# 2007 National Teaching Institute Creative Solutions Abstracts

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### **Oral Presentations**

Stop a Clot, Save a Life: Becoming a DVT Safety Zone Thomas-Horton E, Whinney R, Rauscher S, Falker A, Nash J, Mantia

P, Dougherty D, Schurrer D, Harris H, Smith J, Jones J; Barnes-Jewish Hospital at Washington University Medical Center, Mo-

Purpose: Complications related to deep vein thrombosis (DVT) kill more people than HIV disease, breast cancer, and highway fatalities combined. Virtually every hospitalized patient has risk factors of venous thrombus embolism, yet this silent threat frequently goes unrecognized. A multidisciplinary team was organized to recognize, prevent, and treat DVT. Description: Team members included nurses, physicians, rehabilitation services, OR personnel, safety specialist, operations coordinator, and supply manager. The team's goal was to establish a hospital-wide DVT program and to make sure 100% of patients receive DVT assessment and appropriate prophylaxis. Our slogan was "Help Make Our Hospital a DVT Safety Zone." Team members developed tools specific to their area of expertise, which were presented to the team for analysis and feedback. Tools developed included DVT guideline order set and computer-based training for nursing and rehab staff. To improve availability of sequential compression devices (SCDs), the number of devices was increased, SCDs were placed in the OR recovery rooms and surgical ICUs, and the process for obtaining SCDs on the nursing units was streamlined. We developed a TV program and an instructional guide for patients. Because changing processes may increase stress and resistance, a "Clot Man" distributed buckets of candy labeled with the DVT slogan at nursing divisions. In addition, each discipline presented the DVT strategies at their group meetings. Evaluation/Outcomes: Year-to-date data indicate that 96% of patients admitted were assessed for prophylaxis; 70% of patients needing prophylaxis received appropriate prophylaxis, which is a 35% increase from previous years; 2500 nursing and rehab staff successfully completed the online education; and we held 25 DVT presentations. This process has significantly raised the awareness to both patients and staff about DVT prophylaxis. ejt1587@bjc.org

Push to Prevent: Risk Assessment and Prevention of Pressure Related Wounds in a Medical-Surgical Intensive Care Unit

Zimmerman B, Krall W, LaFary V, Vonderhaar V, Dalhardt D, Haas M;

Purpose: To help staff identify patients at risk for skin breakdown due to invasive interventions and hemodynamic instability with associated immobility and to initiate preventative measures. Description: A multidisciplinary team investigated and developed a risk-assessment tool and improvement plan, called "Push to Prevent." The plan included an assessment tool, educational plan, and data collection. The assessment tool was used to analyze activity, hemodynamics, Braden score, and treatments and interventions, and then to stratify risk as low, moderate, and high. General prevention guidelines, suggested for low and moderate risk, included turning every 2 hours, using waffle cushions in chairs, elevating heels, and using barrier wipes to heels and barrier cream. For high-risk patients, general prevention guidelines were suggested with the addition of waffle heel cushions and a physician prompt for Xenaderm (BCT) ointment twice a day, as needed. The educational plan included a documentation competency, quick reference pocket card, and periodic staff meeting updates. Evaluation/Outcomes: Monthly prevalence studies show a decrease in stage 1 hospital-acquired wounds over a 5-month period. In addition, wound care documentation has improved. Thank-you notes for staff recognition are generated for good documentation and initiation of preventative measures. Ongoing prevalence data have been used to further refine the assessment tool. bzimm@one.net

A Nursing-Driven Strategy to Optimize Patient Outcomes: Spinal Clearance in the Surgical Intensive Care

Tauscheck K, Plach S, Besag S; Froedtert Hospital, Wis Purpose: To develop and implement an interdisciplinary strategy to optimize nursing care and subsequent patient outcomes by facilitating early cervical/thoracic spinal clearance. **Description**: The project team, 3 critical care RNs, noted that excess days passed before spinal clearance occurred for patients admitted to the SICU after motor vehicle or motorcycle trauma. This delay hindered the ability to provide optimal nursing care (eg, turning, elevation of head of bed). Furthermore, transfer from the SICU to the radiology department for clearance scans were a safety concern because many patients were unstable, intubated, and/or in traction. To identify the extent of the problem, we collected data about the length of time the patient was in the SICU before spinal clearance and the number of transfers needed for clearance. We also contacted the CT radiologists and the CT manufacturer to determine if the initial CT scans from the ED could be reformatted for a more timely clearance evaluation. Evaluation/ Outcomes: Over 3 months, 52 patients had not received spinal clearance before admission to the SICU. Of these, 44 had head, chest, or abdomen CT scans done in the ED. However, only 8 received spinal clearance within 1 day, and 36 were not cleared for up to 6 days. Forty required clearance transfers (range 1-5). On the basis of our data and the manufacturer's verification that CT scans could be reformatted for spinal clearance, the hospital radiologists, trauma surgeons, and neurosurgeons determined that reformatted CT scans provided adequate views for spinal clearance. This nurse-directed process improvement initiative has led to a dramatically decreased number of SICU transfers for spinal clearance; consequently, nursing care and patient safety have been optimized. nrskim@aol.com

Forecasting to Increase Compliance With Best Practice Bundle Staul L; Legacy Good Samaritan Hospital, Ore

**Purpose:** The multidisciplinary critical care quality council has long promoted evidence-based best practices through the development of policies and protocols. Quality tracking included the rate of ventilatorassociated pneumonias (VAPs) and central venous catheter (CVC) related blood stream infections (BSIs) but not compliance with the specific practices and established policies that were demonstrated to reduce infections rates, the best practice bundle. Our team recognized that we needed to shift the quality focus to compliance and the impact that noncompliance had on patient outcomes to achieve improvement in patient outcome. **Description**: A review of compliance with the key evidence-based initiatives demonstrated that few had satisfactory compliance. We used forecasting to communicate to the multidisciplinary staff how the level of noncompliance could affect patient care. Forecasting involves estimating the potential patient adverse outcomes that could occur with our current compliance rates. On the basis of the literature, we determined the number of patients needed to treat to gain an effect of the practice intervention. Using the number of patients who should have received the intervention, we calculated the number patients at risk per year by not complying with the recommended intervention. These data created powerful information for the nursing and medical staff and were a motivating factor in increasing compliance. Evaluation/Outcomes: Forecasting was instrumental in assisting us to achieve compliance at over 90% for all components of the best practice bundle. In addition, we observed a clinically significant decrease in

VAP and CVC BSIs. Following the implementation of the best practice bundle with forecasting potential adverse outcomes we saw reduction in VAP from a rate of 11.1 per 1000 ventilator days to 1.7 per 1000 ventilator days and a reduction in the CVC BSI rate from 7.9 per 1000 CVC days to 0 per 1000 CVC days. Istaul@lhs.org

#### You've Got a PAL in the Business: A Smooth Transition for New Leaders

Ray T, Johanson R, Steinaway S; Harborview Medical C<mark>enter, Wash</mark> Purpose: To help new leaders transition into management roles at our busy regional trauma center. **Description**: We created an innovative program called Partnerships in Acclimating Leaders (PAL). The PAL team acts as a support, a friend, a guide, and a familiar face to new leaders; this program is another way to make new leaders feel welcome. Drawing from proven retention strategies, each new leader is assigned a PAL teamexperienced leaders who have participated in the strategic leadership program and who have volunteered to share their leadership knowledge and organizational insight with new leaders. A pool of volunteer PALs is maintained by the organizational development and training department. Once a new leader is hired, this department matches him or her with a team of PAL volunteers. This team consists of 1 or 2 hospital leaders, with at least 1 from the same division as the new leader (to make the most of common experiences). The PAL will accompany the new leader to his or her first department manager meeting and will give a facility tour within a few weeks after orientation to answer more detailed questions. The PAL checks in weekly by phone or email, provides informal introductions to divisional colleagues, and helps the new leader navigate the organizational formalities. PALs join the new leader for lunch, breakfast, or coffee regularly, and generally makes them feel welcome. Evaluation/Outcomes: The PAL program has helped make leadership orientation at our facility more personal and friendly, creating an effective network of leaders within the organization. Managers who have benefited from the PAL program have a sense of collegiality with their peers, an appreciation for the relationships they have built with other managers within their division, and contribute to the retention of other new leaders by volunteering as mentors themselves. tdray@u.washington.edu

### Learning to Grow: Education and Leadership Development at a Grass Roots Level

Faber M, Sexton R, Tate J; Harborview Medical Center, Wash Purpose: To provide a forum for meeting the learning needs of our staff. **Description**: Routine staff-driven educational sessions are a part of our unit's Mentoring and Education Program. Although originally designed for new employees on our unit, the senior staff began to express interest in attending when they heard about the quality of information being provided. We accommodated their request and now all nurses are invited to participate in the ongoing education. The sessions are held bimonthly and the topics are derived from nursing issues current on the unit, such as interesting or unusual case studies, new or infrequently used equipment, and patient treatments or studies that we participate in. We have asked senior nurses to develop their roles as leaders through involvement with planning, teaching, and implementing these sessions. Nurses who have expertise in such areas as wound care, PA catheters, and neurosurgery have taught our sessions. Less experienced nurses have also become involved by arranging for speakers and publicizing the sessions, which allows staff to recognize and retain the knowledge of these resources. Some of our bestreceived sessions were a Jeopardy game highlighting policy and procedure and a talk by organ recipients and donor families. These educational sessions are optional and staff participates because they want to further their knowledge, not because they are required. Evaluation /Outcomes: A large number of nurses on our unit participate in these unit-based education sessions. Nurses have an impact on the educational content, which directly affects the care they deliver. Staff are recognized and developed as clinical leaders through the roles they play in these educational sessions. In addition, physicians have approached us with topic suggestions and have volunteered their time for teaching. marne@u.washington.edu

## A Three-Ringed Circus: Nurses Who Are Knowledgeable, ArtICUlate and Supported Save Lives

Pyle K, Bethe J, Ĥewett M, Lepman D, Pierson G; Hoag Memorial Hospital Presbyterian, Calif

**Purpose:** To assess the cumulative impact of 3 overlapping initiatives on transferred, deteriorating, septic patients to critical care at a nonacademic, nontrauma 510-bed community hospital. **Description:** In 2005, 3

separate teams implemented each of their initiatives, which included SBAR Communication, a rapid response team (RRT), and the medicalsurgical phase of the Surviving Sepsis Campaign (SSC). The cumulative impact of these initiatives were thought to have been an important influence on improved outcomes seen with the severe sepsis population transferred to critical care. Data were analyzed from the Cerner Project IMPACT database, which used 50% random sampling. Retrospective data collection was performed in 2004 (n=41) and compared with 2005 (n=37). The analysis included patients admitted to any medical-surgical floor and subsequently transferred to critical care because of declining status with an acute diagnosis of severe sepsis or septic shock. Patients with DNR status were excluded. Evaluation/Outcomes: The average critical care LOS was reduced from 10.7 to 6.7 days and the average hospital LOS was lowered from 27.8 to 17.2 days. For patients requiring mechanical ventilation, the average number of ventilator days was reduced from 12.2 to 5.7 days. A decrease in the need for hemodialysis (all types) was significant with a drop from 19.5% to 8.1%. Critical care mortality was decreased from 26.8% to 16.2% and hospital mortality dropped 19.7% from 41.5% to 33.3%. Although none of the differences reached statistical significance, resource use and quality improvements were notable. With a methodical, systematic approach to implementing SBAR Communication, the RRT, and the SSC, improved patient outcomes may be achieved. kirsten.pyle@hoaghospital.org

#### Mission Possible: Our Path to Certification

Dresser S; Deaconess Hospital, Okla

Purpose: To develop a multipronged strategy for CCU nurses who wanted to demonstrate their professionalism, degree of specialty knowledge, and commitment to excellence by taking the CCRN exam. Description: This initiative had the financial support of the hospital and the guidance of the unit's CNS. Initially, a survey was done to determine the level of interest in taking the CCRN exam, types of learning formats preferred, choice of audiovisual aids, and preferred times for study. Study group sessions were scheduled for every other week for a total of 10 study sessions, and the calendar and course content were given to each participant before the course. After purchasing the review program and making the review notebooks, the CNS developed a CCRN study library on the unit. Nurses then had the flexibility of reviewing the videotapes, audiotapes, journal articles, puzzles, flash cards, and practice exams at their convenience. To keep the group motivated and focused on the goal of certification, motivational quotes were placed throughout the study notebooks and on the unit and sample test questions were posted on the unit's bulletin board each week. The nurse who answered the most questions correctly were awarded "hospital bucks" for use in the cafeteria. Evaluation/Outcomes: Before beginning the CCRN study sessions only 2 nurses were CCRN certified. A total of 22 nurses began the program and 17 are currently still participating at the midpoint with plans to sit for the exam. The clinical ladder has been revised to reflect the value of certification with an increase in point value. A CCRN Wall of Fame has been created in a visible location so that both visitors and staff can appreciate these nurses' committment to excellence. suedresser@cox.net

#### Power Driven by Proactive and Preventive Strategies: Meeting Education Needs in the ICU Using "Tip of the Week"

Education Needs in the ICU Using "Tip of the Week" Weiss B, Vanjaeckel J, Defilippis M; Morristown Memorial Hospital, NJ **Purpose:** Complications of hospitalization are known to increase LOS as well as morbidity and mortality. Research has shown that many complications of a critical illness can be prevented with timely, evidenced-based nursing interventions. While striving to meet JCAHO's national patient safety goals our ICU initiated a proactive and preventive (PP) care campaign powered by its unit-based performance improvement committee. To help achieve its education goals, the committee decided to sponsor a "Tip of the Week" to educate staff. Description: After reviewing JCAHO and evidencebased practice guidelines, we initiated the PP Tip of the Week campaign. PP tips are based on the educational needs identified from monthly audit results at performance improvement meetings. PP tips are written in easyto-remember snippets to encourage retention and compliance of the information. New education nuggets are posted weekly with catchy titles and enjoyable graphics to attract attention where all staff will see them—inside the bathroom door. Old PP tips are maintained in a binder. Evaluation/ Outcomes: The PP Tip of the Week campaign has been an overwhelming success in the ICU. The tips have stimulated intellectual discussions about important issues on our unit. PP Tips of the Week have led to positive improvements in our monthly audits of patient-safety goals. Our VAP rate has decreased by 50% over the past year after a large education campaign

that included a "Whap the VAP" tip. Other improvements include advance directives, glycemic control, and pain and sedation assessments. The improvements in these areas have given us the opportunity to monitor and educate about other important safety issues.

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A Method of Using Evidence-Based Learning to Educate Baccalaureate Nursing Students in Critical Care Nursing

O'Sullivan S; The Pennsylvania State University School of Nursing, College of Health and Human Development, SD

**Purpose:** To implement a strategy to encourage the use of available critical care nursing research literature when teaching a didactic course in critical care nursing. Description: By using an evidenced-based nursing care plan in the classroom, student nurses can develop skills in research evaluation and use in critical care nursing situations. The educator can feach students to form a research question, to evaluate the research findings, and, with the case study information, to implement a nursing care plan based on the research findings. By using simulated patient cases in classroom presentations, the learning becomes more real to students and the use of research evidence is promoted to improve patient outcomes in critical care settings. Evaluation/Outcomes: Implementation of research into practice has been a challenge for nursing educators. However, by using evidence-based learning as a teaching strategy, the nursing student becomes a more proficient consumer of research literature and a more informed practicing nurse in the critical care environment. sxo5@psu.edu

## Rockin' Round the Clock: Hourly Rounds in the PCU. Reducing Patient Call Light Use and Increasing Patient Safety

Razo D; Bon Secours St. Francis Hospital, SC Purpose: To implement a conceptual model of proactive versus reactive nursing in the delivery of patient care, in particular patient call light usage. Description: A 6-week pilot program using data from a single progressive care nursing unit to determine the frequency of patients' call lights, the reasons patients use call lights, the effects of 1- and 2-hour rounding using specific nursing behaviors on reducing patient call light use, and patient satisfaction and safety (patient falls). Evaluation/Outcomes: A total of 2261 call lights were recorded for this experiment during a 6-six week period and 26 reasons were developed to categorize the reasons patients use call lights. Overall call light reductions showed a decrease of 23.8% from prerounding to weeks 3 and 4. This progressive care unit historically does not have a high fall rate and the recorded falls on the Nursing Scorecard for the entire year of 2005 was 1. However, data for 2006 showed an upward trend with 6 falls recorded for January through May. During the 4 weeks of hourly rounding no falls were reported. Prerounding patient satisfaction scores were documented as being in the 86th percentile for overall quality of nursing care. Postrounding patient satisfaction scores were at 91% for overall quality of nursing care. This new model of patient care delivery demonstrates its effectiveness for bedside nursing care. d razo@bellsouth.net

#### Research Ahoy!

Washington G; Mountain States Health Alliance, Tenn

Purpose: To demonstrate the research process in a fun, unique, and nonthreatening manner. A second objective was to use this experiment as a focal point of our upcoming research workshop. Description: Originally used as a teaching tool in a school of nursing to demonstrate the steps of the research process, we decided that the cookie experiment could be used to have fun while teaching about research. Our research council obtained and reviewed the article describing the experiment, revising the survey tool and informed consent for our use. We made arrangements with our facility's food service to provide 2 different chocolate chip cookies, one made with butter and eggs, the other with margarine and egg substitute. We obtained a convenience sample of employees by approaching them, explaining the purpose, asking for consent, and giving them a sample of each cookie. They completed the Likert scale survey indicating their likes and dislikes of each cookie based on appearance, flavor, texture, and moistness. The raw data were entered into SPSS and the results revealed at our research workshop. When discussing the results, the presentation also included explanations of how the results were interpreted to demonstrate how the researcher draws conclusions from the data analysis. Evaluation/Outcomes: Approximately 700 clinical employees were scheduled to work during the data collection period, and 476 participated in the cookie experiment. The idea was well received when the results

were presented at our research workshop. There were 50 in attendance at the workshop, with about 15 having actually participated in the cookie experiment. The workshop participants were given an opportunity to generate their own research questions and to discuss them with the presenters. The evaluations for the workshop were mostly 5 on a scale of 1 to 5. washingtongt@msha.com

The Progressive Care Unit: A Case of Mistaken Identity Lepman D, Hewett M, Pyle K; Hoag Memorial Hospital Presbyterian, Calif

Purpose: The value and benefit of progressive care units are underestimated and underutilized. Sub-ICU beds are an essential key to keeping critical care units (CCUs) available for admission and treatment of critical care patients requiring intensive intervention and treatment. There is a known lack of beds for patients who require acute resuscitation and whose chances for survival outwelph those currently populating CCU beds for long periods. **Description**: Our facility uses sub-ICU for patients who in the past would only have been admitted to the CCU, including intubated patients, those undergoing percutaneous intervention, automatic internal defibrillator patients, postoperative vascular patients, complex respiratory patients, and certain neurosurgery patients previously admitted only to the CCU. In the CCU, if a ventilated patient is not successfully extubated by day 4, a multidisciplinary evaluation is done to determine sub-ICU transfer status. Daily evaluation is done with the "Daily Goals" check list to determine which patients are ready for the sub-ICU. Evaluation/ **Outcomes:** In the coronary care unit, an improvement in the percentage of patients transferred to sub-ICU from 12.0% in 1999 to 29.1% in 2005 (P<.05) was celebrated; the ICU increased the rate of transfer from 13.6% in 1999 to 18.6% in 2005 (P=.11). Both units show favorable bed use when compared with similar units in the Cerner Project IMPACT database. Transfers from the coronary care unit show better resource use with a sub-ICU transfer rate of 29.1% vs 18.8% (P<.05); telemetry transfer, 31.8% vs 24.2%; and general care with telemetry, 1.3% vs 2.7%. The ICU shows favorable as well with a sub-IC $\psi$  transfer rate of 18.6% vs 15.4% (P<.05), telemetry transfer 8.4% vs 15.6%, and general care with telemetry 2.9% vs 6.6%. By using sub-ICU beds and specially trained nursing staff, patients may be safely cared for in the sub-ICU with a resultant positive impact on critical care bed availability. dlepman@hoaghospital.org

Sponsored by: Hoag Hospital

### Utilizing APNs on a Rapid Response Team Benson L; Bronson Methodist Hospital, Mich

Purpose: Rapid response teams (RRTs) are becoming increasingly popular to proactively identify patients who may have arrest potential and to prevent arrest from occurring. A variety of RRT models are employed at hospitals nationwide. Our hospital chose to employ a nontraditional NP/PA model as the primary responder with a respiratory therapist as backup. Use of an APN model allows for a provider with advanced assessment  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ skills, prescriptive ability, and reimbursement capability. Description: Implementation was multifaceted including protocol development, practice agreements, and a multidisciplinary-targeted educational plan. A predictive query was developed using our documentation system to assist with the identification of patients likely to deteriorate to an arrest situation. These patients were then discussed with the charge nurses of our 5 medical-surgical units. Staff also identify patients of concern and page the team accordingly. The team APNs provide education with each call plus are in the process of developing morbidity educational sessions for each unit containing information pertinent to their specific patient populations. Evaluation/Outcomes: After only 3 months of operation, the team is averaging 30-40 calls per month, has reduced codes per 1000 discharges

## Prevention and Management of Critical Airway Complications in the Surgical Intensive Care Unit

by 25%, has maintained greater than 70% of the patients seen in a non-

ICU setting, has reduced medical-surgical mortalities, and has attained

100% staff satisfaction. bensonl@bronsonhg.org

Westhoff L, Guin P, Benken B; Shands at the University of Florida, Fla **Purpose**: Patients with extremely vulnerable airways are at risk for critical airway complications. If these patients' airway became malpositioned, occluded, or dislodged, reestablishment of a patent airway would be difficult and could result in harm to the patient. We developed criteria to identify patients with vulnerable airways who are most at risk, and we developed a nursing initiative to provide safe care and improve patient outcomes. **Description**: After review of evidence-based practice and CDC

guidelines, we developed the Adult Critical Airway Precautions Protocol, which contained the criteria for critical airway precautions and outlined specific interventions to improve both safety and communication among staff members. We recognized 4 risk factors and 9 interventions for critical airway precautions. In-servicing was completed on the Critical Airway Precautions Protocol to the staff. We collected data on protocol compliance daily throughout the patient hospital stay for patients in the SICU; we obtained data through observation, documentation, and inquiry. We then analyzed and disseminated the data to the unit leadership and staff to reinforce compliance with the protocol. Evaluation/Outcomes: The analyzed data revealed that staff was not familiar with different models of tracheostomies and required appropriate reference materials. A tracheostomy module was developed. Over the course of 3 months, compliance with the precautions protocol improved steadily to a 100% compliance. After this nursing quality initiative, no incidences of airway loss were reported. This protocol and educational module resulted in improved patient safety for patients at high risk for airway loss. Preparing staff to manage these high-risk patients resulted in decreased ICU stays, which subsequently reduced costs. westhl@shands.ufl.edu

## Isolation of Enterocutaneous Fistula Within a Vacuum-Assisted Closure Wound System

Verhaalen A; Medical College of Wisconsin, Wis

Purpose: Enterocutaneous fistulas within wound beds create management challenges. Most fistulas require wound management for weeks to months of before closure results from either granulation or surgery. Often the draining intestinal contents cause local skin excoriation, inhibit wound healing, and require a great deal of nursing time for wound management. We set out to find a solution to minimize dressing change frequency, protect skin integrity, as well as allow for patient healing and independence. Description: For many wounds, the vacuum-assisted closure (VAC) dressing improves granulation, minimizes dressing change frequency while increasing patient comfort and mobility. Currently, mild to moderate liquid enteric contents may be successfully managed with a suction based wound care system. However, once the enteric contents become thicker or the liquid volume becomes too great, the suction-based dressing system becomes less successful, and many times unusable. One may achieve both isolation as well as a quality barrier by wrapping an impermeable dressing around a circular-shaped piece of sponge, then adhering it to the wound base with a tacky substance such as an Eakin ring and stoma paste and placing this into a suction-based dressing system. Evaluation/Outcomes: The application of an impermeable circular foam ring around the base of a stoma has successfully isolated enterocutaneous fistulas within a wound bed when used in conjunction with a VAC system for periods up to 48 hours. The fistula isolation has allowed for stool collection into an ostomy appliance independent from the wound bed to optimize healing, quantify fistula drainage, and reduce direct time spent on wound care. Patients have successfully maintained a regular dressing regimen in the both the hospital and outpatient settings for weeks while simultaneously participating in physical and occupational therapies. averhaal@mcw.edu

### **Poster Presentations**

A New Transfer Process From the ICU to Improve Family Satisfaction Merrill K, Ridling D, Foster C, Ruddy M, Atouani N, Cortez E, Hardiman J, Hawk H, Jackson C, Yalon L; Children's Hospital and Regional Medical Center, Wash

**Purpose:** Transferring from the ICU to the acute care unit can be a stressful transition for patients and families. To improve patient and family satisfaction with the transfer process, a new standardized approach was developed. Description: The ICU Practice and Research Council developed a program to improve the ICU transfer process thereby increasing family satisfaction. Input was obtained from ICU nurses, acute care nurses, and managers. On the basis of feedback and the literature, the council revised the existing policy, enhancing the procedure with a detailed checklist and unit-specific transfer packets, and designed a process for complex patient transfers. Nurses were educated about the new process and the need to increase family satisfaction via a global email and a presentation at a staff meeting. The charge nurses were recruited to help predict impending transfers and ensure compliance with the new process. Evaluation/Outcomes: Family satisfaction with the transfer process is measured by survey results using NRC+Picker Family Experience Survey (FES). A low problem score indicates high family satisfaction. We set a goal

of 28.1%. Preimplementation scores averaged 42.1%; postimplementation scores were not significantly lower and averaged 41.3%. Therefore, we included education at a mandatory education day and shared comparative data with the ICU staff. FES data are reported quarterly and will assist us in determining if the mandatory education was effective. Our next steps are to audit our process and interview families who have transferred to seek their input. kelly.merrill@seattlechildrens.org

### A Therapeutic Hypothermia Review Group to Ensure Patient Safety Kupchik N; Harborview Medical Center, Wash

Purpose: An interdisciplinary group was formed at our medical center to review patients receiving therapeutic hypothermia after cardiac arrest. The team reviews patients with the purpose of identifying adverse effects, ensuring patient safety and quality assurance, as well as continually reviewing our protocol and current literature. Description: Our medical center implemented an evidence-based therapeutic hypothermia protocol in 2002 on the basis of published studies revealing therapeutic hypothermia improves neurological outcomes after cardiac arrest. This year a hypothermia review group was formed that meets quarterly to review patient cases, identify any related problems, and strategize plans to prevent complications from this therapy. As a result, our order set was updated and education needs of the physician and nursing staff were identified with a follow-up education plan implemented. Tips for using the hypothermia protocol are printed on the back of each order sheet to assist practitioners with initiation of the protocol as well as patients to avoid. Our presentation will highlight modifications to the protocol and changes in clinical care our group developed to prevent future complications in this population. Evaluation/Outcomes: A therapeutic hypothermia review group of intensive care physicians and nurses was successfully developed that continues to meet quarterly. Recommended protocol changes have been successfully implemented in patients receiving this therapy. We will continue to strive to maintain and improve patient safety by reviewing current literature and implementing evidence-based practice. nkupchik@hotmail.com

## A Win-Win Scenario: Using Volunteers in the Burn and Pediatric ICU Faber M, Jhooty P, Paine J; Harborview Medical Center, Wash

Purpose: To provide community exposure to the burn/pediatric ICU, to increase community involvement in the healing process of our critically ill patients, and to ease staff stress, volunteers have become an integral part of the team on the burn/pediatric ICU. Description: Often, we have limited time and resources to care for our patients the way we would like, and sometimes this means being able to provide only good clinical care without being able to provide holistic care as per our mission statement. In addition, we look to educate the community and provide outlets for giving back to one another. With all these ideas in mind we are now using volunteers as a creative solution. Our unit uses volunteers 7 days a week, both days and nights. Their role has developed into an integral part of the functioning of our unit. The volunteer's job consists transporting patients, providing support to patients during procedures, stocking equipment and supplies, entertaining our pediatric patients, and sometimes just sitting and holding a hand. Evaluation/Outcomes: The presence of volunteers in our ICU is a success: they are given the opportunity to serve their community; many people who are interested in working in the medical field gain exposure to the challenges and rewards we face daily; our patients receive enhanced care because of the additional resources; and a number of our volunteers have transitioned into the staff positions such as medical assistant, nurse, and physician. marne@u.washington.edu

## Achieving Tighter Glycemic Control in Our Medical-Surgical ICU McGinn G; St. Vincents Medical Center, Fla

Purpose: The trend has been to achieve and maintain normoglycemia in our critical care units. A nursing initiative in our unit led us to search for a protocol that would allow us to achieve tighter glycemic control for our patients than our former protocol. Description: After a review of several well-known protocols we selected the Atlanta Protocol for a pilot study. This insulin drip uses a formula and is based on a range chosen by Dr Bode. Our 13-bed medical/surgical ICU served as the experimental group and the other ICUs served as the control group. Twenty heterogeneous ICU patients were studied and their median blood sugar (BS) levels were examined using both the Atlanta Protocol and our former protocol. The Atlanta Protocol uses a multiplier that acts as a measure of the insulin resistance. A formula is used each hour to calculate the dose of insulin to be titrated. A target BS range is chosen for each individual patient by the

physician and the multiplier is increased or decreased on the basis of whether the BS level is above or below the range ordered for the patient. In addition, if the patient becomes hypoglycemic (BS <65 mg/dL) he or she is treated by using a formula. The patient only receives enough glucose to elevate his or her BS level to normal range instead of administering full ampule or half an ampule of D50 causing the BS to surge too high. Evaluation/Outcomes: Our median BS results in the control group was 178.8 mg/dL and the median BS results in the experimental group was 115 mg/dL. The BS levels were less labile in the experimental group. Our physicians were pleased with the results and were eager to extend the pilot to the other ICUs. gjmcginn@comcast.net

Advanced Burn Core: The Other ABC for Nurses With a Burning Desire for More

Tate J, Wolff K, Emerson C, Blayney C; Harborview Medical Center, Wash Purpose: To ensure that the staff in our burn ICU remain current in burn care practices, biannual advanced burn core (ABC) was developed. Even though the burn ICU nurses are trained in specialized burn care within the first year of being hired, some staff had not received any further formalized burn education in many years. This issue was first identified by our unit-based Best Practice Committee, a group of motivated nurses who meet regularly to work on clinical projects aimed at improving care delivery in the burn ICU. ABC was developed to meet the continuing educational needs of all staff. Description: Members of the committee solicited information from staff regarding what they would like to see in an ABC class. Staff provided more than 50 ideas for class content; the information was then complied and 2 assistant nurse managers took a leadership role in the creation of the ABC curriculum. Topics include the latest in resuscitation, medications, artificial dermis, skin cultures, necrotizing fasciitis, toxic epidermal necrolysis, and electrical and chemical burns. Classes have been well received and are included as part of each nurse's scheduled hours. To meet the initial need, 6 classes were offered in quick succession that included as many staff as possible with priority given to employees who had worked on the unit for longer than 1 year. ABC is now offered twice a year so that newer staff and those who were not able to attend the first time are given the opportunity to attend. The classes are 3 to 4 hours in length with both a power point presentation and hands-on education. **Evaluation/Outcomes:** In the 2 1/2 years that the class has been offered, 90% of the burn ICU staff have attended. Staff have expressed gratitude that their needs have been addressed with this comprehensive class. Staff turns to the ABC manual when questions arise. jotate@u.washington.edu

Airing out the Pediatric Cardiovascular ICU

Staveski S, Leong K, Wong D, Luna R, Mabanglo C; Lucile Packard Children's Hospital at Stanford Hospital, Calif

Purpose: Pediatric cardiac patients are at increased risk for complications from air emboli. The consequences of undetected air in IV catheters and tubing can be catastrophic, including stroke and death. Meticulous care and vigilance are the keys to optimizing patient safety and outcomes. We developed an interdisciplinary initiative to decrease air in IV catheters and improve our standard of care. **Description**: After surveying best practices and performing a literature search, we developed a new standard of care for air vigilance on the basis of collaborative, interdisciplinary practices within our ICU team. To implement and monitor the new care guidelines, an audit tool was created and education performed. From November 2005 to April 2006, Quality Management performed weekly sheath audits on 156 patients. Daily peer-to-peer education was initiated to promote the practice change during the months of February through April. The CVICU nurse practitioner and quality manager analyzed the data and disseminated it to the ICU staff and leadership on a weekly basis. Evaluation/Outcomes: The team's air vigilance practices changed notably following implementation. Immediately after this initiative, 96% of staff consistently removed air from catheters, as compared to 24% before. Postimplementation survey data suggested that the team gained an increased awareness of air vigilance practices and their importance for patient safety, with 62% (after) vs 90% (before) of staff believing air filters were better for safety. Peer feedback was important in embedding this practice change into our unit's culture. This initiative has helped promote collaborative, interdisciplinary practice and the concept of feedback as a golden nugget of information in the promotion of our patients' safety. sstaveski@lpch.org

All Nurse Action Days: An Investment in Retention

Thompson T, Strahle S; The University of Michigan Health System, Mich Purpose: Retention of nurses is a high priority for healthcare institutions. In 2003, the University of Michigan Health System initiated "All Nurse Action Days." These 8-hour conference days enable the institution to support UMHS's dedication to excellence in patient care through direct investment in the nursing community. Description: Action Days are an opportunity to articulate priorities and expectations while imparting essential clinical and performance information. The events are held off site, during and around National Nurses Week. All nurses are encouraged to participate. Nurses attending are on paid time, with overtime often being used so that more staff can attend. Continuing education credits are provided. The topics carry the message of the vital role that nursing plays in patient care at UMHS. These days are meant to honor nurses and are opportunities to learn, build friendships and network in a relaxing environment. Evaluation/Outcomes: This retention initiative has increased in nurse participation and popularity. In 2006, 1560 (48%) nurses participated. Changes in content are made in response to feedback from participants. A healthcare organization that supports nurse retention builds a stronger workforce through the creation of a stable work environment. This year, 89% of the participants found the Action Days effective. At UMHS, the nurse turnover rate is 10.8%, well below the national average of 13.9%. Cost associated with the orientation of new staff is greatly decreased. This is one of the many initiatives that UMHS has implemented to postitvely affect the retention of nurses. theresat@umich.edu

An ICU Journal Club: A Springboard to Evidence-Based Practice Leaton M, Vanjaeckel J; Morristown Memorial Hospital, NJ

Purpose: The ICU Journal Club had been in place for several years and the format had been informal, focusing mostly on fundamental clinical articles. As we began to investigate processes to develop a culture of evidence-based practice (EBP) in our institution, the Journal Club seemed a ready-made forum for nurses to develop the skills necessary to implement EBP in the ICU. **Description**: The CNS collaborated with the nurse researcher to integrate the John Hopkins Nursing Model for EBP into our Journal Club meetings. We developed and are using a simple Journal Club template to structure our meetings and generate EBP projects. The members of the Journal Club identify current clinical practice questions they are concerned about. The CNS and the staff nurse presenting the selected topic review the literature, summarize the findings, and choose 1 or 2 articles for the group to critique. If the topic involves other disciplines, they are invited to participate. Members of the Journal Club compare the findings from the articles to current practices in the ICU and determine if there is a need to change nursing practice on the basis of the evidence. If there are opportunities to change current practices, the Journal Club provides leadership for and often implements unit-based EBP projects. Over the course of the last 6 months the number of practice changes the Journal Club has generated lead to the initiation of an ICU Practice Council. Evaluation/Outcomes: The Journal Club has completed 2 EBP projects: (1) a hyperglycemia protocol and (2) a subcutaneous insulin protocol. The Journal Club has recommended 3 other practice changes that are being implemented by our new ICU Practice Council: (1) reliability of the Behavior Pain Scale in the trauma/surgical/medical ICU and the cardiac care unit; (2) implementation of an agitation and delirium protocol; and (3) a patient assessment protocol for readiness for ventilator weaning. marybeth.leaton@ahsys.org

And the Beat Goes On: Basic Concepts of Permanent Pacemaker, ICD, and Cardiac Resynchronization Therapy

Rorapaugh A, Kennedy S; Mount Carmel Medical Center, Ohio Purpose: The field of electrophysiology (EP) has grown tremendously and is continuing to grow at a rapid rate. As a response to this growth our EP lab developed an in-service. The goal was to increase staff nurse understanding of devices and thereby improve the quality of patient and family education. Description: The EP lab staff initiated bedside preprocedure and postprocedure patient education and found there were frequently asked questions and misconceptions in regards to these devices not only from patients and families but from the staff nurses as well. A 1-day continuous, interactive in-service was developed in response. The format allowed for nurses to come and learn as time allowed with a total of 92 nurses attending. The primarily audience was critical care and telemetry nurses; the only prerequite was basic nursing knowledge, but telemetry experience was helpful. The objectives were to identify indications for pacemakers, ICDs, and CRT; to describe basic device function, to discuss preoperative and postoperative care; and to improve nursing knowledge and patient/family education. Included in the curriculum were indications for use, detailed information about each device, evidence-based studies, goal of the therapies, preoperative and postoperative care, and patient and

family education. Evaluation/Outcomes: Feedback was resoundingly positive. Additional in-services are being planned. The in-service has opened the lines of communication between the EP lab nurses and the critical care and telemetry nurses. There has been an increase in the number of correct consents from 77.9% to 95% as a result of improved understanding by the staff nurses. The nurses have indicated they feel more confident delivering patient and family education and alerting physicians to who may benefit from device implantation. arorapaugh@mchs.com

### And to All a Good Night: How to Promote Sleep in the ICU Population Bonnet N, Andrew L; Morristown Memorial, NJ

Purpose: Critically ill patients are known to suffer from severely fragmented sleep leading to sleep deprivation. The 24-hour routine of an ICU make distinguishing day from night challenging, if not impossible, for ICU patients. Frequency of assessments, multidisciplinary diagnosis and treatment interventions, and subsequent evaluation of treatment are some of the reasons this patient population is at higher risk. Sleep deprivation has been explored in both laboratory conditions and clinical areas. Symptoms of sleep deprivation have been shown to be restlessness, disorientation, combativeness, delusions, hallucinations, and increased illness. **Description:** After review of current literature of the ill effects of sleep deprivation, a change in practice was implemented by the night staff of an 8-bed medical cardiac care unit. Strategies to encourage sleep included routine practice of turning off all lights, decreasing noise levels, and shutting the doors when possible. Nursing activities were condensed to coordinate interventions and decrease interruptions. A complete "down-time" period was established restricitng all activities for a designated period except for life-threatening emergencies. Other disciplines were educated about the goal of our program and the importance of sleep promotion for this patient population. Evaluation/Outcomes: The sleep promotion measures implemented in a cardiac care unit served to enhance the awareness of the importance of sleep in this population. Staff admittedly expressed a laissez faire attitude toward waking a patient before beginning this practice change. Staff who care for sleep-promoted patients report calmer and less anxious patients. This program can be used to increase patient satisfaction and improve patient outcomes. This process has served as an introductory platform for multidisciplinary collaboration for further sleep research. LeselyAnne.Andrew@AtlanticHealth.org

#### Assistant Nurse Managers: Leadership With a Clinical Focus Vogelzang M, Castillo M, Conner L, Stafford A, Tesfamariam A; Harborview Medical Center, Wash

Purpose: To maintain a connection with all staff, to role model nursing excellence, and to serve as a conduit between staff and administration, our facility has developed the role of assistant nurse manager (RN3) Description: Throughout our facility the RN3 works 90% in direct patient care and 10% in an administrative capacity. RN3s complete scheduling, clinical competencies, annual staff evaluations, unit education, interviews, and unit tours. They also oversee new staff and charge nurse orientation. RN3s are involved in or supervise unit development projects such as Best Practice Committees, mentoring programs, newsletters, and unit Web page development. Each unit has RN3s assigned to all shifts to facilitate communication and direct observation of the staff. In the off-shift setting they may be the only management contact a patient or family has available to them. All these tasks are essential, but the most critical aspect of the RN3 role is to model exemplary clinical care and promote high professional standards. RN3s are promoted with the valued input of staff and administration; they represent both elements of the nursing spectrum. Because the majority of their time is spent providing bedside care, the RN3s are often resources for clinical trials, unit design issues, maintaining ideal supply levels, and other functions that enable a unit to run well. **Evaluation/Outcomes**: The entire nursing staff is better served because of established lines of communication through a nurse that understands the needs and priorities of both bedside nursing and hospital administration. The RN3 is a champion of cooperation and collaborative practice. vogue@u.washington.edu

