CS38 A Cardiac Resuscitation Unit Development: An Interdisciplinary Approach to Postresuscitation Care
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Purpose: The coordinated care of the postresuscitation patient is a complex, time sensitive process that requires a specific skill set sensitive to the critical illness of the patient and the devastation brought onto the family. The purpose in developing a cardiac resuscitation unit (CRU) was to organize a functional unit of team members capable of routinely addressing the needs and process required for this patient population. Description: The in-hospital postresuscitation care of patients has become a complex process of patient triage, stabilization, coronary revascularization, hypothermia induction, mechanical circulatory support, neuro-protection, and inflammatory mitigation. Several years ago a team of nurses, cardiologists, and neurologists were assembled to create a process for the initiation of induced hypothermia. Over time this unique population grew, and with it came experience and increased knowledge of how complex the coordination of resources was. Additionally, it became apparent that it was more than successfully initiating a hypothermia protocol and safe patient monitoring, it was rapid patient triage, swift revascularization, family education and support, monitoring and quickly controlling nonconvulsive seizure activity, and escalating circulatory support when necessary. Two critical care nurses were appointed initially as hypothermia coordinators but their role was changed to CRU coordinators. These nurses coordinate the education, response, patient care, quality assurance, and interdisciplinary CRU team. They have developed continuing regional education and clinical practice guidelines to facilitate the care of these patients. Evaluation/Outcomes: The evaluation of this project has demonstrated the need and value of the CRU. This medical center continues to care for more than 100 sudden death survivors annually and ongoing metrics continue to demonstrate superiority over outcomes seen with postresuscitation studies. The critical care nurse approach to care coordination provides the base of organized patient and family centered care. Further scientific research into this approach defining the need for a coordinated interdisciplinary team response is ongoing.
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CS39 A Collaborative Solution to Decrease Unplanned Extubations in the Intensive Care Unit
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Purpose: An unplanned extubation is a potentially life-threatening incident that could lead to hemodynamic and airway complications, and increased costs. Since 2005 the University of Wisconsin Hospital’s 24-bed trauma and life support center has experienced an increased number of patients with unplanned extubations. A decision to implement eICU monitoring in the south side of the unit (12 beds) was made. One goal of the eICU monitoring was to minimize/prevent unplanned extubations. Description: In August 2008, eICU monitoring was implemented, which provided additional support to all patients, including intubated patients. e-Care registered nurses’ interventions include video rounding assessment on all patients; reminding confused, agitated patients not to pull on tubes; responding to vital sign alerts; updating bedside staff of changes; reviewing patients’ medications for potential causes of confusion and notifying staff if found; and monitoring confused patients for the bedside staff if staff are involved with other patients. The unit implemented additional strategies to decrease the number of unplanned extubations. Nursing leadership interviewed staff whose patient had an unplanned
extubation to better understand the circumstances surrounding the event and educated bedside staff to increase their awareness of unplanned extubations. The multidisciplinary team ensures that standardized sedation and weaning protocols are implemented and continues early morning rounds, rounding first on patients with successful weaning trials in hope to expedite extubation for those patients. **Evaluation/Outcomes:** Since August 2008 the number of unplanned extubations per 1000 ventilator days on the south side has shown a decline (5.2), whereas the number on the north side has continued to increase (11.2). Patient Safety Net reports on unplanned extubations with a harm score of D or E were tracked, and when compared to similar patients without an unplanned extubation, it was shown that these patients had an increased length of stay of 1.7 days at a cost of $5487. Seventeen patients on the north side experienced an unplanned extubation and were assigned a harm score of D or E. On the south side during the same period only 8 patients experienced an unplanned extubation. This difference represents a potential cost saving of $49 500.

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**CS40** A Comparison of a Behavioral and a Subjective Pain Scale in Thoracic Cardiovascular Surgery Patients

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**Purpose:** The critical care division of our institution use the Modified FLACC pain scale to assess the presence and level of pain in nonverbal patients. This tool was adapted from the FLACC pain scale by a nurse at our institution. The Modified FLACC pain scale tool ranks objective patient behaviors to determine a pain score; it has not been validated as a reliable tool. The Wong-Baker FACES scale has been validated as a reliable tool. This study is designed to evaluate these 2 pain scales.

**Description:** This study began as a unit quality improvement project. The initial data collected was reviewed by the quality improvement project team and the preliminary results were significant for the study of pain assessment in this patient population. During early postoperative recovery, patients are unable to effectively communicate their pain to their caregivers. An application for an expedited convenience nursing research study was made to the institutional review board for human research.

**Evaluation/Outcomes:** This is a prospective, observational, convenience study on 60 patients using the 2 pain scales.

Pain assessment training is provided by the acute pain service nursing coordinator for all the clinician observers collecting data for the study. The Wong-Baker FACES scale, 0 to 10, is used by alert verbal patients to describe their pain level to one of the observers at a predetermined time. The other observer assesses and documents the patient’s nonverbal behaviors and body language on the Modified FLACC tool during the same assessment period. All thoracic cardiovascular surgery patients in the ICU were included if they were alert and older than 18 years of age. Measures to prevent bias during the data collection include separate interactions with the patients by the observers. The results of the Modified FLACC will not provided to the second observer. The same patient will be assessed by 2 observers for the same time specified. This study has tremendous potential for clinical use and future research. There is no “approved pain assessment tool” for nonverbal patients at this time. This research will benefit from rigorous study oversight, increase the knowledge and improve the practice of pain assessment in non-verbal patients.

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**CS41** A Creative Solution Using Innovative Collaboration to Reduce Door-to-Balloon Time

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**Purpose:** Our goal was to create a system driven by the needs of patients and families in which acute and critical care nurses make their optimal contribution. By combining the critical care expertise of the rapid response team (RRT) nurse with the clinical expertise of the cardiac catheterization laboratory (CCL) team our purpose was to initiate a seamless, collaborative process to reduce door-to-balloon times at our institution.

**Description:** The American College of Cardiology/American Heart Association guidelines recommend a door-to-balloon time of no more than 90 minutes. In 2007, the mean emergency department (ED) door-to-balloon time at our institution was 94 minutes. Several approaches failed to help meet the 90-minute goal. In March 2008, the cardiology division contacted the RRT to explore the possibility of responding to ST-elevation myocardial infarction (STEMI) activations. A collaborative effort produced a creative process. For all STEMI activations, to ensure prompt response and immediate treatment, a page goes out to several key health care personnel in the organization.
The RRT is one of the responders and has a specific role of assisting with the initial treatment based on a STEMI checklist. Once activated, the RRT arrives in the ED with a portable defibrillator and STEMI medications, and is prepared to rapidly transport the patient to the CCL. The RRT is familiar with CCL processes and helps prepare the patient for a cardiac catheterization. A STEMI cart with patient preparation items was especially designed for the RRT to ensure efficient processes. In addition to ED response, the RRT meets the patient on the helipad for all STEMI life flight transfers and assists with direct transport to the CCL. Evaluation/Outcomes: Creating a STEMI checklist and putting together a STEMI cart were part of the creative tools to improve the process. Including the RRT in STEMI activations made a tremendous difference. In 2008, the mean ED door-to-balloon time was reduced to 67 minutes and in 2009 the mean ED door-to-balloon time was 47 minutes. Since implementation, the RRT collaboration has helped reduce door-to-balloon time by 47 minutes. With this creative solution and the dedicated effort of the RRT, ED, and CCL, Our institution was able to set a new ED door-to-balloon time goal of 45 minutes.

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CS42 A New Screening Strategy Detects Sepsis andPrevents Septic Shock
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Purpose: Although sepsis is a preventable condition with identifiable warning signs, it remains the 10th leading cause of death in the United States. The purpose of this 4-step screening process is to provide a simple tool for early detection, thereby decreasing incidence of septic shock and reducing the total number of deaths.

Description: This simple screening tool provides step-by-step analysis of a patient’s vital signs and laboratory data that collectively identifies infection and sepsis. Step 1 screens for systemic inflammatory response syndrome (SIRS). This step looks at heart rate, temperature, respirations, and white blood cell count. If 2 or more of these indicators fall outside of the accepted parameters then the patient is considered positive for SIRS, the nurse should proceed to step 2, screening for infection. Following determination of infection, step 3 requires screening for organ dysfunction. Once all 3 steps have been positively determined, severe sepsis is occurring, which prompts the nurse to notify a doctor using SBAR (Situation, Background, Assessment, and Recommendation). The recommendations include interventions such as fluid resuscitation, obtaining laboratory values (lactate level, complete blood count, and arterial blood gases), or calling the rapid response team. The screen was implemented by the nursing staff in an 18-bed intermediate care unit and was completed on each patient at the beginning of their shift. Evaluation/Outcomes: To evaluate this methodology, nurses collected data over a 5-month period, with an average data sample of 85 patients per month. In the first month, 8% of patients screened positive for severe sepsis. Although the number of patients who screened positive for infection remained constant, the percentage screening positive for severe sepsis lessened each month to 0%, 1%, 2%, and 4%, respectively. By detecting SIRS and infection in patients before onset of severe sepsis, treatment occurs earlier, in turn reducing the number of patients who test positive for severe sepsis. Additionally, early detection and treatment prevented the transfer of patients to the intensive care unit.

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CS43 A Staffing Matrix Tool Based on the Synergy Model to Make Nursing Assignments in the Pediatric Intensive Care Unit
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Purpose: The AACN Synergy Model for Patient Care was based on the premise that patients’ outcomes are optimized when patients’ needs match nurses’ competencies. Nurse satisfaction is essential to nurse retention and healthy work environments. The aim of this evidence-based practice project was to determine the impact of the use of a Nurse Staffing Matrix Tool based on the Synergy Model on nurse satisfaction with patient assignments made in the pediatric intensive care unit (PICU).

Description: This interventional study involves the development and implementation of a new assessment tool based on the AACN Synergy Model to better match patient needs with nurse competency. This prospective evidence-based practice project will use validated, published scoring tools developed by AACN to assess PICU patient characteristics/needs along with an investigator-developed Nurse Staffing Matrix to assess nurse competencies/skills. These tools and Matrix scoring system will replace the existing nurse skill assessment process.
currently being used in the PICU. The Nurse Staffing Matrix will measure subjective and objective assessment of nurse’s competency. This Staffing Matrix will combine the nurse’s subjective self-rating system using Benner’s Model of Novice to Expert and the Synergy Model’s Nurse Competencies scale and objective information such as age, gender, years of nursing experience, years in PICU, highest nursing degree, and nursing certifications. The PICU charge nurse will match patients with the highest acuity score with nurses with the highest score from the Nurse Staffing Matrix for each shift to determine the right nurse for the right patient.

**Evaluation/Outcomes:** Nurses participating in the study are asked to complete the Nurse Staffing Matrix Tool and a Healthy Work Environment (HWE) survey. The scores from the Nurse Staffing Matrix Tool will be used by the PICU charge nurse to make patient assignments and the results of the HWE survey will remain confidential. After 2 months, the nurses will retake the HWE survey. If the results of the HWE survey reveal a positive impact on nurse satisfaction with patient assignments when using the Nurse Staffing Matrix Tool, this tool will be recommended for continued use.

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**CS44 After the Abstract Is Accepted: What Next?**
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**Purpose:** Our ICU is actively involved in AACN and highly encourages staff participation in submitting creative solution and research abstracts for NTI. Staff members who have previously had successful submissions become mentors offering practical support and encouragement. Everyone is excited in January when the decisions on acceptance are sent out; however, the joy of acceptance is quickly replaced by the angst of how to actually create a poster. Unnerved, first time submitters ask “What next?" **Description:** We wanted to assist staff members whose abstracts were accepted to create posters that were informative, appealing and in compliance with AACN guidelines. To accomplish these goals nurses with previously accepted abstracts organized a poster workshop day, consisting of a 6-hour blitz session during which mentors were available for all nurses with accepted abstracts to come and create their poster. The leaders invited staff members who had previously presented NTI posters to bring their laptops and attend the workshop. A clinical nurse educator from hospital education created a template that accommodated the NTI poster requirements as well as a theme with a consistent background color and our hospital logo. A conference room for a 6-hour block of time was obtained. The room had a large a table and chairs to accommodate up to 20 people at one time. With this in place, we moved forward with advertising. All potential poster presenters were sent the template and poster guidelines via e-mail to begin their poster and invited to come anytime during the session to work with experienced staff to create and polish their project. **Evaluation/Outcomes:** Turnout was a great success. Mentors successfully guided new presenters through the process with humor and tact. The entire group was able to view and critique posters via computer before completion. They provided valuable insight and suggestions resulting in more instructive and polished posters. By the end of the session, many posters were ready to print. Those not finalized had a significant start and an identified mentor to assist in completion. Finally, all posters were consistent, providing a unified identity for our hospital submissions at the NTI poster sessions. With anxiety transformed into the anticipation of presenting their poster at NTI, the first timers knew what to do next!

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**CS45 Are You as Smart as a CCRN? Developing Confidence for Certification Testing**
Andrea M. Russo; University Hospitals Case Medical Center, Cleveland, OH

**Purpose:** Certification validates expert knowledge and skills. A sense of confidence is part of being a certified nurse. Having the knowledge base and confidence to take the certification is a sticking point for many nurses. The purpose of this project was help our nursing staff develop their knowledge base as well as their confidence level to be successful in becoming certified. **Description:** We asked nursing staff in our 4 ICUs if they had considered becoming certified and if not, why not. The overwhelming response was, “I’m not ready,” “I don’t know enough.” In an attempt to boost RNs’ confidence, to enhance their knowledge base, and to promote certification, the following project was designed. A tri-fold poster was developed for each of our ICUs. The posters were titled “Are you smarter than a CCRN?” Information on value and benefits of certification was displayed as well as options available for the hospital’s support of their pur-
suit of certification. Each week, 3 to 4 CCN review questions were posted and e-mailed to all ICU RNs, together with the answers and rational for the previous week’s questions. The names of the RNs who correctly answered the questions each week were posted on the unit’s bulletin board. In each unit, a weekly drawing was held and a hospital meal or movie ticket was awarded to the nurse whose name was drawn. At week 44, a 10-question survey was sent to the nurses to determine the project’s effectiveness. The survey was open to both certified and uncertified RNs. Fifty-three (26%) RNs participated, of whom 81% were not certified.

**Evaluation/Outcomes:**
Survey results revealed that 87% of RNs had completed the questions at least 25% of the weeks, 30% had completed the test at least 50% of the weeks, 100% thought the questions were appropriate for the roles, and 95% felt they learned from completing the weekly questions. Of the 42 RNs who were not certified, 73% felt that after completion of the questions they had a greater confidence level in their ability to pass the test. Sixty-one percent said personal satisfaction was the most important reason for certification and more than 80% believed that better patient outcomes had resulted from the weekly questions. Enhancing the nurses’ perception related their ability to the certify test is one of the first steps in promoting certification.

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**CS46 Aspiring Nurse Leaders: Inspiring the Future of Nursing**
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**Purpose:** The purpose of Aspiring Nurse Leaders Week is to provide bedside clinicians an opportunity to further their leadership knowledge and abilities through educational offerings, presentations from tenured leaders, and recognition of current efforts. Ongoing development of clinical leaders allows the opportunity to expand expertise and grow professionally in an effort to retain clinical experts and leaders at the bedside.

**Description:** Aspiring Nurse Leaders Week recognizes nurses who demonstrate clinical excellence and leadership. These individuals demonstrate the drive and desire to improve quality of care and their work environment while practicing at the bedside. This week-long event promotes ongoing professional development of these aspiring nurse leaders and recognizes their efforts. At the same time the occasion encourages others to develop their own leadership knowledge and abilities. Events of the week include a key note address from a tenured leader to inspire program participants as well as formal recognition of nurses in different clinical areas who consistently demonstrate quality and commitment to nursing excellence. Continuing education classes provided throughout the week include portfolio planning, review of available educational opportunities from local nursing institutions, how to prepare and present a professional nursing presentation, evidence-based management, and the introduction of a nursing research toolkit. Posters highlighting the various quality improvement and work environment improvement projects being completed in the different clinical areas are also prominently displayed for staff and visitors during the entire week.

**Evaluation/Outcomes:** The inaugural Aspiring Nurse Leaders Week was an opportunity to recognize and promote excellence in leadership. The concept was developed by the Professional Development Shared Governance Council to provide nursing staff opportunities to develop as professionals and leaders. All scheduled events were well attended and gave nurses an opportunity to be distinguished for their outstanding work. Aspiring Nurse Leader award winners received a scholarship for further education. The event also inspired others to become more involved within their own work environments in the future. Overall, the program was well received and the second annual event is scheduled for this fall.

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**CS47 Authentic Leadership: Building Leadership Competency Using Blended Learning With ENMO**
Vivian F. Norman; St. Joseph Hospital, Orange, CA

**Purpose:** Creating a healthy work environment must include authentic leadership. It is no longer appropriate to promote the best bedside nurse to a management position, without support to acquire leadership skills. Mentoring and coaching is as important as theory and content. Essentials of Nurse Manager Orientation (ENMO) provides the foundation, and paired with a practicum, a successful leadership development program can be built.

**Description:** An 18-month program was developed based on ENMO and regular coaching/mentoring sessions. The Executive Nursing Management Team gave full support, including budgetary. Clinical coordinators, managers, and “rising stars” were selected to partici-
The patient or family dials a specific extension that connects them to the operator. The operator has discrete criteria to screen for a valid Condition H call. Should the patient’s call be an appropriate Condition H, for example, the patient or family believes there has been a worrisome change in the patient’s condition or after speaking with a member of the health care team, the patient continues to have serious concerns about their care, the operator will activate the rapid response team (RRT). The RRT responds immediately to the bedside. Should the call not be a valid Condition H (e.g., diet, TV, phone, or temperature concern), the operator will call the patient care unit and inform the charge nurse of the patient’s concern or request.

**Evaluation/Outcomes:** We knew we had to bring a “family lifeline” to our patients. In offering them the Condition H option, we demonstrate our commitment to them as partners in their care. The RRT council’s goal is to widen our patient safety net through our Condition H initiative and disseminate “lessons learned” to physicians and nursing staff. Condition H was implemented in June 2008. Since then, 22 Condition H calls have been initiated. Of those, one necessitated a patient transfer to a higher level of care and 6 resulted in medical or nursing intervention. Patients and families express appreciation and a renewed sense of confidence due to this important safety measure.

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**CS48 Can You Hear Me Now? Condition “H” Hears You and Rapid Response Is on the Way!**
Deborah A. Lepman, Mary Hewett, Sherry Lemasters; Hoag Memorial Hospital Presbyterian, Newport Beach, CA

**Purpose:** Our hospital is dedicated to the delivery of patient-centered care. Empowering our patients to participate in the decision making and delivery of their care is pivotal to this process. Patient safety is our top priority. We welcome our patients, their families and loved ones to partner with us to ensure optimal care and safety during their hospital stay. **Description:** Condition Help, or Condition “H,” is our hospital’s initiative to enable patients and their loved ones to call for help when a patient is in distress and they feel they are not receiving the medical attention they require. Patients and families are informed of Condition H on admission, through brochures and posters displayed in hallways and patient rooms, an in discussions with their care givers. To access Condition H, the patient or family dials a specific extension that connects them to the operator. The operator has discrete criteria to screen for a valid Condition H call. Should the patient’s call be an appropriate Condition H, for example, the patient or family believes there has been a worrisome change in the patient’s condition or after speaking with a member of the health care team, the patient continues to have serious concerns about their care, the operator will activate the rapid response team (RRT). The RRT responds immediately to the bedside. Should the call not be a valid Condition H (e.g., diet, TV, phone, or temperature concern), the operator will call the patient care unit and inform the charge nurse of the patient’s concern or request.

