TEMPLE UNIVERSITY HOSPITAL

Community Health Needs Assessment
Implementation Plan

FY20 Progress Report

TEMPLE HEALTH
TEMPLE UNIVERSITY HOSPITAL

CONTENTS

Fiscal Year 2020 Progress Report Highlights 2

Plan to Address Diabetes & Obesity 3

Plan to Improve Mental Health Resources & Education 7

Plan to Improve Disease & Care Management 9

Plan for Violence Reducation & Intervention 14

Plan to Improve Substance Use Disorder Treatment Integration 15

Plan to Improve Health of Moms & Newborns 17

FISCAL YEAR 2020 PROGRESS REPORT HIGHLIGHTS

During Fiscal Year 2020 (FY20), Temple University Hospital achieved significant progress on 2019-2022 Community Health Needs Assessment Implementation Plan goals despite the COVID-19 pandemic. To reduce behavioral healthcare barriers and increase access, we added a Psychiatrist and 18 Psychiatry residents to our clinical team. In response to the Opioid Crises, our certified recovery specialist (CRS) implemented measures to improve patient engagement workflow efficiency. We also increased staff training on warm handoffs and our number of primary care providers with buprenorphine waiver training. These tactics resulted in increases of 146.9% in CRS engagements, 500 more warm handoffs, 50% greater buprenorphine prescribed or given and over 25% additional clinicians prescribing buprenorphine when compared to FY19.

In addition to our expansion of substance use disorder treatment services, we trained over 900 Philadelphia school district officials on life saving bleeding control techniques to address rising violence in schools through a new partnership with the City of Philadelphia and Tactical Medical Solutions. Our violence intervention programs also grew with the launch of our 24-hour *Trauma Support Advocate Program* that connected hundreds of violent crime victim with counseling and other social supports to aid with post-trauma recovery & community re-integration. In FY21, we will continue expanding virtual and other web-based services and programs to meet the needs of our vulnerable communities during the COVID-19 pandemic.

PLAN TO ADDRESS DIABETES & OBESITY

Program 1: *Diabetes Prevention Program (DPP)*

Goals:

1. Enhance access to Temple's Center for Population Health's (TCPH) *DPP* at various locations including community based locations and health system campuses.
2. Increase number of community members receiving information from *DPP* curriculum and other resources to help them make healthy lifestyle changes reducing their risk of developing type 2 diabetes and improve overall health.

Implementation Team:

- *DPP Coordinator & Trainer, TCPH* - Edoris Lomax
- *Director of Population Health, TCPH* - Ronni Whyte MS, BSN, RN

Objectives:

1. Increase number of participants enrolled in *DPP* from communities across TUHS catchment area.
2. Increase *DPP* participant retention rate by 5%.
3. Expand current *DP*P to 2 additional locations in catchment area.
4. Increase volume of participants from health plans, Temple Physicians Incorporated, Temple Faculty Practice Plan, Temple University Hospital employees and community members by 5%.

Summary of Tactics Implemented:

- From October 2014-October 2018, TCPH in collaboration with the City of Philadelphia, participated in a CDC-funded grant to provide free *DPP* classes at various locations in our catchment area, primarily serving the North Philadelphia region. The program focused on training Community Health Workers (CHWs) to serve as lifestyle coaches for pre-diabetes, hypertension and obesity management.
- In October 2019, TCPH recognized the DPP supported Type II Diabetes reduction onset and continued the program.
- In FY20, the TCPH *DPP* Coordinator obtained a Medicare provider number to strengthen access to services for Medicare beneficiaries.
- *DPP* partnered with Health Partner Plans, Keystone First and United Health Communities to provide services for their Medicare and Medicaid member populations.
- *DPP* partnered with Temple University Health System Benefit Services to provide DPP classes to employees at no cost to employees.
- Beginning in March 2020 due to the COVID 19 pandemic, all DPP classes were offered remotely using Zoom or WebEx technology.

Outcomes:

- *DPP* class offerings expanded to two (2) locations in North Philadelphia, including Lutheran Settlement House for community members & Temple Administrative Services Building for employees.
- *DPP* sessions continued in North Philadelphia at Temple University Hospital, in Northeast Philadelphia at Temple University Hospital - Jeanes Campus; and in Center City Philadelphia for Law Enforcement Health Benefits (LEHB).
- *DPP* retention rate increased over 5% compared to FY19 pending 21 enrollees graduation as shown in **Figure 1** below.
- *DPP* participants lost an average of 5.2% of their body weight measured at program completion as shown in **Figure 1** below.
- Due to COVID-19 pandemic, we were unable to increase overall participant volume by 5%; however, we still enrolled the following from October 2019- July 2020:
  - 25 Temple Employees
  - 20 TPI Employees
  - 20 Community Members