### At Your Fingertips: Improved Efficiency With Specialized Procedure Carts

Faber M, Pate A, Miller E; Harborview Medical Center, Wash Purpose: To increase the efficiency of care delivery, to improve physician compliance with procedure consent and verification, and to decrease infection rates, the use of specialized procedure carts has been implemented by our ICUs. Description: Stocked, specialized, procedure carts maintained by medical stores are present on each ICU. They consist of all the equip-

ment required for a procedure including masks, sterile gloves, and gowns. For quality assurance, preprocedure verification sheets are kept on the carts. We have an invasive catheter cart with equipment for central catheters, PA catheters, and A-lines; the ventriculostomy/ICP cart contains equipment requested by the neurosurgical team; a general surgery trauma cart has equipment for bedside procedures such as decompressive laparotomies, open chest resuscitation, pericardialcentesis, and continuous arteriovenous rewarming; and the ER and the pediatric ICU have Broselow length-based carts containing equipment for pediatric emergencies. The presence of the required paperwork on the procedure cart serves as a reminder to maintain compliance with the established patient safety standards. When a patient requires a bedside procedure, the physician calls the unit and notifies the staff to bring the cart to the bedside and await physician arrival. Every unit has identically stocked carts so the physician knows where the supplies are and does not need to spend time searching for equipment. Evaluation/Outcomes: These specialized carts have dramatically decreased the time nurses spend gathering procedural equipment. Procedures and equipment are more uniform with physicians having access to identical equipment carts. Staff compliance with patient safety and infection control standards has increased because of the presence of all the required supplies and forms. marne@u.washington.edu

#### Back From the Edge: Implementing the Sepsis Bundle Utilizing Two Multidisciplinary Order Sets

Johnson A, Evenson L, Gajic O; Saint Marys Hospital, Mayo Clinic, Minn Purpose: Treating patients who present with sepsis remains a continuing challenge faced in critical care. Evidence shows that to obtain the best outcomes in septic patients, goal-directed therapy must be initiated as soon as possible. To expedite care, 2 multidisciplinary order sets were developed that incorporate the guidelines of the sepsis bundle into a document that also allows for physician orders. Description: Recommendations set forth by the Surviving Sepsis Campaign (SSC) were reviewed by a CNS, staff nurses from the practice committee, and physicians in our 24bed medical ICU. Two multidisciplinary order sets were developed with input from emergency department (ED) staff. The order sets included guidelines and physician orders for sepsis and severe sepsis/septic shock management. The order sets addressed areas of organ perfusion, antibiotic treatment and source identification, steroid administration, glucose control, and DVT and stress ulcer prophylaxis. The goal was to expedite implementation of therapy within 1 hour of sepsis recognition. All nursing and physician staff in the medical ICU/ED were educated on the order sets and compliance and mortality outcomes were tracked. Evaluation /Outcomes: Data on compliance with these 2 order sets and adjusted outcomes were collected from APACHE III database and patient records. Within 6 weeks of implementation the sepsis order set had a compliance rate of 60%. Five months later the compliance rate was 82%. Compared to a period just before introduction of the order sets, the adjusted hospital mortality (OR 0.42, 95% CI, 0.18-0.94) and ICU length of stay (4.1 ±4 days after vs 6.3 ±7 days before, P=.01) improved significantly. APACHE predicted ICU mortality was 36% and observed ICU mortality was 23%. We aim to efficiently and expediently treat septic patients through continued use and compliance with the sepsis order sets. walker.andrea@mayo.edu

### Balancing Safety and Variation in Practice: Standardizing Continuous Infusions ("Drips")

George E, Skledar S, Tasota F, Malich C, Michalec M, Gross P, Guttendorf S, Ervin K, Kowiatek J, Martinelli B, Mcateer B; University of Pittsburgh Medical Center, Pa

Purpose: Over a 13-month period, 9 adverse drug events (ADEs) involving infusion concentration changes were reported in our institution. A multidisciplinary workgroup was formed to examine ADE-causative factors and redesign the existing standard infusion list (SIL) to improve patient safety and reduce ADEs. Description: A development team of pharmacists and physicians revised the SIL to reduce variation. An implementation team of advanced practice nurses, pharmacists, pharmacy technicians, and information systems specialists created teaching tools, updated online resources, and completed interdisciplinary education for conversion to the new SIL. The revised SIL was not only used to designate standards but also to define maximum concentrations and safe dosage ranges. On the implementation day, new infusion concentrations were dispensed and existing infusions were converted to ensure housewide conformity. To provide support to the bedside nurse and reduce error, members of the implementation team rounded to each bedside. The team

delivered new infusions, educated nurses, confirmed pump programming accuracy, and verified computer entry. All copies of the SIL were replaced with new versions marked "2006" to differentiate from old versions and reduce error. Implementation was completed over a 72-hour period. Evaluation/Outcomes: The revised SIL reduced variation by 88% (16 drips with multiple concentrations versus 2). Physician prescribing compliance improved from 55% to 95% using the new SIL. There have been zero drip concentration ADEs since implementation, compared to a high of 4 in the quarter before implementation. This interdisciplinary approach to redesign and education ensured a safe and successful housewide conversion. georgeb@upmc.edu

Bed Trinkets: An Unnecessary Evil

Farlow V, Jones P, Pack B, Sabri B; Duke University Health System, NC Purpose: Our tertiary care hospital has a committee composed of nurses galled Skin Care Champions who teach staff how to prevent and monitor patients for pressure sites. This team identified a pressure site risk factor common to the majority of our ICU patients: "trinkets" in the bed. Description: After resuscitation, catheter insertion, or other procedures, patients may have syringe covers, stopcocks, unattached tubing, etc, entangled in their linen. In addition, necessary items such as urinary catheter tubing, rectal tubes, and catheters can lodge under a patient causing unnecessary pressure points. Trinkets under patients who are bedridden and uhable to move on their own or who were unaware that small trinkets were in their beds can cause a pressure site in only a few hours. We collected bed trinkets for 6 months checking beds of patients admitted from outside hospitals, ER, OR, cath lab, and hospital units following procedures and catheter insertions. We proceeded to educate the staff regarding "bed trinkets," linen checks, turning patients on a routine basis, and using prescribed skin care products when reddened areas were noted. Education was provided on a poster called Bed Trinkets as well as one-on-one conversations and role modeling. The poster was very graphic featuring a collection of bed trinkets actually collected on the unit and pictures of pressure sites. Evaluation/Outcomes: Displaying the poster and reminders from the Skin Care Champions has decreased the number of potential pressure sites from undetected trinkets. The decreased pressure sites that require treatment has decreased length of stay. farlo003@mc.duke.edu

#### Blankets and Bears: Comforting Kids in the ICU Curtis A, Rivas N; Harborview Medical Center, Wash

Purpose: To provide comfort to pediatric patients during their ICU stay, to provide a distraction from the clinical environment and procedures, and to send patients home with a positive memory from their stay, our unit provides all pediatric patients with a quilt/blanket and transitional item such as a teddy bear or other toy. **Description**: Many of our patients arrive in the ICU in a rush without having had time to collect comfort items from home. Patients experiencing this new environment can become

overwhelmed by the stress. Our pediatric patients are no exception; they are often the most affected by the environment change. Through a community effort, each child admitted to the PICU is provided with a blanket and a toy or stuffed animal. The blankets and quilts are handmade by a variety of community organizations and donated to our facility. The toys and stuffed animals are obtained through direct donations or through funds donated to the hospital for this purpose. The blankets provide a bit of color and fun to the uninviting environment of the ICU. The bears and toys can be used for distraction or fun during or in between procedures. The patients keep these items throughout their hospital stay and can bring them home when they are discharged. Evaluation/Outcomes: Patients and families have a positive response to the gifts of the blankets and toys. Parents have stated that it makes the ICU a little less scary. Nurses report enjoyment at being able to provide comfort and being able to make a small child smile. Patients are able to return home and take with them a positive memory from their stay in the ICU. acurtis7777@yahoo.com

#### Blue Ribbon Recognition for Blue Ribbon Service!

Michalopoulos H, Sala J, Mcgrath R, Causing N, Abaring T, Filipovski J; University of Chicago Hospitals, Ill

Purpose: In 2003, the morale in the University of Chicago Hospitals' medical ICU was low and the staff nurses wanted to turn that around and revive the unit. The nurses decided they not only wanted to feel the positive energy, but see it as well. Description: A nurse created the Ribbon Recognition program. She provided 3- to 4-inch ribbons with labels with the headings, "To," "Thanks for," and "From" for staff to wear. The purpose of the ribbons was for nurses to give their peers positive recognition and

encouragement by writing a quick thank-you on the ribbon for their help that day or for a job well done. The honored nurse would tie the ribbon to his or her name badge and wear the ribbon as recognition for hard work. Over time nurses would create a bouquet of ribbons on their name badge. The ribbons were multicolored and were holiday or time of year appropriate. Evaluation/Outcomes: Seeing the ribbons made nurses more aware and more apt to give positive feedback to their peers. This ultimately helped foster better working relationships within the medical ICU. In 2006, the unit-based nursing committee included a thank you card to the recognition program. The cards provided staff an opportunity to write a more complete thank you to their peers. Completed cards were posted in the staff conference room where all staff could admire the work of their peers. Staff was encouraged to copy the cards and present them to their manager who used the feedback during their annual evaluations. Both the ribbons and the cards were a huge success. What an easy way to measure the outcome—seeing ribbons on everyone's name badge! helen.michalopoulos@uchospitals.edu

#### Body Substance Isolation Plus Model for Eliminating Multidrug Resistant Acinetobacter

Hamilton R; Harborview Medical Center, Wash

**Purpose**: To eliminate the transmission of *Acinetobacter* bacteria in critically ill patients at our medical center. A resistant form of *Acinetobacter* was introduced to our medical center by a military member injured in Afghanistan and treated at Harborview. Acinetobacter is a highly resistant, opportunistic bug. Therapeutic options for treatment are limited to a highly nephrotoxic antibiotic with subsequent patient morbidity. **Description**: We implemented the WASH (wipe out Acinetobacter with Surveillance, Substance isolation, and Hand Hygiene) campaign, spearheaded by infectious disease, clinical education, and hospital quality improvement /patient safety. All high-risk patents (intubated, with open wounds, or transferred from another facility) who were admitted to the ICU were given surveillance cultures upon admission and once a week while in the ICU. A patient testing positive for *Acinetobacter* becomes a body substance isolation plus (BSI+) patient. BSI+ is noted with an orange wrist band, orange stickers on the patient's chart, and an orange BSI+ signs posted outside the patient's room. Patients are placed in a private room or with other BSI+ patients. All staff members, family, and visitors are required to adhere to strict gloving, gowning, and hand hygiene. All equipment and supplies are considered contaminated and remain in the SBI+ rooms until patient discharge. After discharge, rooms and equipment are terminally cleaned and all left over supplies are discarded. Evaluation/Outcomes:
Before implementing the BSI+ model, up to 5 new cases of *Acinetobacter* were reported daily. After initiating the BSI+ model, a dramatic decrease in the number of new cases of resistant Acinetobacter was achieved. Harborview had almost completely eradicated Acinetobacter from the hospital with only 1 known case. Because of the tremendous success, the BSI+ model has been expanded to include not only Acinetobacter but also a range of other highly drug-resistant organisms. rhamilo@u.washington.edu

#### Bug Spray: Use of an Atomizer to Zap Vap

Bereznay J, Whitcomb D, Love J, Obeidy M; Oakwood Healthcare System Oakwood Annapolis Hospital, Mich

Purpose: Reducing the risk of ventilator-associated pneumonia (VAP) is a constant challenge in critical care. Chlorhexidine application to the oral mucosa has been identified as an effective way to reduce VAP. This creative solution compared the effectiveness of chlorhexidine using mouthswabs (CS) and chlorhexidine using an atomizer in conjunction with mouthswabs (CAS) in reducing VAP. Description: This project compared results between 2 acute care units. During the 18-month period preceding use of chlorhexidine, the VAP rates at site A ranged from 0-5.38 (mean 1.368) per ventilator day (range 143-276). VAP rates at site B ranged from 0-9.52 (mean 3.133) per ventilator day (range 95-220). When the chlorhexidine protocol was instituted, staff at both sites received education about the use of the product. At site A education included the CAS protocol in which the chlorhexidine was first sprayed into the oral cavity using an atomizer then swabbed. At site B the chlorhexidine was only swabbed in the oral cavity. Evaluation/Outcomes: After implementation VAP rates at site A (CAS) ranged from 0-3.92 (mean 0.436) per ventilator day (range 132-255). This represented a 68% decrease. VAP rates at site B (CS) ranged from 0-8.55 (mean 1.069) per ventilator day (range 97-155). This represented a 66% decrease. Another CAS site also reported a decrease in VAP, but the reduction was only 28%. Reduction in VAP may be related to multiple factors including education, technique, compliance, and patient variables. Further investigation is warranted. bereznaj@oakwood.org

### Building Clinical Strength Through Mentoring Relationships

Faber M, Wittgow P; Harborview Medical Center, Wash

Purpose: To meet the education and development needs of staff nurses, to support and encourage new staff, and to maintain a high clinical standard for all nurses on the unit, we used the mentor relationship to make assignments that meet the needs of new staff and our patients. **Description**: Our unit has an established mentoring program that teams nurses new to our unit with experienced senior nurses. With a positive experience for the program the role that mentors play in staff development has expanded. This past year, our mentors were challenged to aid the clinical growth of new staff by directing the patient assignments of these new team members. The mentors have in-depth knowledge of the challenges and successes that the mentees have had. They routinely meet to discuss the developmental accomplishments as well as the ongoing learning needs of the mentee. This knowledge combined with their advanced clinical skills allows the mentor to direct the mentees to patient assignments that will encourage both clinical growth and caregiving confidence. When a challenging assignment is taken, the mentor serves as a clinical resource and is a strong source of encouragement. With all nurses on the unit exposed to a wide range of acute and challenging patients we build a stronger nursing unit, not just a group of good nurses with a few stars. Evaluation/Outcomes: Word of the support given to our new staff has spread and our unit does not lack for qualified nurses that want to work on the floor. Our staff feel supported and know that someone is there to aid them when they need it. Physicians want their patients on our unit because they know that the patients will receive consistently excellent care from all the nursing staff. The nursing staff cooperates to improve the unit and provide exceptional patient care. marne@u.washington.edu

Building for the Future: New Graduates Entering Critical Care Scott S, Lusardi P, Elliott S, Albano A, Thomas D; Baystate Medical Center, Mass

Purpose: Our ICU is a 24-bed medical-surgical unit in a 641-bed level 1 trauma center, with a variety of high-acuity patients other than the openheart surgical population. To meet the staffing challenges in our ICU we needed to begin hiring new graduates but did not have a program in place to do so. When we looked at other institutions of comparable size that offered orientation programs designed for new graduates, we noted that they had specialized critical care units. This allowed a new graduate to orient while focusing primarily on a single system problems. Because we were in a unique position we developed a Critical Care Internship Program tailored specifically to our unit. Description: The orientation program was originally designed with 3 phases: (1) a student nurse critical care rotation, (2) a graduate nurse segment on an acute care unit, and (3) a critical care component. Before graduation, the student nurse works in the ICU along with an experienced nurse. After graduation, the new nurse undergoes a 6-month precepted acute care orientation that includes regular meetings with the ÎCU CNS and the acute care preceptor to assess progress. This is followed by a 6-month precepted experience in the ICU. Extensive mentoring and educational support are in place to sustain the new graduate in/ his or her transition to the role of a successful critical care nurse. Evaluation/Outcomes: Three new graduates have entered and successfully completed the orientation program. They are functioning independently as staff RNs in the ICU and are being supported by their nursing colleagues and the ICU CNS and nurse educator as they continue to gain critical care experience. Evaluation of the program revealed that the student clinical experience did not significantly contribute to the development of the student nurse as critical care nurse. As such, this piece has been eliminated from the program as of 2007. susan.scott@bhs.org

#### Calling All Nurses: A Shared Governance of the Charge Role

Mathews S, Wood C, Kagel E; Grant Medical Center, Ohio

Purpose: To engage all CCU RNs into stepping up to the charge nurse role, and to define that role as one of a shared governance position to enhance nursing satisfaction, patient satisfaction, and quality of care.

Description: Because of the increase in patient acuity, the nursing shortage, and tighter nursing budgets, senior nurses constantly felt drained. These feelings were identified during unit meetings and staff satisfaction surveys. As a result, a series of charge nurse meetings were held, where it was expressed that many staff aspired to step into the charge nurse role, and would rather have a charge nurse without patients as opposed to having additional support staff. The next step toward this new charge role involved educational meetings on direct care budgeting and staffing. Aspiring nurses were encouraged to take management classes, preceptor classes, and per-

sonality trait seminars. Upon the development of the hospital's rapid response team (RRT), it was decided that the CCU charge nurse would act as the nurse responder for the hospital and as an assistant to the nurse manager by completing various QA audit tools and performing patient rounds. Evaluation/Outcomes: As a result of this newly created charge nurse position, staff satisfaction has increased. A new sense of unit responsibility has ensued on the part of the nurses. The charge nurse has been able to assist and mentor new nurses fostering a positive ongoing nursing educational process not only in the CCU but on other units through the RRT team. Quality outcomes and goals percentages have increased because of the daily audit tools. Patient satisfaction has increased because patients and families have access to additional support staff. The nursing staff has gained new respect for the management aspect of the role, because they all share in its success and failures. spop1992@aol.com

### Cardiac Nursing Practice Group: Uniting Cardiac Nurses With a Shared Vision

Stengrevics S, Anderson C, Bethune C, Carroll D, Cierpial C, Donahue V, Griffith C, Haldeman S, Silva J, Snydeman C, Tubridy A; Massachusetts General Hospital, Mont

**Purpose**: Patients cared for in our medical center are often complex. In an effort to better "know the patient," to improve handoffs, and to promote a best practice environment, a cardiac nurse practice group was created. Description: CNSs representing the cardiac units at our institution met to improve communication and to share knowledge and expertise across the continuum of cardiac care. Simultaneously, nurse managers discussed plans for a cardiac center of nursing excellence. Together, the groups developed a vision and 6 goals related to the delivery of nursing care of patients with cardiovascular disease. With the framework of 6 identified goals, approximately 30 clinical nurses, CNSs, and NMs now meet bimonthly to optimize patient outcomes by addressing common issues. A research librarian helps with literature support for initiatives. Clinical nurses, guided by CNSs and NMs, often identify issues and assume leadership of projects. Evaluation/Outcomes: Communication has been enhanced through unit-based open houses and demonstrated by the adoption of a standardized cardiac patient problem/outcome care plan and a service-based patient/family teaching record. Clinical initiatives include development of best practice guidelines for temporary pacing, 12-lead ECG lead placement, measuring pulsus paradoxus, and recording anticoagulation medication administration. A cardiovascular review course was developed to promote professional advancement of clinical nurses through specialty certification. A celebration for cardiac nurses included presentations from a visiting scholar. Additional goals for 2006 include designing a healthy work environment, expanding membership to include other cardiac clinical nurses, aspirin desensitization protocol, and standardizing sheath management. Communication among units is more collegial resulting in improved patient care. sstengrevics@partners.org

### Cartoon Reminders Improve Documentation

Brames N, Rieth S; Barnes-Jewish Hospital, Mo

Purpose: Chart audits frequently show areas that need improvement in documentation. Even though this information is shared with the staff during staff meetings, audits continue to show the need for improvement. **Description:** We created small reminders using Clip Art relevant to the documentation issue, along with a short reminder statement. We laminate, cut out, and tape the reminders to the computer monitors used for charting. Two reminders are placed on each monitor; each monitor has different reminders. We change the reminders according to the most recent chart audit results using different Clip Art and paper colors. Examples of the reminders we use include pain documentation, patient profiles, documen tation of ventilator changes, restraint documentation, alarm documentation, and telemetry documentation. The Clip Art adds humor to a serious issue while ensuring that staff will read and learn from it. Evaluation/Out**comes:** The cartoon reminders have helped us to improve documentation in areas that were lacking. The staff enjoys the cartoon characters and remembers the message that goes along with it. neb3116@bjc.org

### CCU Reference Manual: From Orientation and Beyond

Bull D; VCU Medical Center, Va

Purpose: Nurses are often overwhelmed by the amount of data they receive during orientation, information that they were only exposed to once, or information that they did not receive during orientation. Certain procedures and equipment may not be used on a routine basis; therefore,

it can be stressful when they are performed or used in an emergency situation. Orientees have preceptors with different levels of information and teaching styles. The objectives for the manual are to aid staff with the use of accurate information, have readily accessible answers, and improve the nurse's level of confidence. Description: To meet orientees' educa tional needs, a quick reference flip chart was developed. Data were collected from experienced staff and staff with less than a year's experience. Information that frequently requires verification or answers was added. The flip chart was kept in a central location, so a pocket guide for each orientee was developed. The CCU reference manual was recently revised. The reference manual is pocket size and spiral bound, and consists of 121 pages. Information was classified by sections such as cardiology, respiratory, medications commonly and infrequently used, laboratory values, equipment needed for a procedure, and the nurse's role during the procedure. Staff members receive a copy of the reference manual on their first day of orientation. Evaluation/Outcomes: During orientation staff routinely use their reference manual. It is not uncommon to see orientees and their preceptors verifying information together from the manual. Beyond orientation, staff continue to refer to their manual and make additional notes they find helpful. The reference manual is a helpful, time efficient, effective tool for both new and experienced staff. dbull@mcvh-vcu.edu.

Changing Attitudes About Tight Glycemic Control Rhatican C; Baylor University Medical Center, Tex

Purpose: To develop and evaluate an educational intervention to change staff attitudes toward tight glycemic control and associated patient outcomes in the adult trauma population. Description: Tight glycemic control has been shown to have a positive impact on patient outcomes. To achieve this goal, the nurse must perform hourly blood sugars and, in response to these results, titrate insulin infusions. Because these activities increased patient care intensity, this medical protocol was not popular with our staff. We felt if staff had a better understanding of the importance of these tasks and the positive impact on patient outcomes that attitudes would improve. Educational content was developed on the basis of current literature, unit procedure, and the medical protocol. The presentation was further refined for 3 target groups (management, staff, and support personnel) to be relevant to the specific issues of each. These groups attended classroom presentations. Evaluation/Outcomes: After attending a classroom session, attendees used a 5-point scale to rate their change in attitude concerning the importance of tight glycemic control. Data collected thus far show 87% of the participants have had a definitive to significant change in their attitudes. Individual suggestions for process improvement were also solicited with the evaluation and communicated to the group through a "Bright Ideas" section of the unit bulletin board. Two ideas in process are the purchase of additional glucometers and the use of barcoding technology to increase efficiency and timeliness of running these tests. Reevaluation of the staffs' attitudes and the Bright Ideas implemented is planned for January 2007 to see if the gain achieved has been sustained.

Changing the Rise of Ventilator-Associated Pneumonia in the ICUs Harner A; Tampa General Hospital, Fla

**Purpose:** High acuities and a large number of patients requiring prolonged ventilator assistance had led to an unacceptable rise in the incidence of VAP. It was decided to develop a method of treatment to reduce and/or eliminate this expensive and often lethal complication. Description: Initially, the guidelines from the Institute for Healthcare Improvement were used in our medical ICU. We developed a 7-item list, which was posted in the chart of every patient on the ventilator. Physicians were asked to write these items as orders, which were then implemented by the nursing staff. A small sign denoting the "Vent Bundle" was posted at the patient room door as a staff reminder. Charts were audited 3 times a week for compliance and the infectious disease nurse followed the incidence of pneumonia. We purchased and began using a mouthcare package that contained all items necessary for a 24-hour period. Following the implementation of the bundle, our unit had 7 months with no VAP. Evaluation/Outcomes: With the success of this plan, it was decided to implement it in all units. Our incidence of VAP has decreased dramatically and we have added the bundle to a full set of orders for the adult ventilator patient. We are in the process of incorporating these orders into standard order sets for other units. Our "Bundle Committee" meets bimonthly to evaluate the success of this house-wide program. aharner@tgh.org

Charge It Up: Developing Authentic Leaders

Faber M, Johanson R, Thomas A, Vogelzang M; Harborview Medical Center, Wash

Purpose: To develop a strong unit staff that takes pride in collaboration, communication, and strong clinical care, our unit has made a choice to train a broad segment of our staff to serve in the charge nurse role. **Description:** Nurses take the lead in patient care delivery, but not all nurses have the skill set to be great leaders. Our unit has put a priority on developing the staff into a strong group of clinical leaders. The charge nurse role is a natural pathway to the skills required of a good leader. The charge nurse sets the tone for the unit. They have the global picture in mind, and they manage admits, transfers, and discharges. The charge nurse is a resource for other staff and can aid those being challenged beyond their knowledge and experience. The charge nurse must have advanced skills in facilitating communication between disciplines and providing feedback to staff. The charge nurse must be flexible and creative in their problem solving and be a role model of excellent clinical care. A unit is only as strong as its weakest staff member, so training a greater number of nurses to the charge nurse role has strengthened our ICU. Evaluation/Outcomes: Not every nurse is prepared to take on the charge nurse role, but by training a greater number of nurses we have seen a change in the culture of the unit. By rotating the charge responsibilities there is less mental fatigue placed on individuals. The staff is more supportive and accepting of the difficult decisions that a charge nurse must make. Teamwork is the norm rather than a rare event. Nurses are invested in sharing their knowledge and strengthening other staff members. The unit is a place that people are proud to work. marne@u.washington.edu

Clinical Ladder Tracks: A Tool for Managers and Advisors McBroom K, Swearengen P, Bowling L; Duke University Health System, NC

Purpose: The clinical ladder, consisting of 4 levels, is a tool used to recognize and promote nurses who have demonstrated excellence in practice and advanced leadership skills. Staff performance is tied to the Balanced Score Card, our mechanism to measure success. This tool includes clinical quality, customer service, work culture, and financial quadrants. Previously, application requirements were specific to the clinical quadrant. Exceptional work in the other quadrants was difficult to recognize even though a review of applications revealed interest in those nursing opportunities. To support the diverse needs and interests, a clinical ladder committee was formed to expand and further develop our program. **Description**: The committee identified 3 distinct areas of nursing practice, administration, education, and clinical. Each focus identifies specific skills reflecting leadership, advanced practice, and knowledge. Grids were devised to include preapplication requirements and developmental components. The developmental segments provide a blueprint to assist the manager and nurse in planning activities to support individual learning goals. Inservices educated staff regarding changes in the process and reviewed expectations within each track. In addition, intensive training was provided for advisors to effectively guide and coach applicants throughout the advancement process. Evaluation/Outcomes: The 3-track options provided advisors and managers direction while advising the nurse during the process. This method provides the nurses, novice to expert, an avenue for professional growth and recognition. Nurses have a broader understanding of how their practice supports all four quadrants of the Balanced Score Card. The recognition of the administrative, clinical, and education unit experts validates an enhanced respect for nurses and their work toward positive patient outcomes. mcbro004@mc.duke.edu

### Collaborative Practice Enhances Nursing Competence

McBroom K, Soltis L, Apter J, Cowan E, Washington L, Waresak M, Lloyd A, Overman K, Holtschneider M, Gattis K; Duke University Health System, NC

Purpose: As nursing practice moves from general to specialized, nurses experience more autonomy, as well as more responsibility for the expansion of knowledge and expertise in their chosen specialty. As a consequence, floating to another unit has the potential to be a challenging and stressful experience, resulting in questions for unit-specific information. It became apparent that a resource was needed to enhance knowledge and increase comfort levels for nurses. Capitalizing on the fact that our nursing staff possessed a vast range of experience, a task force with representation from each area was initiated to determine how to offer simple, accurate information that would benefit a nurse working in our specialty areas. **Description**: Each representative offered updated unit-specific information including

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critical aspects of patient care, as well as important telephone numbers. The guide included expectations for assessments; documentation; preprocedure, postprocedure, and interventional care; critical drips; and IV catheters. This information was compiled in a template in the form of a pocket guide. Nursing staff from included areas were given the opportunity to review the draft and provide comments, suggestions, and recommendations. The pocket guide was completed, approved by the hospital education department, printed and distributed to staff. Evaluation/Outcomes: Collaborative efforts resulted in a concise, accurate, and economical tool for the staff. The nurse that "floats" into an unfamiliar area will have the information needed to better understand routines and requirements, thus providing a safer environment, increased staff satisfaction, and promote positive patient outcomes. Questions regarding drugs, catheters, and equipment are now clearly organized and close at hand, allowing nurses to safely, correctly, and efficiently perform duties. mcbro004@mc,duke.edu

Color Coding: You Are Now Entering the Medication Safety Zone Tate J, Johanson R, Blayney C; Harborview Medical Center, Wash **Purpose:** To ensure that our staff members have the resources to safely administer IV fluids/medications, our trauma center has instituted 2 major changes to IV administration. The hospital made the transition as easy as possible so that staff would buy into this important safety initiative. The changes are additional visual cues that help to augment the "5 Rights" of patient medication administration whereby seeing a wrong colored/ named drug label or tape would alert the nurse that there is a potential error. Description: As part of our trauma center's continuing priority to provide the safest care, a policy has been instituted to use colored labels for IV medication bags with the additional safety feature of colored medication name labels for all the IV tubing. These labels are placed at the drip chamber, the cassette loading location, and at the IV hub. Staff on our floor trialed the IV tubing labels with these labels being placed in a central location in the medication room. It was a successful trial in which staff took to the colored labels and tape quickly, which led to management placing the colored tape in each room. Pharmacy instituted a major change in how they labeled their IV medication bags. All medication bags used to have yellow labels but with the safety changes all vasoactive agents and nonstandard concentration bags have blue labels and all other IV medications still have yellow labels. Evaluation/Outcomes: In the year since the changes were instituted, IV medication errors (wrong bag hanging) have substantially decreased on our unit. Because of the ease of the changes and no added work load to staff, we have found the change in IV medication administration to be very effective, with nearly complete staff compliance. jotate@u.washington.edu

Condition O: A Rapid Response Team for an Obstetrical Crisis Stein K, Baldisseri M, Mcbride-Valizedeh E; Magee Womens Hospital of UPMC. Pa

Purpose: The care of the obstetrical patient presents unique challenges to hospitals and healthcare professionals. Most obstetrical patients are considered low risk in terms of complications, yet they may develop highrisk or life-threatening conditions. The 2004 JCAHO Sentinel Event Alert identified areas of concern in the management of obstetrical emergencies contributing to poor fetal and maternal outcomes. These included poor communication between providers; failure to function as a team; inadequate staff competency, orientation, and training; and physician unavailability or delay. A retrospective case review was conducted by a multidisciplinary task force. This review showed early signs of deterioration not recognized and treated in a timely manner. Description: Our goals in establishing an obstetric rapid response team are to encourage any staff member to initiate this process; provide a critical core group of expert healthcare providers to the bedside of an obstetrical patient with a deteriorating clinical condition, and to lower the number of emergent clinical events. The multidisciplinary task force defined the clinical criteria of an obstetrical crisis and determined the appropriate response team members and roles of the team. Notification and education of the staff and hospital personnel was completed over several months. Evaluation/Outcomes: The Code Response Committee reviews the cases and identifies barriers that may exist to deliver quality patient care. The medical director implemented a human simulation course on obstetric crisis management. Each member of the team is debriefed and educated regarding their performance in their role. The goal of the course is to enhance performance in an obstetric crisis. The goal of the Condition O is deliver a high-quality team approach to obstetrical patients demonstrating early signs and symptoms of a deteriorating clinical condition. kstein@mail.magee.edu

Contamination: Spreading the CCRN Virus

Taylor J, Michalopoulos H, Jones N, Perez E; University of Chicago Hospitals, Ill

Purpose: To implement a professional development plan that supports staff nurses in successfully achieving CCRN certification. CCRN certification is offered to staff nurses who have worked in the ICU for more than 2 years and provides evidence that nurses have acquired an advanced body of knowledge that aids them in providing quality care to critically ill patients. Description: Critical care educators implemented the first CCRN review course in January 2005. Educators met with the cohort at times that accommodated the needs of both the day staff and night staff. The NTI (National Teaching Institute) CCRN lecture tapes, along with the AACN Core Curriculum for Critical Care Nursing textbook were used to prepare participants for the CCRN certification exam. Before the first class, the nurses received a 7-week content outline allowing the nurses to review the information before viewing the videotapes. After review of the videotapes, participants discussed multiple study questions along with answers and related rationales. During the final session, educators incorporated a new interactive monopoly-type game to enhance critical thinking skills and decision making. The winning team received a prize. Evaluation/Outcomes: Using evaluation forms to obtain feedback, the educators developed new ideas to engage staff in learning the vast amount of information required to successfully pass the exam. With each new cohort more nurses participated in this learning opportunity. Since the inception of the CCRN review, 3 nurses reported having successfully passed the CCRN examination. Efforts are currently in place to provide additional guidance and support to individuals who were unsuccessful in obtaining their CCRN certification and to remove the stigma associated with the need to repeat the exam. jennifer.taylor@uchospitals.edu

#### Cracked Heart: The Effects of Cocaine on the Heart

Balmer S, Kupchik N; Harborview Medical Center, Wash Purpose: To appropriately identify and treat patients with the diagnosis of cocaine-induced myocardial infarctions (MIs). Description: Our ICU sees approximately 1-3 cocaine-induced MIs per week. We wanted the staff to have a solid knowledge base of how to effectively treat and manage this specific patient population. This provides the staff the opportunity to act as a knowledgeable patient advocate through staff and resident education. We implemented this by early identification of cocaine-induced MIs in the emergency department, mentoring all staff, and providing resident education at the bedside during rounds. Evaluation/Outcomes: The outcomes of this project were improved management of the cocaine-induced MI. An increased staff awareness and advocacy for this population of patients. In addition, better screening tools used in the emergency department to identify these patients as early as possible. We collected data on the number of patients admitted with cocaine-induced MIs, including management, treatment, and patient education. s.balmer@comcast.net

Creating a Staff Empowered Recruitment and Retention Team to Enhance a Healthy Work Environment and Improve Satisfaction

O'Roark D, Pileski D, Henry L; Conemaugh Memorial Medical Center, Pa Purpose: To meet the perceived needs of our staff and increase their overall satisfaction by forming a unit-based retention and recruitment team. The goals of the team were to build a more healthy work environment, per AACN's Healthy Work Environment initiative, by developing methods to increase satisfaction, decrease communication barriers, develop a more cohesive work team, and provide meaningful recognition to each member of our critical care unit. The team wanted staff to feel empowered to inspire change. Description: To form the team, all staff was asked to collaborate and identify opportunities for improvement. Two early initiatives were the development of a 50/50 raffle and a snack basket to provide funding for initiatives. Survival kits were distributed to welcome new staff. Greeting cards were sent to recognize significant events. Social outings such as a lunch club, family picnic, and a "cutest pet photo" contest were organized to help staff become better acquainted. Monthly newsletters were published incorporating education, humor, staff profiles, valuable tips, and recognition of staff's meaningful contributions. Evaluation/Outcomes: The team sent surveys to all staff to evaluate the team's impact. The staff expressed gratitude for the team's efforts, especially with the snack basket and others were eager to have more social outings. Overall, staff felt that efforts of the team had a dramatic impact on increasing their satisfaction and providing a healthy work environment. The team recognizes the need to provide meaningful

recognition for daily contributions to better relate to each other, retain skilled staff, and work as a cohesive group. Encouraging staff to use their own insight to empower change helps ensure staff needs are being met, leading to improved satisfaction and retention. dawno216@aol.com

#### **Creating Power**

Elliott S, Scott S, Thomas D; Baystate Medical Center, Mass Purpose: A successful rapid response team (RRT) program goes beyond the team; it supports both the ICU staff as well as the frontline nurses on the medical/surgical units. Description: In March 2006, our medical center developed an KRT to be available 24/7. It is composed of a critical care nurse, a respiratory therapist, and an IV nurse. Initially, the plan was for the ICU nurse covering RRT calls to also carry a patient assignment. However, this placed a burden on the ICU staff because we averaged 1-2 calls per 12-hour shift, with an average length of a call lasting \$8 minutes. Our concern was how best to support the ICU staff left to cover the RRT nurse's assignment while he or she was out on a call. ICU nursing leadership supported the addition of an RRT RN on night and weekend shifts, where fewer resources are available. The RRT nurse does not carry a patient assignment and assists coworkers with patient care between calls. On the day shift (Mon-Fri), the role of the RRT RN is covered by the ICU nurse manager, assistant nurse manager, or the nurse educator, none of whom carry a patient assignment. In addition, an opportunity to build collaboration and teamwork developed between the ICU and medical/surgical units. The ICU nurse provides educational and emotional support for the medical/surgical floor staff who call on the RRT. We do follow-up visits on all RRT patients that do not transfer to a critical care unit, seeing the patient and the patient's nurse. This is a unique opportunity to share insights with the nurse and sharpen assessment skills so that he or she will respond proactively to similar events in the future. Evaluation/Outcomes: There has been an overwhelmingly positive response by both the ICU staff RNs and the medical/surgical nurses. The ICU staff welcome the additional staff support, and floor staff appreciate the clinical and educational support afforded by the follow-up visits. sheila.elliott@bhs.org

Creative Collaboration to Promote Professional Involvement

Marzlin K, Webner C; Aultman Hospital, Ohio

Purpose: Both the Magnet and Beacon awards for excellence expect involvement in professional organizations. Low participation in professional organizations is a common problem in today's busy healthcare environment. Many benefits of professional organization involvement occur at the local chapter level through education and professional networking. However, limited resources and reliance on volunteers often limit the ability of local chapters to provide high-quality programming. This project involved collaboration between Aultman Heart Center and the Canton Akron Chapter of the Alliance of Cardiovascular Professionals (CAACVP) to sponsor an annual regional symposium. Description: Project goals were (1) to increase the number of staff members exposed to nation ally known educators and (2) to increase number of staff members engaged in a professional organization. A planning committee was developed using joint leadership between the CAACVP and Aultman Heart Center. A staff nurse chaired the committee. The symposium planning was organized into 5 subcommittees: Speakers and Program, Marketing, Finances, Registration, and Materials/Facilities. The committee met regularly for 1 year. **Evaluation/Outcomes:** The formal collaborative structure for the 2006 Celebrating Excellence in Cardiac Care Symposium resulted in the following: (1) 79 attended the preconference, (2) 125 attended each day of the 2day main conference, (3) 8 states were represented, (4) 11 outside speakers brought national expertise to the regional conference, and (4) 98% of the participants rated the symposium as excellent. Aultman Heart Center and the CAACVP hope to expand the partnership to include our local AACN chapter for the 2007 symposium. Professional organizations can successfully collaborate to meet mutual goals. Nurse members of professional organizations are key persons in identifying, proposing, and leading in collaborative projects. Keychoice1@yahoo.com

Creative Solutions to Successful Implementation of ECCO Bettinelli M, Mclaughlin M; Lahey Clinic, Mass

Purpose: In January 2004, ECCO was implemented in a 293-bed tertiary care hospital. Implementation resulted in many challenges, for both the orientee and the critical care leadership team. Previously, orientation had been a traditional model consisting of educators presenting didactic information in the classroom setting. All orientees, regardless of specific area of practice specialty, attended these classroom presentations. The

specialty areas consisted of traditional ICUs, postanesthesia care unit, emergency department, and progressive care unit. Other elements of the orientation involved the orientee working with preceptors and unit-based educators. Barriers encountered during implementation were completion of ECCO modules, scheduling of computer time, integrating current module with available patients, and ensuring attendance at corresponding workshops. Other challenges were varied methods of implementing ECCO in diverse specialty areas, as well as varied levels of nursing experience. Description: An ECCO Task Force was created to identify and address implementation challenges. An orientation manual was designed to welcome the orientee to the ECCO program, provide access instructions, and clearly state module completion deadlines. The orientee was scheduled to attend workshops and was assigned computer time. AACN workbooks were purchased for each unit and were equipped with a computer dedicated for ECCO learning. Workshop and overall program evaluation forms were developed. Evaluation/Outcomes: Although some challenges still exist, Task Force members are pleased with the consistency of the orientation. Evaluations have been positive. Orientees have appreciated the orientation manual. The task force continues to meet on a regular basis to monitor progress and address areas of concern. Michele.Bettinelli@Lahey.org

Curves in the Road: Using Algorithms as a Map

LaTour L, Ramus-Embler A, Mertins L, Mcbroom K; Duke University Health System, NC

Purpose: Throughout any given day, nurses are going to the computer and resource manuals, seeking information about specific process standards or guidelines for a procedure. This is time-consuming and may result in delayed treatments. As frontline leaders, we consistently look for ways that ensure patient safety as well as maintaining staff competence. A frequent request from staff was to develop a tool that contained printed information that could be placed on their clipboard. **Description**: Staff was asked to prioritize information needed at the bedside. Feedback from staff was presented to the nurse manager/educator and other frontline nurses. Isolation, blood administration, restraints, and femoral pressure device placement were the top 4 priorities. When reviewing these process standards and guidelines, a decision was made to develop algorithms so staff members could easily follow instructions and deliver necessary treatments in a safe, competent and timely manner. Algorithms were developed in compliance with hospital process standard and guidelines. These were presented to and approved by the step-down clinical practice committee. Individual copies and education were provided to all staff members. The algorithms were placed in a pursing resource book for easy accessibility. Evaluation/ Outcomes: Staff nurses are better educated and have a higher level of comfort knowing there is a quick and available reference for their review. The algorithms are considered to be a "safety net" by the staff when delivering patient care. Preceptors consistently use this valuable tool to teach new learners and to stimulate discussion during orientation. Treatment is given in a timelier manner, which promotes staff and patient satisfaction. Frontline leaders from other units have requested copies so they may be shared among their unit's staff. latou001@mc.duke.edu

Decreasing Code Chaos: Identifying Roles, Maximizing Results Falker A; Barnes-Jewish Hospital at Washington University Medical enter, Mo

Purpose: Code teams respond to acute, life-threatening changes in a patient's hemodynamic status. The team provides lifesaving care to patients they do not know, in unfamiliar situations, and with healthcare team members they do not work with consistently. To increase the effectiveness of the Code Team, a Code 7 Review Algorithm was developed and implemented. **Description**: Each time the Code Team responds to an emergent situation, they must quickly assess, treat, and stabilize the patient. The Code Team members must effectively communicate with each other and perform their specific roles. Breakdowns in communication sometimes occur, decreasing the team's efficiency. Our hospital tries to limit any code chaos by sending new nurses and residents to Mock Code classes. However, we do not currently have 100% compliance. We offer refresher Mock Code classes to staff but enrollment is minimal. To combat this problem, a 2-page algorithm was developed detailing the Code Team members, basic role responsibilities, contents of the crash cart, and nursing responsibilities. These algorithms were placed in the crash cart books located on the crash carts. New nurses and residents received the algorithm as a survival guide, and a copy of the algorithm was placed in nursing staff mailboxes and distributed to residents. Evaluation/Outcomes: Nurses and residents like the algorithm; it is a quick and user-friendly reference guide. It helps staff

to rapidly identify who is present and better understand the role responsibilities of the Code Team members. Ultimately, the algorithm decreases the chaos associated with code responses and improves patient outcomes. axf5697@bjc.org

### Development and Implementation of an IV Insulin Protocol for ICU Patients

Ozanne L, Matthews J, Rogers A, Logsdon C, Whipple R; Memorial Health University Medical Center, Ga

**Purpose:** There is building evidence that tight glucose control in the ICU decreases mortality, morbidity, and length of stay. In our medical/ surgical/neuro/trauma ICU, the percentage of patients with median daily blood glucose of <150 mg/dL was 43%, 37%, and 67% for 2003, 2004, and 2005, respectively. A multidiscipline performance improvement project was undertaken to develop and implement an intensive IV insulin protocol. Our goal was to increase the percentage of ICU patients with adequate glucose control (median daily glucose <150 mg/dL) to greater than 80%. Description: After a thorough literature review, an IV insulin protocol from a published journal article was piloted in our ICU. Education on the importance of glucose control in the ICU and instructions on how to use the pilot protocol was provided to all nurses and patient care technicians. An hourly bedside flow sheet was developed for the patient care technicians to record blood glucose. Multidiscipline input on the ease of use and the interim success of the pilot led to 3 revisions to the pilot within 3 months. Evaluation/Outcomes: Blood glucose values for all ICU patients were collected. The percentage of ICU patients with median daily blood glucose of <150 mg/dL was 87% for the first quarter of 2006. This represents nearly a 30% increase in patients with adequate glucose control when compared to our 2005 data. Following implementation of our IV insulin pilot protocol, the median blood glucose for patients on IV insulin decreased from 141 mg/dL to 136 mg/dL (P<.0005). logsdcr1@memorialhealth.com

### Development of an Electronic Reference for Safe Administration of Chemotherapeutic and Hazardous Medications for the ICU

Dudley L; University of California San Francisco Medical Center, Calif Purpose: To provide guidelines for safe administration of chemotherapy and hazardous agents in the ICU. Description: A quick access to chemotherapy information did not exist in the ICU. A chemotherapy manual did exist but was difficult to understand by nurses who administered chemotherapy infrequently. Many nurses were uncomfortable giving chemotherapy without a more thorough explanation of why, how, and the risks involved. As time can be of essence in an ICU, the information needed to be more easily accessible and user-friendly. This project was the result of collaboration between the oncology clinical nurse specialist and clinical nurse leader in the ICU. The most frequently used agents outside of the oncology unit were identified. A quick guide highlighting the do's and dont's of proper set-up, administration, and disposal of chemotherapy agents was developed. The guide included a step-by-step checklist reinforcing the procedures. The references and tools were placed on the nursing department Intranet for access by all units. The Web site includes the quick guide with the original, more comprehensive chemotherapy manual. It also includes a list of all the chemotherapy agents identified with a link to the pharmacy Web site with drug information and patient teaching tools. Evaluation/Outcomes: This guide has been used by all critical care units. Nurses have reported that the site is understandable and easy to use. The Web site format using links to other current resources is quick to access and decreases searching time through the existing manual. This electronically available reference guide provides key information that helps nurses provide safe care related to chemotherapy administration. Leeda.Dudley@ucsfmedctr.org

### Dialogue Heals: Improving Communication Skills on the Frontline of Our Critical Care Unit

Dickerson L; Grant Medical Center, Ohio

Purpose: Critical care nurses are very skilled in critical and creative thinking; however, our training prepares us little in the art of communication. Our CCU staff identified that for our unit to take the next steps in creating a healthy work environment and maintaining or Beacon Award we needed to be not only skilled healers but strong communicators.

