Women and Infants Services

The History of Women and Infant’s Services
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Infant Special Care Follow-up
Our 4th issue of the UCSD Journal of Nursing brings much celebration for our Women and Infants Services. UC San Diego Health System became a “Baby Friendly” designated hospital in 2006 and we recently celebrated our 3,000th birth along with the 10 year anniversary of the Birth Center! For the last 36 years we have been serving the population offering low and high risk OB services, a Level 3 NICU, and outpatient women’s services.

In this issue you will learn about our Women and Infants Services and discover the long history of our Labor and Delivery, NICU and Antepartum and Postpartum units. From delivering quintuplets and sextuplets, separating conjoined twins, to taking care of an Orangutan at the San Diego Zoo, there is never a dull moment in these units!

Did you know that in 1975 the delivery rate was approximately 125 births per month and women routinely went to the OR for the birth of their babies? Now we typically see an average of 220 births per month in the L&D and about 30 deliveries per month in our Birth Center assisted by our all Volunteer Doula Service. What a difference a few decades make! Now we practice “rooming in” with our mothers and babies, fathers are more involved in the entire delivery process, more holistic approaches during labor are offered, and we continue to promote breastfeeding with the help of our Lactation Team. Our Labor and Delivery suites have undergone major renovations and expansion benefiting our patients, their families, our staff and faculty.

The ISCC (Infant Special Care Center) continues to make progress with new programs such as the SPIN (Supporting Premature Infant Nutrition) program, the Infant Special Care PICC (Peripherally Inserted Central Catheter) team, and volunteers in the Cuddler and Concierge programs.

I encourage you to read the following articles that showcase all the amazing changes that have taken place in regard to labor and delivery and the care of the tiniest and sickest patients. These units truly embody the family centered patient care model and I am excited to share these stories with you.

Sincerely,

Margarita Baggett RN MSN
Chief Nursing Office
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B eing a historian isn’t an easy job, but it sure is interesting. I started my career at UC San Diego Medical Center on June 25, 1975, when it was known as, “University Hospital.” The UCSD Medical School was only seven years young. It had been started by a world renowned group of faculty from institutions all over the country and the curriculum was, and still is, very research based.

The delivery rate was approximately 125 per month. The Labor and Delivery unit was on the second floor with two four bed rooms for antepartum and laboring patients. The “nurses’ station” was a small office in the hallway where the Infant Special Care Conference room is now. There was a reception area at the corner of the hallway which is now occupied by triage rooms. All women went to operating rooms for the birth of their babies. The “Special Care Nursery,” also on the second floor, had 15 beds and the postpartum unit was on the 4th floor with a 12 bed Normal Newborn Nursery.

Between 1975-1979, the Special Care Nursery increased from 15 to 30 Beds. It was renamed the Infant Special Care Center, allowing for infants up to six weeks to be readmitted to the unit from home, especially if they had been previously discharged from the unit.

The “new and modern” environment included hoses for medical gases all hanging from the ceiling. While this had some advantages for the staff not having to bend to find gases, it made the unit look like a jungle of wires, which was not very inviting.

The Medical Center received a state grant to create Infant Resuscitation Teams throughout San Diego County. We went to all the hospitals in San Diego and Imperial Counties where babies were delivered to give classes and then the nurses from those hospitals were brought to UCSD for two weeks of training.

Thinking that it was the cutting edge in care and would reproduce the environment of the womb, water beds, yes, water beds for preemies, were introduced into the unit. They did not last long because it was too difficult to take care of the babies. They would slip off to the side of the mattress and if resuscitation was needed it was impossible to do in the water bed. There was a change in the basic design of the incubator from a mere rectangular box to a shape with a rounded cover – they were fondly called bread boxes or “Bubbles”. Staff in the unit participated in the development of this equipment and we received a number of these expensive beds for free.

A common problem with premature babies is that their ductus arteriosus (major vessel of fetal circulation) does not close. In term newborns it usually closes within the first few hours or days after birth and when it does not, it creates problems with extra uterine circulation. In the late 70’s, UCSD made history again, giving the medication Indocin to help close this vessel in preterm infants. This research ‘proved’ that this modality of treatment was effective, saving preterm babies from days of ventilation, thus preventing some chronic lung disease.

Other technologies introduced in the ISCC in the 1970s included bedside ultrasound for diagnosing
intraventricular hemorrhages in premature babies, transcutaneous oxygen monitoring and the implementation of a neonatal blood gas lab in the ISCC. Processing blood gases in the unit saved time in obtaining needed information for managing the ventilation of the sickest and smallest patients in the medical center.

Finally, during this time period Labor and Delivery created an “Alternative” Birthing Room with rugs and bedspreads for ambiance. I wanted to use that room for the birth of my first child in 1978 and ended up with a c-section!

In 1983 the first set of quintuplets were born at UCSD. This birth took months of planning and coordination. We had up to 25 people on call with pagers just waiting to come in and be part of history. It was a fantastic event.

This time period saw much growth. The ISCC was remodeled in 1987 increasing from 30 to 40 beds. The gas lines from the ceiling were gone! Labor and delivery also had a remodel. The four bed rooms were made into two bed rooms and 4 labor rooms were created. Slowly we introduced the concept of the LDR (labor, delivery and recovery) room where patient care was delivered in one room; decreasing the number of times that patient was moved and handed off.

In Postpartum the new concept of Couplet or Mother Baby Care was introduced. The article “You’ve Come a Long Way Baby” describes this in more detail. Suffice it say that this care model is better for moms and babies and encouraged breastfeeding and maternal newborn attachment.

During the 80’s new care modalities were introduced into the ISCC. The role of the neonatal respiratory therapist (RT) was created. Prior to this the RTs who worked in the ISCC were members of the adult RT team. We also saw high frequency ventilation, ECMO (extracorporeal membrane oxygenation), and administration of human and porcine surfactant for the treatment of hyaline membrane disease (HMD) or respiratory distress syndrome (RDS). Babies of 25-26 weeks gestation were now surviving.

A unique volunteer cuddler program was created during this time and these volunteers were trained to hold, change diapers, and bottle feed babies in the ISCC who had families that could not visit as much as they would like. (This program continues to be so popular today that there is a three year waiting list for it). It was also during the 80s that the staff and parents dressed up babies for Halloween and had a costume contest. Several locally famous people, including Jim Laslovic and Larry Himmel, came to the unit to judge the costumes. Everyone was so happy for a few moments of normalcy. The UCSD Auxiliary had an annual event, “An Evening With.” Gerald McRainey from Starsky and Hutch attended the event one year. The ISCC was the recipient of the proceeds from this event and we were able to purchase much needed equipment.

Around this same time one of the nurses produced a video on Infant CPR which was distributed nationally by the American Journal of Nursing. Twelve hours shifts were implemented in the unit and a self staffing committee was created in the ISCC to help with staff satisfaction. This staffing team is alive and well to this day.

The 90s brought a few more firsts to Women and Infants Services. In 1992 the UCSD Lactation Service was created. The ISCC received a visit from the Governor of the State of California, Pete Wilson which was exciting. We also saw the creation of the Service Line of Women and Infants Services. In 1995 the service line created a partnership with the department of Reproductive Medicine and the medical center which continues today. This partnership allowed and supported Health Sciences and the medical center in creating a new Midwifery Service and the Birth Center. Also in the 90s, 4 of the LDRs in Labor and Delivery were made over with unique design using Japanese Shoji Screens. The use of different colored wood and lighting made these rooms attractive to staff and patients.

Another out of the ordinary event involved the ISCC staff caring for Karen the Orangutan at the San Diego Zoo. It was wild. No pun intended!
She needed open heart surgery and post op she needed care just like a human undergoing the same surgery. The animal techs at the zoo were not prepared to take on this complex task and it was a wonderful opportunity for our staff.

At this time in the ISCC babies born at 24-25 weeks gestation were now surviving and thriving. New respiratory therapies were introduced such as the use of nitric oxide for ventilator gas. The unit was also involved in researching of total body cooling for asphyxiated infants. A developmental care model for babies in the ISCC was implemented by the staff and the entire healthcare team was educated in developmental care. This included, limiting light to the incubators, minimal handling, and anatomically correct positioning. We also began co-bedding of multiples, two or more babies in one bed. This was revolutionary but we figured these babies had been together in the womb and we tried to mimic that environment.

A once in a lifetime event occurred, conjoined twins who were born at the medical center were successfully separated. What a feat for our multidisciplinary team and how wonderful it was to see these babies go home as two very happy babies with very happy parents!

In Labor and Delivery a central fetal surveillance, archival and documentation system was implemented. This not only allowed nurses to see all the fetal heart rate tracings from the nurses’ station but also allowed any fetal strip to be seen in any/all of the rooms. We led the way for the medical center with Labor and Delivery and Postpartum being the first units in the hospital to begin computer provider order entry (CPOE) and in the 2000’s ISCC was the last unit to implement CPOE. I think of it as bookends to technology.

Late in the 90s, we started to see surrogacy births. This practice has continued to grow over the years and has mandated that specific policies and procedures be developed. This is another example where the service line approach has proven to be beneficial to program development both clinically and financially.

Finally, the new millennium arrived and we saw the inpatient pediatric unit, pediatric ICU and pediatric specialty clinic close at UCSD and move to Children’s Hospital. Later on in the decade the Primary Pediatrics Clinic moved to Children’s as well. The good news was that a number of Pediatric Nurses transferred to the ISCC and have been a wonderful addition to the staff.

Another volunteer program was started in the Service Line, the Hearts and Hands Doula Service. Specially trained birth assistants support women in labor through birth. Within the program we have specialty programs for HIV positive women and women from Las Colinas. This allows us to be culturally sensitive in a unique manner.

Postpartum implemented an electronic tracking system for infant
security. We were given the honorable designation of a “Baby Friendly Hospital”. Learn more about this in the article “UC San Diego Medical Center-A Baby-Friendly Hospital” A Postpartum Depression Screening Program was created and this program has saved at least one person’s life and probably more that we can not begin to track. I am very proud of this needed mental health program.

Labor and Delivery started planning for an entire unit remodel. The ensuing process is described more thoroughly in the article Living and Working Through A Unit Remodel – OR– Please Pass the Valium! The Fetal Diagnosis and Genetics Centers is an area vital to the service line that was added in 2005. This program brings patients to UCSD for screening and special needs follow up. Through this program the Multiples and Fetal Surgery programs at UCSD were developed.

