

Lessons Learned in Sustaining an Opioid-Light Emergency Department

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I have no conflicts of interest to disclose

Objectives

- Discuss background supporting multi-modal pain medications
- Review revised trends in opioid use in BMH-Memphis emergency department
- Report newly identified challenges and strategies
- Describe current transition to inpatient opioid reduction









THA Opioid-Light ED Pilot Participants

- CHI Memorial Hospital-Chattanooga
- CHI Memorial Hospital-Hixson
- Henry County Medical Center
- Maury Regional Medical Center
- NorthCrest Medical Center
- Parkridge East Hospital
- Parkridge Medical Center
- Parkridge West Hospital
- Regional One Health
- Saint Thomas Dekalb Hospital
- Saint Thomas Hickman Hospital
- Saint Thomas Highlands Hospital
- Saint Thomas Midtown Hospital
- Saint Thomas River Park Hospital
- Saint Thomas Rutherford Hospital
- Saint Thomas Stones River Hospital

- Saint Thomas West Hospital
- Southern TN Regional Health System-Lawrenceburg
- Starr Regional Medical Center-Athens
- Starr Regional Medical Center-Etowah
- Sumner Regional Medical Center
- TriStar Ashlyn City Medical Center
- TriStar Centennial Medical Center
- TriStar Hendersonville Medical Center
- TriStar Horizon Medical Center
- TriStar Portland Medical Center
- TriStar Skyline Medical Center
- TriStar Southern Hills Medical Center
- TriStar StoneCrest Medical Center
- TriStar Summit Medical Center



BACKGROUND



Health | Nation

Feds halt 2 Tennessee pharmacies' opioid dispensing for now

Originally published February 8, 2019 at 11:10 am | Updated February 8, 2019 at 4:26 pm

...told DEA agents that "he did not believe there is an opioid problem and that it is media hype."

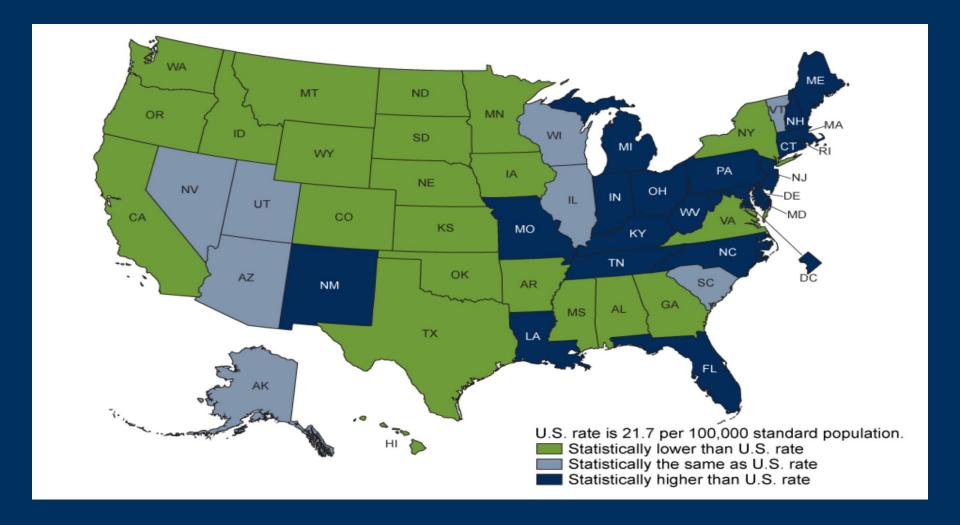
"Doctors need to be investigated. They are the ones writing prescriptions. We just fill them. The pharmacist is not responsible."