Description: Our journey began with a brainstorming session identifying scenarios in which the staff and management failed to have important conversations that revolved around mistakes of peers, incompetence, unit standards, lack of support, and back biting of one another. The second leg

of our journey focused on education in which we required all staff to read "Vital Smarts Dialogue Heals." Staff then discussed the previous scenarios and worked through them to be able to raise these concerns in a confident way. Two staff members were also specifically trained to confront safety concerns by addressing these real time on the unit. The final and ongoing leg of this journey is focued on accountabilites and how we handle crucial conversations. This is now included in our peer evaluation tool. **Evaluation /Outcomes:** Armed with tools to address conversations around broken rules, lack of support, mistakes, incompetence, teamwork, and disrespect our unit's employee job satisfaction scores improved 16%. Patient safety is improving and staff verbalize increased confidence with improved communication. ldickers@ohiohealth.com

## Discharge Planning: Your Last Chance to Make a Good Impression Rosenthal K, Haugen M; Mayo Clinic, Minn

Purpose: Discharge planning is an essential element of providing excellent nursing care and patient service. Poorly executed discharge planning can lead to delayed dismissals, decreased patient satisfaction, and an increased risk for posthospital complications and hospital readmission. To improve the discharge process, the staff of our 33-bed thoracic surgical progressive care unit created an RN-led multidisciplinary discharge planning team. **Description**: The primary issues affecting patient dismissals were lack of complete and accurate dismissal summaries and prescriptions not written and filled on time, resulting in a delay in discharges. Methods for improvement included quarterly audits of dismissal summary accuracy and prescription timeliness, surveys of patient and staff satisfaction, the implementation of multidisciplinary discharge planning rounds, and discharge planning education with physicians and nurses. Evaluation/Outcomes: Since the formation of the discharge planning team, survey results have shown improvements in all areas. Results included a 47% increase in staff satisfaction and a 32% increase in prescription timeliness. We hope to provide insight into the importance of discharge planning and inspire fellow nurses to improve their own discharge planning process. rosenthal.katherine@mayo.edu

#### Ditzels: Simple and Effective Staff Communication

Vogelzang M, Tate J, Faber M; Harborview Medical Center, Wash Purpose: To provide a simple means of disseminating information to staff. Description: "Ditzel" is a word born from the burn patients cared for on our unit; we use it to describe small areas of burn requiring minimal intervention. This seemed the perfect way to describe information that we wanted to impart to the staff. It was determined by the Best Practice Committee that practice updates, policy and procedure reminders, as well as standard-of-care cues could be disseminated via low-key, nonthreatening emails. Ditzels are sent out weekly via email so staff may either read them at work or on their own time. They are also placed on the communication board so there is always a hard copy available for perusing during break times. The emails are generally less than half a page so that they are quick to read and easy to remember. We have recently begun to use Ditzels to discuss new products in use on the unit and new studies in which we are participating. The Ditzels are also a mechanism for clearing up any confusion regarding patient care without isolating one individual. The nursing staff on the unit are the primary source for new Ditzel material. Evaluation/ Outcomes: This method for distributing information has become a welcomed, consistent, and anticipated means of communicating. The timely and low-key style has become a great way to answer staff questions, educate, and disseminate time-sensitive material. This method for distributing information has been adapted by many other departments in our organization. vogue@u.washington.edu

#### Do Desensitizing Decibels Drown Out the Deadly Alarms? Shatzer M, Frank S, Delucia G, Hannan K, Digiulio N, Rack L,

Schmid A; University of Pittsburgh Medical Center, Pa

Purpose: Cardiac monitoring systems rely on a pitch-escalating audible alarm structure to alert the nurse to various patient events. Real-time data notification is an attractive feature of such systems; however, the high frequency of audible noise transmissions can promote an overstimulating and desensitizing environment. The aim of this cardiac monitoring practice transformation is to reduce non–life-threatening alarm occurrences while improving patient safety and decreasing nurse desensitization within an academic medical center's innovation unit. Description: Initial modifications were aimed at low-level alarms (eg, leads off, battery depletion, or cannot analyze) that potentially posed a patient safety risk when unrecognized or unresolved. Patient care technicians on an 18-bed medical

cardiology step-down unit were educated to expand their role to include battery change, low-level alarm recognition, low-level alarm response, and proper lead placement and assessment responsibilities. An additional nursing strategy aimed at mid-level alarms included alarm analysis process improvement and unit default modifications. Evaluation/Outcomes: Baseline low level data revealed 120 lead-related and 3 battery alarms. After protocol implementation, 34 lead-related (71.6% reduction) and 0 battery alarms (100% reduction) remained. Mean response time for lowlevel alarms improved from 3.42 minutes at baseline to 2.71 minutes after implementation. Mid-level alarm baseline data demonstrated an average daily ring rate of 870 events. Mid-level alarm default modifications reduced the average daily rate to 390 alarm events. By reducing the overall ring time and creating a more streamlined alarm response we have improved the unit environment. Lethal alarms are no longer lost in the extraneous low and mid-level alarm noise. shatzermb@upmc.edu

Doing Safer Things, Doing Things Safer-Patient Safety First Hewett M, Pyle K, Lepman D; Hoag Memorial Hospital Presbyterian,

Purpose: To ensure compliance with JCAHO's National Patient Safety Goals and the Environment of Care Standards, Hoag Memorial Hospital Presbyterian's Safety Management Council created an online, unit-specific audit tool. Description: Each department director selected a safety representative who was oriented to our safety program, which fosters a climate of safety awareness, identifies accident-prone conditions, and initiates appropriate actions. The unit safety representatives educate the staff on the National Patient Safety Goals while conducting Safety/Infection Control Inspections to determine compliance with existing environmental safety regulations. Changes are recommended if needed. They submit their audit data electronically, which is compiled into a database and the results are disseminated to department directors and appropriate vice presidents. The department safety representative and department director are responsible for resolving issues discovered during the audits. When needed, the Safety Management Council and/or Environment of Care Committee monitors performance and provides support as necessary. Evaluation/ Outcomes: National Patient Safety goals showed a 97% for 2 patient identifiers used, 92% for sterile field medication labeled, a 98% for time out before surgical or invasive procedure and read back is 100%. "All Alarmed Doors Are Working Properly" has improved from 0% to a 74% average the past 6 months, "Medications Locked Including Refrigerator" improved from 87% to 91%, "Pharmaceutical Waste Container Is Used Properly" improved from 89% to 92%, "Wheelchairs and Gurneys Are Clean" improved from 79% to 92%, and "All Refrigerator and Freezer Temps Checked and Recorded Daily" improved from 89% to 94%. The area we continue to address is the chemical spill kits availability, which was at 71% and only moved to a 79% average during the past 6 months. MHewett@hoaghospital.org

### Donation After Cardiac Death: A Photographic Journey From the Critical Care Nurse's Perspective

Norman V, Johnson K; St. Joseph Hospital, Calif

**Purpose**: To orient the critical care nurse to the OR environment to support donation after cardiac death (DCD). Description: DCD is an option when brain-death criteria are not met. The organ procurement organization is involved in obtaining consent and support for the family and critical care staff. This period is very stressful for staff because of end-of-life ethical and psychosocial elements. When DCD is scheduled, the critical care nurse transports the patient to the OR. Family may be brought into the OR to be with the patient at the time of death. The nurse monitors the patient during withdrawal of life support and pronouncement of death, and assists the chaplain with family support. As the OR environment is unfamiliar to most critical care nurses, photographs were taken of the OR suite and equipment. They are available as a reference book so staff can be prepared for this process before it occurs. The photographs have captions and arrows to specific equipment, such as monitors and suction. This idea came out of the experience of one critical care nurse, who wanted his coworkers to be familiar with the OR before they have to go there with a DCD candidate. We prepared a Powerpoint presentation, which is used for inservicing and reference binders for each critical care unit. **Evaluation /Outcomes**: The inservicing and reference binders, which are used to orient staff to the DCD process, have been well received by the staff. They are grateful for actually "seeing" the OR in a series of clear photographs, so they can be prepared when the time comes for DCD. This has reduced the stress and contributed to improved staff satisfaction. Vivian.Norman@stjoe.org

#### **Driving Force of Mentorship**

Sabatini R, Fidellaga A, Kirk C, Leaton M; Morristown Memorial Hospital, NJ

Purpose: A Shared Governance model supports professional development of nurses. Mentoring is one strategy to meet this need and a formal program can assist with achieving professional goals in a timely fashion and increase satisfaction with professional growth. Description: A mentoring program was first developed at the corporate level through a grant, but later, the Nursing Education Council guided its refinement and execution. The program includes descriptions of the mentee/mentor, a signed contract, goals and timelines, and "tracking" sheet. Goals are formatted around institutional shared values and forces of magnetism. The ICU implemented the program through collaborative efforts between the ICU Practice Council, manager, CNS, and human resources. Eleven pairs of mentors and mentees identified individual goals that focused on increased competency with complex technical skills, committee participation, achievement of CCRN certification and clinical ladder status, and educational presentations. Pairs submit quarterly progress reports and identify obstacles. Evaluation/Outcomes: All mentors are in the process of achieving their goals. Less experienced mentees have achieved competency in technical skills associated with the IABP. Five staff nurses will seek CCRN certification in fall 2006. Four staff nurses have become members of the ICU Practice Council and 3 have joined the Journal Club. These staff nurses are leading presentations and discussions on practice issues, including literature reviews. None of the staff nurses engaged in the mentoring program have terminated their employment. The program has been evaluated and modified with less paperwork, easier "tracking" of individual progress, and process evaluation. Collaborative efforts have been extended to the clinical nurse researcher. roxysab@earthlink.net

#### Ed Fellowship-Pathway to Excellence

Williams J; Barnes-Jewish Hospital, Mo

Purpose: To provide a creative and clinically sound orientation program to guide new graduate nurses as members of the Emergency Department Nursing Team. Description: The nursing shortage created a large void in potential staff to work in the emergency department. The CNS sought to develop an orientation program that would provide a safe and effective orientation for new graduate nurses in the emergency department. The Emergency Nursing Fellowship Program was created and implemented in 2001 in our emergency department. The program is designed as an intensive orientation and education program targeted specifically at new graduate nurses and those with less than 1 year of clinical practice in the acute care setting. Using a combination of evidence-based classroom teaching, clinical experience, and focused evaluations of the orientees progress, the members of the fellowship are prepared to care for the complex patients independently in 5 months. The implementation process, eritical changes and improvements in the program and the ongoing research initiatives surrounding the program are identified. Evaluation/Outcomes: The program has successfully recruited over 80 staff nurses to the emergency department in 6 years. It has the greatest number of applicants for the positions in the hospital. The program has retained greater that 70% of all members that successfully completed the orientation period. Former members of the program are now in leadership positions within the department and demonstrate rapid assimilation of critical thinking skills required for safe care of emergency department patients. jaj5264@bjc.org

### **Empowering Staff to Conquer Codes With Confidence**

Murchie W, Hardie N, Pharney R; Children's Hospital and Regional Medical Center, Wash

Purpose: To increase skill and confidence during a code by creating learning sessions that are standardized, engaging, and participatory. Description: In order for ICU staff to maintain competency, an 8-hour education day is offered 5 times a year. These days cover such competency skills as CRRT, pacemakers, open chest procedures, and codes. Because many clinical staff nurses assisted in teaching the code skills, we found an inconsistency in teaching styles and degree of hands-on practice with the participants. After 1 hour, staff did not feel competent or prepared for a code situation or effective in their role. Last year we chose to redesign the competency day session and called it a Mock Code Session. Each session was tailored toward the core skills of our nurses. The sessions were increased to 2 hours. Laminated "playing cards" were made for review of crash cart contents. Each card had an item or collection of items listed on it. Staff each takes a card, locates the item, and explaines its use during a code. We developed code scenario cards that teams had to choose and act out. Each

team fully participates, drawing up medications, opening the crash cart, and operating the defibrillator as the other teams watch. The instructors have their own corresponding scenario card with the expected outcomes of the staff to ensure standardized instruction and followup. Staff is then given a code recording sheet to document scenarios read out from a collection of ICU codes. Each person is to record the code as if it were occurring. Two nurses from the ICU have been consistently teaching the competency sessions for the last year. Evaluation/Outcomes: Staff states they feel more prepared and confident to participate in a code. Staff is more engaged and interest is kept with a fun, interactive method of learning. wendy.murchie@seattlechildrens.org

#### Empowering the Bedside Nurse: The Development of an Adult Critical Care Pathway

Shanahan M, Hendersen J; Highland Hospital, NY

Purpose: The Adult Critical Care Pathway was developed in response to a triad of needs. First, to incorporate evidenced-based care in daily thought and practice of ICU RNs. Secondly, to develop a document that would include all critically ill adult patients, regardless of the etiology of their illness. Lastly, to use an acuity scoring system that would accurately reflect the patient's severity of illness, response to interventions, and the outcome in a measurable, defined parameter. This tool is designed for bedside nurses to efficiently assess both patients' acuity of illness and their progress on the path to wellness. The bedside nurse simply follows the guidelines at the top of the pathway twice a day. Description: After an extensive literature review for both existing pathways and best practice, combined with the realization that all critically ill patients are systematically affected by illness, a holistic approach was embraced in the development of the Critical Care Pathway. Regulatory requirements as well as safety issues were woven into the design. During the first 3 months, staff (multidisciplinary support team included) simultaneously used and evaluated this documentation tool. After another 3 months, a satisfaction survey was completed by the staff, which produced the "end-of-life" section. Evaluation/Outcomes: The success of the pathway has been 3-fold: standardization of care, the realization of patients' progression, and the use of the acuity system. Acuity scores are used for many aspects of unit operations: triage decisions, in correlation with nursing indicators for our performance improvement plans, synergistically in staffing assignments with respect to nursing level of competency, and to account for staffing patterns. Our facility promotes a variable staffing plan, that is, we have the autonomy to maneuver our staff; however, we need to justify our actions. The acuity scores reinforce adjusted staffing decisons. k\_shanahan@urmc.rochester.edu

### **Entrepreneurship in Nursing**

Reed M, Skinner M; Martha Reed Foundation, Va

**Purpose:** To help nurses meet the entrepreneur inside themselves and to help the already entrepreneural nurses make their dream of owning their own business a reality. Description: Most ICU nurses are very creative, and even have sideline businesses and work in nursing part time. The average age of US nurses is 47 years old. Our children are grown and we can now focus on growing our wealth and inventing things that will improve the lives of full-time hospital nurses. This session is designed for nurse entrepreneurs and leaders who are exploring solutions to everyday problems in hospitals. Our JEOPARDY game for medical people was launched in 2002. It helps nurses and students learn and study for certification exams. CDs of CCRN and PCCN education became available in 2004. Our third product, Review Courses, again serves a need for critical care education. The key components necessary in making your project a profitable reality are concept, legality, patents, royalties, marketing, due diligence, and running a nonprofit foundation. Evaluation/Outcomes: There are few experiences as exciting as saving someone's life. Our products enable us to experience this joy many times over every day. It is a great feeling to touch people, some who we will never meet, through our educational products. We continue to receive positive comments from our customers, some of which are posted on our Web sites. In the future, we will partner with other bright nurse entrepreneurs and help reduce medication errors even more. Through the wisdom of crowds, we will continue to innovate, create, and improve. www.amazingnurses@cox.net

#### Establishing an Effective Day of Surgery Admission Practice for **Critical Care Surgical Patients**

Ginn A; Piedmont Hospital, Ga

Purpose: As managed care practices have an ever-increasing impact on healthcare reimbursement, surgeons search for innovative ways to

reduce healthcare costs. Day of surgery admission of patients requiring a critical care bed postoperatively was one strategy that was implemented. Patients were brought directly from the hospital lobby to the surgical preoperative preparation area, which resulted in chaotic chart organization or omission of necessary tests, consults, or documents. To design a more useful, cost-effective plan of care, a task force was organized to improve patient flow and outcomes. Description: Originally intended to serve the general surgical population, the Admissions Testing Area (ATA) optimizes patients for surgery before admission to provide a safe, efficient perioperative experience. Each exam room is self-contained, which enables an RN to complete a nursing assessment, medication review, laboratory work, electrocardiogram, and provide education in one location for each patient before the scheduled surgery date. After education of the staff, a system was established to include nonemergent critical care surgical patients in the ATA population. After completing testing and assessment, the patient visits with a nurse practitioner, who provides test evaluation, medication education, and information about the ICU stay. Following the preoperative visit, a patient chart is completed that contains all required testing and documents and is forwarded to the surgical preoperative area the evening before the scheduled surgical date. Evaluation/Outcomes: In a descriptive evaluation of the current system, patients, staff, and physicians responded with a 100% favorable response in all areas surveyed. Delayed or canceled surgical cases due to incomplete workups or missing documents have been reduced. ali.ginn@piedmont.org

#### Extra, Extra, Read All About It: NTI Newsletter Hewett M, Pyle K, Lepman D; Hoag Memorial Hospital Presbyterian,

**Purpose**: Education is the key to improving patient care outcomes. To share the information we learned at the National Teaching Institute (NTI), we started a newsletter in 2002 called Discover, 2002, which brought home the most recent information about best practice to the entire staff. Description: Our Unit Practice Council chose those who will attend the NTI based on ability to use their leadership skills to transform and update thinking with evidence-based practice, a desire to guide information sharing, those who show a commitment to the facility, and those who would be an advocate for best practice. The conference was funded for that individual and in return they were required to author a detailed synopsis of their favorite presentation. With the comprehensive session topics available, we have had minimal duplication on articles written. Staff members who received awards were showcased with a review of the contributions and achievements that exemplified their excellence in nursing. Pictures were spread throughout the newsletter showing the network opportunities enjoyed by all. We used the abstracts to assess our processes and protocols currently in place. Evaluation/Outcomes: Each staff member receives a copy of the 14-page newsletter. The feedback has been positive stating the newsletter is an effect method of communicating recent innovations and practices. When making multidisciplinary rounds and in staff meetings, we recap pertinent topics that relate to the patient they are caring for. This is a cost-effective way to excite your staff about NTI and educate them on the most current therapeutic modalities. MHewett@hoaghospital.org

#### Extra, Extra, Read All About It: Clipboard News Serves Dual Purpose Brames N, Rieth S; Barnes-Jewish Hospital, Mo

Purpose: In an ICU with many staff members it is difficult to get new information to everyone in a timely manner. We sought a creative solution to help us reach all staff members of the neuroscience ICU, regardless of the shift or the number of days per week they work. **Description**: To address this issue we created Clipboard News. This mini-newsletter, published evey 2 months, contains current information about practice issues, documentation reminders, new protocols, new medicines, new equipment, and other relevant updates. Each issue has a change of paper color and design, and it is double-sided and laminated. We place the new issue on the patient clipboards and remove the old issue. Implementation of the Clipboard News Project serves a dual purpose. Staff members have current information at their fingertips and the laminated covers fulfill HIPAA requirements by keeping private patient information covered. Evaluation / Outcomes: Staff members enjoy the Clipboard News and often look forward to new issues. We have found that staff is more informed about issues and changes in the ICU. The covers wear well and are a colorful way to help us protect patient information. neb3116@bjc.org

Extreme Makeover: The Rapid Response Team (RRT) Edition Evangelista E, Prata J, Pelly V, Gill B, Ritter C, Farraj M, Seckel M, Johnson K; Christiana Care Health System, Del

Purpose: The MICU nurses have played an integral part in the RRT implementation and change from an existing STAT nurse program to RRT. The development of a cart including medications and preprinted documentation form were part of the extreme makeover achieved by the team. Description: Initially, the equipment was a small basket with an IV start kit and an ECG monitor mounted on a pole with wheels. Feedback from the MICU nurses quickly revealed that this basket would not be sufficient. After reviewing multiple RRT calls and surveying the MICU nurses, the needs were identified and a supply makeover became inevitable. The RRT cart was created. The newly designed cart with 6 drawers and specified itemized supplies, allowed the RRT to function efficiently with minimal delay. A recent update added a pharmacy stocked tray to the top locked drawer with the most commonly used emergency medications not routinely stocked on the non-ICU units. Because of demand, a second cart was also added. Documentation was also scrutinized by the team. After multiple rapid revisions, a preprinted form was developed, which became a permanent part of the patient chart and also served as a data collection tool. Evaluation/Outcomes: Today, the cart is used in nearly every RRT call. The convenience of the cart has helped to keep the RRT directly at the patient's bedside instead of looking for supplies throughout the unit. The cart has contributed to reduced delays in patient care and satisfaction of the team. The preprinted form provides an organized and clear way to record and review RRT calls along with both data collection and documentation of the RRT plan. eevangelista@christianacare.org

### Family Centered Care: Families Participating in Multidisciplinary Rounds

Mulloney J; Sinai Hospital of Baltimore, Md

Purpose: Because nurses play a major role in helping families tolerate the indescribable experience of their child's critical illness, PICU staff sought to implement practices for improving family-centered care. **Description**: The RICU environment is one of extreme stress and tumultuous emotions for the families of critically ill infants and children. Parents play a fundamental role in providing for their child's emotional, physical, social, and developmental needs, yet historically they have been limited in participating in their child's care in the PICU. The literature provides ample evidence for the causes of parental stress in the PICU, including the child's appearance and behavior, difficulties in communication with the healthcare team, and changes in their role as parents. Using quality improvement strategies to improve the practice of family-centered care, a multidisciplinary group in the PICU determined that one method to enhance communication was to include parents in daily rounds. The group also felt that including parents as members of the multidisciplinary team would strengthen the integration of family-centered care in the PICU. Parents are given the option of participating in rounds as the team convenes at the child's bedside. The team members introduce themselves; then, the child's care and treatment as well as plans for the day are discussed. The parents are asked about any concerns they may have and asked to provide input into the plan of care. The parent's input into the plan of care is integrated as appropriate. Evaluation/Outcomes: Since the implementation of this program, parents have reported increased satisfaction with care and decreased feelings of being isolated from the team. The parents report a high level of satisfaction with the degree of communication. The needs of parent documented in the literature are met: accurate information, access to the child, and meaningful participation in the child's care. jmullone@lifebridgehealth.org

#### Family Pride: A Patient Education Initiative

Kidd Ř, Reed M, Skinner M, Gorrell C; Bon Secours, Va

Purpose: To educate the public on how to be part of the healthcare team by involving themselves and their family in the plan of care. The plan is in accordance with the 2007 National Patient Safety Goals, which include encouraging the patients' active involvement in their own care. Description: The acronym FAMILY PRIDE was created to educate the public on what to know in case you are hospitalized. FAMILY PRIDE stands for Falls—protect yourself from unnecessary potential of falling; Advocate—use a healthcare professional as your advocate; Medications—know your medications and keep a list of them on your person at all times; Identifiers—know the hospital's patient identifiers and know they are always used in medication administration, procedures, and blood testing; You are in control; Pay close attention to details—inspect room for any hazard potential and ask if surgical sites have been verified before any surgeries; Repeat

back any instructions to verify that you understand; Infection control—ask about gloves, hand washing, etc; Double-check blood draws—ask to see the label and verify that your name is correct; Expect quality care, never settle for less. Evaluation/Outcomes: Since beginning the FAMILY PRIDE initiative, nursing has reported patients and families are asking questions. The percentage of patients that present to the hospital with an accurate medication history card has increased. Patients are asking staff to wash their hands and wear gloves. Infection rates have dropped and we have enjoyed 6 consecutive months with no ventilator-associated pneumonia in one ICU.

#### G.E.M.S.

Logue-Hunter J, Martinez R, Quick V, Osborne K; Central Carolina Hospital, NC

Purpose: With the continuing growth of many US minority populations, we must recognize how culture influences values, beliefs, and behavior affecting healthcare delivery. Learning every culture and subculture in the United States would be difficult, but nurses should work toward becoming knowledgeable about the various cultures in the area their hospital serves. Description: To meet the needs of our patient population, a survey was conducted in surrounding areas to identify the various cultures our facility serves. The staff was encouraged to participate by adding to our initial list from their own communities. Interviews with community leaders, members of ethnic populations, and experienced nursing staff were conducted to provide information regarding cultural practices, beliefs, and behaviors. Various research articles were used to supplement the findings. An informative pamphlet was devised for use by the healthcare team. Evaluation/Outcomes: Our families felt less anxiety and developed increased trust in the staff. This improved overall delivery of healthcare in a more timely manner, prompted team work with families as participants in the plan of care of their loved one, and increased staff comfort in caring for patients from different cultures. By assisting staff in recognizing differences in cultures, we helped them recognize and overcome potential biases in providing care to members in our community. rebel@wave-net.net

### Get Caught Doing the Right Thing: Public Recognition Increases Compliance of All Staff

Brames N; Barnes-Jewish Hospital, Mo

Purpose: The CNS implements changes in practice and validates competency of the staff he or she works with. Staff compliance is often a problem. A creative solution to improve staff compliance in a nonpunitive way was sought. **Description**: A new oral care protocol was implemented for patients recieving ventilation. The CNS educated the staff and informed them that audits would start in 1 week to verify compliance. The first audits had low compliance; however, a few staff members were consistently compliant with the new protocol. The CNS posted signs in several areas listing the staff members that were "Caught Doing the Right Thing." They received public recognition from their peers and a coupon to use in the cafeteria. The next audits were much better; compliance with the protocol was increased 3-fold. The "Get Caught Doing the Right Thing" idea continues to be used with positive results. Evaluation/Outcomes: The staff has responded well to the positive recognition. Staff members that did not make the list often ask the CNS what they can do to "Get Caught Doing the Right Thing." This program has helped the CNS increase staff compliance with new protocols and annual competencies. neb3116@bjc.org

### Get It Right the First Time: Reducing Errors Through Medication Reconciliation

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Purpose: Medication reconciliation is documenting a complete list of the patient's current medications and ensuring accuracy is continued during the hospitalization. Benefits include improved patient safety and work flow by reducing frustrations through using patient and staff input to improve the process. Description: A housewide 50 chart audit showed that documenting the home medication list was 4% complete. The JCAHO's National Patient Safety Goal, "Accurately and completely reconcile medications across the continuum of care," called for a process for documenting the complete list of a patient's current medications upon admission. We assembled a team with precardiac catheterization, presurgery, pharmacy, and patient safety representatives. This team used the Six Sigma method with cause and effect tools, process flow diagrams, and failure modes effect analysis to determine the root cause in obtaining an accurate list from patients. Evaluation/Outcomes: The team developed a home

medication reconciliation standardized process. This process helped clinicians document a complete list of patients' home medications during the initial admission assessment. The initial documentation also served as home medication orders by the managing physician. The tool became the home medication reference while the patient is in the acute care setting. In the outpatient setting, the tool is used with medication discharge instructions for the patient. Pilot results demonstrated the process to achieve 53.5% ability document a complete list. The pilot standardized process demonstrated statistically significant improvement in preprocedure areas. The process was implemented across the organization. Ongoing monitoring shows the process demonstrating a mean 85% compliance in obtaining a list at admission, with an upward trend showing improvement in documenting a complete list. cwaage@mercydesmoines.org

## Get Squared: Using the Square Wave Test to Ensure Arterial Blood Accuracy

Balmer S; Harborview Medical Center, Wash

Purpose: To ensure accurate arterial blood pressure measurement by all staff members through the use of square wave testing. This was both an educational campaign and a change in our unit's patient care practices. **Description:** Our unit began an educational campaign when we discovered that not all staff understood the use of the square wave test. Arterial blood pressure variances occur on the basis of a number of reasons: where the catheter was zeroed, length of time catheter has been inserted, catheter patentency, and the ability to recognize signs on waveform inaccuracies. Through chart audits we found that arterial blood pressures were being documented and treated that were inaccurate on the basis of the lack of square wave testing. We set a goal for all staff to use the same standards to determine arterial catheter accuracy. We posted information regarding square wave testing, assisted new staff on performing square testing, and educated the new residents on the use of square wave testing. Evaluation/ Outcomes: Square wave testing is now done on all pressure catheters in our ICU to ensure catheter accuracy. We have been completing bedside rounds to ensure arterial catheter accuracy and printing strips of the square wave tests to provide staff education and ensure catheter accurateness. This allows our staff members to have a universal standard of practice in treating and managing arterial blood pressures. s.balmer@comcast.net

#### Get to Know Me: Posters Improve Patient and Family Satisfaction Faber M, Fowler K; Harborview Medical Center, Wash

Purpose: To aid in delivering individualized care, to increase patient and family involvement in care delivery, and to ensure that patients maintain a sense of identity throughout their stay, the Get to Know Me poster was developed. Description: The average patient arrives hooked up to a ventilator. Cathters, tubes, and wound coverings are the prevailing presentation, often obscuring the person behind all the equipment. A personalized informational poster was developed for each patient's bedside. The poster solicits information from families and patients regarding the patient's likes, dislikes, and usual activities such as favorite food, music, and hobbies. Sections on calming activities and stressors are also present. Gathering this information encourages family involvement by allowing them to provide insight into what they know best, their loved one. The poster reinforces with the family and patient that the staff is there to care for the whole patient, not just his or her injuries. Staff use the information to develop a caring partnership with the patient and the family. Choosing the right music decreases the need for anxiolytics and narcotics during procedures. Offering patients their favorite foods can increase caloric intact vital to wound healing. The posters help us avoid known stressors and aid in providing a calm and comforting environment. Evaluation/Outcomes: Positive feedback from patients, families, and staff has been provided regarding the posters. Families state they feel included in the team of people providing care for the patient. Patients report feeling that staff care about them, not just their injuries. Since the introduction of these posters, staff job satisfaction has increased because of a greater personal connection with patients. The Get to Know Me poster is a simple and inexpensive, yet valuable communication tool that improves patient, family, and staff satisfaction and aids in providing individualized family-centered care. marne@u.washington.edu

#### Getting Connected! The Wireless Wave Hits the ICU

Bodnar A, Forbell J, Adams D; Trillium Health Centre International Purpose: To facilitate communication, enhance efficiency, and improve patient care in a large, multidisciplinary ICU with the innovative introduction of Research in Motion (RIM) Blackberry wireless devices. Description: Our 26-bed medical-surgical ICU team includes 150 nurses, 4 intensivists, respiratory therapists, pharmacists, educators, social workers, a dietician, an organ and tissue donation coordinator, a physiotherapist, and an occupational therapist. Because of our large staff, traditional communication methods, such as phoning and paging, were often challenging. To improve communication, our ICU implemented Blackberry wireless devices. The Blackberry provides immediate access to every team member through secure wireless email so that information can be shared much faster and with less effort. Less time is spent on nonclinical duties like trying to locate people, and more time is spent on patient care. The Blackberry is nondisruptive and can be used right at the bedside without affecting monitoring equipment. Clinical information is easily shared among the team, providing insight on an ongoing basis about changes in a patient's condition. Physician orders can be given by Blackberry, which facilitates safer, more reliable, and timely care. Blackberry messages are legible, contain a date stamp, and become part of the patient's medical record and can therefore contribute to the reduction in medical and transcription error. This has led to a dramatic improvement in ICU team efficiency and a much faster response to patients' needs. Evaluation/Outcomes: With the adoption of the Blackberry, our ICU has been transformed into an integrated, connected network that provides more efficient, safer, and timelier healthcare, which translates into excellence and a positive patient experience. anbodnar@thc.on.ca

## Getting to the Heart of the Matter: The Role of a CNS in a Heart Failure Program

George S, Morton B; Integris Heart Hospital, Okla

Purpose: Over 4.8 million people in the United States are affected by heart failure (HF) making it one of the most serious problems confronting the healthcare system today. Studies have shown a collaborative HF program managed by an advanced practice nurse to be effective in improving quality of care and patient outcomes. Description: INTEGRIS Baptist Medical Center initiated a HF Disease Management Program coordinated by a CNS with a HF cardiologist as the physician champion. The CNS role includes individual patient education, physician and staff education, order set development and implementation, and concurrent quality monitoring. Patients admitted to the institution with HF are visited by the CNS, who provides one-on-one teaching. The HF CNS reviews patients' charts to ensure their treatment follows current core measures. Physicians or nurses who do not follow current HF protocol receive a letter from the Heart Hospital Quality Committee or the President of the Heart Hospital requesting a rationale for omission of treatment. A multidisciplinary committee was developed to regularly discuss the challenges and various issues associated with implementation of a HF program, as well as setting future goals for the program. Evaluation/Outcomes: Benefits of CNS involvement in this HF program extend beyond individualized patient teaching to include improved nursing knowledge about HF and increased compliance with national guidelines. Since implementation of the program, compliance measures have improved substantially, for example, discharge education increased from 14% to more than 90% in a 2-month period. Physician usage of standardized HF admission and discharge order sets has increased, thus improving our continuity of care. Providing comprehensive HF education reinforces core concepts, providing patients the necessary skills and knowledge to take charge of their disease process. susan.george@integris-health.com

#### Glycemic Control Evidence-Based Practice Change in the Cardiac Postanesthesia Care Unit

Emond L, Sancho R, Czigler L, Russo K, CPACU RN Staff; Morristown Memorial Hospital, Atlantic Health, NJ

Purpose: We aggressively attacked the problem of hyperglycemia in our cardiac surgery patients using an evidence-based approach. Research has shown that hyperglycemia is associated with a 5-fold increase in catheter sepsis, a 3-fold increase in sternal wound infection rate, and higher mortality rates. Investigations indicated that CABG patients required three to 6-fold higher dosing in initiating IV insulin therapy. Description: A team that included staff nurses, a clinical coordinator, unit educator, nurse manager, cardiac surgeons, and an endocrinologist was created to develop and implement a protocol for glycemic control in the CPACU. Guidelines were developed based on the Portland Protocol that demonstrated success in achieving glycemic control in critically ill patients with target blood glucose levels 70-120 mg/dL. Initial guidelines and monitoring tools were implemented after extensive staff education. In 54 patients we found minimal episodes of hypoglycemia with blood sugars between 60-70 mg/dL.

but recognized lengthy interventions (mean=9 h) to achieve glycemic targets with some patients actually never reaching their target. A new, more aggressive and flexible guideline was warranted and subsequently developed. **Evaluation/Outcomes:** The revised protocol using an algorithm approach was trialed following mandatory staff education. After minor changes, we found that the majority of patients achieved glycemic control in the range of 70-120 mg/dL within 4-5 hours. In addition, there were a minimal number of hypoglycemic episodes with blood glucose levels ranging from 62-69 mg/dL. The protocol was presented for approval to the Pharmacy and Therapeutics Committee with an endorsement from the Department of Endocrinology. This protocol continues to be a standard of care in the CPACU. lynn.emond@atlantichealth.org

#### Guided Mentoring: A Must for Critical Care

Hadas L, Tejeda L, Thompson E, Schubert E; Florida Hospital Medical Center, Fla

Purpose: The education and management teams in the cardiovascular intensive care unit (CVICU) have developed and implemented an individualized succession plan and professional pathway for graduate nurses (GNs) entering the CVICU. This plan fosters clinical growth while investing in the individuals and is aimed at integrating them into the acute care environment. **Description**: The push to hire GNs directly into the CVICU is primarily due to a decreased number of experienced nurses seeking employment in healthcare today. The challenge is preparing GNs to competently deliver safe, quality patient care in the CVICU. Of the GNs who enter acute care, 35%-60% leave within the first year of employment because of a variety of reasons, including a lack of engagement within their unit. Following the 16-week critical care training program, GNs enter the mentoring program. There are 2 dedicated mentors on the day shift and 2 on the night shift. The mentors do not take a patient assignment and their time is charged to the education department. The GN's progress is plotted along a time-line on an individualized, progressive-acuity mentoring program. This innovative approach to mentoring helps to provide the skills necessary for developing the GN's identity as a critical care nurse and to develop his or her nursing practice. This in turn ultimately results in optimal patient care and is a powerful recruitment and retention tool. Evaluation/Outcomes: Before the implementation of this program, GNs took, on average, 12 to 16 months to complete the program as opposed to the 6 to 8 months it currently takes. In addition, approximately 75% of GNs are still working in the CVICU after 2 years. The mentoring program has optimized the transition of GNs into the acute care environment by providing a supportive and systematic program where they can successfully master the basics of critical care nursing by participating in a progressive plan for their future in CVICU.Lori.Hadas@FLHosp.org

## Guiding Nurses From Novice to Expert: A Mentorship Program in the Surgical Intensive Care Unit

Rickelmann C, Dickinson S, Wonnacott R, Montanaro N, Litle M, Labeske M, Videan B, Brown R, SICU Staff; University of Michigan Hospitals and Heath Care Centers, Mich