CDC-Funded Grant with the Philadelphia Department of Health 10/1/2014 – 9/30/2018					
Grant Year	**Classes**	**Enrollees**	**Currently enrolled**	**Graduates**	**Avg. Weight Loss**
Year 1	4	36		11	
Year 2	8	157		69	
					Avg. Weight Loss Data Submitted to the CDC for Year 1-2: 4.6%
Year 3	9	144		60	
					Avg. Weight Loss Data Submitted to the CDC for Year 3: 5.9%
Year 4	9	99		44	
					Avg. Weight Loss Data Submitted to the CDC for Year 4: 6.9%
Post Grant Reporting 10/1/2018 – 9/2020					
Year 1 (10/2018 – 10/2019)	5	150		29	
					Avg. Weight Loss calculated: 5.6%
Year 2 (8/2019 – 8/2020)	7*	101	51	21 enrollees scheduled to graduate 8/2020	
					Avg. Weight Loss 5.2%

**due to COVID 19 pandemic, all classes were converted to virtual*

Conclusions & Next Steps: Temple's *DPP* program expanded locations offerings and increased participant retention despite the COVID-19 pandemic. Beginning in March 2019, we offered classes remotely using Zoom or WebEx technology to ensure safe program continuation for enrollees during the pandemic. To further the success of the *DPP* in FY21, we will:

1. Expand *DPP* contracts with Medicare, Health Partners Plan, Keystone First, and United Health Communities.
2. Continue goal to increase *DPP* participant volume by 5%.

3. Participate in city wide *Philadelphia Diabetes Prevention Collaborative*.
4. Expand *DPP* to offer additional in person and virtual class options.

Program 2: *Diabetes Education*

Goal: Expand access to Diabetes education classes and related initiatives at TUH's Main, Episcopal, Northeastern and Jeanes campuses.

Implementation Team:

Executive Sponsors

- *Executive Director, TUH – Episcopal Campus* - Kathleen Barron
- *Section Chief, Endocrinology, Diabetes and Metabolism, TFP* - Jonathan Anolik, MD

Team Members

- *Manager, Diabetes Program, TUH* - Casey Dascher
- *Educator, Diabetes Program, TUH* - Lindsey Verano
- *Educator, Diabetes Program, TUH* - Christine Luby
- *Educator, Diabetes Program, TUH* - Adrienne Liccketto
- *Vice President, Operations, TUH – Episcopal Campus* - LuAnn Kline
- *Administrator, Diabetes Center*, TUH – Northeastern Campus - Hernan Alvarado

Objectives:

1. Increase diabetes class attendance by 5-10%
2. Demonstrate reduction of HgA1c by 1.5 among students who complete program

Summary of Tactics:

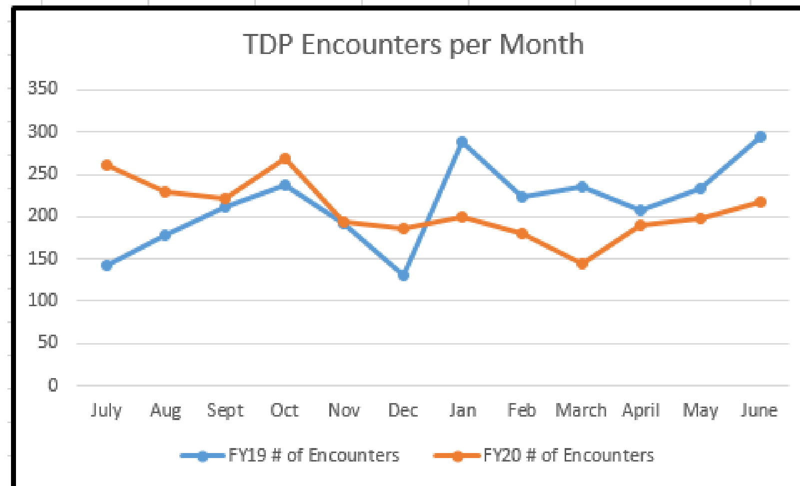
- Implemented text reminders for appointments and classes
- Diabetes educators are now in the same practice as endocrinology and in three (3) other TPI primary care settings. This increased referral to *Diabetes Self-Management Education and Support (DSMES)* classes and improved cooperative efforts between medical and educational/support services to lower HgA1c levels.
- Patients were scheduled for classes in the endocrinology office, rather than waiting for a telephone call on another date.
- Scheduling now completed in our online scheduling platform with upcoming appointments viewable in EPIC for providers to remind patients of upcoming *DSMES* services and dates.
- Adrienne Liccketto, RN, BSN, CDE implemented a new Spanish language *DSMES* curriculum to provide more culturally appropriate services for the Latinx North Philadelphia population, improving class participant retention.

- Patient's physicians are contacted for medication recommendations if a patient's BG levels remain elevated during class despi te lifestyle changes.

Outcomes:

- The *Diabetes Program* saw a decrease of 3% between FY19 and FY20. In March 2020 when the COVID-19 pandemic began, we saw a large drop in referrals and had to cease all classes and in-person visits. We restarted in April with individual telehealth appointments and virtual classes.
- Participants who completed classes in FY20 had an average a1c reduction of 1.7, meeting and surpassing our objective it.