Overdose Deaths by the Numbers

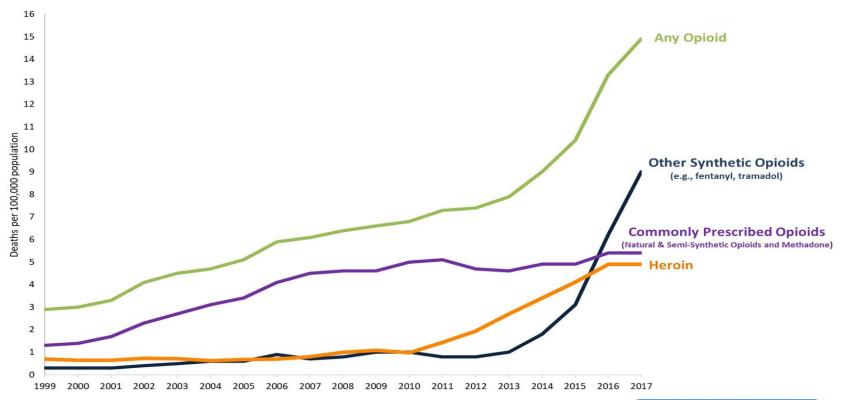
- In 2017, there were ~70,000 drug overdose deaths in the United States
- Overall overdose deaths increased by 9.6% from 2016 to 2017

Rates of Drug Overdose Deaths: 2017



Rates of Opioid Overdose Deaths

Overdose Death Rates Involving Opioids, by Type, United States, 2000-2017

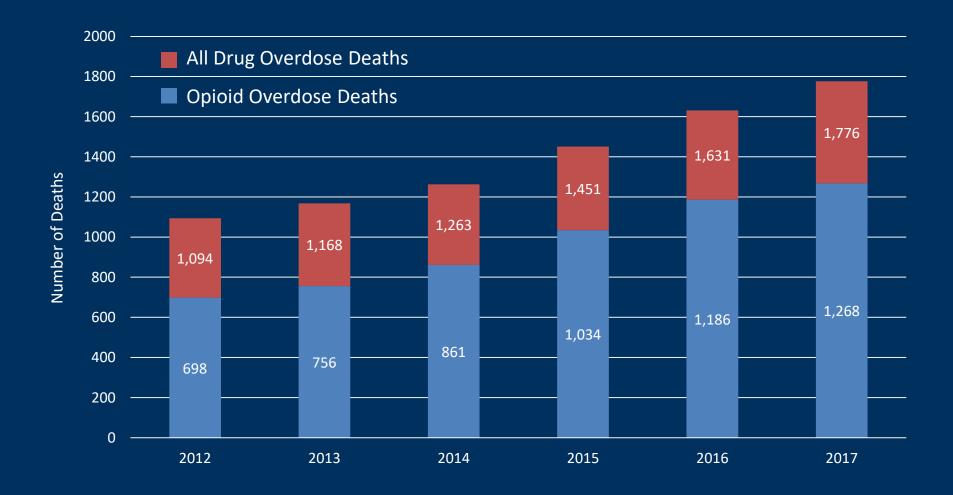


SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2018. https://wonder.cdc.gov/.





Tennessee Overdose Deaths



ALTERNATIVES TO OPIOIDS

Alternatives to Opioids (ALTO)

- Multi-modal approach to target various pain receptor pathways; examples:
 - COX inhibitors: NSAIDs/APAP
 - Sodium channel blockers: Lidocaine
 - NMDA receptor antagonists: Ketamine
 - GABA agonists/modulators: BZDs/Gabapentin
 - Inflammatory cytokine inhibitors: Steroids
- Opioids as "rescue" or second-line

FIVE Pathways

- Headache / Migraine
- Musculoskeletal Pain
- Extremity Fracture / Dislocation
- Renal Colic / Kidney Stones
- Gastroparesis / Chronic Abdominal Pain

BAPTIST MEMORIAL HOSPITAL – MEMPHIS EMERGENCY DEPARTMENT



Baptist Memorial Hospital - Memphis

- 571 beds
- Average 475 patients
- >75,000 ED visits (2018)





Where were we?

- Baseline usage
 - MME (IV) = Milligrams IV Morphine Equivalents
- ED usage Dec 2016-Jan 2017
 - ~7,200 MME (IV) / month
 - ~120 MME (IV) / 100 patient visits
- Huge variability among providers
 - 5-6x difference between low providers and high providers per 100 patient visits
- Percentage of patients receiving opioids
 - ~22% of patients received at least one dose of opioids