Purpose: The volatile healthcare climate in a critical care area is characterized by a dimished supply and demand of qualified critical care nurses. There has also been an increase in patient acuity and use of technology throughout all areas of the heathcare system. In addition, most of our new, inexperienced staff are placed on the night shift, where there are the fewest number of experienced nurses. This has created an environment of fear and stress related to the skill set of the new staff member. To address these issues we created a mentorship program to develop new inexperienced nurses into competent ICU practitioners. In addition, we had hoped to foster positive relationships; develop future experts; and nuture committment, retention and teamwork. Description: The hospital has adapted the novice to expert career model through our professional framework development. Based on the new career ladder, the novice RN goes through an orintation program to develop basic ICU knowledge and skills. Over a 2-month period the new staff member would only be assigned a "typical," stable, ICU assignment. This would allow them to gain comfort with the standard patient populations, equipment, documentation, and general practices of the unit. After the basic orientation and a 2-month skills gaining time frame, they are ready for the mentorship program. The new RN is assigned a high-acuity patient, but with the backing and support of an expert nurse. They are provided immediate feedback as to their performance with a documentation tool using an objective format. Evaluation/ Outcomes: All our incoming staff without ICU experience are now being placed in the mentorship program. Experienced mentors and new staff

are very positive about the program. As each RN advances through the mentorship program, we have documented positive outcomes, improved confidence, and a more timely advancement to our most critical patients. Sdickins@umich .edu

#### **Gutteral Nursing: The Containment of Draining Wounds**

Banas M, Curia M; University of Chicago/University of St. Francis, Ill **Purpose**: To highlight the effectiveness of a nurse-developed device to contain wound drainage and protect skin integrity. Description: After years of clinical knowledge, as well as trial and error experience of different devices, a wound drainage containment device was developed on 3 separate patients. Patient 1 underwent gastric bypass surgery and subsequently developed numerous draining fistulas. The containment device created included a wound drainage bag with a snap lid that facilitated access for wet-to-dry dressing changes. A catheter access port was inserted in this bag to facilitate the placement of a gastrostomy tube. Y connectors at the end of the gastrostomy tube and wound drainage bag were used to place both of these devices to low constant wall suction. Patient 2 underwent an exploratory laparotomy in which swelling of her intestines prevented primary closure of the abdomen. Sterile IV bags were sutured in place to protect the exposed bowel. Leakage developed at various IV bag suture sites. The wound containment device included 2 flat Jackson Pratt drains placed above and below the abdomen along the suture line of the IV bags and secured with Ioban. The ends of the drains were then Y connected and placed to low constant wall suction. Patient 3 had a large abdominal tumor removed with a resultant open draining abdominal wound. A wound containment device was developed by bordering the entire outside of the wound with stoma adhesive wafer while the inside of the wound was packed with normal saline-soaked kerlex rolls. A nasogastric tube was embedded in the center of the kerlex rolls. The entire wound was then covered with Ioban. The nasogastric tube was placed to low constant wall suction that effectively contained the drainage. Evaluation/Outcomes: The wound drainage devices were highly effective in containing drainage and skin integrity remained intact throughout all 3 patients' ICU stay. Mab1103@sbcglobal.net

## Have You No Time for Reading? A Journal Club Is a Creative Way to Learn the Latest on Evidence-Based Medicine

Blackburn A, Byrum D, Moran K, Taylor D; Carolinas Healthcare System, NC

Purpose: A group of midlevel providers (MLPs), including nurse practitioners, CNSs, and physician assistants) were searching for a way to infuse the latest evidence-based medicine into their practice. MLPs often do not have time to review the latest research studies but may feel the need to have a working knowledge of the latest in evidence-based medicine. Therefore, we formed the Advanced Practice Nursing Journal Club as a mechanism for MLPs to get together on specific topics, and critically review and discuss the latest in evidence-based medicine. Description: We have more than 40 MLP participants on our email list. Monthly meetings take place in the evening in a meeting room in one of the local restaurants with dinner supported by a topic-related vendor. Relevant research articles are sent via email to all participants beforehand. At the meetings, a general overview of the subject is presented by a subject matter expert, followed by a round table discussion to critically review the articles. We discuss and question aspects of the articles, with oppositions/agreements noted about the research methodology and the applicability to practice. In addition, we partnered with the local AACN chapter to receive contact hours for our meetings. Evaluation/Outcomes: Many MLPs feel this has truly offered an opportunity to enhance their learning and knowledge on a variety of different subjects. The journal club allows the MLPs to plan ahead, devoting a specific time to read and discuss articles. As a result, we believe this knowledge will ultimately result in improved patient outcomes! angela.blackburn@carolinashealthcare.org

#### Heart Sounds of Parents: Careful Listening

McGrath L, Ray J, Jarrett K, Sandquist J, Brown M, Shannon J, Mackey J, Fox L; Children's Center at Mercy, Iowa

Purpose: This initiative focused on improving education of future parents/families of pediatric cardiac patients. Using careful listening, input was obtained from previous patients and families that had gone through the open-heart surgery process. Description: Within our organization, approximately 100-120 pediatric open-heart cases are performed annually; yet, involving parents/families beyond the physical care of their child, namely in designing an educational tool, was absent. Processes were put

into place for focused parent/family discussions to gain insights for educational tools and useful information. Careful listening was integrated as a guiding principle by caregivers. Using the expertise of the heart-to-heart support group nurse liaison as lead, a multidisciplinary team was created with representatives from nursing, social services, child life, education, and parents/families. An educational tool was created that focused on sequential processes from admission through discharge; however, it was the parents' expertise that offered meaningful contributions such as colored photographs of what to expect (eg, IV catheters, chest tubes, endotracheal tubes, and ventilators) and the title of the reference booklet, *Healing Hearts*: A Parent's Guide. Final approval of the proposed draft was received from a parent whose daughter had undergone multiple cardiac surgeries. Evaluation/Outcomes: Voices of parents have been heard by careful listening of caregivers with proven success, and as evidenced by the creation of *Healing* Hearts: A Parent's Guide. It has also promoted a unit-based cultural change for continued involvement of parents/families as a vital resource for future initiatives. mcgrath@mercydesmoines.org

## Heart to Heart: A Collaboration Between Medical and Surgical Cardiology Educators

Soltis L, McBroom K, Washington L; Duke University Health System, NC **Purpose:** Professional development and continuing competency for the bedside nurse is critical to the success of a healthcare organization. Clinical educators must seek out opportunities for collegial dialogue regarding educational offerings that can contribute to professional development for staff. Description: The cardiothoracic surgical unit and the cardiology unit are both composed of 61 step-down beds and 16 critical care beds each. There are a great number of staff nurses that require highly specialized training and skills to be successful at the bedside while delivering patient care. The unit educators are responsible for ensuring the maintenance of continuing competence of the staff, as well as providing additional education for staff professional development. Educators collaborated on various educational opportunities to increase the educational offerings available to staff. This was accomplished through both written and electronic materials being shared with all the staff on the 4 units. We were able to develop an in-house pocket guide for staff nurses that included important information such as assessment findings, laboratory values, and equipment troubleshooting information. We shared information on patient education teaching materials as well as unit-based protocols that could be implemented when specific patients were admitted onto the "sister" unit, such as CAD patients on the surgical step-down unit. Evaluation/ Outcomes: This open collaboration and communication between the units helped develop strong relationships and increased the sense of unity as it relates to patient care. It is important to use resources available as educators. Collaborating with other educators and professional resources can be an effective way of exposing staff to practice focused education and ensuring their success as professional nurses. Lisa.Soltis@Duke.edu

### **Huddle Up to Safe Patient Handoff in the CVICU**

Lambert  $\bar{A};$  University of Rochester Medical Center, Strong Memorial Hospital, NY

**Purpose**: The topic of transfer of care is a National Patient Safety Goal recognized by JCAHO for 2006. Accuracy of information transfer from one team to another is a critical step when considering the complex processes involved with critical care patients. Description: Our cardiovascular intensive care unit (CVICU) has begun using a new process to accurately transfer information or "handoff" care from the OR to the ICU team. The "Huddle" takes place for postoperative patients arriving to the CVICU direct from the OR. The core team members required to be present before the Huddle commences are the admitting RN, nurse practitioner, respiratory therapist, attending anesthesiologist, anesthesia resident, and cardiac surgery fellow. The hallmark for the Huddle is uninterrupted verbal reporting to the entire team to ensure all members receive the same information. An opportunity for clarification and questions by any member is encouraged at the end of the verbal report. Full attention to the individuals speaking is given during the Huddle. The transfer of various monitoring catheters, and other admission processes are postponed until after the Huddle is completed to minimize distractions. To maintain consistency for the Huddle, the team members report in a specific order. A detailed description of the patient's history, operative procedure, and operative course is reviewed. The only unintended consequence is a positive one. The team agrees that the new way to handoff care actually takes less time overall than the previous way. The team giving the report is familiar with the process and is more prepared to give an accurate report, and the standardized report is more concise for the accepting team. Evaluation/Outcomes: Evaluation of the handoff was done by voluntary survey. The form included subjective evaluation by rating a numerical scale of accuracy of information received, improvement in process, and feeling part of the team. Anna\_Lambert@urmc.rochester.edu

ICU Cardiac Rehab: Heading 'Em Up and Moving 'Em Out Johnson R, Mckinzie P; Duke University Health System, NC

Purpose: Our uncomplicated myocardial infarction (MI) patients are often discharged from the intermediate unit within 24 hours of transfer from the ICU and on occasion may even be discharged directly from the ICU. There was a concern that our patients had not safely progressed their activity level to go home. In a time when patient length of stay is decreasing and patient needs are increasing, a fresh insight about rehab for ICU nurses was needed. Description: Although rehab is not a traditional ICU focus, we found that nurses frequently integrated it into practice. However, questions arose regarding specifics of phase I cardiac rehab. To capitalize on the positive practice currently in place as well move forward in an organized and consistent manner, nurses were surveyed to determine baseline knowledge of activity guidelines after MI. Based on the newly identified knowledge deficits of staff nurses regarding phase I cardiac rehab, we consulted exercise physiologists. An up-to-date algorithm for cardiac rehab was created. A poster clarifying phase I activity and goals for discharge were created and laminated copies of the algorithm were posted in each room. Care nurses were prompted to remind them of the expected discharge date and encourage phase I rehab. A daily roster was kept of the activity levels of uncomplicated MI patients from admission to discharge. Evaluation/Outcomes: Several months after beginning the program a test was given that showed a significant increase in staff knowledge. In reviewing the roster after implementation of education, the majority (87%) of our patients participated in cardiac rehab before transferring from the ICU. Nursing staff have now incorporated phase I rehab into their daily practice. It is no longer unusual to see uncomplicated MI patients ambulating on our unit. Staff and patient awareness improved as well as progression of activity in anticipation of discharge. johns 151@mc.duke.edu

#### ICU Quick-Reference Pocket Cards: Let Your Fingers Do the Walking! Michalopoulos H, Sala J, Kozlowski D, Ojibah R; University of Chicago Hospitals, Ill

**Purpose**: The medical ICU at our institution is the largest of 6 units with many new graduates and junior nursing staff. Because of the high acuity and complex patient assignments nurses encountered in our unit, references for both common and uncommon practices and procedures were often difficult to acquire in a timely manner. The aim of this project was to create a fast and simple way for nurses to obtain this information. **Description:** A group of staff nurses worked with the nurse educator to create pocket-sized, quick reference cards. Topics included use of external ventricular drains, mechanical ventilators, nitric oxide, and peripheral nerve stimulators; procedures for monitoring bladder pressures and endtidal CO2; assisting with the placement of arterial catheters, chest tubes, and endotracheal tubes; and commonly used medications including dosages, concentrations, and preferred IV route. Each nurse was provided with a set of reference cards for their own personal use. To prevent loss of the cards, the cards were attached to a metal ring. Evaluation/Outcomes: Feedback from staff nurses was very positive. Many nurses stated that they use the cards on a daily basis. One nurse even overheard a physician asking where the cards were so he could review a topiq himself! Because of the highly successful implementation of the pocket cards project, a "Critical Care Quick Reference Binder" was created using a more elaborate version of the information provided on the cards to serve as a core reference on the unit. The binder includes a laminated page for each topic and extra copies for staff if cards are misplaced. As word spread throughout the other ICUs, requests for similar binders were granted, and currently pocket-sized reference cards can be visualized throughout the critical care center! Helen.Michalopoulos@uchospitals.edu

#### Impact of a Work Life Committee on a Critical Care Unit Chadwick D, Pettet K, Temple P, James M, Brown N, Stalsbroten V; Providence Everett Medical Center, Wash

**Purpose:** The intent of the work life committee is to engage the staff and refresh the work environment. Staff were not seeking certification and the involvement on unit projects was difficult to facilitate. The 2005 Gallup Survey item, "At work, my opinion seems to count" scored a mean of 3.47/5.0. The Work Life Committee addresses the issues of retention

and recognition, encourages profession development, and makes an impact on the work environment. **Description**: Projects focused on the Healthy Work Environment Initiative and applying for the Beacon Award. A unit retreat was planned with Debbie Brinker, AACN President, speaking on a Culture of Excellence, and time was spent on brainstorming solution to unit problems and participating in team-building exercises. Engage and Transform vests were given to all staff as a reminder. Retention and Recognition are addressed with a Certification Board, picturing all CCRNs and recognizing years of service. New staff members are welcomed to the unit, pictured on a Bio-Board, and given a welcome packet and coffee card. Work Life also facilitates social interaction off the unit by hosting a summer and holiday party and each month on the unit we host a birthday celebration. Evaluation/Outcomes: The retreat was successful, the staff left inspired and refreshed. Staff strongly agreed with the retreat objectives as evidenced by the evaluation from the retreat. The 2006 Gallup Survey item "At work, my opinion counts" scored 3.81 (>0.20 mean change). Nurses express more unity on the job and are more satisfied as a unit. A Certification Prive has begun and the number of CCRNs is increasing. The inventory/for the Beacon Award is completed and the application will begin this September. danica.chadwick@providence.org

Implementing an Evidence-Based Oral Care Protocol in the MICU Logsdon C; Memorial Health University Medical Center, Ga

Purpose: ICU patients receiving ventilation are at high risk for developing ventilator-associated pneumonia (VAP) because of insufficient oral hygiene and removal of bacterial colonizing secretions. Literature review shows there is an association between the use of routine dral care and reduction of VAP. However, there has been no consensus among critical care professionals on a standardized oral care protocol for these patients. The goal of any protocol should include removal of dental plaque, stimulating oral immunity, and reducing the bacterial colonization of the oropharynx. Description: CDC guidelines and evidence-based practices were reviewed for interventions that improve secretion removal and prevention of bacterial colonization. Before protocol development, ICU oral care consisted of swabbing the mouth with chlorhexidine every 4 hours. Our protocol used specific interventions every 4 hours with emphasis placed on brushing of teeth every 12 hours. Oral care education and protocol use was provided to nursing staff by the CNS. An audit tool was developed to evaluate completion of oral care interventions and assess the condition of the oral cavity. Pilot of protocol was completed over 4 weeks in the 8-bed MICU. Audits of protocol and VAP rates were analyzed for correlation. Results were presented to Nurse Leadership and Unit Practice Committees. The protocol was revised per RN feedback and implemented throughout the critical care division. Evaluation/Outcomes: Compliance of protocol use during the pilot phase was 98%. Patient care techs have become more involved in the patient's care and have assumed oral care as one of their primary duties. The MICU has been free of VAP for 6 months. The protocol is used on all patients receiving ventilation in the critical care division. Education, auditing of clinical practice, and reinforcement of oral care interventions are ongoing. logsdcr1@memorialhealth.com

### Improving RN and MD Communication and Relationships in a Cardiac Care Unit

Michalopoulos H, Jones J, Trinosky K, Lazzara D, Fedson S; University of Chicago Hospitals, Ill

Purpose: To improve nurse and physician communication efforts and foster a better working environment. Research suggests that enhancing nurse and physician communication can dramatically improve patient outcomes, prevent medical errors, and foster collaborative relationships between team members. Twice a month, in our cardiac care unit (CCU), a new group of medical interns and residents begin their rotation caring for patients. Because of the frequency in turnover, the CCU nurses felt it took a long time to introduce the team to the unit's everyday practices, thus creating an atmosphere of animosity and poor relations. **Description**: CCU nurses collaborated with the medical director to create an intern orientation information package. This package outlines the day-to-day practices of the unit including policies and procedures for admissions and discharges, do not use abbreviations, and the visitors' policy. On the first day of their rotation, the charge nurse is responsible to disseminate the information and provide a brief presentation. Physicians were also encouraged to use the unit's communication board to communicate information to the nurses regarding the patients' plan of care, responsible party, and pager numbers. Evaluation/Outcomes: Feedback from informal focus groups was collated and indicated that since implementing the program communication had improved among team members. The use of the unit's communication board by the medical team had increased, providing an opportunity for enhancing communication. Many medical team members appreciated the discussion at the beginning of their rotation. They stated it provided them with guidance to the day-to-day functioning of the unit. The introduction of the intern orientation program has improved communication efforts and continues to provide an opportunity to cultivate an environment for establishing better working relationships among disciplines. Helen.Michalopoulos@uchospitals.edu

### Improving Safety for the Anticoagulated Patient: Falls and Medication Administration

Haldeman S, Cierpial C, Silva J; Massachusetts General Hospital, Mass Purpose: Patients who are receiving anticoagulation sustain greater injury when they fall in the hospital than other patient populations. Nurses can best affect this problem by being well prepared to put interventions in place for anticoaglated patients. Cardiology patients require a ginger balance between clotting and bleeding. Our goals were to reduce the injury associated with falls for the anticoagulated patient and to enhance the quality of documentation for IV anticoagulants in the hospital. **Description**: CNSs and the nurse manager of an interventional cardiology inpatient unit undertook a 2-pronged effort to affect the safety for patients requiring anticoagulation. The first effort entailed a unit-based effort to closely examine patient falls during the previous 12 months and translate the themes into an educational effort. The second effort was the implementation of a new medication administration record for patients requiring anticoagulation throughout the organization. Synergistically, the cardiology and cardiac surgery CNSs created a single patient problem list with interventions to facilitate intraunit communication. Both interventional cardiology unit efforts used evidence, collaboration with expert nurses and other disciples, and education and research. These efforts coincided with other hospital-wide initiatives to reduce falls for all patients that included an automated safety reporting system and several new products. **Evaluation/Outcomes:** Through this project, staff nurses are better prepared to address the risk of patient falls while receiving anticoagulation. The incidence of patient falls remained the same. The incidence of injury was decreased based upon multiple patient and environmental factors. The quality of documentation for anticoagulation has improved in clarity and consistency. Administration results are still in review. SHaldeman@Partners.org

#### In-Alignment: Advanced Preceptor Course for Advanced Staff Nurses Sabatini R, Walker-Cillo G; Morristown Memorial Hospital, NJ

Purpose: A program was developed to provide staff nurses interested in being unit preceptors with adult learning skills that increase comfort and satisfaction with their role as preceptors. Description: All nursing units have staff nurses interested in being preceptors for new staff. Criteria for this role vary from unit to unit but in general, nurses need to be seasoned practitioners with advanced knowledge of both patient and institutional characteristics. The JCAHO challenges institutions on their mechanism of educating preceptors and unit educators. A 6-hour program highlighting 4 major topics including (1) the role of the preceptor, (2) Benner's levels of expertise, (3) adult learning theory, and (4) conflict management was developed and implemented by unit educators and staff nurses who make up the Nursing Education Council. Group discussions and role playing provided opportunities to use knowledge in practice. The program was modeled after a review of the literature on staff nurse and preceptor programs. Evaluation/Outcomes: The formal evaluation resulted in high satisfaction scores (5, on a scale of 1 to 5). The only concern related to anxiety during role-playing exercises. In the future, more time will be allotted for preparation exercises and debriefing. Because of space and staff limitations, the program could only accommodate 25 participants, yet 52 expressed interest. The chair of the Nursing Education Council mentored colleagues in content development and presentation. Themes of mentorship, risktaking, and collegiality permeated the program. roxysab@earthlink.net

#### Increasing CCRN Certification to Provide a Beacon for Our Future Cousin A, Mork A, Boyer C, Hornung C, Jacobs L; University of Wisconsin Hospital and Clinics, Wis

Purpose: Encouraging CCRN certification has been a nurse-driven project over the past 1.5 years in our 24-bed level 1 trauma ICU. Specialty certification in nursing is recognized to provide benefits to patients, healthcare organizations, and the nurse seeking certification. In preparing our Beacon application, it was recognized that 8% of nurses in our unit

were CCRN certified. Therefore, increasing certification was a primary goal before Beacon application submission. A committee consisting of both CCRN and non-CCRN staff nurses was formed. It was acknowledged that taking the CCRN exam may be perceived as stressful. To decrease anxiety and increase preparedness for taking the CCRN exam, a plan was developed to recruit a professional CCRN review speaker to present a review course. Description: To promote and support certification, a CCRN review course, taught by a national speaker, was organized and funded through our unit budget. As 1 of 5 ICUs in our institution, we chose to advertise the CCRN review course to all ICU nurses in the hospital. Fifty ICU nurses attended this 16-hour review course. The review course and study guide were offered free of charge, and each participant was required to take the exam within 90 days. Applications for the CCRN exam were collected as a group for the bulk discounted application rate. Evaluation/ Outcomes: Pass rates were 100% for our unit after the review course and certified nurses increased from 8% to 21%. Excellent pass rates, positive program evaluations, and high attendance has shown the success of the CCRN review course for increasing CCRN certification. Based on the success and positive energy created, a second CCRN review course was organized. Through our committee work, an increase in CCRN-certified staff has led to peer empowerment, demonstrating that the process of our Beacon application is just as exciting as our future goal. acousin@uwhealth.org

#### Information Please! Improving Communication and Access to Information With a Unit Web Site

Saville D, Francoeur N; Harborview Medical Center, Wash Purpose: We developed a unit Web site to improve communication between staff and to provide access to information that was inherent to trauma and critical care nursing. Description: The Web site was developed from a framework for Web sites that was created by UW Computing and Communications. Information on the site is protected and requires a staff user ID and password to access the page. Links to all of the following are identified on the home page: organizational and educational groups such as AACN; minutes from different committee meetings such as staff meetings, participatory management committee meetings, and nurse practice committee meetings; articles of interest such as the current weekly research article being discussed; staff schedules and phone lists; and a central window for posting personal notices such as a thank-you or congratulations. Evaluation/Outcomes: Communication has improved with the development of the Web site. Staff members have commented that they enjoy being able to check their schedule from home. Others like to review the meeting minutes to refresh their memory about an issue that was discussed or to update themselves if they were unable to attend. Links to critical care organizations such as AACN are easily available and information such as Trauma Pearls written by a trauma surgeon are just a click away. Anyone can post a message and several staff members have used the site to send out information about a baby shower or to say thank you for gifts received. It is a work in progress and we are continuing to develop it for the benefit of ourselves and our patients. dsaville@u.washington.edu

### Insight Into Practice: Leveraging Nurse-Influenced Operational Dashboards to Improve Quality of Critical Care Nursing

Little J, Khanna N, O'Connor R, Rempher K; Sinai Hospital, Md Purpose: Operational dashboards are rapidly evolving as decision support tools for direct-care nurses in intermediate and critical care practice environments. Essential to the success of dashboards is the ability of directcare nurses to translate data into meaningful outcomes that will help either sustain good practice or serve as impetus to improve practice. At our institution, the use of dashboards shifts the onus for shaping the nursing practice milieu from hierarchical directives to direct care nurses. **Description**: As an outgrowth of the hospital's Magnet Council, the critical and intermediate care units developed an Outcomes and Practice Committee in 2005. This committee, composed mostly of direct care nurses and some nursing leaders, was tasked with developing a meaningful, easy-to-read communication tool for presenting nurse-influenced data in a concise manner. After various iterations by trial and error, a powerful tool in the fo<mark>rm of a dash-</mark> board was developed. The dashboards, when presented to patient care staff, allowed for quick visualization of exceptional and deficient performance in key areas. In an attempt to create a true sense of ownership for those key areas, which presented opportunities for improvement, committee members developed a process whereby simple "action plans" were developed by members of the direct care staff. Inherent in this action plan development process was the requirement for nurses to present and reinforce their plans with colleagues, and to reevaluate the effectiveness of their plans. Evaluation/Outcomes: Effectiveness of the plan was evaluated using 3 tools: (1) a pre- and postintervention assessment using the electronic SurveyMonkey format, (2) NDNQI RN Satisfaction Survey (with emphasis on measures of autonomy and impressions of quality of care), and (3) evaluation of quality outcomes versus benchmark data using the dashboards. jlittle@lifebridgehealth.org

#### Insights That Drive Patient Care: Designing Accommodations for Critically Ill Suicidal Patients

Collins A, Gilliland B, James A, Edwards R; Capstone College of Nursing and Baptist Princeton Hospital, Ala

Purpose: In emergency departments and critical care units the healthcare providers and environments are designed to focus on meeting the physiological needs of patients. Suicidal patients need special accommodations to have their critical psychological and physiological needs addressed. The charge of our taskforce was identification and analysis for gaps in the continuum of care throughout an acute care facility relevant to physiologically unstable suicidal patients. Description: The taskforce developed a triad of interventions to improve these processes. The first was an educational effort called the 411 on suicidal patient identification and stabilization. This effort involved all disciplines of the team who would interact with this patient. The second was development of a protocol to change the environment of care upon admission of a suicidal patient. The third was networking with community resources to assist the patients and family in finding support. Evaluation/Outcomes: The outcome of the interventions is currently being assessed via system audit. Increasing awareness of the issues surrounding the care of these patients has stimulated changes in protocols, staff orientation and education, and patient teaching. acollins@bama.ua.edu

#### **Inspiring Excellance: Critical Care Certification**

Whiston K, Mckelvey M; Overlake Medical Center, Wash **Purpose:** To show committment to excellance in professional practice and to promote recruitment and retention (RR), the RR committee attempted to find ways to encourage certification. We were also in the process of applying for the Beacon Award of Excellence. Description: We have 2 adult critical care units that are separate in many ways. In 2 years, these units will be joined into 1 combined unit. To unite the units, the RR committee looked at increasing the number of nurses certified. Between the 2 units, we started with a group of 20 certified of 100 nurses. Despite the financial reimbursement for certification as well as differential pay, the nurses did not acknowledge certification as valid. They did not connect certification with expertise in clinical practice. Strategies to promote increased certification included study quides, CD-ROM practice exams and audiotapes. Preparation methods included study groups, CCRN weekly practice questions with answers and rationales posted on the units and available by e-mail, and current CCRN members mentoring other staff with core review. A CCRN recognition dinner was held and each member was presented with a CCRN pin as a symbol of their achievement. Each unit displayed the CCRN plaques with names of CCRNs in their area. The unit newsletter posted these accomplishments. A hallway bulletin board displayed new CCRN members' photos and statements of why it was important to them to become certified. As the staff became aware of the recognition in the CCRN certification achievement by their peers and patients, more pursued this goal. Evaluation/Outcomes: Our goal is to have all nurses with 1 or more years of critical care experience to be certified. So far we have more than doubled our family with 50 total members. kwhiston@u.washington.edu

### Intra-Abdominal Pressure: Know Your Number!

Abenojar P; Memorial Hermann EICU Advantage, Tex **Purpose**: To compare the "homemade" bladder pressure monitoring device with the AbViser monitoring device to measure intra-abdominal pressure (IAP) in critically ill patients. Description: Abdominal compartment syndrome (ACS) is a potentially fatal condition of which all clinicians need to be aware. ACS causes widespread physiological disturbances involving the respiratory system, cardiovascular system, renal system, central nervous system, and abdominal and visceral effects. The "homemade" method to measure IAP is with the use of an indwelling catheter. Sterile saline is injected into the empty bladder through the indwelling catheter and the tubing of the drainage bag is clamped just distal to the aspiration port and the pressure transducer apparatus is hooked to the aspiration port. The AbViser IAP monitoring device uses a valve that is attached to the existing Foley catheter, pressure transducer, and monitoring system. The valve allows the bedside clinician to infuse 20 mL of sterile saline into the empty bladder. The valve will return to drain position

automatically. **Evaluation/Outcomes:** The AbViser IAP monitoring device standardizes and simplifies IAP measurement technique. The risk of nosocomial UTI is reduced and needle-stick injury is eliminated. Bedside clinicians should employ a uniform, standardized and reproducible method in measuring IAP. p\_abenojar@yahoo.com

Is Your ICU Prepared for an Internal Disaster?

Boyle L, Hubbs P, Cimato L, Davis D, Wagner J, Sullivan F; The Children's Hospital of Philadelphia, Pa

**Purpose:** To assess the readiness of a large ICU and a 405-bed urban hospital to respond to an internal disaster. Previous disaster drills had mostly focused on potential external events. The readiness and ICU bed capacity of the hospital to respond to an internal disaster had not yet been fully tested in a drill. This internal disaster drill used a multidisciplinary approach to set up a mock ICU with 15 acutely ill "patients." **Description**: Nursing and physician leaders from the pediatric ICU partnered with the hospital's Environmental Health and Safety Department to plan the drill. Patient scenarios (including age, diagnosis, acuity, and a list of appropriate equipment) were written by the ICU nursing staff. Fifteen toddler and adult mannequins were used and each bedside was equipped with appropriate beds or cribs, supplies, and technology (eg, monitors, pumps, IV poles, ventilators, ECMO and CVVH circuits). After a brief orientation, each volunteer RN was given an assignment. A smoke machine was used to create a real evacuation scenario. At times, the smoke reduced visibility within the unit to less than 15 feet creating a heightened sense of urgency. Cooperation from 34 clinical staff as well as 15 additional support departments was needed to evacuate all 15 patients. Videography, photography, and expert volunteer observers were used to assess the evacuation. Evaluation/Outcomes: Based on real-time hospital census, all 15 patients were triaged and safely evacuated to appropriate locations within 17 minutes from the start of event. All patients were evacuated using appropriate monitoring and equipment. A postdrill debriefing identified challenges such as suboptimal communication systems, evacuation personnel response, and equipment accessibility. Work is underway to address these issues. All agreed that this exercise was a great learning experience and will be used for future education. boylel@email.chop.edu

It Takes a Village: Collaborating to Change Practice and Improve Outcomes With Cardiac Device Implants

Lamar K, Severance B, Tebow A; Integris Heart Hospital, Okla **Purpose:** This creative solution stemmed from a distinct increase in cardiac device infections (CDIs) that historically had been nearly nonexistent. The purpose was to determine factors influencing infection rates. Once variables were identified, a multidisciplinary action plan was developed to implement current evidence-based practice. Description: Charts of patients admitted with CDI spanning a 14-month period were reviewed. Each chart was audited for 45 variables, including antibiotic administration, means of hair removal, age, pathogen, and device implanted. Once commonalities were delineated a comprehensive action plan was implemented for staff development. Before implementation of education modules, baseline knowledge was established via pretesting. Modules included comprehensive sterile technique and infection control guidelines based on 100K Lives Campaign and Surgical Complications Improvement Projects. Education was presented to guide practice and provide concrete action lines to advance patient outcomes. These changes in practice set the stage for a common vision between staff and physicians and resulted in new physician order implementation addressing variables associated with infection rates. Evaluation/Outcomes: Posttesting revealed a significant increase in staff knowledge related to practice and procedures reflecting current national guidelines. The actions implemented increased collaboration between HCL/EP lab staff and physicians providing a single focus on patient care and outcomes. Collaboration was extended between the HCL/EP as well as the operating room. The cardiac device implant rooms are no longer treated as procedure rooms but as OR suites. Since implementation of the action plan our hospital has reaped numerous benefits. Increases in staff knowledge and morale have been observed; most importantly, this patient population has benefited, as no CDIs have been observed since implementation of the action plan. katie.lamar@integris-health.com

It Takes More Than a Magic Wand! Staff Nurses Impact the Design of the New ICU in Our Small Community Hospital

Gooding M, Wald M; Seton Northwest Hospital, Tex Purpose: Our 6-bed ICU was faced with a required move to another floor of the hospital. The overall square footage of the unit would not be appreciably increased but the area would be designed to house 2 additional ICU beds. Description: The ICU staff was initially resistant to the proposed move from our perceived "ideal" location. Our ICU unit council met and determined that the ICU staff nurses wanted to be as involved as possible in this transition. One of the major design challenges was the layout of the unit, which was limited by the structure and size of the area. Staff nurses researched sites such as the Society of Critical Care Medicine's guidelines for ICU design. To demonstrate how much space an ICU patient might need, we invited architects and administration to view our mockup ICU room where we placed all the equipment required for a critical patient. We involved physicians in the process. Staff and physicians reviewed the proposed blueprints and brainstormed about different configurations for the new unit. We took a field trip to a new ICU in another local hospital. We sent an ICU nurse as a representative to the weekly construction meetings to give staff input and report back to the ICU staff on issues. We created a vision of a unit that would provide for staff efficiencies in the design while also assisting in patient orientation and minimizing the institutional feel of the rooms. Helping to create an aesthetically pleasing unit is a key aspect of the perceived quality of care. Evaluation/Outcomes: Including the opinions and perspectives of the experienced nursing staff laid a foundation for a healthy work environment. The ICU staff nurses functioned as authentic leaders of this process. As we encouraged discussion and involved everyone in the process, the move was now well-received by the staff. mgooding@seton.org

#### It's Nap Time in the ICU

Tamerius N, Schultz P; Meritcare Medical Center, ND Purpose: Research has shown that critically ill patients do not get adequate restorative sleep during their ICU stay. Lack of sleep can cause delirium, delayed wound healing, and posttraumatic stress disorder. Causes for lack of sleep are multifactorial secondary to patients' illnesses and required interventions. However, research has also indicated many correctable factors such as staff interventions, lights, and noise could increase patients' sleep duration. A protocol was designed to provide for periods of uninterrupted sleep in our ICU. **Description**: A multidisciplinary team composed of physicians, nurses, and respiratory therapists reviewed the evidence-based practice related to sedation, sleep, and delirium. The Critical Care Sleep Protocol was developed to promote restorative sleep, decrease complications of sleep deprivation, and improve patient outcome. The Sleep Protocol includes the phases of the patient's critical illness, medication evaluation, environment, patient and family involvement, and teaching. After completing the inservice of all critical care team members the protocol was implemented. Compliance was monitored by observation, documentation audits, and patient and family satisfaction. The data were analyzed and disseminated to all ICU team members. Evaluation/Outcomes: Phe goal for developing the sleep protocol was to provide uninterrupted restorative sleep. We are also evaluating data related to length of stay, ventilator days, sedation usage, and the relationship between improved restorative sleep on patient outcomes and quality of care. noreentamerius@meritcare.com

Jacho Jeopardy: What Is How to Be Prepared?

Dressel B, Ashmead C, Essenpreis J, Benigno M; Barnes-Jewish Hospital, Mo

Purpose: It is necessary to be perpetually ready for unannounced JACHO visits. We needed a way to help our staff learn and retain information to prepare them for JACHO visits. Description: While brainstorming on ways to educate the staff regarding issues pertinent to JACHO visits, the Unit Practice Committee thought adding fun and games to the learning process would heighten retention of the required information. Using the Jeopardy Game theme, we drew 6 columns on a large display board. The columns were titled: Environmental Health and Safety, Medication Administration, Performance Improvement, Patient Safety Goals, and Joint Commission Potpourri. Under each topic are pockets indicating dollar amounts. Inside each pocket is an answer to a question relating to that category. We use the game during staff meetings. Staff members take turns picking a category and dollar amount. If they answer correctly, they receive a prize. The prizes range from gum and candy to gift certificates to the hospital cafeteria and local stores. If a staff member answers incorrectly, we take the opportunity to discuss the topic and the correct answer. Evaluation/Outcomes: Although some staff members found the game to be "corny," most participated with enthusiasm indicating it was indeed a fun and different way to learn the required JACHO information. Using this

tool at every staff meeting keeps the information fresh in the staff's mind. The Cardiovascular Procedure Center is prepared for any JACHO visit. bjd3823@bjc.org

#### Just Say "No" to Drug Errors in the Surgical Intensive Care Unit Castillo M; Harborview Medical Center, Wash

Purpose: Adequate knowledge of vasoactive drugs is vital to safe clinical practice. However, ICU nurses face the unattainable challenge of remembering all of the information about each vasoactive medication. Inadequate knowledge may lead to adverse drug incidences that are often preventable. **Description**: In an effort to prevent drug errors, a concise vasoactive drug chart was designed to serve as a quick reference in drug administration. The chart listed frequently used vasoactive drugs in the ICUs by both generic and brand name. It included the facility's standard concentration; rate at which to start an infusion; and dose ranges including maximum dose, indications, precautions, and titration parameters. The unit pharmacist and the medical director reviewed and approved the information. The chart was laminated and posted on the counter in each patient's room, making it readily available for nurses working on the unit to use as reference. Evaluation/Outcomes: The surgical ICU nurses and the nurses who floated to the unit felt more confident administering and titrating vasoactive drugs. More novice nurses claimed that the chart served as a much quicker reference than looking at the reference books or computerized resources. This can be too cumbersome and time-consuming in critical situations when time is better spent on patient care. With the information written out, the chart guides the nurse on the dosage, indications, side effects and what parameters to consider. Nurses who have floated to the surgical ICU requested copies of the drug chart. So far, no vasoactive drugs errors have been reported since the chart became available. The plan is to update, review, and add drugs as they come into use to keep the quick reference current. malouvc@u.washington.edu

### Keep the Door Open: Reducing the Stress Level of Family Members in the Intensive Care Unit

Castillo M, Lodzinski D; Harborview Medical Center, Wash Purpose: A hospital admission is an anxiety-producing event for all family members, especially to a critical care unit. Awareness of this stressor motivated the nurses in the surgical ICU to liberalize the existing visitation policy. This change allows 24-hour open visitation except during shift change. Description: In the past, the families and friends of the ICU patient were requested to call the unit before each visit. The waiting room served as a holding area and a phone was available to determine times of visitation. The culture has since changed with the introduction of a more open and liberal visitation policy. Upon admission, the nurse directly caring for the patient establishes a rapport with the family. Information is given to the family regarding the visitation policy. The family is informed that they do not need to call the unit each time they want to visit their loved one. However, for patients' privacy, the curtain is closed to render care or procedures, and any visitors are asked to wait until it is opened, unless the patient requests their presence in the room. When the family chooses to stay past visiting hours, they receive a badge to wear for identification. Evaluation/Outcomes: Family members express feeling supported and welcomed by the nursing staff and feel respected during their stressful time. They also verbalize that spending time with the patient and being present at the bedside is very important and offers emotional control over their vulnerable situation. This helps to minimize their anxiety. As for the nurses, they have reported a significant decrease in phone calls to the nurse's station, which has reduced the noise level and increased the amount of time available for patient care. malouvc@u.washington.edu

### Keep the Flow Going

Burns J, Wellen M, Lintzenich D, Michaud T, Brown K, Rieth S, Gist K, Davis S; Barnes-Jewish Hospital, Mo

Purpose: To facilitate patient flow through the continuum of care of the neuroscience patient a method was needed to get the right patient to the right area. The neuroscience population has grown beyond the capacity of the previously designated divisions' bed space. To prevent delays in bed assignment and surgery backup, a system for bed placement and patient tracking was developed. Description: Our facility has had in place a scheduled morning "bed placement" meeting in the Patient Placement and Access department that includes ICU and surgical divisions charge nurses. At this time, scheduled admissions are assigned to appropriate divisions. After this meeting, the charge nurses from the neuromedicine,

neurosurgical, and neuro ICU meet to focus on specific needs of each individual patient. Bed assignments are finalized by this group and communicated to the bed planner assigned to the neuroscience areas. Evaluation/Outcomes: This process works because both neuromedicine and neurosurgical patients are assigned to the same bed planner and the bed assignment is not overridden by the bed planner. In all other areas, the bed planners are assigned to either a medical or surgical division and they may override charge nurses decisions. This ability of the neuroscience nurses to allocate beds with appropriate staff keeps the flow going. jmb0662@bjc.org

#### Keep the Pressure Off! Pressure Ulcer Prevention and Treatment Strategies in the Intensive Care Unit

Freeland N, Evans B, Atkinson M, Witscheber C, Kiseleski C, Pavlik-Mogowan B, Williams D, Vanhouten C, Comerford M, Moynihan H, Berry C; University of Rochester Medical Center, NY

Purpose: Pressure ulcer management consumes a large percentage of healthcare time and resources in the ICU and can be financially and emotionally costly to patients. Pressure ulcer prevalence in our adult ICUs was consistently higher than comparable hospital benchmarks. A multidisciplinary Pressure Ulcer Task Force was formed to develop evidence-based standards and a consistent approach to prevention and treatment of pressure ulcers for complex ICU patients. Description: After comprehensive review of the literature for evidence of best practice protocols, an ICU service action plan was developed that focused on 6 areas for improvement: a shift in focus to prevention, development of ICU skin care specialists, implementation of standardized treatment options, improved documentation forms, competency-based education plan, and a consistent process for data collection. The competency-based education plan incorporated all the various elements of the performance improvement initiative and was mandatory for all ICU nursing staff. An ICU Pressure Ulcer Flowsheet was developed to improve documentation and provide better ulcer progression tracking. ICU skin care specialists and nursing leadership on each of the ICUs were empowered to enforce staff compliance with completion of education and accurate pressure ulcer documentation. Evaluation/Outcomes: Development of an ICU specific pressure ulcer prevention and treatment plan that focused on the 6 areas for improvement significantly increased staff awareness of patients at risk for developing pressure ulcers, provided standardized evidence-based strategies for treatment of pressure ulcers and improved documentation of pressure ulcer risk, treatment, and progression tracking. nancy\_freeland@urmc.rochester.edu