You guessed it, even more changes were seen in the ISCC in the early 2000s. The Concierge Program was started, which involves volunteers greeting new ISCC parents and supporting them by giving them an orientation to the unit. This relieves some of the stress felt by the new families with infants in the ISCC. Another construction project was completed on the 4th floor adding 9 beds to the ISCC. We also experienced the birth of UC San Diego Medical Center’s first set of sextuplets. That was even a more coordinated event than the quintuplet birth two decades earlier. What a difference one baby can make. They all did well and are school age now.

Just this last fall we received a visit from the famous Blue Angels. For the first time in history there is a female member of the Blue Angels. She was transported here as a newborn to be treated in the ISCC and wanted to give back to the medical center.

In summary, it has been quite a journey these 35 years I have been at UC San Diego all in some aspect of Women and Infants Services. I am so proud to be a part of the team that has accomplished all of these great developments in Women and Infants’ Care. I hope you enjoy reading about all that Women and Infants Services has accomplished and has to offer.

Women and Infants Services.
Women and Infant Services extends beyond the walls of the UC San Diego Medical Center Hospitals. Most of the 2500 women admitted yearly for women’s services have originated care through one of our many ambulatory care clinics throughout the county.

We serve a diverse population of women and feel strongly about empowering them to cultivate health seeking behaviors. Our goal is to partner with patients and their families while delivering state of the art evidence based care.

We offer classes and mentoring to assist women in achieving their goals. We have a well developed patient education committee to standardize patient teaching in both the outpatient and inpatient settings, bridging the gap for patients, families and staff.

Our multidisciplinary team includes; faculty and resident physicians, certified nurse midwives, nurse practitioners, nurses, health educators, medical assistants, case managers, genetic counselors, perinatal ultrasonographers, licensed clinical social workers, certified registered dieticians, mental health care workers, psychiatrists, and doulas. Through this multidisciplinary approach, we partner with patients and their families to keep them involved and informed.

Our many obstetrical clinics include:
- High Risk OB clinics
- Low risk OB clinics
- Certified Nurse Midwifery clinics - with care focused on “natural birth” but also encompassing low risk births
- Diabetes in Pregnancy Clinics
- “Multiples” clinic delivering special care to women carrying multiple babies.
- Fetal Care Genetics Center
- Antepartum Testing Unit - providing monitoring and assessment of mothers and fetuses at risk
- Fetal Assessment Unit - providing ultrasound surveillance of fetuses at risk
- Women’s and Infant Services reaches beyond the “baby” years to women of all ages who require gynecological care. Some of the services provided and case managed by RNs include:
  - Dysplasia clinic - treating women with precancerous pathology of the cervix, vagina, and vulva
  - Menopause clinic - serving the needs of women in life transition
  - Women’s Pelvic Medicine - caring for women with urinary incontinence and pelvic prolapse
  - Reproductive Endocrinology and Infertility Programs - serving women desiring pregnancy or dealing with diseases of hormone imbalance

Mom to Mom Program
Developed by Women’s Health Services Nurses
Provides a mechanism for patients who have much to share by donating new and gently used baby clothes to patients who have limited resources.

Kath Cunningham, RNC and Tosh Stack, RNC with moms participating in the “Moms 2 Moms” clothes sharing program. Each mom has received a bag full of clothes.
Diabetes in Pregnancy

With diabetes one of our nation’s major health concerns, the number of women with diabetes in pregnancy has reached epic proportions. Managing diabetes during pregnancy is a complex journey. Achieving healthy outcomes involves hard work from the entire team.

Involvement in clinical research and the state’s “Sweet Success” diabetes program helps ensure state of the art evidence based care. The patient is always the primary team member and her ease in accessing this highly trained team to discuss blood sugars and diabetes management is one of the most important factors in its success. Certification in diabetes education and experience working with high risk pregnancy are prerequisites for RN’s and dieticians on our team.

We are proud to be able to care for women with complicated diabetes, who in the past, were never encouraged to become pregnant because of the risk of complications to both mother and baby. Our UC San Diego team is proud to be the community leader for the care of women with diabetes during pregnancy.

Postpartum Depression Prevention Program

An evidence-based practice project we are most proud of is our postpartum depression project. All pregnant women are screened for depression in the clinic during their prenatal visits with follow up screening postpartum prior to discharge and again at their postpartum clinic visit. We have partnered with the University of San Diego in a study which offers enhanced psychosocial support to all women who are identified at risk for depression. This support includes meeting with dedicated social workers, psychiatric counselors, or psychiatrists for appointments within Women’s Health Services’ Clinics to meet the identified needs. The screening of pregnant women has led to realization of the need to screen all women, which we are now doing with routine well women exams.

Our clinic programs exemplify UC San Diego’s Nursing Philosophy of embracing patient and family, professionalism, and leadership with collaboration. Also evident in our care is our Nursing Vision “The Power of Excellence”, our Professional Practice Model of Care, and one of our many Care Delivery systems, that of the Case Manager. We are proud that we have many nurses who have passed their 20 year mark of nursing at UC San Diego which highlights not only the excellence of care available but speaks loudly about transformational leadership, and opportunity for career and professional growth.

Diabetes in Pregnancy Teaching

Certified Diabetes Nurse Educators and Certified Diabetes Registered Dieticians make frequent contact with pregnant patients with diabetes.

The goal of glucose control is much more strict during pregnancy than in the general population.

The patient is the primary team member with the rest of the multidisciplinary team working to support her and her fetus.

Antepartum Testing

Innovation has been a key part of our history and will remain part of our future. In the late 1990’s, the Women’s Health Services’ RNs made a commitment to bring all antepartum testing to the outpatient arena. Most hospitals, even today, house this testing of very high risk women and their babies within their Labor and Delivery units. These 6000 appointments per year (usually twice weekly beginning in the third trimester) greatly impact the flow and activity on a busy labor and delivery unit. The program’s success is dependent on the dedication of the clinic RNs who wrote strict management protocols in conjunction with the Perinatology faculty. These nurses have committed to provide coverage even on holidays when the clinics are closed for other appointments. The unit is RN-managed and all staff is L&D-trained with certification in advanced fetal monitoring and limited OB ultrasound. Early on in program formation, OB/GYN faculty and the Labor and Delivery staff committed to partnering with these nurses to act on abnormal tests when there is concern for the health of the mother or fetus. If there are any concerns patients are sent directly to L&D for full evaluation.

During patient visits, patients are seated in comfortable recliners and there is great opportunity for patient education. Topics such as signs of labor, fetal movement recording, pregnancy warning signs, general pregnancy health maintenance, and depression awareness are routinely discussed. This program has worked beautifully and we are now an example to our peers in the community.
The obstetrical patient population has changed over the last few decades to include women in their 40's, those with complex medical conditions, and an increased number of multiples in a pregnancy. UC San Diego Medical Center is well recognized as a referral center for high risk pregnancies. With increased knowledge and advances in technology we can care for these patients and obtain good outcomes, though it often requires prolonged hospitalization. As the numbers of these complex patients have increased, a focus on high risk/critical care education and inpatient space/beds has become a reality.

In 2007, Women and Infant Services opened the Perinatal Special Care Center (PSCC) with an emphasis on offering private rooms with small refrigerators for patients who needed to stay in the hospital prior to delivery with a goal of including the entire family in the plan of care. Nurses in the PSCC provide professional and compassionate care to patients experiencing complicated pregnancies with diagnoses such as preeclampsia (high blood pressure disease of pregnancy), placenta previa (placenta covers the cervix) and accreta (placenta grows into the uterine wall), preterm labor and uncontrolled diabetes. Many of these patients return to PSCC after delivery when they require a higher level of care.

A patient, JS, quickly comes to mind when thinking about the special needs and challenges our patients bring with them, needs that are not only physiological but psycho-social and financial, as well. In July of 2008, JS was transferred to UCSD Medical Center from a hospital in North County. She was at about 18 weeks of pregnancy and had a recent diagnosis of paraplegia following surgery to remove an abscess caused by sepsis from IV drug abuse. Because of her desire to continue the pregnancy, JS spent the next 4 months with us. She spent that time free from abusing drugs, learning how to cope with her disability and...
how to accept assistance from others, developing meaningful relationships, building up her strength so that she could successfully transfer herself from bed to a wheelchair, learning self catheterization, maintaining good nutritional eating habits, and determining resources that would help her after delivery of her baby. The Perinatal staff learned too; they learned patience, persistence, how to heal skin breakdown (noted on admission) and to prevent hospital acquired pressure ulcers. They experienced the frustrations of the financial/insurance (or lack of there of) bureaucracy, and came to understand how pregnancy and homelessness placed an added limitation on transfer to a rehab center for spinal cord injured patients. Although JS was scheduled for a cesarean section toward the end of November, she delivered 14 days earlier (by C/S) on 11/4/09 due to labor contractions and the increased risk of developing autonomic dysreflexia. Mom and baby did very well; baby went to foster care and JS was discharged to rehab relatively healthy and "ready to start her new life," with the goal of being reunited with her baby in the near future. We believe that it was the ongoing collaboration among the multidisciplinary team of obstetricians, perinatologists, neonatologists, nurses, nurse managers, clinical nurse specialist/educator, social workers, physical therapists, case managers, dieticians and a commitment from hospital administration that enabled us to achieve good outcomes, which included a healthy mom and baby at discharge and a satisfied patient and staff."

The PSCC RNs and CCPs offer special things for their patients and families who frequently face weeks or months of hospitalization. Support group time was established to give the antepartum patients an opportunity to meet other inpatient pregnant women who are experiencing similar conditions and issues while hospitalized. The staff, also, has developed resources who will offer massages, facials, healing touch, visiting pets and pastoral care. In order to decrease boredom and help pass the time the staff teach the patients to knit and crochet baby blankets, hats and booties for their babies. Staff members provide the materials if the family cannot. They also help patients celebrate milestones and provide patients with their favorite snack or meal for a special treat. Accommodations are made for baby showers and birthday celebrations so that normal events are not missed just because of hospitalization.