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**CS49 Can You Hear Me Now? Nursing Presentation During Multidisciplinary Bedside Rounds**
Heidi A. Martin, Eileen Nelson; Children’s Hospital of Philadelphia, Philadelphia, PA

**Purpose:** Nurses are usually present during multidisciplinary bedside rounds in our 45-bed pediatric ICU. The degree of participation has been variable. Depending on the level of experience and team culture, the nurse may be viewed as an active team member or as an interested bystander. Consistent nurse presentation during rounds was implemented to increase decision making, facilitate active participation amongst all nurses and improve communication and collaboration amongst the multidisciplinary team. **Description:** Recognizing the need to improve active participation and decision making, we implemented a system in which each bedside nurse presents his/her patients during daily bedside rounds. Before implementation, data were collected to assess percentage of time nurses were physically present...
during bedside rounds, identify potential barriers as well as length of rounds. A script was developed with input from nursing and medical staff to guide nurses in presenting patient information/updates clearly and concisely during rounds. The script includes an overview of events/changes over the past twenty four hours and current issues/concerns. Before implementation, many discussions occurred with physicians, nursing leadership and bedside nurses to gain buy-in from each discipline. The physicians’ largest concern was that the length of rounds would increase. The script was trialed before full implementation. Night shift nurses prepare the information for the script and day shift nurses update and present the information during daily bedside rounds. If the assigned bedside nurse is unable to present the patient’s information during rounds, they use their neighbors or plan with charge nurse in an effort to have 100% active participation.

Evaluation/Outcomes: A survey was conducted 1 month after implementation. Less experienced nurses reported feeling more empowered and less intimidated during rounds. Response from experienced nurses has varied with some reporting no difference in their level of empowerment as they have always felt empowered. Nursing and medical staff both reported rounds occur more smoothly with fewer interruptions and more accurate patient information. Resident physicians report that having nurses’ present during rounds has given them the opportunity to improve their knowledge base. Length of rounds varies according to attending; however, data has not shown an increase in length of rounds since implementation.

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CS50 Cardiovascular Intermediate Care Unit Staff Expedites Discharge Teaching Through Technology
Nancy N. Bouldin; East Carolina Heart Institute at Pitt County Memorial Hospital, Greenville, NC

Purpose: The 24-bed cardiovascular intermediate care unit (CVIU) at East Carolina Heart Institute admits more than 2500 patients a year. This fast-paced progressive care unit discharges nearly 10 patients a day. It was identified by delayed discharges, increased length of stay, safety issues, decrease in patient compliance, and patient/family discontent that the discharge process was inefficient. To assist the nurses it is essential to incorporate new creative materials and strategies for the patient teaching process from admission to discharge. Description: Bright colored Power Point slides with minimal wording were used to engage the nurses and to invite patients and families to participate in discharge teaching. All rooms in the CVIU have a computer at the bedside. A flash drive is implemented for the discharge Power Point slideshow. This can be presented in the privacy of the patient’s room. A creative approach with flash drives is simple and easily accessible to nursing staff. The slideshow involves everyone. The nurse answers questions on the spot as he/she is presenting the 10-minute slideshow. By comparison, the previous method of using a discharge video proved to be mundane and impersonal. The Power Point teaching tool is also a means of relaying material to literacy challenged patients. The privacy of the patient’s room allows the patient to maintain his/her dignity. Patient feedback ensures the understanding of the material given. This medium of providing information can be tailored to most literacy levels and languages. The method was created to help staff engage in discharge teaching.

Evaluation/Outcomes: Qualitative evaluation outcomes were done by interview of nursing administration, management, staff, and patients. From the feedback, the tool proved to help increase the efficiency of discharge times, increased patient and family satisfaction and contributed to maximizing bed availability. The uniqueness of these discharge lessons, patterned from staff education, has proven to reduce our discharge turn around times by 2 to 3 hours. An example of a patient response was, “I have never been able to read or write but I can understand this.” Further research and evaluation is planned to determine if implementing this method of discharge teaching has any impact on patient compliance.

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CS51 Charge Nurse Development: An Investment in Leadership Success and Satisfaction
Debra Bradshaw, Patti Hudson; East Carolina Heart Institute at Pitt County Memorial Hospital, Greenville, NC

Purpose: Creating the next generation of nurse leaders starts with providing structured education for charge nurse leadership development. Brainstorming with charge nurses from each unit identified the initial learning needs. Our hospital developed education programs from these learning needs; the objectives included being clinical/human resource liaisons, communicating effectively, mentoring staff, ensuring quality and safety standards are met, conflict management, delegation, and leading
teams. **Description:** Learning needs from charge nurses included daily tasks, responsibilities from A to Z and self-identified learning needs. Information was categorized and a task force of nurse managers, educational specialists and organizational development leaders evaluated and planned the development journey for charge nurses. The plan consisted of 4 Steps. Step 1: Managers and peers evaluated charge nurses based on accountability, assertiveness, attitude, communication, and resourcefulness. This tool was developed to provide an objective measurement of behavior. Step 2: Revised the charge nurse competency tool that measures performance. Both tools will be used to evaluate charge nurses annually. Step 3: Developed a 4-hour charge nurse seminar facilitated by the unit management. The purpose was to demonstrate the manager’s commitment to charge nurse development, clarify expectations, and foster commitment to the role. Step 4: Created 2-day educational session. Day 1 focused on communication, conflict resolution, and motivating and leading teams. Day 2 focused on leadership style, patient placement, service recovery, and quality initiatives. Each participant received charge nurse notebooks with important protocols, guidelines, and resource listings. **Evaluation/Outcomes:** The charge nurse development program has proven to be an important initiative. Four hundred charges nurses have completed all 4 steps of the program. Feedback and evaluation results validated the need for the program with very positive summaries and comments. Developing charge nurses has empowered our staff, increased frontline accountability, enhanced competency, increased teamwork and collaboration across divisions. Outcome data have shown improvements in patient and staff satisfaction and all quality initiative priorities. The charge nurse role has a new identity and sense of purpose, appreciation, and renewed commitment.

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**CS52 Collaborating With Patients and Families:**

**Creating an Intensive Care Unit Guidebook**

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**Purpose:** A Patient and Family Advisory Council (PFAC) was established to promote a change toward patient-centered care in our ICU. Council membership is composed of former patients and family members, staff nurses, managers, social workers, and physicians. Patient and family participants reported that the amount of information to take in during an ICU stay was overwhelming and stressful. PFAC recommended development of a reference manual for information frequently presented to ICU patients and family. **Description:** Based on feedback and in collaboration with families, a single source of information was designed. Open discussions with the PFAC advisers resulted in a list of information they wished they had known or found useful in their experience. Examples of requested information included what an ICU is, visiting policies, equipment, structure of physician staff, rights as an advocate, phone numbers, and locations of resources. Staff nurses added additional frequently asked questions. Volunteers from the Council formed a committee that met monthly. Sections were created based on similar content and divided among the group for writing. Sections were then collected and submitted to the University of Washington Medical Center Patient and Family Education Services for editing for cohesiveness and reading level. Drafts were reviewed by the committee and presented to the full Council and ICU charge nurse group for approval. The ICU Guidebook made final print May 2009, 10 months after the project was initiated. This resource is distributed to patients and families of patients determined to need several days of ICU care. **Evaluation/Outcomes:** Patient satisfaction scores were compared before and after implementation of the ICU Guidebook, using the Press Ganey system for satisfaction scoring. Specifically, the category asking patients and families to rate understanding of treatment and condition showed improvement from the 14th to the 53rd percentile. Mean scores improved from 88.6 to 91.1, on a scale of 100. Feedback from ICU volunteers has been overwhelmingly positive, noting that patient and family members have found the resource to be quite helpful. It has been suggested to expand distribution of the guidebook to the surgical waiting rooms.

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**CS53 Consistency, Communication, and Coaching:**

**The 3 Cs in the Development and Use of a Core Charge Nurse Group**

Lisa Blessing; Riverside Methodist Hospital, Columbus, OH

**Purpose:** A critical care core charge nurse group was developed and implemented to provide consistency, communication, and leadership coaching among staff members in the ICU. **Description:** In January 2009 a core
charge nurse group was developed to assist management in conveying information and processes to staff and to provide peer coaching to improve performance. All charge nurses who were interested in becoming part of this group were evaluated by their peers, hospital supervisors, respiratory therapist, and physicians. The evaluation tool consisted of questions regarding the candidate’s performance in customer service, professional growth, stewardship, and communication. Based on the feedback from the evaluations and insight from the management team, members of the core charge group were selected. These nurses are required to maintain certifications, attend 10 monthly meetings, create an agenda and lead 1 meeting annually, have no disciplinary action, and attend a crucial conversations and safety coach class. They demonstrate leadership skills by doing daily audits, safety huddles, maintain 103% productivity through appropriate staffing reductions, and actively promote staff in professional development by supporting them with challenging assignments. This group role modeled professionalism by adhering to a professionalism standards statement that they created, which was then adopted by the nursing staff.

**Evaluation/Outcomes:** Seven nurses were selected to be part of the core charge nurse group. This group has provided consistency, improved communication, promoted professional growth and has contributed to the increase in staff satisfaction. Physician satisfaction and work flow has also improved as evidenced by open communication with nursing staff. The core charge group has provided objective feedback for quality improvement in the unit and is a reliable source for the implementation of new initiatives. The group provides constant observation and has performed immediate peer coaching, when necessary. In order to maintain the highest standards each core charge nurse is evaluated annually by their peers.

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**CS54 Crash Course: Resuscitating the Code Blue Process**

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**Purpose:** Resuscitation is a complex process that requires optimal performance from all team members. Ongoing problems are documentation, ACLS skill degradation over time, RNs may lack skills to communicate with physicians, particularly addressing physician orders that deviate from ACLS algorithms and new biphasic defibrillators. The usual methods of in-service, documentation reviews, ACLS, and traditional mock codes failed to sustain improvements. **Description:** Crash Course is a 2-hour program, held in the controlled setting of a classroom, which begins with a brief review of the ACLS algorithms, code team responsibilities, and the Code Blue documentation form. The RNs participate in several mock code scenarios. In each scenario, 4 to 5 RNs assume code team roles, while the others record the code events. Class format is based on experiential learning and adult learning principles. Everyone in the class has a role in every fast-paced, real time scenario. Coaching is provided as necessary to reinforce ACLS algorithms, procedures, scripting for physician/RN communication, and defibrillator function. Instructors role-play family members and physicians at the code. Students are presented with common problematic situations that must be successfully managed. After each code, the instructors debrief the participants and review the code records for accuracy. Crash Course was offered frequently during 2008, and over 90% of critical care and emergency department RNs attended. Crash Course provides one more strategy to refresh ACLS skills, reinforcing documentation for Code Blue in a controlled non-threatening environment, thereby encouraging skill transference to real Code Blue occurrences. **Evaluation/Outcomes:** National Registry of Cardiopulmonary Resuscitation (NRCPR) data for 4th quarter 2007 showed that 50% of code records had documentation issues and decreased to 12% in 1st quarter 2009; a 76% improvement. NRCPR data in one 2007 quarter showed up to 40% ACLS protocol deviation and, after Crash Course implementation, dropped significantly by first quarter 2009 to 12%. Crash Course proved so successful that it was added to the budget for RNs to attend biannually, in years opposite ACLS recertification. RNs report a higher comfort level in addressing physician compliance issues, and positive team dynamics. This course requires few material resources and is easily transferable to other institutions.

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**CS55 Critical Care Without Borders: Critical Care Resource Nurse**

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**Purpose:** Hoag Hospital continues to experience high census causing critically ill patients to be held in the

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that it was time to initiate a formal nurse peer review process in our organization. A nursing director volunteered to coordinate the development of our hospital’s first nurse peer review council and the program was initiated. **Description:** Nurse peer review is multifaceted and serves several purposes. Two of those purposes are the demonstration of professionalism and clinical competency. The American Nurses Association defines nursing peer-review as the process for evaluating the care provided by an individual according to accepted standards. A literature review was completed and highlighted that nurse peer review should include expert representation from all nursing areas. Each nursing director identified a nurse to represent him or her in the peer review process. A tool to review, investigate, and document referral cases was then developed. We also felt it essential to adopt a confidentiality statement communicating our commitment to integrity, trust, and respect among our nursing peers.

The first formal nurse peer review meeting took place on February 15, 2008. We immediately began to receive cases from the Sentinel Clinical Event Committee, the body responsible for all clinical and sentinel events, for our review and management. Nurse Peer Review now meets monthly to review cases and identify opportunities to improve patient care through revision of existing policy and procedure, process change and re-education of our nursing staff. **Evaluation/Outcomes:** Since its inception, Nurse Peer Review has reviewed a total of 59 case referrals and has finalized 49 reviews. Two policies have been revised. The first addresses the preparation, storage and delivery of heparin drips and the second clarifies and outlines the correct management and replacement of G-tubes. A formal vision and mission statement have been adopted and is strongly supported by nursing staff, our nursing leaders and hospital administration. Since its implementation, 3 additional departments have joined the council. In addition, due to a heightened focus on medication management, the pharmacy department has become a standing member of the nurse peer review process.

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**CS56 CSI Newport Beach. Clinical Search and Investigation: Nurse Peer Review**

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**Purpose:** Our chief nursing officer identified the creation of a formal nurse peer review as a significant opportunity for our nursing department. As a Magnet facility, professional accountability was fundamental to our process and structure. As nursing leaders, we agreed that it was time to initiate a formal nurse peer review process in our organization. A nursing director volunteered to coordinate the development of our hospital’s first nurse peer review council and the program was initiated. **Description:** Nurse peer review is multifaceted and serves several purposes. Two of those purposes are the demonstration of professionalism and clinical competency. The American Nurses Association defines nursing peer-review as the process for evaluating the care provided by an individual according to accepted standards. A literature review was completed and highlighted that nurse peer review should include expert representation from all nursing areas. Each nursing director identified a nurse to represent him or her in the peer review process. A tool to review, investigate, and document referral cases was then developed. We also felt it essential to adopt a confidentiality statement communicating our commitment to integrity, trust, and respect among our nursing peers.

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**CS57 Dramatic Mislabel Reductions in a Medical Intensive Care Unit Resulting From Unit Practice Committee Interventions**

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**Purpose:** The medical intensive care unit (MICU) of a large urban tertiary medical center had one of the highest rates of mislabeled laboratory specimens in the hospital in 2007. The MICU designed a program to decrease that number of mislabels, which will provide a safer environment for the patients. **Description:** In 2007 the MICU had 90 mislabeled specimens. A mislabeled specimen is defined as a specimen that has the wrong patient label, has label and requisition for different patients, or is an unlabeled specimen. Mislabeled specimens are a safety issue that can lead to incorrect patient interventions, delays in treatment, repeat sample collection, unnecessary work, and increased anxiety for staff over the mistake resulting in a possible corrective action. The unit practice committee (UPC) undertook a multiprong approach to correct the problem. Education was done to make staff aware of the problem and to gather input on ways to decrease mislabels. Graphs of progress were posted monthly. Fun and eye-catching signs were posted and rotated frequently to help remind staff to double-check labels. A coaching document was developed to provide individual feedback to any staff that sent a mislabeled specimen. Reasons for the mislabels were posted so staff could learn from each other, and staff were encouraged to share their experiences at staff meetings. **Evaluation/Outcomes:** The MICU mislabels have dramatically decreased. In 2007 the mislabel total was 90, which decreased to 41 in 2008—a 54% improvement. Year to date in 2009 the MICU has a further 19% improvement. Staff is encouraged by the progress and reports enjoying the creative signs. Staff members pride themselves in having no mislabels. The MICU mislabel preventative process has created a safer environment for patients and a healthier work environment for staff.

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**CS58 Drop a Bundle and Save: Reducing Surgical Site Infections Across Surgical Populations**

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**Purpose:** Surgical site infection (SSI) rates for cardiac surgeries exceeded national benchmarks at our 271-bed community hospital. A highly engaged multidisciplinary team developed and implemented an evidence-based perioperative surgical bundle (PSB) to support gaps in current practice. A significant decrease in SSI rates in cardiac surgeries were observed and sustained over time. All elements were then applied to the peripheral vascular surgery population (PVBY) with notable success. **Description:** The team—a cardiothoracic surgeon, cardiologist, anesthesiologist, infection control practitioner, pharmacist, clinical nurse specialist, and staff nurse from the clinical action team (CAT)—developed our PSB (2% chlorohexidine gluconate-impregnated [CHG] clothes, preoperative oral CHG rinse, nasal screening, treatment of *Staphylococcus aureus* carriers, and tight glycemic control). CAT members served as the frontline link to all roles in the communication and coaching of the interventions. CAT members, involved from the inception of the project, having evidence-based knowledge and leadership supported autonomy, felt empowered to coach and mentor their peers. Staff, with belief in purposeful work and supported by peer coaching, various educational modalities, and timely feedback of results, recognized their valuable role in the successful implementation and subsequent outcomes of the PSB. The PSB was integrated across the continuum of care and supported by automation into the electronic medical record through order-sets, smart links, and “best practice” alerts. Heart-link, an outpatient program for patient prescreening, education, and follow up was also key to our smooth implementation and success. **Evaluation/Outcomes:** A pre-post study design was used to analyze the effectiveness of the PSB. After implementation of the perioperative surgical interventions, SSI rates decreased significantly in cardiac patients ($P = .049$; 4.3% in 2006 to 0.71% in 2009) and have been sustained over time. Although not statistically significant, PVBY rates demonstrated a linear downward trend between the second quarter of 2008 (26.7%) and 2009 (0%), and are below national benchmark. Although we recognize several confounding factors, evidence suggests that the PSB is effective in reducing risk of SSIs and may have beneficial effects if extended to other surgical subspecialties.

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**CS59 ECCO: Can You Hear Me Now?**

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**Purpose:** The intent of this creative solution was to integrate clinical skills with attained knowledge to formulate safe, bedside practice. Novice ICU nurses who were enrolled in AACN’s ECCO were scheduled for simulation
days that would incorporate the knowledge they were gaining with case study scenarios. These ECCO case study simulations were developed to reinforce the content in the modules and assess and to evaluate and strengthen the participant’s acquisition of critical care knowledge clinical skills. **Description:** The critical care program coordinator and several unit-based advanced practice nurses (APNs) met to discuss the possibility of enrolling more learners into the ECCO program. It was a general consensus that this program offered many long-term benefits to the learner and organization, including a mechanism to bridge the gap between classroom and computer-based learning. One idea was to combine the ECCO modules with simulations that would reinforce the modules. Each APN met with their novice nurses to review this computer-based critical care course. A calendar was developed that displayed the order in which each nurse would complete each module. The APNs developed case study simulations that reinforced the module’s content and scheduled time for the nurses to demonstrate their acquisition of this new knowledge through these simulations. During the simulations, the nurses demonstrated skills related to management of a respiratory and cardiac arrest, assisting the physician and advocating for the patient during the placement of a central catheter and the insertion and maintenance of a pulmonary artery catheter. Effective communication, critical thinking, and leadership skills were also evaluated in these simulations. **Evaluation/Outcomes:** Two adult ICUs had a total of 6 nurses who were enrolled and completed the ECCO program. These nurses also attended 2 simulations, each facilitated by an APN. All nurses successfully completed their modules, as noted by the ECCO reports. In addition, all nurses successfully completed the simulations, as noted by initial competencies. Upon completion of their formal orientation, the nurses evaluated the simulations as “excellent.” Ongoing assessment and revision of the integration of the ECCO modules with simulations continues. Additional simulations and individualizing the ECCO program are being considered.

