

The Health Care Improvement Foundation
2019 Delaware Valley Patient Safety and Quality Award
Entry Form

1. Hospital Name

Temple University Hospital – Temple University Health System

2. Title Of Initiative

Opioid Stewardship in an Opioid Epidemic

3. Abstract (Please limit this description to 250 words.)

Pennsylvania is among the states with the highest rates and frequency of opioid related deaths (2016; 2235 deaths; 42 vs 22/100,000 nationally). In 2017, 1217 unintentional drug related deaths occurred in Philadelphia, and 623 acute hospital admissions were attributable to non-fatal opioid related overdose. Also in Philadelphia, 12,000 individuals are in treatment for opioid addiction; 70,000 individuals are actively using heroin; 168,000 individuals are using opioids and 500,000 individuals are using any prescription opioid. Although sales of opioids have begun to trend down, sales remain historically high. In addition, the highest concentration of overdoses occurs in north-central Philadelphia.

In this context, an enterprise-wide task force was convened and the Strategy for Addiction Medicine was developed. This program was implemented in coordination with municipal and state agencies to address prevention, treatment and recovery services. Broad goals included: a) improved access to medication assisted treatment; b) prevention and harm reduction through community engagement; c) improved opioid addiction risk assessment and mitigation; d) appropriate physician prescribing practices in the inpatient and ambulatory settings; e) updated medical education and inter-professional education and f) employee wellness. To achieve these goals, working sub-committees were formed in 2016 across the health system. Primary areas of focus were at the main academic facility and the behavioral health facility as well as among all specialists and community practice physicians. Since 2016, a 44% reduction in ambulatory prescribed opioids has been achieved across the health system.

4. What were the goals of your initiative?

The measurable goal of this initiative is overall reduction in opioid prescribing practices by identifying prescribing practices with physician specific data and feedback. The larger population health goal includes reducing the social burden of opioid addiction by intervening directly with individuals who struggle with substance abuse disorders.

5. What were the baseline data and the results of your initiative?

From 2014 to 2018, this academic health center and hospital system demonstrated a 44% reduction in total morphine milligram equivalents (MMEs) prescribed per year.

Virtually every specialty substantively decreased the use of prescribed opioids. Alternative regional and adjunctive anesthetic techniques increased 225% in the same time period from 550 to 1300 per year, supporting reductions in post-operative opioid utilization. Over the five years, the majority of opioids were prescribed by medical departments, as compared to surgical departments. From 2014 to 2018, the annual MME's prescribed by medical departments decreased 42.2%. A slight increase was observed from 2016 to 2017 associated with increased utilization of Pain Medicine and Palliative Care services. From 2014 to 2018, surgical departments demonstrated a 70.8% ($p < 0.001$) decrease in opioid prescribing, with consistent year-over-year decreases.

6. Describe the interventions that were instrumental in achieving the results for your initiative.

The Substance Abuse Task Force deployed and coordinated multidisciplinary initiatives to improve access to treatment and appropriately decrease opioid prescribing patterns. Funded by a Pennsylvania Department of Health Comprehensive Medication Assisted Treatment Program Grant, a multidisciplinary addiction medicine “hub and spoke” model was implemented. The goals were to: a) increase access to medication assisted treatment (MAT) by linking ten spoke clinics into the training and resources available at the hub; b) linking acute and ambulatory patients with community resources to provide MAT; c) training providers in the use of MAT; d) providing standardized guidelines for pain management and opioid prescribing reduction, and e) addressing behavioral and social work services to address the social determinants of health.

7. Describe the key steps required to successfully replicate this initiative throughout the region. (Please limit this description to 100 words.)

To achieve an overall reduction in opioid prescribing and identification of prescribing practices requires physician specific data and feedback. Consensus from both the medical staff and medical staff leadership is necessary to support opioid stewardship through rational clinical practices. Physician participation is required at all phases to ensure that key stakeholder concerns are addressed. Contemporaneous reporting as well as aggregate reporting keeps physicians well informed about their prescribing practices. Developing sustainable reporting structures and processes is essential to share understandable information appropriately. Each of these steps is replicable and important because no organization can singlehandedly “solve” the opioid epidemic.

8. Explain how the initiative demonstrates innovation (Please limit this description to 100 words.)

This program was innovative in the multidisciplinary, ground up approach. Instead of top-down mandates regarding patient safety indicators, DVT prophylaxis orders, and clinical documentation requirements, this program was designed around specific patient needs and perceived barriers. Incentives for both, staff and patients, gamesmanship, and the pleasure to be gained by simply walking a dog enabled all participants to be enthusiastic about engaging in this collaborative approach to care. Improved outcomes

and the act of sending congratulatory emails to attending surgeons when their patients won an “Awesome Ambulator” award facilitated universal faculty support.

