Hallmark Health System
Nursing News
Fall 2012

Notes from Nancy

Dear colleagues,

Together we drive nursing excellence and high quality patient care through the use of research, best practices and innovations.We have learned that an evidence-based practice (EBP) approach to care increases patient satisfaction and produces better patient outcomes. EBP activities foster an environment of clinical inquiry, a foundational component of our professional model of care and care delivery model. We as nurses critically appraise the growing volume of scientific information on the most effective practices in order to integrate new knowledge and provide the best care to all patients across the continuum of services.

With the guidance of our Nurse Scientist, nurses formulate well-designed clinical questions, search the literature, evaluate evidence, integrate findings into practice and evaluate the outcomes in the clinical setting. The Evidence Based Nursing/Research manual, located in Policy Manager, is available to all nurses electronically from any desktop computer. This manual along with the Nursing Quality Plan outline the performance improvement cycle utilized at HHS, plan-do-check-act. Since nurses are central to care delivery, many lead and participate on quality improvement teams and are essential members of many interdisciplinary committees that oversee care practices and guide improvements in care delivery.

The Nursing Research Council (NRC), a key component of the nursing governance structure, underscores this commitment. The role of NRC is to promote inquiry, support investigation and facilitate dissemination and integration of evidence based nursing knowledge that will impact the practice of nursing. The NRC mentors nursing staff in the utilization of EBP process through individual and group work. Council members are available to provide guidance and assistance as necessary related to EBP. The council also sponsors programs, such as article critique sessions and EBP related workshops or courses, as well as journal clubs.

The councils provide leadership for the use of research findings, ensure that quality data is an integral component of clinical practice and policy development, and promote a scientific approach to problem solving in measurement, management and delivery of patient care. Discussion about status and progress of quality measures, EBP and process improvement projects are ongoing. The Nurse Scientist and members of the Nursing Research Council serve as mentors for the unit-based councils and are available to you to guide you in the process of EBP.

The nurse scientist guides units to begin and sustain journal clubs. The journal clubs are the units' catalyst for incorporating evidenced based practice. The staff use the journal club structure to review peer reviewed articles on a particular practice that pertains to their area. Journal clubs on various units have explored and implemented practice changes as a result of the evidence. The HHS library offers an extensive collection of nursing and medical journals and a set of services to support clinical, research and EBP activities.

There are many processes in place to support and encourage you to use evidence to evaluate nursing practice. Structure and processes in place include the HHS shared governance council structure, the HHS nurse scientist, unit based journal clubs and nurse peer review. Evidence-based practice (EBP) has the potential to empower nurses, improve patient outcomes and enhance patient safety. We have many research and evidence based practice activities occurring throughout Hallmark Health System and we will be able to speak to them when our friends (the Magnet Appraisers) come to visit! [Best guess – late spring 2013].

Sincerely,
Nancy Gaden, MS, RN, NEA-BC
System Vice President, Patient Care Services and Chief Nursing Officer

Newly certified nurses

Board-certification is an important way to distinguish that a nurse has a met a level of distinction and knowledge indicating professional nursing practice. Board-certification also gives the public some assurance that the individual must engage in lifelong learning to maintain and renew their certification and in the case of advanced practice nurses their authorization/licensure to practice. The public recognizes the significance of this achievement and it provides some assurance that the individual who is caring for them has acquired a predetermined level of knowledge in the specialty area of practice.

The following Hallmark Health System nurses were recently certified. Please congratulate them on their accomplishment.

Anna Baladjay, BSN, RN-BC
Brenda MacPherson, BSN, RN-BC
Patricia Sanza, BSN, RN, TNCC
Michael Whatley, ASN, RN, TNCC
Kori Carroll, BSN, RN, CEN
Maryanne Thompson, RN, CPAN
Susan Meegan, RN, CPAN
Sarah McCabe, BSN, RN, CWS
Amy Giarnese, BSN, RN, CCRN
Shelley VanBuren, ASN, RN, CEN
Jean Dearstyne, ASN, RN-COB
Patrice Desrochers, BSN, RN, NE-BC
Rosemary Mwangi, RN-BC
Kelly Whiting, ASN, RN-BC
Kelly Linden, ASN, RN-BC

Effect of soy protein and isoflavone supplementation on glucose metabolism in pregnant women at high risk for gestational diabetes

Gestational Diabetes Mellitus (GDM) is the most common medical complication of pregnancy; approximately 200,000 or seven percent of pregnant women in the United States develop GDM every year. GDM is associated with adverse pregnancy outcomes and increased risk of subsequent Type 2 Diabetes Mellitus (T2DM). In addition, children of GDM mothers are at increased risk of developing obesity and T2DM; therefore it is important to identify viable GDM risk lowering approaches.

