Medication Assisted Treatment Emergency Department Induction Project

FY22-23 Annual Report

Tennessee Department of Mental Health and Substance Abuse Services &

Tennessee Hospital Association

October 2023

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Special Thank You

Special thank you to our pilot hospitals, clinical champions, their teams, and community partners for taking this step with us to improve the care provided to patients with an opioid use disorder presenting to the emergency department in Tennessee.

*Denotes the active clinical champions for each of the pilot facilities.

Ascension Saint Thomas Rutherford
Dexter Woods, MD, ED Physician*
Mary Jane Brown, MD
Stacey Beaven, MSHA, RN, NE-BC, Chief Nursing Officer
Elessia Bignall, MHA, CSM, Project Manager
Julie Hudgens, PharmD, Director of Pharmacy

Jackson-Madison County General Hospital
Michael Revelle, MD, Medical Director of Emergency Department*

University of Tennessee Medical Center Knoxville
Julia van Zyl, MD, MBA, MS, LSSBB, Vice President Clinical Design, Medical Director Patient Pathways, Executive Director Behavioral Health Network, Associate Clinical Professor, Hospitalist*
Stanton Elseroad, MD, ED Physician
Joshua Lamb, UT Behavioral Health Network Manager

Tennessee Department of Mental Health and Substance Abuse Services
Jessica Youngblom, LMSW, Director of Strategic Initiatives
Kayla Williams Mehr, PMHNP, Hospital-Based MOUD Clinical Specialist
Kaili Hardiman, Assistant Director of Strategic Initiatives

Tennessee Hospital Association
Jackie Moreland, RN, BSN, MS, Clinical Quality Specialist
Adrienne Nordman, MPA, MA, Assistant Vice President Member Relations & Education

Introduction & Background

The Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) and the Tennessee Hospital Association (THA) have partnered and collaborated on projects for the past decade. Leveraging this established relationship, TDMHSAS approached THA in early 2021 about their interest in partnering on a project that would bring funds and technical assistance to local emergency departments (ED) to improve the care of individuals presenting with opioid use disorder (OUD). The desire was to explore increasing physician capacity, knowledge, and utilization of buprenorphine to treat patients with an OUD while presenting for care and to provide connection to community resources for ongoing treatment. Based on the most recent Tennessee Overdose Data report published by the Tennessee Department of Health (TDH), in 2021, 3,814 individuals lost their lives due to an overdose.[1] Concurrently, Tennessee has continued to see an increase in non-fatal overdoses.

Given the increase in fatal and non-fatal overdoses, TDMHSAS and THA knew that ensuring patients with OUD entering the ED are being offered a connection to treatment as early as possible was crucial. This model was built off the existing program of the TN Recovery Navigators (TRN) and lessons learned from a pilot project funded by the Tennessee Department of Health utilizing Overdose Data to Action grant funding. The pilot project partnered with a hospital to start education and initiation of buprenorphine in the ED for individuals with OUD. The TN Recovery Navigator Program was established in 2018 and partnered with eight (8) community-based treatment providers to employ peers in long-term recovery; these treatment providers in turn established memorandums of understanding with hospital emergency departments. The TRNs meet with patients who are admitted to the emergency department due to a non-fatal overdose, experiencing active withdrawal, or have been identified as having a substance use disorder (SUD). Once the TRN meets with the patient, they work collaboratively to connect them to treatment and recovery resources and provide follow-up in the month following discharge. In fiscal year 2022 the TRNs served 3,058 individuals, increasing that number to 3,730 individuals served in fiscal year 2023. TDMHSAS and THA felt confident that with this established program, knowledge from the existing pilot, and the relationships in the hospitals, partnering emergency departments could improve the identification and transition of patients with OUD to appropriate resources in the community.

[1] 2021_Tennessee_Drug_Overdose_Deaths.pdf (tn.gov)

In November of 2021, TDMHSAS and THA executed the contract for this project with the following goals:

- Increase the education and knowledge of medication assisted treatment (MAT) for OUD among ED staff of participating facilities.
- Consider the unique ways this could be carried out in an ED setting.
- Increase the number of physicians who registered and received their DEA DATA 2000 Waiver (X-waiver).
- Increase the number of ED physicians initiating treatment of OUD related withdrawal symptoms in the ED, utilizing MAT.
- Increase the utilization of the treatment provider network, including the utilization of the TN Recovery Navigators.

