Pain Management at SJH—Keeping Our Patients Comfortable and Safe

The pain management standards established by The Joint Commission in 2001, have made patient comfort and the alleviation of pain a high priority, and rightfully so. Unfortunately, increased efforts to alleviate a patient’s pain have not been without consequences. More aggressive opioid analgesia is often clinically indicated, but is not without risk. Throughout the past decade, the Institute for Safe Medication Practices noted a rise in the number of adverse outcomes associated with patients receiving opioids in hospitals across the nation. Our patients at St. Joseph Hospital were not exempt from this phenomena.

A rising trend in the number of transfers to the ICU due to iatrogenic oversedation became apparent during ICU rounding in November of 2009. This observation was brought forward to several Committees, and concern began to spread throughout the hospital. In an effort to capture the extent of the problem, a retrospective case review was conducted by the Quality and Resource Management Department on all patients who were administered naloxone due to iatrogenic oversedation in Quarter 4, 2009. In addition, all transfers to the ICU, rapid response team activations and code blue activations were reviewed to determine how many were related to iatrogenic oversedation. The use of naloxone proved to be the best way to capture the occurrences. Findings of the study revealed that 80% of the cases involved the use of Dilaudid, 40% of cases were orthopedic patients with an average age of 80, and three-fourths of patients had significant medical co-morbidities, most commonly COPD, kidney disease, sleep apnea, and dementia. Further analysis identified additional contributing factors, including but not limited to the following:

- Dilaudid dosage was inappropriate for IV usage due to an apparent lack of appreciation by the ordering provider that the starting IM dose may be 1mg to 2mg every 3 to 4 hours, but the starting IV dose is 0.3mg to 0.6mg every 1 to 2 hours;
- Concomitant use of long acting oral narcotics leading to delayed overdose, as the peak effect of the oral agent occurs after a therapeutic level has been established with short acting IV narcotics that may be accumulating unexpectedly in the elderly and those with comorbidities;
- Failure of dose reduction in patients with comorbidities, especially dementia, COPD, and chronic renal disease;
- Concomitant use of other sedating medications for anxiety or nausea (benzodiazepams, antihistamines or phenothiazines) without appropriate dose reduction of the narcotic and/or the sedation medication;
- Inadequate evaluation after administration of narcotics both for peak effect (15 mins after IV administration) and for cumulative sedation (2 hours);
- Continuation of home medications at full dosage as a result of the medication reconciliation process without adjustment for the acute situation.

The results of this audit and the growing concern regarding the extent and upward trend of the problem made it clear that something had to be done. In April 2010, a multidisciplinary Pain Task Force was created, comprised of nearly twenty nurses with representation from units across the organization. The members were first charged with reviewing evidence based literature related to pain management and its associated risks, which clearly confirmed that oversedation is not unique to St. Joseph Hospital but is rather a growing concern in hospitals nationwide.

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Given the evidence from the literature review as well as the analysis of the audit findings, the Pain Task Force then established prioritization of goals and set forth to accomplish numerous initiatives aimed at preventing further episodes of oversedation. The initiatives focused primarily on education, changing the delivery of narcotic administration, including more accurate dosing as well as safer delivery mechanisms, increasing the frequency of assessments, implementing a sedation assessment scale, and enhancing the use of nonpharmacological pain interventions.

Some of the methods used to educate nursing included posting laminated educational posters on frequently prescribed narcotics, including the peak effect, onset of action, duration and half-life, suggested dosage guidelines, and appropriate nursing assessment, posting equianalgesic charts and dosing algorithms, distribution of pocket cards, mandatory completion of a Net Learning module on Prevention of Sedation & Respiratory Depression During Opioid Administration for Pain Management, as well mandatory completion of a test on Evidence Based Guidelines for Pain Management in the Older Adult. Open forums were held with Dr. McDonah and Dr. Kumar, where equianalgesic dosing was discussed, and the role of the anesthesiologist in pain management and the use of nerve blocks in trauma, cancer and orthopedic patients was emphasized.

Education was not only geared to physicians and nurses, but to our patients and families as well. On admission and throughout their hospital stay, patients are educated on their role in pain management. Signs are now posted in every patient room on “What Can I Do to Decrease My Pain?”, and a pamphlet from The Joint Commission on “Speak Up” was printed.

The organization also opted to provide a safer method of medication administration by purchasing new Patient Controlled Analgesia (PCA) pumps that allow for the programming and use of Dilaudid, Fentanyl and Morphine. Using PCA versus IV push will deliver a smaller dose of the drug more frequently, allowing for better pain management and decreased likelihood of oversedation. In addition, as of 05/18/2010, AdminRx is live on all units, which provides another method of ensuring medication safety at the point of administration with bar code matching of patient and medication. A message alert has been programmed into AdminRx that appears when scanning Dilaudid that reads: Potent narcotic; Assess 15 minutes post dose; Watch dosing, approx. 1.5mg = 10mg morphine.

