



FIRST

Do No Harm

In this Issue:

- ◆ BIDMC Implements BLC recommendations
- ◆ "Conflict" Teams at Quincy Medical Center
- ◆ Faulkner's CT Safety Initiatives
- ◆ Dr. Schreiber is "2010 Medical Director"
- ◆ "Lessons Learned" from OIG Report
- ◆ SQR Corner
- ◆ QPS Notes

Quality and Patient Safety Division, Board of Registration in Medicine

December, 2010

Program Development, Implementation and Evaluation for the Betsy Lehman Patient Safety Recommendations Regarding Fetal Heart Rate Monitoring

Harvard School of Public Health student, Mary Vadnais, MD, completed her practicum at the Board of Registration in Medicine's Quality and Patient Safety Division (QPSD). Under the guidance of Dr. Stancel Riley and Tracy Gay, JD, she elected to address the need for program development for the Betsy Lehman Center (BLC) Expert Panel in Obstetrics recommendations regarding fetal heart rate monitoring. This Panel, in a report published in November 2009, made recommendations to lower morbidity and mortality to mothers and infants in the period of labor.¹

The mission statement of the BLC Expert Panel was: "Under the auspices of the Betsy Lehman Center for Patient Safety and Medical Error Reduction, the Expert Panel in Obstetrics will review the existing state of the art in selected areas of obstetric quality and safety; including existing and developing best practice approaches; make evidence-based recommendations to improve care quality and safety; and identify areas for further research and collaboration." The Panel established task groups to make recommendations in five areas, one of which was electronic fetal heart rate monitoring. The recommendations for electronic fetal heart rate monitoring were the following:

All 46 maternity hospitals in Massachusetts should: adopt the new NICHD/AWHONN/ACNM/ACOG² approved definitions, terminologies, interpretation and management for EFM; develop educational programs related to the new guidelines; and establish processes to evaluate the implementation of the new guidelines, including maternal and neonatal outcomes.

In addition to these clinical recommendations, the Panel recommended the development of process and outcome measures to evaluate their implementation and effect.

Vadnais is also a Maternal Fetal Medicine Fellow at Beth Israel Deaconess Medical Center (BIDMC), a Harvard teaching hospital, and knew that the leaders in Obstetrics were interested in developing a plan to implement the NICHD terminology. She elected to merge their goals with that of the Quality and Patient Safety Division, and develop and implement a project in accordance with the Expert Panel recommendations

at BIDMC. There are approximately 5000 deliveries a year at BIDMC and electronic fetal heart rate monitoring is the most common obstetrical procedure. Included in this report are the details on her project.

Opinions and concerns surrounding the recommendations were sought informally from providers at BIDMC. Local Obstetrics experts and leaders at the other Harvard hospitals were contacted and their experiences in implementing or following the guidelines were discussed. Additionally, a local public health expert was identified and her suggestions on data collection incorporated into the practicum.

A literature review on implementing change in obstetrics was performed in PubMed. Evidence based elements likely to increase the success of a program were incorporated. A multi-faceted, multi-disciplinary approach was utilized and targeted nurses, residents and attending physicians. Formal leaders and opinion leaders were recruited to participate in delivering the didactics lectures and informative emails. Local champions, both nurses and physicians, were involved in promoting and assisting with compliance. Pocket cards with NICHD categories and definitions were distributed and large posters with the same information were displayed on the Labor and Delivery unit. Providers had access to a computer training module on fetal heart rate tracings. Vadnais was present on the Labor and Delivery unit during several day, night, weekday and weekend shifts to provide one-on-one assistance when needed, and to audit charts and provide immediate feedback. Additionally, the departments of Anesthesia and Neonatology were provided general information on the change in practice.