9. How does this initiative demonstrate collaboration with other providers within the continuum of care? (Please limit this description to 100 words.)

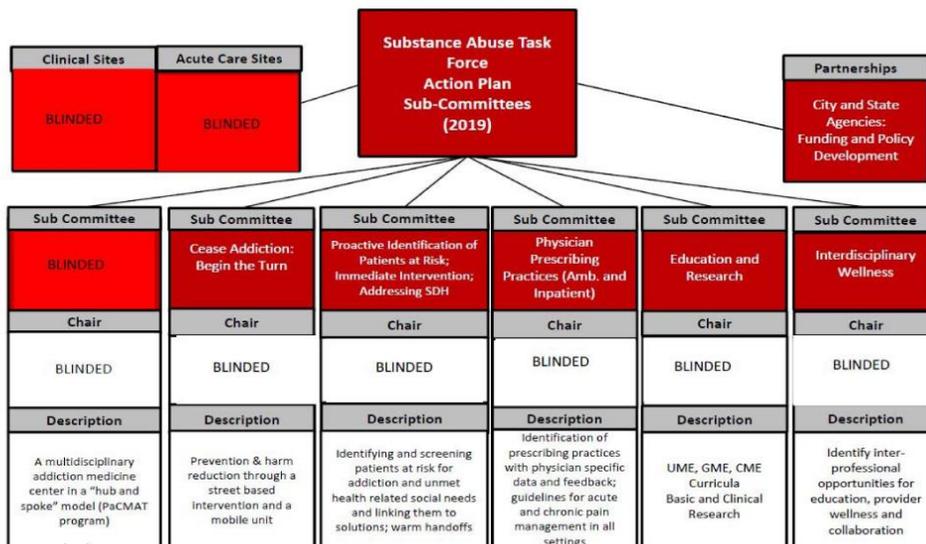
Every practitioner in the health system who prescribes opioids was included in this initiative through information feedback loops regarding prescribing practices. Prescribers from many specialties are included in revising recommendations for post-procedural and discharge opioid doses. Data from the results section demonstrate how opioid prescribing reductions were achieved by contributions from virtually every physician specialty across multiple facilities in the health system. Specialties that were primarily hospital-based, those that were primarily outpatient-based as well as those with combined inpatient and outpatient practices all demonstrated opioid prescribing reductions.

10. Explain ways in which senior leadership exhibited commitment to the initiative (Please limit this description to 100 words.)

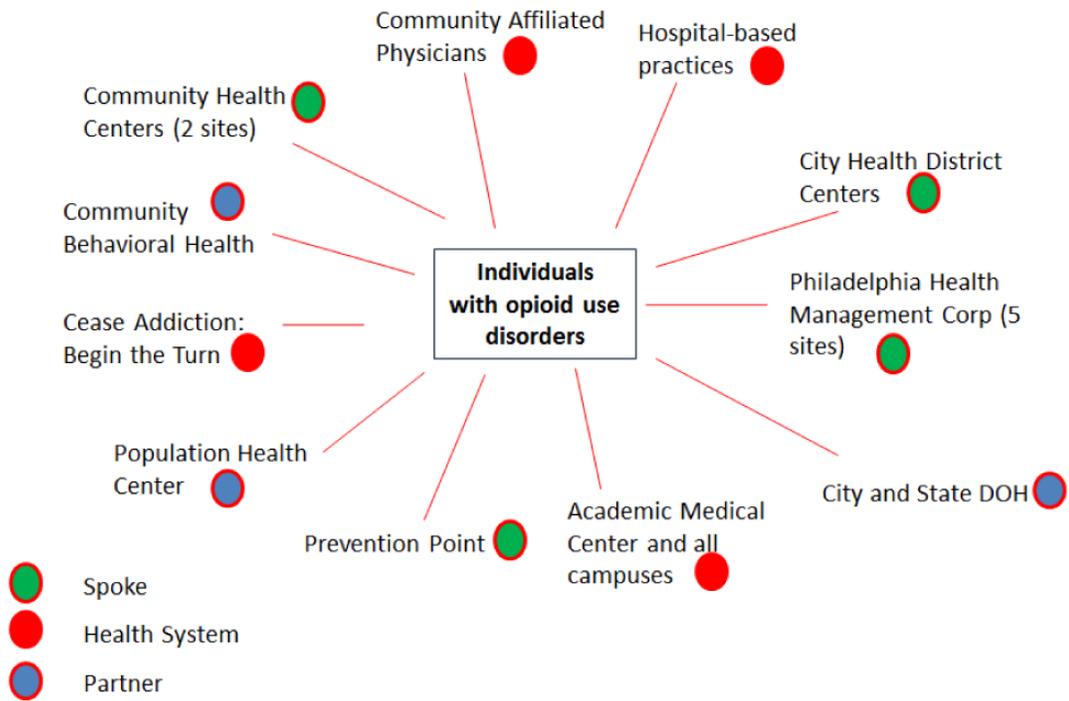
The Substance Abuse Task Force was led by the leadership of the system’s Center for Population Health. Full support from the Chief Information Medical Officer was required for data gathering and feedback. Several of the Task Force Sub Committee Chairs also hold leadership positions in the health system (see Appendix). Information technology and electronic health record leadership support also was key in data validation. The entire program was supported by physician practices, hospital administration and health system leadership.