The next step was to identify which hospital emergency departments would be willing to look at changing their processes surrounding treatment of patients with OUD in their individual facilities.

Hospital Selection Process

At the start of the pilot, THA pulled overdose claims data across the state to prioritize hospitals numerically based on need and then identified hospitals in each grand division. TDMHSAS and THA had the understanding prior to the pilot that each hospital across the state had varying access to community resources serving different patient populations. The intentionality in choosing one hospital per grand division was to learn as much as possible about the barriers each hospital would experience and unique solutions, they would implement to address the needs of their patient populations. The second part of the selection process was to evaluate pilot readiness. This included experience and response in managing a clinical, quality pilot program, as well as current community infrastructure. Existing infrastructure included MAT treatment centers within proximity to the ED and an established navigator program or willingness to integrate the navigator program within the ED.

West- Jackson Madison County General Hospital

Middle – Ascension Saint Thomas Rutherford

East – UT Knoxville Medical Center

Project Timeline and Implementation

The initial contract between TDMHSAS and THA was November 2021 through June 2022. This period was intended to provide THA time to identify, meet, and create subcontracts with the three (3) hospital emergency departments and then allow time for the hospital emergency departments to begin implementation. As the project began, University of Tennessee Medical Center Knoxville signed their contract quickly due to having previously laid the groundwork for a BRIDGE program. Ascension Saint Thomas Rutherford and Jackson Madison County General Hospital required more time to consider partnering and did not sign their contracts until April of 2022. With the timing of contract execution, implementation, and uptake of the project in the middle and west divisions, TDMHSAS and THA realized more time was needed to understand process implementation and collect equitable and reasonable data across pilots, so they extended the contract until June 2023

Budget

TDMHSAS provided funding to THA for oversight, administration, and monitoring of the three (3) hospital partners. Additionally, it provided a stipend, encompassing the expenses for a hospital champion's dedicated time toward the project, cost of medications (e.g., buprenorphine and naloxone) for uninsured or underinsured patients, and addressing other operational needs identified by the partner hospitals including transportation for patients to treatment. A maximum spending percentage of these funds was set at 20% for naloxone to ensure the other project goals were able to be met.

Hospital Site Implementation Strategies

Implementation Strategies

There was some apprehension and uncertainty as the pilot hospital teams embarked upon the initial phases of this work. With passion and determination, teams provided foundational education to physicians and engaged with other areas of the hospital, such as pharmacy, information technology and behavioral health resources to streamline data collection, build out electronic health medical record (EHR/EMR) power plans, schedule and create ongoing educational initiatives, examine, and break down barriers connecting patients from the EDs to appropriate community resources. Two pilots started a "Snacks and Facts" educational session in the ED and met internally with their teams monthly to identify strengths, weaknesses, barriers, and discuss outcomes to ensure ongoing improvement. Once the pilots were launched, pilot hospitals discovered that while each site may have been unique in terms of

having a different EMR or staffing models, the similarities were remarkable as far as patient and provider struggles. Clinical Champions and their teams participated in a monthly check-in call with TDMHSAS/THA representatives to discuss barriers and opportunities. Bi-monthly, the clinical champions met on a call to learn from one another. The bi-monthly calls proved invaluable for sharing ideas, fostering collaboration, and addressing lingering questions.

X-Waiver Change and Impact to Implementation

On December 29th, 2022, President Biden signed the Consolidated Appropriations Act (CAA) of 2023. The CAA incorporated the Mainstreaming Addiction Treatment Act of 2021 (MAT Act) that removed the DATA Waiver requirement for prescribing Schedule III-V (e.g., buprenorphine) medications for maintenance or detoxification treatment of OUD in settings other than a SAMHSA-certified Opioid Treatment Program (OTP). Due to this change, the former process of taking an 8-hour education for physicians, and a 24-hour education for NPs and PAs, followed by signing up for a special X-Waiver with the DEA no longer was required going forward to prescribe buprenorphine. SAMHSA and the DEA published initial guidance on January 12th, 2023, announcing that the DATA Waiver program had ended and, effective immediately, the X-Waiver was no longer required to prescribe buprenorphine for OUD.