Evidence from animal studies, human observational studies and some randomized controlled trials has suggested that soy protein and isoflavones have beneficial effects on lipid and glucose metabolism. Additionally, soy isoflavones can diffuse across the placenta, enter fetal circulation and potentially reduce the susceptibility of cardiometabolic disorder in adulthood. Given the high prevalence of GDM and its serious health consequences for women and their children and likely health benefits of soy protein and isoflavones on a panel of metabolic parameters, the role of maternal supplementation of soy protein and isoflavones for prevention of GDM and/or minimization of GDM severity in mothers and for downstream health indicator optimization in their offspring merits investigation.

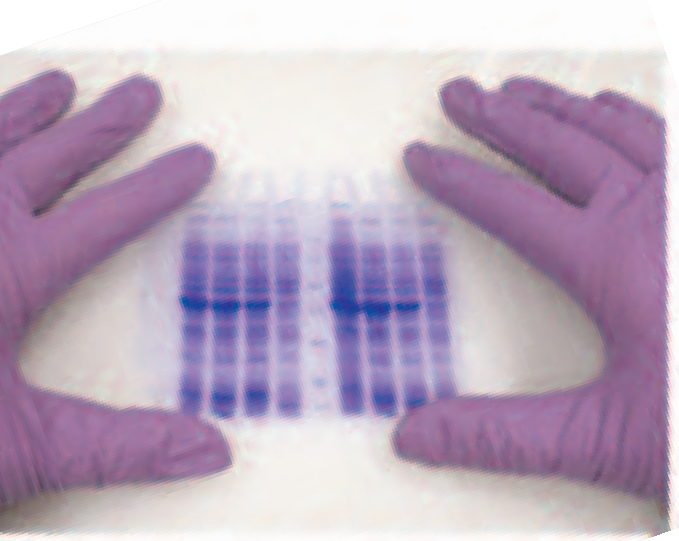
Before starting a large scale intervention study, preliminary data are required to establish feasibility of the protocol and participant adherence to the intervention. An application has been made requesting the support necessary to conduct a pilot study. Forty pregnant women at high risk for GDM will be recruited from the obstetrics services at Melrose-Wakefield Hospital and randomized equally to receive either a 25 gram isolated milk protein (IMP) or 25 gram isolated soy protein with 75 mg isoflavones (ISP+ISO) from the 16th gestational week to birth.

Investigating the levels of moral distress in emergency room nurses

The purpose of this study will be to assess the level of moral distress being experienced by emergency room nurses and to identify which clinical situations are causing the greatest intensity and frequency of this distress. Once levels of moral distress of these nurses have been identified, strategies to help mitigate this problem can be developed and implemented. Moral distress is caused by any situation in which a person feels he or she knows the right thing to do, but is ultimately unable to do it due to some kind of constraint, including personal, professional or institutional.

Given the amount of extensive research conducted on the topic of moral distress, there is little question it is an essential topic of study in the field of nursing. It has implications and connections not only for the psychological well-being of nurses, but for burnout and retention rates, communication with interdisciplinary team members, ethics and improved patient outcomes. The data thus far serves as an impetus for future research in order to better understand this concept, ways to quell it, redefine it or remedy it. It is a valid, important and multidimensional concept that demands the attention of future researchers. It is constantly evolving and dynamic. The effects on nurses, patients and other healthcare professionals beg to be uncovered and understood.