11. Appendices (i.e., tables and graphs)

Strategy for Addiction Medicine



Community Based Opioid Treatment Collaboration



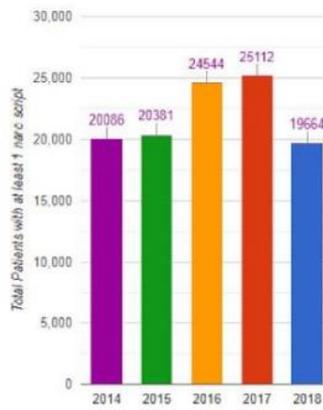
OVERALL PRESCRIBING TRENDS

*Note: These data include all prescribing in the ambulatory context of Epic, including prescriptions from outpatient clinics and discharge medications.

Total MMEs Prescribed per Year



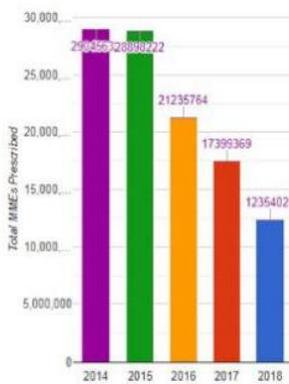
Total Scripts Written per Year



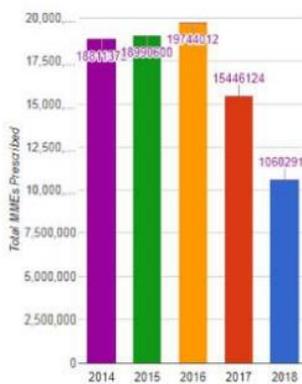
Decreased MMEs and scripts indicate that each patient is receiving fewer narcotics on average.

