

MEMORANDUM

TO: Auxiliary President and Auxiliary Board Members

FROM: Central Kentucky Anesthesia: Acute Pain Service

Thomas L. Broster, MD

John M. Edwards III, MS, CRNA

DATE: 8-17-2017

ITEM(S) REQUESTED: Ultrasound Machine

NEED DEFINED: Central Kentucky Anesthesia has become one of Baptist Health's premier anesthesia practices. We specialize not only in providing anesthesia but Acute Postoperative Pain Management services for patients undergoing a variety of surgical procedures. Central Kentucky Anesthesia boasts 13 Anesthesiologists and 26 Certified Registered Nurse Anesthetists (CRNA).

In the past, pain after surgery has been often under treated, despite surveys that show patients coming for surgery, pain is one of their greatest concerns. We know that effective pain management is not simply about patient well-being, but contributes to better post-operative recovery. Good pain management leads to a quicker recovery, a shorter hospital stay, with less complications. Good post-operative pain management starts before the operation, continues through the operation and into the post-operative period. At Baptist Health Lexington, we're able to use the latest technology to see things we haven't been able to see before. With the use of ultrasound guidance, we have a real-time visual assistant that helps us to quickly, safely and precisely guide our nerve block procedures. We consistently utilize a variety of ultrasound guided peripheral nerve blocks to manage postoperative pain.

Central Kentucky Anesthesia developed a formal Acute Pain Service in the spring of 2014. We began our service with two ultrasound machines. Over the course of 2014, we developed protocols for multiple orthopedic surgical procedures that utilized the use of peripheral nerve blocks and indwelling nerve catheters. In 2014, we provided **1623** peripheral nerve blocks and discharged **140** patients home with peripheral nerve catheters to prolong their excellent pain management. At the beginning of 2015, Baptist Health Lexington agreed to not only purchase us a third ultrasound machine, but also provide us with a full time Acute Pain Nurse to help us further provide excellent care for our patients. 2015 was a very busy year for our group. We developed protocols for elderly hip fracture patients, bariatric surgical patients, colorectal surgical patients and continued to expand the use of ultrasound guided peripheral nerve block and catheter placements. In 2015, we provided **2595** peripheral nerve blocks and discharged **575** patients home with peripheral nerve catheters which was a **311%** increase from the prior year. In 2016, we continued to perfect our current acute pain protocols and developed a very successful protocol for patients with breast cancer that were undergoing both mastectomy and mastectomy with reconstruction surgeries. In 2016, we provided **3313** peripheral nerve blocks and discharged **691** patients home with peripheral nerve catheters.

Providing both single shot and continuous nerve blocks reduce the need for opioid medications, which prevent patients from developing opioid side effects and, more importantly, opioid dependence. The amount of opioids that our patients require has dramatically decreased. The implementation of an Acute Pain Service at Baptist Health Lexington has had a profound impact on patient care. Perhaps the biggest difference has been on the time a patient has to stay in a hospital after a procedure, referred to as length of stay. A prolonged hospital stay can increase health care costs considerably and is a burden for patients and caregivers. Since starting the Acute Pain Service, patient satisfaction had dramatically increased and LOS has decreased consistently.

The ability to provide over 3300 peripheral nerve blocks and nerve catheter placements in a year requires a lot of organization. The Acute Pain Service has provided many educational events to train the anesthesia providers, pre-op staff, OR staff, PACU staff, floor nurses and even pharmacy. Central Kentucky Anesthesia's Acute Pain Service currently has 2 ongoing research projects looking at ultrasound guided nerve block procedures. We intend to publish our research in an attempt to help others learn from our experience. We have worked hard to reach new levels of excellence in patient care every year.

We have grown so quickly that we struggle to meet the demands of our daily practice. We currently have three ultrasound machines. We utilize these machines to for every single nerve block and catheter placement. Most days, we don't have enough machines to get our work done effectively. Unfortunately, we spend a lot of our time hunting down machines. There are times we have to post-pone the nerve block procedure until another machine becomes available, which can delay the patient's surgery. We feel that five total ultrasound machines would meet the needs of our Acute Pain Service and give us room for continued expansion. Baptist Health Lexington has agreed to provide a fourth ultrasound machine. It is one that will allow us to do some specialty blocks as well as assess cardiac and lung function. We would respectfully like to ask the Baptist Health Lexington Auxiliary to provide us funds to purchase a fifth machine to help us grow and expand our Acute Pain Service to impact more patients' lives.

Sincerely,

Thomas L. Broster, MD
John M. Edwards III, MS, CRNA

DATE ITEM IS NEEDED: Fall 2017

AMOUNT REQUESTED: \$30,000

Department Director

Vice President

*All requests must be approved by the appropriate persons prior to being submitted to the Auxiliary.