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**CS60 Enhancing Practice Through Unit Level Shared Governance: Targeting Unit-Acquired Pressure Ulcers in the MSICU**

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**Purpose:** It was evident that a large patient population in our MSICU was at risk for developing pressure ulcers. We felt the need to reduce this risk and improve our patient outcomes. A nursing initiative was undertaken to train a core group of RN staff to be Wound Champions or skin integrity experts, empowered to guide and resource their peers. Another key part of the plan was the development of a staff friendly QI tool that would reflect real time pressure ulcer data to be used to improve our practice. **Description:** The MSICU implemented the use of a Pressure Ulcer Log, where staff would document all patient pressure ulcers. Staff also completed a QI Tracking Form for all unit-acquired ulcers. Our “Looking for a Few Good Men (Women)” Campaign elicited 10 RNs interested in training to be MSICU Wound Champions. These RNs completed a Pressure Ulcer Education Series and Staging Validation under the guidance of the MSICU CNS. Staff was then educated on the new role of the Wound Champions. Our nurse manager, with input from 2 staff RNs, developed an Excel spreadsheet for unit-acquired pressure ulcer data collection. One Wound Champion was designated to input the data on a monthly basis. The data auto-populated graphs, noting prominent risk factors for breakdown, as well as location and stages of breakdown. This information was then shared at our monthly Nursing Coordinating Council and Multidisciplinary Subcommittee meetings. We were able to identify practice issues and areas requiring practice modification. Our Wound Champions also launched a variety of educational initiatives to address staff learning needs, including a Skin Integrity Resource Manual, one-on-one teaching, poster boards, and contests. **Evaluation/Outcomes:** The positive effect of our Wound Champion program is evident in an increased staff awareness and consistency and accuracy of documentation of skin integrity issues and pressure ulcers. Staff are now proactive in their practice, with earlier use of preventive measures, such as specialty beds. The use of our staff driven data entry/analysis has enabled us to identify at least one practice change per month to improve our processes and practices related to pressure ulcer monitoring and prevention. The Wound Champion program initiated in the MSICU is now active on other units in our hospital. Our QI tool is transitioning onto these units as well and will eventually be used hospital-wide.

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CS61 Ethics Stewards: Enhancing a Culture of Ethical Practice
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Purpose: The Ethics Steward program is an innovative program that prepares and empowers staff nurses to promote excellence in ethical care in their respective areas. Ethics Stewards fulfill their role by heightening awareness of ethical principles, serving as a resource to members of the health care team about ethical considerations and resources, and assisting to reduce moral distress experienced by colleagues. Ultimately, patient and family care improves when ethically sensitive care is provided.

Description: Spectrum Health, the largest integrated health care system in West Michigan, serves 9 million people in 67 counties. In 2007, many ethically fraught patient situations occurred within adult critical care (ACC) services. Moral distress was noted, as well as opportunities to improve ethics resources and knowledge. Efforts focused on education for ACC nursing staff, and the formation of an Ethics Workgroup. Workgroup efforts included hospital-wide RN education, sponsorship of an Ethics Conference, and creation of an Ethics Steward program. Ethics Stewards are staff nurses who received education and mentoring on ethics and provision of ethical patient care. Initially, 72 staff completed the training. A toolkit was developed to provide written and Web-based resources for stewards to promote ethical excellence in their respective areas. Bimonthly Ethics Steward Education and Support Sessions provide the stewards with ongoing mentoring, as well as an open forum for sharing struggles and successes. Recently, a second Annual Ethics Conference was held, and Stewards were invited to a breakfast session to celebrate and recognize their efforts. Current work includes increasing the number of Ethics Stewards. Evaluation/Outcomes: Outcomes of the Ethics Steward program are both measurable and intangible. Measurable outcomes include an increase of nearly 400% in the numbers of Ethics Committee consults in the past 2 years. The Ethics Conferences, held in 2008 and 2009, had 260 and 212 attendees, respectively. Evaluations of the Steward support sessions reveal that the sessions have met the goal of engaging stewards in continued learning and sharing about the ethical complexities they encounter. Intangible outcomes include staff nurse reports of “support” and “knowing I have resources” when faced with ethically challenging situations. In total, these efforts translate to ethical excellence in patient care.

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CS62 Evaluating a Fall Prevention Program Tailored for a Telemetry Unit
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Purpose: Much research has been conducted to examine ways to reduce falls and supports a multi-faceted approach consisting of a “fall bundle” of interventions specific to unit needs. On our unit, the old bundle included signs placed on the patient charts and on the doors, but staff expressed concern that the signs were small and often overlooked. The purpose of this study was to determine if a 4-fold increase in sign size and more specificity in signage would reduce the incidence of falls. Description: The IRB-approved quasi-experimental study compared historical control data to postimplementation data of the new fall bundle with improved signage. The bundle included staff education, red 12-inch “Call, Don’t Fall” signs placed at the end of the bed for at-risk patients, and larger signs indicating fall risk placed at the entry to the patient room. The risk stratification included (1) red stop sign for those on complete bedrest due to physical limitations or recent procedures, or requiring complete assistance due to confusion and unsteadiness; (2) yellow triangle for those using assistive devices, needing assistance with ambulation, or recovering from sedation; and (3) green plus sign for alert and oriented patients with steady gaits who needed no assistance. The red signs were further modified to indicate whether the patient was on procedural bedrest or required complete care. The yellow signs were further modified to indicate the level of assistance needed by the patient, ranging from stand-by assistance to a 2-person assist. The staff evaluated the patients every shift and updated the patients’ signs. Input from physical and occupational therapy was taken into account in determining the proper level of assistance. Evaluation/Outcomes: The number of falls per patient days was obtained for January and February 2008 as historical controls. For these 2 months, the number of falls was 6 falls for 1266 patient days, yielding a fall rate of 4.74 per 1000 patient days preimplementation. The new bundle was implemented in January 2009. During the postintervention period, the number of falls was 5 falls for 1443 patient days, yielding a fall rate of 3.47, a 27% reduction. Anecdotal comments from staff
CS63 Everyone Deserves a Holiday: Increasing Knowledge of Daily Sedation Holiday Process Through an Educational Project
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Purpose: A survey of a medical-surgical-transplant intensive care unit that frequently cares for patients that are on continuous sedation identified a knowledge deficit of the sedation holiday process. The purpose of this education project was to educate intensive care nurses on the benefits of sedation holiday for sedated patients, describe sedation goals as defined by the RASS score, and explain the process of a sedation holiday through the use of a standardized order set. Description: A pre-assessment survey on knowledge of the daily sedation holiday processes was administered to nursing staff on a medical-surgical-transplant intensive care unit. After a knowledge deficit was confirmed, a literature search using a PICO question was conducted as follows: “Does the use of a standardize process for sedation holiday and the reinitiation of therapy for critically ill mechanically ventilated patients decrease ventilation days, ICU days, the incidence of VAP and self-extubation?” A continuing education session on the information obtained from the literature search was presented at a unit meeting. The following information was provided: definitions of sedation and analgesia, patient situations that require daily sedation holidays, measuring sedation using the RASS score benefits of daily sedation holidays, and institutional order sets and guidelines that support daily sedation holidays. At the end of the presentation case studies were presented to facilitate critical thinking of the new information provided throughout the presentation. Evaluation/Outcomes: A test was given to the same group of ICU nurses following the presentation. The survey showed an increase in knowledge in most of the areas covered within the presentation, especially in identifying the patients that should be considered for a sedation holiday, the benefits of daily sedation holidays, and the process of reinitiating sedation following a sedation holiday. Over all the objectives of increasing the understanding of daily sedation holiday for continuously sedated patients, sedation goals as defined by the RASS score and the process of a sedation holiday through the use of a standardized order set were achieved.

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CS64 Eye Spy: Can You See the Improvement With Safety, Compliance and Improved Patient Satisfaction? Use of a Simple Bed Tag
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Purpose: The quest to continually improve clinical practice each day poses challenges as the acuity and complexity of patients rises. The postoperative cardiothoracic progressive care unit at UNC hospitals faced a practice concern involving lack of daily weights documented on patients’ charts in January 2009. To address this opportunity for improvement, the unit created a simple bed tag to increase compliance with documenting patient daily weights. Description: The unit was facing a 50% to 75% noncompliance rate with physician orders for daily weights on patients. Several root causes to the noncompliance were identified: staff stated resistance by patients who didn't want to get out of bed for daily weight; it was difficult to obtain a weight on bed ridden patients as it was unclear when bed scale was last zeroed; the unit only had one standing scale to weigh patients. A tool, in the form of a paper bed tag, was developed to indicate when the bed was zeroed so one touch bed scales could be used to weigh patients without getting them up. “Bedside suction set-up” was added to the bed tag because suction set-up is a major safety necessity. The staff that setup a clean room would zero the bed, and place a new suction set-up in the room, then sign and date the bed tag at the foot of bed. Room inspection visual check was added in a second version of the tag to ensure the room met cleanliness standards as a patient satisfaction initiative. Several drafts of the tag were trialed before a final tag and name, “Eye SPY Room Check” was chosen; Eye for visual inspection, S for safety and suction set-up, P for pounds (Zeroing the bed for weights), and Y for You, as in, “Is this room clean enough for You?” Evaluation/Outcomes: The Eye SPY bed tag has decreased the noncompliance of daily weights to between 20% to 30%. One unanticipated benefit has come from beds being zeroed consistently, which has helped with having bed exit alarms functional due to proper weights. Our facility had a sentinel event due to a
bed not zeroed and bed exit alarm. The other benefits that have been realized secondary to the implementation of Eye SPY include increased staff ownership of the process, increased patient satisfaction with room cleanliness, and increased safety compliance with consistent suction set up.

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CS65 Failure Is Not an Option: APNs Mentoring Bedside RNs to Promote Evidence-Based Care of Heart Failure Patients
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Purpose: This abstract outlines how advanced practice nurses (APNs), nurse practitioners (NPs), and clinical nurse specialists (CNSS) implemented a mentoring program to increase awareness of bedside RNs of the heart failure (HF) disease process and of HF evidence-based therapies (EBT) recommended by the American College of Cardiology/American Heart Association. Description: HF is the most common inpatient admitting diagnosis for Medicare patients. This patient population is admitting to a myriad of clinical settings including critical care, progressive care, and medical units. This resulted in RNs with varied clinical experiences and baseline knowledge caring for the HF population. Caring for this population requires a specialized knowledge base, focusing on strategies to promote lifestyle changes, EBT, and health promotion disease prevention strategies. In 2006, an NP led, multidisciplinary performance improvement team was formed to address compliance with the Joint Commission/CMS HF Core Measures. RN “HF Champions” were appointed from each nursing unit. The HF Champions were mentored by the APNs on EBT for HF. Policies empowering bedside RNs to identify patients with HF and provide evidence-based education were adopted by the hospital. Standardized education plans were created and used by the RNs. In 2009, an online educational course for HF was developed and implemented. Monthly team meetings were conducted to evaluate successes and to identify areas in need of improvement. Educational classes taught by the APNs, are given regularly to enhance knowledge and learn new skills. Evaluation/Outcomes: The role of APNs mentoring RNs that care for HF patients is pivotal in improving outcomes. The HF Core Measures quality care performance indicators were used as benchmarks to show compliance with EBT. The following improvements from 2006-2008 were seen: (1) HF specific discharge instructions provided to patient by the bedside RNs at discharge improved 16.4%; (2) evaluation and documentation of left ventricular systolic function improved 4%; (3) ACEI or ARB prescribed at discharge for patients with an EF of <40% improved 11% and (4) smoking cessation advice provided to current smokers improved 14%. To date, 542 RNs have completed the online HF educational module. Strategies for improvement are ongoing.

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CS66 Food for Foley’s: An Incentive to Reduce Urinary Tract Infections in the Intensive Care Unit
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Purpose: Despite established bundles for the prevention of urinary tract infections (UTIs), our rate was still above threshold of 1.2. A quality improvement project was implemented to examine compliance with established bundles and current research and to implement changes to decrease our rate of UTIs. Description: We started weekly UTI reports for each ICU, including the date since last infection. Patients developing a UTI were reported real-time for analysis. Our initial bundle included 4 elements: silver-impregnated catheter, proper perineum and catheter care, closed system (red seal) remains intact, and Foley stabilization device properly applied. A prevalence study was conducted through all units examining actual practice and interviewing staff. An algorithm for Foley catheter removal was developed from the research and added to the other portions of the bundle. The eICU and emergency department were included in our efforts to promote the algorithm and program. Evaluation/Outcomes: The prevalence study showed 75% compliance with Foley bundle; education focused on fall-out areas. During the first month of the program, 3 ICUs decreased their DUR by about 20%, compared to 2008. An overall decrease in DUR of 9.8% compared to 2008 was achieved during the program. One ICU achieved a 58% DUR reduction during the last month of the program. There were no UTIs in any of the 7 ICUs for 23 weeks. Overall, our ICU UTI rate declined from 1.44 for calendar year 2008 to 0.76 for calendar year 2009 through August—a 47% reduction. ICU Foley catheter device utilization rate decreased from 0.81 to 0.76, a 6% reduction during this same period.

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**CS67 Get Bundled Up: Interventions to Prevent Catheter-Associated Urinary Tract Infections**

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**Purpose:** Urinary tract infections (UTIs) are the most common type of hospital-acquired infections, with 80% being attributable to indwelling urethral catheters. Catheter-associated urinary tract infections (CAUTIs) affect patient comfort, cost of care, and length of stay. Moreover, the centers for Medicare and Medicaid Services will no longer reimburse cost for health care–related CAUTIs. The goal of this project was to develop and implement an evidence-based intervention aimed at reducing the rate of CAUTIs. **Description:** Baseline data were collected showing the rate of catheter insertions on our unit and the documented numbers of CAUTIs. Unit wide audits were performed using an analytical audit tool to collect information such as date of catheter insertion, reason for initial placement, and continued use. The average length of time catheters remained was 9 days and approximately one-half of the patients with catheters inserted had positive urinary cultures. In addition, the majority of patients transferred out of the ICU still had their catheters in place. We took a multidisciplinary approach involving nurses, patients, families, and physicians in the implementation of the CAUTI bundle. Interventions included, but were not limited to, a zero tolerance policy for hand washing and documentation of indwelling catheter care every shift. An informational bulletin board described the CAUTI bundle and results of unit-specific data. A Power Point presentation developed by members of the unit Performance Improvement Committee was shared with the staff. In addition, one-on-one teaching of the CAUTI bundle was implemented. **Evaluation/Outcomes:** Our ICU now has a well-articulated plan of action for prevention of CAUTIs. There is an increase in nursing staff awareness and continued education as evidenced by an increase in charting of indwelling catheter care every shift. The need for continued use of indwelling catheters is now discussed during patient care rounds. Bladder scanners are available hospital wide for patient assessments. We plan to continue to collect data and compare to baseline data of rates of CAUTIs before and after the initiation of this project. Our future goals also include collaborating with a newly formed hospital wide committee focused on urinary tract infections, and to share and expand our program.

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**CS68 Green, Yellow, or Red: Follow the Signal to Safely Administer Hazardous Drugs**

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**Purpose:** Hazardous drug handling is an acknowledged occupational hazard for critical care nurses; however, using safe handling practices can decrease the risk of preparing and administering hazardous drugs. The National Institute for Occupation Safety and Health (NIOSH) has prepared a list of hazardous drugs that pose a potential health risk to the nurses who may be exposed during medication preparation or administration; however, nursing and pharmacy staffs were not aware of these guidelines. **Description:** We established a multidisciplinary committee to develop guidelines for a Safe Handling Program that included hazardous drug identification, use of appropriate personal protective equipment (PPE), and appropriate management of spills and waste. Specific information regarding the recommended precautions was prepared by nursing and pharmacy experts (particularly oncology) and is available on the “Infonet,” our internal Web site. The drugs are classified as low risk (green), moderate risk (yellow), and high risk (red) and the corresponding PPE recommendations are listed. Using practices that were based on oncology procedures, hazardous drugs are identified, primed in the pharmacy, and administered using safe-handling practices and appropriate PPE. The training program also reviewed hand hygiene after drug-handling activities, appropriate disposal of material contaminated with hazardous drugs, management of accidental exposure, and voluntary medical surveillance. **Evaluation/Outcomes:** We involved nursing, pharmacy, environment services (housekeeping), central supply service, employee health service, and environmental health and safety to develop a process to implement the NIOSH guidelines, evaluate personal protective equipment (PPE), and prepare a plan to inform health care providers of the NIOSH guidelines. The education program integrated formal inservices, demonstration, posters, and an e-mail campaign. The issues that surfaced included supply demands, noncompliance, and/or inappropriate use of PPE with all levels of personnel, and “trash confusion” with waste disposal.

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CS69 HELP! Is Anybody Out There? Implementing a Patient/Family Activated Emergency Response
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Purpose: According to the Josie King Foundation, medical errors are the fourth largest cause of death in the United States each year, amounting to 98,000 deaths. Hospitals are engaging their patients and families to help prevent potential medical errors. St. Joseph Hospital (SJH) proactively addresses system problems to improve the delivery of patient care and minimize errors. As a proactive measure, SJH has instituted a mechanism to give patients/families the ability to access an emergency response team. Description: In providing the best care, our rapid response team developed a patient/family activated emergency response we call Condition H (HELP), as supported by the Institute of Healthcare Improvement. This allows patients and families to be involved in their plan of care. We created a timeline, rallied all disciplines, and educated staff. We also shared the story of Josie King, an 18-month-old girl, who suffered fatal consequences due to medical errors, which depicts how a breakdown in communication among the health care team can have detrimental outcomes. It was important for staff to understand the program’s purpose and intention. In preparing, brochures were developed to educate on the program and how to use it. In addition, a responsibilities grid, algorithm, documentation form, and operator tree were created. Hospital disciplines were updated and involved at each planning stage, staff and Condition H team members were thoroughly educated and mock drills were conducted. In September 2007, we piloted this program and implemented it hospital wide in March 2009. We have had more than 30 calls in the last 18 months addressing a variety of concerns, including issues related to D/C planning, pain management, confusion with plan of care, and medical deterioration. Evaluation/Outcomes: Each event is evaluated with the caller and reviewed by the committee. It is also shared with all units and medical and administrative staff. Some challenges we have faced include staff concern of punitive measures, lack of patient education of the program, and clarifying team and staff roles. Some issues identified include confusion with care when multiple physicians are involved, D/C-related concerns, and communication breakdown between the team. Overall, all callers have been satisfied with the program, regardless of the outcome, and feel safer knowing the program is available to them. We have shared our journey and assisted many facilities nationwide in developing their own program.