This change had various benefits as reported by the pilot hospitals. One pilot hospital reported that the removal of the X-Waiver was beneficial because ED physicians were skeptical of having the conversation initially, but once removed, they were willing to engage in the pilot and this work. With this change, there has been an increase in buprenorphine ordered and administered in the ED. Another pilot hospital reported that they initially felt the removal of the requirement would dampen their efforts to have their providers seek the 8-hour training; however, the subsequent DEA renewal requirement, which occurred following the federal MATE Act, allowed them to encourage providers to take the 8-hour training so they could better understand substance use disorder and the need for medication-assisted treatment in the ED. The third hospital continued to offer education and encouraged physicians to complete the former X-Waiver training so they would feel more comfortable with OUD and how to start buprenorphine. Overall, the X-Waiver regulations were inherently confusing, and the pilot hospital teams reported it created stigma around utilizing buprenorphine in the ED. With removal, it allowed physicians to prescribe buprenorphine without completion of the “official” training and removed an overall reputation of cumbersomeness around the medication in the EDs.

Testimonial

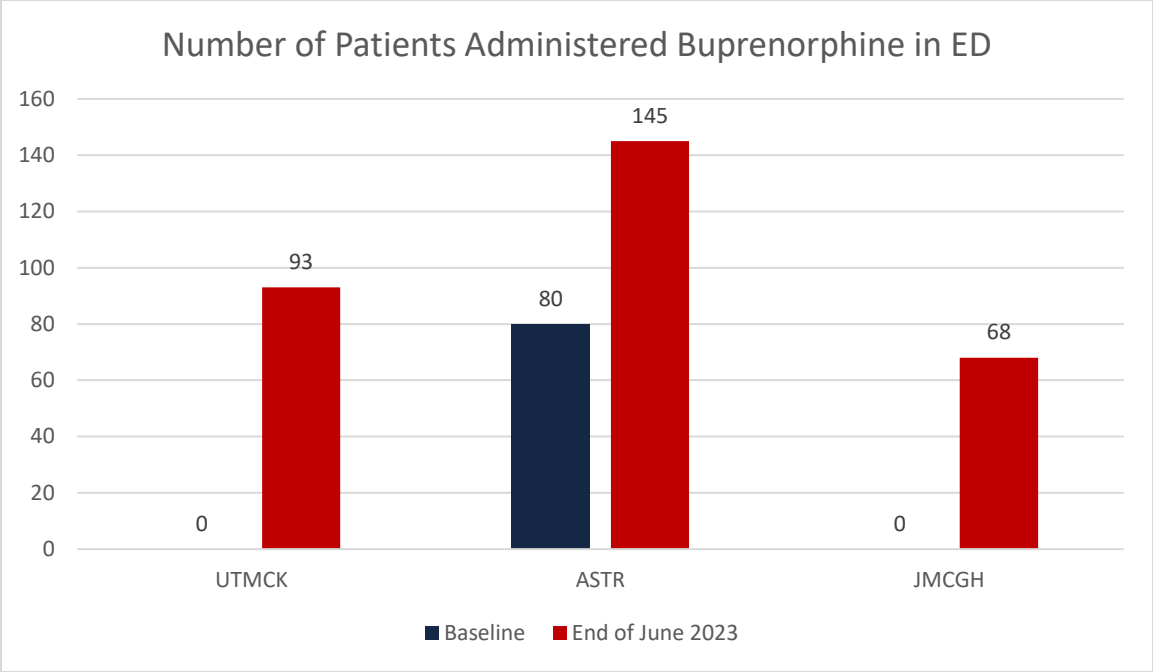
"Patient A: 38 visits & 23 AMAs since 2019; experiencing homelessness, strained relationship with loved ones; engaged by navigators during 24/38 visits on July 1st, 2022, and offered and accepted treatment coupled with sober living; patient has been engaged since starting treatment, living with wife and now working; only 4 ED visits since treatment for medical concerns and UDS confirms continued participation in treatment with medication each time."

Successes & Outcomes

The main data points we reported on are directly related to the initial goals of the project. (1) the number of patients who received buprenorphine in the emergency department setting; (2) the number of new emergency department physicians who registered and completed the x-waiver training; (3) the number of prescriptions written for naloxone, for patients leaving the emergency department with a prescription to fill at an outside pharmacy. (4) the number of patients dispensed naloxone in the ED (i.e., walked out of the emergency department with naloxone in hand); and lastly (5) the number of TN Recovery Navigator referrals.