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	AVG per Month
FY19 # of Encounters	142	178	211	238	192	131	288	224	235	208	233	294	215
FY20 # of Encounters	260	229	222	269	193	185	200	179	144	189	198	218	207
												% Change	-3%



Conclusions & Next Steps: The *Diabetes Program's* DSMES classes consistently show an improvement in HgA1c average reduction of at least 1.5 for participants completing the class series. In FY21, we are looking to improve access to classes by incorporating a telehealth curriculum. We have already seen increases in DSMES telehealth appointments attended by those under the age of 55 and among male participants. We are also considering adding educational services in additional TPI offices and will be offering 2 additional virtual DSMES class series for the Salus Eye Institute.

PLAN TO IMPROVE MENTAL HEALTH ESOURCES & EDUCATION

Goal: Expand mental health treatment beyond hospital walls while increasing access to treatment across all levels of care. Increase care transition linkages and patients with warm handoffs from TUH to other care levels.

Strategy Team Lead: *Director of Behavioral Health, TUH –Episcopal Campus*, - LJ Rasi

Summary of Tactics Implemented & Outcomes:

- **Tactic:**
  1. Psychiatrist with Board Certification in Addictions Medicine was recruited and began working in our Crisis Response Center (CRC) in January 2020.
  2. Eighteen (18) additional Psychiatry Residents joined Temple's Psychiatry Residency teaching program in September 2019 following closure of local teaching hospital.
  3. Education was provided to Residents, Social Workers, CRC staff and others on therapeutic benefits of warm handoffs.
  4. Linkage Reports on door-to-door CRC care transitions and inpatient units were developed and refined.
  5. OwlCrowd funding drive launched in Fall 2019 to support transportation needs of patients to next level of care.
  6. Collaboration with community agencies remains ongoing to improve linkages.
  7. TUHS continued collaboration with Collaborative Opportunities to Advance Community Health (COACH), with focus on trauma-informed care incorporation into staff training and care delivery.

- **Outcome:**
  1. Addition of Psychiatrist in CRC also providing coverage for outpatient provider on campus helped smooth patients transition to medication assisted treatment (MAT) and intensive outpatient services.
  2. Additional Residents improved coverage in CRC and inpatient behavioral health units and allowed for additional rounding in outpatient sites resulting in more patients seen and expanded services.
  3. Staff now have greater understanding of how warm handoffs mutually benefit patients and hospitals by improving patients transition into and compliance with next level of care leading to improved treatment outcomes, reduced readmissions and healthcare cost savings.
  4. Linkage reports assessed performance of staff and agencies in increasing warm handoffs. Assessments used to determine who successfully increased warm handoffs and those in need of improvement. This helped identify best practices for increasing warm handoffs and staff and agencies in need of assistance to improve future performance.
  5. OwlCrowd funding drive exceeded goal raising over $7,000 for improved transportation linkages. Funds were raised just prior to beginning of COVID-19 pandemic after which transportation services decreased while providers began more tele-treatment. Funds will be utilized more widely when pandemic lessens and in-person treatment increases again.
  6. Collaboration with agencies was impacted by the COVID-19 pandemic. From December to March, Temple's Episcopal Campus leadership met with two large rehab providers and two large outpatient providers to help ease transitions and build a network

of preferred providers. The last of these meetings was moved from in-person to virtual as the pandemic grew. Staff from many sites began working from home, making it difficult to arrange further meetings and achieve our goal of getting leadership from all preferred providers together to discuss common challenges and opportunities. We anticipate this work will be accomplished in the coming year.

7. Work with COACH was progressing until March; the focus of the collaborative then shifted to the COVID-19 response. Efforts at improving trauma-informed care resumed in July through virtual sessions and training opportunities.

Conclusions & Next Steps: As a result of the above tactics, warm handoffs increased in FY20's first three quarters with an average of 238 per month in Q1, 273 in Q2 and 285 in Q3, before declining to 173 per month in Q4 due to the COVID -19 pandemic. Beginning in March, social distancing efforts in our CRC and unplanned tele-treatment increases yielded this significant drop. Despite this, our primary goal of increasing warm handoffs by 500 cases in FY20 over FY19 was achieved. As we work through the quickly changing and challenging healthcare environment, we will continue to pursue virtual warm handoffs opportunities until normal operations resume.

PLAN TO IMPROVE DISEASE & CARE MANAGEMENT

Goals:

1. Heighten community awareness of Temple University Health System (TUHS) clinical services including primary care networks, disease specific programs and care management resources.
2. Increase patients utilizing Care Transitions Team members of Community Health Workers, Nurse Navigators, and Social Workers at Temple University Hospital (TUH).
3. Increase patients enrolled in longitudinal care management.
4. Screen patients for social determinants of health disparities and link to community based organizations.
5. Improve appointment adherence post discharge.
6. Improve care transitions for patient discharged from inpatient hospitalization to next care site.