Forty-one charts were selected in a systematic, stratified, random manner to include charts from weekday and weekend day and night shifts. Eighty-seven percent of the patients' nursing flow sheets complied with the department's recommendation that a category be documented every 4 hours. There were 171 SOAP notes in the 41 charts. There was 90% compliance with use of a NICHD category. Of the remaining notes, 70% had all other components of FHT documented. One percent of notes lacked both a category and a complete description of FHT. Providers tended to either use a category

(Continued on page 2)

The Betsy Lehman Center serves as a clearinghouse for the development, evaluation, and dissemination, including, but not limited to the sponsorship of training and education programs, of best practices for patient safety and medical error reduction.



Fetal Heart Rate Monitoring

(Continued from page 1)

all of the time or none of the time.

Feedback from providers was collected informally and suggests that presence on the unit for assistance and pocket cards were most helpful. Also, providers report concerns surrounding the medical-legal ramifications of the NICHD categories. BIDMC's policy for fetal heart rate monitoring was revised.

The work was published in the *Journal of Maternal Fetal and Neonatal Medicine* in November, 2010. Vadnais and co-author Toni Golen, MD, concluded that the use of a multifaceted, multidisciplinary, evidence-based educational program can increase compliance in utilization of the NICHD definitions and three-tier system for electronic FHR monitoring. Additionally they suggest that evidence-based strategies and a multidisciplinary approach to education can yield high compliance in adoption of guidelines and result in practice change. Vadnais notes that further analysis is needed to determine long-term compliance and the impact on maternal and neonatal outcomes.

References

1. Recommendations to Improve Maternity Care in Massachusetts; Report of the Expert Panel in Obstetrics Convened by the Betsy Lehman Center for Public Safety and Medical Error Reduction; Massachusetts Department of Public Health; November 18, 2009.
2. NICHD: National Institute of Child Health and Human Development; AWHONN: Association of Women's Health and Neonatal Nursing; ACNM: American College of Nurse-Midwifery; ACOG: American College of Obstetricians and Gynecologists.

Acknowledgements

Harvard School of Public Health: Barbara Gottlieb, MD, MPH; Ellice Lieberman, MD, DrPH
Beth Israel Deaconess Medical Center: Toni Golen, MD; Tracey Pollard, RN
Board of Registration in Medicine: Tracy Gay, JD; Stancel Riley, MD, MPH

Quincy Medical Center's Conflict Response Team

Contributed by Esther Bowen, Director of Pastoral Care, Patient Advocate and HRO, Quincy Medical Center

In an April 2010 communication with the Quality and Patient Safety Division, the Department of Quality at Quincy Medical Center reported on a new initiative, the *CONFLICT RESPONSE TEAM* (CRT), a real-time response to conflicts that arise between a patient/family and care provider or amongst care providers themselves.

Modeled on the idea of the "Rapid Response Team," which brings additional clinical resources to the bedside real-time in order to help resolve clinical issues, the CRT provides additional clinical-administrative resources to the bedside to diffuse tension before it escalates to serious conflict. The primary responders include the Director of Risk Management, Chief Medical Officer, Chief Nursing Officer, Patient Advocate, &/or Manager of Transitions of Life Care. CRT responses in specific clinical settings also include key leaders from those respective areas, such as Department Chiefs. Our focus is on mentoring and coaching, providing support and learning for future encounters of a challenging nature. The team can be initiated any time of day or night when there is a sense of conflict that cannot be mediated by the persons involved. Our philosophy accompanying the implementation of this initiative is "no interaction should end with a sense of unresolved conflict." Such conflict can negatively impact caregiver focus and compromise patient outcomes.

A recent example that illustrates the effectiveness of the process involved the son of an elderly patient who was angry at what he perceived to be a condescending attitude on the part of the patient's nurse and not being able to get the answers he needed with regard to his mother's care. The son was in the process of signing his mother out AMA when the CRT was notified. The angry son agreed to speak with one of the team members who listened to his concerns. The conversation revealed deeper stress about the recent loss of his father and his great fear of losing his mother, as well. After a brief cooling-down period, the son was persuaded to speak with the attending physician and case manager in the presence of the CRT representative. The issues were clarified, reassurances were made to ensure compassionate communication and care, and the son agreed to keep his mother at the hospital until the appropriate time for discharge. The nurse apologized and the son even offered an apology on his own behalf for his escalated behavior.