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CS70 High Expectations for Early Extubations
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Purpose: Early extubation of adult cardiac surgery patients has been demonstrated to improve outcomes. Efforts to reduce ventilator times in our cardiothoracic surgical ICU over a 5-year period were fraught with poorly defined goals, absence of benchmarks, and dearth of evidence-based practice standards. We formed a multidisciplinary team to synergistically develop protocols, measure results, and revise practices in an effort to target safe and consistently early extubation of our patients. Description: A multidisciplinary team including surgeons, perfusionists, cardiac anesthesiologists, respiratory therapists, CTICU bedside RNs, clinical pharmacists, intensivists, and a CNS was convened. The team reviewed 5 years of extubation data demonstrating inability to sustain decreases in ventilation times, poorly defined goals, lack of interdisciplinary collaboration, poor outcomes feedback loops, and lack of standardized vent weaning protocols. A literature review demonstrated markedly different definitions with no clear consensus on benchmarks or outliers. An internal benchmark of extubation in less than 8 hours was established. Order sets and protocols were obtained from other institutions. Separate protocols for early extubation (fast-track) and uncomplicated ventilator weaning (expected longer than 8 hour vent time) were developed. Order sets to accompany both protocols were developed. Pharmacologic agents were reviewed a trial dexmedetomidine was initiated. Education was conducted across the patient care continuum on the new order sets and protocols. Teamwork in the operating room and through the CTICU was highlighted. Feedback loops to all participants were implemented. Orders and protocols underwent multiple revisions. Evaluation/Outcomes: By focusing on process rather than outcomes, we achieved ventilator times significantly less than published comparisons and below our internal benchmark of less than 8 hours. Our results have continued consistently for the past 2 years. Multiple changes were implemented to achieve these outcomes including elimination of our uncomplicated wean...
protocol with a new culture that all patients benefit from early weaning and could be safely trialed with our fast-track orders. Continued changes in medications and wean parameters required ongoing education and data collection in the operating room and CTICU. An ongoing feedback loop has helped us to sustain our improvements and continue to revise orders.

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CS71 Impact of Cardiac Surgical Step-Down on Critical Care Readmissions
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Purpose: Despite initial recovery after cardiac surgery, with admission to a critical care unit and subsequent step-down, many patients remain at risk for associated deterioration and death. Readmission to critical care is associated with a significant increase in mortality and morbidity. The intent of the project was to evaluate if placing cardiac surgical step-down patients in one location would reduce the incidence of readmissions to the critical care. Description: Two in-patient units in a large tertiary teaching hospital were occupied with cardiac, thoracic, and vascular surgical patients. Variability in patient specialty and in caregivers assigned to patients was causing inconsistencies in how care was delivered. A multidisciplinary cardiac council composed of leadership, nurses, physicians, nurse practitioners, staff, and case management was developed to look at the nature of readmissions and plan for a service line approach populating the cardiac surgery patients in one location to improve continuity of care, patient satisfaction, and focus resource allocation to services that support patient care strategies. The council inspired a vision that was shared by all associates including plans for an official name change in the unit. The staff underwent competency training on advanced care of the cardiac surgical patient and established and revised clinical pathways including preparation of patient friendly pathways allowing the patients to measure their own daily outcomes. We measured cardiac surgical readmissions to critical care before and after cohorting patients in one location. Evaluation/Outcomes: Cardiac surgical readmissions before cohorting in the step-down unit over a 1-year period ranged from 6.7% to 8.9%. After 6 months of cohorting cardiac surgical patients, the readmission rate was reduced to 4%. This cardiac surgical step-down unit with the focus on a specific patient population created a framework for nurses that allows them to focus on the cardiac surgical population in a targeted specific care delivery model and helped to promote excellence in outcomes. Creating a service line allowed the department to work toward a shared vision, installing new standards and processes and closely monitoring progress toward their goals.

CS72 Implementing Research Into a CNS Residency: The Impact of Computerized Triggers on Early Identification of Sepsis
Lynne M. Bustraan; Florida Hospital, Orlando, FL

Purpose: Sepsis is life-threatening complication of critical illness. The purpose of this project was to evaluate a bedside monitoring application for its ability to detect sepsis. Because successful implementation of sepsis bundles hinge largely on early detection, a need for accurate and timely evaluation of the signs and symptoms of sepsis was needed. The project was begun during a CNS residency to learn essential competencies of CNS practice. Description: As an opportunity to develop CNS skills related to conduct of clinical research was afforded during the final residency in the CNS program. Because early recognition of sepsis is essential to increasing survival rates, a project was undertaken to evaluate a patient monitoring application to alert the nurse to potential signs and symptoms of sepsis (Protocol Watch, Philips Medical Systems, Andover, MA). During the CNS residency, implementation of this project included IRB approval, implementation of the monitoring system, staff education, data collection, and analysis. This project was conducted at 2 comparable facilities within a multihospital system. Data were collected before implementation to assess characteristics of patients with sepsis, time to recognition, and adherence to treatment recommendations. Implementation occurred over a 1-week period with education and training support from the vendor. Following implementation, data were collected to determine what nurses did when the sepsis trigger alarmed and to assess accurate recognition of sepsis and implementation of treatment protocols. Evaluation/Outcomes: During project implementation, several key findings related to CNS practice were noted: lack of routine laboratory values monitoring, documentation variances, and need for further sepsis education. Nursing feedback regarding the ease and use of the sepsis trigger program was submitted to the manufacturer. Data analysis also
found that nurses in the unit supported by a CNS had better compliance with using the monitoring program, and an increase in sepsis bundle compliance, than did the unit without the support of a CNS. Learning opportunities provided during the CNS residency included clinical inquiry, implementation of innovative interventions, evaluation of technology, influencing change, and systems thinking.

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CS73 Implementing the AACN Preceptor Challenge E-Learn for a Nurse Preceptor Workshop

Elizabeth S. Guernsey; Park Nicollet Health Systems, St. Louis Park, MN

Purpose: Many nursing preceptors are novice educators, lacking structured leadership and guidance. Qualitative analysis has shown nursing orientation dissatisfaction. The nurse educator initiative at our hospital is designed for nursing preceptors to gain greater leadership and education skills and to improve staff orientation satisfaction. Using the AACN Preceptor Challenge e-learning course, we launched a pilot program in 2009.

Description: A cohort of educators reviewed the 3.5-hour e-learning course and decided this program offered innovation, creativity, and educational excellence. The Preceptor Challenge program is 8 hours in length and incorporates presenter sessions, discussion points, and group work. We recognized the logistical and economic factors, such as funding for the user fee, and were able to implement a pilot program of 12 inpatient and clinic nurse participants. We addressed the need to develop and provide a translator guide for pilot participants to account for the staff orientation variation between the e-learning and the organization. The translator guide included topics such as the appropriate number of different preceptors assigned for each new staff member, as most new employees during orientation experience at minimum four different preceptors at this health care facility, and some of the e-learning terminology is translated into more familiar words and phrases. The educator group recognizes and agrees that this organization needs more ongoing support, recognition and continuing education for nurse preceptors. Evaluation/Outcomes: The 12 nurse preceptor participants that attended the AACN Preceptor Challenge e-learning workshop completed 2 separate evaluations. One survey was a 21-item Likert scale evaluation and the second evaluation was a 7-item open-ended survey. Primary results of the Likert scale evaluation showed an 85% participant satisfaction rating of strong agreement or agreement with the program objectives and content. The open-ended questionnaire provided mostly positive feedback and suggestions for improvement. Nurse educators met to discuss modifications for future nurse preceptor workshops using the AACN Preceptor Challenge course. Secondary evaluation development is underway.

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CS74 Improved Patient/Family Satisfaction After Implementation of Family Rounds

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Purpose: A primary need of families of critically ill patients is to receive information about their loved one. Evidence-based guidelines recommend shared decision making and regular information dissemination between the patient, family, and caregivers. The critical care unit’s nursing leadership and medical director implemented daily “family rounds” with the goal to improve patient/family satisfaction scores related to communication and involvement in care decisions.

Description: Review of patient/family satisfaction data for the critical care unit from fiscal year 2006 (FY06) revealed low scores regarding physician availability, explanation of treatments, and sharing in decision making. A review of the literature suggested that family rounds could improve communication and the relationship between the health care providers and families. To improve low patient/family satisfaction scores found on the unit the nursing leaders unit and the medical director initiated Family Rounds. These rounds consist of the critical care attending and a senior nurse visiting each patient and/or family at the patient’s bedside every weekday between 4 PM and 5 PM. The visit lasts approximately 5 minutes per patient. The purpose of the visit is to answer any questions, give a brief clinical update and solicit patient/family input for care decisions.

Evaluation/Outcomes: Patient/family satisfaction scores for FY 07 improved for the 6 questions on the survey regarding communication, physician availability, and involvement in decision making. The scores for 5 of the 6 questions increased even more from FY 07 to FY 08. The average score of these 6 questions (on a 0-5 Likert scale) increased from 4.4 in FY 06 to 4.6 in FY 07 and up to 4.8 in FY 08. The patients and families quickly understood
the routine and were prepared with questions for the rounding physician and nurse. Family Rounds, which take 1 hour or less per day, increased patient family satisfaction for 2 consecutive years.

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CS75 Improving Door-to-Balloon Time for STEMI Patients With a Cardiac Alert Program
Candy C. Cross, Alisha Zimmer, Sara Tinguely; Banner Heart Hospital, Mesa, AZ

Purpose: In 2006 the American College of Cardiology and the American Heart Association challenged hospitals to set a goal to reduce door-to-balloon time to less than 90 minutes. Achieving this goal will directly improve patient outcomes by decreasing infarct size, reducing heart damage, and decreasing mortality. After 8 months of collaboration with the Arizona Department of Health Services and the emergency medical services (EMS), Banner Heart Hospital (BHH) developed a Cardiac Alert program. This program includes an outreach plan that provides advanced care to rural areas of Arizona.

Description: When a patient experiencing chest pain activates EMS in the community, the process of identifying a ST-segment elevation myocardial infarction (STEMI) is critical. BHH partnered with the Department of Health and EMS in the surrounding communities to assist with training paramedics to perform 12-lead electrocardiograms (ECGs) in the community and to recognize a STEMI. If ST-segment elevation is present, the ECG is faxed to the emergency department and a phone call is placed to the emergency department physician for confirmation. Once STEMI has been confirmed, the next call is to BHH’s Acute Cardiac Transfer/Acceptance line. Important patient information is relayed and a Cardiac Alert (including estimated time of arrival) is announced over the hospital’s intercom. This announcement activates admitting to start the registration process and the catheterization laboratory (cath lab) personnel to prepare for the patient’s arrival. On arrival, a team from the cath lab is waiting and the patient is taken directly to the cath lab. Initiation of this process while the patient is still en-route shortens door-to-balloon time and helps ensure STEMI patients receive treatment within the national standard of less than 90 minutes. Evaluation/Outcomes: BHH’s Quality Management team monitors door-to-balloon time on every STEMI patient and reports to the hospital’s Initiative Team on a quarterly basis. Information is reviewed and outliers (outside the 90-minute window) are evaluated for the cause and the team works on solutions to improve the outcomes. Data obtained before and after program implementation showed a shortened door-to-balloon time consistently below the national standard. Before the development of the cardiac alert program, less than half (35%) of the STEMI patients presenting to BHH met the national standard. The cardiac alert program was implemented in January 2008. For that year, 97% of STEMI patients coming to BHH via EMS attained a door-to-balloon time of less than 90 minutes. Preliminary data for the first half of 2009 reveal even greater improvements.

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CS76 Inclusion in Care: Implementing Family-Centered Care in a Small Community Hospital Beacon Intensive Care Unit
Martha C. Gooding, Roseanne Lindsey; Seton Northwest Hospital, Austin, TX

Purpose: Families face overwhelming fear and stress when a loved one is a patient in ICU. They strive to cope with frustrating, devastating, and frightening changes that affect not only the patient but the entire family unit. The staff in our ICU brainstormed to find ways to help families cope with these overwhelming events. Staff chose to help families answer 5 basic questions affecting their loved ones: Who is caring for the patient? What’s happening? Why? What’s next? Where to go to for assistance? Description: To facilitate this interaction with patients and their families, staff uses white boards in the rooms listing names of staff caring for them, goals for the day, and other useful information. Also, families are included in patient care rounds on Monday, Wednesday, and Friday. They meet the entire patient care team, including chaplain, pharmacist, social worker, case manager, dietician, RTs, physicians, and discuss with the group the plan of care and goals. All disciplines offer input to ensure excellent patient care. Families are encouraged to ask questions and give input. The physician speaks with patients and available family daily and follows them throughout their entire hospital stay. Our ICU staff created posters and pamphlets for patient and family teaching with information describing complex devices, procedures, CRT, HIPAA and palliative care. We also compiled a resource book with maps and information to assist families in unfamiliar surroundings. Families are encouraged to be involved in care. Diversity in religious practices and
customs is respected, and translators are available if necessary. ICU staff created an open visiting policy that allows families in the unit during codes with support from trained hospital staff. **Evaluation/Outcomes:** Family-centered care interventions have been received positively by families, patients, and nurses. Many families and patients have kept in contact with ICU staff over the years, sending the unit updates of their progress after ICU. Families realize that they are respected and included as an integral part of the patient care team. Staff have facilitated special family requests, such as weddings, pet therapy, and religious ceremonies. The staff acknowledges that a comforted, informed, and actively involved family imparts less stress onto the patient and helps the patient cope with the difficulties of being critically ill. Through ICU team collaboration, our unit demonstrates Beacon values everyday.

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**CS77 Institution of a Nurse Mentorship Program in the Intensive Care Unit**

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**Purpose:** The medical surgical transplant ICU at our academic medical center had a high turnover rate in 2005. It was recognized that although we had a strong orientation program, we lacked formal support after the orientation period ended. To bridge this gap, a mentorship program was initiated to support and improve our retention of new graduate nurses in the ICU. **Description:** In 2006 we built and piloted the mentorship program; one new graduate nurse was paired with a seasoned ICU nurse. Education was provided to explain the difference between mentoring and precepting. The mentorship program began at the completion of orientation and continued until the 1-year anniversary of the new employee. The program was supported by the nursing unit leadership team by providing funds to pay the mentor and mentee for meetings outside of work for 1 hour each month. In addition to the meetings outside of work, the mentee and mentor scheduled themselves on the same days 4 times per month. A confidence tool from the 17-item American Academy of Medical Surgical nurses was adapted to evaluate the new nurse’s confidence in the ICU. The tool was administered at the onset of mentoring and again at the end of the mentorship period. Initial feedback and successes led us to expand the program to include 40 new graduate nurses over the next 2.5 years. The mentor/mentee meetings were formalized and expanded, incorporating both a social component and a curriculum that focused on self-care and clinical topics. **Evaluation/Outcomes:** Data were collected from 26 nurses (24 before and 12 after, 10 nurses with paired pre-post data). On average, confidence scores increased by 25 ± 1% (*P* < .001) (before, 69 ± 12%; after, 94 ± 9%). Paired data demonstrated a 20 ± 7% (*P* < .001) (before, 69 ± 12%; after, 94 ± 9%). Paired data demonstrated an increase in confidence on all 17 items. Examples of improved confidence that were specifically targeted during program included discuss the patient’s condition with physician (60% with increased confidence) and ability to refuse to follow a physician’s order if I question the correctness for the patient (90% with increased confidence). The ICU turnover rates decreased from 24 ± 2% in 2006 to 15 ± 4% in 2007 and 14 ± 2.5% through 2008.

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**CS78 Intensive Care Unit Patient and Family Advisory Council: Changing the Unit Culture**

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**Purpose:** An ICU Patient and Family Advisory Council (PFAC) was established for our medical-surgical-transplant and cardiothoracic ICUs as a means to shift the culture of our units toward patient- and family-centered care. Our aim was to engage current and former patients and families as advisors on the council and then to partner with them to develop innovative programs that would improve patient, family, and staff satisfaction. **Description:** Our PFAC began with intensive planning, staff outreach and education including concepts central to patient/family centered care. Staff then nominated patients/families for the PFAC. After screening potential advisors, the ICU PFAC met initially in March 2008. Membership consists of 16 current/former patients and family members, 4 ICU RNs, social work, physicians, director of patient care, and nurse managers. We sought to understand from patients/families their ICU care experience and their ideas for improvement. Meeting monthly, we brainstormed and prioritized areas for improvement. Over 14 months we completed a multitude of projects, all planned and implemented by patients/families in partnership with staff. Projects included staff
education by our patient advisors; a Getting to Know Me poster placed in patient rooms; a comprehensive 40-page ICU manual for patients/families; funding for a comfort tray program for families with loved ones who were dying; and implementation of a policy regarding family presence during emergency resuscitation. Recently, we implemented a volunteer liaison program, in which volunteers make ICU rounds providing education, emotional support, and guidance to our patients and families. **Evaluation/Outcomes:** The primary method of evaluation for this project has been feedback from ICU patient and family advisors and liaison volunteers. This feedback, gathered monthly at PFAC meetings, tells us that our interventions have made a difference. Specifically, we hear that patients and families feel better informed and know what to expect, that they feel more welcome and involved in the care, and that emotional needs are being better met. One important outcome of this project is the realization that current patient satisfaction scoring systems are not sensitive enough to the ICU experience; we are currently in the process of implementing a new system to collect real-time data from patients and families.

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**CS79 It's Up to You! Creating a Self-Directed Model for Professional Advancement**

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**Purpose:** In 2006, The University of Michigan Health System (UMHS) made a commitment to nurses wishing to advance professionally while remaining at the bedside by implementing a self-directed abundance model for professional advancement. The Professional Development Framework (PDF) serves the goal of UMHS nursing to provide world-class patient care. This model encourages nurses to build their careers at UMHS at a self-initiated pace. **Description:** The PDF structure is built upon 5 domains of nursing practice: clinical skills and knowledge, therapeutic relationships, professional relationships, professional development, and advancing practice through innovation and research. Within each domain, clinical behaviors are further defined and articulated along a continuum of evolving expertise. Each domain has behaviors that describe the expected performance of a nurse at each level of the framework. Behaviors are described for each domain of nursing practice. Nurses must demonstrate a preponderance of behaviors within a given level in order to advance. There are 4 levels within the PDF; each describes nursing practice from the novice nurse at level A, a new graduate nurse with less than 12 months of experience, to a nurse at level E, whose expertise is exemplified by highly developed clinical skills as well as high level contributions within the UMHS community and, perhaps, beyond. Applicants seeking advancement must submit a portfolio discussing their clinical expertise, then interview with a 3- to 4-member subgroup of a central committee that verifies, amplifies, and clarifies the contents of the portfolio. **Evaluation/Outcomes:** Since 2006, 771 applications have been submitted, with a success rate of 81%. The UMHS PDF for nursing depends upon creating a practice environment with no barriers, where nurses flourish and prosper in extraordinary ways in the delivery of outstanding patient care that is innovative, grounded in science, guided by our core values, and driven by compassion. Our model sparks a passion and an awakening that empowers nurses to pursue professional development that promotes excellence. Nurses know their daily work brings value to their patients, profession, and organization. We embrace the principle of abundance and never-ending growth. Talent is bountiful and possibilities are endless.