Strategy Team Leads:

- *Senior, Vice President, Population Health, TCPH* - Steven R. Carson MHA, BSN, RN
- *Director, Population Health, TCPH* – Ronni Whyte MS, BSN, RN
- *Director, Quality and Compliance* – TPI – Alyssa Mullen, MHA

Objectives:

1. Increase post-hospital, discharge follow-up appointment adherence to primary care 10%.
2. Improve medication adherence 5% for patients discharged from hospital.
3. Reduce hospital readmission rate 5% for low acuity admissions.

Summary of Tactics Implemented & Outcomes:

1. To meet our community's complex needs, the Temple Center for Population Health (TCPH) Community Health Worker programs at TUH continue to expand and diversify. This team is outward facing to the community and works directly with hospital staff to prevent readmissions. The team consists of five CHW's, a registered nurse, and social worker. The team provides in hospital intake and at home/community based visits to patients identified as having complex social and medical disparities.
2. The TCPH Longitudinal Care Management team provides post discharge follow up calls and interventions to patients affiliated with Temple Faculty Practice (TFP) and Temple Physicians Incorporated (TPI) primary care physicians using a nurse navigator and community health worker dyad. The team uses a risk stratification model that accounts for multiple factors related to patient outcomes and health. Selected patients are followed and managed from transitions of care after hospital stay through a longitudinal multi-month care management phase to assist with long term healthcare needs such as medication adherence, biometric improvement (A1C, LDL, etc.), and disease management.
3. With a focus on improving medication adherence and reconciliation, the care management teams in concert with TPI quality improvement team worked with health plans to identify individuals in need of reminders to fill their chronic care medications.

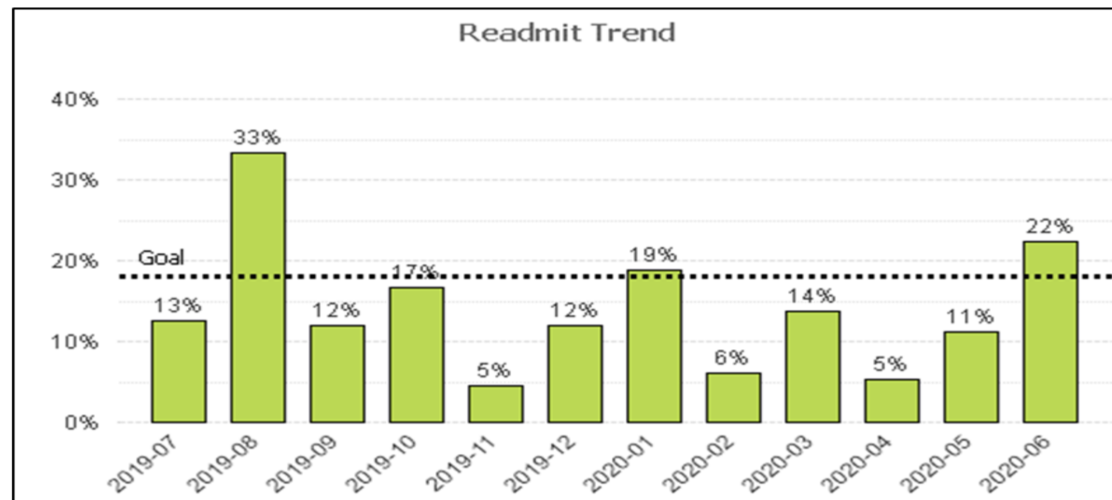
The team also focused on patients who unable to attend post discharge office visits within 7 days. For these patients the team performed outreach and performed medication reconciliation telephonically.

4. TPI and TCPH have focused on building an integrated behavioral health program in TPI primary care practices to provide outpatient behavioral health care management. A licensed clinical social worker was hired in June 2020 and TPI contracted with a consulting psychiatrist from TFP to support TPI primary care offices. The social worker focuses on behavioral health and chronic health condition management to improve overall patient health outcomes with an active caseload of 73 patients.
5. Using a contract vendor, chronic care management was expanded to 16 TPI primary care practices. The vendor now completes telephonic chronic care management assessment, disease management and education, and care planning with patients. The vendor also enrolls patients in a behavioral health care management program, if appropriate, and coordinates access to resources and follow-up with primary care providers. In compliance with CMS requirements, the vendor performs post-discharge outreach calls with three goals in mind: 1) Complete medication reconciliation post-discharge; 2) Coordinate transitions of care visit; and 3) Address any post-discharge needs or questions patients may have.

Care Management Metrics

Readmissions

Community Health Worker Program											
CHW	Patients	Avg Charlson Score	Patient w/ CHW Home Visit	Patient Home Visit %	Patient w/ Post ED Visit	Patient w/ ED Visit %	Patient w/ Post Admit	Patient w/ Post Admit %	Patients w/ Post Readmit	Patient Readmit %	Services Performed
Total	441	3.4	114	25.9%	96	21.8%	80	18.1%	59	13.4%	4,373



Patients enrolled in the community health worker transition of care program, have constantly performed better than readmissions goal, except for August 2019, January 2020 and June 2020.

