified by:

- WBC member staff while admitted to the hospital;
- By WBC team members:
    - Engaging patients at the hospital
    - Embedded in participating PCPs
    - Via telephonic health services

Define accountability of each person in the care coordination process.

Each member of the care team will be responsible for assisting patients in coordinating their care. Tasks will include:

- Obtaining appointments for patients with their primary care physicians when needed

- Assisting patients in establishing obtainable patient goals, to manage their symptoms and disease process
- Making appropriate referrals for services including substance abuse and mental health

Programmatic metrics will be established to monitor productivity of the care team and their progress with their patients.

Describe staffing models, if applicable.

The following staff members will be hired by the UMMS PHSO as employees dedicated to the activities of the WBC.

Care Management Team

RN/Care Manager

- Licensed individual who does the following:
  - Assesses and enrolls patients into the program
  - Conducts and/or telephonic follow-up or home visits to educate patients on medications, chronic illness and sign and symptoms
  - Use teach-back method and motivational interviewing
  - Works with patients to establish a care plan and establishes goals with patient to engage patient in their own plan of care
- Requires clinical assessment skills, advocacy, joint care planning with other providers and the use of motivational and teach-back skills
- In a primary care setting (under the auspices of a PCP)
  - can assist patients and review with them their illness
  - help to identify patient needs
- In a community setting:
  - can be called upon by patient to discuss illness signs and symptoms
  - help patients get into the PCP for urgent visit
  - work with physicians to have patient take an urgent dose of medication
  - Educate patients on diet and lifestyle changes
- Work with other team members to bring needed resources to the patient
  - Social workers
  - Behavioral health professionals
  - Community health workers

Social Worker (SW)

- Works to aid patients to obtain financing for medications, health care or other social needs
- Works to provide other community resources such as meals on wheels, or senior housing
- Helps with placement in post-acute care facilities (if needed)
- Helps to obtain behavioral health resources
- Serves as a behavioral coach or as a behavioral health resource
  - A portion of the SW team members will be trained and certified in Behavioral Health

Community Health Worker

- Assists the RN and or SS worker to help patients get to appointments
- Assists care team in ensuring patients are adhering to medications
- Visits patient in community in between visits of RN or SW
- Assist the care team in reinforcing patient engagement and care plan goals
- Promotes nutrition and personal care
- Some healthcare screening

WBC Staff

WBC Senior Director

  - Oversees all care coordination or care management activities
  - Accountable to WBC Governance Council and hospital members for overall program performance
  - Helps to assign patients
  - Ensures work load are distributed appropriately
  - Ensures team quality and training
  - Measures team productivity

Clinical Pharmacist

- Works to ensure medication reconciliation is completed on all patients
- Advises physicians of correct dosing, other drug interactions and supervision of drug usage and dosing in therapeutic procedures
- Works with the care team in renewal of prescriptions
- Helps with providing education for patients
- Helps high risk patients with obtaining generics or other prescription options

Practice Transformation Experts

- Use of data, registries, quality data, cost data, etc. to assess practices
- Assuring availability of practice to patients (hours, urgent care, call center, etc.)
- Imbedding of practice guidelines for chronic diseases and other common conditions
- Expanding span of in-office procedures
- Patient and family engagement
- Shared decision making and advanced care planning
- Getting the most out of specialist care
- Managing transitions of care
- Creating teams and getting all staff “to practice at the top of their license.”

IT Team/Analysts

- Provide phone and computer connectivity
- Manage software used to attribute patients to Care Management teams
- Maintain central data resource of patients’ records and appointments

- Conduct data analytics and tracks and publishes performance dashboards which include identified program metrics

Describe any patient engagement techniques that will be deployed.

Care team members, including community health workers, will engage in:

- Extensive education and training focused on addressing needs of diverse patient population to effectuate change in health behavior
- Motivational interviewing
- Development of teach-back method

Physician Alignment

Describe the methods by which physician alignment will be created.

Physician alignment in the WBC will be created via collaborative requirements conditioned on participation, including:

- Sharing patient data with WBC members and CRISP
- Participation in quality improvement activities
- Meeting HIPAA requirements
- Utilizing CRISP tools and reports
- Providing availability to targeted patients
- Collaborating and partnering with care coordination team and complex care practice guidelines

Further efforts undertaken by the WBC will include:

- Assisting physicians to work to the top of their license
- Developing of clinical protocols
- Investigating the availability of the Chronic Care Management fee based on HSCRC research
- Assessing practice needs
- Providing additional staff and services, as needed

Describe any new processes, procedures and accountabilities that will be used to connect community physicians, behavioral health and other providers in the regional partnership and the supporting tools, technologies and data that will assist providers in the activities associated with improved care, cost containment, quality and satisfaction.

The WBC will seek input from the Medical Advisory Committee, which provides advisory services to the WBC Governance Committee. Made of PCP representatives from FQHCs, hospital-employed physicians, UM Faculty Practices and UM Rehab and Orthopedics, and Independent PCPs, the committee will suggest additional methods of creating and strengthening alignment, in addition to those listed above.

Describe any new value-based payment models that will be employed in the regional partnerships

Similar to the HSCRC's evaluation of the permissibility of using Value Based Payments, the WBC is currently evaluating ways to successfully engage PCPs by way of value-based payments for program participation and looks forward to working with the HSCRC to achieve shared goals.

Organizational Effectiveness Tools

Attach the implementation plan for each major area of focus (with timelines and task accountabilities)

The implementation plan for the WBC is currently under development and will be included in the WBC implementation grant application.

Describe the continuous improvement methods that will be used by the regional partnership.