Twelve Months In

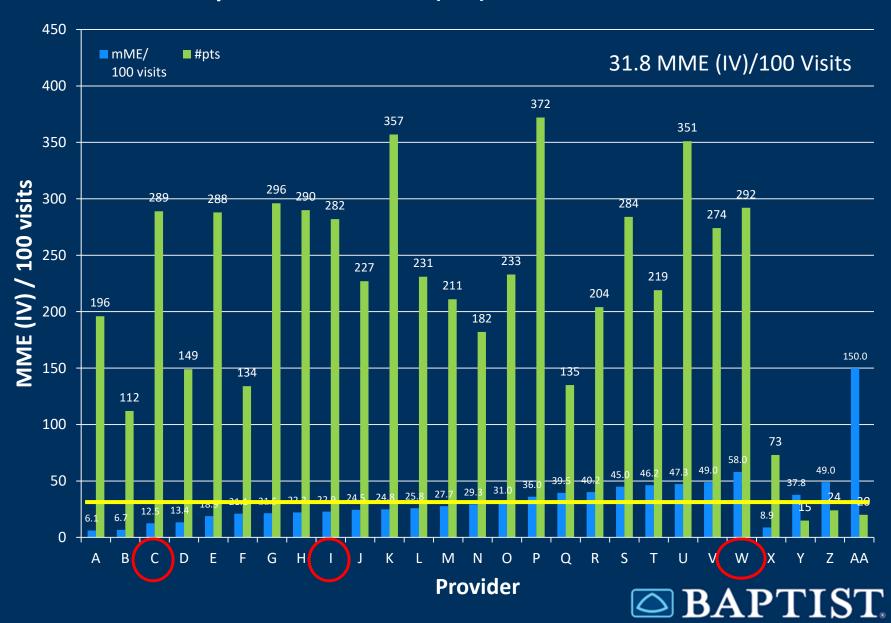
- ED usage
 - $~3,035 \text{ MME (IV) / month } (\downarrow 58\%)$
 - ~45 MME (IV) / 100 patient visits (\downarrow 63%)
- Even larger variability among providers
 - 12-13x difference between low providers and high providers per 100 patient visits
- Percentage of Patients Receiving Opioids
 - ~13% of patients received at least one dose of opioids (\downarrow 41%)