Temple Longitudinal Team Dashboard for September 2020

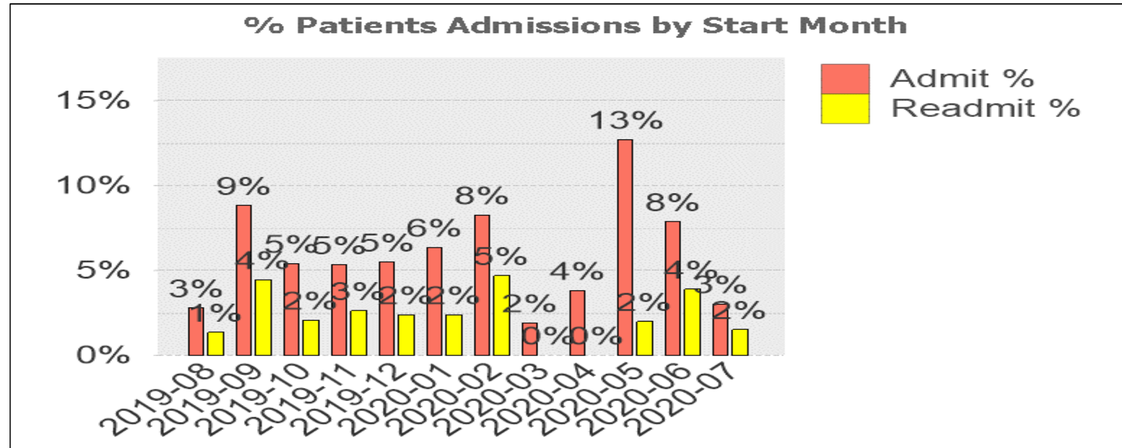
All Patients starting August 2019 - July 2020

Utilization is 30 days after enrollment date

**Appointment Scheduling data is TPI only*

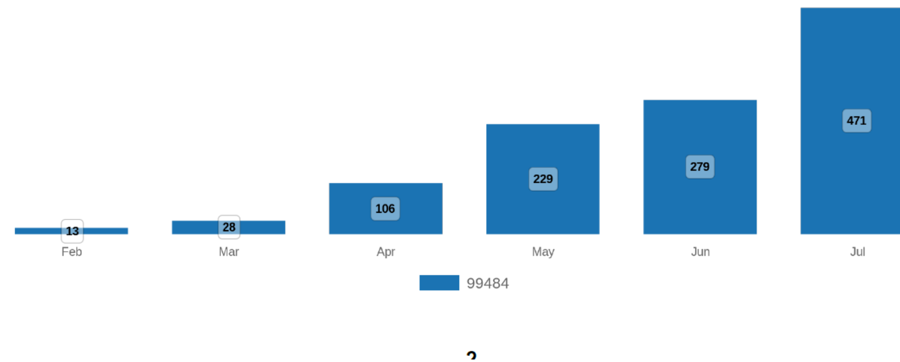
Participating Patients

Care Pathway Owner	Patients	Avg Patients per Month	Avg Charlson Score	Avg Days	Patients Admitted	Patient Admitted %	Patients Readmitted	Patient Readmit %	Patient Appt Scheduled	% Patient Appt Scheduled	Patient Show Rate	Care Plans Created	Plan Created %
Overall	1142	95	3.5	37	76	6.70%	28	2.50%	429	38%	78%	988	86.50%



Patients enrolled in the longitudinal care management program showed reductions in admissions and readmissions. Patients were on service an average of 37 days and had a physician appointment rate of 86.5%.

Behavioral Health Integration



Vendor outreach initiated in February 2020, data demonstrates month over month improvement in services provided to Temple's primary care practices. YTD over 16 practices have services imbedded.

STARS Improvement Measures

13% medication reconciliation improvement post discharge of 63% as of July 2020 YTD compared to 50% in CY19.