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**CS80 Journey to a Healthy Work Place: AACN’s Healthy Work Environments Initiative Provides Framework for Unit Transformation**

Mary E. Rehak, Karen Bruggeman, Joyce Schmaltz, Julie Lavelle, Ronda Bolgrean, Janine Stene; MeritCare Health System, Fargo, ND

**Purpose:** In January 2008, on our cardiac intensive and progressive care units, issues from providers and unit staff surfaced regarding perceptions of care, practice changes, and system concerns. Established communication routes and work teams were being bypassed. The issues were unclear and dissatisfaction was expressed in terms of unit teamwork. The cardiothoracic interdisciplinary team members desired to use an evidence-based practice framework in structuring problem solving and team building. **Description:** A nurse-led multidisciplinary steering group reviewed the issues. The group determined team cohesiveness problems were affecting communication and collaboration efforts as well as patient care. Literature review included AACN’s Healthy Work Environments (HWE) Initiative. The evidence
demonstrated ineffective team function has the ability to negatively affect patient outcomes. AACN’s HWE Initiative became our agreed on framework. Initial work focused only on the communication and collaboration standards. Staff input through surveys as well as information from NTI 2008 attendees expanded our work to include all 6 standards and additional staff involvement. Facilitated by steering group members, 4 work groups were formed around the HWE standards: skilled communication.true collaboration, effective decision making/education, appropriate staffing/meaningful recognition, and authentic leadership. Staff was solicited in the fall of 2008 for a 3-month subgroup time commitment. Working synergistically, subgroups established goals and initiatives to address survey results. A logo to brand communications assisted in highlighting initiatives. Management financially supported meetings, class time, and recognition strategies. Evaluation/Outcomes: Early metrics demonstrated gains in rounding efficiency and effectiveness. Initiatives receiving most positive response included personal accountability and Crucial Conversations classes, NTI attendance selection process, certification and length of service recognitions, combined charge nurse meetings, and representation at physician meetings. Patient satisfaction data showed gains in 8 of 11 measures. Groups continue to meet to build on our successes. We have presented our work to various audiences and are supported in moving our strategies forward as an organizational standard. The 4 four subgroups built around AACN HWE standards will be used to mentor our future sister units.

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CS81 Maintaining Ventricular Assist Devices Competency on a Progressive Care Unit
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Purpose: Healthy work environment is top priority in this climate of quality nursing care. Our 48-bed progressive cardiac care unit provides nursing care to patients with mechanical circulatory support devices as a bridge to transplant with 5 different types of ventricular assist devices (VADs) and the total artificial heart (TAH). Our shared governance committee rolled out a plan to ensure all 67 nurses received sufficient training to maintain a high level of competency with all the devices. Description: Classroom training for our nurses included training from corporate vendors with new VAD protocols and the VAD coordinators providing 4 or 8 hours classes for new nurses. However, maintaining competency for all 6 devices was a challenge. Each nurse on the unit was interviewed to determine baseline knowledge and comfort level for each device. A spread sheet was generated with each device, the nurse’s name, experience, comfort level, training time, and shadow experience. Additionally, the spreadsheet had a date log to record the days and hours each nurse was assigned to a particular device ensuring an even distribution of patient assignments. The charge nurse referred to the spreadsheet when making assignments for patients with devices, making an effort to rotate nurses needing hands-on practice or with an experienced nurse providing support. Nurses on orientation were assigned with an experienced VAD preceptor when learning each machine. Additional resources available to our nurses included VAD coordinators on call to answer questions, Power Point presentations on our unit Web site for each device as a quick reference guide, and manuals provided by the manufacturer. Evaluation/Outcomes: Understanding the key concepts of the VAD operation is essential to effectively evaluate patient status and intervene appropriately when changes occur. Our efforts to educate nurses in the classroom, provide hands-on experience, and maintain competency have been successful. We continue to track experience and confidence of our nurses. The spreadsheet is kept in the charge nurse book so assignments can be rotated. Nurses continue to rotate care with the introduction of a new device. We maintain high patient satisfaction scores and successfully passed the Joint Commission inspection specifically for care of the patient with a VAD or TAH device.
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CS82 Making a Positive Impact: Staff Driven Initiative to Enhance Unit-Based Nursing Skills Competency Revalidation
Patricia Sudar, Paul LeBlanc, Faryl Podolle, Rose Burroughs, Laura Dickerson; Duke University Hospital, Durham, NC

Purpose: Advanced clinical nurses identified an ineffective coordination of efforts to revalidate annual nursing competencies at the unit level. The goal of this initiative was to coordinate, develop, and implement a monthly competency revalidation continuum for the unit nursing staff. Inconsistent compliance with hospital expectations and escalating staff dissatisfaction were the
primary reasons for revamping the nursing skills revalidation process. **Description:** Establishing the committee was a collaborative effort between advanced clinical nurses and unit leadership. Using the clinical expertise and knowledge of these nurses, a conceptual framework was developed. This framework challenged the traditional method of yearly revalidation to monthly revalidation. Nurses guided the process that allowed staff to complete nursing competency revalidation on a cyclical basis. In past years, staff was required to attend revalidation on unscheduled workdays. This resulted in staff dissatisfaction and negatively affected the unit budget. Developing a framework compliant with hospital- and unit-based requirements for annual competencies, staff was able to complete the required components during their shift. The curriculum was based on current hospital policies, protocols, and incident safety reports. The information was presented in 2 designs: hands-on and written format, addressing the needs of visual and tactile learners. Hands-on learning enabled staff to demonstrate knowledge of equipment, allowing time for practice and direction with advanced clinical nurses. Bulletin board postings and reference guides provided information while completing the written assessment tool. **Evaluation/Outcomes:** Staff survey results indicated that monthly competencies decreased anxiety with revalidation and increased ability to comprehend knowledge. We also gauged staff satisfaction through results of NDNQI and work culture surveys. Staff gained a greater familiarity of safety issues pertaining to our patient population. Staff increased their ability to incorporate policy and procedure guidelines into daily practice. One hundred percent participation was achieved in hands-on learning and the written portion. Six months after implementation, data revealed a significant decrease in adverse drug events. Staff was provided with confidential remediation and expressed satisfaction with this process.

**CS83 Making an Impact: A Rapid Response Team’s Proactive Approach**

Heather Hicks, Patricia Miller, Christina Greig, Heidi Delvecchio; University Hospitals Case Medical Center, Cleveland, OH

**Purpose:** In February 2006, our rapid response team (RRT) began having an ICU nurse respond to calls on a medical-surgical division. This role, in addition to caring for ICU patients, stressed the ICU nurse. This stress increased as the program expanded. The solution was to employ a dedicated RRT nurse. As a result, the approach became proactive to optimize the benefits of the RRT: increasing the number of patients seen, decreasing the number of codes and the mortality ratio, and improving overall nursing satisfaction. **Description:** By October 2006 the program had expanded to all medical-surgical divisions and a dedicated RRT nurse was added to cover nights and weekends. The RRT nurse identified, assessed, and advocated for patients at risk of declining, and responded to patients actively decompensating. The nurse rounded on medical-surgical divisions, assessed patients transferred from the ICU (for 48 hours), and responded to calls. As a result of the dedicated RRT nurse rounding, a significant increase in calls was evident. In addition, the stress felt by the ICU nurse was only alleviated part of the time. Thus, a pilot began in November 2007 with a dedicated RRT nurse 24/7. The number of ICU transfer patients seen, calls, reason for the call, and the disposition of patient were tracked. Those that initiated the call completed surveys. Having a sole RRT allows for quality nursing support, teaching, promotion of teamwork, advocating for patients and connecting with families. These dynamics help facilitate a healthy work environment. In addition to rounding and responding to calls, the RRT nurse reassesses patients who remain on the division following RRT calls. Driven by patient needs, critical care is taken beyond the ICU. **Evaluation/Outcomes:** The importance of the proactive approach by the dedicated RRT nurse was evident in the success of the pilot. Before the pilot, RRT calls averaged 26 calls per month and increased to 115 per month during the pilot. Significantly, 40% of calls resulted from the RRT nurse rounding. The mean number of codes decreased from 0.69 (May 2006-March 2008) to 0.52 (April 2008-December 2008). The mortality ratio (observed/expected) decreased from 0.81 (2006) to 0.66 (1st quarter of 2009). Results from a survey showed that 99% of those surveyed agreed the RRT nurse was valuable to staff and patients. Having a dedicated RRT nurse saves lives, promotes teamwork, and empowers nursing.

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**CS84 Making Room: Family Presence During Resuscitation Supports a Healthy Work Environment**

Donna Prentice, Kelly Dodds, Jennifer Williams; Barnes-Jewish Hospital, Saint Louis, MO
**Purpose:** A large, urban, tertiary care hospital designed to provide family presence (FP) during resuscitation. The emergency department implemented FP in 2006 with great success. The Code Committee implemented FP during resuscitation in January 2009, throughout the hospital. FP during resuscitation has been shown to help meet the emotional needs of family members during a critical time and affords the family the opportunity to be kept informed, to be with their loved one, and to have closure. **Description:** A subcommittee of the hospital code committee was given charge to implement family presence. Spiritual Care services was identified as a consistent provider that was present for all codes. They were recruited to become the personnel to screen families and to become the guide and support for the family during the code. An algorithm was developed for the process. Tools were developed for family screening. Support from key groups (nursing administration, physicians, spiritual care) was obtained through literature review, conferencing, and experiential sharing. Education was provided for the spiritual care personnel regarding the screening process and what to expect in a code. Education for physicians and nursing occurred hospital wide and at the unit level. Follow-up meetings were held with spiritual care to coach and to allow for feedback. The hospital code committee received feedback and followed up on any issues. **Evaluation/Outcomes:** Family presence was instituted hospital-wide with success. Anecdotal reports of families telling the team that they could tell every effort had been made to save their loved one. Code team members and the spiritual care group became more comfortable in code situations. Staff members were more attune to the care that they provide and open communication with the family. Family presence allowed for discussion of the patients wishes and futile efforts. A number of families, once they visualize for themselves the stress that the code process has, stop any further efforts. Family presence during resuscitation is another step in providing excellent care to the people we serve.

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**CS85 Managing Alcohol Withdrawal in a Community Critical Care Unit**

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**Purpose:** Alcohol withdrawal is a disease managed in every critical care unit (CCU) in the country. Twenty percent of all patients admitted to the hospital are alcohol dependent. As a community hospital we often care for patients in our CCU who failed alcohol withdrawal on oral regiments and require continuous intravenous benzodiazepines. Together, the nurses and unit leaders identified this as an underserved subset and began a quality initiative project in 2004 to improve care for this unique population. **Description:** For varied reasons our patient population exploded in early 2004. The unit-based nurse practice council realized that a more standardized and evidence-based approach to caring for this population was needed. After gathering a team of physicians, nurses, and pharmacists with an interest in this population, the literature was reviewed and areas for improvement identified. The 5 focus areas were nursing education regarding alcohol withdrawal and the prevention of complications, standardization of patient assessment, an admission order set to facilitate care, increased use of long-acting benzodiazepines when able, and standardization of lorazepam infusion titration. Nursing education has been provided at competencies and the CIWA protocol was adopted as our standard for ongoing assessments. Together with the medical director and pharmacists the nurse practice council developed a CIWA driven lorazepam protocol which resulted in a coordinated order set. Finally, in subsequent revisions to our protocol, we opted to increase our use of longer acting benzodiazepines once the patient is able to tolerate orals. Yearly to bi-yearly retrospective reviews have provided us with data to guide our progress. **Evaluation/Outcomes:** We have thus far implemented interventions aimed at all 5 focus areas, including an order set, a CIWA driven lorazepam drip protocol, and an oral diazepam protocol. Since 2005, our combined multifaceted approach to this population has produced positive outcomes. In 2008 we saw a decrease both in the number of patients requiring lorazepam infusions and decreased length of time they required the infusion, length of stay both in the CCU and the hospital has decreased, and, perhaps most importantly, our complications related to withdrawal were fewer. Overall this project has resulted in improved patient outcomes and increased staff satisfaction with the quality of care being provided.

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**CS86 Meeting Educational Needs With Portable Technology: Adapting to the Next Generation of Nurses**

Charles C. Reed, Heather Williams, Ken Medellin,
Purpose: In the rapidly changing and fast-paced environment of health care, keeping nurses up to date on new procedures, educational opportunities, and leadership communication is often difficult. To meet the learning needs of the staff, a novel method of disseminating medical information in a portable and on-demand format was developed. This change provides nurses with learning opportunities in a setting that accommodates their busy schedules.

Description: Educational training needs and practice updates are continuous and often mandatory in the hospital setting. These opportunities are frequently missed and poorly attended by the bedside staff in their effort to provide quality patient care. To increase participation, a team including learning resources, corporate communication, and clinical staff collaborated to develop and ultimately implement a high tech, portable on-demand resource that contains in-services, training courses, and ongoing leadership communications. In creating this effective yet efficient means of information dissemination, a portal was developed to house multiple channels that provide outlets of information on topics that have proven to be of significance. Additionally, the learning portal has a subscription feed, which automatically syndicates pertinent information in a timely manner. This portal provides our nursing staff access to various educational episodes via any device that is connected to the Internet. The portal also provides our staff with the opportunity to download audio-visual content to any portable player, thus allowing our nurses the capability of time-shifting their learning.

Evaluation/Outcomes: The implementation of our learning portal makes training available in a limitless fashion. The online multicultural continuing education course received a 300% increase in participation compared to the same instructor-led course. Leadership rounds led by our CNO updates 25 attendants per session. By adding this information in an audible format, 233 additional employees were conveniently exposed to the same information in the environment and time of their choosing. The option of reviewing information portable/on-demand appeals to the fast-paced lives of our nursing staff, allowing them to be compliant in reviewing pertinent information without removal from their unit responsibilities.

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the new charge nurses maintained a healthy work environment in her absence.

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CS88 Minimizing Communication Errors During Patient Hand-Offs: Implementation of Nursing Sterile Cockpit

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Purpose: The Joint Commission has identified qualities of effective hand-offs, including limited interruptions. In the pediatric ICU at Duke Children’s Hospital, minimizing interruptions was achieved during rounds with implementation of the “sterile cockpit.” Transition to nursing hand-offs had not occurred. The purpose of this quality improvement initiative was to implement a sterile cockpit environment during nursing hand-off to improve the nurse-to-nurse patient hand-off process and nursing satisfaction. Description: Communication quality and unit environment during change of shift report were assessed via observation and questionnaire. Observations revealed several factors associated with the potential for miscommunication: multitasking by bedside nurses, dual conversations occurring during exchange of patient information, and environmental distractions (phones, radios, televisions). Nurses were frequently interrupted by a variety of disciplines (physicians, PNP’s, fellows, residents) and ancillary services (laboratory, radiology) during both morning and evening sign out. Additionally, it was not uncommon in the morning for rounds to begin before nursing completing the patient hand-off. After completion of observations and with administrative approval, staff was requested to complete an online survey specific to the unit environment during shift report. The majority of questions were multiple choice; 2 open-ended questions asked for suggestions for improvement. Variables inconsistent with a sterile cockpit environment were identified and analyzed. Variables that could be controlled for were negotiated with the medical staff. Strategies for implementation were then developed to improve the hand-off environment. Evaluation/Outcomes: Implementation of a nursing sterile cockpit during nursing patient hand-off has demonstrated a statistically significant decrease in interruptions. Trends toward improvements in length of change of shift report, time stayed past change of shift, and frequency of bedside rounds starting before end of report were noted. Physicians now ask the bedside nurse if he/she is ready to begin rounds; if not, the team moves on to another patient. Nursing states satisfaction with the sterile cockpit. Resident interruptions continue to be the greatest challenge. Implementation of the nursing sterile cockpit is a first step in meeting one Joint Commission recommendation for effective patient hand-offs.

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CS89 Moral Distress: Supporting Nurses During Patient and Family Conflict

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Purpose: Addressing moral distress is necessary in creating a healthy work environment. The purpose of our unit-based moral distress initiative included (1) addressing the definition of moral distress and the impact on a healthy work environment, (2) assisting nurses in identifying sources and symptoms of moral distress, and (3) identifying resources to assist with coping during distressing situations. Description: A particularly challenging end-of-life situation within a 24-bed medical, surgical, trauma ICU had a profound impact on the interdisciplinary team. A clear need for staff resources to assist with moral distress identification, coping, and prevention was identified by individuals involved in this case. A team consisting of the unit-based clinical nurse manager, patient care coordinator, clinical nurse specialist (CNS), medical director, and social work met with the psychiatric-liaison CNS and chaplain to develop a moral distress initiative. AACN’s 4 A’s of Moral Distress Tool was used to develop an introductory nursing focused educational program which was presented at the organization’s Nursing Grand Rounds series. Resources were identified and an algorithm was developed to assist nurses with recognizing moral distress triggers and appropriate resources to contact for a variety of distressing situations. Future initiatives to support the moral distress initiative include additional education, such as specific moral distress workshops for care team leaders (charge nurses) and unit-based nurses, which are planned for spring 2010. Evaluation/Outcomes: Staff found the initial educational program validated emotions and challenges they commonly faced. As a result of the situation that occurred on our unit, the organization’s ethics committee has since instituted a 24/7 call system with prompt response. In subsequent cases, there has been a more timely gathering of the interdisciplinary team, ethics
committee consultation, and legal consult. A moral distress survey was distributed before the educational program, and will be repeated after the additional spring 2010 education to compare unit-based nursing perceptions related to resources and support during morally distressing situation.

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CS90 Multilevel Creative Approach to Increasing Family
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Purpose: Our institution currently monitors family satisfaction through a questionnaire administered after patient discharge. In response to patient and family comments, a family care coordinator was hired to assist families and to improve communication. After institution of this role, the surgical intensive care unit (SICU) saw a significant improvement in our satisfaction scores. This empowered our Unit Leadership Committee to begin a project with a goal to increase family satisfaction.

Description: A literature search was done to identify areas for improvement that are seen throughout critical care. The majority of the literature identifies 5 needs: support, comfort, proximity, information, and assurance. Families of patients in the SICU were interviewed to evaluate family satisfaction of nursing care, communication of the health care team, level of family support provided by the health care team, and any other concerns to identify areas specific to our SICU unit that were of concern. Based on the feedback, the needs identified were reflective of that in the research. Building on the family care coordinator role, a 4-prong approach was used to develop a strategy to help further improve family satisfaction scores.

First, we filmed a video and played it on the waiting room TVs, we designed an orientation booklet, and we developed and initiated family care conferences. Finally, RN education was done to ensure that the all messages and information given to the family were consistent. Each of these interventions was evaluated to ensure that the same concepts and themes were addressed. A new family satisfaction evaluation tool was adopted and administered while the patient was still in the unit.

Evaluation/Outcomes: At this time we are instituting all of the strategies and will evaluate the interventions. We expect results in 3-4 months.

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CS91 Nurse Empowerment: Professional Development Through Certification
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Purpose: Dealing with increasingly complex health care delivery systems combined with sicker patients are an ongoing challenge for bedside nurses. Although mentoring, support, and continued education all provide part of the solution, 93% of nurse managers surveyed in the 2004 National Critical Care Survey conducted by AACN also enthusiastically supported national certification. However, only 10% of the staff nurses in units surveyed are currently certified.