The WBC is uniquely positioned to engage in constant, direct patient monitoring from the hospital to the community. Methods for program improvement are built directly into the entity structure:

- Team members will be able to directly evaluate patients in a variety of environments and adjust treatment plans in real time to maximize effectiveness
- The information hub component will allow for programmatic outcomes of patient data, enabling comparison to program metrics to established benchmarks and targets
- The Medical and Community Advisory Committees will provide clinical and communal expertise, ensuring successful process refinement
- The governance structure will allow collaborators to address variances to goals rapidly and directly
- Performance dashboard will be developed for monitoring metrics

Attach a copy of the metrics dashboard that will be used to manage performance over time with an explanation of associated processes that will be used to monitor and improved performance.

When the HSCRC finalizes performance metrics, the WBC will develop specific outcome, programmatic and financial measures as listed above. A performance dashboard will be operational at the time of program start-up. The dashboard will be subject to monthly review by the WBC Program Director and Management Committee, with specific input on metric evaluation from the Community and Medical Advisory Councils.

Describe the work that will be done to affect a patient-centered culture.

The WBC is implementing a complex care management program centered around the medical and social needs of patients. Care Management teams will integrate with PCPs to assist patients achieve the highest health and quality of life.

New Care Delivery Models

Describe any new delivery models that will be used to support the care coordination outcomes. (For instance, tele-visits, behavioral health integration or home monitoring.)

- The care team will bring together health and community social resources to provide comprehensive care services to patients outside of the hospital. The mobility of the care team allows for continual patient contact and assessment, and reduces travel burden on the patient
- Contact will be maintained through team home visits
- If a home visit is not practicable, the WBC central information hub will permit telephonic services by care team members if a personal visit with the patient is not practicable
- The data collection services and the IT infrastructure

Identify how the regional partnership will identify patients, new processes, new technology and sharing of information.

Patients will have eligibility determined by evaluations based upon the target patient population criteria. This screening will be specific to the location of the patient:

- For hospitalized patients, high-level screens will be conducted by hospital staff. A referral will then be made to a WBC team member, who will conduct a comprehensive patient evaluation, provide program information, and secure patient enrollment
- For patients at PCPs that have a high volume of eligible patients in the practice, embedded WBC care management members will assist in enrolling eligible patients at the practices
- The central information hub will allow providers to contact staff members, who will assign potential patients to care teams, who will conduct full evaluations

- The WBC will endeavor to have all PCPs within the WBC enroll with CRISP thus enabling data-sharing within the WBC. We note, however, that we may need to prioritize enrolling key PCPs within WBC with CRISP based on resources available to CRISP.

Financial Sustainability Plan

Describe the financial sustainability plan for implementation of these models.

- Detailed financial and budget analysis will be contained in final grant application
- Current financial analyses yield anticipated savings within 3-5 years that may enable expansion of services beyond Medicare and Dual Eligibles to all-payers
- With a reduction in PAUs, it is anticipated there will be savings to be reinvested in the Collaborative's efforts
- Per the estimated Return on Investment calculation, we are expecting to reinvest savings into model expansion, to eventually capture high utilizers in all payers

Describe the specific financial arrangements that will incent provider participation.

- Physicians who participate with the WBC in the care of chronic care Medicare patients would be eligible for Medicare's Chronic Care Management reimbursement amount
- The WBC is actively seeking mechanisms to reward providers for successful patient outcomes e.g. pay for performance within the limits of financial and legal feasibility
- Detailed financials will be provided in the final grant application

Population Health Improvement Plan

Provide detailed description of strategies to improve the health of the entire region over the long term, beyond just the target populations of new care delivery models. Describe how this plan aligns with the state's vision, including how delivery model concepts will contribute and align with the improvement plan, as well as how it aligns with priorities and action plans of the Local Health Improvement Coalitions in the region.

The WBC is working with the hospitals across Baltimore City to devise compatible systems of care to attend to the medical and social needs of patients. The hospitals are collaborating in several important areas including care profiles, metrics and patient assignment for care management. Further, the Baltimore City Hospitals Community Benefit Collaborative is another important forum that seeks to improve the health of residents of Baltimore City. Representatives of the Community Benefits programs of most of the city hospitals meet once a month to discuss how the hospitals can work together to maximize the impact of our collective community health improvement efforts. This collaborative is considering whether it is possible to effectively combine and capitalize on efforts related to their Community Health Needs Assessments and Community Health Implementation Plans. The group prioritizes social determinants of health, and for the coming year has committed to focus on health literacy, and specifically on messages encouraging positive engagement with the healthcare system by establishing a relationship with a primary care provider. The goal is to help people understand how to

use the healthcare system effectively, which will reduce ED and inpatient utilization.

NOTES:

(1) The University of Maryland Medical Center was the lead applicant for this planning grant proposal and Johns Hopkins Hospital was the lead applicant on another. Since the time of the initial award, and in fact during the development of the proposals, the two partnerships have been committed to working together, knowing that many high-cost, high-use patients visit multiple hospitals across the City, and that the goals of the partnership cannot be achieved without improving health and lowering costs for all City residents. One of the goals of the planning process—and a charge to us by the HSCRC/DHMH staff when the planning grants were awarded—was to identify the areas that most lend themselves to being developed jointly. This was explored during meetings of the Alignment Committee, with participants from both partnerships. The Committee identified Patient Attribution, Care Plans/Care Profiles, and Quality Measures as priority areas for joint development. The results of the work of the subcommittees addressing these areas will be described in the Implementation Grant Application.

(2) The information contained in this text reflects current analyses, processes and thinking of the WBC. Minor changes to the proposed operation may be reflected in the final implementation grant submission.