Social Determinants of Health Assessment Program

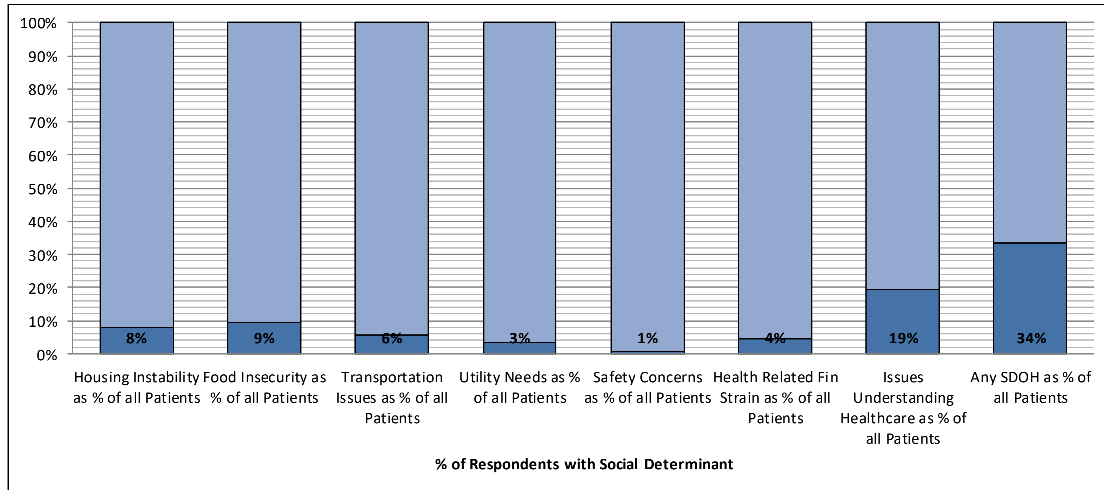
Temple University Health System implemented a Social Determinants of Health Assessment program (SDOH program) across its hospitals and facility practice plan primary care practices. Patients are screened during medical office visits, inpatient hospital stays and through community outreach for social determinants using an assessment tool embedded in our electronic medical record EPIC system. The tool was developed by a multidisciplinary workgroup based on the CMS accountable care model recommendation and contains 10 questions on food insecurity, housing, transportation, utilities, finances, healthcare literacy, and safety. The tool also includes referral resources to address unmet needs identified. We connect patients in need with community resources through Southern Pennsylvania 211, a United Way organization that assist individuals living in Bucks, Chester, Delaware, Montgomery and Philadelphia counties, with the identification of social supports in their communities including food, utility assistance clothing, and shelters, among others.

Patients screened between March 2019-July 2020 responses are provided in charts below. Primary determents identified include housing instability, food insecurity and healthcare literacy.

Participated Patients Overview:

Total Patients	14,423
Patients w/ Housing Instability	1,136
Patients w/ Food Insecurity	1,361
Patients w/Transportation Issues	807
Patients w/ Utility Needs	473
Patients w/ Safety Concerns	98
Patients w/ Health Related Fin Strain	640
Patients w/ Issues Understanding Healthcare	2,803
Patients w/ any SDOH	4,852

Housing Instability as % of all Patients	8%
Food Insecurity as % of all Patients	9%
Transportation Issues as % of all Patients	6%
Utility Needs as % of all Patients	3%
Safety Concerns as % of all Patients	1%
Health Related Fin Strain as % of all Patients	4%
Issues Understanding Healthcare as % of all Patients	19%
Any SDOH as % of all Patients	34%



Conclusions & Next Steps: There was significant improvement in care transitions and disease management during FY20. In FY21, we will continue to focus on reducing unnecessary hospitalization and increasing outpatient primary and specialty care services to further improve our patients' health outcomes though:

1. Continue to expand behavioral health integration within primary care practices
2. Collaborate with TFP Psychiatry department to potentially expand access to behavioral health care professionals and partner with additional consulting psychiatrists.
3. Monitor and improve medication reconciliation metrics and adherence and focus on readmissions reduction. Explore opportunities to better utilize technology, such as text message reminders to engage patients.
4. Assess outcomes of first group of patients enrolled in *Longitudinal Care Management Program*. Metrics include depression screening score, HbA1c value, ED utilization, IP utilization and readmissions, and medication adherence.

PLAN FOR VIOLENCE REDUCATION & INTERVENTION

Goal: Strengthen awareness of dangers of violence to reduce hospitalizations, barriers to preventative health care, and to improve quality of living in our underserved community.

Strategy Team Leads:

- *Trauma Outreach Coordinator, Trauma Program* - Scott Charles
- *Chief of Surgery, TUH* - Amy Goldberg, M.D.

Summary of Tactics Implemented & Outcomes:

- **Tactic:** Temple University Hospital's (TUH) continued its violence prevention and intervention programs in FY20 designed to educate Philadelphia's youth about dangers of gun violence (*Cradle to Grave*), how to provide first aid to gunshot victims (*Fighting Chance*), promote use of gun locks (*Safe Bet*), and link victims of violent crime to resources that will assist in meeting their social, emotional, and financial needs before they leave the hospital (*TUH Trauma Support Advocate Program*).

- **Outcome:**
  - Collaborated with the Philadelphia's Juvenile Justice Center to deliver a series of *Cradle to Grave* presentations specifically modified for incarcerated teens in the facility's high school program.
  - Delivered the *Cradle to Grave* presentation to more than 700 Philadelphia residents, including increased number of adjudicated youth residing in North Philadelphia area.
  - Hosted *Fighting Chance* trainings to teach bleeding control techniques to community members residing in violence-plagued North Philadelphia neighborhoods.
  - Partnered with City of Philadelphia and Tactical Medical Solutions to train over 900 school district nurses, administrators and public safety officers on life saving bleeding control techniques.
  - Distributed more than 800 free gun locks to Philadelphia residents during community events hosted by local law enforcement agencies and community organizations.
  - Distributed more than 100 free gun locks through collaboration with TUH's emergency department that allows patients and visitors to request a free firearm safety device from doctors and nurses.
  - Launched new 24-hour *Trauma Support Advocate Program* that referred more than 380 victims of violent crime to community-based victim advocacy programs serving the North Philadelphia region.