MME PRESCRIBING TRENDS BY SPECIALTY

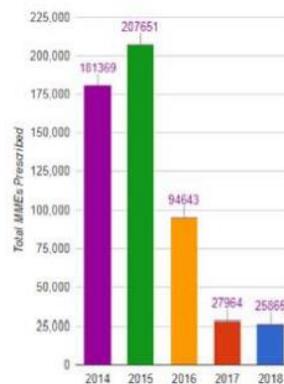
Family Medicine



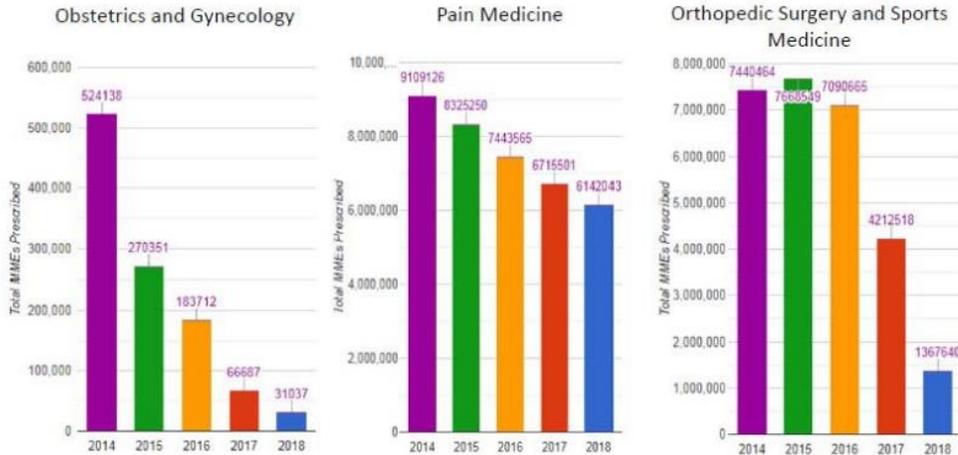
Internal Medicine



General Surgery



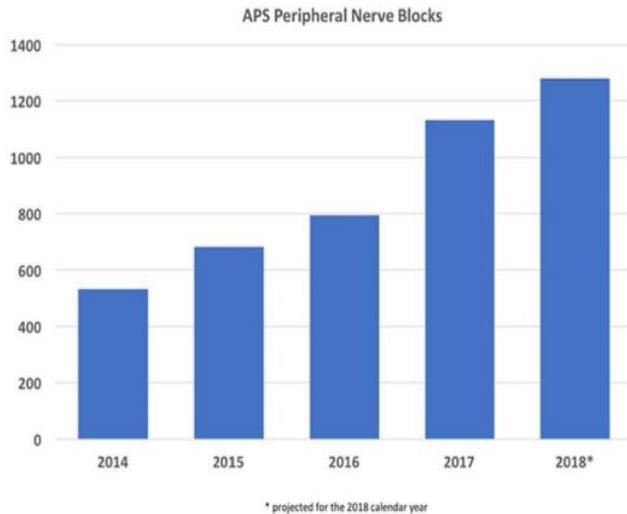
MME PRESCRIBING TRENDS BY SPECIALTY



Chronic Opioid Dashboard

	Aug	Sep	Oct	Nov	Dec	Jan
<u>Narcotic Agreement Recorded in Epic</u> Percentage of unique patients with agreements scanned to "Narcotic Agreement" document type out of all patients with 3 or more opioid scripts in the past 12 months.	4%	6%	10%	16%	18%	23%
<u>Recent Urine Drug Screen</u> Percentage of unique patients with urine drug screen in the past 4 months out of all patients with 3 or more opioid scripts in the past 12 months.	27%	36%	41%	52%	60%	61%
<u>Recent Visit with Opioid Prescribing Department</u> Percentage of unique patients who have a visit with the opioid prescribing department in the past 3 months out of all patients with 3 or more opioid scripts in the past 12 months.	79%	77%	79%	82%	79%	81%
<u>Concurrent Benzodiazepine Use</u> Percentage of unique patients with concurrent benzodiazepine and opioid use out of all patients with 3 or more opioid scripts in the past 12 months (lower is better).	1%	1%	1%	1%	1%	1%
<u>Active Naloxone Prescription</u> Percentage of unique patients with an active naloxone prescription out of all patients with 3 or more opioid scripts in the past 12 months.	2%	2%	2%	2%	2%	3%

- Made available to providers in October 2018.
- Scores provider on the following 5 measures for patients with 3 or more opioid scripts in the past 12 months (chronic pain).
- Next Steps:
 - Add PDMP Compliance Measure



STANDARDIZED SURGERY DISCHARGE ORDER SET

Discharge

Review Home Medications 1. Reconcile Orders for Discharge 2. Order Sets

Place New Orders

Order Sets

General Surgery Discharge Pain Medication Personalize

Non-Narcotic Medications

Pain Medication

- acetaminophen (TYLENOL) 1000 mg tablet q6h prn
Disp-30 tablet, R-0
- ibuprofen (ADVIL/MOTRIN) 800 mg tablet q6h prn
Disp-30 tablet, R-0
- celecoxib (CELEBREX) 200 mg capsule BID
Disp-20 capsule, R-0
- gabapentin (NEURONTIN) 300 mg capsule TID
Disp-30 capsule, R-0

Narcotic Medications

Opioid Prescription Recommendations For Surgery

Additional SmartSet Orders

You can search for an order by typing in the header of this section.

Narcotic Medications

Opioid Prescription Recommendations For Surgery

These recommendations are from the Michigan Surgical Quality Collaborative (MSQC).
"Preventing Chronic Opioid Use and Abuse Before it Starts"

- Laparoscopic Cholecystectomy
- Laparoscopic Appendectomy
- Inguinal/Femoral Hernia Repair (open/laparoscopic)
- Open Incisional Hernia Repair
- Laparoscopic Colectomy
- Open Colectomy
- Ileostomy/Colostomy Creation, Re-siting, or Closure
- Open Small Bowel Resection or Enterolysis
- Thyroidectomy
- Hysterectomy
- Breast Biopsy or Lumpectomy alone
- Lumpectomy + Sentinel Lymph Node Biopsy
- Sentinel Lymph Node Biopsy Alone
- Simple Mastectomy ± Sentinel Lymph Node Biopsy
- Modified Radical Mastectomy or Axillary Lymph Node Dissection
- Wide Local Excision ± Sentinel Lymph Node Biopsy

Narcotic Medications

Opioid Prescription Recommendations For Surgery

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"Preventing Chronic Opioid Use and Abuse Before it Starts"

- Laparoscopic Cholecystectomy
- acetaminophen-codeine (TYLENOL-CODEINE #3) 300-30 mg per tablet
Disp-15 tablet, R-0
- tramadol (ULTRAM) 50 mg tablet
Disp-15 tablet, R-0
- oxycodone (ROXICODONE) 5 mg immediate release tablet
Disp-10 tablet, R-0
- HYDROcodone-acetaminophen (NORCO) 5-325 mg per tablet
Disp-15 tablet, R-0
- HYDROMorphone (DILAUDID) 2 mg tablet
Disp-10 tablet, R-0