Baptist Memorial Hospital - Memphis enhanced patient satisfaction and minimized exposure to opioids.

**Overview of organization**

Baptist Memorial Hospital – Memphis is a 571-bed, non-profit community hospital serving the Memphis and greater Mid-South area. Baptist Memphis is the flagship hospital for the Baptist system of 22 hospitals in Tennessee, Mississippi, and Arkansas.

**Interprofessional Team**

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**Project Summary**

A pharmacist-led multidisciplinary approach allowed the Baptist-Memphis Emergency Department (ED) to become “Opioid-Light” with a focus on alternatives to opioids for patients’ pain management. Through a patient-centered approach, provider and nurse education, system changes, and teamwork, Baptist Memphis has sustained more than a 70% reduction in opioid usage per 100 patient visits while increasing patient satisfaction.

**Importance**

Due to the alarming rate of opioid use and overdoses in Tennessee, Baptist Memphis assembled a team of pharmacists and physicians to address the Centers for Disease Control and Tennessee Department of Health initiatives to decrease opioid addiction.
A patient’s first opioid exposure often occurs with an ED visit. Two studies published in the Annals of Emergency Medicine (Hoppe et al., 2015; 65: 493-499 and Butler et al., 2016; 68: 209-212) demonstrated an association of ED opioid initiation with recurrent opioid use, and ED prescription opioids as an initial exposure preceding addiction. This prompted the focus on improving ED opioid prescribing patterns.

**Background**

Opioid usage was assessed through calculation of MME (IV) = Milligrams IV Morphine Equivalent. ED baseline usage was determined to be ~7,200 MME (IV) / month and ~120 MME (IV) / 100 patient visits for December 2016 through January 2017. Huge variability among providers was also noted with a 5-6x difference between low providers and high providers for every 100 patients seen. This was in conjunction with an increasing frequency of overdose patients arriving in the ED. The team was very motivated to take action to decrease patients’ exposure to opioids, especially opioid-naïve patients to prevent future risk of addiction.

**Actions**

A focused pharmacist team consisting of the pharmacy director, clinical manager, ED, operations and clinical pharmacists met multiple times weekly to evaluate data, identify obstacles, discuss ideas and plan next steps through a quality improvement process.

Pharmacy first developed a multi-modal pain therapy order set to provide alternative treatment for five specific indications with evidence for efficacy of non-opioids. The “Opioid-Light” order set included alternatives for migraine/headache, musculoskeletal, joint fracture/dislocation, renal colic, and chronic abdominal pain. Approvals of the ED Service Line and Pharmacy & Therapeutics Committees were obtained for implementation of the opioid-light order set.

Pharmacists educated providers and nurses on the order set and various medication options to assure comfort and competence in ordering, administering, monitoring and talking to patients about the alternative medications. Pharmacists also had individual conversations with high-usage providers to address barriers and provide recommendations, and presented usage data at monthly ED provider meetings. Order-set medications were made available in the automated dispensing machines for increased accessibility. In partnership with nursing, policy and training was developed to allow ED nurses to administer low, analgesic doses of ketamine. Throughout, the interprofessional team used an ongoing process for review and analysis to ensure continuous improvement towards their goals.
Objectives

- Decrease ED patients’ exposure to opioids, especially opioid-naïve patients, to decrease risk of developing opioid addiction.
- Improve pain management by providing the most current evidence-based treatment options.

Results

<table>
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<tr>
<th>Increased Safety of Care</th>
<th>Enhanced Patient Outcomes</th>
<th>Spreading the Impact</th>
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<tbody>
<tr>
<td>• Decrease in ED monthly MME per 100 patient visits by &gt;70%, sustained for 6 months.</td>
<td>• Increase in patient satisfaction with care in ED assessed via patient satisfaction scores.</td>
<td>• Expansion of Opioid-Light order set to the other 21 hospitals in Baptist system.</td>
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<td>• Decrease in percent of ED patients receiving an opioid during ED visit by &gt;50%</td>
<td>• Stable patient satisfaction scores related to pain management with decreased opioid use.</td>
<td>• Pilot implementation in 28 EDs throughout state via the Tennessee Hospital Association, including commitment of reporting monthly metrics for MME/100 patient visits and percent of patients seen receiving an opioid.</td>
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Initiative Continuation

The Baptist Memphis team continues to report utilization data at the monthly ED provider meetings and has sustained a 70% reduction in MMEs for more than 6 months. The Opioid-Light order set has now been spread throughout the Baptist system, which includes an additional 21 hospitals in the surrounding area. In collaboration with the Tennessee Hospital Association, the Opioid-Light program is also being piloted in 28 EDs throughout the state. The Baptist Memphis pharmacy team is working to expand the multi-modal approach to in-patients with an initial focus on perioperative pain management.

About the Award for Excellence in Medication Safety

The Award for Excellence in Medication Safety is a nationally acclaimed awards program that recognizes outstanding pharmacist leadership, teamwork, innovation and patient outcomes that demonstrate improvements in patient safety within a medication-use system in acute and ambulatory care settings. For over a decade, the award has been a collaboration between the ASHP Foundation and the Cardinal Health Foundation, to showcase the critical value and importance of pharmacist leadership in impacting the effective and safe use of medications on patient care and outcomes.