Baptist Memphis Opioid-Light ED Initiative

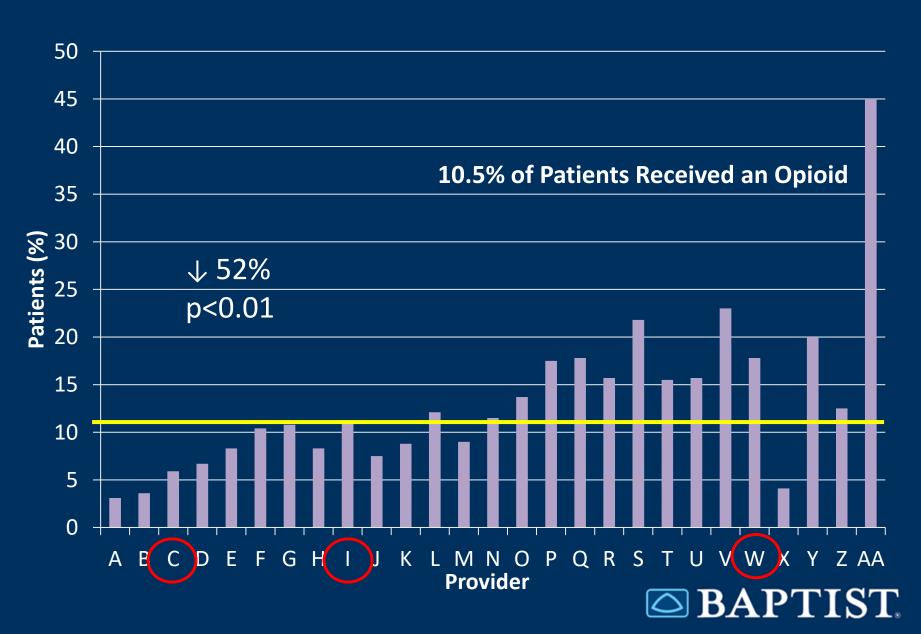
January 2017 – December 2018



Provider Specific MME(IV)/100 Visits: Nov 2018



Provider Doses Per Patient: November 2018



STRATEGIES THAT WORKED

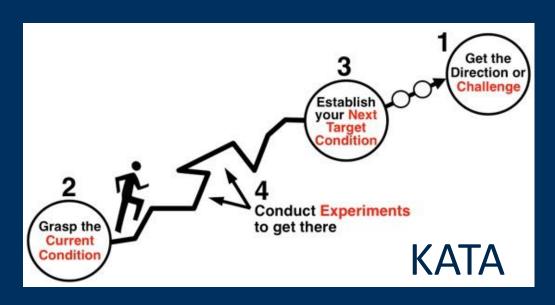
Tracking the Data

- Daily, weekly, & monthly numbers
- Real-time assessment
- Track trends, order-set/alternative usage
- Target interventions to high-usage providers
- Provided to ED Medical Director
- Presented at monthly ED provider meetings

Recurring Progress Meetings

Recommend meeting at least weekly

- Evaluate data
- Incorporate feedback
- Identify obstacles
- Make changes
- Assess impact
- Repeat



Education, Education, Education

- Nurses

 Shift Huddles, Staff Meetings
- Patients
 One-on-one Discussions, Signage,
 Flyers/Pamphlets

Patient Interactions

- Consistent message
- Patient reported pain is important to manage
- Engage patients
- Using proven medications
- Discuss risks of opioids
- "We care about taking care of you now and in the future"

Habits are Habits

"Any act often repeated soon forms a habit; and habit allowed, steady gains in strength. At first it may be but as a spider's web, easily broken through, but if not resisted it soon binds us with chains of steel." - Tryon Edwards

Recognizing Poor Prescribing Habits

- Utilized % patients prescribed/patients seen
 - Identified individuals prescribing opioids for >50% of patients seen
- Evaluated type of opioid and dose per prescriber
 - Identified individuals prescribing high doses as default

Changing Practice

 "A nail is driven out by another nail. Habit is overcome by habit. "-Desiderius Erasmus

- Targeted one-on-one education
- Changed providers' "favorites" in CPOE background

Tap into Desire

- Providers want to take good care of patients
- Aware of opioid crisis
- Alternatives appealing to most

Celebrate Progress!

- Change inherently challenging
- Recognize efforts of individuals and team
- Success leads to more success

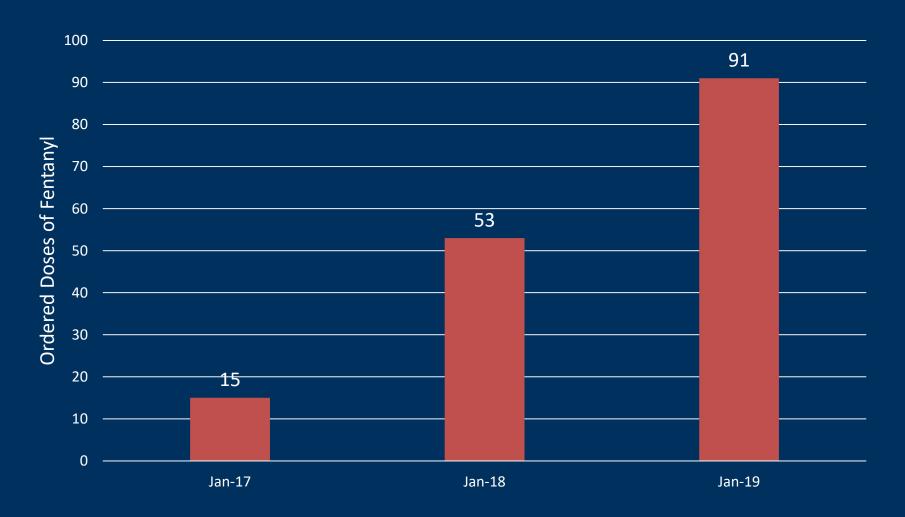
NEW/NOT SO NEW CHALLENGES



Medication Considerations

- Opioids are dirt cheap; alternatives may not be
 - Increased utilization of IV APAP
- Increased IV room time/storage/delivery
 - Ketamine syringes
- Increased utilization of fentanyl???