As end of life situations appeared to be a significant source of moral distress for nurses working in the emergency room, structure and process related to support for nurses should be implemented. In addition, opportunities to explore situations when continuing life support and extensive life-saving actions need to be considered, perhaps as a significant portion of the Ethics Committee plan of action. Nursing representation on Ethics Committees is critical to the ability to address these issues. Carrying out physician's orders for tests and treatments considered unnecessary, levels of staffing nurses considered unsafe and levels of perceived competence of nurses or other healthcare providers are situations that led nurses to feel intense and frequent moral distress. Nurse and physician leaders must address these issues. Staff Development departments must address and provide support for ongoing competence development and validation. Data related to level of attrition or consideration of leaving a current position due to moral distress was notable for this research. The percentages are high for a small sample size and the researchers are interested in further research with a larger sample size of emergency room nurses in order to identify if this issue is of statistical significance.



Antimicrobial Stewardship Subcommittee
Piperacillin/tazobactam (Zosyn) extended infusion

Background

Antimicrobial Stewardship, sometimes referred to as Antibiotic Stewardship (AS) is the practice of selecting an appropriate drug and optimizing its dose and duration to cure an infection while minimizing toxicity, minimizing secondary infections and minimizing conditions for selection of resistant bacterial strains (Fishman, 2006; Spellberg, 2010). In an era of drastically reduced new antimicrobial development, one of the primary goals of AS is to prevent or slow the emergence of expanding antibiotic resistance (Bartlett, 2011). Over the last couple decades, only a handful of antibiotics have been released or are in the pipeline for release. Due to this, healthcare needs to preserve the antibiotics that we currently have in our armament. One way to do this is to better utilize the antibiotics we currently have. Zosyn (pipercillin/tazobactam) exhibits time dependent killing as do most beta-lactams.

Discussion

Continuous infusions of pipercillin/tazobactam were evaluated against a four-hour infusion time. No benefit was seen for continuous infusion. Study results showed that:

- The standard dose of pipercillin/tazobactam (3.375 gm q6hr as a 30-minute infusion) achieves target (fifty percent fT > MIC) < ten percent of the time for organisms with an MIC = 8 mcg/mL.
- Prolonging the infusion of pipercillin/tazobactam (3.375 gm q8hr administered over four hours) will obtain fifty percent fT > MIC one-hundred percent of the time for organisms with MICs ≤ 8 mcg/mL.

Conclusions

In patients with an APACHE II score ≥ 17, a four- hour infusion of pipercillin/tazobactam, there was a significantly lower 14-day mortality rate and a shorter median hospital length-of-stay after culture sample collection for patients who received extended infusion, compared with patients who received intermittent infusion. Therefore, improved outcomes and potential decrease in resistance can be achieved by optimizing drug exposure, especially in critically-ill patients.

Based on the study results, Hallmark Health Sytem will be changing length of infusion from 30 minutes to four hours for each dose and the number of daily doses will decrease from four to three (q8 rather than q6) to prevent resistance to Zosyn and decrease mortality in severely-ill patients.

The Professional Recognition Program

Hallmark Health System is committed to recognizing and rewarding direct care RNs who have achieved excellence in clinical practice. The Professional Recognition Program (PRP) identifies and advances eligible RNs based on the Benner Model from "Novice to Expert." Qualified candidates, submit a portfolio that contains exemplars of patient interactions that demonstrate the RN's professional development. Based on this level of development, the RN is then identified, advanced, and rewarded with a salary incentive. Many nurses at HHS have already completed the PRP program and have been recognized for their advanced practice. The next class will be on Monday, January 21, 2013 in the Education Classroom from 4 - 6 p.m. If you are interested in information on this program, contact Beth Reid at ereid@hallmarkhealth.org.