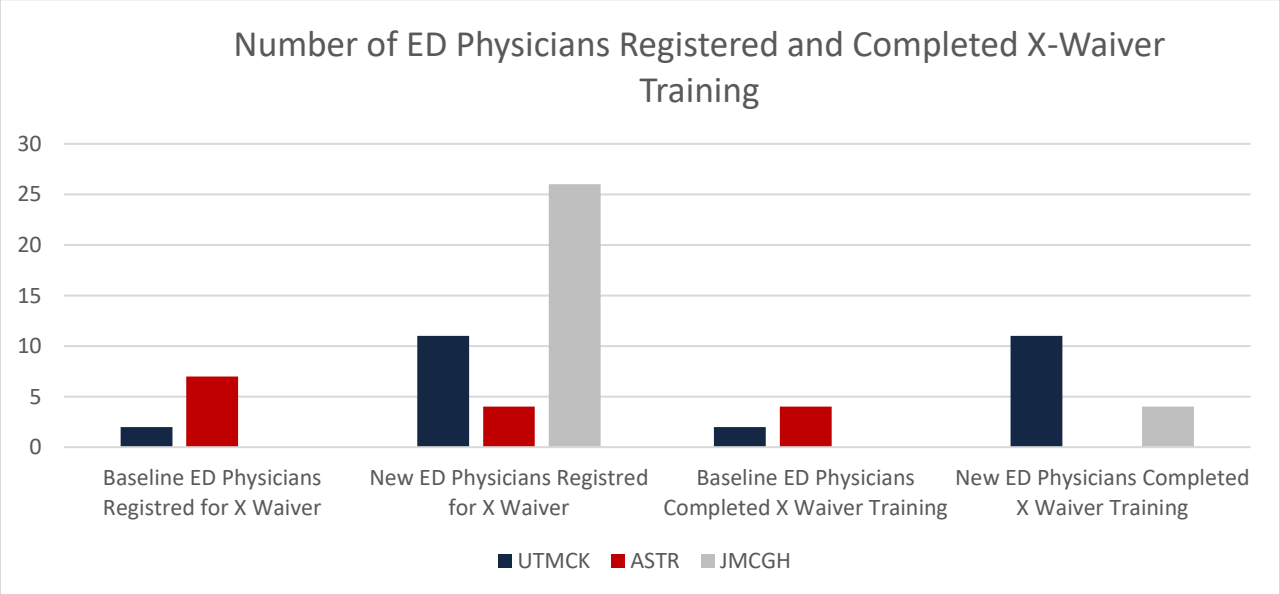
Buprenorphine Administered in the Emergency Department

There were **306** patients who were administered buprenorphine throughout the project. Both UTMCK and JMCGH were able to determine that the data reported uniquely captured patients without an active prescription for buprenorphine (starting the initial dose of buprenorphine). ASTR's data included both individuals administered buprenorphine without an active prescription and individuals to whom it was continued upon admission to the emergency department for other reasons while actively engaged in OUD treatment. Being able to capture those individuals receiving buprenorphine to better facilitate their willingness to engage or reengage with treatment will be important to future outcomes monitoring of the project and the lack of differentiation in this initial data set was a lesson learned as we look toward the next phase. It is important to note that prior to this project, UTMCK and JMCGH were not actively initiating buprenorphine and were not capturing the data. Due to the pilot project funded by TDH, ASTR had a head start on this metric, which is why their baseline is higher than the other two facilities.



X-Waiver Trainings and Registration

From the beginning of the project through the end of June 2023, **41** emergency department physicians registered for the x-waiver and **15** physicians completed the x-waiver training. As noted above, the x-waiver requirement was removed during the project, contributing to the lower number of individuals who completed and registered for the x-waiver. Also, as with the buprenorphine numbers, ASTR had started this work prior to this pilot, which is why their baseline numbers are higher than the other pilots.