Although the overall volume of patients in women and infants services often determines where the high risk patients receive care, the type/quality of care is the same regardless of the place. The PSCC has created a positive atmosphere where quality care and patient advocacy are the norm. It is a special and desirable place to work, as well as to receive care.
Have you ever lived through a major addition and remodel? If your answer is yes, imagine living with 20-30 extra people (in our case, physicians, midwives, nurses, medical/nursing students, technicians, Hospital Unit Service Coordinators, and housekeepers), along with a construction crew, 24 hours a day, 7 days a week, for the duration of the project. Then add a steady flow of guests (in our case, our patients and families) whom you adore and for whom you want to provide the best possible experience while they are with you. Welcome to the UC San Diego Medical Center, Labor and Delivery 2008-2010 Unit Remodel—OR—Please pass the Valium!

The project was conceived in 1999, with the goal of adding much needed patient care and delivery space, providing a family waiting area for Labor and Delivery and the Infant Special Care Center (ISCC), and beautifying a unit in dire need of a facelift.

Phase I of the construction project started in March 2008 with the addition of 5 “state of the art” LDRs (labor, delivery, and recovery room). The new rooms opened for Patient care at the end of April 2009, much to the delight of our patients, their families, and our staff.

Phase II of the project started in May 2009 with the addition of a new unit entrance, reception and waiting area, and Fetal Assessment Unit (FAU). The main corridor connecting the NICU and Labor and Delivery was closed in segments for floor and ceiling replacement, seismic retrofitting, and information technology and nurse call upgrades. All of this meant months of re-routing patient and visitor access for both L&D and the ISCC, as well as endless shifting mazes for the staff from both units to navigate. Thanks to the wonderful cooperation from the Main Operating Room, our patients and their families were able to be routed, via a clever trail of blue footprints on the floor, through the

“In the end, the look of awe and amazement on the faces of the staff who had endured this journey as they looked down the newly opened corridor for the first time was priceless.”

Pat Inzano, RN, AN II has been a nurse for 27 years, all in Maternal/Child Health. She has been at UC San Diego medical Center as an AN II in Labor and Delivery for 22 years.
Main OR corridor and into the back area of Labor and Delivery. It took the teamwork of many people and departments to see us through to the completion of the project, including Fire and Life Safety, Facilities Engineering, Facilities Planning, Equipment Management, Clinical Engineering, and Environmental Services. Hopefully, they did not have to use all of their Valium!

Through it all, the entire staff kept their sense of humor and never let those literal roadblocks interfere with their dedication to deliver excellent patient care. Our Press Ganey scores for patient satisfaction indicated that some months were better than others, depending on the phase of the construction, but overall, continued to show an increase in the "Likelihood to Recommend" score each month.

In the end, the look of awe and amazement on the faces of the staff who had endured this journey as they looked down the newly opened corridor for the first time was priceless. For our patients and their families, we now had a beautiful new place for them to deliver their babies. For our Staff, we had a beautiful new space to deliver their very special care. The project was completed at the end of February 2010. In a unit where new beginnings happen daily, this one was especially meaningful and significant. No need to renew that prescription of Valium!

We invite you to stop by Labor and Delivery and allow a proud staff member show you around. Who knows, one day it may be your experience, too!
Noelle, Noelle Are You Okay?
Simulation Training in Women and Infant Services

By Brooke Sturgeon, BSN, RN

What is simulation training? Does it improve the competency of the direct care nurse? Are the physicians benefiting from the use of simulation for education? All these questions are commonly asked when working with a simulation mannequin.

In July 2008, NOELLE and Baby Hal: the Maternal and Neonatal Simulation System arrived in Women and Infant Services. Linda Levy, Director, Dr. Moore and I began to look at ways to utilize Noelle as a teaching tool in all areas of education. Noelle, a training mannequin, is connected to a wireless computer system that reads out her vitals signs and her baby's fetal heart rate tracing and operates all of her functions, including her voice commands.

Noelle has many functions and can simulate many situations. For example, you can start IV’s on her and get a true flashback. She may be intubated, have an NG tube or a foley catheter placed. She can have a seizure, cry out in pain or hemorrhage. With Noelle you can simulate a code and you can bring her back using the crash cart and defibrillator. On any given day she may have a vaginal delivery, a shoulder dystocia (difficulty delivering due to a larger baby that has broad shoulders that inhibit normal passage through the birth canal) or a crash cesarean section.

In August 2008, Noelle became a part of our OB Drills. Our Drill Committee is made up of nurse representatives from all our inpatient units (Labor and Delivery, Postpartum, Birth Center, Perinatal Special Care Center and Infant Special Care), a Certified Nurse Midwife (CNM), a case manager and our clinical educators. This committee holds monthly drills around a specific topic. These topics have included postpartum hemorrhage, pulmonary embolism, seizures, prolapsed umbilical cord, shoulder dystocia and breech delivery. The committee selects the topic, creates a scenario and a team of nurses conduct a simulated drill using Noelle and baby Hal.

Noelle's involvement with staff education is ongoing. We use the birthing simulator for yearly skills, including infant and maternal codes. Our new grad program has utilized her for practice in performing IV starts and foley catheter placements. The Doula Program has used Noelle and Baby Hal to educate new doulas about electronic fetal monitoring and in practicing different positions for mothers in the labor process.

Since August 2008, Noelle has been utilized in the Yearly Skill Building Education program in Family Medicine. The education portion of the program is directed by Dr. Ikea and Dr. Wu, while I direct the simulation. Topics included in this training range from obstetric emergency deliveries to fetal scalp electrode (FSE) and inter-uterine pressure catheter (IUPC) placement. In October 2008, Dr. Deak and I introduced practice with Noelle into the Medical Student Training Program.

Medical students are trained every 6 weeks on proper sterile technique, gowning, gloving and assisting with a simulated vaginal delivery. In September

Brooke Sturgeon, RN, BSN, CNIII has been a nurse for 9 years. She started as a new graduate in Labor and Delivery. In 2008 she became the Perinatal Simulation Coordinator and the nurse educator for Labor and Delivery.
and November 2009, a study on the use of simulation training with residents was implemented by Jamie Resnick MD, Daphne LaCoursiere MD, MPH, Brooke Sturgeon RN, MSN, Maryam Tarsa MD, Christine B. Miller MD, MPH, and Carlette D. Moore, MD to determine if a simulation based curriculum led to enhanced resident performance in the clinical setting. Research findings will be published later this year.

In conclusion, Noelle has continued to educate and challenge all levels of staff through the simulation process. Our nurses continue to use the birthing simulator as a teaching tool. Whenever a clinical situation has occurred we take the opportunity to educate ourselves by re-creating the situation through simulation to learn how we might improve our practice and keep our patients safe. Our monthly drills are a good example. The two most recent drills simulated post partum hemorrhage. On both drills, a system error occurred. The care provided to and for the patient by the staff was great; however, it took longer than 5 minutes to get the obstetrical hemorrhage medications to the patient. We worked with managers on the Post Partum and High Risk Antepartum Units and with the pharmacy to educate the staff on best practice for removing these medications in an emergency situation.

Our experience with Noelle and Baby Hal demonstrates that simulation is an ever evolving process. The more we leverage its power, the more our patients will benefit.
We are well into the 21st century. Due to advances in technology and a better understanding of the reproductive system, including how to manipulate physiology to achieve a pregnancy, we are seeing people become parents in an assortment of ways. “Surrogate” or proxy pregnancies are one method for couples that can not carry their own child to become parents. Surrogate pregnancies are achieved through various ways and the baby may or may not be biologically connected to the surrogate and/or intended parents. Each of the different types of surrogacy has its own name stemming from how the women conceived, whose biological material was used and if there was a previous connection between the surrogate and intended parents. We will attempt to describe a few possible combinations here. First the “Traditional” Surrogacy where artificial insemination is used to impregnate the surrogate using her own egg and the sperm from either the intended father or donor. The second is “Gestational” Surrogacy where the egg is fertilized outside the body and implanted in the surrogate. In this case the sperm and egg could come from the intended parents, donors or combinations of the two. The next two labels placed on surrogacies relate to the relationship between the intended parents and the surrogate. In cases where the surrogate and intended parents have a previous relationship and no payment is intended we refer to it as an “Altruistic” Surrogacy. In these cases it is common for a friend or family member to act as the surrogate for the couple. In other situations the arrangements between a surrogate and intended family are entered into as a business agreement with payment in money or transfer of other forms of compensation for the service of carrying the child. This type of surrogacy is labeled a, “Commercial” Surrogacy. The most common combinations encountered are the “Commercial/Gestational” Surrogacies where the intended parents select a surrogate with whom they previously had no relationship and contract to have an already fertilized egg implanted into that person.

One other area of variety and interest is the different possible combinations of egg and sperm. Biological sperm and eggs from the intended parents can be used or we can use donor sperm or egg. In other cases the donor egg might come from the surrogate or through an egg donor or bank. Also in same sex couples a mixture of the intended parents’ eggs in female couples or sperm in male couples is often used so that there is equal chance of both being the biological mother or father of the baby.

Surrogacy is an intriguing concept for many and you may ask yourself, “I wonder what is involved in becoming a surrogate?” Surrogates and intended parents meet and connect in different ways. Many intended parents now seek the support of a surrogacy agency to help in the screening of potential surrogates, for initial contacts and for establishing contracts. Some of the criteria for becoming a surrogate are that she not smoke, drink or use drugs. Having had a previous successful pregnancy and birth without complications is also looked upon favorably. Most couples are looking for a surrogate between the ages 21-44 years who has her own transportation, is financially stable, is committed to being a surrogate and who has good support to see her through the process. The surrogates should also anticipate

Corey Anaka, RNC, IBCLC graduated from nursing school in 1980. She joined the Division of Women and Infant’s Services at UC San Diego Medical Center in 1991 as a staff nurse in the ISCC and has had various roles during her tenure, including seven years as Coordinator of Lactation Services and 1.5 years as the Coordinator of Multiples/Fetal Surgery Programs.

Frann Teplick, MSN, RN, BC, CNS has been an RN for 32 years, the last ten of which have been at UC San Diego Medical Center. She has been a clinical nurse specialist for 28 years.
The likelihood that she will carry more than one baby, since rates of multiples increase with assistive reproductive technologies. The surrogate should also plan to limit the stress in her life when at all possible and be willing to undergo psychological testing and counseling as necessary. She must attend all regular clinic visits and follow provider recommendations and medical protocols for keeping herself and the babies as healthy as possible throughout the pregnancy.