Description: Nurse managers identified an increasing interest but lack of knowledge regarding how to attain professional certification among our staff members from both medical and surgical units representing our nursing specialty. We recognized the opportunity to promote professional certification by capturing staff interest and providing the needed mentoring and support. To accomplish this we organized an open forum to discuss the relevance and importance of certification and to identify organizations that encouraged professional growth and development through certification. General information was presented regarding 4 available certifications (CCRN, PCCN, gerontology, medical/surgical). We held an open discussion to assist staff members in identifying certification exams that met their individual needs and interests. Applications and test fees were collected over a period of 1 month. To ensure commitment, each applicant received a study packet and practice exams after the application fee was collected. Applicants chose to coordinate and lead monthly group study sessions that correlated with the exam blueprints. Sessions were lead by the applicants as well as advance practice nurses.

Evaluation/Outcomes: After the first forum, the 30 nurses who applied to sit for certification achieved a passing rate of 66.6% with 23 nurses sitting for the exam achieving certification. This increased the number of certified nurses from 1% to 35%. Currently there are 76 nurses preparing for exams and 50 of the nurses who attended our last open forum are waiting to hear from AACN to schedule their test date. The success of our certification program has become a model for our entire health system. Now, on our unit professional development through certification is no longer a vision, but a reality!

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CS92 Nursing Grand Rounds: Building Confidence and Improving Staff Satisfaction

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**Purpose:** When our organization began a discussion around taking a Magnet journey it became apparent that our nurses needed ways to translate Magnet concepts to the daily practice of nursing. Many nurses do not consider the uniqueness of what we contribute to our patients’ care. In considering how to generate excitement in the uniqueness of nursing and engage bedside nurses in the process, nursing grand rounds (NGR) surfaced as a strategy. **Description:** The development of NGR at our institution grew out of a desire to engage bedside critical care nurses in presenting interesting or complicated cases that rejuvenated their clinical practice in some manner. The presentation focuses on identifying evidence-based practice and methods to improve patient outcomes through nursing care. The NGR presentations are delivered in a case study format highlighting the background of the patient, pathophysiology of the disease process or diagnosis, nursing care measures used, and challenges identified. With support from the patient care administration team, bedside staff nurses are the target for presenting the cases. The critical care clinical nurse specialists (CNSs) assisted with the mentoring of bedside caregivers and the development for the first 6 NGR. As this occurred, interest was peaking throughout the institution to share patients’ stories in other divisions. Currently, each NGR is a multiunit effort. Nurses now approach the CNSs with potential cases and volunteer to present. A contact education hour is requested, lunch is provided at each NGR with vendor support, and raffle prizes awarded after the presentation. **Evaluation/Outcomes:** Our institution has seen high attendance levels from both nursing and other health care professionals. Although the majority of our NGR presenters are novice speakers, our presentations have been rated exceptionally high. Each presentation has received a basic evaluation form the individual attendees to determine if objectives were met and to rate the presenters on a Likert scale (4 = excellent, 1 = poor). NGR at TTH was initially established to assist with the Magnet journey and these presentations have met or exceeded our goals.

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CS93 Operationalizing Core Measures and Evidence-Based Practice for Undergraduate Critical Care Nursing Students

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**Purpose:** Public access to outcomes data and the emergence of pay for performance initiatives are driving initiatives such as “ventilator bundles,” surgical care improvement, and AMI pathways across critical care settings. Nursing education and nursing practice are placing increased emphasis on evidence-based practice (EBP) and the associated link to patient outcomes. **Description:** The primary purpose of this academic-practice partnership was to introduce students to the EBPs and then linking to the structure-process-outcomes model of quality. Students complete a class assignment before graduation, which examines the evidence underlying a health practice and an organizational analysis that focuses on an organizational process. The practice-based quality specialist helped identify discrete elements of core measures that were of interest to the specific critical care area. Students’ health information literacy skills were enhanced through group and individual training in searching databases such as OVID, EMBASE, and EBSCO. The faculty then guided student groups through evidence appraisal and translation into practice recommendations. During a 140-hour clinical leadership rotation, student, and preceptor groups identified barriers to successful implementation. The project was made more real when performance measures coordinators and service directors provided unit level outcomes data as well as target goals. Example of projects and associated initiatives include obtaining an electrocardiogram within 10 minutes of entry (AMI), elevating the head of bed to 30° (ventilator-associated pneumonia), and reducing blood culture contamination rates. **Evaluation/Outcomes:** This collaborative project helped faculty identify projects of value to the clinical setting which in turn were more valued by students. Clinical leaders benefited as many of these students became employees and were aware of the significance of process improvement activities. In its fifth year, this work-in-progress continues to improve based upon feedback from both students and colleagues.

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CS94 Our Journey to the Pediatric Beacon Award for Critical Care Excellence

Jennifer M. Cohen, Gail Sundberg, Juliet Vaupel-Phillips,

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Geri Lynn Ching; CHOC Children’s Hospital, Orange, CA

Purpose: The pediatric intensive care unit (PICU) at CHOC Children’s Hospital is dedicated to achieving quality patient outcomes in an environment that promotes the delivery of family-centered care. This poster will highlight our Journey to Excellence and the best practices we have established in creating a healthy work environment that earned CHOC Children’s the privilege of being recognized as the very first Pediatric Beacon Award for Critical Care Excellence. Description: The PICU recognizes that families are critical to our mission to nurture, advance, and protect the health and well-being of children and are valued as key partners in the decision-making process. An essential part of sustaining our healthy work environment and improving patient outcomes is fostering collaborative relationships between the health care team and families to accomplish our common goals. Our unit-based multidisciplinary family-centered care committee meets monthly to address the unique needs of critical care families and has provided education for staff, created a bereavement cart for the unit, involved families in rounds, established an open visitation policy, and has led the initiative to encourage family presence during critical moments. Multidisciplinary team rounds are conducted daily with an additional weekly comprehensive team conference to evaluate the plan of care and review the discharge planning and long-term needs of our patients and families. Our PICU leadership team conducts daily patient/family rounds in the unit to increase the visibility of the nurse leaders and assess if we are accomplishing our goals of skilled communication, true collaboration and shared decision-making.

Evaluation/Outcomes: By working together, we have reduced the number of catheter-related bloodstream infections from 6.3/1000 to 1.7/1000 catheter days over the past 3 years. In addition, our urinary tract infection and ventilator-associated pneumonia rates are significantly lower than national averages. In an effort to enhance the professional practice environment, the PICU nurses have increased the number of CCRN certifications by 28% over the last 2 years, setting the example and inspiring other disciplines to obtain national certifications in their specialty areas as well. As a result of these efforts, we are proud to be recognized as the first Pediatric Beacon Award recipients!

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CS95 Pandemic Staffing Pilot

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Purpose: It is estimated that in the event of a pandemic surge, such as novel H1N1 influenza, staffing patterns may be reduced by as much as 50%. In planning for a potential pandemic surge this fall, we sought to simulate a staffing scenario that reflected the potential impact of reduced resources. The primary purpose of the project was to identify any risk to patient safety that might result from altered staffing patterns, and to identify the effects of the altered staffing pattern on nurses. Description: The surgical intensive care unit (SICU) is a 19-bed ICU in a large urban academic medical center. Patients admitted to the SICU come from a variety of sources, including the operating room and inter- and intrahospital transfers for rising acuity. Staffing patterns are typical for an academic hospital ICU with nursing ratios of 1:1 or 2:1, depending on patient acuity and nursing workload. The nursing unit was divided into 2 groups: the pilot (10 patients) group and the “business as usual” (9 patients) group. Nursing care in the pilot group was delivered by RN teams composed of 3 SICU RNs, 3 non-SICU RNs currently employed in non-direct patient care positions, a runner, and an administrative support role. Observation of the pilot was conducted by 5 SICU RNs. The RN observers ensured that standards of care were maintained, evaluated and recorded system issues related to care delivery. The observation team focused on the timeline of the care team to respond to patient needs, alarms, physician orders, documentation of assessments, as well as opportunities for self-care. Additionally, the observation team remained ready to assume patient care responsibilities and return to a normal staffing pattern should the pilot need to be discontinued.

Evaluation/Outcomes: The data collected from the pilot are currently under review. Both quantitative and qualitative data were collected. The RN Workload Questionnaire, which is a survey that measures stress and fatigue, was completed by SICU staff nurses at the end of an ordinary shift and at the end of the staffing pilot project. Each member of the Observation Team was provided with a digital voice recorder as well as a standardized observation tool. Data obtained from the observation tool capture the accuracy and timeliness of documentation, assessments, and treatments, patient safety, medication management, and personal/environmental safety.

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**CS96 Patient- and Family-Centered Care Starting in the Preoperative Phase**

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**Purpose:** Knowing patients and families are at a vulnerable time in their life coming to the hospital with fear of the unknown, the staff of the surgical intensive care unit (SICU) designed a preoperative tour and education program for surgical oncology patients. The goal of the program is to answer questions the patient and family members may have before surgery and to meet the staff that will be taking care of them. The purpose of this project is to increase the knowledge that patients and families have preoperatively by offering tours in the SICU to answer all questions, and begin postoperative teaching. These interventions have the potential to improve patient outcomes. **Description:** A surgical oncology ICU can prove to be intimidating and a highly stressful environment for patients and families. Most ICU patients are unconscious or incapacitated making it difficult to communicate. In the SICU at UPMC Shadyside, our focus is patient and family-centered care. Most family members are overwhelmed with unfamiliar and often frightening interventions with the outcomes being uncertain. Surgery in most cases is inevitable, thus creating more fear and anxiety for patients and families. The staff in the ICU recognized these fears and wanted patients and families to feel more comfortable in the ICU environment. Knowing this is a stressful time for patients and families, the staff decided they wanted to try to help alleviate some anxieties by answering questions patients had preoperatively. A collaborative effort between the outpatient oncology clinic and the ICU team developed a program for surgical oncology patients and their families to tour the ICU before surgery. This program has been a huge success. Not only do the patients and families get to tour the unit, they get to meet the nurses who will be taking care of them. Availability is made by staff to answer all their questions. Teaching is also started at this time. Discussions are held regarding pain management, coughing and deep breathing techniques, and sounds of the ICU. After the tour of the ICU is complete, a tour is given of the unit they will transfer to, after their ICU stay. Staff has also developed a handbook called “Welcome to the ICU.” This detailed book covers the whole ICU stay including a glossary of terms. Also included in the book are places for families to stay and a map of the city. The surgical ICU team has a commitment to quality and respect for persons in the ICU. Giving patients and families the opportunity to make choices about many aspects of their care and the care delivery process has been a huge patient and family satisfier. Developing relationships based on mutual respect, trust, open honest communication and integrity ensures quality care delivery. Having an understanding and respecting patients’ cultural traditions, their personal preferences and values, their family situations and their lifestyles have improved patient outcomes. Involving patients and their loved ones as part of the care team, collaborating with health care professionals in making clinical decisions make patients and families feel as if they have some sense of control. Surveys are given to patients prior to leaving the ICU unit to ensure all needs have been met. Our commitment to quality and excellence to patients and families achieves positive patient outcomes.

**Evaluation/Outcomes:** A survey is given to the patient/family before leaving the SICU. The results of these surveys have been positive with comments reflecting that some of the preoperative anxieties had been alleviated. Families are comfortable knowing where the lounge is, what the visiting hours are, and what to expect the day of surgery. Patient- and family-centered care ensures that transitions between providers, departments, and health care settings are respectful, coordinated, and efficient.

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**CS97 Patients and Families at the Center of Care Delivery: Relationship-Based Care Within the Critical Care Environment**

Sherri A. Morris, Jennifer Hughes, Meghan McCann, Deirdre Maisano, Emily Johnson, Meghan McCann; UNC Healthcare, Chapel Hill, NC

**Purpose:** Families are typically not allowed at bedsides for a long period in ICUs. Visitation often depends on nursing comfort level with family. The culture of relationship-based care (RBC) was adopted in the CTICU to decrease patient anxiety, include patient input into plan of care, and increase overall patient satisfaction. The goal was to create an environment in which families felt comfortable to participate with care, be present during procedures or codes, and build a trusting relationship with caregivers. **Description:** A core group of staff nurses who felt passionate about RBC took the initiative to spearhead the project. To establish baseline knowledge about...
RBC, surveys were distributed to all CTICU staff including support staff regarding: “What is RBC and what does it mean to you?” Interviews were performed to allow for more detailed feedback. Evidence was then presented to staff from IHI, Institute for Family Care, SCCM, and AACN with the history and benefits of RBC. The leadership teams in the CTICU at UNC Healthcare led the effort with a consistent united front. Open visitation guidelines were established for staff and visitors. Quit Taking It Personally (QTIP) was used to remind staff to always do what is best for the patients first. Staff is discouraged from blaming RBC for inappropriate behavior in the unit. Families are taught simple basic care tasks so they are active participants in the care of their loved ones. Families and patients are included in rounds with physicians and shift report. The manager rounds daily with patients and families to ensure their needs are consistently met. The entire interdisciplinary team has embraced the idea once members experienced the positive results and feedback from families. Evaluation/Outcomes: Methods used for evaluation 1 year after initiation of RBC in the CTICU: direct observation, interviews, and discharge satisfaction surveys. Patients and families have verbalized their comfort level in knowing they can take a break away from the unit and come back anytime. Patients feel included in the care and constantly informed of the plan of care with bedside reporting. There has also been an increase in satisfaction of CTICU care on discharge surveys. The paradigm shift of RBC has led to other initiatives in the CTICU. RBC ultimately promotes a safer environment for patients and a higher level of professionalism within the unit as evidenced by achievement of Beacon Award.

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CS98 Pediatric Organ Donation: Creating a Culture of Best Practices in Donation Requests
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Purpose: To address a decrease in organ conversion rates, the PICU at CHOC Children’s partnered with the organ procurement organization (OPO) to change how families are approached for donation requests. Team “huddles” between the health care team and OPO have been implemented to discuss, on a case-by-case basis, who is the most appropriate person to initiate the donation discussion with the family. This collaboration has led to significant improvement in procurement outcomes. Description: In 2006, the OPO strongly recommended that physicians stop initiating organ donation discussions with the families. The rationale was that consent rates would increase if the request for donation is made by a member of the OPO. Before this change, our organization had a 71% organ donation conversion rate. In 2007, this rate dropped to 20%. To address this significant decrease, a multidisciplinary team of OPO representatives, nurses, and physicians met to evaluate past and current practices and determine areas for improvement. The team felt strongly that, in most cases, because they have an established relationship, the physicians are the appropriate people to approach the sensitive subject of donation with the family. The team agreed upon defined roles that the PICU and the OPO would play in this process. Additionally, the importance of the roles of chaplain, child-life, psychology, and social services were discussed. It was agreed that a real time “huddle” would occur for each case to determine family approach and support. Policies and procedures were updated to reflect the practice changes and education was completed with physicians, associates, and the OPO. Evaluation/Outcomes: Through the combined efforts of the PICU and the OPO to increase communication and shared-decision making, the donor conversion rates increased from 21% in 2007 to 75% in 2008. This year, CHOC received the Organ Donation Medal of Honor from the Department of Health and Human Services for sustained improvements in organ procurement. The physicians and associates in the PICU have expressed increased satisfaction with the team approach to supporting grieving families with this difficult decision. This creative solution has met the organizational strategic goal of creating a family-centered experience by promoting dignity/respect, information sharing, participation, and collaboration.

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CS99 Pleasant Dreams to Better Health
Jon M. Frazier, Robin Bouchard, Jeanne Marston, Debra Connelly, Mary Elizabeth Bedenbaugh, Lorie Neil, Cynthia Grasso, Lisa Manolakis; South Shore Hospital, South Weymouth, MA

Purpose: In the spring of 2009, the mixed ICU at South Shore Hospital started an initiative to evaluate the routine of restful sleep in the unit and its benefits for our patients. As more and more interventions are implemented
on a daily and nightly basis, less time can be designated as rest time for most patients. REM sleep is the body’s own mechanism for rejuvenation, the lack of this vital component can inhibit appropriate healing. A healthy rest environment is best accomplished by implementing both a regimen of medications and controlling the patient’s environment to stimulate REM sleep states. The goal of our project will be to evaluate the advantage of a natural rest environment for patients. This will be accomplished through monitoring patient satisfaction with their healing process and hospital experience while in the mixed ICU. **Description:** During interdisciplinary daily rounds on the mixed ICU a group of nurses, doctors, and ancillary personnel frequently discussed the challenge of how to best accomplish the goal of a natural rest environment. Some of the integral components that needed to be addressed were increasing the amount of uninterrupted sleep time and the quality of rest. Several physicians agreed to use selected medications that would promote healthy REM sleep such as Precedex and Trazadone. The Precedex would be weaned as the Trazadone was started at a dose of 25 mg, increasing by increments of 25 mg until the patient was adequately resting without interruptions in their sleep pattern. Along with the medications the nursing team decided to implement a closed door policy, curtains pulled, and lights dimmed for a peaceful opportunity to sleep. This sleep would be uninterrupted by nursing staff, physicians, and ancillary personnel, all agreeing to make sure interventions were completed before the proposed sleep times. This strategy was designed to minimize distractions from rest times to enhance the overall experience for qualified patients to promote the healing process and the patient’s satisfaction. **Evaluation/Outcomes:** The patients that received the Trazadone, coupled with sleep times in an environment conducive to sleep, were reported by nursing staff to appear rested. When queried, patients reported feeling better after designated sleep times. The environment was focused on calm, peaceful, uninterrupted rest for each of the patients. Responses from the patients included that they were “thankful” that the nursing staff had allowed them to sleep undisturbed for several hours. The perception of the staff was that the patients were pleasant, and generally calmer about the challenges they were facing the rest of the day. All staff directly involved in this process have found that having their work completed around the patient’s designated sleep times does not present any major problems with providing care. The current process has found a stable foothold to continue upon in the unit, and steps are being taken to enhance the experience even more for our patients and additional interventions are being considered. These additional interventions include signs placed on the doors notifying staff of the times that these patients are not to be disturbed and education for the families to ensure that they are aware of the specific rest times and its benefits so there is no conflict in visitation schedules. Any patient who is determined to be unstable is not a candidate for designated sleep times.

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**CS100 Promoting Independence in Staff Research Teams**

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**Purpose:** Sparking an interest in clinical inquiry, the first step of nursing research, can be a challenge. Sustaining that interest once the project is started can be an even greater challenge. In our teaching hospital, staff nurses felt confident posing relevant clinical questions but lacked the skill and tools to move forward. Hurdles to progression of research included difficulty searching the literature, lack of experience using the IRB, and an elementary understanding of the research process. **Description:** Nurses new to research are enthusiastic about clinical inquiry and are able to pose relevant questions. Although we were energized by the increasing numbers of nurses interested in research, we quickly realized that successfully engaging staff in asking questions was only the beginning. Major hurdles lay ahead. Most had no previous knowledge of navigating the complexities of creating a protocol, working with the IRB, and analyzing data. To help build skills, our nurse researcher created an informational booklet that clearly and succinctly described 8 steps in the research process: identifying a research question, creating a research team, reviewing the literature, developing a protocol, getting through IRB approval, enrolling patients, collecting data, analyzing data, and sharing outcomes. The booklet begins with a table of contents that is color coded to the chapter information. Side boxes highlight staff nurse responsibilities and the available resources to accomplish each step. The brochure is concise and well structured, and it is based on sound practice with references to current texts.
for additional information. Evaluation/Outcomes: The booklet has provided staff with an uncomplicated, yet accurate map for proceeding with clinical research. Now, instead of having to repeatedly meet with the nurse researcher, independence is promoted by methodically moving the novice researcher forward on her own. Because time spent with the nurse researcher is used more effectively, she is able to meet with more individuals to mentor and support projects. Importantly, promoting individual staff success has spurred an increased interest in engaging in research. Currently we have 18 studies ongoing, 9 completed and 4 published.