### Learn to Brag: Articulate Your Best Practice

McBroom K, Klilngenberger J, Bride W; Duke University Health System, NC

Purpose: Preparing for a Magnet site visit was exciting and challenging. Vast amounts of data were gathered regarding our nursing accomplishments, yet articulating these same accomplishments was an ordeal for the staff. We discovered that it was uncomfortable for nurses to "brag" about their contributions and positive impact on patient care. We had to empower the staff to discuss their successes and accomplishments with appraisers just as they would with each other. **Description**: Leadership and staff met to discuss methods for gathering and disseminating information. This meeting resulted in a retreat that included the nurse managers, educators, and staff nurses, identified as Magnet Champions. Representatives from each unit were grouped together to review the Magnet application and discuss nursing accomplishments for their area. A "walkthrough" tool defining Magnet, the ANA Bill of Rights, Code of Ethics, and Forces of Magnetism was developed. The tool provided the staff an opportunity to articulate how their practice meets the forces of magnetism. In addition, requirements of each force were articulated and documentation regarding individual accomplishments by nursing staff included. A supplemental card file containing this information was created and placed at each nursing station for staff review. Nurse managers and Unit Magnet Champions conducted walkthroughs on the unit to remind staff of the many ways they exemplify Magnet recognition and encouraged staff not to be timid about replies. Evaluation/Outcomes: There was an enhanced awareness and pride of accomplishments. Staff nurses were able to easily communicate accomplishments and unit goals. This confidence motivated staff and encouraged group participation, providing nurses an avenue to discuss why their unit exemplifies Magnet status. Learning to Brag not only provided the staff with an increased comfort level with communication, but it also promoted self-awareness during the journey to Magnet. mcbro004@mc.duke.edu

Let Your Fingers Do the Walking: Promoting Communication and Efficiency Through Our ICU Website

Martin D; Highland Hospital, NY

Purpose: Our ICU developed a department-specific Web site to enhance the communication, education, and information available to our staff. The Web site is accessible via computers in the hospital or at home. **Description:** Communication is key for a 24/7 operation that cares for people. It is essential that all employees can access the same information, regardless of whether they are working at 2 AM or 2 PM. The Web site has many uses, but overall, it coordinates communication and promotes teamwork for all shifts. Staff refer to the site for ICU-specific standards and educational programs (either self-paced modules or live class schedules); fun stuff (eg, history, staff photos, and stories); annual ICU competencies along with a customized education record; links for ECG practice; links to the AACN site and Practice Alerts; and links to all our ICU newsletters. Future plans include adding the unit's schedule. The ICU Web site affords us the opportunity to display teamwork and the culture of our ICU. There are photos and updates on educational programs from conferences staff have attended. There is also a page on the history of our unit including newspaper clippings of what the original ICU looked like. **Evaluation/Outcomes:** The ICU Web site has improved clinical practice by reducing the time needed to refer to the most current standards. Using the Web site, a nurse can print the current standard and place it in the patient's bedside book for all staff to refer to real time—no searching. In addition, the Web site offers our nurses some unique and fun ways to stay updated in their practice. dianeh\_martin@urmc.rochester.edu

Lights, Camera, Action! Turning Inservices Into a Video Library Suntrup M, Thomas-Horton E; Barnes-Jewish Hospital, Mo

Purpose: Because of increased patient acuity and patient-nurse ratios, it has become increasingly difficult for the bedside nurse to attend unit inservice educational presentations. Because many of our staff members expressed regret that they could not attend these presentations, we looked for a way to make the information available to everyone. **Description**: We started a video library of our taped inservices. We first procured a video camera for our media services department on our scheduled monthly inservices presented by our MD intensivists. After taping was completed, we transferred them to a DVD format. Two inservices were placed on each DVD and 5 copies of each DVD were made. Colorful designs were used for labeling. The DVDs were advertised on our Web site for staff to check out. Charge nurses were also encouraged to show the DVDs during quiet times in the unit. Evaluation/Outcomes: The video library has been well received and appreciated by the staff. The library continues to grow as our inservices continue. Staff have also requested the taping of our required classes that are given in the unit so they can be available for review. We have now purchased our own video camera so it can be available for scheduled as well as unscheduled presentations that may be given. mas6678@bjc.org

#### Little Visitors

Martinez R, Logue-Hunter J, Osborne K, Quick V; Central Carolina Hospital, NC

Purpose: In an era of open visitation and increasing family involvement with patient care, sometimes the littlest visitors continue to be restricted. Fear of infection, disruption of unit routine, noise control, and safety issues all combine to make staff reluctant to admit young children for visitation. Our fragmented society has resulted in many alternative families. Grandparents may be primary caregivers to young children. Denying access to a 'parent" or favorite grandparent can increase stress in a child already dealing with altered living arrangements. Our goal was to provide a method to prepare young children for brief visits without disrupting unit routines or increasing a child's distress. Description: Staff recognized we would need to use age-appropriate material for all ages under 12 years. Issues to be addressed included appearance of patient and equipment, infection control and noise, height of bed and ability for smaller children to see from his or her viewpoint or height. Accompanying adults would also need to agree to specific time frames and stay with the child throughout the visit. In the event that a visit is not possible, alternative methods of communication between the patient and the child would be provided. To meet our requirements and expectations, a toolbox was stocked with age-appropriate materials and instructions for the staff. Evaluation/Outcomes: Allowing younger children visits with a sick family member reduces the anxiety felt by the patient, his or her family, as well as the staff caring for the family unit. Family relationships are maintained. There is a bond of trust that develops between the staff and the younger visitors. This trust increases

support for the patient and child thereby promoting cohesion within the family. Staff has become more comfortable with the "little visitors" and has developed an insight into healthcare gained from viewing intensive care from a child's perspective. dianamartinez@nc.rr.com

Long-Term Retention: The Numbers Prove It Is Possible

Brangle R, Tapp V, Crocker D, Sneade R, Johnson R; Duke University Health System, NC

Purpose: Today, more than ever, critical care units are facing the dichotomy of an increasing number of sick patients and a decreasing number of permanent staff nurses. It is becoming more and more difficult to maintain dedicated staff nurses who meet the needs of acutely ill patients. Many institutions have open positions that remain unfilled or experience high turnover rates. Traveling nurses and bonuses help fill the void, but they can be expensive and delivery of patient care may be inconsistent. To prevent our unit from falling into this pattern, our priority was to identify the reasons senior staff remain on our unit. **Description**: A review of our 50 member RN staff revealed that 64% (32) were full time. Of that group 44% (22) have remained on the unit for more than 5 years. Specifically, 18% (9) have worked 5 to 9 years, 12% (6) 10 to 19 years, and 14% (7) more than 20 years. An interview with these nurses revealed factors they considered crucial to staff satisfaction, including strong managerial support, autonomy, educational and advancement opportunities, and compatibility with personal lifestyle. Tools made available to the staff that supported participation and continued growth included membership in hospital-wide committees, self-scheduling, the autonomous function of the charge nurse role, and self-governance within the unit. The nurses appreciated their ability to stimulate change and felt valued as team members. Evaluation/ Outcomes: When nurses' needs are identified and met, workforce retention is enhanced. Maintenance of a stable workforce provides the staff ability to identify issues relevant to their practice and guide change. The presence of experienced mentors provides new staff with knowledgeable role models willing and able to share their expertise. In addition, the decreased need to hire and orient new staff translates to more funds for staff development and education. The result is a loyal long-term staff. brang001@mc.duke.edu

Magnet Readiness: One Unit's Story

Bryan C, Mcbroom K, Morin L, Palmer R, Duncan L; Duke University Health System, NC

Purpose: Magnet status is an honor, yet all our staff was not familiar with what Magnet meant or what achieving this status entailed. As the application for Magnet status was being prepared, it became evident that we needed to prepare our staff on the various components. Staff leaders on the unit assumed responsibility for making staff aware of the 14 forces of magnetism and how our accomplishments and activities fulfilled the requirements to meet each force. Description: Each week 2 Magnet forces were identified, giving staff an opportunity to identify the accomplishments and ideas that met the specific force. Weekly emails were sent to make sure that everyone was aware of when the Magnet forces were posted and to encouraged participation. An "idea" box was placed in the nursing conference room and each week, nurses were asked to provide examples for each force. The staff with the most unique answer was rewarded with a small personalized gift. The contest among staff, including the secretaries and nursing assistants, increased curiosity and awareness of the Magnet process on the unit. In addition, a 2-week "Top That" competition encouraged staff to continue to think about the forces and how they applied to us. As our site visit approached, notes were given to staff reminding them of their accomplishments and adding words of encouragement. Evaluation/Outcomes: During the Magnet visit, nurses, both novice and expert, responded to questions thoroughly and calmly. A nurse with less than 1 year experience clearly articulated precise information in regard to orientation and education background. An expert nurse easily discussed unit process standards and guidelines. Staff participation in a variety of round-table discussions proved to be an outstanding experience. Attendees returned to the unit, feeling confident and energized. Successful planning and preparation was key for our staff to successfully articulate our readiness to achieve Magnet designation. bryan023@mc.duke.edu

Management Matters: The Driving Force to Keep a Stable Unit-Based Best Practice Group  $\,$ 

Castillo M, Tesfamariam A; Harborview Medical Center, Wash **Purpose**: Nurses in the surgical ICU were hesitant to get involved in unit-based best practice/research projects because of the large time com-

mitment and lack of incentives. To address these concerns, the management team of the unit collaborated with interested staff to develop an approach to encourage and support participation. Description: The manager's initial strategy was to organize a meeting with surgical ICU nurses interested in best practice/research projects, the critical care CNS, and the research CNS. A Best Practice Committee was created and during the first meeting the group generated ideas for potential research projects. Once the scope was narrowed, designation of roles for each member was identified including the role of Management. In subsequent meetings, the nurse manager facilitated scheduling time off the unit; posted agenda and minutes electronically to update staff on stages of accomplishments; and ensured that at least 1 CNS would be present in the meeting to guide the core members. Snacks were provided during meetings. During the implementation of the first study, the manager arranged clinical coverage so that the core group could concentrate on data collection. Each meeting was paid time for nurses attending. Evaluation/Outcomes: The management team maintained the core group and provided the support needed to develop, implement, and finish the project. The Best Practice group stated that because of the paid time provided off the unit to participate in the process, involvement required minimal time commitment. The CNSs also noticed that the project progressed quickly and was accomplished according to the original time frame because of the regularity of meetings. With the success of this first project and the incentive of paid time off from bedside patient care, other nurses have expressed their desire to participate in future unit-based research projects. malouvc@u.washington.edu

### Marshalling Reinforcements: Facilitating Staff Safety in a 6-Bed ICU in a Small Community Hospital

Gooding M; Seton Northwest Hospital, Tex

Purpose: Reports of workplace violence are increasing. Statistics show that healthcare workers, especially nurses, are physically assaulted more often in the workplace than any other group, including prison guards and police. A minimally staffed, isolated ICU increases the potential for violence. During a 1-month period, our 6-bed ICU had 3 situations of combative patients threatening nurse safety. For this reason we developed a Code Gray to ICU plan activated from Code Gray buttons installed in each ICU room. Description: Review of the violent situations showed several system failures. PBX operators did not quickly answer the ICU phone call and were unfamiliar with the hospital emergency help plan. Immediate availability of security staff could not be guaranteed. In 2 situations, nurses were unable to access a phone or leave the room to request help. Our ICU clinical manager met with directors of telecommunication, security, maintenance, and the chairperson of the emergency preparedness committee to identify possible solutions. First, PBX staff was retrained on the hospital emergency plan. Several communication options were tried. Our final solution was to install a Code Gray button near the doorway of each ICU room. Pressing the button immediately alerts PBX operators to page "Code Gray to ICU" overhead and on emergency pagers, alerting available hospital staff to hurry to ICU to help defuse a potentially volatile situation. Evaluation/Outcomes: All hospital employees are trained on the Code Gray to ICU plan and the use of Code Gray buttons. The Code Gray button plan has been successfully used several times by ICU staff in threatening situations to quickly summon help. Staff nurses report feeling safer knowing that marshalling and receiving help quickly is just a pushbutton away. mgooding@seton.org

## Mentoring the Community: Sharing Our Secrets and Successes With Rival Hospitals in Our Area

Johanson R, Faber M; Harborview Medical Center, Wash Purpose: To promote goodwill between rival hospitals, to increase recognition of our successful programs, and to elevate nursing throughout our region, nurses from our burn/pediatric ICU have undertaken to share ideas and some of our unique projects with neighboring hospitals. Description: In 2004, 2 of our ICU nurses presented a successful Mentor & Education Program at an Education Symposium sponsored by our local AACN Chapter, and the response was incredible. Our unit has since been invited to share this program with several area hospitals and to help other units set up a mentoring program. We have been consulted by our O<mark>rganizational</mark> Training and Development department to tailor a mentor training program to be offered hospital wide. In addition to mentoring, unit exposure at national conferences on several other topics has resulted in many email, phone, and in-person consultations. We have shared information regarding pretransfer burn care, management of pediatric trauma, injury prevention programs, and orientation secrets. Our unit has showcased a successful Self-Scheduling Program, a popular "ICU to Acute Care Checklist," and an active unit-based Best Practice Committee. Nurses from our unit have been asked to teach advanced burn care, PA catheter management, and pediatric topics at numerous training venues. Evaluation/Outcomes: Burn/Pediatric ICU nurses have been honored to share their successes with peers from neighboring hospitals as well as with other ICUs in our own facility. It is encouraging to see the interest in our programs by others, and to be welcomed into rival hospitals as goodwill ambassadors. Several of our recent hires haves made the choice to join our staff after hearing of some of our innovative and exciting projects. Nurses cite the level of recognition and the pioneering spirit of our unit as a major retention factor. Sharing secrets has been quite positive for the burn/pediatric ICU. johanson@u.washington.edu

## Milestones: A Creative Approach to Assist Family Decision Makers of Chronically Critically Ill Patients

Wiencek C, Rees H; Case Western Reserve University, Ohio Purpose: Chronically critically ill patients experience a complex syndrome of physiologic abnormalities; prolonged medical and nursing dependence; and uncertain trajectory associated with a high risk of disability, cognitive impairment, and death. Because of high morbidity and impaired decisional capacity, family members are usually faced with the responsibility of making decisions about treatment in collaboration with the critical care team. These discussions have traditionally been medically focused with a significant level of uncertainty and stress. The purpose of this project was to evaluate if milestones, objective measures of patient progress, were associated with differences in the process of communication or family satisfaction with communication. **Description**: As part of an intensive communication intervention for chronically critically ill patients, advanced practice nurses facilitated formal weekly meetings between the care team and family decision makers of patients receiving mechanical ventilation for more than 72 hours in 5 adult ICUs. Medical condition, prognosis, patient goals, and milestones were reviewed. Milestones, such as the patient's tolerance of weaning trials or decreased vasopressor reliance, were agreed upon. Also, these milestones were documented in the progress notes and communicated to appropriate staff. Family members and team members used these milestones as a measure of the patient's progress. Evaluation/Outcomes: The use of milestones with family decision makers has been instrumental in shifting from a traditionally medical orientation to a more patient-goal centered focus of discussion. Perceived agreement between the family and physician, measures of communication process, and percentage of milestones accomplished have been measured and compared to a control group. The advanced practice nurse played a pivotal role in this creative solution to the challenges inherent in family decision making.clareen.wiencek@case.edu

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#### **Multidisciplinary Goal-Oriented Patient Care**

Derby B, Summy G, Koch J, Birchem S; Mercy Medical Center, Iowa Purpose: Our medical center's CCU staff felt a need for an improved multidisciplinary tool to facilitate patient care during their stay. A multidisciplinary goal sheet was developed to help identify patients' specific needs, their daily goals, and their greatest safety need. This tool can be used by any member of our multidisciplinary team. **Description**: We adopted a goal sheet from our medical ICU but soon discovered it was not always appropriate for our patient population and we began looking at other options. We determined the key elements we wanted to include and organized them by body sytems. If the system is not problematic, the nurse checks no and proceeds to the next system. If a problem is identified, the yes box is checked and the system is evaluated in more detail. We included prompts to improve our delivery of care, which incorporated evidence-based practices. To assist with our compliance of JCAHO core measures we also included prompts for AMI and CHF indicators. The team reviews the goal sheet daily addressing any system that has been identified as a problem. We conclude each discussion by listing patients' daily goals as well as their greatest safety need. Evaluation/Outcomes: When the disciplines meet to discuss each case it gives everyone an appreciation for the whole. During the past year we have assisted numerous patients with establishing a medical power of attorney. Our compliance with vent bundle has increased and we have had no ventilation-associated pneumonias for 14 months. Our central catheter infection rate has decreased. Our average length of stay has decreased by 0.4 days. By reviewing each patient and individually identifying their problems we can better assist the patient, their family, and plan for their discharge proactively rather than reactively. bderby@mercydesmoines.org

Not Too Sweet Please! The Successes and Barriers of an Insulin Infusion Protocol in the SICU

Dickinson S, Rickelmann C, Stoll H, Siev J, Mehta N, Vert C; University of Michigan Hospital and Health Centers, Mich

Purpose: A growing number of research articles describe a varity of adverse outcomes associated with hyperglycemia. Patients with hyperglycemia have longer hospital stays, higher rates of admission to ICUs, and an increased rate of discharge to assistive care unit or a nursing facility rather than home. Stress-induced hyperglycemia results in longer hospital stays along with higher morbidity and mortality rates. These patients are suscepitble to sepsis, excessive imflammation, and increased risk of nosocomial infection. Acute hyperglycemia also results in adverse consequences in volume and electrolyte balances which further potentiate poor wound healilng and can increase the risk for infections. **Description**: After initial education, an intensive insulin infusion protocol was instituted in the SICU. To identify the barriers confronting the nursing staff, a survey was conducted over a 2-month period to evaluate the effectiveness of the insulin protocol and its compliance by the staff. The survey was composed of 7 questions, using a Likert Scale, yes/no questions, and open-ended questions. Sixteen randomly choosen charts were audited for compliance with the protocol. Evaluation/Outcomes: Overall findings concluded that there is not enough equipment, personnel, and time to comply with this new intense hyperglycemic protocol. With these data, we have been able  $t\phi$  increase the number of ancillary and trained personnel. The number of glucometers on the unit has also been increased to help with compliance of the protocol. sdickins@umich.edu

#### Nursing Peer Review: Designing a Committee to Improve the Quality of Care Given to the Trauma Patient

Bossart K, Marable K, Rozzell M; Grant Medical Center, Ohio **Purpose:** Establish a committee that evaluates trauma nursing practice via retrospective chart review; provide feedback to nursing management and staff; and implement necessary changes to achieve best practice. Description: Nursing peer review often is not started because it can be met with resistance by the nursing staff, or administration, who may perceive it to be negative or threatening. However, at our medical center peer review was established as a quality improvement initiative and is viewed as a necessary method for nursing to institute effective process improvement and impact patient outcomes. In July 2005, a panel of nursing staff representatives from the emergency department, critical care, and acute care trauma units began monthly peer review audits of nursing care. Patient outcomes, critical thinking skills, documentation, and adherence to protocol were evaluated. Emphasis during the reviews was placed upon discovery of opportunities for improvement of patient care and outcome. Evaluation/Outcomes: The committee's critical analyses revealed that opportunities existed for improving nursing care and impacting patient outcomes. Discovered opportunities included: communication errors, standardization of tracheotomy care, adherence to nursing care protocols as well as proper identification and resolution of equipment malfunctions. Issues were identified and referred to the critical care work team, trauma continuous process improvement team, and the ICU professional practice council for follow-up. Benefits achieved by staff participation included a formal positive venue for nurses to address care issues in a nonpunitive manner to increase the continuity of care of patients, establish cohesiveness between nursing units, and identify nursing educational gaps. kklboss@aol.com

#### Oh, My Aching Head! Neurosurgical Patient/Family Teaching Manual in a Level One Trauma Center

Moore E, Feyereisen A, Webb D, Braungardt T; Harborview Medical

Purpose: Harborview Medical Center is the level 1 trauma center for Washington, Wyoming, Alaska, Montana, and Idaho. Eighty percent of admissions are generated through the emergency department and 40% directly to the neurosurgery service, resulting in more than 1300 operative cases each year. Because of the volume and serious nature of these cases, nursing identified a need for patient education regarding diagnosis and hospital system navigation. Description: A panel of nurses met to review the 10 most common neurosurgical admitting diagnosis and general topics. After 12 months of development, the manual was introduced to a "mock" patient, nursing staff, attending physicians, and management for revisions. Upon final completion, patients received their diagnosis specific manual either through the nurse care coordinator or individual staff nurse. Nurses were also able to access individual topics online via the hospital Intranet

for patients admitted to the service less than 72 hours. Data were collected from patient surveys and discharge follow-up phone calls. Evaluation/ Outcomes: Patients and families were surveyed over a 3-month period. Phone calls into the outpatient neurosurgery office were tallied before and after manual distribution. Results showed a 17% decrease in calls to the staff nurses in the outpatient office. When questioned, hospitalized patients surveyed appreciated having a concise binder specific to their diagnosis available to them. Before the manual distribution families complained of a lack of education materials, were unable to identify their care team providers and had a lack of understanding of their diagnosis. The overall conclusions are that this education manual has been successful in educating and decreasing the anxiety level of patients and their families. An unexpected outcome of this project has lead to decreased staffing requirements in the outpatient neurosurgery office. semoore@u.washington.edu

#### On Your Mark, Get Set, Go: Achieving 120-Minute Door-to-Balloon Time for the AMI Patient in the Cardiac Cath Lab

Dressel B, Ashmead C, Gregory R, Williams J, Denicke R, Martin N; Barnes-Jewish Hospital, Mo

Purpose: To minimize myocardial damage and maximize outcome, it is crucial that the acute myocardial infarction (AMI) patient undergoes angioplasty within 120 minutes of arrival to the emergency department (ED). Meeting this deadline was a problem when the cardiac catherization laboratory (CLL) team had to be called in from home. We sought a creative solution to this problem. **Description**: In May 2006, a multidisciplinary team was organized to participate in LEAN thinking, a method to identify and eliminate waste from of a process. This team consisted of nurses and managers from the ED and CCL and hospital-based Quality Compliance Representatives. Through brainstorming and flow processing, the time lost waiting for the CCL call team was identified as a major obstacle. Strategies were developed to help reduce the identified lag time. First, the ED physician activates the call team instead of making multiple calls to the AMI fellow and interventionalist. Second, a rapid response nurse role was created. This nurse stays in the hospital during off hours and carries the AMI pager. When the ÉD activates the pager this nurse prepares the CCL suite and generates the necessary paperwork. Third, 20 minutes after the AMI pager is activated the ED proceeds with the patient to the CCL. The patient is placed on the fluoroscopy table and made ready for the procedure. The ED nurse gives report to the first call nurse to arrive. The procedure can begin immediately as the rest of the team arrives. Evaluation/ Outcomes: Before April, the overall 120-minute door-to-balloon time was achieved 63% of the time. From May to July the overall time improved to 93%. In July, the gold standard for door-to-balloon intervention was changed to 90 minutes. The LEAN team is now looking at ways to further reduce these times. The call team reports that the rapid response nurse plays a significant role in preparing the CCL suite and patient for the procedure. bjd3823@bjc.org

#### Optimizing Communication to Staff in the Pediatric Intensive Care Unit

Ryan K; Duke University, NC

Purpose: Optimizing communication in a critical care unit can be challenging. There is a plethora of information that needs to be given to nursing staff every day. Managers juggle the challenge of distributing information to staff without overwhelming them, but ensuring the essential information is available. A weekly newsletter is a creative solution that optimizes communication and minimizes the numerous small announcements and emails that staff receive. Description: The creation of a weekly newsletter that is distributed on Friday to all nursing staff, health unit coordinators, nursing care assistance, and nurse practitioners has optimized communication in the pediatric ICU and minimized the numerous small emails. Using a standard template on an existing computer program it took very little time to create. The template is minimized on the desktop of the nurse manager throughout the week to quickly access it for updates. When notified of changes in practice, upcoming educational opportunities, and unit social activities, it is quick and easy to add to the newsletter. On Friday afternoon the newsletter is easily converted to a PDF file and emailed to the entire staff. Evaluation/Outcomes: The staff reports increased satisfaction due to receiving 1 email update a week rather than many small emails. They also appreciate being updated on unit activities and changes on a consistent basis. This form of communication is fun and easy to access. It can also be saved to use as a reference at a later time. This concept has quickly caught on to other units in the hospital where the staff has also reported improvement in communication update. kristi.ryan@duke.edu

### Oral Care in the Critically Ill: Evidence-Based Practice Change in the Intensive Care Unit

Stone B; Middlesex Hospital, Conn

Purpose: This presentation describes development of an evidencebased oral care protocol and education/validation strategies aimed at reducing the occurrence of ventilator-acquired pneumonias (VAP) in adult critical care patients. Description: VAP continues to be a problem in critical care units across the country. At our hospital, an interdisciplinary team conducted an extensive literature search to design a bundle of evidencebased care protocols for care of ventilator-dependent patients that defines standards for hand hygiene, nutrition, sedation, sedation vacation, HOB, ambulation, and oral care. As a result the VAP rate has significantly dropped from 11.7/1000 ventilator days in 2001 to 2.4./1000 ventilator days the first half of 2006. However, the team aims to achieve a zero rate of VAP. We identified variations in oral care interventions as a potential contributing factor based on a survey of staff member practices. Variations stem from traditions and routines in practice, perceived importance of oral care, and practitioner personal preferences about oral care products. Evaluation/ Outcomes: Following critique of the literature, the team developed an evidence-based oral care protocol and a standardized education session for staff that includes visual, didactic, and return demonstration teaching aids. A companion to the education session, a validation tool for oral care ensures staff competency in implementing the new oral care protocol. Barbara\_Stone @midhosp.org

#### **Orientation: Doubling Our Numbers**

Wolfer M, Mowry J, Watts J, Ferguson J, Colaianne T; University of Michigan Medical Center, Mich

Purpose: The orientation of 53 new staff members in 10 months to prepare for the move from a 14-bed TICU to a 24-bed cardiovascular ICU. Description: ICU nurses need 10-12 months of orientation to feel comfortable in a high-acuity cardiovascular ICU. Senior staff, management, and nurse educators worked together to develop a plan for mass orientation. We addressed the major challenge of juggling schedules, classes, preceptor coaching, and formal lectures. Large numbers of orientees often required every nurse to precept and at times there were more orientees than patients and preceptors. This prompted creative scheduling and offunit experiences such as OR and SWAT. Extensive skills checklists, assignment passport, formal classes with respiratory therapy, perfusionist, and intensivists provided teaching tools. Evaluation/Outcomes: Evaluations showed preceptors were welcoming and provided different levels of support, outside departmental experiences were favorable and classes were beneficial and provided knowledge for practice. Pretests and posttests ensured documentation of learned skills and concepts. Online competencies and one-to-one feedback conferences provided evaluation of practice readiness. Continuation of formal classes on VADs, CRRT, and IABP have been instituted on an ongoing basis. wolferma@umich.edu

### Our ICU's Experience With a CCRN Drive

Murchie W, Ávaiusini L; Children's Hospital and Regional Medical Center, Wash

Purpose: To increase the number of certified nurses in the ICU. Description: After learning about offering a CCRN drive at NTI 2005, our Shared Governance Professional Development Council took on the role to organize a CCRN drive in July 2005 with the support of our administration. We offered 16 hours of review classes, in 4-hour sections, all sections offered twice in 2 weeks. The content covered both neonatal and pediatric CCRN exam blueprint material. All nurses wishing to attend the review course were required to have completed the certification application process by the deadline and be committed to write the exam. A group examination application was offered to staff. The cost of the examination would be reimbursed by the hospital upon passing. Nurses were required to attend the review courses on their own time. Study groups were offered and encouraged by staff, focusing on specific topics and using varied learning styles. We solicited ICU nurses as instructors and had a total of 14 instructors for 16 topics. Each topic was presented using case-based learning and multiple choice questions with rationale. A resource binder was created with application information, study resources, sample tests, and AACN membership information. NTI 2004 CCRN review tapes were purchased and offered on loan for study material. In June 2006 we recognized all our certified staff by presenting them with CCRN pins at an ICU staff meeting. All certified nurses are identified on a plaque located in our ICU as well as congratulated in our ICU newsletter when they receive certification. Evaluation/Outcomes: We had 31 applicants on our group CCRN exam

application. Thirty-five nurses became certified during the drive. Our unit has a total of 64 certified nurses. Awareness and motivation for certification has increased. Certified staff feel recognized for their clinical competence. wendy.murchie@seattlechildrens.org

### Overcoming the Stumbling Blocks: Putting a Fall Reduction Plan Into Action

Brames N, Michaud T, Declue C, Reid-Jones K, Rutledge C; Barnes-Jewish Hospital, Mo

Purpose: The hospital has many strategies to reduce fall rates hospital wide; however, the fall rates on the neurosurgery floor continued to be high. We found that staff was unaware of, or not using, many of the resources available to them. The staff felt that all neurosurgery patients were high fall risks and special reminders were not necessary. We sought a solution to change this way of thinking and to implement a fall reduction plan that would increase the safety of our patients. Description: To begin the process, a group of nurses met with the hospital Fall Team to discuss available resources. Fall packets are used for any patient at risk of falling. The packets contain a green armband to identify a patient as a fall risk, a door sign reminding staff that the patient is a fall risk, signs to place at the patient bedside to remind patients to Call, Don't Fall, and a pamphlet for the patient and family to educate them on ways to prevent falls. This information was presented at staff meetings and in the unit newsletter. A poster outlining the different parts of the fall packet and ways to use them to keep our patients safe hangs in a prominent area that is visible to staff, patients, and visitors. We laminated Call, Don't Fall signs and posted them in the patient rooms. Each staff member has a gait belt to use when they ambulate patients. As a final intervention, each staff member completed a selfstudy module and posttest on falls and restraints. The fall coordinators for our floor make rounds to ensure that fall signs are up and the fall reduction plan is being implemented. Evaluation/Outcomes: The fall reduction plan is now implemented routinely. The staff is more aware of ways to keep patients safe. Patients that are at risk of falling wear a green armband to remind all staff members of the patients needs. The staff continues to work on improving fall rates through the UPC and the Fall Coordinators. neb3116@bjc.org

### Pain Resource Nurse: Support for the Staff RN on Thoracic Surgical Progressive Care Unit

Stapleton J, Chartrand C, Pringle G, Solberg T, Dahl K, Cordes M; Mayo Medical Center, St. Mary's Hospital, Minn

Purpose: A pain resource nurse (PRN) is an RN who functions as a resource and change agent by interfacing with nurses, physicians, and healthcare professionals. PRNs collaborate with patients and their families to facilitate quality pain management to achieve patient comfort. PRNs are used to help staff nurses develop and implement pain management strategies. Description: Identification of individuals and providing support for nurses who are interested in the PRN role were the first step in creating a resource for postoperative pain management in the thoracic surgical patient. The PRN group members are nurses who have a minimum of 1 year experience in thoracic surgical nursing, expresses interest in pain management, demonstrate interest in educating fellow staff, and have a commitment to personal development. The PRN group meets quarterly and collaborates with a multidisciplinary team to discuss trends and issues. They establish and review policies and procedures, discuss topics and current research related to pain management, and are active participants in facilitation of pain studies. Education for the PRNs includes presentations from inpatient pain service (IPS), pharmacy, alternative pain therapy, hospice, and others. Institutional pain education offerings are attended by each PRN. PRNs shadow an IPS nurse for 1 shift. This experience helps to facilitate the collaboration with the teams. Information obtained is shared with staff by email, bulletin boards, and in presentations at team days. Pain management certification is recommended. The PRNs are scheduled to provide a resource on every shift during the week and on weekends. Evaluation/Outcomes: The PRNs are recognized for the efforts to improve pain management and knowledge provided to support staff. RNs have expressed that the PRNs help keep them up to date on new alternative pain relief measures as well education on pain management protocols and guidelines. Jberg0531@hotmail.com

#### Peace and Harmony: Creating a Positive ICU Culture Balmer S; Harborview Medical Center, Wash

**Purpose:** To transform a negative working environment into a positive one where staff feel supported and engaged. As the management

team, we realized that this cultural change would require complete staff buy-in to realize this transformation. Description: An anonymous survey with 40 questions was completed using a scoring scale of 1-5; this survey was completed by all staff members to identify problem areas within the unit that required change such as staffing, staff culture, and recognition. The data were compiled by human resources and presented to the management team. With the staff's help at a follow-up meeting we identified solutions to each problem. We organized a staff retreat to lay the foundation for improvement based on the proposed solutions. We incorporated AACN's healthy working environment concepts. The process was designed to encourage the staff to work cohesively toward a positive working environment. Evaluation/Outcomes: We did a postimplementation mini-survey at 6 months and a 1-year complete follow-up survey to ensure that we were continuing to make progress toward our healthy working environment goals. The results indicated that the staff had an improved morale, were happier at work, felt a positive change in their working environment, and would recommend our ICU to a friend for employment. s.balmer@comcast.net

### Pediatric Campaign: Caring for the "Little Ones" in an Adult Trauma Center

Johanson R, Lundy K, Blayney C; Harborview Medical Center, Wash Purpose: To raise staff and public awareness of the important role our hospital plays in providing pediatric trauma care services in our region and to highlight this important aspect of our mission, we have initlated a community relations campaign this year. Our hospital is the only level 1 trauma center serving a 4-state region, yet many people do not realize that pediatric trauma care is an important part of the services we provide. There are many children's hospitals in our area that provide primary pediatric care, but they do not have the resources to take patients with traumatic injury and burns during the initial resuscitation period. **Description:** The trauma surgery, neurosurgery, and burn surgery departments admit patients directly to the pediatric ICU in our facility. We have a pediatric intensivist team that consults and manages ICU issues of these patients, yet many people are not aware of this unique collaboration. Each month during our pediatric campaign, a different team is highlighted with posters and flyers, including photos and salient quotes related to pediatric care from each of 12 different department chiefs. This campaign has coincided with education regarding injury prevention projects and enhanced pediatric safety initiatives going on in our facility. Evaluation/Outcomes: The public has responded to this campaign with interest. Many have expressed increased appreciation for the excellent pediatric trauma care that we provide, as well as the collaborative structure of our medical comanagement of children in the ICU. The adult and pediatric patient mix we provide has attracted a number of critical care nurses seeking to become better prepared for enhanced roles such as nurse anesthesia and flight nursing, creating a highly qualified and motivated staff. johanson@u.washington.edu

#### Peer Praise: A Staff Approach to Meaningful Recognition

Peavy K, Harrigan W; Southern Regional Medical Center, Ga Purpose: To recognize and build teamwork, the critical care staff developed the Peer Praise Program as a means to formally recognize staff in a convenient, simple but significant way. Critical care also participates in the hospital-wide service excellence initiatives, but in recognizing the need to thank and acknowledge each other more "on the spot" for day-to-day kindness, the Peer Praise program was developed. **Description:** The staff complete a Peer Praise note card when they want to thank, acknowledge, or recognize a peer who has gone out of his or her way to assist, intervene, or support the care of our patients and/or staff. These note cards are kept in the critical care break room for easy access. Each completed Peer Praise note card is placed in the appropriate Peer Praise box labeled day or night shift. During daily lineups (a designated time before the beginning of each shift used to regroup and set the day's focus) on Wednesday and Sunday, a card is drawn from each box, read aloud, and posted on the Peer Praise board in the break room for all to acknowledge. Monthly, all Peer Praise notes are placed together and one winner is drawn for a gift card of their choice. Evaluation/Outcomes: The response has been overwhelming and self sustaining. The program is over 2 years old and continues to draw positive feedback for acts of kindness on a daily basis. The staff are committed to each other and they deliver the best to our patients and families. kathleen.peavy@southernregional.org

### Powered by Insight, Knowledge and Collaboration: Mentoring Staff Nurses to Provide Quality Educational Programs

Norman V; St. Joseph Hospital, Calif

Purpose: With so many evidenced-based practice changes occurring in critical care, we need to employ a variety of methods to keep the staff nurses current. The team approach works well not only in the development of evidence-based practice, but also in the education of staff to implement change. Description: We have many multidisciplinary collaborative teams, including the renal transplantation council, organ donation council, sedation team, neuro team, and cardiovascular surgery team. Each team has an education subcommittee, coordinated by the critical care educator. The renal transplantation council wrote a book. The organ donation council determined that the OR environment was foreign to the critical care nurses, and a photographic presentation was put together as reference for nurses to use for donation after cardiac death. The sedation team developed an evidence-based policy and elected to teach the rest of the critical care staff 1-hour classes in the new practice change. The neuro team teaches classes and coordinates outside speakers to help move to more sophisticated equipment and procedures. The cardiovascular team teaches open heart surgery and intra-aortic balloon classes. The critical care educator mentors on curriculum development, format, and presentation. Each team developed the content for annual competency assessment. Evaluation/Outcomes: Empowering staff members to share their knowledge and expertise is rewarding for the educator but more importantly for the staff members. These projects enhance professional development from the competent to proficient to expert level of clinical practice. Each of the RNs has taken a risk and realized success. They are the resident experts, available to support their peers. The result is adoption of evidence-based practice changes and is powered by insight, knowledge, and collaboration. Vivian.Norman@stjoe.org

## Preventing Aspiration in the Esophagectomy Patient on a Progressive Care Unit

Bertilrud D; Mayo Clinic/Minn

**Purpose**: Postoperative sophagectomy patients are at high risk for aspiration. Most patients receive tube feedings for a period, increasing their risk. Standardized practice on a thoracic surgical progressive care unit has focused on preventing aspiration. **Description**: For more than a decade, nursing has implemented interventions that have led to a decreased occurrence of aspiration and its complications in patients who have an esophagectomy. Interventions that are standard of practice for the esophagectomy patient include maintaining the head of bed at 30 degrees, early and frequent ambulation, and sitting in a chair when eating. Orientation for unit and float staff covers standard interventions for the esophagectomy patient. Involving family members in understanding the importance of aspiration precautions improves patient adherence. Educational tools to improve understanding include the Recovery From Chest Surgery video and visible signs posted in each patient room indicating that all patients must be in the chair when eating. Written discharge information and education is provided to patients and family members regarding aspiration precautions at home. Dieticians provide diet instructions and reinforce education provided by nursing related to aspiration precautions. Evaluation/Outcomes: Through consistent implementation of the described standard interventions, we found that we have decreased the rate of aspiration pneumonia, minimized use of the ICU, decreased the negative fiscal impact of aspiration and its complications in esophageal patients, and have decreased readmission rates to the hospital after discharge for aspiration pneumonia. bertilrud.desiree@mayo.edu

### Prime Your Pump! Maintaining Intra-Aortic Balloon Counterpulsation Competency

Kupchik N, Yntema L, King K; Harborview Medical Center, Wash Purpose: An education program was developed at our medical center targeting nurses experienced in caring for patients receiving intra-aortic balloon counterpulsation (IABC) therapy. Description: Patients receiving IABC are often critically ill, requiring advanced skills of the critical care nurses. Our facility treats fewer than 30 patients requiring IABP catheters per year, making it necessary to have an education program in place to maintain skills and competency. A collaborative team composed of our critical care educator, cardiac intensive care assistant nurse manager, and staff RN and Datascope educator coordinates 4 classes per year. This mandatory 4-hour class reviews indications for use, theory of IABC management,

timing of balloon waveforms, and potential complications. Case scenarios of our patients are presented and reviewed. A 2-hour hands-on session allows critical care nurses to review their timing skills with simulators. An insertion station is also set up for cath lab and STAT RNs to review techniques for safe IABP catheter insertion. Each RN attending the class completes a quiz with questions related to the theory of IABC therapy and is required to analyze and interpret IABC waveform timing strips. Once the course is successfully completed, a validation checklist is placed in the employee's file. Evaluation/Outcomes: This review class promotes critical care nurses maintenance of IABC skills and meets yearly competency requirements for this high-risk, low-volume therapy. nkupchik@hotmail.com

Protective Status: Rules to Live by When the Rules Don't Apply Falker A, Rogers A, Rhodes H; Barnes-Jewish Hospital at Washington University Medical Center, Mo