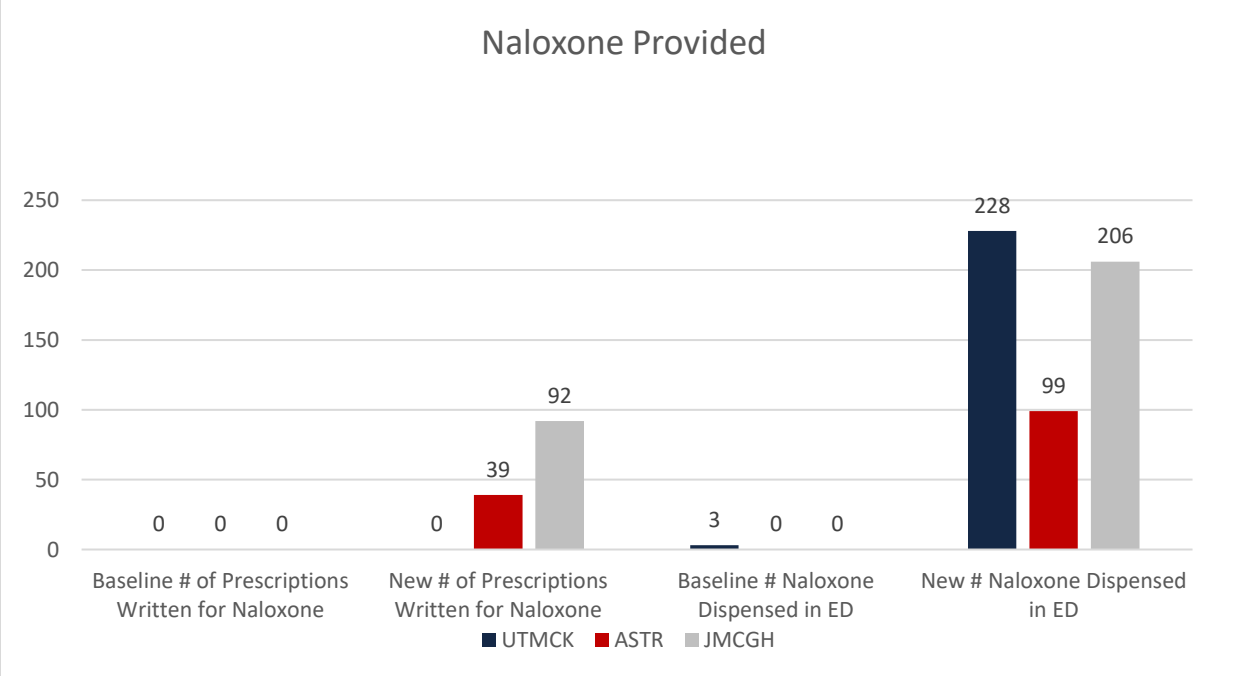


Naloxone Provided

Prescriptions written for naloxone are those that were provided to patients to fill at an outside pharmacy, whereas the naloxone dispensed in the emergency department encompasses medication handed to the patient to take with them upon discharge. UTMCK was able to create a process within their emergency department that any patient who needed naloxone was provided medication prior to discharge, removing the need for a prescription to be written and filled at an outside pharmacy. The most important number to highlight is the fact that **533** patients left the emergency department with naloxone in hand improving the likelihood of survival in the event of a future overdose.