Another situation involved tension and conflict among care providers surrounding a delayed patient discharge. Issues identified included consultants setting unrealistic expectations for patients, the hospitalist's difficulty in prioritizing discharges, and care providers not connecting regularly and effectively for care plans. A member of the CRT met with the care providers involved and facilitated discussion that was non-judgmental in nature. The encounter provided clarity of the issues and action steps were identified to correct recurring problems. The parties agreed that the intervention had been helpful for the situation at hand and had also provided enhanced clarity of structure for future discharge planning.

(Continued on page 3)



Conflict Response Team

(Continued from page 2)

A CRT process flowchart was developed to help our staff understand how to engage with the team. The clearly articulated process provides the appropriate structure for initiating the CRT both during regular business hours and during evenings and weekends, when conflicts are equally likely to happen but may be less likely to be resolved because of fewer administrative staff on hand. Additionally, in order to help improve systems overall, each encounter with the CRT is documented and maintained in a database so that we can study trends. A few of the other reasons for initiating the CRT are listed in Table 1, below.

We've received many encouraging comments from care providers across the institution that supports what we believe to be the need and usefulness of such a program. One nurse said, "The CRT process helped me feel supported in dealing with a challenging patient before it escalated to a major problem."

Table 1. Conflict Issues Database	
Conflict Issue	Issues Identified
Methadone management.	Patient and daughter felt uncomfortable with care management plan undertaken by MD.
Comfort measures in ICU.	MD reluctant to honor family wishes to change the patient's CMO status
Patient refused to sign behavioral contract.	Patient directing own care, refused to see specialists and refused medications.
Patient belligerent and refusing medications.	Patient needed calming influence.
Patient upset about late discharge.	Identified need for improved coordination with care plan. Hospitalists need assistance with prioritizing discharges.

CONFLICT RESPONSE TEAM AT THE BEDSIDE

In an effort to improve patient outcomes, professional relationships, communication, and overall sense of job satisfaction, we have developed a system that brings a conflict response team (CRT) to the bedside to provide additional support and mentoring for all front-line providers, to help them resolve specific difficult management issues or differences of opinion. Through this real-time response system, its focus on mentoring and coaching, and its ability to diffuse tension before it builds up, frontline providers are more likely to learn how to address such situations in the future and how to build a more effective team approach on the frontline. The key elements of such a system are:

- Initiate the CRT every time there is a conflict in a one to one interaction.
- The conflict may be between providers, or between provider and patient/family.
- The message to the frontline providers is "Don't leave anyone with a sense of conflict. Seek the help of a third party to mediate the issue or call the CRT."
- Responders will include the Director of Risk Management and Chief Medical Officer. Chief Nursing Officer (or delegate) may be called to participate, as necessary.
- Other key responders (or initiators) will include Patient Advocate and/or Director of Transitions of Life Care.
- For conflicts in specific clinical settings (e.g. Operating Room), the responders will be key leaders from the respective area (e.g. Chief of Surgery, Director of Surgical Services, Chief of Anesthesia.)
- The CRT will include the frontline providers involved in the care of the patient
- The immediate goal of the CRT will be to diffuse tension and arrive at a sense of agreement about the patient's care plan.
- The CRT will be specifically charged with not identifying blame or fault, but to improve frontline providers' capacity in decision-making, communication, and teamwork
- The CRT will monitor the responses, and develop a system to measure outcomes.

Quincy Medical Center





What's New in CT Safety at Faulkner Hospital

Joanne Locke, RN, JD, Director, QI, Risk Management and Credentialing
Ellen McKenna, RT (R) (CT), QI Coordinator, Department of Radiology
Faulkner Hospital, Boston, Massachusetts

During the past year, Faulkner Hospital Radiology has taken a leadership role in patient safety and quality improvement at our institution through its efforts to strengthen CT safety. This story illustrates how comprehensive self-examination during the Root Cause Analysis (RCA) process can improve quality, reduce risk, and increase patient satisfaction.