One of the biggest changes in nursing practice involves the implementation of a sedation assessment for patients receiving IV narcotics, whether it be via IV push, a drip, or PCA. Evidence has shown that nurses can be the key to preventing respiratory depression by frequently assessing a patient’s sedation level, which is a warning sign that the dosage of the opioid may need to be adjusted. The Pasero Opioid Sedation Scale (POSS) has been implemented on all units, and requires reassessment of the patient’s sedation level 15 minutes after the administration of an IV push narcotic or change in dosage for an IV drip or PCA, with specified guidelines for frequency of reassessment thereafter.

In addition to pharmacological measures, the Pain Task Force lead an initiative to enhance the awareness and use of complimentary nonpharmacological interventions, including a Relaxation Channel on TV, re-institution of the Pet Therapy Program, a book/magazine cart, and the role of Spiritual Care in pain management.

As evidenced by the trend line below, the initiatives set forth by the Pain Task Force have had a positive impact on reducing the incidence of oversedation. As the quest to provide safe and effective pain management for our patients continues, the effectiveness of the initiatives will continue to be evaluated. A review of Narcan used to reverse oversedation will continue on an ongoing basis and results will be disseminated throughout the organization. Review of our patient satisfaction results regarding pain management will also be monitored to ensure that we are providing appropriate and effective management. In addition, each unit is charged with completing five pain audits on a monthly basis where review of the medical record as well as input from the patient is sought.

Optimal management of the patient experiencing pain enhances healing and promotes both physical and psychological wellness. St. Joseph Hospital, acting out of our belief in the value and dignity of each person, commits to provide effective pain management in order to reduce pain and suffering of each person receiving service and care within our system. Our commitment is to provide care for all individuals served within our system that is safe, effective, patient-centered, timely, efficient and equitable.
CPOE—What is it and how does it affect me?

CPOE (Computerized Provider Order Entry) will increase patient safety and improve the timeliness and quality of care we provide here at SJH. It will integrate the electronic systems we are currently using for inpatient and emergency room patients. CPOE will replace our current process with real time, unambiguous orders, therefore improving patient safety and reducing the length of stay. This project will be a significant investment of time and resources for our organization, which will help us to grow our services. We have started the project and are planning to train staff in late 2011, early 2012.

HEO (Horizon Expert Orders) is the computerized physician order entry (CPOE) system that St. Joseph Hospital has chosen to implement. HEO is a McKesson product which integrates with Physician Portal, Care Organizer/Horizon Expert Documentation (HED), and Horizon Meds Manager (Pharmacy system).

The design/build process has begun with interdisciplinary clinical teams comprised of stakeholders from each of the impacted groups, including physicians, nursing, pharmacy, laboratory, radiology, respiratory therapy, rehab therapy, cardiovascular, and nutrition services. Workgroups have been formed and will collaborate with the core project team on the workflow and rollout strategy.

Further information about CPOE or HEO is on the SJH Intranet or can be obtained by contacting:

Dr. Bill Stephan, CPOE Physician Champion
Aaron Thibodeau, Manager of Physician Applications; x63506
Dianne Bolton, Director Nursing Informatics; Project Co-Project Manager; x63527
Glenn Spargo, Director of Applications, IS; Co-Project Manager; x63502
Keith Choinka, CIO; Executive Sponsor; x63340

New Measure for AMI—Statin Prescribed at Discharge

A new measure for Acute Myocardial Infarction (AMI) - Statin prescribed at discharge has been implemented for all medical staff who have privileges at St. Joseph Hospital. We began abstracting this Core Measure information beginning with October 1st patient discharges. Listed below is the new measure information. As always, use of standard treatment plans may not be appropriate for all patients. It is important, therefore, to document the rational when there is any deviation from a standard of care. This can be done in the discharge summary when the course of hospital care is reviewed. Please be sure to explicitly link the condition, reason for not prescribing a Statin at discharge in your summary. SJH is continuously striving to give exceptional patient care!

**Description:** Acute myocardial infarction (AMI) patients who are prescribed a statin at hospital discharge.

**Rationale:** Several randomized clinical trials have proven the benefits of statin drugs (also known as HMG Co-A reductase inhibitors) in reducing the risk of death and recurrent cardiovascular events in a broad range of patients with established cardiovascular disease, including those with prior myocardial infarction (4S, 1994; Sacks, 1996; LIPID Study Group, 1998; and MRC/BHF Heart Protection Study, 2002). Current ACC/AHA guidelines place a strong emphasis on the initiation or maintenance of statin drugs for patients hospitalized with AMI, particularly those with LDL-cholesterol levels above 100 mg/dL (Antman, 2004; Smith, 2006; Anderson, 2007; and Antman, 2008). As a result of the strength of the evidence and guideline support, the ACC/AHA have developed a performance measure to assess this aspect of care for patients with acute myocardial infarction (Krumholz, 2008). Because statins are generally well-tolerated, most patients with AMI are appropriate candidates for this therapy.