**Purpose**: Our hospital is a nationally certified level I trauma center. We admit a large number of patients who have been involved in violent confrontations. We strive to provide inpatient care in a safe and protective environment for patients, families, and staff. The standard hospital guidelines for visitation and phone communications do not apply to this special population. The staff provides verbal explanations of the protective status guidelines to the patient and family. Unfortunately, patients and family members do not remember the rules and as a result do not follow or dispute the rules. Our goal was to create an instructional tool for the patients and families to improve understanding and compliance with the guidelines. **Description:** Patients on protective status at our hospital complete a visitor list that is limited to 3 family members and 1 clergy member. They also do not have telephone privileges during their hospitalization and must travel with a hospital staff member when leaving the nursing division. Nursing staff in the ICU, ED, and nursing divisions voiced concern that the guidelines were misunderstood by patients and families and therefore difficult to enforce. To remedy this situation, a tri-fold brochure titled A Patient's Guide to Protective Status was developed. The brochure is written at the sixth grade level and clearly states all the guidelines. It is discussed with the patient and family after admission to the ICU, ED, and/or nursing division. Evaluation/Outcomes: The brochure ensures patients and families receive the same information each time we discuss the guidelines. Since implementation of the brochure, staff is noting an increase in patient and family compliance. Patients and families now express a better understanding of the policy. In addition, use of the brochure has decreased the amount of time staff spends reinforcing the policy and it is a useful tool when training new staff. axf5697@bjc.org

## Putting the Pieces Together: Making Sense of the Plumbing and Setting a Standard for Care After Pancreaticoduodenectomy

Brenner Z, Salathiel M, Krenzer M; Rochester General Hospital, NY Purpose: To improve the continuum of in-hospital care for pancreaticoduodenectomy patients and their families while increasing recognition from outside agencies and payers. Description: A comprehensive program was developed to connect the existing structures within the hospital system to enhance communication and cooperation between the SICU and the abdominal surgery unit. Using evidence-based practice to standardize care, we developed a clinical pathway for multidisciplinary use that included establishing OR to SICU protocols and SICU to abdominal surgery unit protocols. This was accomplished by gaining consensus among care providers in streamlining practice variations. The clinical pathway set also serves as an educational tool in guiding new nurses and new physicians in how to best care for the patient having pancreatic surgery. We adapted the separate ICU and step-down documentation formats into 1 packet used by both units. A multifocused education program was designed, which included the CNS and care manager providing education about the process, the CNS mentoring an experienced nurse to teach about postoperative care, and a surgeon teaching about the intraoperative experience. Two new educational materials were developed for patients and families, one for providing information before hospitalization and one for use in continuous teaching during the hospital stay. We implemented new focused data gathering and more clearly linked existing data sets. Evaluation/Outcomes: We have a nearly seamless SICU-abdominal surgery unit continuum of patient care. We have new tools for healthcare providers and for patients and families that increase the quality of care. These have the potential to reduce omissions or delays in appropriate best practices in treatment. We have achieved increased recognition from outside agencies Improved communication is the glue that holds together the pieces of our pancreaticoduodenectomy program. zara. brenner@viahealth.org

### QIK Reference: Guidelines for Caring for the Child With an Established or New Tracheostomy $\,$

Wispe L, Beall V; University Medical Center, Ariz

Purpose: To create a bedside reference tool to provide guidelines for the care of patients with an established tracheostomy or a new tracheostomy in the PICU. The PICU nurses expressed interest in a user-friendly, succinct reference tool summarizing the key points in caring for this population. Description: A patient/family education committee, consisting of 5 PICU RNs, a PICU nurse practitioner, a pediatric clinical nurse educator, and a wound and ostomy nurse specialist, was formed. The committee developed 2 QIK references, one for the patient with an established tracheostomy and one for the patient with a new tracheostomy. This tool summarizes the guidelines of caring for the patient with a tracheostomy. The QIK reference also includes available key online reference information and hospital policies, as well as the names and phone numbers of personnel resources. Each single-page tool is color-coded and laminated. The tool for use with the child with an established tracheostomy is red, whereas the tool for a new tracheostomy is yellow. We also created a color-coded sticker for the patient kardex (nursing communication sheet) for use in conjunction with the QIK reference. The sticker includes important information regarding the specific care of the patient with a tracheostomy (ie, trach size, trach change schedule, and length of suction catheter). Evaluation/Outcomes: After using the QIK reference tool for more than 3 months, the committee created a written evaluation form asking the PICU nurses for feedback on the tool. The evaluations were overwhelmingly positive. The nurses felt that the tool was userfriendly, informative, and helpful in guiding their practice of giving consistent care to children with a tracheostomy. lwispe@uph.org

#### Rapid Response: Beyond the Team

Elliott K; Washington Hospital Center, DC

Purpose: The purpose of the Positive Work Environment Program (PoWER) on this 31-bed medical cardiology unit was to empower the staff to break down barriers that inhibit and discourage open and positive communication, ultimately affecting patient satisfaction. Description: The PoWER program was incepted and launched on a 31-bed medical cardiology unit. The staff consisted of RNs, LPNs, PCTs, PSAs, and UCs. All staff were included in the discussions relating to a progressive decline in patient satisfaction. Through staff meetings, the staff identified what they perceived to be barriers in communication and what was perceived to be negative communication. All staff were in agreement that the negative communication among the staff negatively affected staff and patient satisfaction and contributed to a negative perception of their unit. The program involved staff meetings between the head nurse and staff member, as well as group staff meetings that occurred bimonthly. The themes presented in the staff meetings were cultural diversity and each staff member's (personal and professional) background—how it affected their interpersonal communication style and fit with the organization's mission, vision, and values. The unit enlisted the psych-liaison nurse to assist the staff and management team with the group process and our interpersonal communication skills. PoWER homework resulted after each meeting to encourage staff to focus on their cultural diversity, background, and their style of communication. Cultural beliefs, historical precedence, and identification of those nonverbal behaviors that are viewed as negative are being explored with the staff. Evaluation/Outcomes: The PoWER program observed an incremental increase in patient satisfaction scores. In addition, staff will be surveyed as to their satisfaction with the unit and managers every 2 years. kimberly.elliott@medstar.net

#### Reach for the Stars: 100% Organ Donation

Hewett M, Lepman D, Pyle K; Hoag Memorial Hospital Presbyterian, lif

Purpose: To demonstrate how one community, not-for-profit hospital can improve its conversion rate for organ donation to save more lives by instituting best practices set forth by the National Breakthrough Collaborative. Description: Conversion rate = total number of eligible organ donors/number of actual donors. There are more than 92 000 people on the national waiting list waiting for organs. Every 13 minutes another name is added and every day 17-18 people die waiting for an organ. In partnering with OneLegacy our organ procurement organization instituted the following best practices: (1) management team evaluation of patients to identify candidates and ensure 100% timely organ donation referral, (2) development and use of clinical trigger signs/pocket cards to ensure timely notification to OneLegacy, (3) use of the huddle to optimize the appropriate request process, and (4) optimal management of donor patients in

order not to lose organs. For simplification, we refined our registration process for donor patients and added it to our organ donation notebook as a resource. Discharge data were followed with the Cerner Project IMPACT database. Evaluation/Outcomes: From January to June 2006, we recovered 19 organs and 16 were transplanted from 4 donors, one of which was a 7-organ donor. This is in comparison to 10 transplants from 6 donors for the entire year of 2005. Three of 16 transplanted organs were to status 1A patients who would have died in a few hours or days without the transplant. In 2005, we had a 55% conversion rate. Our conversion rate year to date is 80% and for the second quarter of 2006 was 100% or 3 of 3. This demonstrates an improvement of 31%. IMAPCT data show a higher rate of referrals of 3.6% (n=578) vs the comparison group of 2.4% (n=27 312). Furthermore, Hoag has been awarded the medal of honor from the National Learning Collaborative for obtaining a 75% conversion rate in organ donation, MHewett@hoaghospital.org

Recruitment and Retention Through Organization Sponsored Higher Education

Leslie-Larson L, Gallagher L; Carondelet Health Network, Ariz **Purpose:** To demonstrate how an institution can recruit and retain nurses through offering higher education degrees in exchange for time committments to the organization. Description: Carondelet Health Network has instituted PCT-RN, RN-BSN, and BSN-MSN programs to not only increase the quality of care given but also as an effort to retain nurses through a 2-year organizational commitment requirement that commences at the completion of the appropriate degree program. Evaluation/Outcomes: During the initial rollout of this program, only an RN-BSN degree was offered. Over the first 15 months of implementation 8 cohorts were established and at the completion, 87 nurses graduated through this program. Of those 87 nurses, 52% intend to continue with the BSN-MSN program. The organizational commitment requirement for the RN degree can be fulfilled while obtaining a BSN degree, then the BSN requirements fulfilled during the course of obtaining the MSN degree. The MSN component will begin to be fulfilled after all classes are complete. Carondelet receives an average of 5 interest calls per day from prospective employees who are drawn to our system because of these programs. llarson@carondelet.org

### Redesigning the Kardex to Be an Efficient Hand-Off Communication Tool

Jones C, Hadas L, Rickett T, Morrison J, Caluag V; Florida Hospital Medical Center, Fla

Purpose: The Nursing Practice Council (NPC), made up of CVICU staff nurses, identified a need for a standardizing shift-to-shift report to increase accuracy, continuity, and efficiency. The current version of the Kardex was found to be antiquated, underutilized, causing reports to be inconsistent, and resulting in frustration and unplanned overtime due to lengthy reports. The Kardex was redesigned to improve continuity of care between shifts and to create a systematic approach to hand-off communication. Description: The new version of the Kardex organizes patient information such as pertinent medical history, procedures, advance directive and code status, special needs, family and physician phone numbers, and any evidence-based practice pathways that the patient may be on. In addition, the Kardex was designed around nursing workflow and continuity of patient care along a care map. Education and implementation of the Kardex was completed by the NPC members using poster presentations and one-on-one instruction to each staff nurse. Evaluation/Outcomes: After implementation of the new Kardex a survey and analysis of shift report was completed. Nurses reported a major improvement in the way they gave and received shift report, stating that report was more focused on outstanding patient issues. Data analysis revealed that there was a reduction of 10 hours and 29 minutes of end of shift overtime, which is a decrease of 8% that was attributed to a lengthy and unorganized report. The new Kardex was instrumental in the improvement of hand-off communication between shifts that has lead to an accurate and concise method of passing along pertinent information that has decreased unnecessary overtime, increased nursing satisfaction, and improved the continuity and quality of patient care. Cindee.Jones@FLHosp.org

## Reducing Continuous Infusion Errors in a Pediatric, Cardiac, and Neonatal Intensive Care Unit

Carron M, Ridling D, Brooks C, Nelson J, Macdonald F, Olson C, Dillman M, Aboulafia A; Childrens Hospital and Regional Medical Center, Wash

Purpose: As intensive care has become more complex, more medications are administered as continuous infusions. Though "smart-pump" technology assists in reducing medication errors, they still occur. For example, incorrect patient weights or drug concentrations can be entered into the pump in error, resulting in incorrect drug delivery. The purpose of this ICU quality improvement initiative was to reduce the number of continuous infusion errors in the ICUs in a 250-bed regional children's hospital. Description: A newly formed Quality Improvement Shared Governance Council was formed as part of an ICU-wide project. We included all 3 ICUs (PICU, CICU, NICU) with a total of 45 beds. One goal set forth by this council was to reduce continuous infusion medicated drip errors by half in the first year. The definition of an error was continuous infusion with the wrong drug, wrong patient, or wrong dose. We excluded parenteral nutrition, intralipids, and maintenance solutions. We used a Plan, Do, Study, Act cycle of quality improvement. Interventions that were done included a serious event review of all errors that met definition criteria. In June 2005, we initiated a 2-RN check of infusions and pump settings at change of shift. The 2-RN check found errors earlier, but did not prevent them from occurring. In November 2005, we instituted an additional 2-RN check at the initiation of all continuous infusions. In January 2006, we placed hard limits on all syringe pumps and added documentation requirements for 2-RN check. Evaluation/Outcomes: Evaluation included process audits for the 2-RN check and ongoing review of infusion errors as our outcome measurement; 295 infusions were audited over 3 months for completion of 2-RN check with greater than 95% compliance for all 3 months. Infusion errors went from an average of 4 per quarter in 2005 to 0-1 per quarter in 2006. All errors in 2006 occurred when staff failed to follow the standard practice of a 2-RN check at the bedside. michele.carron@seattlechildrens.org

### Remembering "Ham Salad" When Administering High Alert and Sound Alike Medications

Skinner M, Reed M, Gorrell C; Bon Secours Maryview Medical Center, Va

Purpose: To help nurses remember to double-check with another nurse on high-alert medications and to alert them to any medication that may have a look alike or sound alike drug name. Description: We came up with funny acronyms and hilarious artwork to help nurses remember to do the double-checks during their busy shifts, thereby decreasing the incidence of medication errors. HAM stands for high-alert medications; SALADs stands for sound alike look alike drugs. Artwork includes dancing pigs and salad ingredients. Our second funny acronym is CHIPN MONCS, which represents medications requiring a second check by another nurse. Each letter of CHIPN MONCS stands for a high-alert drug. Artwork includes funny chipmonks dancing and high-fiving each other. Evaluation/Outcomes: Our hospital has enjoyed a 50% reduction in medication errors since we began using our "Ham Salad" process. We continue to teach and reinforce safe medication administration using this method. mesheartrn2002@yahoo.com

## Repositioning Immobile Critically Ill Bariatric Patients: A Team Approach Trial

Misola J; Queen's Medical Center, Hawaii

Purpose: An increasing number of obese patients has challenged nursing staff ability to safely reposition immobile bariatric patients. A team approach trial was undertaken to improve care of this critically ill population. Description: The observed inability to reposition immobile bariatric patients to meet care standards triggered this performance improvement project. The Shewhart Plan-Do-Check-Act methodology was used. Collaboration was sought from nursing staff and other disciplines after unit manager approval. Current knowledge from research literature, MICU database, and patient/process observations validated the need for an innovative team approach. Baseline staff survey clarified current attitudes and practices in repositioning bariatric patients. An educational intervention was used to address the survey results and devise an interdisciplinary team approach highlighting team members' roles in safe and efficient patient repositioning. Activities included poster board display, distribution of educational materials to each staff and individualized coaching as needed. Evaluation/Outcomes: A postintervention survey showed a decrease from 15 to 12 minutes in mean repositioning time. Time spent waiting for the turning team decreased from 28 to 10 minutes. Total patient handling time decreased from 29 to 21 minutes. Time spent waiting for the primary nurse to get organized decreased from 8 to 1 minute. Despite improvements using the team approach, the standard of care for repositioning every 2 hours was not met. The results were disseminated,

staff participation was acknowledged, and team approach components were reinforced. Nursing leadership was informed, implying the need for system strategies to meet care standards. Nursing currently leads an interdisciplinary bariatric care taskforce and continues to explore assistive technology and workload management systems that account for obesity in patient acuity classification systems and in patient assignments. jmisola@queens.org

#### Research Evaluating Serial Protein C Levels in Severe Sepsis Patients on Drotrecogin Alfa (Activated), Respond Design

Short M, Schlichting D, Arkins N; Eli Lilly and Company, Ind Purpose: The RESPOND clinical trial incorporates a creative study design to evaluate a targeted therapy approach for administering drotrecogin alfa (activated) (DrotAA). The ultimate goal is to establish serial plasma protein C (PC) measurements as a biomarker to aid in identifying severe sepsis patients most likely to benefit from DrotAA, enable the adjustment of DrotAA therapy for individual patients and provide the clinician guidance regarding the patient's response to DrotAA. Description: RESPOND has been designed and implemented to test the hypothesis that PC is a potential biomarker to identify severe sepsis patients and guide their therapy with DrotAA. Trial design, previous data on exposure to higher dose and longer duration, and safety guidelines will be presented. Evaluation/Outcomes: Observations of patients with severe sepsis indicate acquired protein C deficiency is common and associated with higher mortality. RESPOND's design is based on data from PROWESS suggesting that patients who normalize their PC levels have lower mortality. The data showed that while most patients had higher PC levels at the end of the infusion, a substantial number of patients remained PC deficient despite treatment with DrotAA. Analysis of PC levels in patients who died after completing the DrotAA infusion (during study days 6 to 15) showed that PC levels gradually increased during the infusion, but mean PC levels at the end of the infusion were less than three fourths of the lower limit of normal and decreased after completing the infusion. These patients may have benefited from a longer duration of infusion. Patients who died during the infusion (study days 1-5) were severely PC deficient at baseline and showed no increase in PC level during the infusion, implying these patients may not have benefited from longer infusion duration, but may benefit from an increased dose of DrotAA. For patients who improve rapidly shorter infusion duration may provide a survival benefit. mshort@lilly.com Sponsored by: Eli Lilly and Company

### RNs' Knowledge of Chest Drains: Opportunity to Improve Practice and Initiate Evidence-Based Practice in Progressive Care

Gee-Monahan A, Sullivan K; Jersey Shore University Medical Center, NJ Purpose: Chest drains are traditionally seen in the ICU; however, more patients now have this therapy in a progressive care setting. Shared knowledge from the ICU to PCU and med-surg RNs can help ensure all patients receive high-quality, safe care. The project was designed to assess PCU nurses' knowledge and current practice related to chest drain management, to create an evidence-based, holistic policy and standard of care, and to offer ongoing education to ensure clinical expertise. **Description:** Hospital RNs from PCU and med-surg were surveyed at an annual nursing competency fair (NCF) in 2005 to determine the source of knowledge, current practice and experience with chest drains. Previously generated research and expert opinion were used to develop, implement and evaluate an evidence-based nursing policy and standard of care related to chest drains. Knowledge gaps were identified and targeted through continuous review and reinforcement of the bedside RN using nonthreatening techniques such as humor. RNs were resurveyed at a 2006 NCF to evaluate the effectiveness of the interventions. Evaluation/Outcomes: The first survey provided baseline data from 70 RNs representing PCU and non-ICU nurses. Thirty percent of RNs had cared for patients with chest drains in the last 1-5 years; however, not often enough to feel proficient. Stated practices were based on ritual tradition rather than evidence. Seventy-eight percent refer to the policy and procedure manual for chest drain information, emphasizing the importance of incorporating EBP into policy. The survey tool was amended to evaluate knowledge of care of the patient with a chest drain. In 2006, 27 RNs participated in the revised survey. As a result, detailed education has been included in NCF for the last 2 years. More RNs answered questions correctly at subsequent NCFs. This improvement can translate into patient safety in areas where chest drains are a low-flow, high-risk therapy. gee-monahan@comcast.net

Sponsored by: AACN Clincal Inquiry Grant

### Routine Round Table Briefings Aid Collaboration and Cooperation Faber M, Thomas A; Harborview Medical Center, Wash

Purpose: To increase collaboration and cooperation between our 7 ICUs, to ease the transfer of patients from the emergency department to the ICUs, and to provide time to discuss the staffing needs of the hospital, twice a day briefings are held with the charge nurses from each unit. **Description:** Twice a day, once during the day shift and once during the night shift, a representative of each ICU (generally the charge nurse), attends a round table briefing led by the nursing supervisor. The conditions and needs of the patients and hospital are discussed. These information-packed briefings last about 10 to 15 minutes. Each unit has the opportunity to discuss its current acuity and staffing levels. The emergency department reports on any patient that requires an ICU, pediatric, or other specialty bed. The ICUs are notified of incoming patients requiring complex treatments. The recovery room will report on patients that will be coming out of the OR and recovery requiring an ICU bed. Staffing for the next shift is discussed and plans are developed for meeting any staffing needs. Notices for computer down-time, ongoing equipment needs, and media issues are shared. This briefing also allows time to discuss particularly interesting or challenging patients and to solicit input from other units that may have an expertise in a specific care area. Finally, inter-rater reliability sessions are held. This is where scenarios are provided to all participants and acuity level is assessed then compared to the group rating. This helps ensure that acuity assessments are fair and consistent among all the ICUs. Evaluation/Outcomes: Strong communication exists between all the units in the hospital. When one unit is struggling because of acuity or lack of staff, other units can help provide needed resources. Staffing concerns are not just the issue of one unit, but are dealt with by pooling resources meeting the needs of all the patients in the hospital. marne@u.washington.edu

### Roving Lift Teams: Meeting Ergonomic Challenges in a Bariatric World

Vogelzang M, Song T; Harborview Medical Center, Wash Purpose: To assist the nursing staff in caring for patients on spine precautions and obese patients, and to reduce staff injury, our busy trauma center has introduced Lift Teams as an integral component of care delivery. Description: As a part of the hospital's transportation department, hospital assistants and medical assistants with specialized training make rounds throughout the medical center and assist with turning patients, getting patients out of bed, linen changes, and with wound care on a preselected group of patients. The Lift Team also provides instruction and reminders to all staff about appropriate postures, positions, and work practices allowing turning and transfers to occur efficiently with the least amount of bodily stress. The basic criteria for being on Lift Team rounds include spine precautions and/or a weight greater than 250 lb. The Lift Team works in staff pairs, coming to a patient's room every 2 hours to help with turns. This process is particularly helpful in small units with limited staff (some small units do not even have enough total staff to perform a proper spine turn). Nursing care such as wound care, chest physiotherapy, and turning is often planned around Lift Team arrival. Having a Lift Team maintains consistent turning schedules, with guaranteed help coming at regular intervals. Bariatric patients, some as large as 800 lb, are better served because we have support staff that we can count on for help. Evaluation/Outcomes: Care for some of our most challenging special needs patients has been improved with the introduction of a roving Lift Team. Regular turning has helped to prevent skin breakdown and has improved pulmonary function. Ergonomic assistance has helped reduce staff injuries to muscles, joints, and tendons with repetitive strain. vogue@u.washington.edu

#### Safety Rounds: A Weekly Interdisciplinary Educational Event

Bodnar A, Forbell J, Adams D; Trillium Health Centre International Purpose: How to foster leadership, promote collaborative relationships, encourage education and develop insight and analysis of patient safety issues among a large multidisciplinary group in busy, high-acuity ICU? Support weekly multidisciplinary educational safety rounds. Description: We are a 26-bed medical-surgical ICU in a leading community hospital. Our team includes 150 nurses, 4 intensivists, respiratory therapists, pharmacists, social workers, a dietician, an organ and tissue donation coordinator, a physiotherapist, an occupational therapist, a chaplain, a speech and language therapist, and clerical staff. Our complex patient care environment is rapidly changing with many projects underway simultaneously, such as the creation and maintenance of teams for medical emergency

response, high-risk medications, ventilator-acquired pneumonia, transfusion, and sepsis. To disseminate information, promote collaboration, and facilitate the development of insight about patient safety issues, every Friday safety rounds (and pizza!) are presented twice over the lunch hour to allow everyone to attend. Representatives from every discipline are encouraged to present topics that relate to patient safety. These include patient case reviews, communication issues, safe transport and transfer of care, reports from the teams, and information about best practice guidelines. This time is also used as brainstorming sessions to work together to solve problems that are impeding patient care. Evaluation/Outcomes: The weekly session is well attended and offers an opportunity to gather in a relaxed setting and share expertise and insight from many different perspectives. Learning together fosters collaboration among team members and advances our knowledge to improve patient care. anbodnar@thc.on.ca

### Safety Takes Patience and Saves Patients' Lives: Implementation of a Patient Safety Audit Tool

√epman D, Hewett M, Pyle K; Hoag Memorial Hospital Presbyterian,

Purpose: National Patient Safety Goals are a top priority for hospitals across the country. How do you ensure that your patients receive care that is safe and predictable? We created a tool to contemporaneously measure patient safety. Description: We identified multiple criteria to serve as metrics with which to improve our performance. Several measures include DNR, age, fall risk precautions (bathroom-assisted rounds, exit alarms, side rails and fall wrist bands), wall signs, braden scale, restraints, 12-gour chart checks, vaccination screen, advance directive, Posey D/C, Kardex, and isolation. We partnered with Decision Support to distribute real time clinical information to those responsible for patient care. We used AIM tables, SQL advantage, crystal reports, crystal enterprise, and server set up to generate the report. A query is performed that identifies each of these criteria as documented in the patient electronic chart. The nurses receive the report every 6 hours and use it for his or her shift report and during rounds to determine if each criterion has received the correct intervention including its related documentation. The charge nurse is also alerted to any area found noncompliant that allows for immediate, expert, proactive intervention. Evaluation/Outcomes: Detailed reports with corresponding control charts are generated for trending, which adds statistical rigor to each measure. They are sent to each department director as well as the chief nursing officer. A high-level summary is reported to the Board of Directors. Areas in need of attention and management are reviewed with staff, addressed immediately, and followed by timely, appropriate action. This intervention has allowed us to provide a more safe, efficient, and effective method of caring for our patients. dlepman@hoaghospital.org

Sponsored By: Hoag Hospital

#### Satisfaction Is the Action

Johnson D, Gill B, Pelly V, Volpe K, Abbazia C, Werb A, Hover K, Morrison R, Bowker P, Evangelista E, Adamo F; Christiana Care Health System, Del

Purpose: The goal of the MICU Patient/Family Satisfaction Committee is to continually evaluate how well the MICU team is meeting the needs of our patients and their families from a nursing perspective, to identify ongoing areas for improvement, and to celebrate success. **Description**: The MICU committee, formed in 2005, meets monthly and has developed MICU-specific tools designed to improve both patient and family satisfaction during the MICU stay based on staff, patient, and family feedback. An MICU satisfaction survey, in both English and Spanish, has been developed and is readily available in the MICU waiting area. Information sheets have been developed on ventilators, restraints, sedation, and analgesia, along with a description of the members of the critical care team. A Welcome Folder is given on each admission or transfer into the MICU and includes multiple items to facilitate communication. The waiting room has been enhanced with a bulletin board that displays common ICU equipment explained in a family-friendly way. In addition, the MICU team participated in a hospital pilot entitled, Positive Change, for staff to distribute to any employee, when exceptional service is observed to family, patients, or staff based on the pay-it-forward concept. Evaluation/Outcomes: Preliminary data from the MICU satisfaction survey and patient and family comments show satisfaction improvement. The hospital patient satisfaction data have also shown improvement in the MICU from July 2005 to July 2006 and the MICU team has won the Service Excellence Award in June and July 2006. The committee will continue to develop

actions that gain satisfaction, identify both successes and opportunities, and communicate their results to the MICU staff and the hospital-wide Service Excellence Council. DebJohnson@christianacare.org

#### Save the ARDS Patient: Instituting a Collaborative Evidence-Based Protocol in Critical Care

Nood C, Mathews S, Kagel E; Grant Medical Center, Ohio Purpose: To develop a set of protocols drawn from evidence-based research proven to decrease mortality in the complex ARDS patient. Development of an evidence-based protocol that incorporated autonomy, ease of use, and teamwork between nursing and respiratory was necessary. Description: A team of multidisciplinary staff members reviewed current literature and best practice standards. For successful implementation, suggestions were sought from multidisciplinary staff members in developing the tool and a pulmonary critical care intensivist worked closely with the team. A protocol was developed, which included inclusion and exclusion criteria; initial set-up based on patient information; subsequent tidal volume, PEEP, and Fio<sub>2</sub> setting adjustment algorithms; Ph management; and end-points of the protocol Education to physicians and respiratory and nursing staff was essential. ARDSNet protocol was presented to all nursing staff at Critical Care Skills Days in lecture and Powerpoint format. Physicians and respiratory staff were oriented to the new protocol through inservices. Prize Box Questions on ARDS research articles and the new protocol were made available for staff to complete in a gaming-type atmosphere. Staff-made posters were presented. Readily available access to the protocol was implemented by laminating the protocol and keeping it in each nurse's/respiratory therapist's bedside charting. Evaluation/Outcomes: Benefits include added patient safety as collaboration/communication with other disciplines is enhanced when using the protocol. Mutidisciplinary team members report ease of use and accessibility of the tool. Autonomy is accented by team members reporting decreased need to call the physician when using the protogol and the tool has also proven to be time efficient in the patient's care. cwood2@ohiohealth.com

### Seize the Day: The Journey to Epilepsy Certification

Burns J, Davis S; Barnes/Jewish Hospital, Mo

Purpose: This presentation illustrates how a team lead by 2 neuroscience advanced practice nurses was able to develop a structure around the epilepsy services that would lead to Epilepsy Center of Excellence certification by the JACHØ. **Description**: A multidisciplinary performance improvement team was established to develop standardized educational tools and performance improvement measures and to create a centralized epilepsy database. Major risks of the project were identified and a plan was developed to overcome barriers that could prevent certification by the JCACHO. Evaluation/Outcomes: This project resulted in improved evidence-based patient care, an increase of assessment skills of all staff, and the epilepsy center now uses clinical practice guidelines. The process used to prepare for certification can be used in any practice setting to improve patient care and result in better outcomes. sbd4906@bjc.org

#### Seminars for Dummies: Spreading the Word

Harner A, Ploor S, Spitrey J; Tampa General Hospital, Fla Purpose: Tampa Geneeral Hospital, a regional transplant center, receives many patients for liver transplantation from smaller community hospitals with minimal training in the care needed by the patient in acute hepatic failure. The decision was made to present a seminar on all aspects of hepatic care. Educating physicians and nurses in the area would greatly improve the care of this segment of our patinet population. Description: A full-day seminar on care of the acute hepatic failure patient was felt the best venue for offering this information. Planning began in April with a proposed date in October. None of the planners had experience in planning large-scale seminars. We began by discussing the idea with our manager and division director. Over the next months we learned how to book conference rooms, coordinate speaker schedules, apply for financial grants, coordinate catering, apply for CE credits from AACN and CME credits for physicians, format flyers and advertising, obtain mailing lists, arrange AV support, and a number of other details. This was new to us; we were learning as we went. Then, 2 days before the seminar, we learned a hard lesson. If you live in Florida, never, ever, plan a seminar during hurricane season! Wilma made landfall south of us the day of the seminar. We then learned how to cancel catering, notify attendees, reschedule speakers, and then repeat everything over again. Evaluation/Outcomes: On our next attempt, all went as planned. Attendance was better than expected with good representation from outlying hospitals, physician attendance was

excellent, program reviews were complementary with appreciation for the information, and attendees felt the knowledge gained would have a direct impact on the care of their patients. On our part, our knowledge base of the educational process is so improved that we are beginning the planning for another conference—in April—before hurricane season! aharner@tgh.org

### Sepsis: Dealing With Sepsis Takes the Entire Team

Forbell J, Lewarne L; Trillium Health Centre International Purpose: We developed a sepsis team to improve the outcome for the septic patients in our ICU. We soon discovered that a hospital-wide team was required to keep up with this insidious and extremely dangerous clinical situation. Description: According to the international health community, sepsis has a mortality rate of 30% to 60%, much higher than cancer. Clear guidelines and algorithms were developed in 2003 and distributed by the Institute for Healthcare Improvement to maximize survival. Our team began by measuring our sepsis mortality, as well as measuring our success with the best practice guidelines. Although we are a leading community hospital we were shocked with our results and realized we needed greater representation from many more areas in the hospital. We found that 80% of our septic patients came from the emergency department and most of the remainder from medicine. The septic patients from the inpatient population were generally identified by the medical emergency team (MET). Our team now consists of physicians, pharmacists, nurse champions, and educators from ICU, emergency and medicine, as well as a representative from infection prevention and control, medical health records, and an infectious diseases physician, and the MET nurse. The team identified several important gaps including delays in recognizing sepsis by both the nursing and medical professionals, and incomplete compliance with best practice guidelines once sepsis was diagnosed. We developed emergency and inpatient sepsis order sets, promoted nurse and physician education around sepsis, and created sepsis posters and job aides to be worn with our ID tags. Evaluation/Outcomes: As we continue our measurements, we find that we are much more successful in identifying septic patients, and our compliance with the international guidelines is steadily improving.

#### Serenity Room: An Oasis in the MICU

Pryer D; Barnes Jewish Hospital, Mo

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Purpose: The ICU is a stressful place to work; taking care of patients and families in life and death situations can take a toll on the physical, mental, and spiritual health of caregivers. The chronic stress experienced by ICU nurses can lead to burnout or compassion fatigue. Many nurses feel they have no choice but to leave the critical care environment and with the current nursing shortage that is a costly result. Acknowledging this problem and identifying ways to help nurses cope with the stress they experience will result in a healthier work environment. It will also increase the nurses' awareness of the importance of self-care to stress management. Description: When renovation plans were undertaken last year for our 19-bed medical ICU, the nurse manager was approached about the possibility of including a healing room for the nursing staff. She was supportive and found a space that could be used. Plans were made for the room to be decorated in soft colors with soothing artwork. Education about stress management is provided on the unit Web site. We recently returned to the refurbished unit where the Serenity Room is furnished with a loveseat, table, and a recliner equipped with a chair massager. A CD player with several relaxation CDs is on the table along with a continuously flowing fountain. Several varieties of aromatherapy scents in spray bottles are available for use. The room is lighted with a soft incandescent lamp. Literature about other stress management techniques is available in the room. Evaluation/Outcomes: The staff response has been very positive. Room usage is increasing as nurses gain a better understanding of its benefits. dpryer54@yahoo.com

#### Share the Love: A New Spin on the Organ Donation Process

Mathews S, Kagel E, Wood C, Morley D; Grant Medical Center, Ohio Purpose: To increase support for family members when their loved one is terminal and to increase the comfort level of RNs throughout the end-of-life process. Description: We noted that when a patient became terminal, the RNs were apprehensive and unsure as to when to call the organ donation team. Often the call was made when the patient died and was sometimes perceived as just more paperwork. Consequently, referrals were sometimes missed. Also, at this crucial time, the families required increased emotional support. To address these issues, a new end-of-life

process was created through the collaboration of the hospital chaplains, the RN staff, and the Life Line organ donation team. The collaboration with Life Line resulted in the hospital having an on-site representative who checks daily with both the chaplain and the charge RN to determine if there are any patients who would be candidates for organ donation. The Life Line representative, the RNs, and the chaplains began working together to provide the much needed support and comfort to the families during this difficult time whether donation was eminent or not. In addition, the chaplain became responsible for the end-of-life paperwork and worked closely with the RN to provide information to the referral agency at time of death. The Life Line representative also began conducting monthly inservice training for the RNs, providing feedback regarding recent donations and other related topics. Evaluation/Outcomes: There has been an increase in the amount of support and comfort given to the families during end-of-life situations. Through continuous involvement with Life Line, the RNs have experienced an increased comfort level with the donation process. Because the chaplain assists in end-of-life referrals, RNs are free to spend valuable time with the family. Also, as a result of this care team, a new policy for donation after cardiac death was formulated. spop1992@aol.com

### Shared Governance in the ICU: A Collaborative Approach to Decision Making

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Purpose: The nursing shortage is driving many hospitals toward improving retention and recruitment strategies for nurses. RNs are more committed to and attracted to jobs in which they have an increased sense of autonomy and control over their work environment. Shared Governance enables nurses to be part of the decision-making process on issues that directly affect the patient care they provide. A Shared Governance model was designed for the ICU to bring decision making to the point-ofcare delivery. **Description**: After an extensive review of the literature, a Shared Governance model was developed for the ICU. The model is based on a 5-council structure: Professional Development, Practice and Research, Operations, Quality Improvement, and a Coordinating Council that acts as a central point of contact for the other 4 councils. Each council is chaired by a staff nurse and is composed of management and nursing representation from all ICUs and shifts. Bylaws were written to provide a guiding framework for the Shared Governance model. Before the initial convening of the councils, a leadership workshop was designed and carried out for each council chair to gain the necessary skills to facilitate meetings and lead a group of their peers. Evaluation/Outcomes: A year and a half following implementation of the model bedside nurses are changing and managing the framework of their environment. Staff meetings are coordinated and run by council members; annual competency is developed by the Professional Development Council; and a CCRN certification drive and review course resulted in increasing staff certification by 83%. In the first year of staff-designated goals and council strategic planning, we exceeded our 2 Gallup Survey goals by an average of 200%. The complete ICU model and leadership training course was adopted by other units within the hospital and became the foundation for building the hospital-wide Shared Governance model. nicolemhardie@comcast.net

### Should I Stay or Should I Go Now? Improving Patient Safety During Hand-Offs and Intrahospital Patient Transport

Sona C, Becker C, Corcoran R, Jackson D, Johnson R, Kelly D, Lintzenich D, Martin N, Oberholtzer L, Rieth S, Thomas J; Barnes Jewish Hospital, Mo

Purpose: To focus on improving patient safety during hand-off and to standardize the process. Description: Using LEAN methodology, we improved our process for intrahospital transport and hand-off. Our existing triage system was improved to determine the appropriate level of accompaniment necessary to ensure patient safety during transport. This simple transfer stability assessment (TSA) is standardized and completed on all patients traveling for procedures or between departments. The TSA ensures providers get adequate report and critical hookups such as calllights and alarms are completed with a face-to-face and signature. Treatment areas can also use the form to report to the floor. Procedure areas were reorganized to allow direct patient visualization and to provide patients with a call light. The house reporting format was standardized using the SBAR technique with a focus on limiting interruptions during hand-off. Posters, computer screensavers, and report notepads were used to increase

staff awareness of the changes. In addition, shift change has been identified as a high-risk period for patients. The 30-minute shift overlap has designated tasks and staff to answer call lights. This allows oncoming shifts to receive uninterrupted report. Evaluation/Outcomes: Code data reveal no codes during transport and no issues related to appropriate assessment and accompaniment of patients. Audits on completed TSA documentation on arrival to tests, treatments, and procedures were 96% for the fourth quarter of 2005, 99% for the first quarter of 2006, and 100% for the second quarter of 2006. The percentage of patients with the appropriate level of accompaniment was audited randomly on the general radiography, CT, and interventional radiology departments with 94% accuracy for the fourth quarter of 2005 and 100% for the first and second quarters of 2006. css1/19@bjc.org

Skin/Care Champions: An Ounce of Prevention Is Priceless! Farlow V, Pack B, Jones P, Atwater E; Duke University Health System, NC Purpose: Data collected on Medicare patients in 1994 showed an average LOS increasing from 5.4 days for patients without pressure ulcers (PUs) to 27 days for patients with PUs. Increased cost of treating PU patients was \$2360 per day. Based on this information, the Wound Management Institute (WMI) in our hospital developed a hospital committee composed of staff nurses and nursing assistants from every unit where wound care and prevention and treatment of pressure ulcers are addressed. Description: The WMI contacted unit leadership to assist in identifying individuals interested in becoming skin care champions (SCC). The first group of SCC met in 2001 with the WMI and wound management nurses to begin the educational program to teach members about skin care, skin care products, and bed selection on the basis of skin needs. The unit-based SCC is a critical component of the of the hospital's wound and skin care program. The SCC role is to serve the organizational commitment to the prevention of skin breakdown, to serve as an educational resource for coworkers, and to collaborate with the Wound Management Clinical Outcomes group on a quarterly basis. In addition to committee participation and staff education, the estimated time commitment for SCCs is 12 hours a month, which includes a monthly unit audit of skin assessment based on the Braden Scale, bed type, plan of care, and Wound Management consult as needed. Evaluation/Outcomes: Nursing units throughout the hospital have shown a significant decrease in the occurrences of PUs identified, improved staging and treatment modalities, as well as the use of specialty beds and equipment. Data collected over 4 years indicate a consistent decrease in occurrences of PUs, decreased LOS, decreased patient cost, and improved patient care. farlo003@mc.duke.edu

## Smile You're on EICU: A Collaborative Critical Care Team to Enhance Patient Outcomes

Mathews S, Wood C, Kagel E, Grant Medical Center, Ohio Purpose: To create a critical care team encompassing the CCU RNs with the RNs of the EICU for enhancement of overall patient safety and outcomes. **Description**: After the concept of the EICU monitoring system was presented to the RN staff, it was noted that there was much apprehension, fear, and initial resistance, including fear of punitive repercussions from continuous monitoring of their actions in the patients' rooms, fear of an increase in patient workload because of other eyes watching their patients and giving orders, and fear of an increase of RN-to-patient ratios because of the possibility of the suspected virtual nurse replacement. To foster acceptance and overall embracement of the EICU collaboration by the CCU RNs, a work team was created. The team was apprised of management and CCU RNs. Initially, time was spent on staff ducation as well as identifying the apprehensions of the nurses. Creative solutions were discovered to ease these fears such as EICU nurses were invited to spend time on the unit to foster team building, creative t-shirts were made and presented to each staff member of the CCU to wear during the go live week, a door bell system was created so that the RN would know when the EICU was monitoring in the room, and the CCU RNs were invited to tour the EICU. Evaluation/Outcomes: Through the efforts of the work team, RN apprehension was decreased and an overall acceptance of the EICU staff was noted. A successful team has developed between the 2 entities and patient outcomes have been improved: DVT/GI prophylaxis and vent bundles have been monitored more closely, patient falls have been prevented, trends of negative lab values have been detected, and physicians and ancillary staff have been contacted quicker in emergent situations by the EICU staff while the bedside nurse provided care to the patient. spop1992@aol.com

### So, What Did They Say? An Interdisciplinary Family Meeting Documentation Form

Westphal C, Dalyg G, Hnatiuk M, Rustom M; Oakwood Healthcare System, Mich

Purpose: To develop a process that promotes family-provider communication. Family meetings that provide opportunities to discuss patient status, prognosis, plan of care, and patient preferences are an essential component of patient-family focused care. Families may meet with a variety of providers on several occasions; however, a review of medical records demonstrated a paucity of information related to who was present, what was discussed, and the subsequent plans. Description: A Family Consult/ Meeting Summary form was developed to document meetings and serve as a process trigger. The form provides a systematic way to verify advance directive information, document attendees (particularly the inclusion of the patient advocate), summarize discussion (eg, prognosis, plan of care, patient preferences), describe follow-up plans, and identify time spent. The form, printed as a carbonless triplicate, is placed in the "consultation section" of the record making it easy to locate for review. A copy of the meeting summary is also made available to the family. Evaluation/Outcomes: The form was originally used as a tool by Family Matters Support Service. Physicians and other members of the team found it useful and requested that it be made widely available. The form was subsequently revised to meet the needs of the interdisciplinary team. Staff from the Family Matters Support Service mentor healthcare providers in how to facilitate a meeting and appropriately document the event. Family members who receive copies of the meeting notes report that it is a helpful way to remember what was discussed and to communicate it to members who were not present, thus improving family satisfaction. Healthcare providers report that availability of the meeting record promotes consistency of information and an understanding of the future directions. westphac@oakwood.org