The issue of CT utilization and patient safety begins with the decision to order a CT scan. In a recent issue of the *New England Journal of Medicine*, Bruce Hillman, M.D., and Jeff Goldsmith, Ph.D., advocate for better medical student clinical education to avoid the growing risk that patients face due to . . . “needless exposure to non-beneficial downstream testing and inappropriate treatment related to misdiagnosis and over-diagnosis of common but unimportant findings.” Hillman BJ, Goldsmith JC. *The Uncritical Use of High-Tech Medical Imaging*. *N Engl J Med*. 2010; 363 (1) 4-6. (Accessed July 22, 2010 at <http://content.nejm.org/cgi/content/full/363/1/4>). Hillman and Goldsmith cite 2009 data from the Association of American Medical Colleges that less than a fifth of medical schools have a mandatory radiology clerkship despite the near-ubiquitous use of CT, MRI and PET scanning among medical specialties. The goals of medical student training, according to the authors, should be to redirect new practitioners toward a more thoughtful approach in the use of imaging, and away from unnecessary cumulative radiation exposure over a patient lifetime. Faulkner Hospital endorses this perspective, and has developed guidelines, policies and protocols to reduce radiation exposure without compromising care.

Faulkner has worked to decrease both the amount of contrast and the amount of radiation exposure a patient receives during CT imaging. Over the past several months, Faulkner technologists have worked with other members of the Partners Radiology Safety Committee to identify the lowest level of radiation exposure necessary to produce an acceptable CT scan. This has resulted in reducing the amount of radiation exposure for several imaging exams, including sinus, chest, abdominal, and pelvic CT. These efforts also contributed to a decision to purchase two Siemens multi-slice scanners that implement a new automatic exposure control technique, called, “CareDose4D.” As described by the manufacturer, this technique analyzes the cross-sectional anatomy of each patient in real time (instead of simply relying upon the patient’s external dimensions and apparent size) and adjusts the emitted X-ray dose accordingly, to provide excellent image quality with minimal exposure. The system permits the radiation dose administered to the patient to adapt as the scanning occurs, adjusting the dose on an individualized basis. Other

CT manufacturers also have similar ionizing dose-reducing measures built into their scanners.

In addition to limiting the amount of radiation exposure, the hospital has improved its pre-procedure monitoring of renal function for high risk patients. Faulkner measures estimated Glomerular Filtration Rate (eGFR) in certain patient groups because this test is a more sensitive measure of renal function than BUN and creatinine. The eGFR guides clinicians to reduce or eliminate the amount of IV contrast media in vulnerable patient groups. In most cases, the test is performed within three weeks of imaging, with closer monitoring required for patients who recently received NSAIDs and certain chemotherapeutic agents. Other patients who require an eGFR include all patients over 65, as well as those who have received certain IV antibiotics, and IV Amphotericin B. If the eGFR value falls below a minimum threshold, imaging does proceed without physician assessment.

An interdisciplinary task force at the hospital developed guidelines to foster a more critical risk/benefit analysis in the use of CT scanning for evaluation of abdominal pain. An algorithm guides clinicians about utilizing KUB, ultrasound and physical exam before ordering a CT, in an effort to avoid aspiration and unnecessary ionizing radiation exposure. This includes patients who present with severe nausea and vomiting, small bowel obstruction, ileus, those at risk of aspiration, and patients with an obvious diagnosis. Practitioners also are reminded to consider whether the patient can benefit from CT findings, especially if too debilitated and ill to undergo surgery for conditions identified by imaging. In such cases, the CT may not provide any additional benefit to the patient’s treatment, and should therefore be avoided.