Conclusions & Next Step: Our surrounding North Philadelphia communities continue to be receptive to our violence intervention initiatives. During FY21, we will begin adapting our violence prevention and intervention interventions to address the new socially distant reality due to the COVID-19 pandemic. These adaptations will include web-based versions of *Cradle to Grave* presentations and *Fighting Chance* trainings. We will also work with family-serving organizations such as food pantries to help get gun locks into more homes.

PLAN TO IMPROVE SUBSTANCE USE DISORDER TREATMENT INTEGRATION

Goals:

1. Establish 24/7 Certified Recovery Specialist (CRS) coverage in all Temple University Health System (TUHS) Emergency Departments (ED).
   - Work with ED leadership to ensure effective patient flow.
2. Deploy level of care pre-assessment (LOC) in CRS workflow.
3. Engage EPIC team to review current SUD monitoring infrastructure and modify based on needs specified in goals.
4. Launch "SUD Warm Handoff Collaborative" to support transition of SUD patients treated in TUHS's acute care units to next appropriate level of behavioral health care.
5. Introduce Medication Assisted Treatment into Temple University Hospital - Episcopal Campus's Crises Response Center (CRC) and utilize 23-hour observation status for purpose of improving patient recovery.

Strategy Team Leads:

- *Project Manager, TCPH* - Patrick Vulgamore
- *Director, Behavioral Health, Temple Episcopal* – Luciano Rasi
- *Drug and Alcohol Clinical Supervisor, Temple CRC* – Danny Rivera

Objectives:

1. Increase number of SUD patients seen by CRS team compared to prior year.
2. Increase number of waived providers compared to prior year.
3. Increase ratio of SUD patients linked to next appropriate-level provider successfully.

Summary of Tactics Implemented & Outcomes:

1. Contracts with the City of Philadelphia's Department of Health and Department of Behavioral Health and Intellectual Disability Services (DBHIDS) Office of Addiction Services (OAS), the single county authority, were updated to reflect expansion of funding available to TUHS to staff a certified recovery specialist team. TUHS engaged a subcontractor to create more efficient CRS engagement workflows resulting in:
   a. 146.9% increase in total number of CRS engagements (from 345 to 852) comparing FY'19 to FY'20.
   b. 45% successful warm handoffs average in FY20 compared to 33% in FY19. *This estimate is conservative due to fact it is difficult to track appointment adherence for patients referred to external outpatient programs.*
2. CRS LOC pre-assessment was deployed and aided in increased patient throughput from ED placement.
3. EPIC team produced actionable reports allowing for on-demand access to analytics gauging effectiveness of SUD best practice treatment interventions deployment.
4. Concurrent efforts were launched in outpatient, inpatient rehab and skilled nursing facility settings to support a "Warm Handoff Collaborative." Subject matter experts engaged with each level of care via regular calls to discuss patient volume, review handoff pathways, and ensure referral sites were providing best practice treatment. TUHS also expanded capacity to provide Office Based

Opioid Treatment (OBOT) internally through continued efforts to increase number of Temple Physician Practice group primary care providers with buprenorphine waiver training. TUHS is on track to waive 100% of primary care providers by the end of calendar year 2020. When comparing FY'19 to FY'20, relevant statistics include:

   a. 49.1% increase in buprenorphine prescribed or given (4814 to 7177).
   b. 31.9% increase in number of individual clinicians who administered or prescribed buprenorphine (420 to 554).
   c. 26.1% increase in number of clinicians who prescribed buprenorphine (115 to 145).
   d. 28 primary care physicians completed buprenorphine waiver training between May-June 2020 alone.

5. Partnership with Merakey, an onsite addiction medicine office providing induction, intensive outpatient and inpatient rehab resulted in increased efficiencies in linking CRC SUD patients to next most appropriate level of care. Although buprenorphine induction volume in our CRC remains low, we will continue to pursue opportunities and partnerships to increase CRC patients direct access to MAT. A 23-hour observation status has been utilized in the CRC should psychiatric treatment needs present in order to identify the most appropriate next level of care, further contributing to increase in successful warm handoffs.

Conclusions & Next Steps: Based on the progress we have made over the last year noted above, we have learned how we can modify our goals to strive for more SUD best practice treatment integration across our campuses by pursuing the following:

1. Expand access to the American Society of Addiction Medicine Assessment for patients to expedite placement into next most appropriate level of care.
2. Mobilize a SUD care management team, including continual expansion of certified recovery specialists aimed at 24/7 coverage.
3. Continue collaborations with our federal, state and local government partners and community based organizations to support funding stream alignment and sustainability of our treatment systems.

PLAN TO IMPROVE HEALTH OF MOMS & NEWBORNS

Goals:

1. Maintain *Sleep Awareness Family Education at Temple (SAFE-T)* program, which provides education to mothers regarding safe infant sleep practices and free "Baby Boxes" - functioning bassinets that provide babies a safe place to sleep.
2. Promote breastfeeding through patient, family, peer support and nursing staff education programs.
3. Increase patients' compliance with pre-natal care.
4. Initiate taskforce to explore delivery of care models to enhance care delivery in prenatal practice with goal of increasing compliance with prenatal visits. (i.e. "Centering" prenatal care, which involves development of groups of women of similar gestation to provide women with a support group).