## Something for Everyone: Improving Education and Healthcare Management Through Multiformat Resource Materials

Vogelzang M, Kanai K, Regan L; Harborview Medical Center, Wash **Purpose:** To facilitate understanding of health issues and increase education for patients and their families, we have developed a large number of educational resources for patients, families, and staff. **Description:** Our trauma center services a broad population with a diverse educational back ground. To meet the needs of all our patients and families our facility provides a variety of educational resources and methods. A Web-based patient education site has been established providing educational information that can be accessed by clinical staff When the staff identify an education need they sign onto the site and select information that is patient specific, then print the handouts. Some of these handouts have pictures and others provide information written at elementary reading level. The information on the Web site covers a large range of information and specialties. As a level 1 trauma center we have high number of trauma patients. For these high-volume services we have preassembled packets of information that include patient education handouts as well as Web sites and phone numbers that provide further educational materials. Contacts for support groups offered in the hospital and in the community are also included. On admission or at any time when the information is needed clinical staff may provide the packets. On the walls of many of our ICUs pamphlets specific to the specialty of that unit are hung for visitor self-education. Finally, our trauma center has a patient family resource center that is open during the day to provide additional hospital and community educational resources. Evaluation/Outcomes: Our patients and families report improved understanding of diagnosis and plan of care. Families are increasingly familiar with the ongoing health issues and are asking more educated questions. Patients and families are taking a more active role in healthcare and health maintenance because of the access to educational materials. vogue@u.washington.edu

## Stepping It Up: Using Distance Markers as Goal Setting Tools Bethel-Warner J, Holland D; Sinai Hospital of Baltimore, Md

Purpose: Motivating cardiac care patients to ambulate in the recovery phase of an acute event is a major component of care for PCU nurses. Ambulation is an effective VTE prophylactic agent and is important in the restoration and maintenance of cardiovascular health. Development of a collaborative approach to ambulation was a goal for PCU nurses at our institution. Description: To improve care, a collaborative team of healthcare providers worked together to create distance markers

for placement in the unit's long hallways. An important feature of the distance markers, which are strategically placed every 25 feet, is that they serve as visual guideposts to facilitate ambulation goal-setting for patients. In addition, the markers help patients, families, and nurses communicate distance and are expressed as a unit of measurement. For many patients, developing a plan to walk the distance of 4 markers is much less daunting than developing a plan to walk 100 feet. The markers also allow nurses to better document distances ambulated by patients with help from friends and families as these distances are reported in terms of "markers" and not feet. This standardized unit of measurement allows nurses, physicians, and physical therapists to more accurately track the patient's activity tolerance. Finally, in an effort to ensure and facilitate brand recognition of the cardiac service-line not only by patients, but also members of the community, the organization's Heart Center logo was chosen for display on each of the distance markers. Evaluation/Outcomes: Success of the distance marker project has been evaluated using quantitative and qualitative measures. Chart audits will be used demonstrate improvement in compliance with ambulation documentation. In addition, qualitative surveys will be used to demonstrate patient's increased satisfaction with ambulation, goal setting, and overall impressions of care delivered. Jbethel@lifebridgehealth.org

### Stepping Up to Step Down. Progressive Care: Care Across the Continuum

Daugird D; Duke University Health System, NC

**Purpose**: Progressive care nursing includes patients in transition from acute illness to wellness and involves complex nursing assessments and interventions. The intensity of care, vigilance, critical thinking, and implementation of the nursing process are similar in both critical care and progressive care except for a few highly technical procedures. Administrators and educators must be creative and innovative in developing programs, methods, and materials that will help prepare progressive care nurses for present and future demands. Description: Our PICU team moved to align with the pediatric PCU. A pediatric PCU team was formed with 9 core members. Educational goals were developed to align education and development of the PCU staff to ensure that their assessment and critical thinking skills were commiserate with the acuity of the PCU patient. To meet these goals, a specific 12-week pediatric PCU orientation was developed, including an EKG course, attendance of PICU core classes, 2 weeks in the PICU to enhance critical thinking skills, time management strategies, and development of PICU/PPCU relationships. Evaluation/Outcomes: PCU nurses report increased job satisfaction due to the development of new skills, support by the critical care team, increased team cohesiveness, and growing expertise. Primary care providers benefited by continuous monitoring of their patients, a trained core team, and improved interdisciplinary communication. The multidisciplinary team benefited with improving work culture, staff retention, and improved patient safety in a high-risk population. Families and patients benefit due to continuity of care by a trained PCU team and more open visitation than in the ICU. Hospital leadership benefited by lowering costs of employing less-invasive technology, less-expensive caregiver to patient ratio, improved PICU-PPCU throughput, and optimizing bed availability through more effective use of ICU beds. daugi001@mc.duke.edu

### A Step-Wise System-Based Model to Orient Registered Nurses to the Cardiothoracic Intensive Care Unit

Rimmer L, Thomas-Horton E; Barnes-Jewish Hospital, Mo Purpose: Complicated information is communicated during the orientation of RNs to our ICU. Because we hire nurses who range from newly graduated to experienced, we found there was insufficient explanation of expectations and inadequate support to accomplish this overwhelming task. Our goal was to improve orientation by giving clear expectations and consistent, reliable tools. Description: We developed a step-wise content program. We divided it into manageable segments following our systems-based patient assessment documents. Our level I competency included assessment and technical skills, and proficient use of computerized nursing diagnosis, outcomes, and approaches to plan of care. Classes and testing included patient monitoring, critical alarms, rhythm analysis, basic and advanced critical care, and pacemaker management. A weekly Clinical Orientation Pathway tracked progress on nontechnical skills including safety checks, priority setting, order transcription, communication, observation, and reporting of clinical problems. Our level II competency included classes and/or self-study with testing for intra-aortic balloon pump, ventricular assist devices, continuous dialysis, and heart

and lung transplantation. Critical support tools comprised the competency workbook, accessible reference books with articles, an online hospital network with up-to-date policies, procedures, and drug references, and critical information cards in patient rooms. New graduate nurses also attend the hospital's fellowship classes. Evaluation/Outcomes: We give program evaluation tools to the orientee and to the preceptor at the end of each nurse's orientation. All evaluations have rated the program very good to excellent in preparing orientees to take on their new role. jrimm@hotmail.com

Strategy for Success: Lifelong Learning in the PICU Underwood L; Sinai Hospital Of Baltimore, Md

Purpose: The PICU staff is committed to lifelong learning yet a constant challenge is how to provide and receive education in a busy, stressful environment. Description: The PICU Education Committee met to determine creative strategies for education on an ongoing basis. Staff are interested in learning and often share information about evidencebased practice. However, it is difficult for staff to leave the bedside to attend educational programs. Compounding this challenge, a new requirement of the performance appraisal process is that nurses provide education one time a year. Based on the needs of the staff, the PICU Education Committee developed an Education Day held twice a year. Staff conduct a needs assessment to determine topics. A mock code is included in the program. An option for staff who want to provide an inservice but are uncomfortable with presenting in front of a group is to develop a self-learning packet to be completed by the education day. Most of the speakers are PICU staff, which meets 2 goals. They are able to meet the performance appraisal requirement and they can develop their presentation skills in a nonthreatening environment. Experienced nurses are able to share their knowledge and newer nurses, in developing their inservices, discover the joy in creating education that enhances their own practice. Other disciplines, such as medicine, pharmacy, and respiratory therapy participate, which enriches multidisciplinary collaboration. All materials from the inservices are compiled into an educational file on the unit so that staff have ongoing access to the information. Evaluation/Outcomes: The evaluations provided positive feedback from all nurses who participated. Nurses commented that it was a supportive and positive way to provide education and discussion about PICU nursing practice and that they are able to develop autonomy in their practice. Staff also provide suggestions for topics for the next Education Day. plunderwood3@verizon.net

### Stroke Busters: Building Bridges to Beat Stroke

Williams J, Tan D, Lee J, Thomas C, Shearrer D, Nassef A, Mccammon C, Harrison C; Barnes-Jewish Hospital, Mo

Purpose: In 2003, our emergency department (ED) acute stroke team noted that the number of patients presenting within 3 hours of acute stroke had fallen dramatically. This initiated a renewed focus on our acute stroke system with the expectation of getting the stroke patient into the ED within the 3-hour window. The team sought to develop an action plan to increase the number of potential patients arriving for evaluation of stroke symptoms and ensuring that once in the ED setting, the care would move seamlessly through the evaluation and treatment process. **Description**: EMS education programs were developed by team members and then provided to the 2 largest EMS programs in the surrounding area. The education empowered EMS providers to activate our stroke code pager system. The use of the Cincinnati Stroke Scale by EMS and nursing triage staff standardized the approach to recognition of symptoms. When a patient presents with any of the symptoms as abnormal either the stroke team pager is activated and a cascade of events follows. The ED focused the nursing and physician education on the consistent use of a nursing triage protocol and stroke care algorithm. They identify clear process steps for rapidly obtaining lab samples, CT imaging, neurology consultation, and screening for tPA eligibility. Using this tool, the nursing staff does not defer testing orders to the physicians after they examine the patient but rather make autonomous decisions to initiate the procedures necessary for rapid evaluation. Evaluation/Outcomes: Following the implementation of the program, the number of patients who have received tPA has increased by 450% and the number of patients who have received tPA in less than 2 hours has increased by 750%. To ensure that all healthcare providers involved in the case are recognized for their efforts, letters from the Chair of the Department of Neurology and "Stroke Busters" pins are sent to the provider and their supervisors. jaj5264@bjc.org

Success From the Start: Transitioning From Acute Care to Critical Care Nursing

Stafford A, Tesfamariam A; Harborview Medical Center, Wash **Purpose:** To foster success in nurses transitioning from acute care to critical care nursing, ease anxiety and stress associated with such a transi tion, and ensure a better integration into the ICU, a progressive approach to ICU orientation was developed by the management team of the SICU and the clinical education department. Description: Former acute care nurses new to the ICU environment often feel apprehensive and overwhelmed during this transition. These feelings can be attributed to the new environment and culture, unfamiliar coworkers, new skills, and increased responsibilities. In addition, some concepts taught in the orientation are difficult to grasp without previous exposure to the ICU. Through feedback and interviews conducted with staff trained in the traditional orientation process, the management team of the SICU determined a change was needed. A 4-week prientation process was developed for transitioning nurses before the classroom portion of the orientation. New staff works with their assigned preceptor gaining exposure to the ICU environment and the concepts employed in critical care nursing. The clinical education department provides written materials that may be used as a reference throughout this phase. This initial period of orientation allows for the new staff to learn responsibilities of the nursing and support personnel, develop trusting and nurturing relationships, and become integrated into the unit culture. Evaluation/Outcomes: Feedback from new and existing staff regarding this approach has been extremely positive. The ideas presented in the classroom portion are better absorbed and concepts are easier to understand. The SICU has found this process cost neutral without any extension of the orientation period. The confidence level of the new staff is greater and stronger relationships exist between staff. Transitioning nurses report feeling welcomed and supported as part of the team. amystaff@u.washington.edu

Summertime and the Learning Ain't Easy Huffman S, Mathis V, Howe J, Hickey E; Duke University Health

**Purpose:** Orienting 18 new graduate nurses over July and August presented a unique challenge to our 16-bed surgical trauma ICU. The sheer number of simultaneous learners in this busy ICU was daunting even to the veteran preceptor group. A new approach to the unit's classic orientation processes was needed to provide a safe, thorough orientation and prepare these new nurses to assume an independent role in delivering care. Description: A work group consisting of staff, management, and unitbased and centralized educators met to discuss options. Streamlining the process was a priority that was accomplished by revising orientation materials, evaluating testing methods, and revising class schedules and unit-based experiences. The classic 12-hour shift schedule was modified, incorporating 8-hour days/nights with defined tasks and newly developed tools that allowed a 2:1 orientee:preceptor ratio. An orientee status tracking method was implemented for charge nurses and preceptors. Manage ment support for unit-based educators was invaluable. A centralized skills day allowed 1 person to teach numerous orientees specific tasks/equipment. **Evaluation/Outcomes:** Sixteen of 18 orientees who started that summer are still on staff, while the average ICU nursing turnover rate is approximately 20% for our institution. Frequent evaluations allowed early detection of the unit/learner mismatch for the other 2 orientees. Orientee comments strongly supported the 8-hour shifts, skills day efficacy, and increased handson orientation time. Preceptors appreciated the goal/outcome driven tools and the shorter teaching times with orientees, facilitating the ability to learn and retain information. Unit-wide improved teamwork and peer relations was also noted. Management reports a heightened awareness of incorporating safe practice and patient care standards by all staff. huffm005@mc.duke.edu

Sweet Success: Implementing a Comprehensive Hospital-Wide Teaching Plan to Educate the Diabetes Mellitus Inpatient

Collins J, Gullage J, Jeffries M; Massachusetts General Hospital, Mass Purpose: This project was to assist the RN at the bedside with successful education of the newly diagnosed diabetic to all facets of diabetes mellitus (DM) care using visual, auditory, and hands-on materials in a uniform manner. DM education is a lifelong issue. Providing a comprehensive interventional curriculum with a visual flow chart enabling the patient to give return demonstrations of their competence and comprehension is a way to reinforce good technique and behavior, ultimately improving positive outcomes. Description: Teaching inconsistencies were identified between individual RNs as well as from unit to unit. All available

resources were reviewed and an outline of basic outcomes and interventions was established. Multilingual online resources were recognized and hospital TV access was provided. Reading material was available with visual cues that included complications of the disease. A Problem Intervention Plan for the patients chart to assist RNs with individualizing care needs, documentation, and consultation options for nutrition, podiatry, social service, physical therapy, and ophthalmology was developed. The final product was the implementation of a teaching plan that included a bedside visual flip chart to review patients' individual instructions and self-management goals, document progress with medication management, checking their own blood sugars, insulin administration, and plan for discharge. Evaluation Outcomes: The ultimate outcome rests in patients' DM comprehension through return demonstration and compliance in addressing their health needs and goals. Patient outcomes will be measured with a follow-up phone call to the patient 1 month after discharge to survey comprehension and compliance around daily care. For the nursing outcomes, comparing the RN responses on the annual Staff Perception Survey before and after tool implementation will determine whether this teaching method is constructive and effective. jcollins7@partners.org

### Tackling the CCRN Slump Through Collaboration and Meaningful Recognition

Watson F, Schreyer C, Horner S; Memorial Medical Center, Pa Purpose: It had been more than 2 years since a staff nurse had last taken the CCRN exam. We highly value certification and sought to understand the barriers and develop a process improvement plan. Our goals were to increase the number of CCRNs and retain our current compliment by providing meaningful recognition. Description: Insecurity about passing the exam and inability to pay fees were identified as the barriers. Our team worked closely with administration and human resources to develop a certification commitment. Interested nurses were asked to sign a written agreement to sit for the exam within 6 months. Our hospital agreed to collabotrate with local AACN chapters and support a 2-day certification review course by paying costs and educational days for the course and testing. To recognize our CCRNs we purchased plaques and prominently displayed their names and credentials. Certification is celebrated with hospital announcements, banners, and cakes. During Nurse's Week, each newly certified nurse is recognized at a hospital ceremony where the nurse is awarded a certificate of acomplishment. Certification is incorporated in the Clinical Advancement Program and it is required of all charge nurses. The benefits of belonging to AACN and certification are discussed with all hires. There is an expectation that certification be obtained when requirements are met and the annual evaluation reflects this philosophy. Evaluation/Outcomes: The number of CCRNs increased from 7 to 13. This reflects a 85.7% increase. One nurse has obtained CSC; 7 additional nurses are preparing to complete the exam in the coming months. Overall interest in ertification has increased and staff members feel their efforts have been recognized. Initiatives are expanding as 4 nurses have recently obtained PCCN certification. This spring we will be supporting a CCRN/PCCN review and hope to further our successes. fwatson@conemaugh.org

#### Teaching End-of-Life Care From the Patient's Perspective During Orientation

Wiencek C, Russo A, Wetzel H, Kloos J; University Hospitals of Cleveland, Ohio

Purpose: End-of-life care is an essential skill to include in critical care nursing orientation in addition to the traditional content areas of pathophysiology and technical skills. Death is common in the ICU despite increasing technology with mortality rates ranging from 6.4% to 40%. Therefore, critical care nurses must have the opportunity to explore endof-life care and issues. The purpose of this project was to evaluate if the use of the popular film, Wit, provided a forum for discussion of end-of-life issues and affected attitudes toward care of the dying patient. **Description**: End-of-life instruction is included in the critical care orientation that is provided multiple times each year. The instructional method used to address end-of-life skills is the HBO movie, Wit. This film chronicles the personal journey of a literary scholar dying from ovarian cancer. With biting humor and "wit," the patient challenges the movie audience to look at caring and death from the patient's perspective. The movie is shown over a 3-hour period with multiple discussion and reflection points facilitated by group leaders. The critical care nurses discuss communication, goal setting, end-of-life attitudes, advanced directives, role of the nurse in discussions of treatment limitations, and ethical implications. Evaluation/ Outcomes: Seventy-five nurses, a majority of which were new graduates,

have completed the critical care orientation and end-of-life module. All viewed the film, Wit, and participated in the structured discussions. Evaluations of the session indicated a positive response to this method of instruction of end-of-life issues and skills. Presurvey and postsurveys of attitudes toward end-of-life care have demonstrated that this creative approach was successful in raising awareness of the critical care nurse's role in providing skilled end-of-life care. clareen.wiencek@case.edu

### The 100K Lives Campaign: Implementing the Central Line "Bundle" to Reduce Catheter-Related Bloodstream Infections

Paton M; Moses Cone Health System, NC

Purpose: Approximately half of all patients in ICUs have central venous catheters (CVCs) and are at risk to develop catheter-related bloodstream infections (CR-BSIs). The cost to treat each CR-BSI is estimated to be \$25 000 to \$50 000. More significantly, national data suggest at least 14 000 patients die each year as a result of these infections. To minimize the incidence of CVC infections, our health system—as a part of the 100k Lives Campaign—made a commitment to implement the Institute for Healthcare Improvement central line bundle. A bundle is a set of evidencebased recommendations that when initiated together demonstrate improved outcomes. Description: A multidisciplinary team was formed; it was led by a CNS and included nursing and physician representation from ICU, anesthesia, trauma, surgery, IV therapy, and infection control. After a review of the bundle components, the team compared our current state to the bundle recommendations. A cause-and-effect diagram was completed for each bundle element to identify potential barriers to compliance. The infection control policy was rewritten, necessary supplies obtained, and pilots completed in 2 ICUs and the operating room. Approval was obtained from multiple committees, including infection control and the Medical Executive Committee. The team determined that the procedures outlined in the bundle would represent a significant practice change; nursing and physician education was planned as a crucial piece of the implementation process. Evaluation/Outcomes: The central line bundle has become policy for our health system. CR-BSI data continue to be collected and reported on a monthly basis. An audit tool created by the team will be completed during each central catheter insertion. This tool will serve both as a checklist for the procedure and a QI tool to monitor compliance with the bundle; each CR-BSI will be investigated. maryellen.paton@mosescone.com

## The Beat Goes On: Developing a Pediatric Cardiac Orientation for PICU Registered Nurses

Wilson C, Creque B, Cates K, Ryan K, Bolen R, Meliones J; Duke Children's Hospital, NC

Purpose: When both the multidisciplinary PICU and pediatric cardiac ICU (PCICU) share the same physical location yet have separate staff, orientation can be challenging. Developing our PCICU is driven by the desire to provide the highest quality care through consolidating knowledge, resources, and skills. However, this must be done in a way to enhance not minimize the PICU orientation and training. To achieve these goals, we augmented our orientation by developing a specialized clinical pathway that defined nursing care for cardiac patients while maintaining the training and competencies we had established for multidisciplinary PICU patients. Description: A subcommittee of the nurse-led PICU Orientation Committee developed a clinical pathway that provided a structured orientation focusing on the pediatric cardiac population while allowing a phase of orientation for the multidisciplinary PICU population. The development of the clinical pathway was a process including input from the Orientation subcommittee, the cardiac ICU nurse manager, medical and surgical director, and the pediatric clinical nurse educator. The preceptors were oriented on the new pathway. The pathway was then placed in an orientation notebook and distributed to the new orientee during their first week of hospital orientation. Evaluation/Outcomes: The challenge of developing a unit within a unit can be significant. To overcome this, we developed a creative solution: a specialized clinical pathway while enhancing current PICU orientation. This provided us with 2 important outcomes: review and enhancement of the multidisciplinary PICU competencies and standardized specialty care for critically ill pediatric cardiac patients. The specialized clinical pathway has improved patient outcomes, decreased length of stay, as well as increased staff and family satisfaction. wilso219@mc.duke.edu

The Big Chill: Therapeutic Hypothermia After Cardiac Arrest Kupchik N; Harborview Medical Center, Wash

Purpose: More than 300 000 Americans die each year from cardiac arrest. With increased availability of AEDs and early defibrillation, many patients are successfully resuscitated but suffer permanent neurological damage. A hypothermia protocol was developed and implemented at our facility with the goal of preserving neurological function. Evidence-based practice has shown improved neurological outcomes with the use of therapeutic hypothermia. Description: At our institution, approximately 60% of patients admitted for prehospital, nontraumatic cardiac resuscitation never awaken. Recent studies have shown that mild hypothermia induced after resuscitation from cardiac arrest may improve neurological outcomes. In 2002, a hypothermia protocol was developed and successfully implemented for resuscitated cardiac arrest patients that remained comatose. The protocol has been adopted as a hospital-wide standard of care. Standing order sets were established and revised based on feedback from the nursing staff. Efforts are made to cool patients as early as possible. Patients are cooled using a noninvasive, body surface temperature cooling device and paralytics and sedation are administered concomitantly to prevent shivering. Core temperature is monitored using an esophageal probe. Once the goal temperature of 33°C has been reached, the paralytics are discontinued. Electrolyte levels are monitored closely as potassium levels may drop precipitously due to the patient's core temperature fallling. Bleeding times are also monitored closely because of the potential development of coagulopathies. After 24 hours, the protocol is discontinued and patients are gradually rewarmed over 8 hours. Evaluation/Outcomes: Establishment of the hypothermia protocol and orders sets has standardized the care of postarrest patients. nkupchik@hotmail.com

## The Clinician Huddle: Soliciting Multidisciplinary Input With Major Treatment Decisions and Palliative Care

Johanson R, Parker D, Tate J; Harborview Medical Center, Wash Purpose: To maximize multidisciplinary collaboration and to encourage full team participation as important care issues are discussed, our burn center has developed a unique technique called the "clinician huddle." All team members gather together to discuss major treatment options, including palliative care, when injuries are deemed not survivable. Description: When patients with large burns or complicated cases are admitted to the ICU, the decision of continuing with aggressive resuscitation or allowing the patient to die can be emotionally charged for all team members. To help diffuse the stress associated with these life or death decisions, our burn team gathers to discuss the options available and their implications on care. Team members are asked to share their thoughts and concerns, and the attending physician answers any questions. Burn resuscitation can present unique challenges and the prudent care direction may be to stop IV fluids and allow the patient to remain conscious and communicate with his or her family before he or she dies. Whether a burn is survivable can depend on several factors such as comorbidity or other injury, percentage of body surface burned and available donor sites, smoke inhalation, and patient or family wishes. The team members each express their concerns, and a final decision is not arrived at until everyone has had an opportunity to share with the team. After consensus is reached, the team then approaches the patient and family, and makes a recommendation based on clinical expertise and experience. Evaluation/Outcomes: The "clinician huddle" helps each member of the healthcare team, from ICU nurse to physician, from respiratory therapy to hospital assistants, feel valued and involved. Discontinuing resuscitation of a burn patient can be one of the most gut-wrenching experiences a caregiver can be involved in, and the team approach gives everyone the sense of being valued and supported. johanson@u.washington.edu

### The Journey From Novice to Certified Practice Marzlin K, Webner C; Aultman Hospital, Ohio

Purpose: Novice to expert progression is key in the development of nursing practice. In addition, certified practice is a nationally recognized means for nurses to validate specialty knowledge. Both the Magnet and Beacon awards of excellence support certification with multiple standards addressing education, training, and mentoring. The Heart Center's 5-level Novice to Expert Program is an education program to support certified practice. Description: Levels 1 to 4 of the Novice to Expert Program comprise the core curriculum building on national standards and current evidence-based practice. Level 4 includes emphasis on certification preparation. The fifth level of the program serves as a continuing education program for certified staff. Multiple enhancements have been implemented since initiation of the program: (1) development of teaching strategies to improve engagement and comprehension, (2) implementation of a certification

study group and subspecialty certification review classes to complement the certification preparation course, (3) focus on instructor development to optimize delivery of content, and (4) creation of linking knowledge campaign to link classroom knowledge to clinical practice. Evaluation/Outcomes: Before initiation of the program there were 7 certified nurses in the heart center. After a full 3 years of implementation there are currently 57 certified nurses, many of whom hold more than 1 certification. In addition, 36 of the 57 certified nurses currently serve as clinical instructors in the program. A secondary benefit has been the increased number of nurses who have completed or who are enrolled in BSN and MSN programs. A systematic process built on the concept of novice to expert practice can provide the foundation for achieving certification. Teaching is one of the most effective methods for reinforcing learning; using clinicians as instructory strengthens the body of bedside nursing knowledge. Keychoice1@yahoo.com

#### The MICU Web Site Has Made a Difference

Jafelice J, Kotora K, Tietjen K; University Hospital, Ohio Purpose: In June 2003, our MICU completed an employee survey to evaluate the staff's perceptions of belonging, communication, expectations of leadership, operations, professional growth, and team work. The survey results revealed problems in all areas. **Description**: As part of an overall plan designed to alleviate many of the issues, a unit-based Web site was created. This was the first unit-based Web site at the hospital. Since the creation of the MICU Web site, it has been revised to provide additional support and the latest information. The site provides a mechanism for communication to enhance the sense of belonging. It provides a forum for staff and management review and feedback. Resources such as policy and procedure manuals, safety hotline, hospital calendars of events, and links to organizations (eg, AACN) are at their fingertips. Evaluation/Outcomes: In April 2006, the employee survey of the  $\bar{\text{MICU}}$  staff showed a complete turnaround of the staff's perceptions. The MICU became a Beacon Unit in the fall of 2005. The Web site was one of the interventions used to turn a dysfunctional unit into an award-winning unit. Janice.Iafelice@uhhs.com

### The Oscar Goes to... "While You Are Waiting"

Parsons J, Foster S, Roeback C; Duke University Hospital, NC Purpose: Through our visitor satisfaction surveys, it was identified that families for our 16-bed trauma/surgical ICU are often kept waiting before the initial visit to the bedside of their loved one. Visitors do not know what to expect or what is required of them in a strange and unknown environment. Description: In addition to the visitor's pamphlet, resource booklet, volunteers, and location beepers, the Visitation Committee felt that an additional teaching tool was needed to give a more comprehensive and general view about our ICU environment. Recognizing that admission to a level 1 trauma center is stressful and augmented by the lack of knowledge about the ICU setting, equipment and staff the decision was made to develop a DVD entitled While You Are Waiting describing our unit, the staff, and the waiting area. Evaluation/Outcomes: One month after implementation, 83% of ICU visitors completed a visitor satisfaction survey. Results indicated that 100% felt that the video was informative and helpful, addressing questions/concerns related to procedures and equipment in the ICU. Overall, visitors felt included and informed. As a result of this DVD, we have seen an increase, not only in visitor satisfaction, but also with the staff and waiting room volunteers. In addition, other ICUs throughout the hospital are considering developing a similar DVD for their units. roeba001@mc.duke.edu

### The Road to Beacon: The Road Less Traveled Should Be Your Unit's Next Stop

Lepman D, Hewett M, Pyle K; Hoag Memorial Hospital Presbyterian, Calif

Purpose: Critical care units that receive the Beacon Award demonstrate high-quality standards, exceptional care of patients and families, and healthy work environments. The road to Beacon is a process that provides self-assessment and better understanding of where your unit lies with important variables that measure quality and safety. Many units across the country meet the Beacon criteria but for many reasons do not rally together and collaborate in proceeding forward with the application process. Description: The decision to apply for Beacon status addresses several key imperatives: recognition of exemplary care, quality and outcomes achieved by staff, and raising awareness of exceptional accomplishments by the nursing profession. Equally essential is the need to attract and retain top nursing candidates. Some strategies that may lead to designation

include supporting detail and data such as standard of care interventions; specific examples that support clinical and safety goals; showing what specific administrative levels are addressed with each initiative; honesty with boundaries and constraints; illustrating the effect of care provided with statistical data, processes in place, and trending over time; and showing compliance within each process. In addition, it is effective to use statistical tools to demonstrate change and show the method, frequency, and level of communication. Finally, illustrating an alignment with patient centered care is paramount. Evaluation/Outcomes: In April 2006 we were notified by AACN that both of our separate applications, one for CCU/CVICU and one for neuro ICU were approved and given the status designation of Beacon Units. The Beacon Award is a tremendous achievement not only for nurses in critical care but for the entire hospital. This status will promote an individual sense of professionalism and will affect the recognition by critical care nurses across the country. dlepman@hoaghospital.org Sponsored by: Hoag Hospital

## The Successful Implementation of a Rapid Response Team in a Community Hospital

Roberts M, Johnson J, Willard J; Poudre Valley Health System, Colo **Purpose:** Most patients who arrest in the hospital have identifiable signs of deterioration before their arrest. Based on the evidence from IHI regarding the effectiveness of rapid response teams (RRTs), critical care nurses made the decision to support and implement an RRT. Description: Since 1999, PVH has encouraged general nursing staff to call the code team before cardiorespiratory arrest.  $\bar{\text{Th}}$  e critical care nurses used the success of this concept to help physicians, administration, and other nurses understand RRT. Following a review of the literature, our program was designed based on the Baptist (Memphis) model. A process was defined and forms created to facilitate data collection. The following goals were identified: to take critical care assessment skills to the patient, to identify system failures and improve processes, to reduce returns to ICU, and to decrease the number of codes. Initially, the RRT was composed of 1 team member, a critical care RN. In June 2005, a pilot program was started to trial the process; the RRT nurses were carefully selected for their critical care skills and their ability to be an ambassador of the program. The critical care RRT nurse responded to designated general nursing units. Process changes were made on the basis of RN evaluation. The RRT was rolled out to the entire hospital by December 2005. Education was provided to physician groups, nursing staff, and directors. In March 2006, RT joined the RRT team. Evaluation/Outcomes: All events are concurrently reviewed for quality assurance and data collection. The team averages 60 calls per quarter; 60% are rescues, 40% are RN assistance. The number of codes outside of critical care continues on a downward trend. Code calls have been reduced by 35%. Staff nurse satisfaction with the process indicates a satisfaction level of 4.93 on a 1 to 5 Likert scale. mgr@pvhs.org

## The Tipping Point: An Internal Certification Rewarding Competency and Knowledge in $\operatorname{ACS}$

Williams J. Evans G. Severance B; Integris Heart Hospital, Okla Purpose: On the basis of evidence-based practice and national quality measures, the Chest Pain Certification (CPC) was developed to ensure the knowledge of nurses working at our hospital. In addition, it provides a means of rewarding them for their competency in cardiology, specifically acute coronary syndrome (ACS). This internal certification was created by the cardiovascular educators, with physician and administration support, as a way of raising the bar, striving for excellence, and improving patient outcomes. Description: The CPC is composed of 5 parts: 3 educational modules, a case study presentation, and an oral panel. A self-learning study packet is provided to the nurse, and covers the core contents of each educational module including cardiac anatomy and physiology, dysrhythmia and 12-lead EKG, and ACS. These modules build on basic knowledge of cardiology and references are available. A written test is taken to complete each module, with a 90% or better passing requirement. After completion of the education modules, the nurse must present an ACS case study, including treatment and patient education, to two thirds of their departmental staff. The culmination of this certification is an oral panel discussion with a cardiologist, which typically involves describing the care of an ACS patient from onset of symptoms to discharge from the hospital. After successful completion of the CPC, the President personally presents the nurse with a check for \$500, a CPC lapel pin, and a certificate. Evaluation/ Outcomes: We have received an overwhelming positive response to this certification. Sixty RNs were certified within the initial 3 months and 36 more are currently in the process of certifying. The CPC has intensified

the collaboration and increased effective communication between nurses and physicians regarding the treatment ACS, which has positively affected patient care. jana.williams@integris-health.com

#### The Wall of Courage: A Message of Strength

Juno J, Akers A, Cassidy P, Klopp S, Spillman J, Sims E, Scott-Miller S, Parker A; University of Michigan Health System, C.S. Mott Children's Hospital, Mich

Purpose: The critical level of care needed for patients managed in a PICU can cause nurses to suffer from a level of moral distress and emotional exhaustion. Patients and their families exposed to this highest level of care experience a broad range of feelings including hope and despair; fear and relief; and thankfulness and grief. Acknowledging these emotions, a team of PICU nurses conceptualized a Wall of Courage. The wall celebrates children and their family's strength, courage, and love while serving as a way to help nurses reconcile difficult events and counteract the effects of cumulative grief. **Description**: The wall is a work of art that showcases the life, characteristics, and personalities of children who have spent a month or more in the PICU no matter what the outcome of their treatment. The work incorporates patient photos and family-written narratives gathered by nurses. Nurses worked with the Department of Interior Design, Gifts of Art, and Child Life to engage an artist to complete a mural of the 4 seasons. The RNs successfully obtained grant funding for the project, engaged colleagues in the process, and supported the work to fruition. Evaluation/ Outcomes: Staff and participating families were surveyed to elicit reaction to viewing the Wall of Courage. In addition, a comment box is mounted at the site to capture unscripted feedback about the artwork. Survey replies and collected comments indicate that the pictures and stories of the children help remind staff of the impact they have on families. Staff express pride in the wall. Knowing that they are not alone in their experiences, families report that the wall provides them with a sense of encouragement and support. Moreover, the visitors report that replacing the large bare space on the wall with images and inspiring stories of amazing children provides a place of peace and serenity in an otherwise high-stress, fast-paced unit. jjuno@med.umich.edu

Sponsored by: UMHS Fostering Innovations Grant

#### To Replace or Not to Replace: Examining the Implementation of an Electrolyte Protocol in the SICU

Dickinson S, Rickelmann C, Kraft M, Kristofick A, Horner R; University of Michigan Hospital and Health Centers, Mich

Purpose: Electrolytes help to maintain many homeostatic and metabolic functions within the body. Electrolyte disorders are common in ICU patients. Electrolyte imbalances as well as improper electrolyte replacement have been associated with increased morbidity and mortality in the ICU. Patients with a magnesium deficiency have mortality rates 2 to 3 times higher and experience longer hospitalizations compared to ICU patients without decreased magnesium levels. Implementation of protocols within the ICU have been shown to reduce morbidity and mortality. **Description:** Over the course of 2 months, data were collected from a sample size of 54 patients, of which 29 were on the SICU electrolyte protocol. Patients who had a creatinine level of greater than 2.0 and/or were on continuous renal replacement therapy or were not on the SICU service were excluded from the protocol. For each patient, 2 to 3 different lab values for potassium and magnesium were recorded as well as any corresponding administered electrolyte replacements. We retrospectively analyzed whether electrolyte replacements were being administered correctly based on the serum lab values as dictated by the protocol. SICU staff nurses were also asked to complete a short survey adressing barriers to the implementation of the protocol. Evaluation/Outcomes: Based on the results of the retrospective review of 29 parient lab sheets and medication administration records, the nurses in the SICU demonstrate consistent replacement of potassium as dictated by the protocol. However, in terms of magnesium, there is a dramatic decrease in the consistency of implementation of the protocol. We concluded that this inconsistency in magnesium replacement therapy could be a factor contributing to the increased number of cardiac arrythmias seen in postsurgical patients in the SICU. sdickins@umich.edu

### Translating Research Into Practice: Graduated Compression Stockings for the Cardiac Surgery Patient

Sendelbach S, Jensen L, Frederickson M, Battle M; Abbott Northwestern Hospital, Minn

Purpose: To develop an evidence-based standard for the use of grad-

uated compression stockings (GCSs) for patients undergoing open heart surgery. Description: The literature supports that GCSs are effective in diminishing the risk of deep vein thrombosis (DVT) especially when used in adjunct with other therapies. Although thigh-high GCSs had been the standard for patients following open heart surgery, nurses identified difficulties with their application and maintenance and patients complained of discomfort. A team of staff nurses, CNS, and physicians conducted a critical review of the literature and examined community standard of the use of GCSs. Although no published studies were found that specifically examined thigh-high versus knee-high GCSs in cardiac surgery patients, several studies were found for patients undergoing other types of surgical procedures. Evaluation/Outcomes: Evidence revealed knee-high GCSs appear to be as equally effective as thigh-high GCSs in DVT prophylaxis. Knee-high GCSs have been associated with less risk and problems and are more comfortable to wear. Knee-high GCSs were made the default choice on computerized physician orders at our institution with the option of thigh-high GCSs if appropriate for the patient. The hospital savings for 1 year of knee-high GCS use rather than thigh-high GCSs were approximately \$2500 per year for open heart surgery patients. sue.sendelbach@allina.com

### Transportable Monitoring/Simulation System Created by Insight, Powered by Energy Turka J; UPMC Shadyside, Pa

Purpose: To optimize care in our 12-hospital health system a transportable monitoring/simulation (TMS) cart was designed to provide critical thinking scenarios and hands-on monitoring skills for the staff in the ICU, ED, and telemetry units. Description: The trend toward early detection and rapid response to changes in patients' conditions requires that nurses have strong critical thinking and assessment skills as well as knowledge of monitoring and emergency equipment. This interactive instruction tool was designed to assist new nurses (and update experienced nurses) in obtaining crucial information that can make a difference in patient outcomes when seconds count. Unlike a simulation lab, the TMS cart is completely mobile. The TMS cart contains a central monitor simulating the nurses' station and patient monitor usually located in the patients' room. Monitoring modules from PA cathters to pulse oximetry are available and connected. A state-of-the-art Fluke simulator simulates cardiac rhythms and pressure waveforms and mimics changes seen in impending crises. A Vigileo continuous cardiac output monitoring device is also attached. The distinguishing feature of this cart is its complete mobility to almost anywhere on campus. Case scenarios based on actual patient conditions and presented with this simulation module require the nurse to identify, evaluate, and react to patient changes both in the ICU and in non-ICU areas. Critical thinking can be evaluated and enhanced during the simulations. Evaluation/Outcomes: The poster presentation will describe the funding, educational resources, simulations, and scenarios. It will highlight the many courses that have used this teaching handson technology. Finally, the poster will highlight the results of adding this new learning device enhancing critical thinking with outcomes assessed both in the classroom and clinical settings. turkajf@upmc.edu

### Triple Lumen Catheter Tackle Boxes as a Mechanism to Reduce Catheter-Related Blood Stream Infections on Acute Care Units

Tacia L, Roth G; Ingham Regional Medical Center, Mich **Purpose:** Catheter-related blood stream infections in ICUs are one of the most common healthcare-associated infections and are viewed by patient safety experts as a preventable complication. The literature is replete with evidence to reduce CR-BSIs in ICUs. Little has been written to assist practitioners with this same task on acute care units. This intiative was undertaken as a mechanism to spread the lessons learned in our ICU. Description: Creation of a central cathter insertion cart, where all necessary supplies are located, facilitates compliance with evidence-based practices in the ICU. Practitioners on acute care units did not have this luxury. It was necessary to go to multiple locations to obtain all the needed supplies. Using the cathter cart concept, a Tackle Box was created for insertion of triple lumen catheters on each acute care unit. Contents mirror the ICU catheter cart, so the only additional expense was a Tackle Box for each unit. A disposable lock ensures that contents remain in place. Placing a checklist in the tackle box prompts caregivers to follow the established protocol and facilitates independent redundancy. The nurses are empowered to stop the procedure if items on the list are not adhered to. After its use, the Tackle Box is taken to the sterile processing department and exchanged for a new one. Evaluation/Outcomes: The triple lumen Tackle

Boxes have proven to be an effective mechanism to assist practitioners in complying with evidence-based protocols by providing all necessary supplies in a quick, efficient manner. Simplifying the process has encouraged physician adherence to evidence-based practices and has supported the bedside nurse in minimizing the risk of an undesirable encounter. LeiLani.Tacia@irmc.org

### Ultrafiltration: Unloading a Burdened Heart

Blackwell M, Harper M, Davis J, Pura L, Sage K, Mcbroom K; Duke University Health System, NC

Purpose: Much of our patient population suffers from end-stage CHF resulting in frequent admissions for treatment of volume overload. Our standard of practice focused on the use of diuretic therapy. Many patients had become refractory to diuretics and we spent much time trying to decrease their fluid load. A new therapy, peripheral ultrafiltration became available that extracted excessive sodium as well as removed up to 500 mL of fluid per hour. Our nursing and medical team agreed to pilot this procedure to determine if there would be a positive emphasis on patient outcome, use of precious resources and decreased LOS. Description: Because nursing staff would be responsible for implementing and maintaining the system, all staff attended a training session on peripheral ultrafiltration. Training included detailed procedural handouts, oral presentations, and hands-on practice. To promote expertise before beginning the pilot, a demonstration circuit set and a pump were placed on the unit to allow staff to simulate the procedure. Didactic education included information on the use of the system, patient lab studies, areas of potential complications, and essential elements of patient/family teaching. Evaluation/Outcomes: This successful pilot has been extended and is now included in the treatment for select end-stage CHF patients on our unit. Improved electrolyte status and weight loss of 5 to 10 kg after 8 to 12 hours of treatment validates the effectiveness. Patient satisfaction is no less dramatic; they commonly report increased activity tolerance and decreased shortness of breath resulting in a significantly improved quality of life. When days are predious because of an end-stage disease process, it is a joy to see the smiles of patients and families as patients maximize their remaining time by returning home sooner, remaining more active and able to participate in the day-to-day activities of family life. black004@mc.duke.edu

### Under Construction: The Journey of Creating a Healthy Work Environment

Cutler C, Cunningham-Roberts L, Steinaway S, Hare K; Harborview Medical Center, Wash

Purpose: CICU staff was discontented and retention and communication were failing. We wanted to introduce to staff to the concept of AACN's 6 standards to establishing and sustaining a healthy work environment. We wanted to rebuild the unit so we could create an improved work milieu. Description: We surveyed our staff using 68 questions ranging from professional interactions to retention. The HR department collated the data so the responses would be anonymous. Over 60% of the staff replied. Following the survey we created an opportunity and environment where all staff members would be present at a mandatory unit retreat off campus. The organization development and training (OD&T) department was involved to help us design a meaningful program to work with the staff and to create a tool we could use to help our unit understand AACN's healthy work environment standards. Working with OD&T, we used the six standards as a guide, creating an exercise where staff could individually list what was important to them in their work environment. Through a series of 8 steps, we ultimately finished the exercises and determined the 6 topics that meant the most to staff and that could transform the work environment. Each topic was presented to the entire group and solutions were established at this meeting. Evaluation/Outcomes: Following the retreat, unit culture was established by using the staff solutions. Twenty staff members signed up for the CCRN exam enabling them to receive valued pay increases. The importance of precepting and mentoring new ICU RNs was also identified and included creating a mentoring class and assigning mentors. Communication improved and the staff started working with the understanding of the components of a healthy environment. A followup to the initial survey was conducted 6 months later using 7 questions, relating to job satisfaction, with a 3% reply of only favorable comments. cutlerce@u.washington.edu

#### **Under Wraps**

Burns J, Davis S; Barnes-Jewish Hospital, Mo

**Purpose:** In this day of 12-hour shifts and weekend option staffing there is little time for attending classes. We developed a process that

addresses ongoing communication; compliance issues; patient safety reminders; low-volume, high-risk procedures; and patient confidentiality. Description: All nursing staff use clipboards to keep their report sheets together. To maintain confidentiality a coversheet was suggested. In collaboration with the unit practice committee and the neuroscience advanced practice nurses, a laminated clipboard cover was implemented. Initial topics included restraint documentation reminders, lumbar drain hints, mannitol administration, chest tube care, and staff updates. Evaluation/Outcomes: Since implementation the staff has verbalized satisfaction with having an immediate available resource that has enhanced patient care. Clipboard covers are updated monthly with additional topics suggested by the staff. This is a tool that has allowed for a new format for in-servicing all staff no matter what shift or frequency worked. sbd4906@bjc.org

### Unraveling the Tubing in the Cardiothoracic ICU

Griffin S; Barnes Jewish Hospital, Mo

Purpose: In the cardiothoracic ICU, many tubes are used for many different reasons. To understand the function of some of these tubes, we adapted the philosophy that "a picture is worth a thousand words." We provided a hands-on display of some of the tubings used in cardiac anesthesia and in cardiac surgery conduits. **Description**: We purchased some tubing and wood at the local hardware store to represent the trachea and neck. Two display tracheas mounted to wooden back boards were used. In one display a double-lumen endotracheal tube was inserted and in the second display a bronchial blocker was placed. A poster was made that showed each device's indications and how it was used. For another display, a heart model with a wooden base was purchased. Clear suction tubing and a red rubber tubing were attached to the model heart, which represented coronary artery bypass surgery. The clear was used to simulate a saphenous vein graft and the red to simulate an internal mammary graft. Evaluation/ Outcomes: All 3 devices were placed in the staff lounge and staff could handle them at their leisure. Staff comments were positive; they expressed how it helped them to have a better understanding of how these devices worked after being able to handle them/Being able to see the size of the tubing it was obvious why people complained of throat discomfort after extubation. Visually seeing the graft locations proved why chest tubes were placed in their current locations. The models have also been helpful teaching tools to patient families to help them understand how bypass surgery is completed and how these complicated endotracheal tubes are used.