Journal clubs

The Department of Nursing under the guidance of the nurse scientist has developed and implemented unit-based or combined unit journal clubs, which enhance each nurses understanding of evidence-based practice and the formulation of clinical questions reflecting the patient population's needs and the culture of the unit. Nursing Evidence-Based Journal Clubs are evolving throughout Hallmark Health System (HHS) as direct care nurses are incorporating the components of "The Iowa Model of Evidence-Based Practice to Promote Quality Care." The Journal Clubs provide a forum for a community of clinicians to translate new knowledge into nursing practice related to the clinical questions in order to expand the application of research in practice. These activities promote interactive learning through discussions utilizing critical analysis and evaluation guidelines. The leaders facilitate the integration of the best evidence with the members own clinical experiences and the patients preferences and values in considering a practice decision or change utilizing evidence-based clinical practice guidelines. The process for establishing journal clubs includes: Unit leadership and staff discussing leaders and co-leaders, day, time, frequency, place, clinical questions, literature review, selection of journal article for review, availability of the article for staff to get a copy to review and prepare for discussion. When the meeting is completed a summary of the discussion is compiled and a copy of the journal article is placed in a binder on the unit for staff not able to attend to review the discussion content and the article. On a monthly basis, Maureen Beirne Streff, EdD, RN, PMH, CNS, BC, associate professor of nursing at Regis College who serves as the nurse scientist for the nursing department and is a member of the Nursing Research Council (NRC), presents a report to the NRC on all journal club activities.

An example of how dissemination of knowledge generated through nursing research occurs internally at HHS is highlighted in the work that has been accomplished in the journal clubs of the inpatient behavioral health units, S1/W1 at Lawrence Memorial Hospital of Medford (LMH) and Med 6 at Melrose-Wakefield Hospital (MWH). In early 2011, the inpatient psychiatric staff was struggling with increased occurrences of patient to staff assaults. During this time, the nursing and behavioral health leaders identified an opportunity to improve outcomes related to patient to staff assaults with resultant injuries to staff. Because of the identified opportunity to improve in these measures and because violence on psychiatric units is a significant factor in staff and patient safety the HHS psychiatric unit based council members committed to exploring the literature to determine best practices to aid in reducing assaults and ensuring the safest possible environment. Staff are very excited about determining unit problems and discovering what the evidence provides for practice solutions.

With the assistance of the nurse scientist and the HHS librarian, the initial literature review yielded nine articles. Two of the articles, chosen because of relevancy to practice environment and patient population and because both were solid grounded theory studies, served as a "jumping off" point and created a foundation for beginning conversations about assault reduction and unit safety. These journal club meetings have been well attended and have served as a forum for lively discussions related to unit problem solving. The results of the literature review and the highlights of the discussions that occurred during the journal club meetings are then disseminated through the shared governance structure back to the unit based council and at monthly staff meetings. A resultant practice change was implemented on S1 and W1.

Normothermia

Purpose and Background

Literature recognizes that hypothermia in the perioperative period is common and many other associated complications can be avoided by using active warming methods. In general, there is a considerable morbidity and mortality associated with hypothermia, due to cardiac events and infectious complications in particular. For the majority of surgical procedures, even minor and intermediate operations, it is important to maintain normothermia. Hypothermia is clinically present when core temperature falls below 36 degrees Celsius (C). This directly affects the circulatory, immune and coagulation systems. This may contribute to increased blood loss by around 30 percent and up to a 70 percent higher probability of need for transfusion during surgery or after trauma. The immune system is also affected and studies have shown that following surgery there is a three-fold increase complications in hypothermic patients.

Initially normothermia was measured and tracked for performance specifically for colon surgeries. Overtime, the thermoregulation metric expanded in scope and documentation requirements. Evidence-based recommendations for the prevention of inadvertent patient cooling during surgery supported the maintenance of a core body temperature greater than and equal to 96.8 degrees Fahrenheit (F). Tracking of colon surgeries only had been the early requirement however, starting in Oct. 2010, all general major surgeries would require a planned strategy by both the Anesthesia and Nursing departments for active and passive warming for all the surgical patients in order to meet the new metric. In addition to the expanded performance requirements a near miss had occurred in surgical services previously, where intravenous fluids for surgical patients had been routinely placed into one of the warming cabinets used for warming blankets. This resulted in overwarming of the fluids. The temperature controls for warming blankets are out of range for temperatures required to warm intravenous and irrigation fluids. The Chief of Anesthesia caught the practice and efforts to educate all staff began. This episode begged a longer term solution. The key elements that spurned a collaborative interdisciplinary strategy were the following:

- Patient safety for active and passive warming to prevent inadvertent cooling during surgeries.
- Passively warm intravenous fluids and irrigations safely for all surgical patients.
- Achieve high performance for patient surgical temperature control with the expansion of the performance improvement metric for surgical thermoregulation in all surgeries.