Implementation Team:

- *Associate Vice President, Nursing* - Kim Hanson, BSN, RNC-OB
- *Chief Nursing Officer* – Angelo Venditti, DNP, MBA, RN
- *Chairman, OB/GYN* - Enrique Hernandez, MD
- *Division Director, Maternal Fetal Medicine* – Wadia Mulla, MD
- *Unit Based Medical Director*, *Post-Partum* - Gail Herrine, MD

Objectives:

- Improve breast feeding initiation to rate of 75% over next year.
- Increase breastfeeding exclusive to rate of 30% over next year.
- Continue to provide baby boxes to all mothers who deliver and have babies discharged at Temple University Hospital (TUH).

Summary of Tactics Implemented:

- Continue *SAFE-T* program and disseminate safe infant sleep practices research. Research alternative vendors for Baby Boxes due to past vendor closing. Identify at risk families and provide safe sleep spaces (travel bassinet).
- Actively participate in *Pennsylvania Perinatal Quality Collaborative* to reduce maternal morbidity and mortality and improve care and outcomes for postpartum women and newborns.
- Continue support of City of Philadelphia's *MOM program*, which connects mothers and their babies from birth through their 6th birthday with social, educational, and healthcare supports.
- Continue *Center of Excellence for Opioid Use Disorder* to care for pregnant and other women facing addiction.
- Obstetrics faculty applied for NIH R01 Grant to increase breastfeeding rates. Pursue other grant opportunities continuously.
- Provide focused breast feeding education for attending obstetricians and resident physicians online through Open Pediatrics' *Bella Breastfeeding* program.
- Initiated new monthly breastfeeding class at Temple University Hospital taught by members of Breastfeeding Resource Center
- Used Lindenheim Grant money to purchase formal education booklets to provide breastfeeding mothers as resource.

- All Obstetrics and Pediatrics offices continued seeing patients via telehealth during pandemic to ensure care was not affected.
- Project Management Office launched study to improve Fetal Center's efficiency through examining wait times, order placement and no show rate
- Partnered with Holy Redeemer to provide maternal fetal medicine physician coverage for high risk patients.
- Partner with Federally Qualified Health Clinics to improve access to Maternal Fetal Medicine High Risk Clinic and Fetal Center.
- Partner with the Philadelphia Department of Public Health program, *Above and Beyond*, to provide community support and resources for patients with OUD.
- Developing taskforce to identify efficiencies and growth opportunities for out-patient clinics to enhance delivery of care in prenatal practice and increase compliance with prenatal visits. Taskforce will include practice plan administrators, OB/GYN physician leadership, PMO and hospital leadership. Group will also look at opportunities to grow OB/GYN service line and ways to streamline patients experience and financial efficiencies.

Outcomes:

- Invited to present at 2020 Pediatric Academic Society meeting. Two abstracts accepted for poster presentation of research on longitudinal use of baby box and reduction of high risk behaviors associated with Sudden Infant Death Syndrome (SIDS).
- Successfully purchased 220 travel bassinets from new vendor through Snider Grant for families in need of safe infant sleep spaces.
- Lewis Katz School of Medicine at Temple University awarded Multisite NIH R01 Grant for $2,168,359 to increase Temple University Hospital obstetrical patient breastfeeding rates.
- Awarded Keystone 10 Mini –grant for $8,000 to teach hand expression in prenatal offices and develop focus groups to identify education needs in patient population.
- Taskforce kick-off meeting will occur in September 2020
- Due to the COVID-19 pandemic, we were limited in our ability to reach goals for increasing breastfeeding initiation and exclusive rates and OB/GYH office visits scheduled and arrived:
  - Breastfeeding Initiation Rate increased .7% to 73.40% in FY20 compared to FY19.
  - Exclusive Breastfeeding Rate decreased -2.5% to 15.76% in FY20 compared to FY19.
  - OB/GYN office visits scheduled decreased -12% to 83,426 in FY 20 compared to FY19.
  - OB/GYN office visits arrived decreased -12% to 83,426 in FY 20 compared to FY19.

Conclusion & Next Steps: Although our original "Baby Box" vendor went out of business in FY20, we secured an alternative supplier to provide travel bassinets to families in need of a safe space to sleep for their newborn. Though our partnership with the *Pennsylvania Perinatal Quality Collaborative*, we are learning to focus our quality and clinical efforts on providing evidence based care proven to improve post-partum hemorrhage outcomes. Together we are enhancing care delivery to families affected by Neonatal Abstinence Syndrome and Opioid Use Disorder across the Commonwealth. During FY21 we will work towards creating more accessible outpatient visits through:

1. Utilize newly formed taskforce to identify opportunities to serve more members of our community.
2. Hire three (3) new OB/GYN's to offer more appointments.
3. Examine how to incorporate a midwifery practice for patients desiring a low intervention birth.