As you can see, surrogacy can be a very complex situation for all involved and the contracts entered into by the two parties can be just as complex. Many of the above criteria and conditions are spelled out in the contracts along with compensation for each stage. These agreements can be very simple or quite complex. One common example involves determinations about how involved the intended parents will be allowed to be during the pregnancy, whether they will be allowed to attend doctors’ visits, ultrasound appointments or possibly be present during the birth. The contract will also often define acceptable behaviors of the surrogate. Compensation varies depending upon whether it is the first surrogate pregnancy for the woman, which can bring in $26,000-32,000, or whether she is an experienced surrogate, which can bring her $28,000-35,000. Also, if the surrogate is carrying multiple babies she can expect to earn, $2-5,000 and higher for each additional fetus/baby.

More and more families are seeking the services of surrogates. As these numbers increase we have become aware of areas of concern related to surrogacy pregnancies. We also have needed to understand legal and other ramifications on local, state, national and international levels.

Many women are drawn to the clinic in Anand, India, to serve as surrogate mothers. Many are drawn by financial incentive. As these surrogate is carrying multiple babies she can expect to earn, $28,000-35,000. Also, if the pregnancy for the woman, which can bring in $26,000-32,000, or whether she is an experienced surrogate, which can bring her $28,000-35,000. Also, if the surrogacy is illegal in many countries (France, Japan, Germany, and Australia) and many states in the United States (New York, Washington, Michigan, Arizona and New Mexico). Other countries, ie. India, have created commercial surrogacy or a “surrogacy business” where many women take on the role of surrogate for international intended parents.

In addition, many of the countries where surrogacy is illegal have national health systems with limited private insurance. Families from these countries, when they hire a surrogate in the United States, do not always consider the need for private insurance to cover the medical costs for their newborns prior to taking them back to their home country. Many of these newborns of a multiple gestation pregnancy or other unanticipated pregnancy complication may spend some time in the Neonatal Intensive Care Unit which can be quite expensive. When these newborns are taken back to their parents home country they must be officially adopted. The surrogacy is not outwardly discussed due to its illegal nature.

Over the last 5-10 years here at UC San Diego Medical Center, we have seen the number of surrogate pregnancies increase. We formed a multidisciplinary task force which includes nurses, physicians, administrators, social workers and risk managers in an attempt to tackle some of the moral, ethical and financial problems that we had begun to see with greater frequency. This team identified system issues including timely notification for successful financial screening, atypical involvement of a third party payor in medical care, international patients and their families with diverse expectations, limited legal regulations and patients’ encounters with a wide range of services within the Medical Group and the Medical Center. Some of the proposed solutions included defining portals of entry into care, sharing databases, protocols for admissions/financial screening, building new hospital policies and procedures specific for this population and having a better understanding of our potential risk exposures. It became clear that the clinical staff needed more education and guidance in how to consistently care for these families. As clinical care providers we were asked to develop a Perinatal Policy and Procedure. Content included definitions, judgment papers (of paternity and maternity), placing and changing of identification bands, release of information, visitation, human milk feeding, birth certificate, guest policy for overnight stays, transport/transfer, discharge and fetal death/demise. As time went on the importance of these elements became more evident as we strived to provide an ever higher quality of care for this high risk perinatal patient population.

We are very proud of our outcomes with each of these unusually complex situations. Our multidisciplinary taskforce and our Division of Women & Infants Services have proven that we are able to handle any situation that comes our way. Teamwork is truly the hallmark of our care!
**Hidden Treasure**

By Paen Smith, RN & Roxane Brown, BSN, RN

It is no secret that UC San Diego Medical Center is the only university-based hospital in San Diego, providing leading-edge care in patient care, biomedical research and up to date education. In the midst of all the high tech gizmos and gadgets there lies a hidden treasure on the 4 West nursing unit of the inpatient tower at UC San Diego Medical Center-Hillcrest called the Birth Center. The Birth Center recently celebrated their 10 year anniversary and their 3,000th birth. Patients and their families choose the Birth Center to facilitate a natural childbirth experience.

The Birth Center is a 4 bed labor, deliver, recovery, and postpartum (LDRP) nursing unit, with dedicated nurses and midwives who deliver quality evidenced-based care in a natural home-like environment. Additional patient support is provided by UC San Diego trained doulas that stay with a woman and her family during the entire labor and delivery experience. Doulas are women volunteers who are trained to support the mom-to-be with the non-medical physical and emotional aspects of labor. They provide comfort and reassurance, the feeling of being safe and let the mom know that they are not alone. They help laboring moms with comfort measures such as relaxation, breathing, massage and positioning. And unlike midwives and nurses, who come in shifts, a doula remains with the mom in labor and her family continuously until her baby is born.

The Birth Center suites provide a home-like setting that is spacious and comfortable, furnished with queen sized beds, rocking chairs, and laboring tubs. The philosophy of Family-Centered Maternity Care (FCMC) is practiced throughout Women and Infants Services, focusing on the patient, and her choice of family and friends involved in her care. During labor, the Birth Center patients are encouraged to eat, drink, and walk. Hydrotherapy, aromatherapy, massage therapy, music, birth balls, and birth stools are all utilized to assist with the normal process of labor and birthing. The nurses are trained to use dopplers to monitor the babies’ heart tones and contractions are assessed with gentle hand palpation.
If the need for further medical intervention arises, patients can safely and quickly be transferred to Labor and Delivery (L & D), just two floors below. Whether in the Birth Center or on Labor and Delivery the midwife continues to oversee the care of the patient, and in many cases (if staffing allows), the Birth Center nurse may also float down to the sister unit, L&D for continuity of care.

With all the birth options available in the Birth Center, it is no wonder that the Birth Center is not only UC San Diego Medical Center-Hillcrest’s best kept secret, but also San Diego’s best kept secret.

Here is what one of our nurses had to say: “I recently had a fresh reminder of why I love being a nurse at the Birth Center, UC San Diego Medical Center. While having lunch with friends I spotted a former patient, her husband and their beautiful 4 week old son. Smiles abounded as we reconnected. This couple stood out in my memory because in many ways they had a typical Birth Center birth. But in another way it was anything but typical.

During her twelve hour labor, this first-time mom walked around the unit, relaxed in the tub, sat on a birthing ball, and rested on the 4 posted bed. Her husband, mother, sister, and doula were there - walking with her, breathing with her, helping her to focus and relax her way through every contraction. I intermittently listened to the baby’s heart rate while she walked the halls or floated in the tub. And I gave the patient’s support team ideas for coping techniques. The midwife encouraged the patient and checked her labor progress.

The patient gave birth to a beautiful healthy nine pound baby boy while on her hands and knees in the bed. She delivered without pain medication. Yes, another wonderful Birth Center labor and birth. An hour after the birth, the mom fainted while I was helping her sit up to go to the bathroom. I called for help and the midwife was there in seconds. The patient was hemorrhaging. As the midwife massaged the patient’s uterus, other nurses and I started an IV, and administered IV medication to help slow the bleeding and firm the uterus. In short order the bleeding stopped and the patient was stabilized. The midwife and I continued to monitor the patient’s bleeding, vital signs and labs for the remainder of the shift.

That’s how my week started. I spent the next two nights with this new family, helping them learn the intricacies of breastfeeding and caring for mom and baby. It was a special joy to care for this family.

Experiences like these are why I moved over 2,700 miles to work at Birth Center at UC San Diego Medical Center. It is such a unique place. The Birth Center staff support and empower women to have a natural labor and birth in a home-like setting with skilled clinicians and emergency back-up to handle any emergencies or complications that may arise.

I look forward to coming to work because every shift is a different adventure. Whether coaching the significant other in primary labor support, caring for a laboring patient, assisting with a birth, or providing breastfeeding and other postpartum education and support – there is always something different do and learn. I have the best job ever. I get to share joy of a family’s most intimate moments. The Birth Center at UC San Diego Medical Center - where women are empowered to have wonderful birth experiences and healthy outcomes.”
We’ve Come A Long Way, Baby!

By Lisa Brugueras RNC and Carol Sainz RN, IBCLC

Over the past 30 years on the 4th Floor at UC San Diego Medical Center we have experienced a multitude of changes as we have evolved from individual postpartum and nursery units to a combined Family Maternity Care Center.

When we both started working on 4 West back in 1979-1980, there were four 4 bed wards, 2 semi-private rooms and only 2 private rooms to service our postpartum patients, none of which were air conditioned! The GU Clinic and the GYN Service took up the majority of the 4th floor and all high risk obstetrical patients were cared for on Labor and Delivery (L&D). Postpartum nurses typically cared for four “normal” mothers, who had either a normal vaginal delivery (3-4 day hospital stay) or a cesarean section (c-section) (5-6 day stay). These “normal” mothers were very well rested, as their babies were in the nursery much of the time. Back then it was unusual for a mom to want her baby to room-in 24/7. Those who did want “rooming-in” were thought of as “Hippie” moms!

Nursery nurses thought the postpartum nurses “had it good.” There was a definite sense of “us” and “them.” Nursery nurses cared for 4 babies at a time. The babies of moms who had vaginal deliveries came up to the nursery carried in mom’s arms. The baby was then taken from her and placed in the nursery while she was admitted to her room. Babies of c-section moms were carried to the nursery by an L&D staff member shortly after birth. All babies were placed in a crib under a warmer in the nursery where the admission process began. Each was given a vitamin K shot, had erythromycin ophthalmic ointment applied to their eyes and blood drawn to check their hematocrit and blood sugar. The blood was processed right there in the nursery, spun in our very own centrifuge. Babies remained under the warmer and vital signs were taken every 30 minutes times three, and then hourly until stable. Phisohex baths and cord care were done when the baby was warm and the baby then remained under the warmer until he/she regained normal body temperature. Babies were then were subjected to a 2nd bath, with more time spent under the warmer. It was believed at the time that the babies were “dirty” after birth and nurses wore cover-gowns over their scrubs until after the bath. Interestingly enough, even though we wore gowns, we didn’t wear gloves. Good hand washing was considered adequate. (These were the days before body substance isolation and before HIV was discovered.) Mothers and their babies were separated for as long as 3-4 hours at a time. Prior to allowing each baby to breast or formula feed, we assessed their suck/swallow ability by giving 10-15 milliliters of D5W by bottle.

Newborn nursery nurses were responsible for drawing septic screens, starting IVs and assisting physicians with lumbar punctures and partial exchange transfusions. They also cared for babies on continuous IVs, those going through drug withdrawal, those being treated with phototherapy and occasionally babies requiring gavage feeds. It wasn’t just about sitting in rocking chairs and bottle feeding babies (though that’s what those postpartum nurses thought)!!