The development of guidelines alone is not enough to assure patient safety. Faulkner’s Radiology department recognizes that other members of the patient’s health care team, including Nursing and Speech Therapy, are important patient safety partners when oral contrast is ordered. Water-soluble iodized contrast media can be highly toxic to the lungs. For this reason, the hospital now provides an electronic prompt that asks the ordering clinician whether the patient is at risk of aspiration at the time the provider orders a CT scan with oral contrast. Recognizing that clinicians are bombarded with guidelines that may result in alert fatigue, nurses and speech therapists are encouraged to voice their concerns about aspiration risk to the ordering provider in the service of patient safety.

Once a decision has been made to proceed with a CT, patient safety efforts focus upon staff competency and pa-

(Continued on page 5)



What's New in CT Safety at Faulkner Hospital Continued...

(Continued from page 4)

tient preparation. The department has developed a detailed checklist for use by CT supervisors to evaluate the competence of new technologists on 34 points relating to IV placement, scanning protocols, equipment maintenance, and administration of IV, oral and rectal contrast. All technologists complete annual competency exams, and the department collects quarterly QI data to monitor practice trends.

Another patient safety tool that has been implemented by Faulkner Radiology is an expanded patient questionnaire, completed before every CT exam. The questionnaire checks relevant medical history, allergies, elicits patient understanding about the exam, assesses the patient's fall risk, and documents medication reconciliation. The questionnaire was designed with health literacy in mind.

The CT department also instituted a written procedural checklist used by its technologists, known as "Pause for Safety." The checklist monitors completion of two patient identifiers, the presence of required labs and verification of the patient's allergy history before starting an IV. It requires the technologist to match identified exam protocols to the clinician's signed order. In addition, the checklist focuses special attention upon priming and flushing of the power injector tubing and syringe immediately before contrast is administered. The technologist must assure that lines are compatible with the power injector, and that the psi and injection rates are safe in varied circumstances. Faulkner considers the checklist to be an essential system protection during the critically important final step before contrast administration. Despite additional time required to complete the checklist, the CT Pause for Safety protects patients from the rare but serious risk of an air embolism. It also helps to reduce other complications such as extravasation, line breaks, and contrast injecting incompatibilities.

Following the CT exam, patients receive aftercare instructions about what to expect. The instructions include recommendations for patient follow-up with the PCP and suggested renal function tests for patients who receive Metformin-based medications, which are known to interact with contrast agents.

Despite best efforts to make CT as safe as possible, complications may arise. Prevention of avoidable complications, such as IV contrast extravasation, has been a top priority at Faulkner. The department has designed a more comprehensive policy and improved its protocols. The policy provides a process to identify patients at risk for extravasation, such as those who are unable to communicate an IV problem, those with abnormal circulation, chemotherapy patients, and all patients over 65 years old.

When extravasation occurs, a detailed protocol is triggered. This includes immediate treatment of the injured area, MD notification, surgical consultation where required, and documentation of an online safety report. In addition, after an IV extravasation event, the patient receives an instruction form for continued treatment and follow-up after leaving the department. The patient is followed for 24-48 hours post IV contrast extravasation. A departmental QI report is completed about extravasation events to monitor and trend data. In quarters 1 and 2 of 2010, the Hospital greatly exceeded its safety performance goals.

Faulkner Radiology has utilized the RCA process to examine departmental practices and to make significant improvements in CT safety. A combination of strong leadership and staff commitment to quality and patient safety support efforts to provide the safest care possible.

For further information about the patient safety tools described in this article, please contact Ellen McKenna, Radiology Quality Improvement Coordinator, at emckenna@partners.org.

