Neonatal team combines compassionate care, discovery to treat region’s most fragile babies

After naps or when bedtime draws near, Diane and Thad Hathaway of Pullman, Wash., catch themselves marveling at their four boisterous toddlers and relishing the way their oldest son Cody, age 7, fills his role as big brother.

Only two short years ago, the toddlers, quintuplets, were tiny preemies in the UWMC neonatal intensive care unit. They were born about eight weeks early and each weighed about two and a half pounds. Three babies — Caleb, Gabriel and Alison — spent two weeks in the NICU before growing strong enough to graduate to a less intensive unit. Seth had significant intestinal problems and also received care at Seattle Children’s. Renae was stillborn.

The Hathaways experienced every emotion imaginable during that stage of their lives: anxiety since Diane was hospitalized and on bed-rest for 96 days prior to the birth; excitement for the arrival of their newest family members; grief for losing Renae; worry for the health of their children and relief that they had chosen UW Medical Center, even though it was 300 miles from home.

“Being in the hospital so far from home and from Thad and Cody was hard, but the nurses were incredible and the care there was just awesome,” Diane said. “The staff did a great job helping me keep my spirits up. I felt very well cared for.”

Diane attributes her children’s transformation from fragile newborns to healthy, active toddlers in large part to this care.

“It’s a thrilling time,” Diane said. “They are all talking and interacting with each other and us. I really love snuggling up with my children and reading a good book to them.”

The Hathaways learned four weeks after their final round of fertility drugs that Diane was pregnant. At six weeks, an ultrasound showed three babies. The Hathaways were shocked, but not overwhelmed. The shock came two weeks later when doctors discovered two more babies.

When she was only 14 weeks pregnant, Diane was prescribed home bedrest, then hospital bedrest when she was at 18 weeks until she delivered her quintuplets. The couple knew Diane and their babies would need highly specialized prenatal care and access to neonatologists with extensive experience delivering higher-order multiples. UWMC was the clear choice.

The NICU was the region’s first Level IIIIB, which means it can provide the highest level of care around the clock to the smallest, most fragile and sickest babies in Washington, Wyoming, Alaska, Montana and Idaho (WWAMI). The unit specializes in higher-order multiples and micro preemies, or babies born before 26 weeks gestation and weighing less than 1,000 grams, or about 2.2 pounds. The experts at UWMC regularly care for babies born sooner and weighing less.

UWMC also works in partnership with Seattle Children’s when babies need surgery for a congenital problem or other issues that develop soon after birth. Experts at UWMC transfer the babies to receive this care from colleagues at Seattle Children’s, who are also faculty members of the UW School of Medicine.

Thanks in part to clinical care and leading research by neonatal specialists in the NICU, babies whose futures might have been grim 50 years ago when the hospital opened, have a greater than 90 percent survival rate and thrive.

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A baby weighing less than 2 pounds in 1959 would have virtually no chance of survival. Today, many babies weighing 2 pounds not only survive, but grow up to be healthy children.

As an academic medical center, UWMC is constantly working with both scientific researchers and childhood specialists to institute new medical advances.

For example, the unit was among the first in the nation to begin using nitric oxide as part of a landmark study funded by the National Institutes of Health. Nitric oxide is a gas that has been shown to reduce the risk of brain damage and lung problems in premature babies. It is now becoming a standard of care for babies across the nation.

The NICU team is currently researching ways to protect babies’ brains, encourage brain development and help babies who have suffered asphyxiation during birth. The team also works closely with the UWMC high risk infant neurodevelopmental clinic, which is unique in our region, allowing the NICU team to follow its graduates through childhood and providers to monitor patients on a long-term basis.

“We are constantly studying ways to help protect premature newborns that have very fragile brains by looking at ways we can minimize the chances that these babies will suffer bleeding or an intracranial hemorrhage,” said Dr. Dennis Mayock, NICU medical director and a UW professor of pediatrics. “As a result of these discoveries and ongoing long-term follow-up by our team, we have better outcomes and lower complication rates than most centers in the United States.”

Perhaps what the team is most proud of, though, is the way they are able to connect with families and help parents become confident members of the health-care team. Each morning, the parents are invited to sit down with neonatal specialists, including doctors, nurses, pharmacists and dietitians, and help plan their babies’ care.

This approach improves patient care and gives the families a sense of control during a time when it is so easy to feel helpless. It builds trust and communication that serves all members of the team throughout a family’s stay in intensive care.

“Our care to the babies is the best, in part, because we understand the need for parents to be central in the care of their babies,” said Lori Chudnofsky, assistant nurse manager of the unit. “We work very hard to support these parents as they learn about caring for their special children.”

The NICU can currently handle more than 30 babies. In order to care for more babies and create an environment to provide optimal care, the unit is scheduled to move to the new inpatient building in 2012.

The new space will allow the team to care for as many as 50 babies with patients and their families in mind. Rooms will be private and quiet with lighting that can be customized based on each baby’s needs – important qualities that are crucial to preterm babies’ development. Plus, new parents will be able to stay overnight at their babies’ bedsides more comfortably. A new room will also be dedicated to family resource materials. Families, many of whom stay for three months or longer and travel far from home for the specialized care here, will have access to a small laundry facility and kitchenette.

Staff members believe the new space will further enhance the unit’s already legendary patient- and family-centered care, shaped in part by the Perinatal/Neonatal Intensive Care Unit advisory council. These advisers are patient and family members – volunteers who work with UWMC care providers and staff to improve the health-care experience for everyone, fostering the philosophy of patient- and family-centered care.

The Hathaway family still appreciates this commitment to care.

“The staff is exceptional and definitely focused on people receiving great care,” Diane said. “They meet you right where you need to be met and go the extra mile.

“I really valued the time they spent with me,” she said. “I know the doctors are so busy, yet I didn’t feel that I had to rush. It felt like we could be sitting around having tea and crumpets under other circumstances.”
“WE WORK VERY HARD TO SUPPORT THESE PARENTS AS THEY LEARN ABOUT CARING FOR THEIR SPECIAL CHILDREN.”

- Lori Chudnofsky, neonatal intensive care unit assistant nurse manager

Nicole Clark spends time with her newborn twins: son, John (above), and daughter, Eleanor (not pictured).