In the early 80’s, the father was the only other person allowed in the room when baby was present and he was required to wear a cover gown when holding his newborn. After all, his clothes were dirty, right? Visitors and family could only come up to the floor during visiting hours from 2-3 in the afternoon and 7-8 at night. During
this time all babies would be returned
to the nursery and could only be seen
through one small viewing window.

During the last half of the 1980s
the model of care changed, and the
nursery and postpartum units were
joined under the same leadership. There
were challenges. The nursery was on
12 hour shifts and postpartum was on
8 hour shifts. Family Centered Care
was becoming the way to practice,
but all staff had to be cross trained for
both units before we could combine
and become one. Like all changes, this
one was met with much resistance.
To go along with our new care model
we took on a new name, the Family
Maternity Care Center. We also began
seeing more complicated mothers,
those requiring magnesium sulfate
to slow labor, diabetics on insulin
and antepartum patients, at the same
time blending our staff members with
nurses specially trained to care for these
more complex patients. Over time,
we became one cohesive unit. Nurses
now worked on both units (FMCC and
Nursery). When we were assigned to
work on the Family Maternity Care
Center ward we took care of couplets
(Mom and Baby), but the nursery was
still open for our more complex babies.

Many other things were changing
in the mid 80’s to early 90’s, based on
research, advances in practice and
changes in the needs of our patients.

Over time visiting hours were extended,
rooming-in began and families were
now able to visit with the new moms
and their babies. Double phisohex baths
ended, though babies were still placed
under warmers and bathed, but now
only with baby soap. Phisohex cord
care was replaced by cord care with
alcohol alone. We also discontinued
routine lumbar punctures on all babies
requiring antibiotics. Evidence led
doctors to stop routine stripping of
the umbilical cord (a practice where
the blood in the umbilical cord was
pushed into the baby at delivery), so
the incidence of and need for partial
exchange transfusions decreased. Blood
draws for routine hematocrits and blood
sugars also ended. Body substance
isolation became a way of life, gowns
and gloves becoming mandatory before
the bath, as we worried about the spread
of HIV. For those of us working in the
nursery, body substance isolation was
particularly difficult. The thought
that these little newborns might possibly
cause us harm was a difficult one to
grasp and none of us ever thought we
would be able to start an IV with gloves
on! Time and practice proved us wrong.

The nursery was eventually closed
in January of 1995, coinciding with
FMCC’s move to 4 East. We no
longer separated moms and babies,
admitting them both directly into
the room. By this time dads were
starting to spend the night and were
much more involved in their infant’s
care. We were no longer just teaching
mom to care for her new baby, but we
were teaching the whole family, truly
embracing, “Family Centered Care.”

The years between 1995 and the
early 2000’s saw ongoing growth
and expansion of the antepartum
service, due to the growing number
of patients with complex medical
problems who were now becoming
pregnant. Our nurses had to not
only accommodate to a changing
patient population, but we also had
to adapt to advancing technology.

Over the last 10-15 years more
and more computer technology has
entered our work place. This was a
huge challenge, especially for some
nurses who couldn’t even type. When
our antepartum patients first came to
the 4th Floor, fetal monitoring strips
were printed and taken down to Labor
and Delivery for the doctors to see and
evaluate. Eventually the rooms were
wired for central monitoring, enabling
the doctors and nurses to view all the
strips on screens in both the L&D

Admitting a baby to the newborn nursery
cancer and lupus, to name just a few. The expanding and successful use of innovative assisted reproductive technology has greatly impacted our care, with the increasing incidence of multiples (twins, triplets and more) which result from fertility treatments.

There have been significant changes in the care of newborns, as well. The focus on evidence based practice has resulted in newborns going to breast immediately after birth and then remaining “Skin to Skin” with their moms. Newborn baths are deferred for at least 24 hours to allow for bonding and establishment of breastfeeding and cord care is only done on an as-needed basis. In most cases, infant warmers have become obsolete. Babies now get routine screenings for metabolic disorders and hearing loss, both of which allow early detection and intervention, preventing long term consequences and delays in development. Education on car seat safety for our families has become a major focus. Babies ride home safely in their car seats, not in mom’s arms as was done in the past. The population of babies cared for on the 4th Floor has also grown, with infants carrying diagnoses such as ‘infant of a diabetic mother’, inter-uterine growth restriction or even Downs syndrome. Once these infants are deemed stable they are able to room-in with their mothers. Late pre-term infants (babies delivered between 35-37 weeks) are now routinely observed initially in the Infant Special Care Center, but then transferred to stay with their mothers on the Family Maternity Care Center, thus improving “Family Centered Care”.

No discussion of the past years would be complete without acknowledging the growth and accomplishments of our lactation program. Thirty years ago, long before any hospital had lactation consultants, Dr. Audrey Naylor and Ruth Wester, PNP started a lactation follow-up program in the UCSD Primary Care Clinic. It was one of the first of its kind in the country. Eventually they left UCSD to start their own lactation education program Wellstart.

and 4th Floor nurses’ stations. What a great step forward that was! We also began computer provider order entry (CPOE) and computerized charting.

Around the same time computerized medication storage cabinets were installed (Pyxis). Gone were the little boxes that stored each individual patient’s meds! At one point we even had a robot who delivered medications to the floor. We nicknamed him, “DT” (short for “Damn Thing”). We loved “DT”, especially when he got stuck in the elevators or in between equipment in the halls. Sometimes he wouldn’t even open his drawers that contained our medication. Luckily DT was only with us a few years!

The last decade has brought other advances in technology, particularly in obstetrical and fertility care. Many women, who in previous years, would have been counseled to never become pregnant, were now conceiving and having children. Some of these patients include women with pulmonary hypertension, various organ transplants, cystic fibrosis,
International, which allowed them to teach and support new mothers in their efforts to breast feed, along with teaching other doctors, nurses, hospital administrators and government officials around the world about the benefits of breast feeding. Foreign countries would often send groups to Wellstart, here in San Diego, for further education. Part of that education often included a tour of the 4th Floor at UC San Diego Medical Center. Our practice was seen as the “model” for others to emulate. The pride we felt for their belief in and respect of our practice was immeasurable.

In the late 80’s, two of our staff nurses, as a part of their CNIII project, set up a lactation committee to support and assist our nurses in their efforts to help new mothers successfully breast feed. By the early 90’s, UC San Diego sent our own multidisciplinary team to Wellstart for extensive education and training. The UC San Diego Medical Center Lactation Service was formally created as a result of these efforts.

Over the next 10 years our service has grown to include physicians, as well as several lactation consults and educators. In 2001 we began an organized effort to become a Baby Friendly Hospital, as designated by the World Health Organization and UNICEF. Through this process, all staff within Women and Infants Services were educated in the benefits and importance of breast feeding. Our efforts were rewarded in 2006, when we were given the prestigious designation of “Baby Friendly.”

Many may wonder how we remained working on the 4th Floor all these years without getting bored. BORING is not part of our UC San Diego Medical Center experience. From working newborn nursery, postpartum, to couplet care, to being charge nurses, lactation consultants, precepting new staff, teaching CPR and NRP, to an endless variety of committees through the years, life at UC San Diego Medical Center 4th floor has been constantly changing and challenging. We wonder what changes will occur in the the next 30 years and how this unit will evolve. We wish luck to those who will be here to take on the challenges that the future may bring!
In April 2006, UC San Diego Medical Center achieved Baby-Friendly Hospital Initiative Designation, joining only 52 other hospitals and birth centers in the USA. We are the first UC Medical Center and the largest academic center on the west coast to achieve this acknowledgment. The award recognizes birth facilities that not only encourage breastfeeding but actively support breastfeeding as the primary source of newborn nutrition.

What is Baby-Friendly?

This designation was designed for the population of healthy term infants. “The Baby-Friendly Hospital Initiative (BFHI) is a global program sponsored by the World Health Organization (WHO) and the United Children’s Fund (UNICEF) to encourage and recognize hospitals and birthing centers that offer an optimal level of care for lactation. The BFHI assists hospitals in giving breastfeeding mothers the information, confidence and skills needed to successfully initiate and continue breastfeeding their babies and gives special recognition to hospitals that have done so” (BFHI, 2008).

Why is it important?

Many years ago, companies started developing a new infant “food.” Through marketing campaigns these companies convinced many around the world that the formula they provided (always new and improved) was much superior to what a mother makes for free. They were quite successful at influencing many around the world to formula feed their infants and in turn, formula became a very lucrative business.

Worldwide, over one million infants die each year because they are either not breastfed or are fed other foods too early. Many millions live in conditions that most of us can hardly fathom. Given the recent natural events in Indonesia, Haiti and Chile we are reminded of how vulnerable infants living in third world countries really are. Three of the most common illnesses in infants - diarrhea, respiratory infections and ear infections - have decreased in the industrialized world just by increasing the numbers of babies that are breastfed.

Over the years, the pendulum of opinion on breastfeeding has swung rather hard in both directions. With the evidence from current research and literature it is hard to dispute the benefits of human milk for infants. After all, we are mammals and Webster’s New World Dictionary defines mammal as, “Any of a large class of warm-blooded vertebrates whose offspring are fed with milk secreted by the female mammary glands.” (1977)

What are the current recommendations?

In 2005, the American Academy of Pediatrics changed their policy statement to say that infants should be exclusively breastfed for at least the first six months of life and continue for at least the first year. The Surgeon General’s Healthy People 2010 gives the goal of 75% of women would breastfeed their newborn infants at hospital discharge. At UC San Diego Medical Center 93-95% of mothers discharged breastfeed their newborn infants.

Baby-Friendly at UC San Diego: Implementing the 10 Steps:

In 2001, with the support of the Senior Management Team, we embarked on a well coordinated mission towards designation status. Linda Levy, Director of Women and Infant’s Services at UC San Diego Medical Center in 1991 as a staff nurse in the ISCC and has had various roles during her tenure, including seven years as Coordinator of Lactation Services and 1.5 years as the Coordinator of Multiples/Fetal Surgery Programs.

Corey Anaka, RNC, IBCLC, graduated from nursing school in 1980. She joined the Division of Women and Infant’s Services at UC San Diego Medical Center and has had various roles during her tenure, including seven years as Coordinator of Lactation Services and 1.5 years as the Coordinator of Multiples/Fetal Surgery Programs.
providers in the division, anesthesia, pharmacy, social work, lactation services and nutrition services.