QPS Committee Member, Robert Schreiber, Named AMDA's 2010 "Medical Director of the Year"

The American Medical Directors Association (AMDA) named Robert Schreiber, MD, CMD, the 2010 "Medical Director of the Year." Dr. Schreiber is Physician-in-Chief at Hebrew Senior Life in Roslindale, MA, and a member of the QPS Committee. This award recognizes Dr. Schreiber for his exemplary work as a physician leader, educator, patient advocate, and clinician. As Hebrew Senior Life's clinical commander-in-chief, Dr. Schreiber was a key force behind implementation of the facility's Pathways to Wellness program, in which each resident receives a thorough assessment and a wellness plan is developed based on the individual's self-defined goals. Also under Dr. Schreiber's guidance, Hebrew Senior Living developed an Outpatient Wound-Healing Clinic that treats patients with a wide range of wounds, including pressure ulcers, diabetic foot/leg and vascular ulcers, and post-surgical and other types of open and non-healing wounds. The clinic's success has led to its expansion to three additional satellite locations. Dr. Schreiber serves as the QPS Committee's expert on rehabilitation and long term care issues.



Safety and Quality Review Corner

Respiratory failure complicated by propofol-related infusion syndrome (PRIS).

Event Description

The patient was intubated and admitted to the ICU, with respiratory compromise. Chest x-ray showed changes consistent with pulmonary edema, multifocal pneumonia, or ARDS. Urine test was positive for Legionella and the appropriate antibiotics were initiated. Propofol, fentanyl, and Cisatracurium drips were started because the patient was difficult to ventilate. A bronchoscopy was performed that showed scant non-purulent secretions, with normal appearing bronchial tree. The patient required 90% O₂ with PEEP; developed a coagulopathy and required increasing doses of propofol. Train of Four (TOF) measurements were consistently recorded at 0/4-4/4.

On HD#5, the patient developed tachycardia and hypertension, with decreasing O₂ saturations. On HD# 6, the patient developed a fever to 105.1 and his white blood count (WBC) rose to 22. A triglyceride level was checked on HD#7 and returned at 2750. The propofol continued to be increased daily and the patient continued to run high fevers. On HD#9, the patient's temperature rose to 106.5. He developed hypotension, requiring intravenous fluids and three pressors to maintain hemodynamics. The patient was noted to be over breathing the ventilator, but was unresponsive to painful stimuli. On HD# 10 the patient developed atrial fibrillation (AF); respiratory acidosis requiring IV sodium bicarbonate; and spiked a temperature to 107. His CPK returned at 344,800 and a troponin was 15.09. The patient developed a wide-complex tachycardia, coded and could not be resuscitated. An autopsy was not performed.

Review Findings and Lessons Learned

The case was reviewed by the hospital's ICU committee. The primary focus of the review was the sedation regimen. The patient was monitored for the effects of sedation and neuromuscular blockade with TOF and Bispectral Index (BIS). In spite of a BIS level in the 20-40 range, (normal BIS level is between 40-60), the patient's hypertension and tachycardia were treated by increasing the dose of propofol administered. Over 7 days, the daily dose of propofol was increased from 0.76 mg/kg/hr up to a maximum of 6.67 mg/kg/hr.

The hospital determined that there was a delay in recognition of probable PRIS and other possible etiologies to explain the high fevers in the face of broad spectrum antibiotic coverage. The providers had only focused on infectious causes of the fever and the possibility of PRIS was not raised until after the CPKs and triglycerides returned dramatically elevated.

Performance Improvement Measures

Educational videos on BIS monitoring, paralysis teaching and PRIS, were uploaded to the hospital intranet for mandatory viewing. Strict propofol administration guidelines were initiated and the need for clear documentation for paralysis was enforced. Triglycerides and CPK critical values were added to the laboratory protocols for ICU patients receiving propofol.

Study of Medicare Beneficiaries Reinforces the Need for Robust Occurrence Screening Processes

A recent study by the Department of Health and Human Services Office of Inspector General (OIG) found that an estimated 13.5 percent of hospitalized Medicare beneficiaries experienced adverse events during their hospital stay. The study defined "adverse event" as "harm to a patient as a result of medical care." Three screening methods were used to identify the adverse events: (1) analysis of Present on Admission (POA) Indicators; (2) medical record screening, using a modified version of the Institute for Healthcare Improvement (IHI) Global Trigger Tool; and (3) identification of readmissions within 30 days of discharge.