On Jan. 27, 2010 a meeting with Donna Harvey and the quality coordinator was held to review the grant award project goals and solicit direct care nurses who be involved in implementing the nursing process and involved in the transition of new knowledge to practice. Melrose-Wakefield Hospital Clinical Leader Nancy Malley, RN and Lawrence Memorial Hospital of Medford Clinical Leader Kathy Sears, RN along with the surgery department director and anesthesia chief would be the principals for implementing identified patient safety strategies and educating nursing and anesthesia. The goal was to exceed 95 percent of surgical services patients maintaining the appropriate temperature. The strategies were:

Strategy #1

Maintain patient normothermia (98.6ºF/36ºC) during pre, post and operative periods. This goal was accomplished by implementing a standardized thermometer measuring procedure 'temporal thermal' assessment in Surgical Day Care (SDC) and the Post Anesthesia Care Unit (PACU) recorded at admission to SDC and admission and discharge from PACU. The monitoring measurement(s) device for use during the surgical procedure is the esophageal probe for all colorectal surgeries only is standard and all other surgeries use skin thermal measurement devices.

Strategy #2

Assessment of patients for hypothermia risks with documentation of that risk management assessment, along with the current warming techniques to be used, were reviewed for needed revisions to the nursing operating room (OR) thermoregulation policies. Harvey explored how surgery departments can document risk assessment and risk management of thermoregulation electronically.

Strategy #3

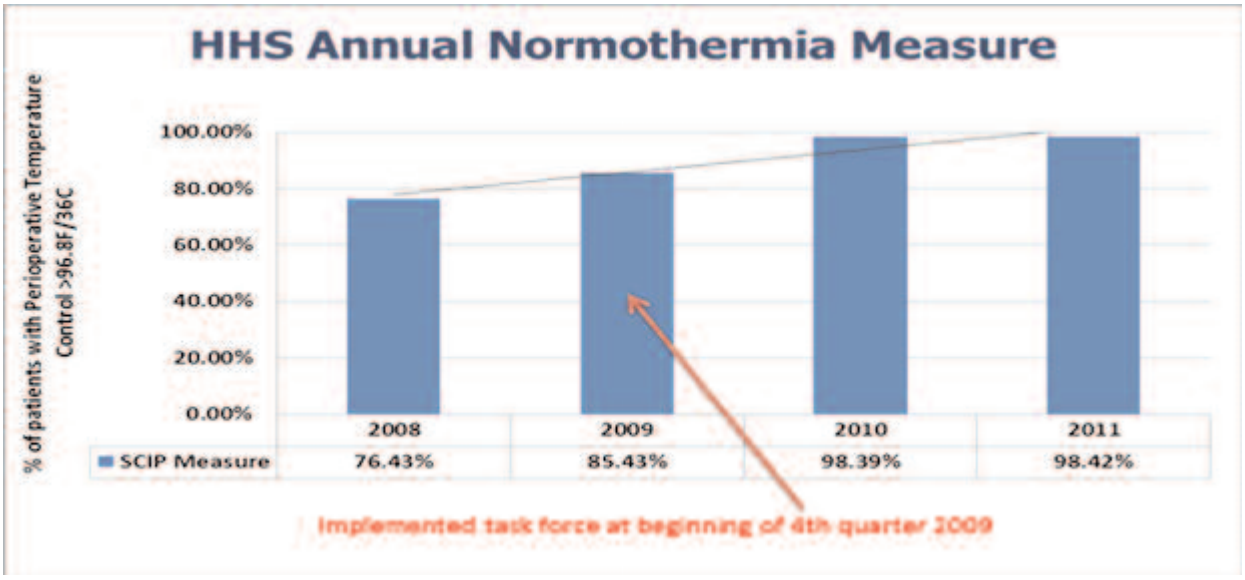
Prevent patient body cooling during the operative period and maintain a core temperature greater than 96.8ºF (T<=96.8ºF/36ºC). This was achieved with all patients receiving warmed intravenous fluids starting in SDC and continuing during the surgical procedure. A fluid warming cabinet is in place in each OR main corridor for the exclusive warming of intravenous fluids and irrigations solutions for a patient's surgery. This 'passive' mode of warming in conjunction with the 'active' forced warm air blanket use during a patient's surgery enhanced maintenance of a body temperature >96.8ºF/36ºC. Documentation of warming was added to the anesthesia record and intraoperative narrative.