Over a period of years, through a gradual and methodical process, we began to change practices, aligning ourselves with the Baby-Friendly principles. The switch to Family Centered Care and “rooming-in” was not only a change in logistics but a philosophy change in providing an environment that keeps the mother/infant dyad together 24/7, from delivery until discharge. The Medical Center made a conscious effort to remove all products that advertise formula or included the formula companies’ logos. It put the hospital in a position of now purchasing formula (that used to be provided abundantly from the companies for free) for those who medically needed it and for creating our own discharge bags that supported the breastfeeding dyad.

One of the most time consuming pieces of this evidence-based practice shift was the training of all of the staff within our division, other departments of the hospital that interact with us, the outpatient maternal-child clinics, and all levels of providers.

**Lactation Services at UC San Diego Medical Center:**

Lactation Services at UC San Diego Medical Center: An integral part of achieving and maintaining our Baby-Friendly status is our Lactation Service. This service includes both Lactation Educators and Lactation Consultants. The Lactation Educators are trained to provide basic breastfeeding/lactation education to families and act as an advocate within the community. Our Lactation Consultants are board certified RN’s that have earned the letters of IBCLC (International Board of Certified Lactation Consultants). Their role is to provide clinical management to families that are having challenges with feeding, premature and medically fragile infants and mothers in special and high risk situations through one on one consultations and education. The support for our breastfeeding families extents to a telephone breastfeeding helpline and a weekly support group to assist families.

**What does it mean to our families that deliver at the Medical Center?**

After all is said and done so what does all of this really mean? To many of us it means another demonstration of our commitment to provide state-of-the-art care for the mothers and babies. We care for a variety of high risk patients, both moms and babies. Though breastfeeding or pumping to provide milk may not always be feasible, we weigh all the options. We feel it is our responsibility to provide the correct information to all families so that a true “informed” decision can be made in regards to infant feeding. In the end it’s not about you or me, it’s about supporting the mothers, babies and families in the choices that they have made.

Without the support and commitment of the Divisions of Neonatology (Dr. Neil Finer) and Reproductive Medicine (Dr. Thomas Moore), and all of the other individuals and departments involved in this project, it would certainly not have come to fruition. I am very proud to be a part of this wonderful Division of Women and Infants Services and all of the great work that everyone does!

**The 10 Steps of Baby-Friendly:**

- Maintain a written breastfeeding policy that is routinely communicated to all health care staff.
- Train all health care staff in skills necessary to implement this policy.
- Inform all pregnant women about the benefits and management of breastfeeding.
- Help mothers initiate breastfeeding within one hour of birth.
- Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
- Give infants no food or drink other than breastmilk, unless medically indicated.
- Practice “rooming in” - allow mothers and infants to remain together 24 hours a day.
- Encourage unrestricted breastfeeding.
- Give no pacifiers or artificial nipples to breastfeeding infants.
- Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.
Recent natural disasters both in this country and around the world remind us everyday that we must be prepared to care for and protect our patients in a crisis. We may need to quickly move them to a safer location if our structure or environment is compromised. This may mean transferring them horizontally into another section of the hospital as, for example, during a fire, or actually moving them outside the hospital entirely if the building has been damaged.

At UC San Diego Medical Center our neonatal intensive care unit (called the Infant Special Care Center or ISCC) has 49 beds, all above the first floor of the hospital. Therefore we need to be able to evacuate up to 49 infants in the event of a disaster. Our review of reports of the process used in the evacuation of a neonatal intensive care unit during Hurricane Katrina demonstrated that this dilemma is not ours alone. It is a national challenge for high rise hospitals. A routine evacuation drill in our unit made it clear that we needed an entirely new process for vertical evacuation of our sickest patients on life support. There were two objectives when we considered evacuation of patients from the ISCC. We needed to be prepared to support a patent airway and maintain body temperature of infants through this stressful procedure and also to consider ergonomic requirements for the staff involved.

Most hospital NICUs utilize infant evacuation aprons to move patients out of their units. We evaluated the aprons in hospital evacuation drills at UC San Diego Medical Center. It quickly became apparent that these aprons are not only unsafe for infants of low birth weight (our most frequent clients), but also for most term infants unless we can provide additional neck support. Both premature and term newborns cannot hold up their heads when sitting up because of immaturity in muscle development. The anatomy and physiology of this group requires additional stabilization of the neck to maintain a patent airway when placed in the evacuation apron in a vertical position.

The requirement for stabilization of neck position was discussed with our Director of Disaster Preparedness. Working together we devised a procedure using Sam splints for this purpose. Typically these splints are used for immobilization of limbs on adults. We determined that by cutting the splints down to fit the standard length of our infants, we had essentially created a baby backboard to stabilize the neck in the “sniffing” position recommended for optimal air exchange. The infant is placed on the Sam splint and the head secured with Coban (a type of medical bandage that adheres to itself) to maintain this open airway position. The entire splint and infant package is then wrapped in a blanket and placed vertically in the apron pocket. Using this procedure a nurse is able to carry a maximum of four infants, each placed in an individual pocket, and to move to another part of the hospital or to descend the stairs to safety in an evacuation. By stabilizing the neck, we prevent the potential apnea and bradycardia that could occur in this population with airway obstruction.

Evacuation aprons are not a suitable vehicle for the evacuation of critically ill infants.
infants on life support. We undertook a series of equipment evaluations and drills, looking at different approaches for these babies. Our efforts led to the creation of a best practice for vertical evacuation of ventilated newborns that supports adequate ventilation, as well as fostering improved temperature maintenance, and meets ergonomic requirements for staff safety.

Initially we tried a 2-person process, where a nurse carried a plastic bassinette down the stairs while the respiratory therapist hand ventilated the patient as they traveled to the designated evacuation site. This process highlighted the poor ergonomics for the staff and did not support best airway position or warmth for the ICU infant. The Safety Coordinator and Management Team reviewed potential equipment that would improve patient and staff outcomes. The initial assessment led to a trial of the infant slings that mothers often use to carry their babies as an evacuation tool. Use of the sling made it possible to use a single person for each infant, leading to a more timely evacuation, as well as improved possibility for survival of the sickest ventilated patients. The sling takes advantage of the body warmth of the nurse and also uses a chemical mattress to maintain temperature. The Sam splint is again used for airway stabilization, allowing the nurse the freedom to be able to use both hands to provide ventilation as the infant is moved down stairs. A small, lightweight oxygen tank with regulator and shoulder strap complete the emergency equipment for this procedure. Each nurse in the ISCC now has the ability to use a one-person process to move their patient in an ergonomically sound manner with all activity at the waist level close to the nurse’s body.

Earthquakes and major disasters occurring around the world highlight the requirement for moving the smallest most fragile patients out of an unsafe environment quickly and safely, using a minimum of resources. An adequate plan and well prepared staff members are vital to the ability to save as many as possible from harm or death. We have created an inexpensive and creative way to move our most unstable neonatal ICU patient population from a high rise building. We will continue to perform additional evacuation drills in order to review and refine our procedures. Certainly the NICU nurses and patients in Hurricane Katrina would have fared better, had they been able to utilize this new approach.
There is a change in the Infant Special Care Center (ISCC). Everyone is talking about maternal milk volume, skin to skin, IEATS (individual enteral advancement tables), feeding progression, donor milk, milk scanning and milk recipes. Mothers and fathers are asking when they can hold their infant skin to skin; a mom is pumping at the bedside while a dad holds their infant on his chest. Nurses are tracking maternal milk volume and explaining donor milk options when mother’s milk is not available. Physicians, nurses, lactation nurses, dietitians, occupational therapists (OT) and sometimes the mom are all involved in weekly rounds to discuss the nutritional needs of the infant. What’s this all about? It is the new Supporting Infant Nutrition Program (SPIN) at UC San Diego Medical Center. As seen on the CBS evening news with Dr Sanjay Gupta, the mission of SPIN is “To create a center of excellence in neonatal nutrition, focused on the provision, analysis and research of human milk, to improve nutritional and neurological-developmental outcomes in preterm babies.” (Kim, 2008)

With the success of the Baby Friendly Hospital Accreditation, the push was on to improve the use of breast milk in the neonatal intensive care unit (Infant Special Care Center - ISCC). It is known that breast milk is best for our babies, decreasing the incidence of necrotizing enterocolitis (NEC) and infection, decreasing feeding intolerance and shortening hospital stays. We know that preterm infants suffer from growth failure and often fall below the 10th percentile, with a risk of never catching up (Dusick, 2003). Yet in 2006 only 33% of our babies received 100% breast milk and our rate of NEC was 5.8% (Kim, 2008). Though we at UCSD were doing better than the national average, it was still not good enough. We knew we could do better. We need 100% of our infants receiving 100% breast milk, we need to decrease our rate of NEC, increase maternal milk volume and breast feeding, improve growth and development of our preterm babies, improve milk safety and create a nutritional plan for discharge. Lofty as those goals might be it is the systematic approach to development and implementation of these changes that makes this program a success.

A milk analyzer was purchased which measures protein, fat and carbohydrate in milk. A study was designed to check the milk of a variety of mothers in the ISCC and the results were astounding. The calories in human milk can vary from 15 to 30 calories/oz and the fat and protein also show wide variations (Sauer et al 2009). Human milk recipes were developed by the SPIN dietitian to fortify mother’s milk and improve the infant’s nutrition. A milk technician was then hired to customize the preparation of all these...
new recipes and improve the safety and handling of milk. The milk analyzer is still only being used in research, but the hope is that it will someday be useful in clinical care, helping us to fortify each mom's milk specific to the nutritional content that exists in each sample. This analyzer will be very important as we move forward in this program.

The new Individual Enteral Advancement Table (IEATS) is an excel program that standardizes the progression of feedings. Nurses may increase an infant’s feeding according to the IEATS table as long as the feeding is tolerated. As an infant reaches full volume on the IEATS schedule, nurses continue to increase the feeding after careful assessment of the infant’s weight, fluid volume status and feeding tolerance, along with a physical assessment.

A lactation consultant was hired to address the lactation needs of our moms. Parents are educated about the importance of providing human milk for their preterm infant. Breast pumps are provided along with education on pumping and storage, how to maintain an adequate milk supply and the importance of skin to skin contact. Daily recording logs help moms keep track of their milk volume and alert staff to any difficulties with maintaining supply. With the increase in maternal education, lactation and nursing support and early skin to skin contact with their infants we hope to see an increase in the mom’s milk volume.