Less than 1 percent of beneficiaries experienced an event on the National Quality Forum (NQF) list of Serious Reportable Events (SREs). Medicare-defined Hospital Acquired Conditions (HACs) also rarely occurred, affecting 1 percent of beneficiaries. Most of the beneficiaries (13%) experienced events resulting in serious harm, (i.e., prolonged hospital stay, permanent harm, life-sustaining intervention, or death.)

The study evidences the importance of having robust hospital internal screening systems to identify and review events that are less readily identifiable and often more complex than SREs or HACs. The Patient Care Assessment (PCA) regulatory require-

ments for occurrence screening and Type 4 Major Incident reporting were designed to facilitate those processes in hospitals. The events that the study identified through its screening methodology are strikingly similar to the types of events that the Quality and Patient Safety Division (QPSD) receives or expects to receive from hospitals under the "Type 4" reporting requirements.

Through collaboration with the QPSD, Massachusetts hospitals have the opportunity to demonstrate how internal occurrence reporting and screening processes, combined with a confidential external reporting system, can be effective in reducing adverse events and promoting evidenced-based practice.

The OIG report, entitled Adverse Events in Hospitals: National Incidence Among Medicare Beneficiaries can be found at: (<http://oig.hhs.gov/oei/reports/oei-06-09-00090.pdf>).

The PCA regulations, 243 CMR 3.00, et seq. are at: <http://www.massmedboard.org/regs/pdf/Regulation%20Filing%20and%20Publication.pdf>.



QPSD Workshop

The Quality and Patient Safety Division (QPSD) held two half-day workshops, one at the Board of Registration in Medicine (BORM) offices in Wakefield on October 28th and one at Bay-state Franklin Medical Center in Greenfield on October 29th. The workshops focused on Patient Care Assessment (PCA) Programs in health care facilities: providing an overview of the regulations; outlining reporting requirements; and a facilitated discussion on how to conduct a safety and quality review.

Eighty people (forty in Wakefield and forty in Greenfield) from forty-one acute care and twelve rehabilitation and specialty hospitals attended. Twenty-one PCA Coordinators, twenty Quality and Patient Safety Managers, eighteen Risk Managers, fifteen Chief Medical Officers, four doctors and two attorneys were among the attendees.

In response to your feedback, we have decided to plan a peer review workshop for next year. We will plan to incorporate an understanding of the regulatory framework of peer review,

the necessary organizational structure and processes for conducting peer review, and the practices you will need in place to be effective. Please look for registration information in the spring.



Workshop Attendees L to R: Christopher Clark, MD; George Ritter, MD; and Robert Wespiser, MD

QPSD Notes

- ◆ The QPSD received a Safety and Quality Review (SQR) report describing a patient who developed Metformin-IV contrast induced acute renal failure. The hospital reported that it now requires that all patients recommended for IV contrast have an order entered into the hospital information system. For patients on Metformin this order will generate an automatic alert to all caregivers (and pharmacy) of a potential drug-test interaction, and will automatically stop re-orders of Metformin.
- ◆ We continue to see SQR reports describing death or respiratory arrest in post operative patients receiving Patient Controlled Analgesia (PCA). Vigilant postoperative monitoring and adherence to protocols can prevent complications associated with postoperative analgesia. A link to the QPSD Advisory on PCA is at: <http://www.massmedboard.org/pca/pdf/update113001.pdf>
- ◆ A hospital's orthopedic service consulted with its bariatric service on the development of protocols for the preoperative assessment and perioperative care of obese orthopedic patients. These actions were taken following the hospital's review of obesity-related orthopedic complications.
- ◆ Ethics consults continue to be a benefit when there are conflicts with patients, their families and providers over treatment decisions, as illustrated by a recent SQR report involving an elderly patient who expired from complications associated with aggressive management of his medical condition. In this case, the medical staff had been reluctant to pursue aggressive treatment of the patient due to her multiple comorbidities and frail state, but went ahead out of respect for the wishes of the family members.
- ◆ A hospital reported that it has instituted formal processes for the introduction of new devices in the operating room. They include procedures to assess providers' competence with the use of any new devices. These new processes were implemented following review of a laparoscopic injury, believed to have been related to the surgeon's use of a new device.
- ◆ To improve the process for patients receiving bedside procedures, one hospital implemented a formal time-out and check list process to be used for all bedside procedures. The hospital also standardized its mobile procedure cart, and created an on-line procedure log system for use by residents.
- ◆ Following review of a case that illustrated the difficulties in management patients who become confused during their hospitalization, one hospital recommended collaboration amongst its neurology, behavioral medicine and psychiatry services to develop protocols for management of patients with mental status changes.