Strategy #4

Development of a fluid warming cabinet policy for purposes of patient safety and temperature control of all fluids for patient use. The fluid warming cabinet policy includes the responsible person for cabinet maintenance, care and operation with the manufacturer's recommended policy for temperature and fluid turnover and the tracking mechanism to track temperature and fluid use in the form of a log that is available for external review. The policy also stipulates the populations likely to receive warmed intravenous and body irrigation solutions and who will be the administrator of those fluids.

Outcome

Dissemination of this new knowledge was completed by educating all surgical services staff on both campuses. Education consisted of how to use the warming cabinets and the revision of nursing policies for thermoregulation. Print additions were made to the anesthesia record to reflect the documentation for forced warm air blanket use in active warming, as well as warmed irrigations and warmed intravenous fluids for passive warming. The intraoperative narrative report was revised to reflect the usage of passive warming and hypothermia risk assessments. All SDC patients receive warmed intravenous fluids and warm blankets. Performance scores for thermoregulation were improved from 76.43 percent in 2008 to 98.42 percent in 2011, exceeding the benchmarks in performance. The risk management grant was the unifying vehicle that joined the surgery departments in this collaborative and concerted effort to prevent inadvertent patient cooling and standardizing nursing practice for warming all surgical patients.



Debra Cronin-Waelde, MSN, RN, NE-BC has been invited for a podium presentation at the Annual ANA Nursing Quality Conference, "Reaching the CORE of Quality" to be held February 6-8, 2013 in Atlanta, Georgia. The ANA Nursing Quality Conference is an ever-growing event that features the latest research and best practices presented by national experts in engaging educational sessions and poster presentations. The 2013 conference will draw nursing managers, quality improvement specialists, researchers, health information technology experts and staff nurses to learn about applying data from nursing quality measures to improve patient outcomes.

The 2013 Conference topics include:

- Cultures of Safety
- New Technologies
- Research and Evidence to Practice
- Patient Engagement in Quality

Ms. Cronin-Waelde's presentation, titled, Every Patient, Every Experience, One Team – Improving Transfer of Care from the ED to Inpatient Unit, focuses on safe patient handoff between departments. The goal was to reduce the number of patient safety reports (variances) by 75 percent and improve the overall patient experience. The ED/Inpatient task force was charged with mitigating the risk of medical error during transfer of care from the ED to the Inpatient Unit. The interdisciplinary team felt that by engaging the patient/family with the ED RN, the Inpatient RN and the physician in a standardized bedside handoff in the ED, positive patient outcomes would be achieved. Utilizing LEAN and Six Sigma methodology, the team began looking at the current state of the ED patient handoff process. An "ideal" state was developed and experiments were carried out. Data driven metrics were made transparent and included provider specific metrics. The team met weekly to review data and prioritize elements that would improve the processes. Improved processes focused on the criteria for "patient ready to admit" and a standard Handoff Report Checklist. Engagement of physician providers was necessary to allow them to be present at the bedside for the handoff. Steps were developed that allowed for the ED provider to initiate the need for admission. The steps were mapped out that allowed for a seamless process for the Inpatient RN to come to the ED and receive a comprehensive report and review of orders at the bedside prior to the patient departing to the higher level of care. Including the patient and family in bedside handoff with the entire care team in real-time provides an opportunity to have questions asked and answered for all parties involved thus reducing the opportunity for error or omission while improving the overall patient experience thus providing a positive patient and staff experience. Data is currently being collected to validate success with the ED/Inpatient Handoff process.