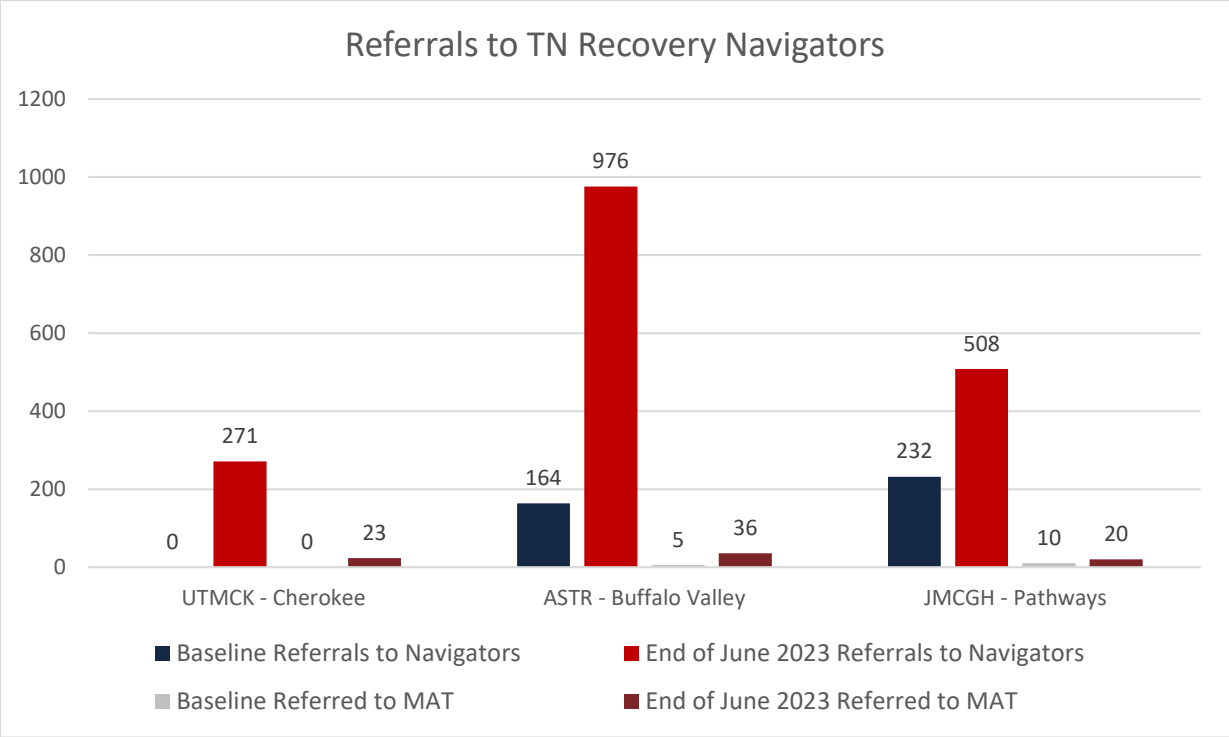
Testimonial

"Patient, 25 years old, presented with overdose, not the first overdose; patient was given and educated on naloxone to take home and met with the navigator prior to discharge; a few weeks later he and his brother were using opioids again and the brother overdosed, and the patient was able to use the Narcan the pilot hospital provided him to revive his brother, but then the patient also became unresponsive and the revived brother called 911; both brothers were brought in. Both brothers accepted treatment and an appointment was able to be arranged at the local treatment center the next day; both brothers continue treatment and have not presented for care in the ED since."



Referrals to the TN Recovery Navigators

The hospitals all had a TN Recovery Navigator (TRN) presence at varying degrees prior to this project. The goal was to increase the utilization of the TRNs. UTMCK during the baseline time had secured funding through a partnership with the McNabb Center to have dedicated Navigators outside of the state funded Navigators. The numbers depicted below are just for those state funded TN Recovery Navigators. You will see there was not only an increase in the number of patients referred to the TN Recovery Navigators, but there was an increase in the number of patients referred specifically to medication assisted treatment after discharge from the hospital emergency department.



As noted above, UTMCK has close partnership with the McNabb Center. They have designated hospital-based navigators that are embedded in their emergency department seven (7) days a week with multiple shift coverage and work alongside the emergency department staff identifying and caring for patients. They are there to support any patient who is seen in the emergency department who may have a psychiatric mental health or substance use need. They also arrange transportation when needed to their facility. Given their expanded role and dedicated time, during the project period they had **3,791** patient interactions at UTMCK.

Lessons Learned & Key Implementation Strategies

Key Takeaways

The pilot hospitals all reported a major focus area was working toward the implemented changes becoming the standard of care and part of the ED culture. One of the most significant takeaways shared was the impact on hesitancy of adopting this new practice of watching buprenorphine quickly relieve symptoms in the ED. Some providers initially expressed concern this change was simply substituting one drug for another, and they had to overcome the initial fear of suddenly becoming a "Suboxone Clinic". By utilizing the clinical opiate withdrawal scale (COWS) score and an order set, pilots were able to watch the improvement of patient symptoms, sometimes with an initial dose and sometimes with additional dosing. Patients became more comfortable, were less likely to leave against medical advice, were more willing to engage with referral resources such as the navigators and followed up with the local clinic or treatment centers to establish care. The pilot locations reported very few individuals came back for subsequent dosing in the ED, therefore reducing recidivism and indicating continued recovery. Perhaps the biggest takeaway was an improved understanding of the disease of addiction and the experience of individuals impacted by it along with the ER's role in being able to help patients with OUD. Just like the follow-up treated hypertensive patient or the non-compliant diabetic we would treat and send for a follow up, they are now more comfortable with identifying OUD and initiating treatment.