QPSD Reminder

Please use the revised Safety and Quality Review forms and instructions. They can be downloaded from the QPS Division website: <http://www.massmedboard.org/pca/>



Should I Call the Attending Physician?

Here is a brief description of one academic medical center’s guidelines to ensure communication between attending physicians and trainees.

All inpatients are to be seen and evaluated daily (365 days/year) by an attending physician, who documents the evaluation in the patient’s chart. All inpatient consults must include a timely exam by the attending physician, who documents the evaluation in the patient chart: 4 hours for urgent/ emergent consults; and 24 hours for routine consults. Attending physicians are to be readily identifiable and reachable.

The medical center developed a list of events that require notification and/or approval of the attending physician. These events include: accepting transfers from another facility; accepting a patient transferred from another service within the facility; scheduling a surgical case; initial antibiotic treatment of a wound infection; initiation of therapeutic anticoagulation for DVT/PE; and undertaking any invasive diagnostic study. Other events requiring attending physician notification include: concern that a situation is more complicated than a trainee can manage; patient/family/care team requests for attending notification; request for inpatient consultation; change in patient status requiring a significant change in treatment plan; hemodynamic/ respiratory instability; significant neurological changes; critical diagnostic test results; wound complication (infection, dehiscence); diagnostic or treatment error requiring intervention; visit to ED within 30 days of discharge; patient leaving AMA; and patient death.

Here are some examples of cases recently reported as “**Type 4**” events to the QPS Division.

- ◆ CVA following coronary angiography and ablation procedure.
- ◆ Compartment syndrome following IV infiltration during a surgical procedure.
- ◆ Bariatric events- mortalities, and morbidity associated with wound dehiscence, anastomotic leaks and sepsis.
- ◆ Infection post breast reconstruction, requiring removal of expander or implant.
- ◆ Pancreatitis and myocardial infarction following Endoscopic Retrograde Cholangiopancreatography (ERCP).
- ◆ Right ventricle laceration during fluoro-guided pericardiocentesis.
- ◆ Delay in diagnosis of subdural hematoma when mental status change was mistaken for ETOH withdrawal.
- ◆ Anastomotic leak following reversal of colostomy.
- ◆ Colon perforation during PEG tube placement.
- ◆ Air embolus following central line removal.

CONTACT THE QPSD

To be added to the QPSD Newsletter and advisory mailing list, update hospital contact information, submit an article, request an SQR form, or obtain additional information, contact QPSD: Jennifer.Sadowski@state.ma.us or (781) 876-8296.

Send mail to Massachusetts Board of Registration in Medicine, QPS Division, 200 Harvard Mill Square, Suite 330, Wakefield, MA 01880.

**THANK YOU TO ALL OF THE
CONTRIBUTORS TO THE
QPSD NEWSLETTERS!**

The Quality and Patient Safety Division newsletter, FIRST Do No Harm, is a vehicle for sharing quality and patient safety initiatives of Massachusetts healthcare facilities and the work of the Board’s Quality and Patient Safety Division and Committee. Publication of this Newsletter does not constitute an endorsement by the Board of any studies or practices described in the Newsletter and none should be inferred.