A new milk scanning system is now being utilized to address milk safety. It utilizes bar coding to identify mothers, babies and mothers’ milk. This system is also utilized to track several factors related to maternal milk production which will provide data for many potential research studies.

Since the inception of SPIN, UC San Diego Medical Center has become know nationwide for the development of the first standardized nutrition program for the preterm infant. Though it is early in SPIN’s development, Dr Stellwagen, Director of the SPIN program, has shared some promising results. Already we can see that 98% of our preterm mothers are pumping. Infants less than 32 weeks are all being fed human milk (donor milk if mom’s milk is not available). Our rate of NEC has decreased to 1% in 2008. Our rate of feeding human milk has increased from 66% in 2006 to 81% in 2008 and 51% of our babies go home on 100% human milk, which is up from our original 33% at the start of this nutrition program.

As it is said, it takes a village to raise a child and that must be true because here at UC San Diego Medical Center it takes an entire Division of Neonatology, along with a multidisciplinary team approach and support from the entire Women and Infants Services Division, to grow a preemie. This nursery is finally engaged and focused on providing the best possible nutrition for our tiniest patients.


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### Individualized Enteral Advancement Tables (IEATS) for Neonates <750g Birth Weight

<table>
<thead>
<tr>
<th>Feeding</th>
<th>Date and Time Advances are q day</th>
<th>mL/kg/day</th>
<th>Weight Est* (kg)</th>
<th>Volume (mL) of each feeding</th>
<th>Caloric density of milk or formula</th>
<th>Comments (circle type of feed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st day</td>
<td></td>
<td>8</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td>MBM of Formula</td>
</tr>
<tr>
<td>2nd day</td>
<td></td>
<td>8</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>3rd day</td>
<td></td>
<td>8</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>4th day</td>
<td></td>
<td>16</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>5th day</td>
<td></td>
<td>24</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>6th day</td>
<td></td>
<td>32</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>7th day</td>
<td></td>
<td>40</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>8th day</td>
<td></td>
<td>48</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>9th day</td>
<td></td>
<td>56</td>
<td>0.000</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>10th day</td>
<td></td>
<td>64</td>
<td>0.008</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>11th day</td>
<td></td>
<td>72</td>
<td>0.016</td>
<td>0.0</td>
<td>20 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>12th day</td>
<td></td>
<td>80</td>
<td>0.024</td>
<td>0.0</td>
<td>22 kcal/oz</td>
<td>HMF/PE22</td>
</tr>
<tr>
<td>13th day</td>
<td></td>
<td>88</td>
<td>0.032</td>
<td>0.5</td>
<td>22 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>14th day</td>
<td></td>
<td>96</td>
<td>0.040</td>
<td>0.5</td>
<td>22 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>15th day</td>
<td></td>
<td>104</td>
<td>0.048</td>
<td>0.5</td>
<td>22 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>16th day</td>
<td></td>
<td>112</td>
<td>0.056</td>
<td>1.0</td>
<td>22 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>17th day</td>
<td></td>
<td>120</td>
<td>0.064</td>
<td>1.0</td>
<td>24 kcal/oz</td>
<td>HMF/PE24</td>
</tr>
<tr>
<td>18th day</td>
<td></td>
<td>128</td>
<td>0.072</td>
<td>1.0</td>
<td>24 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>19th day</td>
<td></td>
<td>136</td>
<td>0.080</td>
<td>1.5</td>
<td>24 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>20th day</td>
<td></td>
<td>144</td>
<td>0.088</td>
<td>1.5</td>
<td>24 kcal/oz</td>
<td></td>
</tr>
<tr>
<td>21st day</td>
<td></td>
<td>152</td>
<td>0.0961</td>
<td>2.0</td>
<td>25 kcal/oz</td>
<td>Protein for HMF</td>
</tr>
</tbody>
</table>

*assumes wt gain rate of 8g/day at 10th day of feeds
The past ten years have brought remarkable advances in neonatal care which have allowed us to refine care for the extremely low birth weight infant (<1000grams) and for term infants who have difficulty adjusting to extra-uterine life. These infants often have extended stays in the neonatal ICU (at UC San Diego Medical Center known as the Infant Special Care Center or ISCC), sometimes for months at a time. Peripheral venous access (PIV) and umbilical venous and arterial lines are critical for the immediate fluid and nutritional needs of these babies in the period following birth. PIV has limited potential for either the stabilization of the at risk infant, or the promotion of growth, especially when the calorie requirement to just maintain life is greater than the basic requirement for weight gain and establishing fat stores. The nurses in the ISCC identified the need for a more stable, long-term and consistent solution for venous access. The solution was peripherally inserted central catheters or PICC lines. These special lines can be inserted by physicians, nurse practitioners and registered nurses with special training in these techniques.

In 2000 the Infant Special Care Center PICC team was officially established. A mission statement and bylaws were created. We agreed from the outset that we would hold regular bi-monthly meetings and elect officers (chair, co-chair and secretary). The ISCC PICC team continues to be an independent and highly functioning group. Members must commit to attend a minimum of 60% of the total yearly meetings, where analytical data is reviewed, case studies are presented, policy and procedure are refined, products are reviewed and published literature is discussed through journal reviews. Currently the ISCC’s PICC team consists of ten nurses, four neonatal nurse practitioners (NNPs), one fellow, and one attending physician. A bedside nurse who wishes to be considered for the PICC team must have a minimum of three years experience in the ISCC, have a strong ability to multi-task, be an independent worker, have critical thinking skills, be proficient at placing PIV’s and be able to read x-rays that document the position of PICC lines. It is expected that the nurse have achieved certification in high-risk neonatal ICU nursing and have either achieved CNIII status, or be in the process of obtaining it. Nurses are selected for the team by an interview process.

One of the team’s projects was to acquire a personal data assistant (PDA) that has been programmed for the specific needs of the ISCC PICC team. All members of the team have access to the device and are responsible for entering their own data regarding insertion/removal, complications, dressing changes, population demographics, and individual/group insertion success. The PDA is synchronized (sync’d) periodically to a computer as a back-up for all files. Because the ISCC averages 200-300 PICC lines with 2000-3000 line days per year use of the PDA has decreased the amount of time needed to enter data and has decreased the human error from manual collection. It also allows rapid analysis of data, as well as comparison to national averages for success rates. For example, when data collection was expanded to include line data (infection rates and number of line days) in 2007 our analysis revealed a high infection rate - 48 cases of reported line-associated blood infections in the 3,540 total line days that year. The team was dismayed to learn of these results and, as a group, considered various methods to reduce the infection rate. Our plan of action included outreach to other NICUs in California to discover their procedures for management of PICC lines. We also asked for involvement from our pharmacy to systematically prepare our IV medications and to ensure consistency. Our unit joined the California Children's Services Continuous Quality Improvement (CCSCQI) Collaborative on decreasing the incidence of central line-associated bloodstream infections (CLABSI).

Armed with information from...
Infant Special Care Center’s PICC Team

all these sources the team developed several action plans. First we conducted an intense scrutiny of the policy and procedure guidelines for PICCs. We created step-by-step procedures for insertion, maintenance, repair and removal of PICC lines. Further review of the literature demonstrated a change from the use of alcohol to chlorhexidine for line insertion in babies greater than 1000 grams and we embraced that change.

Our high infection rate led to lengthy discussions about blood drawing techniques for blood cultures, both peripherally and centrally. We developed a step-by-step procedure for drawing blood cultures and educated our staff in the procedure. We developed a pictorial guide for each step that is easily accessible to the bedside nurses. We then created and implemented bedside competencies to document proficiency in the new procedure. We also made modifications to improve infusion of IV medications. We now use a different IV tubing which allows medications to be introduced further away from the insertion site. The procedure for daily tubing changes was modified, with the goal of decreasing exposure to infectious substances as much as possible. Our involvement in the CCSCQI collaborative led to use of a central line check list that is now used during insertion of all PICC lines and central lines to ensure that there is no breach in aseptic technique.

The outcome of these changes has been a significant reduction in the incidence of central line-associated bloodstream infections. There were only two cases of reported infection in 2009 from a total of 2,373 line days that year. We will now begin to conduct line audits using another form from the CCSCQI collaborative. We will evaluate this new data, as well as continue to analyze data collected in the unit on our PDA.

The ISCC’s PICC team is a special group of independent, strong minded individuals who value high excellent, high quality care. We are driven to be the vocal advocates of patients who cannot voice their concerns. We have enlisted the aid of various outside institutions, consulted with colleagues in other disciplines, and collaborated with the CCSCQI collaborative to ensure a safe and consistent approach in providing central venous access for neonates. We used what we have learned to make evidence based changes which have directly affected the well being of our small patients. Our efforts definitely support an advanced practice position for nurses. We are proud to report that three team members have achieved their CNIII status through their efforts to improve the quality of care we provide.
Infant Special Care Follow-up: Terrific role for a Pediatric Nurse Practitioner

By Martha Fuller, RN, MSN, PNP-BC and Zohar McMurtry, RN, MSN, CPNP

The UC San Diego Medical Center Infant Special Care Follow-up program (ISCF) was established over thirty years ago to provide ongoing neuro-developmental follow-up for high risk infants. Babies who were born prematurely or those with significant medical problems at or around the time of their birth are candidates for participation in this program. Many of our patients came from the Infant Special Care Center at UCSD, but we also receive referrals from other NICUs (neonatal ICUs), since we have been designated as a California Children’s Services “High Risk Infant Follow Up Center.” Infants are seen every six months for the first two to three years of life. Clinic evaluations include a psychosocial assessment, physical examination, and developmental testing. Based on the results of the evaluation anticipatory guidance is given and referrals are made. Pediatric Nurse Practitioners (PNPs) are the primary clinicians in ISCF. We wear many hats: clinician; teacher; case manager.