**Remember:** If not prescribing Statin Medication at discharge, the reason must be included in your Discharge Summary.

If you have any questions, please feel free to contact me by e-mail, wstephan@sjhn.org or by phone at ext. 67046—Bill Stephan, MD, Vice President, Medical Affairs.
We are going through major renovations in the Operating Rooms at the St. Joseph Hospital. Changes are happening all around. Relocation, new surroundings, new colleagues and unfamiliar work conditions are what we are not accustomed to. Those of us who work in the operating room are very obsessive about doing the same routine everyday and keeping things in order. It is challenging to adapt to new conditions and at the same time improve efficiency and maintain safety.

These are “the” challenges routinely faced in voluntary medical missions.

I was lucky enough to be a part of voluntary medical mission work involving plastic reconstruction surgery in children for cleft lip and cleft palate. I was involved in missions to Columbia and China in the last couple of years. The next planned medical mission will be in Bangladesh early next year.

The team consists of varied medical and non-medical personnel from all over the world with varying background and experience.

They all have only one thing in common; service and hard work. Everyone in the team has a critical role in the successful completion of the mission. In my experience I appreciated the importance of teamwork, where everyone’s work is very closely interlinked with others. The whole crew consisted of postmaster, sterilizer, interpreter, medical record keeper, photographer, speech pathologist, dentist, pediatrician, OR nurse, PACU nurse, plastic surgeon and anesthesiologist.

It starts with the postmaster who is in charge of packing, transporting, delivering the daily supply of all necessary things from a gauze piece to surgical instruments, anesthesia equipments and drugs. The next key role is of the interpreter. Often the medical missions do their service in a country where English is not the spoken language. Interpreters play a key role in interaction with patients, the service providers and the hospital personnel, all helping us in every aspect of planning and execution of the mission.

All the team members get introduced for the first time at the airport. Each team consists of a surgeon, anesthesiologist and a nurse. Bonding among the team members is immediate and deep. Members stay as a team for the entire mission. The first day of the mission is clinic day, screening patients and scheduling. This is followed by unpacking, arranging and getting used to conditions in a couple of hours left in the day.

A typical working day starts with a brief meeting about the day’s schedule followed by the first case in the room by 7 am. We start early so that we can finish by 4 pm and the local scheduled cases start after 4 pm. The local OR personnel are very cooperative and accommodating. The day’s work ends with happy hour between 5 to 6 p.m. where everyone unwinds and shares each other’s experience. One of the teams will be on call to take care of emergencies. The operated children are admitted overnight for observation and discharged the next day after seen by rounding surgeons. Typically around 150 children get corrected cleft lips and palates in a mission.

Team members are well taken care of by the hosts. We get one day as a rest day, usually Sunday, where we get a chance to go out and explore the local culture. You feel the appreciation and gratitude by the local people all around.

I love meeting people, visiting new places, enjoying different cultures and their food and language. One gets to meet many unique, interesting personalities. My plastic surgeon was 81 years old from Australia, who happens to be a world class swimmer and who recently won 6 gold medals in the world swimming championship in Sweden. My lead anesthesiologist, who himself had a cleft lip corrected as a child, had been to more than 25 missions so far.

I always wonder how everyone gets along as well in such a short time and get things done efficiently and safely under challenging conditions.

If we can appreciate at work how everyone has a unique personality and learn to work as a team inspiring each other with a common goal, we can make it happen every day. In fact, my colleagues are my extended family!

**Annual Golf Tournament a Success**

Supporters, physicians and friends of St. Joseph Hospital raised more than $101,000 at the 24th Annual Charity Golf Tournament. The Swinging 60’s theme was a definite hit and many of the participants seemed at home with the flower-power, tie-dye-wearing, peace-and-love vibe throughout the day! Our physicians and volunteers were great sports and made for a very colorful and fun event.

We also held a special tribute to outgoing President and CEO, Peter Davis and to Claudie Mahar, Vice President of Hospital Services, who both recently retired from St. Joseph Hospital. Peter and Claudie have been an integral part of every golf tournament and it was fitting to honor their valued commitment to St. Joseph Hospital.

A total of 15 St. Joseph Hospital physicians participated. Our congratulations to Dr. Fred Riester for his second place net handicap finish.