Fentanyl Use in ED 2017-2019



Hall Lives Matter

- Approximately 15-40 patients boarding in BMH-Memphis ED daily since mid-December
- Addition of ~15 hall beds to utilize for triage and boarding patients
- Maintenance and daily medication requirements
- Hydromorphone free...?
- Patients first

Patient Satisfaction

- Increase in overall patient satisfaction scores
- Stable scores related to pain management
- Consider internal surveys, if feasible

Provider & Nurse Satisfaction

Report fewer pain seeking "frequent flyers"

PRN Providers

- Difficult to educate due to sporadic work schedule
- Did not see high number of patients over the month, but often high metrics

NEW/NOT SO NEW FRONTIERS



ED Opioid Reduction

- ED discharge prescription review
- System implementation of ED Opioid-Light program
 - 22 Baptist hospitals in TN, AR, MS
- THA state-wide pilot
 - Webinars
 - Any way we can help!
- Automated Data!!

Pain Team – Inpatient Focus

- Inpatient provider opioid education
- Multi-modal order sets
 - Peri-operative
 - General medicine
- Recommendations for post-op opioid duration
 - PCA 3-day automatic stop date
 - Post-op pain management assessment
- Pharmacy pain management consults for specific patients
 - Sickle cell crisis
 - PCAs

Peri-Operative Multi-Modal Order-Set

- Pre-operative
 - Acetaminophen
 - Celecoxib
 - Gabapentin
 - Methocarbamol
- Other options
 - Opioids
 - Anti-emetics
 - Bowel regimen

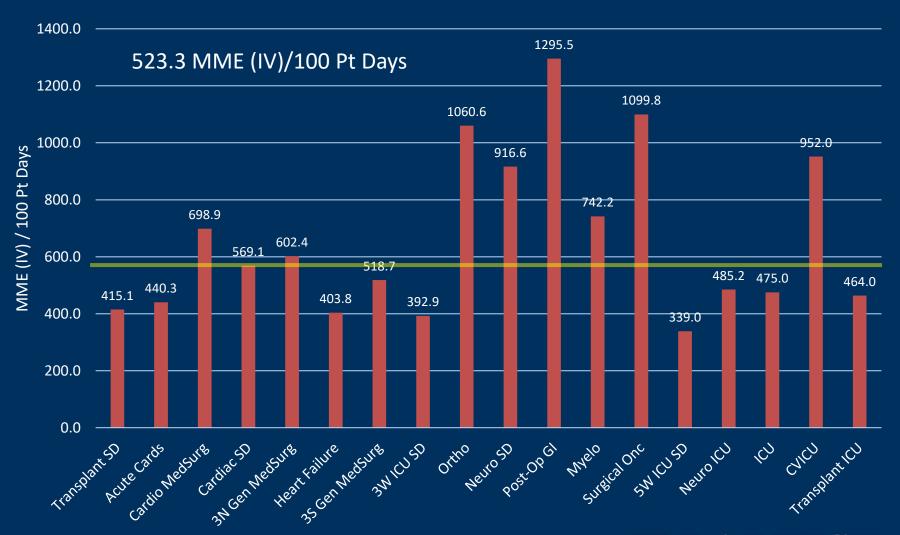
- Post-operative
 - Acetaminophen
 - Gabapentin
 - Ibuprofen or ketorolac
 - Lidocaine infusion

General Multi-Modal Order-Set

- Acetaminophen & NSAIDs
- Neuropathic pain TCAs, SNRIs, gabapentin, pregabalin
- Trigeminal neuralgia duloxetine, ven lafaxine
- Musculoskeletal pain cyclobenzaprine, baclofen, tizanidine, methocarbamol
- Topical agents lidocaine patch, capsaicin cream
- Bowel regimen

Inpatient Opioid MME

Milligram Morphine (IV) Equivalents per 100 Patient *Days*



Final Charge

- Small bites
- Invest in education
- Find your champions
- Celebrate victories AND failures

Join the THA Opioid-Light ED Pilot!

Acknowledgements

ED Providers and Nurses!

- Dawn Waddell, PharmD, BCPS
- Julie Bennett, PharmD, MBA, BCPS
- Marilyn McLeod, MD, FACEP, FAEMS
- Dennis Roberts, RPh, Pharmacy Director
- Melanie Mays, RN, ED Nurse Manager
- Rachael Duncan, PharmD, BCPS, BCCCP

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