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CS101 Pucker Up! How to Prevent Lip Pressure Ulcers From Endotracheal Tubes
Amanda Oakes; Lehigh Valley Health Network, Allentown, PA

Purpose: The staff on an ICU in an academic community Magnet hospital noted an increase in pressure ulcers resulting from endotracheal (ET) tube placement. A quality improvement team (QIT) consisting of ICU staff nurses, respiratory therapists, and wound therapists identified possible causes for the increased number of lip ulcers, inclusive of Braden score, number of days on ventilator, nutritional status, use of vasopressors, and fluid balance. Description: The root cause analysis revealed one commonality among the cases of lip ulcers: the tapping of the ET tube on the patient’s face. The QIT proposed changing the tape holding the ET tube every 24 hours instead of every 48 hours, but this strategy did not produce a reduction in lip ulcers. Collaborative meetings continued and a subsequent suggestion from the literature was to trial a commercially available ET tube holder; this device uses 2 adhesive patches on the patient’s cheeks to support a bridge across the upper lip holding the ET tube. Additional actions included repositioning the ET tube and lip inspection every 4 hours, accompanied by required electronic documentation of the actions. Evaluation/Outcomes: After 6 months, no lip ulcers occurred on any patients in the ICU for whom the new ET tube holder was used. This dramatic result prompted implementation of the new ET tube holder throughout the network. The added cost associated with the new holder was taken into careful consideration, as it was a significant increase. To be cost-effective, the ET tube holder is used for patients receiving mechanical ventilation for 24 or more hours and is changed every 3 days or as needed.

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CS102 Rapid Response Team: Kick It Up a Notch: From Reactive to Proactive
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Purpose: In September 2008 we changed our rapid response team model from a reactive model to a proactive model with a dedicated rapid response RN available 24 hours a day. The proactive model allows the rapid response RN to round on identified high-risk patients in the medical/surgical (M/S) areas, to be available to RNs throughout the hospital for consultation and education, and to respond to emergencies in the M/S areas as they occur. Description: Our rapid response team, called MET (medical emergency team), began in May 2004 with the goal of responding to patients’ threatened clinical deterioration in the M/S areas and preventing code blue events outside of critical care. Our team model was reactive and consisted of the critical care charge RN and a respiratory therapist responding to emergencies as called. We saw decreases in code blue events as the MET calls increased but we continued to have a significant number of code blue events outside of critical care. In September 2008 we changed to a pro-active model and budgeted for a dedicated MET RN providing 24-hour coverage for the hospital. We educated staff and physicians throughout the hospital on the new role of the MET RN and when to call. We developed tools for identifying high-risk patients. We also developed a database for the MET RN to document patient visits. The database is a rich tool for tracking and measuring outcomes. Evaluation/Outcomes: In the first 3 quarters after implementation of the MET RN proactive model we saw an 18% decrease in the percentage of code blue events outside of critical care (from 44% to 26%). We also saw a 1.8 % decrease in the overall rate of code blue events per 1000 discharges (from 7.5 % to 5.7%). The MET RNs are proactively rounding on high-risk patients identified through innovative tools. The MET RNs are available to RNs in the M/S areas for consultation and education as well as responding to emergencies throughout the hospital. The proactive model has made a significant difference toward decreasing code blue events outside of critical care.

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CS103 Reducing Pulmonary Complications and Hospital-Acquired Pressure Ulcers in Quadriplegics
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Purpose: Cervical spinal cord injury (SCI) patients are at high risk to develop pulmonary complications and pressure ulcers that lead to increased morbidity and length of stay. In 2008, we admitted 6 SCI patients. All these patients developed some form of pressure ulcer (PU) despite aggressive prevention measures. A process improvement (PI) initiative was developed to reduce hospital-acquired PU while maximizing mobility and supporting pulmonary function and pulmonary toilet in SCI patients. Description: To optimize pulmonary excursion and toilet, SCI patients are positioned sitting fully upright in a chair sitting position as soon as their condition allows. Existing unit beds could not achieve a full upright position, so patients were placed in a cardiac chair, which led to skin shearing from the transfer and pressure from chair sides and cushions. Considerable staff time was also needed to reposition the patient frequently in the chair to eliminate pressure. Use of specialty mattresses was frequently discontinued by the physicians because the patient could not be placed in a full upright position. To achieve the goals of optimizing pulmonary function and toilet and zero skin breakdown, we collaborated with a specialty mattress vendor who developed a prototype pressure-relieving (PR) surface replacement for use with facility-owned critical care frames for the SCI population. The PR surface was placed on a specialty bed frame that can assume a chair position. A nurse-driven protocol was developed for ordering the bed and PR surface. Staff was trained on the protocol and PU prevention measures. Evaluation/Outcomes: Since implementation in December 2008, we have used the PR bed system 16 times, including in 6 SCI patients with zero incidence of PU. Incidence of pulmonary complications in the SCI population has declined from 66% to 16%. Staff and physician awareness and ownership of PU prevention has increased greatly as a result of this initiative. This PR system allows us to fully treat the patient, and its use has been incorporated into the hospital-wide process for ordering specialty beds. In our unit, the use of the PR bed system has expanded beyond the SCI population to other critically injured patients who cannot be mobilized out of bed.

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CS104 Responsible Staffing: Ensuring Patient Safety and Economic Stability
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Purpose: Our critical care unit, in an academic, level I trauma center and Magnet hospital, experienced an influx of novice nurses on the off-shift, as well as a fluctuating census and patient acuity mix. The Staffing Council in this shared governance unit was faced with a challenge: Ensure an appropriate mix of experienced and novice nurses on all shifts, at all times. Description: Creating an effective schedule is more than just numbers. The Staffing Council must ensure an appropriate mix of experienced and novice nurses to provide adequate resources on each shift. Responsible staffing is essential for economic stability and positive patient outcomes. To meet the unpredictable needs of this trauma unit, the charge nurse uses knowledge of each nurse’s clinical competency, the needs of the patient, and available clinical resources to adjust staffing levels. The council met this challenge creatively by developing 2 schedules—one for experienced nurses and one for novice nurses—and then combined these schedules into one master schedule. This method ensures an adequate mix of experienced and novice staff for each shift. Throughout the shift and before the next shift, the charge nurse uses knowledge of each patient’s situation to make responsible staffing decisions. The charge nurses’ balance of appropriate clinical resources and fiscal responsibility promotes application of the network’s shared governance and care delivery, patient-centered care, models. Evaluation/Outcomes: The Staffing Council evaluates the unit’s “financial scorecard” every 2 weeks. The members review the census for each shift and the patient acuity using the charge nurse report sheets. This information is compared with the budgeted staffing level, which is based on census. The council has determined that charge nurses not only make appropriate decisions for patient safety, but are fiscally responsible. The clinical team has reported increased satisfaction with staffing since inception of these creative strategies.

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CS105 Rest From Distress: Sedation and Analgesic Protocols for the Postoperative Cardiovascular Intensive Care Patients
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Purpose: Intubated patients are prone to distress during the postoperative period. These patients’ care plans begin with treating the underlying causes of their distress, which are mainly due to pain, agitation, and delirium. The focus of management to alleviate these causes is a combination of medications and vigilant quality care. A team composed of multidisciplinary health care personnel in the CVICU developed sedation and analgesic protocols to decrease patients’ postoperative distress. Description: When a patient is under distress, it can lead to patient self-harm and interruption of treatment, which may cause undue postoperative complications and may compromise patient safety. CVICU team members collaborated to evaluate and institute a unit-based sedation and analgesia protocol. Intubated postoperative patients admitted to the CVICU are sedated with continuous intravenous sedation medicine. If the patient is not going to be on fast track to extubation or fails the weaning parameters, then the patient is given a continuous sedation drip along with a continuous analgesic drip infused via controlled pumps. Antipsychotic medication is ordered as needed or with a maintenance dose for patients suffering from delirium. The goal of sedation is measured by the Richmond Agitation-Sedation Scale (RASS). Pain levels are assessed accordingly. The nurse titrates the medications per protocol to reach the ordered RASS score and patient comfort level. The patient is then frequently evaluated for the protocol’s effectiveness. Daily sedation holidays to assess neurological status are implemented for each patient on continuous sedation and analgesia. The CVICU team works together to wean the medications and move the patient safely toward extubation. Evaluation/Outcomes: Implementation of the protocol greatly improved the management of patients’ postoperative distress and promoted collaboration in the multidisciplinary team. Audits showed a downward trend in the mean length of stay in hours in the CVICU. The mean was 58.8 hours at the end of the second quarter and decreased to 47.3 hours by the end of the third quarter of this year. Because there was a low compliance with sedation holiday, the team set a daily time and revised the criteria that excluded patients from the holiday. Compliance improved from 89.6% in the second quarter to 93.7% in the third quarter of this year. As a result of this project, the sedation and analgesic protocols were implemented house wide.
CS107 Shhhh! Putting Emphasis on Sleep and Recuperation in the Intensive Care Unit

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Purpose: Patients often complained about the noise on our ICU. They described being tired as a result of noise interrupting their sleep. Sleep is vital to recuperation, yet little was done to address this important aspect of recovery. Our performance improvement (PI) committee recognized the impact of our open visitation policy, which allowed visitation at any time of the day regardless of patient sleep patterns or rest. They tackled this issue by initiating day and night periods of Quiet Time. Description: To investigate our noise level, Occupational Health and Safety Division monitored noise from 8 AM to 4 PM and from 2 PM to 10 PM over 8.5 hours. Our levels ranged from 58-63 decibels. In comparison to another unit that had Quiet Time, we found that their noise level was less than half of our ICU, a significant difference. After data analysis, the PI committee developed an informational bulletin board and flyers to educate staff and visitors of our noise level and remind them of the effects of sleep deprivation. After an educational period of 2 weeks, we formally set up Quiet Time between 2 PM and 4 PM and between 11 PM and 6 AM. Visitors were asked to leave during this time and patients were allowed to rest unless important procedures or other care needs were indicated. The lights were dimmed, patient doors were closed, and conversations were kept to a whisper. Although we were consistent in implementing this new guideline, we recognized that there were times of exceptions because of patients’ clinical status. We looked at unique situations and maintained appropriate and compassionate flexibility. Evaluation/Outcomes: Patients and families have been pleased with Quiet Time and have given many positive comments on our unit satisfaction surveys. In fact, as patients are transferred to lower care areas, they have mentioned our Quiet Time to their nurses. As well as providing rest for patients, it has also given family members a chance to take a much needed guilt-free break from the bedside. All team members have been pleased with changes on the unit during both day and night Quiet Time and we continue to seek ways to decrease noise at night. New nurses have taken on the challenge of being Quiet Time champions. Our unit Quiet Time was mentioned in a local news article.

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CS108 Tele-ICU Nursing Interventions: Impact on Patient Safety and Nursing Practice

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Purpose: The literature associated with tele-ICU outcomes is usually defined by the interventions of intensivist physicians. Few studies exist that describe the impact of nurses in the tele-ICU setting. The goal of this project was to describe the impact of tele-ICU nursing practice and interventions on outcomes produced over 1 year. Results show important and clear contributions by tele-ICU nurses not only to patient care and safety, but to facilitating and enhancing nursing practice as well. Description: From September 2008 through August 2009, nursing interventions made by tele-ICU nurses at Baptist Health South Florida were collected by nurses who made the interventions, nurses who observed others making them, or other staff who were involved in the unit. Reports of interventions were collected first in writing and then via e-mail and sent to the clinical nurse specialist of the tele-ICU. Several meetings were held over time to work with staff to identify the independent and interdependent interventions that occurred on a daily basis. Nurses were asked to send their “stories” as they occurred with enough text to describe the event. Interventions were categorized in 1 of the following 4 categories: rescue, assist, prevention, or first aid. Working definitions of these categories were rescue patient in trouble; immediate action required; assistance interventions that were initiated by the eICU nurse; prevention interventions that likely prevented occurrences such as falls, self-extubation, and allergic reactions; and first-aid interventions such as troubleshooting equipment, thinking together, educating bedside staff, answering questions and requests initiated by the bedside team. Evaluation/Outcomes: Nearly 600 nursing interventions were documented and categorized in the study period. There were 150 interventions directly affecting safety; for example, falls prevented, medication/allergy issues, and patient ID issues. Thirty-one of the interventions clearly avoided patients’ clinical demise. There were 445 interventions directly enhancing nursing practice; for example, ensuring best practices, coaching of nurses, and assisting nurses with care tasks or watching patients while nurses were busy. Conclusions from the study are that tele-ICU nursing significantly affects patient safety and transforms the way in which bedside care is delivered.

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CS109 Telemedicine: Providing Stroke Expertise to Patients at Rural Facilities Via a Highly Integrated and Coordinated System

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Purpose: Strokes are the third-leading cause of death in the United States and the leading cause of serious long-term disability. Many community hospitals only see a few stroke patients a month, making it difficult to maintain nurse competency in stroke care. Almost none of these emergency departments (EDs) have access to an onsite neurologist. The purpose of our telemedicine stroke network is to improve patient outcomes by providing access to stroke specialists, electronic critical care RNs, and electronic documentation.

Description: Although stroke networks are common throughout the country, using a telemedicine approach is innovative for this system and region. We currently have a unit that provides remote nursing and physician support to critical care patients and staff by using 2-way video and electronic documentation. We have used this existing unit to implement the network. The network links the community hospital ED with neurologists and critical care RNs at a primary stroke center. A mobile cart equipped with 2-way video is placed into the room of any patient being ruled out for stroke, which allows the telemedicine RN and neurologist to view the patient. Documentation is then done using a program that has an embedded algorithm with built-in timers and alerts that let all caregivers know how long it has been since onset of symptoms and how much time is left before specific tests or procedures should be done. The telemedicine RN helps document, notifies the neurologist of the admission, and serves as a resource for the ED RN. The stroke specialist then collaborates with the ED physician to evaluate treatment options and to decide if the patient should be kept at the community hospital or transported to a primary stroke center.

Evaluation/Outcomes: Patients now have access to a stroke specialist, which most of them would not have had before the telemedicine stroke network. The ED nurses have access to the telemedicine RNs who can help monitor the ED patients and assist with questions or concerns. Software imbedded into the documentation system allows the health system to instantly pull reports that track compliance related to the “Get With the Guidelines” criteria, which previously required an outcomes manager to spend approximately 45 minutes per patient to obtain. The transfer time is shortened, and there is increased usage of TPA and an increased number of hospitals using the telemedicine stroke network.

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CS110 The “Dot” Board: An Accountability Chart for Mandatory Competencies and Requirements

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Purpose: To increase staff participation, accountability, and transparency in completion of competencies and clinical requirements in the ICU. Our intention was to make this fun, colorful, and easy to interpret while meeting regulatory requirements to support a culture of nurse autonomy and patient safety.

Description: The challenge was to implement a process whereby 180 nursing staff could readily identify their individual progress in completing the 17 annual/biennial mandatory ICU competencies/requirements such as high-risk/low-volume equipment, stroke and trauma education, and regulatory online training modules. Under the previous system, it was difficult for nurses to access this information because it was filed in multiple binders in the manager’s office, placing the primary documentation responsibility with the unit managers/educators. To solve this issue, the unit educators created a large (3 ft x 5 ft), laminated poster to display in the corridor next to the ICU break room. The poster functions as an annual report card. Staff members’ names are listed vertically and competencies/requirements are listed horizontally across the top of the poster. Each vertical column (competency) has a different brightly shaded color. When a nurse completes a competency, a color-coded sticky dot is placed in the appropriate column corresponding to their name. When a nurse has completed all 17 competencies/requirements, they receive a colored star by their name. The poster location was selected to be visible to staff nurses but not to visitors.

Evaluation/Outcomes: Since initiation in January 2008, nurses are in healthy competition to earn dots to fill in the “report card.” Ninety of our nurses responded to a short survey with 98% positive responses: “I look at it frequently to make sure I’m up to date. It’s a great tool to be responsible for yourself all on one board,” “I love the star when I get all my dots.” On December 1, 2007, there were 102 equipment competencies outstanding compared to 36 on December 1, 2008, thus
greatly reducing end of year follow-up by unit educators/management. The poster has also generated more questions about available classes and/or conferences to earn mandatory stroke and trauma hours.

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CS111 The Amazing Hospital Race
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Purpose: New graduate nurses orienting to our 975-bed medical center were often frustrated with finding their way around the complex physical design of our hospital. In an effort to familiarize new critical care nurses to various departments throughout the facility, critical care educators designed an innovative class that would quickly acclimate these new employees to areas such as nursing administration, various ICUs, radiology, and pharmacy. Description: The Amazing Hospital Race (AHR) allows for a fun, interactive introduction to various departments at our facility as part of the critical care curriculum. Participants are divided into teams of 5-6 people. Each team is given a different patient scenario and a different starting point. One team may start in a critical care unit whereas another team may start in a procedural department. The teams rotate from station to station along the care continuum. At each station, the team reviews department functions and scope of care, and answers questions related to their patient scenario. After the case is discussed, the team receives another clue that takes them to yet another department and a continuation of the patient scenario. Some areas have an instructor to review materials and some areas have educational boards with questions and answers. All teams are exposed to approximately 12 departments that they will interact with as critical care nurses. Evaluation/Outcomes: Evaluation of this teaching innovation has been overwhelmingly positive. Over 90% of the participants rated the AHR as an effective strategy for orienting them to the physical layout of our large medical center. Over half of the teams got lost during their learning quest, but ultimately benefited from their mistake by learning other routes around the hospital. Anecdotally, the educators noted that the new nurses were beginning to critically think through complex patient scenarios and function more competently in teams. The AHR has been an effective, fun strategy to orient new nurses to unfamiliar surroundings during a controlled scenario that teaches much more than a routine hospital tour.

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CS112 The Infestation: An Engaging Educational Approach to the Reduction of Central Line–Associated Blood Stream Infections
David J. Rutherford; Riverside Methodist Hospital, Columbus, OH

Purpose: Creating a culture of quality care using best-practice techniques requires education that is not only informative, but long lasting and effective. The Infestation is a unique, interactive educational session used to raise awareness and engage the bedside nurse in the reduction of central line–associated blood stream infections (CLABSIs). Description: In February 2009 The Infestation was created to address CLABSIs in an informational, creative approach that would provide momentum toward improved quality care and infection prevention. The session was developed by a multidisciplinary team that recognized a gap in educational support in regards to CLABSI, as well as the absence of a quality focus on the unit—six interactive stations were created for the staff. RNs “scrubbed the hub” of intravenous ports with alcohol swabs while they were timed to see what 15 seconds was really like; associates counted out play money to show how much cost is associated for patients who had acquired CLABSI in the unit since October 2008; “Glow Germ” powder was sprinkled throughout the room and black lights were used to detect the germs they had acquired while at the symposium; and “Dress for Success” with central line insertion using Elvirus, the manikin, assisted us to demonstrate the correct universal precautions for central line insertion. Although the focus was toward the reduction of CLABSIs, other infection control concepts were conveyed to the staff, such as reasons for not eating or drinking in patient care areas, ventilator-associated pneumonia prevention techniques, hand hygiene standards, and customer service scripting. Evaluation/Outcomes: Since The Infestation, weekly infection control rounds with peer coaching helps to maintain a CLABSI average rate of 2.66, a significant reduction from 13.43 in 2008; this is credited to increased staff awareness and focus on infection prevention. Occlusive central line dressings, sterile technique with insertion and maintenance, proper
cleaning of intravenous tubing ports, daily assessment of need for line, weekly text message reminders to change central line dressings, and hand hygiene are key culture changes for the unit. This educational session remains a positive strategy for the reduction of CLABSI s and has greatly contributed to the quality care of the patient with central venous access.