On October 10, a delegation of 15 nurses attended the ANCC National Magnet Conference at the Los Angeles Convention Center in California. Pictured above include: Deb Abele, Lisa Buchert, Shannon Hurley, Caroline Boudrow, Tamar Hamparian, Laura Travers, Edmund Travers, William Connolly, Gerry Goulet, Helen Maunsell, Karen Masucci, Isabel Pore, Gilenesh Haile, Judith Moffatt, and Pamela Woods.Below are some comments that the nurses wanted to share with their colleagues:

The Magnet Conference was a knowledge packed three day adventure. I met hundreds of other nurses whose hospitals already have magnet status or were on the same journey as Hallmark. I learned it was not just about Empirical Outcomes or achieving a title for this hospital, yet the true meaning of obtaining Magnet Status is becoming recognized for the hard work and dedication we display here every day. I truly thank you for the opportunity to attend this conference. I have learned so much. Thanks to everyone who allowed me to go. - **Karen Masucci, RN**

I would like to thank HHS for the opportunity I was given. The Magnet Conference was a great eye opener in terms of what other hospitals are doing to achieve high patient outcomes. It provided ideas on what aspects of our practice we need to strengthen or build on, what we should improve and how. It confirmed to me nursing is a profession, which is built on continuous learning and renewal. The key aspect of the learning process is promotion of evidence based practice at all levels of patient care. Thanks again. **- Gil Haile, RN**

The Magnet program provides a vision for nurses to exceed in their traditional role. It encourages participation in research which will assist in the improvement in the continuum of care. This process allows nurses to become transformational leaders of tomorrow. - **Pam Woods, RN**

The ANCC Magnet Conference was an energizing experience. It showed how energy and enthusiasm leads to excellence in nursing. It was great to learn best practices from hospitals around the country. - **Helen Maunsell, RN**

The conference was a great experience. I found it to be very educational. I had the opportunity to see many good speakers that were very knowledgeable about the Magnet process. I also found that we are definitely above the curve on our Magnet journey. We have already instituted many of the programs that some of the Magnet hospitals are just beginning now. The conference was well done, very professional and extremely organized. - **Ed Travers, RN**

The Magnet conference was all about nursing excellence....I felt so proud of my profession and was impressed that Hallmark Health, for such a small community system, was so technologically advanced, compared to some of the bigger organizations. - **Judith Moffatt, RN**

Council Connection

The Nursing Resource and Government Affairs Council — This council is responsible for addressing issues around allocation of nursing resources. Most recently reviewed the floating policy. The council also monitors and responds to legislation on the local and national level that involved patient care. This council is responsible for the selection of the quarterly DAISY Award. If you are interested in this council, please contact Elana Daly at (781) 306-6350. Next meeting: December 7

The Nursing Practice and Quality Council—The council is represented by many members of the nursing staff from both campuses. The council invited experts from an array of disciplines within the system to speak in regards to current evidenced-based practices and incorporate into policy and procedure. The council reviews and approved nursing policies. Anyone interested should contact Joy Welsh at (781) 306-6280 or Dina Borda at (781) 979-3360. Next meeting: January 22

The Nursing Research Council — This council is comprised of nurses who think critically and look at evidence to determine best practice that then transforms care at the bedside. The council has already begun planning the 5th Annual Christine Cameron Symposium on Nursing Quality and Research. If you are interested in this council, please contact one of the co-chairs: Kathy Delesky at (781) 306-6687 or Sharon Turcotte at (781) 306-6793. Next meeting: January 28

The Nursing Informatics Council— This council continually addresses and improves our electronic documentation. The process of the new electronic discharge was discussed, as well as the need for education regarding transcribing Warafin information. The council is revising nursing shift surveillance documentation. If you are interested in this council, please contact one of the: Judy Thorpe at (781) 979-3317 or Annmarie Muse at (781) 979-3353. Next meeting: December 26

The New Grad Council — This council has been formed to support the transition of all New Graduate nurses. This is a great opportunity for you to have a voice even as the newest additions to our Team. This month Rita Olans presented to the group on Antimicrobial Stewardship for Nurses. If you are interested in getting in on the ground floor of this council please contact Beth Campbell at (781) 306-6796 or Kyle Martell (781) 979-3360. Next meeting: December 14