In early 2008 mom Maria was transferred from a community hospital to UCSD Labor and Delivery in pre-term labor with a diagnosis of Twin to Twin Transfusion Syndrome (a complication of pregnancy with very high mortality rates). At 28 weeks gestation she delivered twin girls, Ann and Amy. (all names have been changed to protect confidentiality). These infants were critically ill and required immediate intervention from the ISCC team of doctors and nurses. Despite all their best efforts, baby Ann did not survive. Amy had a long stay in the ISCC and was discharged home at two months old. Six months later, she came to ISCF for her first visit. Amy was doing well, with normal growth and development. At that time her Mother was noted by the PNP to be extremely depressed. A social work consultation revealed significant mental health problems related to guilt and grief over the loss of her other child.
Christian was born at UC San Diego Medical Center at 28 weeks gestation and weighed only 985 grams. He is now 2 and is somewhat shy, but is showing off his gross motor skills as part of his developmental follow-up.

twin. She was referred for psychiatric services. The family was given support and information regarding resources. At Amy's second clinic visit Mom was receiving psychiatric care and was much improved. She had enrolled in an infant massage class. Amy was evaluated by a neonatology fellow working under the supervision of the PNP and found to have some mild developmental delays in several areas and was referred to an early intervention program. Teaching was given to the family regarding additional ways to promote Amy's development. At age two, Amy came to clinic a playful and active toddler, pretending to feed a doll, running down the hallway, coloring pictures. She and her mom have been attending a “mother-child” class twice weekly. Amy had only mild delays in speech and language, and was performing at her age level in all other areas. Amy was referred for a hearing test and we recommended that she receive speech therapy services. Maria was doing extremely well. No longer taking any psychiatric medications she was able to verbalize her understanding that the death of her other twin was not her fault and expressed appreciation for everything that the staff of the ISCC and ISCF had done for her and her family.

The Infant Special Care Follow-up Clinic is a wonderful place for PNP’s to work. We provide education, support, and referrals and watch high risk infants (born too early, too small, or with significant illnesses) grow and develop. We are awed by watching infants who weighed a pound at birth come back as playful active toddlers. The families we serve are inspirational, facing adversity they respond with love and strength.
Certification:
Margie Quinto RN, BSN, Outpatient Hemodialysis Unit, received her Nephrology Nursing Specialty Certification (CNN). All career RNs in the unit are now CNN!

Julia Torres RN, MSN, C-EMF, Labor and Delivery, received her inpatient OB certification.

Darlene Brydon RN, Thornton 3 West, received her Oncology Nursing Certification (OCN).

Melodie Neel RN, BSN, Thornton 3 West, received her Oncology Nursing Certification (OCN).

Anne Vodicka RN, Thornton 3 West, received her Oncology Nursing Certification (OCN).

Leah Yusi RN, MSN, PhD, 8th Floor Hillcrest, received her Orthopedic Nurse Certification (ONC).

Claire Jenkins RN, 8th Floor Hillcrest, received her Orthopedic Nurse Certification (ONC).

Jamie Deyoe RN, PhD, 8th Floor Hillcrest, received her Orthopedic Nurse Certification (ONC).

Nita Uson RN, 8th Floor Hillcrest, received her Orthopedic Nurse Certification (ONC).

Melissa Packer RN, BSN, 8th Floor Hillcrest, received her Orthopedic Nurse Certification (ONC).

Rommel Fong RN, ADN, Thornton OR, received his Orthopedic Nurse Certification (ONC).

Nelissa Reyes RN, 8th Floor Hillcrest, received her Orthopedic Nurse Certification (ONC).

Yoli Inocencio RN, BSN, 8th Floor Hillcrest, received her Orthopedic Nurse Certification (ONC).

Edna Tabladillo RN, BSN, 8th Floor Hillcrest, received her Orthopedic Nurse Certification (ONC).

Christine Cuenca RN, Acute Dialysis, received her Nephrology Nurse Certification (CNN).

Presentations:
Leslie Bartlett RN, Miriam Bender RN and Jody Polyniak RN presented “Positive Outcomes Since Implementing the Clinical Nurse Leader (CNL) Role on Thornton PCU” on January 22, 2010 at the American Association of Colleges of Nursing CNL National Conference.

Publications:
Pamela Eliawitz, RN in Acute Dialysis, published “Diabetes: Controlling Blood Sugar" in the online magazine Westside Today. The article discusses the types, causes, symptoms, and complications of diabetes; the importance of controlling blood sugars; and identifies current research aimed at finding a cure. Read the article at http://www.westsidetoday.com/r1954/diabetes-controlling-blood-sugar.html

Awards:
Marion Garzo Saria RN, MSN, AOCNS, clinical nurse specialist in oncology, was awarded a Trish Greene International Cancer Nursing Training Workshop Fellowship by the International Union Against Cancer (UICC), the leading non-governmental organization dedicated to the global prevention and control of cancer. He travelled to the Philippines as a cancer expert and visiting faculty to teach a workshop on end-of-life care training for doctors, nurses and other health care workers in March 2010.

CN III Promotions:
Jennifer Allyn RN, AND, BA, CCRN, SICU Hillcrest,
Sam Byars RN, ADN, OCN, 3 West Thornton,
Chemotherapy Calendar for Bone Marrow Transplant patients

Larisa Shashlova RN, 2 West Thornton, Diabetes Plan of Care

Kerr Lundgren RN, SICU Hillcrest, SICU Cardiac Surgery Day

Rowena Basa RN, CNOR, Thornton OR, Creation of a Robotic Surgery Custom Pack and Impact in OR

Angela Ramos RN, BSN, Infant Special Care Center Hillcrest, Increasing Use of Diaper Dermatitis Prevention Products

Clarita Floresca RN-BE, BSN, Thornton OR, Implementation of robotic assisted Laparoscopic Prostatectomy (RALP)

Robin Adduono RN, ADN, Thornton OR, Education and Procedural Guidelines for OR Procedures – Intraperitoneal Hyperthermice Perfusion

Lynne Trumbore RN, BSN, RNC-NIC, Infant Special Care Center Hillcrest, Cuddlers Program

Raquel Porto Alvarez RN, BSN, CCRN, CCU/10 ICU, Ventilator Acquired Pneumonia Prevention in the Area of Oral Care in CCU

Jennifer Pavone RN, BS, BSN, OCN, 3 West Thornton, Administering Hazardous Chemotherapies

Christine Byrne RN, BSN, SICU Hillcrest, SICU Cardiac Surgery Day

Martha De Meyere RN, CCRN, CCU Hillcrest, Provider Family Alliance Study/Patient and Family Centered Care Project

Laura Kopfinger RN, BSN, CCRN, SICU Hillcrest, Provider Family Alliance Study/Patient and Family Centered Care Project

Claire Egan RN, BSBA, CCRN, CCU Hillcrest, Provider Family Alliance Study/Patient and Family Centered Care Project

Cynthia Marquez RN-BC, CCU Hillcrest, Provider Family Alliance Study/Patient and Family Centered Care Project

Cherry Bigornia RN, BSN, CCU Hillcrest, Provider Family Alliance Study/Patient and Family Centered Care Project

Jean Kim RN, BSN, CCRN, SICU Hillcrest, Provider Family Alliance Study/Patient and Family Centered Care Project

Kathy Hoang RN, MSN, Infant Special Care Center Hillcrest, Provider Family Alliance Study/Patient and Family Centered Care Project

Mary Marshall RN, AND, CCRN, CCU Hillcrest, Disposable EKG Leads

Colleen Gilhooly RN, BSN, SICU Hillcrest, Safety and Planning for Critical Care Patients in MRI

Leslie Mann RN, BSN, OCN, Thornton IMU, Bedside Report Video: A Quality Improvement Project

Jody Polyniak RN, BSN, Thornton IMU, Bedside Report Video: A Quality Improvement Project

Special Mention:
Beverly Kress RN, BSN was selected as interim nursing director for the Emergency Department and Critical Care Units upon the retirement of Karen Jones RN, MS after 24 years of service.

Alexander Aussi RN, BSN, MBA, transplant administrator for the Center for Transplantation, participated in the creation of the Press Ganey Associates’ new comprehensive transplant inpatient survey and outpatient survey for use by transplant programs across the country.
These Are My Shoes

By Janet Marty Johnson

These are my shoes. Look closely before you put them on. Notice how small they are. They are really not for walking. They were made with an image in mind of who I would one day become. While I am wearing them, teach me that I am loved. Teach me that the world is a warm and wonderful place – help me to enter it softly. Teach me that someone will be there when I cry. My shoes are not for walking. They are for wearing while being held in loving arms. These are my shoes. Look closely while you help me put them on. Notice how small they still are. They are for running and jumping, and sometimes for falling. They were made with an image in mind of all the things that I could do. While I am wearing them, teach me about the wonderful world that surrounds me. Teach me how to approach it. Keep me safe within it. Teach me that learning about new things is fun – listen to what I’ve learned today. My shoes are for running and jumping and splashing in mud puddles. They are for wearing while I explore the world – but not too far away from loving arms. These are my shoes. I was late to school today because I had trouble finding them. One was under my bed and the other was under the kitchen table. I slipped them on my feet on my way out the door – yesterdays’ knots still in the laces. They are for running and jumping and fidgeting in – it is hard to sit still when there are so many things going on around me. They were made with an image in mind of all the places that I would visit in my daydreams. Teach me that I’ll always have you to come home to after all my adventures are through. These are my shoes. I put them on this morning, and walked away from the home that I have always known. Look how my feet have grown. My shoes were made for the kind of person who would help others into their shoes. While I am wearing them, teach me how to teach. Teach me that I can make a difference. Teach me that I am not alone. My shoes are for walking into new situations. Teach me how to do it successfully. These are my shoes that I threw on as I ran out the door to be on time to work today. I hope I grabbed the ones that match. These shoes were designed for the sensible population - A group of people who no one seems to notice anymore – I guess we’ve had our day. While I am wearing them, teach me that I still have something to say – lord knows that’s the only way I’ll turn a head anymore. Show me that you think my time is as valuable as yours. Give me something to laugh about, invite me to join in your conversation. My shoes are for running from one task to another. I run so hard, yet I see that my life has run by, even faster. These are the shoes that the doctor said I should wear. Can you believe how much orthopedic shoes cost? It’s good that they are slip-ons, because it’s too hard to bend over anymore. These shoes were designed to last forever – kind of a cruel thought isn’t it? While I am wearing them, teach me that my life has meaning. Teach me that all my work has not been in vain. Listen to my stories, and maybe I can teach you too. My shoes are on my feet because I still have places to go. I still have things to do. I still have life to live. Teach me that you see that too. These are the shoes that a stranger put upon my feet. The fact that I have shoes on my feet tells me that I still have somewhere to go. It must be some place special, because my shoes are shiny and new. They are not really for walking. They were made with an image in mind of a world that I would some day enter. While I am wearing them, remember what I have taught you. Remember that the world is a warm and wonderful place. Remember that I will be there when you cry. My shoes are for wearing while I am held in God’s loving arms. These are my shoes.

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