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CS113 The New Kid on Our Block: Evolution of an Adult ECMO Program
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Purpose: This poster will discuss the evolution and development of an adult extracorporeal membrane oxygenation (ECMO) program including the history of our program at Mayo Clinic Hospital in Arizona. ECMO is used in the adult population to provide cardiac and pulmonary support to patients in cardiogenic shock refractory to conventional therapies. Description: In our cardiac surgery institution, the need for this program arose as we transitioned to a heart transplant center and an increasing population of patients in our region of the country implanted with mechanical cardiac assist devices as a bridge to recover or transplantation. Initially, the certified clinical perfusionist (CCP) monitored and managed the ECMO circuit but with the development of the RN ECMO specialist role, this position has evolved to a collaborative practice. The role of the RN ECMO specialist will be described with the necessary education and validated clinical competencies. The poster will discuss the adult ECMO program comprehensive of the guidelines and protocols, the course objectives and content, skills lab, provider order development, documentation requirements, precepted experiences, and the validation of competencies within the scope of practice for the RN ECMO specialist. The RN ECMO specialist role has provided the opportunity for the professional growth and development of the experienced ICU nurse. Additional benefits of having an RN in this ECMO specialist role include improved communication and a more collaborative approach to the patient’s plan of care. Evaluation/Outcomes: Summarize the physiology and mechanics of ECMO and present the advantages for ECMO to be used in the adult population. Provide a general account of our past to recognize the necessity in our region of the country for an adult ECMO program. Outline the RN ECMO specialist position related to the necessary education and validated clinical competencies with a course curriculum including lectures, an exam, skills labs, and precepted experiences. Articulate on the function and responsibilities of the RN ECMO specialist related to the tasks of monitoring the ECMO circuit, adjusting flows according to the patient’s blood gas values, documentation, and emergency procedures. Distinguish the advantages to support of having a RN ECMO specialist for a more collaborative practice to the patient’s plan of care and professional growth for the critical care nurse.

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CS114 The Year of the Unit-Based Council: Transforming Shared Governance From the Bedside Up
Laura Lewis; Carolinas Medical Center, Charlotte, NC

Purpose: To develop, support, and empower unit-based shared governance councils (UBCs) to be responsible for the practice of professional nursing at our hospital starting at the unit level. This included changing the culture to one of “they” and management as “parents” to “we” and management as “partners.” Transformation included UBCs becoming responsible for culture, personal accountability, professional development, leadership, mentoring, and staff decision making on their unit. Description: Our coordinating council determined that strong, engaged UBCs were essential to attaining our nursing goals as well as effective communication with and involvement of bedside nurses. All units were expected to have UBCs that met monthly. The council includes staff nurses, any nurses sitting on hospital-wide councils, the manager, and ancillary staff. The UBC goal was to increase the involvement of bedside nurses in practice decisions related to patient outcomes at the unit level, quality improvement based on the unit’s data, research specific to their patient population, recruitment and retention, and certification. Minutes were posted monthly and communicated in team huddles. To educate UBCs on these expectations a class, Shared Governance 101, was created. All UBC chairs and managers attended together. The class included information on UBCs’ roles and responsibilities, including how to interpret data, research issues, and create plans of action. Examples were given of UBCs that have successfully implemented changes resulting in increases in patient satisfaction, patient outcomes, and other data. Time was allotted to discuss challenges faced by UBCs and suggest solutions.
Evaluation/Outcomes: All units now have UBCs meeting monthly. Over 95% of the UBC chairs and managers have attended Shared Governance 101 and it has been expanded to all interested nurses. Council minutes are posted on the hospital’s Web site. During the recent JCAHO visit, nurses referred to their unit data and work of their UBC in answering surveyors’ questions concerning patient outcomes. Bedside nurses know where to find unit-specific data and action plans. Based on class feedback we have developed a Shared Governance 100 covering nursing philosophy, synergy model of patient care delivery, and hospital-wide council structure. Plans are underway to develop a Shared Governance 102 for more in-depth data analysis, research models, and action plan development.

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CS115 Thou Shall Not Fall: Falls Reduction and Prevention Strategies for Patients in a Progressive Care Unit

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Purpose: Patient falls are one of the leading causes of injuries in the hospital; they reduce mobility and independence, and increase morbidity and mortality. The cardiothoracic progressive care unit at UNC had an alarming increase in its falls rate average over a 6-month period, ranking it with the fourth highest falls rate average in the hospital, and above NDNQI averages for similar units. The nursing leadership team created strategies and education to help prevent patient falls on the unit.

Description: Unit data were analyzed for key root causes of falls. These included a unit culture that promotes and encourages early postoperative ambulation; and a patient population in which 90% of patients are taking medications that affect cognition and mobility, such as PCAs. The leadership team appointed a staff nurse to the hospital’s Falls Committee to bring back data, ideas, and best practices for fall reduction. Multiple fall prevention strategies were implemented simultaneously, including replacing single-sided grip socks with ones that had grips on both sides. Brightly colored signs were hung in the patient rooms that highlighted a stop sign and the words, “CALL! Don’t Fall” printed in large font. Patients were encouraged to call for help before getting up and to wear their glasses to enhance visibility. Nursing staff checked the patients on hourly rounds to offer toileting and nutrition. Nursing staff was re-educated on the Morse Fall Scale and the use of yellow arm bracelets for patients at risk for falls. Documentation auditing was used for accountability and on-the-spot reinforcement by the leadership team. Finally, a bulletin board was created to highlight all falls prevention strategies and patient and family education resources.

Evaluation/Outcomes: Staff education and periodic auditing and reinforcement have increased staff awareness of our patients’ risk of falling and methods for preventing falls. In turn, nursing staff make patients and their families aware of the danger and of the importance of calling for help before trying to get up. This education creates a sense of ownership for both staff and patients and families. Over a 14-month period, the cardiothoracic progressive care unit’s falls rate average has decreased by 58% and the unit is now well below the hospital’s average and the NDNQI average for similar units.

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CS116 To Systemness and Beyond! A Best Practice Story

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Purpose: The Central Ohio OhioHealth Critical Care Committee, formed in June of 2008, is a multidisciplinary team charged with advancing critical care medicine across our hospital system through standardization of evidence-based best practice. The committee includes 5 hospitals located in central Ohio, serving a large portion of greater Columbus and several surrounding counties.

Description: Before this committee there was no forum for discussion of critical care practice at the system level. Patients at different hospitals received slightly different care and nurses practicing at multiple hospitals had to know a variety of practices for each disease process. The Board of Directors posed the question why standardization of best practice was not in place across our multi-hospital system. The critical care leadership identified this as an opportunity and partnered with our system CMO on this new endeavor. Membership includes nursing, physicians, pharmacists, respiratory, and infection control practitioners from each hospital. The starting step for each project is a review of the literature, current hospital protocols, and understanding reasons for different practices at the hospitals and how those practices relate to evidence based best practice. Dialogue is always open and honest with focus on improving the health of critically ill patients. A lead is selected for each project
that facilitates communication and progress with a portion of the work completed via e-mail to ensure meetings are most productive. Our goal is to provide our patients with standardized, evidence-based practice at each of our hospitals. Evaluation/Outcomes: Accomplishments in the first year included development of several system-wide critical care protocols including electrolyte replacement, analgesia/sedation for ventilated patients, delirium prevention and screening, neuromuscular blockade, and ICU admission orders. Our team partnered with local EMS in creating the Hypothermia Post Cardiac Arrest protocol to ensure continuity of care from the prehospital setting where cooling is often initiated. We collaborate with other hospitals in our community on development of an H1N1 protocol in ICU and outcomes measurement. Our focus remains on improving care of critically ill patients but our scope has increased from one hospital to our system and beyond.

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CS117 Turning Under Pressure: Improving Pressure Ulcer Rates in the Cardiovascular Intensive Care Unit Rosario P. Macapagal, Kathleen Knaack; The Methodist Hospital, Houston, TX

Purpose: Pressure ulcers are a serious consequence and create a 50% increase in nursing work. It can lead to sepsis, which increases hospital costs and morbidity and mortality rates. A staggering 35% pressure ulcer rate in our cardiovascular ICU (CVICU) led to the development and implementation of a well-designed process aimed to decrease and ensure low incidence of hospital-acquired pressure ulcers. Description: The CVICU shared governance committee assessed the unit’s clinical practice related to pressure ulcers. The committee evaluated 3 areas: documentation of Braden scale per hospital standards, observation of patient turning on a regular basis, and nurses’ understanding of pressure ulcer incidence and their treatments. The documentation of Braden scale was at 98% compliance. The assessment of actual practice of turning was below standard and the third factor of knowledge related to pressure ulcer was determined to be deficient based on the number of referrals to the hospital skin care specialist. Recommendations were twofold: education of all ICU mentors to become wound care resources and revision of the patient care assistant (PCA) role in the ICU to focus on patient turning. A 4-hour class with emphasis on skin surveillance and treatment was attended by ICU mentors. Two PCAs on day and night shifts were assigned solely to turn patients every 2 hours or mobilize them out of bed with nursing supervision. Nurses identified high-risk patients and provided timely intervention. The operating room staff were recruited to apply air mattress to beds for critically ill patients with special devices before they come out to our unit. Evaluation/Outcomes: The CVICU pressure ulcer rate dropped to 15% following the initial changes in the patient care assistant role and staff education. Weekly pressure ulcer surveillance audit showed fluctuation of pressure ulcer rates correlating with patient acuity. The Braden scale assessment was expanded to every shift for closer skin surveillance. Nurses have taken the initiative to provide appropriate interventions resulting in decreased referrals, and collaboration with the operating room staff contributed to our unit’s decreased incidence of pressure ulcers. As of October 7, 2009, our pressure ulcer rate is at 8.1%, well below the national benchmark.

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CS118 Waste Not: Decreasing Wasteful Practices in the Coronary Care Unit Frederick R. Macapagal, Robin Long, Laarni Refuerzo, Perlita Eparwa, Kunjumol Varughese; The Methodist Hospital, Houston, TX

Purpose: Supplies are a major expense for all hospitals. In these times of decreased revenue and lower patient census, it is apparent that we need to look at all avenues of savings. In an effort to improve use and decrease waste, managing supplies wisely was identified as one of the major focus of cost-saving measure in our ICU. A clinical mentor formed a committee to address this problem. Description: Supply expenses from June-August 2008 were gathered and used as the baseline to determine efficacy of the strategies to be employed. Committee members polled staff to identify areas of wasteful practices and possible solutions. Problems identified by staff were not caring about wasting supplies, using linens liberally, improperly charging supplies or not charging at all, or bringing supplies into patient rooms and leaving them unused inside cabinets and drawers. Charge stickers end up on staff uniforms and everywhere else other than where they should be. Simple strategies such as labeling and using IV antibiotic tubing for multiple doses, bolting “junk drawers” shut in patient rooms and, most importantly, changing staff attitude...
toward wasteful practices were discussed. Posters showing prices and photos of commonly used supplies were presented, one-on-one and group PowerPoint inservices were done. Nurse champions for day and night shifts were assigned to remind staff of proper use of supplies. **Evaluation/Outcomes:** Data showed our ICU was $13,000 under budget (savings) over 3 months (June-August 2009) after implementation compared to the same period in 2008, when the unit was $35,000 over budget (deficit). Staff attitude has changed, practice patterns and staff knowledge of supply cost have improved, yielding less waste and improved use.

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CS119 Watson Room: Caring of the Self
Jocelyn E. Espejo; St. Joseph’s Regional & Medical Center, Paterson, NJ

**Purpose:** Allowing nurses to center on the self and engage in refocusing, destressing, and rejuvenating by using aesthetic enhancement with complementary and alternative therapies in the Watson Room will in turn create and sustain a caring and healing environment for the patients, families, and the staff. **Description:** The Watson Room is named after the nursing theorist, Jean Watson. This is a quiet space created for nurses to achieve personal satisfaction in their work. The Watson Room is a byproduct of the Shared Governance Council working on the 14 Forces of Magnetism, Watson Caring Theory, relationship-based care, and healthy work environment to achieve our vision for excellence in patient care. Believing in our commitment to a culture of excellence, the Director Surgical Trauma Services relinquished an office for nurses. A staff nurse from the medical ICU engaged staff nurses, maintenance, patient care associates, nurse managers, directors of nursing, and the chief nurse officer to help with the transformation of the room. Nurses use the room 24/7—before, during or after their shift. Nurses are greeted with the scent of lavender, tranquil music, gently flowing waterfalls, healing tree of stones, Buddha board, and soft drapery gathered toward the massage seat. Representing the 10 caritas of Watson is the Caring Mosaic artwork made of medicine caps and materials nurses use every day. These aesthetic enhancement and harmonious interplay of complementary and alternative therapies for nurses gave an instant sense of relaxation. **Evaluation/Outcomes:** The effects of personal satisfaction derived from the Watson Room on the Self can be echoed from the positive comments of nursing staff while they are in the Watson Room, on their units, and in patient’s rooms. Good patient care outcomes results from destressing and refocusing. Caring and healing for the patient, families, and the staff in a healthy work environment takes place when the nurses are nurtured first.

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CS120 What If Surgery Started on Time? A Look at the Overall Impact of Surgical First Case on Time Starts
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**Purpose:** Dublin Methodist Hospital’s (DMH) surgical first case on time start delays produced a domino effect with customer service and operational efficiency. Health care providers’ stress levels increased as a result of constant efforts to provide service recovery and work from behind. The impact of surgical delays and start time improvement measures on patient, family, surgeon, anesthesia provider, and associate satisfaction, as well as operational efficiency was examined. **Description:** DMH Surgical Services defines first case on time start as incision time. A daily log analysis of delay reasons for 100% of first cases included incomplete preadmission testing and missing orders and test results. Patients also arrived late in relation to inconsistent preoperative information provided by multiple sources. Late surgeons and anesthesia providers, and operating rooms with unavailable or missing instruments were also contributory delay factors. Delay reasons by health care provider were posted weekly with approval of the surgery oversight committee. The largest category included tardiness of surgeons at 80%-90%. Trends in delays were managed through associate performance management with strong emphasis on workflow process improvement/feedback. Process improvements in preoperative cycle time through information technology functionality/interoperability improvements, as well as preadmission testing chart completion at 72 hours via surgeon office. A reduction in block time for first case on time starts with greater than 3 delays/month directly attributed to the surgeon was also instituted. Additional surgeon block time allocation was also predicated on greater than 80% first case on time starts. **Evaluation/Outcomes:** Through commitment and collaboration for patient safety, customer satisfaction, and surgical efficiency, DMH has achieved
greater than 80% first case on time starts, from a baseline of 32%, and has led to Press Ganey customer satisfaction scores in the 90th percentile. Surgeon satisfaction in relation to fulfillment of operating room time is at the 99th percentile. Preoperative cycle time is averaging 34 minutes and preadmission chart completion is 76% for fiscal year 2010. Overall associate work life has been enhanced as evidenced by above national average associate opinion survey scores for job satisfaction at 5.1 with 6 as the highest possible score.

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CS121 When Pigs Fly! Establishing a Safe Environment for Intensive Care Unit Staff and Patients During an H1N1 Outbreak

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Purpose: The recent outbreak of H1N1 (swine flu) in our region created both opportunities and challenges for our medical ICU. This summer, several confirmed cases of H1N1 initially appeared in small numbers on our unit, creating a sense of fear in our staff, as well as in the families of patients. Information changed daily, so it was difficult to stay on top of best practices. Our multidisciplinary team gathered our data and collaboratively created an action plan. Description: Following CDC guidelines, and in conjunction with guidance from our Infection Control Department, our team decided that all suspected H1N1 cases would be placed on droplet isolation: guilty until proven innocent. The team was educated on influenza symptoms, nasal washings were ordered and collected, and viral polymerase chain reactions were sent. Droplet isolation signs were hung on closed doors and strict handwashing was enforced. When absolutely necessary, patients underwent ECMO treatment. Families were educated about good respiratory hygiene and the appropriate use of surgical masks. Staff were taught when to switch to N-95 masks for employees. These situations included the use of an oscillator for mechanical ventilation, as well as for the use of aerosolized medications and high concentrations of oxygen. When the topics of seasonal and H1N1 flu vaccines were discussed, the idea of a multidisciplinary staff survey was developed to determine the interest of staff in receiving an H1N1 vaccine for the first time. The questions included experience taking care of a confirmed case of H1N1 on the medical ICU, as well as the likelihood that the same health care provider would take the H1N1 vaccine if made available for free in the workplace. Evaluation/Outcomes: We now have clear guidelines for staff on how to protect patients as well as their families and themselves, acknowledging that best practice in this field of epidemiology is evolving daily worldwide. According to our survey, 62% of staff who had direct patient contact with H1N1 patients were in favor of taking the H1N1 vaccine for themselves. Fifty-six percent of staff who had never cared for an H1N1 patient were in favor of taking the same vaccine, for a difference of 8%. As of the writing of this abstract, no one on the medical ICU team has developed H1N1. All our H1N1 patients have survived to date, which is a testament to our teamwork and dedication to excellence in patient care.

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CS132 It Takes a Village: A Fully Implantable Heart Replacement System

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Purpose: Heart failure rates have risen disproportionately to heart transplants annually. Limited choices exist for biventricular failure patients ineligible for heart transplantation. A recently approved viable alternative is a fully implantable heart replacement system, that is, an artificial heart. Nursing care is as complex as the nature of heart failure itself. We developed a unique approach to patient management, advocating for the patient while retaining the proper level of care. Description: Patients with an artificial heart require an extensive aggressive multidisciplinary approach because of their baseline multisystem low flow state and physical debilitation before implant. We supported the patient’s desire to leave the ICU once hemodynamics had stabilized but there were multiple complex needs that might not be adequately addressed on a telemetry unit. In addition to increasing time spent with physical therapy, occupational therapy, and speech therapy, we formulated a “blended care approach” for nursing care. The critical care nurses paired with nurses on the telemetry unit so that the patient could stay out of the ICU and focus more on physical rehabilitation while his complex physical needs could continue to be addressed by a critical care nurse. Our goal was to foster learning, growth and teamwork while improving patient satisfaction, motivation and outcomes. Daily communication “huddles” were held to communicate and address concerns. The telemetry nurse
was identified as the primary nurse with the experienced critical care as a mentor. **Evaluation/Outcomes:** Although the device itself proved to be a remarkable replacement for the native heart, the patient suffered from an infection related to poor nutritional and respiratory states, ultimately passing away on postoperative day 69. However, the blended-care initiative was successful. The patient was kept out of the ICU for 18 days. The critical care staff expressed an increased sense of camaraderie and mentorship and the telemetry nurses increased their understanding of critical care workflow and advanced assessment techniques. The patient’s family expressed how supported and respected they felt with the way our staff worked with the patient to improve his quality of life and potential for recovery.

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