## Using Basic Techniques to Rapidly Conquer False Positive Monitoring Alarms

Rimmer L: Barnes Jewish Hospital, Mo

Purpose: The project was designed to continue to improve on patient safety by helping staff nurses reduce the incidence of false positive ICU monitor alarms. A false positive monitoring alarm is triggered by a technical problem, not a clinical patient situation. The alarm parameters for our ICU patients receiving ventilation are ECG rhythm and rate, arterial or noninvasive blood pressure, respiratory rate, pulse oximetry, and endtidal carbon dioxide. Excessive triggering of monitor alarms due to technical problems increases the risk of failure to respond to a clinical patient alarm with possibility of a fatal outcome. Description: A problem-solving booklet was developed to try to resolve this dangerous problem. The booklets are used to teach correct setup of each of the alarm parameters, to differentiate between a technical and a clinical problem, and to rapidly troubleshoot the alarm problem. The booklets are introduced at the start of ICU orientation to stress the importance of reduction of false positive alarms. The information is reinforced by return demonstrations and review during annual skills competency. Laminated reminder cards were developed and placed in each patient room to rapidly assess patient clinical condition and room emergency equipment before start of each shift. **Evaluation/Outcomes:** The nurses have stated that the accumulation of setup and problem-solving information in this one tool has helped them to rapidly intervene to assess and correct alarm situations. Many comment on the calm environment as the false positive alarms have been greatly reduced. A visiting medical professor toured our ICU and spontaneously commented that it was the quietest ICU he had ever encountered. This improvement reduces stress from the constant cacophony of false alarms for all in the ICU. jrimm@hotmail.com

#### Using Six Sigma to Reduce Ventilator-Associated Pneumonia Rates in a Mixed Population ICU

Leaton M, Fetherman B; Morristown Memorial Hosptial, NJ **Purpose**: In 2004, our ventilator-associated pneumonia (VAP) rate was 4.7/1000 patient days. Despite implementing the Institute of Healthcare Improvement recommendations for reduction of VAP, our rate only decreased to 4.0/1000 patient days in 2005. To further reduce our rates, the decision was made to implement a Six Sigma quality improvement initiative. Description: Six Sigma is a statistical measure of quality and a process for continuous improvement. An interdisciplinary team was lead by the ICU CNS to implement this project. The baseline Sigma was 4.0 with 4768 defects per million opportunities (DPMO). The team used brainstorming and a cause-effect grid to identified 28 possible factors that may be contributing to the development of VAP among our patients. Those 28 factors were collected on the 19 VAP patients from 2004 as well as a cohort group of 19 patients that did not develop VAP during 2004. Descriptive statistics, ANOVA, and chi square analyses were performed on these datal 5 factors reached statistical significance (P<.05). The team used an impact effort grid to prioritize possible solutions to address those factors. Our Optimize Solution Plan focused on education, standardizing administration of enteral nutrition and oral care practices, aspiration precautions, use of chlorhexidine oral rinse, decreasing the time until cervicalspine clearance was obtained, and use of meter dose inhalers for respiratory treatments. Evaluation/Outcomes: A 6-month trial was implemented. The 6-month VAP rate was not statistically significant from the baseline VAP rate. Although the VAP rate decreased to 2.0/1000 patient days, the DMPO decreased to 2763, and the Sigma increased to 4.7. We found Six Sigma to be an effective quality improvement methodology for reducing VAPs in a mixed patient population ICU. marybeth.leaton@ahsys.org

### Utilization of a "Patient Passcode" to Safeguard Protected Health Information During Telephone Communications

Emmons P, Cushman L, Aulbach R; St. Luke's Episcopal Hospital, Tex Purpose: Nurses are often asked to disclose patient clinical information over the telephone. The identity of the caller and patient consent for that caller to have information is difficult and time-consuming to confirm. The HIPAA Privacy Rule requires the adoption of reasonable safeguards to protect the privacy of patients' health information. The purpose of the Patient Passcode Program is to provide a consistent and easily adopted method to ensure that protected health information (PHI) is released only to patient-authorized individuals. Description: The passcode number is the patient authorization to release PHI. The responsibility for release and security of this passcode belongs to the patient who may release the it to any family member or individual. A person requesting patient information by telephone must be able to state the passcode before the staff will release any clinical information. Individuals without the passcode are referred to the patient or family. The passcode is a uniform 4-digit sequence of the medical record or account number. Every patient is given a written explanation and a passcode card upon admission. The Patient Passcode Program ensures that individuals calling to inquire about information regarding a patient indeed have the patient's consent to have that information. Nursing administrators and the hospital HIPAA Compliance Officer enthusiastically supported the program. Initial program rollout occurred simultaneously in all patient care units of the hospital. Evaluation/Outcomes: Initial surveys of patients', families', and nurses' responses to this creative solution regarding telephone compliance with the HIPAA Privacy Rule are positive. This poster will present findings of this initiative through a review of data collected from patient and family surveys and nursing staff evaluations. jemmons@sleh.com

#### Utilizing a 1:1 Decision Algorithm to Increase Staffing When Patient Care Demands Exceed Existing Nursing Resources

Rogers A, Mathews J, Ozanne L, Barry J, Perry J, Mccarthy B, Beare M, Logsdon C; Memorial Health University Medical Center, Ga

Purpose: To maintain an optimal level of patient care in a safe environment, a critical care 1:1 decision algorithm will be used when patient care demands exceed existing nursing resources. Description: We reviewed results from quality improvement data of increased patient ID errors, medication errors, falls, and hospital-acquired decubitus ulcers. The Unit Practice Committee conducted a nursing survey among the staff and their consensus was that insufficient staffing during times of increased patient acuity hampered nurses' ability to provide a safe environment for patient care. They developed a plan that will use a 1:1 algorithm to evaluate periods of increased patient acuity and the need for increased nursing resources. A voluntary on-call signup was implemented to increase staffing in times of need. We will pilot the project for 6 weeks in our medical, surgical, trauma, and neuro ICUs. Evaluation/Outcomes: We will be monitoring pretrial and posttrial factors affecting patient safety as evidenced by

patient ID errors, self-extubation, VAP rates, skin integrity, and pretiral and posttrial nursing survey. Based on feedback and analysis of data, the decision algorithm will be modified as needed. The results will then be presented to team members and submitted to nursing leadership for permanent application. rogeran1@memorialhealth.com

### Utilizing a Collaborative Approach for Tight Glycemic Control to Improve Outcomes in the Cardiac Surgery Patient

Gallant P; Maine Medical Center, Me

Purpose: (1) To develop a tool that could easily be used by nurses both in the ICU and the step-down unit setting. (2) To develop a comprehensive education plan for the patient and family on glucose control. (3) To decrease sternal wound infections, LOS, and atrial fibrillation rates. Description: Rigorous perioperative control of high blood glucose levels via continuous IV insulin infusion (CIII) has been widely used in the OR and ICU to improve outcomes for cardiac surgical patients. To further enhance outcomes, the step-down unit began to extend the use of CIII protocol for up to 96 hours after surgery. The nursing staff, nutritional services, physicians, physician assistants, and graduate students met and developed a partnership to implement tighter glycemic control in the ICU and the step-down unit. Interdisciplinary working sessions on tight glycemic control led to a revised hyperglycemia protocol. Research conducted in 3 phases addressed the barriers in following the protocol. As a result, a tool was developed in the form of a nomogram to assist staff in maintaining tighter glycemic control. A comprehensive education plan was put in place for all disciplines, patients, and families. Following the implementation of this regimen, there was a 50% decrease in deep sternal wound infection and a 40% decrease in atrial fibrillation. In addition a cardiac surgery instrument panel was developed, which provided continuous feedback on our outcomes. The goal to maintain tight glycemic control in our cardiac surgery patients has led to a more collaborative approach for evaluation of our practice. Evaluation/Outcomes: (1) A nomogram was developed for the ICU and step-down units. (2) A diabetic education plan was developed and revised for patients and families in preparation for discharge. (3) Sternal wound infections, atrial fibrillation rates, and LOS were monitored for any increase. Pgallan1@maine.rr.com

### Utilizing the Operational Index TM to Design a Strategic Plan for Smart Growth in the Critical Care Unit

Hines P, Moss J, Larson M, Randall M; Sg2, Ill

Purpose: Critical care units account for approximately 10% of an acute care hospital's beds and approximately 30% of the costs. Innovative and effectively managed critical care units provide comprehensive care that optimizes clinical, operational, and human capital investments while achieving desired outcomes. The Operational Index TM allows a critical care unit to understand their current level of innovation and effectiveness. With this baseline information a Smart Growth strategic plan is developed that focuses on enhancing organizational effectiveness and adopting innovations that support future organizational growth. Description: The Operational Index TM is a tool composed of more than 200 criteria related to innovation and effectiveness dimensions, with particular emphasis on operational practice, clinical practice, and human capital investments. The innovative criteria are weighted by level of use and operational impact, while the effectiveness criteria are weighted based on their relative reflection of departmental performance. Once analysis is completed, the department receives a profile of their current level of innovation (early adopter to consensus adopter to late adopter) and their current level of effectiveness (on a scale of 1 to 5). Evaluation/Outcomes: The Operational Index TM Profile allows a multidisciplinary critical care team to develop a 1- to 3-year Smart Growth strategic plan that identifies the priorities for adoption of innovations, whether related to operational practice, clinical practice, or human capital investments. Success is measured through a monthly scorecard of the key elements of the strategic plan and annual reevaluation of progress in innovations and effectiveness through the Operational Index TM.

#### VAP: Implementation of Evidence-Based Interventions

Barta K, Ĺigi C, Mozealous N, Amarante L, Brennan M, Merkouriou N; Midstate Medical Center, Conn

Purpose: Following release of the AACN Practice Alert on VAP and the Institute for Healthcare Improvement (IHI) 100,000 Lives Campaign on preventing VAP, an interdisciplinary healthcare team was created to identify evidence-based interventions that would achieve the best possible outcomes for patients receiving ventilation. Description: VAP has proven

to increase ICU length of stay, cost of hospitalization, morbidity, and mortality. When implemented together and consistently performed for all patients receiving mechanical ventilation, the IHI Ventilator Bundle and AACN Practice Alert for VAP provide evidence-based practices result in significant reductions of VAP occurrences. The VAP interdisciplinary healthcare team started the implementation by updating the present institution standards to reflect current best practices related to ventilatory care. Ongoing staff education and monthly data analysis provided the direction needed to improve outcomes. Evaluation/Outcomes: There were 12 VAPs in 2004 and 2005, above the 75th percentile compared to CDC national VAP benchmark data. Ten months into 2006, there have been only 2 VAPs. This reflects a VAP rate of 1.1 VAPs/1000 ventilator days, significantly below the 10th percentile compared to CDC national benchmark data. This rate is also significantly below the initiative's 2006 goal of 3,7 VAPs/1000 ventilator days and reflects more than an 80% reduction compared to the same timeframe in 2005. Continued interdisciplinary focus on the VAP prevention strategies, combined with data analysis, assessment, and feedback have resulted in improved patient outcomes of patients receiving mechanical ventilation, and a statistically significant reduction of VAPs. KBarta@midstatemedical.org

### What Is So Progressive About a Thoracic Surgical Progressive Care Unit?

Kopecky E; Mayo Clinic, Minn

Purpose: To describe successful components of a combined PCU/general care unit. Description: The excellent working relationship of a multidisciplinary thoracic team is the basis for a successful PCU/general care unit. The unit has 33 beds with hardwire bedside ECG, pulse oximetery, arterial catheter, and telemetry monitoring capabilities. Patients are a mix of monitored PCU patients and nonmonitored general care patients. About 66% of the patients admitted to the unit are monitored at some point during hospitalization. Approximately 25% are monitored immediately after surgery. Monitoring may be initiated by nursing for assessment before the physician seeing the patient when a patient's status warrants it. When a patient meets criteria, the physician will discontinue monitoring. With the support of annual ECG interpretation competencies, ACLS certification, protocols, respiratory therapy, and an integrated pulmonary rehabilitation program, nurses on the thoracic surgical PCU prevent or manage the most common postoperative complications for the thoracic surgical patient. Admission to the ICU for arrythmias and respiratory compromise is minimized. When a patient experiences a change in status the team consults with critical care unit physician staff that will assess the patient to determine if a transfer is required. Evaluation/Outcomes: Less than 13% of the thoracic patients use ICU beds. Patients admitted directly to ICU are from PACU, have known high-risk comorbidities, or require mechanical ventilation and active titration of medications. The average LOS for patients in the ICU is 7.14 days with a median of 3 days. Eighty-seven percent of thoracic surgical patients spend their entire hospitalization on the PCU/general care unit. Patients may come off the monitor more quickly than if they were in the ICU. Staff has increased satisfaction in their skill, support, and resources available to manage these patients. Kopecky.Eugene@Mayo.Edu

#### When Surfing the Net at Work Is a Good Thing

Anness E, Tirone K; Harborview Medical Center, Wash

Purpose: Keeping apprised of frequently evolving medical and nursing information can be challenging. Often, updates and notices are tacked to bulletin boards and eventually stuffed into binders, which can be misplaced. This project was created by the staff nurses of the neurosurgical ICU to improve communication by using a centralized online tool that all staff can easily access at work and at home. Description: Volunteer staff was recruited from all shifts to identify our unit-specific communication needs and to develop our Web page. We used our hospital Intranet to develop our own Web page, which is a secure site. Our needs were identified and then divided into 4 main links from our home page: (1) Clinical /Hospital Updates—general clinical information from educators, nursing administration, and our nurse manager, with links to all of the online policies and procedures; (2) NICU Unit Updates—a virtual bulletin board for memos and relevant unit-specific information, including patient care standards, product changes, upcoming studies, product in-servicing, staffing and scheduling, new hires, open positions, meeting minutes, and staff retreat information; (3) Education—links to hospital education, community-based training, and continuing education within the university; and (4) Social Board—a gathering place for staff-focused social events including luncheons, birthday parties, thank you notes, and letters from former patients and their families, unit-supported charity events, and recipe sharing. Evaluation/Outcomes: Staff surveys before and after implementation showed an increase in staff satisfaction with unit communication. In the spirit of continuous improvement, periodic staff surveys will return valuable information for needed updates, and employees are invited to submit prospective postings for updating and improving our Web page. This project is our unit's primary communication tool and will remain employee driven. banness@msn.com

#### Where Do We Begin? Initiation of a Total Artificial Heart Education Program in the Cardiac Surgery Intensive Care Unit

Lockhart S; Virginia Commonwealth University Health System, Va Purpose: The American Heart Association reports 5 million people in the United States have an existing diagnosis of CHF. Heart transplantation remains the gold standard of surgical treatment for end-stage CHF. Unfortunately, the demand for donor hearts increases annually, while the supply remains constant. Strategies are needed to enable patient survival until a suitable organ becomes available. One such strategy is the Syncardia CardioWest Total Artificial Heart (TAH), a temporary biventricular support device. This abstract describes the development and implementation of an educational program for nursing care of the TAH patient. **Description**: The need to establish an educational program for the cardiac surgery intensive care unit (CSICU) staff was necessitated by the institution of the TAH program at our institution. The CSICU cardiac assist device team was challenged with learning new TAH skills along with enhancing their present knowledge base. Crucial assessment of existing resources was conducted. Intense didactic training was held detailing the nurse's role. Patient simulation exercises were conducted with a mock circulation module. Patient care guidelines were established. A unit-based TAH manual was created detailing device background, preoperative and postoperative considerations, implant/explant procedures, laboratory studies, anticoagulant regime, troubleshooting techniques, and device management and mobility. Evaluation/Outcomes: A successful TAH education plan has served to expand the knowledge and skills of the CSICU nurse while promoting expert patient care delivery. TAH protocol-driven practice has been established and has contributed to the postoperative care of the entire CSICU patient population. TAH learner evaluation feedback has resulted in an ongoing improvement driven learning process. slockhart@mcvh-vcu.edu

### Where Have All the Cables Gone?

Eager S, Jores C; Florida Hospital Medical Center, Fla

Purpose: The Nursing Practice Council (NPC), made up of CVICU staff nurses, decided to tackle the frustrating and costly problem of lost, damaged, or missing monitor cables. Several solutions were attempted but the 2 most effective solutions were an inventory system and the development of an innovative device that preventa cables from being moved from one room to another as nurses were preparing for direct admissions from the OR. **Description**: Each patient room has a 6-cable setup. Cables were often missing creating delays in patient care. Valuable nursing hours were lost locating, disinfecting, and setting up a cable-ready room. The NPC devised several possible solutions, one of which included an inventory system, cataloging and tracking all cable and modules. In addition, it was felt that if there was a way to secure all 6 cables together it would prevent them from being lost or misplaced or damaged because of the number of times a cable is plugged in or pulled out when a patient moves to another room or is transferred out of the unit. One of the NPC members developed a prototype of a device and named it the EAGER LOC. The EAGER LOC consists of a reinforced nylon plastic closure that is secured with a same-key padlock encasing all 6 cables. The nursing staff was inserviced on the application and purpose of the EAGER LOC. This device was implemented in all 28 rooms of CVICU. Evaluation/Outcomes: Since initiating the inventory system and deploying the EAGER LOC in each of the CVICU rooms, all cables have been accounted for and no cables have been replaced because of loss and damaged cables are at a minimum. Rooms are kept patient ready at all times and valuable nursing time is not wasted finding cables; this, in turn, has increased nursing satisfaction. Susan.Eager@FLHosp.org

Work Redesign: Stopping the Revolving Door Without Getting Stuck Dalesandro K, Hammond M, Lovasik D, Saunders C, Scholle C, Snyder L; UPMC Presbyterian, University of Pittsburgh Medical Center, Pa Purpose: Our 24-bed progressive care unit for abdominal transplant

patients experienced a dramatic increase in RN turnover (12% vs 3% housewide). This drew administrative attention to develop creative solutions to resolve staff concerns and physician issues. The goal was to decrease voluntary RN turnover and ultimately improve patient satisfaction and outcomes. Description: Using process improvement techniques and staff involvement, a systematic approach of defining "as is" conditions and developing "target" conditions for redesigning the work environment was implemented. Multiple stressors were identified including a move to a different building, integration of 2 specialty units into 1 59-bed unit, and increasing patient volume and acuity (patient volume tripled between 2002 and 2006). Based on clinical observations, several key innovations were implemented including division into 2 units based on patient acuity (24-bed progressive care and 35-bed surgical unit with both specializing in abdominal transplant); reorganization of clinical leadership and nursing staff; establishing modified patient-to-RN ratios in the progressive care unit; geographically-consolidating assignments; developing a RN/advanced patient care technician partnership; assigning pocket phones to all staff members; purchasing individual supply carts for the patient rooms; restructuring shared governance including self-scheduling; and using electronic nursing documentation. Evaluation/Outcomes: In the beginning stages of the project, it was stated that the limits of our systems and processes would be stretched and some innovations would not be successful. This ongoing process continues to engage the staff in defining the boundaries of their own practice. Since implementation of this innovative work redesigns in June 2005, voluntary RN turnover is 0%. dalesandroka@upmc.edu

### You Can Breathe Now: A Teaching Tool for Families of Ventilated Patients in the ICU

Wald M; Seton Northwest Hospital, Tex

Purpose: ICU nurses spend a lot of time teaching, answering questions, and explaining treatment modalities and plan of care to family members. There are common questions asked by family members, and the same questions are asked more than once, indicating a lack of retention of the initial teaching. When the ICU patient is intubated, this adds a whole new set of questions and shows a knowledge deficit in most family members. Providing these family members with an easy-to-understand informational pamphlet gives them knowledge, lessens their fears, and reinforces our explanations, thus establishing trust in the nursing staff. **Description:** Patients' families have many questions, yet retain very little of the information initially told to them because they are overwhelmed by the critical condition of their family member. Both family members and nurses would benefit from giving family members a teaching pamphlet that they can keep and refer to. The nursing staff compiled a list of the most frequently asked questions by family members. This list was organized in questions and answers and written in an easy-to-understand format. To aid in the teaching process, a simple drawing of the respiratory system was included in the pamphlet. Evaluation/Outcomes: The teaching tool You Can Breathe Now is given only to family members who have a loved one receiving mechanical ventilation. Nurses can use this pamphlet during the initial teaching. The family member can take the pamphlet and review it later. Family members have demonstrated a better understanding of the treatment and plan of care for their loved one. Nursing staff have one more tool at their fingertips to help in the teaching of critically ill patients' families. mwald@seton.org

### You Sink, We Float! Floating Is a Specialty

Thompson T, Talley C, Bruce T, Floyd L; The University of Michigan Health System, Mich

Purpose: Staffing of specialty units and ICUs requires RNs with specific skill sets. Our institution has met this challenge by establishing the Central Staffing Resouce Department (CSR), a permanent float pool with 7 specialty clusters. **Description**: CSR, a large department with more than 600 employees, provides nursing and ancillary staff to 35 inpatient units and 141 ambulatory care clinics. Each unit and clinic serves a specific patient population. CSR is divided into 6 inpatient clusters and 1 ambulatory care cluster with 3 separate focus areas. CSR nurses float within their cluster and are considered specialists. CSR RNs have an expanded skill set that allows them to work safely and effectively within their cluster. They must be flexible and able to adapt rapidly to various clinical settings. CSR RNs have strong assessment skills and a comprehensive knowledge base that allows them to select interventions appropriate for a patient population that can change daily. CSR RNs are oriented to skill sets that reflect their cluster's needs. These skills are reinforced annually through competency testing and hands on education. Evaluation/Outcomes: CSR as an

internal, highly qualified float pool supports our institution's mission to provide excellent patient care while improving staffing ratios. Staff satisfaction is increased as evidenced by a low 8.1% departmental turnover rate, compared to a hospital-wide turnover rate of 10.8% and the national rate of 13.9%. The CSR has resulted in increased satisfaction, decreased costs, optimized resources, and improved patient care. theresat@umich.edu

### A Place to Grow: Carolina Dogwood Chapter

Anderson B, Thomas L; Carolina Dogwood Chapter, NC Purpose: As a small chapter, our goal was to increase our membership by creating an atmosphere in which our nurses felt comfortable and would come and learn more about critical care and AACN. Description: New nurses today place a high value on learning and growing their knowledge, so our chapter decided to focus our efforts to grow our membership on just this concept. Historically, our chapter has offered continuing education lectures on current topics. Since North Carolina now is requiring continuing education for license renewal, we decided to use this requirement to help us in recruiting nurses into our chapter. The chapter leadership asked members to go on an aggressive campaign to query fellow nursing staff as to what current issues they would like to learn more about. Upon obtaining suggestions, we engaged several of these nurses who had voiced an interest in a topic, to help secure a speaker for the meeting. By recognizing their suggestions and eliciting the staff's help, we were able to get new people involved in our chapter. The chapter also used resources available from the national level to assist us in our efforts. Mary Holtschneider, a member of the national board, came and spoke to our chapter on AACN's Healthy Work Environment Standards initiative. Having a nationally known speaker added creditability to our chapter and its programs, which helped us in our recruiting efforts. Evaluation/Outcomes: By engaging the staff, we have increased our turnouts at the meetings and have added 7 new members in 2 months. As a chapter, we were able not only to grow our membership, but we were also able to develop new leaders.

#### Pay It Forward

Stutzer-Treimel K, Irmiere C, Rich M; Northern New Jersey Chapter, South Hackensack, NJ

Purpose: As part of the ongoing mission of the Northern New Jersey Chapter, the Board of Directors is committed to supporting the national scholarship fund as well providing local programs at a reasonable fee. To meet these goals the board sought sources of income beyond membership dues and program registration fees. Description: Actively partnering with industry vendors helps maintain reasonable program fees. One strategy to sustain this partnership is a dedicated board member to manage vendor support. This person serves as the contact for all programs and acts as the liaison for vendor participation. This board member keeps track of all the local vendor representatives, inviting them to support programs throughout the year. The program brochures acknowledge sponsoring vendors. At the educational program we ask attendees to seek out the representatives to express thanks for their presence and financial support. A written thank you is sent to the vendor summarizing the program's success. Another partnership strategy is writing grant applications. Members of the NNJ Board wrote an application for financial support in order to run a half-day program. At the end of the program there were extra funds. In the letter thanking the company for its generosity, the Board let it know that funds were left and asked to return them. The company allowed the chapter to use the funds to plan a second program. The registration fee from the second program allowed the chapter to make an additional donation to the AACN scholarship fund, thus allowing the chapter to "pay it forward." Evaluation/Outcomes: By building relationships with industry partners and careful stewardship of grant resources, funds were available for two programs. The administrative fees charged for managing registration were donated to the AACN scholarship fund above the yearly pledge. Partnering with industry allowed us to increase our financial commitment to the AACN scholarship fund.

#### What Is a CAT?

Hodge K; AACN Chapter Advisory Team Colead, Calif

Purpose: Clarity around what members of the AACN Chapter Advisory Team (CAT) do is somewhat unclear to chapters as evidenced by questions and expectations experienced by various CATs. Using the CAT job description and experiences from the role, this CAT seeks to provide education that clearly articulates who members of the CAT team are and what their job and function is as well as how they can be used to support and mentor local chapters. Description: This poster will contain information that

identifies who CATs are, how they support the mission, vision and values of AACN through chapter mentoring, and support and the CAT job description and functions. **Evaluation/Outcomes**: The expected outcome is that chapter leaders will have a clearer understanding of the CAT role and be armed with knowledge that allows them to use their CAT to help them grow and support their local chapter. Kim.Hodge@AACN.org

## Powered by Insight: A Successful Chapter Project. A Moment of Reflection and an Idea Grows Into Reality

Crawford R; Old Salem Chapter AACN, NC

**Purpose:** To continue the development of a strong chapter that meets the needs of its members and community through outreach to others while promoting the National AACN vision and values. Description: Our chapter felt the pain and agony of Hurricane Katrina and wanted to help. Money was collected at one of our monthly meetings and sent to the Red Cross to distribute as needed. Our chapter wanted to do something more and helping our fellow healthcare professionals became the theme. We felt their anguish of loss while still working under such extreme conditions to provide needed healthcare to patients. Nurses in New Orleans that had lost/everything of their own but were able to continue to work might benefit from some "gently used" uniforms so that their money could be used for necessities. A project plan was developed to collect and send uniforms to help our fellow healthcare providers in New Orleans. We placed signs in 4 area hospitals in which our chapter members worked to announce our plans. The donations came from the critical care areas at first, but soon the donations were coming from all areas of the hospitals. We received bags of uniforms that were in great shape. Initially, one member's church was planning a trip to New Orleans to assist with the devastation and offered to transport the uniforms. The service project evolved with a tremendous outpouring of uniforms, so we extended the deadline. A local packing company offered to transport the uniforms for us. **Evaluation/Outcomes**: Our chapter met and exceeded our vision to assist not only our fellow critical care RNs, but also other hospital workers in New Orleans that had experienced the devastation of Hurricane Katrina. Our chapter received donations of more than 300 "gently used" and more than 200 new uniforms. A local package company donated the shipping fees and we sent 14 boxes of uniforms to 2 hospitals in New Orleans for distribution. An article regarding the uniform drive was placed in the local newspaper. rdc3609@netzero.com

## Powered by Insight: Unfolding a Challenged Chapter. A Near Death Experience

Teal J; Heart of the Piedmont Chapter, NC

Purpose: To describe and outline the turbulent journey of the Heart of the Piedmont Chapter from near death to success. Description: Discuss strategies used by Heart of the Piedmont leaders that turned around a dead chapter. Strategies, such as conflict resolution, SWOT analysis, and needs assessments. A journey towards excellence that sought to determine what really mattered to chapter members. Evaluation/Outcomes: The chapter began to thrive and is a twice winner of the President's award. tealsrus@northstate.net

### Trauma Series Nurses Caring for the Patient and Community Cochran D; Northeast Georgia Chapter, Ga

**Purpose:** To continue to provide education to critical care nurses and ancillary staff on trauma patients and reach out to the community through educational programs. Description: The Northeast Georgia Chapter has been providing, to AACN members and acute care nurses, monthly educational dinners and 2 yearly symposiums for continuing education credits. We are expanding to the community to reach teens on trauma/ accidents and nonsmoking educational programs and to develop the role of the critical care nurse and provide positive role models. Evaluation/ Outcomes: We increased our membership base to include medical and ancillary staff who help provide lectures to the critical care nurses and collaborate with nursing schools to use a clinical day to attend symposiums. We provided 3 scholarships to nursing students interested in working in critical care. To 5 applicants who did not receive scholarships, we offered national memberships to AACN to start off their professional nursing careers. Local high school students received informative lectures about trauma patients and the role of the critical care nurse. Chapter memberships increased by at least 1 member every other month. Nurses started discussing the topics of the evening meetings, attended by ICU/CCU nurses, physicians, and pharmacists, which help reinforce protocols at our hospitals. deborah.cochran@nghs.com

### The Dead President's Society: Creative Strategies for Chapter Succession Planning

Noe C; Southwest Georgia Chapter, Ga

Purpose: To provide a creative solution to (1) the problem of recycling of chapter leaders, (2) mentoring the next generation of local leaders, and (3) hardwiring concepts of succession planning into chapter operations. **Description:** As our local chapter evolved over the last 5 years, we heard from other chapters about the problems associated with an inability to recruit members willing to step up into leadership positions. Often, this problem leads to burnout and sometimes results in chapter disbandment. Recognizing the value of the experience of chapter leadership in the career development of the nurse, we wanted to ensure that our local chapter was a place to develop the next generation of nurse leaders, while demonstrating value and appreciation to previous and committed chapter leaders. The Dead President's Society (DPS) is a group of 3 previously experienced local chapter leaders of AACN, who actively mentor the current leadership. The DPS informally meets with the current AACN president and presidentelect, at least every other month, in a social setting, to provide suggestions, guidance, and advice for local chapter activities and AACN initiatives. Thus, the president has the DPS as a sounding board for the management of meetings and chapter operations. **Evaluation/Outcomes**: As a result, all previous chapter leaders report feeling valued and appreciated for their role in the success of the chapter. Current leaders have expressed equal appreciation for the mentorship and support they have received during their leadership tenure. It has also resulted in the next president expressing that they feel prepared to step into the leadership position. In addition, the chapter has not experienced problems with enticing nurses to apply for leadership positions during the election cycle. cnoe@ppmh.org

### Setting the Example: Planning a Healthy Work Environment Collaborative

Lowe L, Hartzo C, Norris E, Webb L, Williams M, Ducati N, Ferguson C; Southwest GA Chapter, Ga

Purpose: Recognizing the need for a true cultural change to a healthy work environment (HWE) within our local community was not limited strictly to critical care, our AACN Chapter developed a collaborative partnership with 6 nursing organizations with the goal of presenting a HWE Summit to area nurses, physicians, and institution leaders. Description: Following the model of the Region 6 Collaborative for an annual clinical conference, our chapter approached several other local nursing organizations (ASPAN, AMSN, OCN, ENA, GAONL, and AWWOHN) to partner on a community summit to be held in March 2007 that would discuss issues related to the HWE standards. The end goal is to get institutional and professional commitments toward implementing these standards at each organization and by each healthcare provider. The team selected a representative from each nursing chapter to be the liaison between the steering committee and their own group. Our chapter was designated as the project manager for the program, but each chapter committed to take on one of the essential elements necessary for conference planning (eg, speakers, venue, marketing, registration, CE, vendors). A special AACN account was created for the sole purpose of managing the financial aspect of the conference. Our chapter had funds remaining from the last conference that was used as seed money to start the process rolling. Each element of the HWE standards is being used to plan this program. We have authentic leadership with nursing leaders committed to working together to achieve this goal; effective decision making with the steering committee making decisions based on transparency and trust; appropriate staffing by using each chapter's strengths with the assignments; meaningful recognition by promoting individual and institutional participation; skilled communication by establishing effective timelines and clear accountability expectations; and lastly true collaboration by earnestly seeking to provide this program for the good of all professions, institutions, and the community. Evaluation/Outcomes: As of October 2006, each chapter committed wholeheartedly to implementing this program. The steering committee has been established with areas of accountability assigned and time lines determined. Connie Barden and Suzanne Gordon have both agreed to be speakers at the conference. In addition, there is a community buzz about this program. Several institutions have agreed to support this program and are committed to supporting physician attendance.

#### Engaging the Next Generation in the Power of AACN Collins A, Watson S, Nelson C, Berry B, Clifton M, Gilliland B; Greater Birmingham Chapter

Purpose: Our chapter targeted recruitment of new graduates from 5

different schools of nursing. To accomplish this goal 5 faculty who were also members of AACN were recruited to become a taskforce. The taskforce developed 4 proposals and forwarded them to the local board for approval. **Description**: The first initiative of the taskforce was to develop a proposal to give 4 \$500 grants for which the students would apply. Two grants would support attendance at the regional AACN meeting and NTI. The additional 2 grants could be used by the students to defray educational expenses. One grant was designed for an ADN student and one for a BSN student. The second initiative was to have students join AACN at the student rate and allow them free access to the GBAACN meetings for the first year. The third initiative was to dedicate one local meeting specific to the educational needs of the new graduate in critical care. The final initiative was to develop a link on the local chapter website where students could ask a CCRN or CCNS about critical care nursing. The chapter president also developed an electronic letter inviting all interested students to join our professional organization. Evaluation/Outcomes: Two students attended the Region Six AACN meeting in September 2006 through support from their college. The Board approved the grants and currently the students are being ranked for the grant award. The taskforce increased the student's involvement and provided a mentoring relationship to enhance involvement in AACN at the local, regional, and national level.

Building a Sustainable Chapter Leadership Pipeline

Abenojar J, Rodriguez O; Memorial Hermann EICU Advantage, Tex Purpose: To outline the succession planning process of a chapter and ensure that key leadership positions are filled with qualified candidates in advance of actual need. Description: The Houston Gulf Coast Chapter is a rapidly growing professional organization strongly identified in the Texas Medical Center and the surrounding areas. The chapter's strong track record is a testimony to the leadership skills, but also to the talented and motivated volunteers that the chapter has attracted and brought into being over the year. Members beginning their volunteer leadership role typically start at a committee level. Members inclined to continue, advance in their role based on self-motivation and the support of the HGCC governance, including the advisory board. The HGCC Advisory Board, composed of past presidents, provides an important leadership perspective from outside the HGCC governance structure. This unique leadership succession has proven advantageous to the leadership development of the chapter. Evaluation/Outcomes: Succession planning is more about developing candidates for success more than just elections, but also a self-perpetuating succession of leaders. p\_abenojar@yahoo.com

## The Carolina Coyotes: Creating the Optimal Yield of Organs for Transplantation to Enhance Survival

Walton K, Burris G; Carolinas Medical Center, NC

Purpose: To optimize organ yield, which will save and/or enhance hundreds of lives each year. Each day 18 people on the transplant list die waiting for organs they will never receive. With the organ transplant waiting list fast approaching 95 000, our team was charged with increasing the number of donors and increasing the number of organs from each donor. **Description:** The Carolina Coyotes was formed as a result of the Organ Transplantation Breakthrough Collaborative. The multidisciplinary team consists of: nurses, physicians, transplant team, and organ procurement team. With our outcome of increased organ procurement and increased organ yield clearly in sight, we formulated solutions around 3 themes: leadership, education, and outcomes. Examples of our creative solutions include (1) consultation with our medical examiner to discuss refusals, (2) formalizing and defining the leadership role of the physician, (3) automatic surgical critical care consults on all consented organ donors, (4) organ donation workshops developed for critical care nurses by critical nurses to enhance the knowledge of predonor care, (5) development of a team to review and address compassionate end-of-life care for donors, (6) reviewing, updating, and implementing our donation after cardiac death protocols, and (7) prompt after action reviews of all donors to identify potential problems and solutions. Evaluation/Outcomes: Since the creative solutions have been implemented, we have seen a dramatic increase in our number of organs transplanted per donor or yield increase. Our overall goal was 3.75 organs transplanted per donor. To date, our expanded criteria donor organ transplants have increased from 2.0 to 3.67. Our overall standard criteria donor organ transplants have increased from 3.17 to 3.82. We continue to identify opportunities for improvement as our success is measured by each life we save. ickellyw@prodigy.net