Actionable Steps

All pilots agreed that having a navigator, with lived experience in recovery, established in the ED is critical to diminish stigma and overcome barriers in caring for this patient population. Establishing screening, readily available testing (such as for fentanyl), and developing an order set in the EHR are important to recognize and identify patients with substance use disorder and then following an appropriate clinical pathway. Furthermore, most providers are initially responsive and want to help and care for these patients but are not comfortable with administering buprenorphine unless they know that patient can connect with treatment in the community. Frequent and ongoing education is needed to reinforce adoption of a new process and bring continued awareness to recovery resources to reduce this concern. Lastly, for hospitals and ED personnel interested in similar work, clinical champions benefit from access to data and an interdisciplinary team, including administrative support, pharmacy, nurse leadership and overall physician engagement for this to be successful.

Watch our Video Series

Click the image or this link for a video series featuring UTMCK and their work in this program.

Project Expansion & Sustainability

TDMHSAS and THA saw an opportunity to continue this work with the progress and success that was seen in the first phase of this project. TDMHSAS has continued the partnership with THA for another two (2) years to not only continue the work of the original phase but to expand from three (3) hospitals to six (6) hospitals. Taking the lessons learned, considering the federal changes to policy, and ensuring we are building sustainable processes, the funding amounts were tiered, and the data metrics and outcomes were updated.

The first change with the expansion is the funding provided to each hospital annually. The funding will follow a step-down tiered approach to provide resources to initiate change and slowly decrease as hospitals consider and implement sustainability. This funding will follow the same stipend process and will cover the same array of items as listed in the first phase of the project. With the tiered funding process, the idea is that each hospital will continue to explore opportunities to change and update processes and policies within their hospital systems ensuring that once funding ends, patients are still receiving access to the best practices, such as

administering buprenorphine for withdrawal or dispensing naloxone for high-risk patients, and connection to ongoing treatment.

The next phase of the project will run for two years, July 1, 2023 – June 30, 2025. The original three (3) hospitals will continue, and TDMHSAS and THA will look to onboard three (3) additional hospitals with implementation beginning in December 2023.

Reporting for the next phase will still be required quarterly to the state and monthly to THA but the required reporting metrics have been updated. The most noteworthy change is no longer collecting data regarding the DATA 2000 X-Waiver as that requirement was removed federally by Congress. TDMHSAS and THA also added the following metrics:

- Increase the ordering/administration of buprenorphine in the emergency department by 10% in the first year and show continued ordering/administration in the subsequent years of funding.
- Increase the number of prescriptions written or units dispensed for naloxone when MAT induction occurs, or a patient is identified as having an Opioid Use Disorder (OUD) or high risk for an opioid related overdose by 10% in the first year of the grant cycle. The grantee shall show continued ordering/dispensing in the subsequent years of funding.
- Number of patients treated with buprenorphine in the pilot hospital's emergency department that return to the pilot hospital's emergency department within seven (7) days after induction.
- Number of patients who declined buprenorphine induction in the emergency department.

With these additions TDMHSAS and THA expect to see an increase in the practice of offering the initiation of treatment and overdose prevention resources as well as capturing the number of patients that are declining medication and/or contact with recovery navigators to allow us to better identify other methods of outreach and prevention strategies.

Lastly, the hospitals in year two of the project will be required to report out on sustainability measures such as process improvement, electronic health records changes, and data reporting improvements.

Final Thoughts

Since starting the MAT pilot program with three (3) hospitals, TDMHSAS and THA have gained insight into creating change in the way hospitals respond to individuals with OUD in the ED. The

pilot hospitals accepted a challenge to go against the status quo and explore options, alternatives, and solutions in initiating MAT in the ED and connecting patients to community treatment centers. The concerns and stigmas, such as turning the ED into a suboxone clinic or treating the patient, and the misconceptions about buprenorphine, were all initial concerns and barriers these pilots overcame. With persistence and determination, these EDs have established a foundational framework that works based on their current workflows, culture, and patient population.

If you have any questions, please contact Jessica Youngblom, jessica.youngblom@tn.gov or Adrienne Nordman, anordman@tha.com.