

Valley Children's Hospital NICU performs the highest level of care

By Rick Bentley

Valley Children's Hospital's neonatal intensive care unit's Level IV designation means the hospital can treat children who have the most dire medical conditions. Read the story: <http://www.fresnobee.com/2015/03/03/4400579/valley-childrens-hospital-nicu.html> Other Kids Day stories: <http://www.fresnobee.com/kidsday> THE FRESNO BEE

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Gabby Morales adjusts the blankets around her infant daughter, Olivia. It's a little difficult to navigate the assortment of tubes and wires that help the staff of Valley Children's Hospital's neonatal intensive care unit keep tabs on the 3-month-old baby.



Olivia's obviously sleepy, but she manages a smile at the attention she's getting. It's not just the Shafter mom who monitors the infant so closely. The child gets a lot of attention in this unit from the hospital's staff. In fact, not many other units across the country offer this highest level of care.



Designations vary, but in California, the top rank a NICU can receive is a Level IV from the American Academy of Pediatrics. That rank means a hospital like Valley Children's can deal with almost any medical situation a patient — most babies weighing less than 3.3 pounds — may need.

This kind of intense medical treatment for newborns wasn't even a specialty until the early 1960s, but it has grown to be an invaluable part of any children's hospital. These units, especially the ones with a Level IV designation, get the children who have the most dire medical conditions.

That high-level designation is critical for the central San Joaquin Valley. Without it, some patients and their families would have to travel to Los Angeles or the Bay Area. Instead, those patients have one of the top-rated facilities for dealing with the worst case situations.

"This is an amazing facility and amazing in its capabilities," said Dr. Jeffrey Pietz, chief of newborn medicine and Olivia's doctor. "We are pushing the envelope every day."

Valley Children's has responded to these severe cases with a success rate that eclipses national averages. Its survival rate of the NICU patients is 93.9%; the national average is 85%.

Olivia's care

Being at Valley Children's has been a comfort to Morales. Her confidence that her daughter would get better increased because of the nurses and doctors taking care of Olivia.

"It didn't look good, but it just seemed like everyone was on my team," Morales said. "What I like about being here is that they let me be so involved in her health care. I'm so involved. Olivia has come a long way."

Olivia has been a patient here since she was born. Complications during birth caused a massive amount of blood loss that ended up between the baby's skull and scalp and resulted in problems with her liver, lungs, heart and

kidneys.

Morales said that Olivia's chances didn't look good when she was born. She was so sick that she was referred to Valley Children's from a Level III hospital in Bakersfield.

"Her liver took a very big hit, but the nice thing about the liver is that if you give it supportive care, it will recover. And her liver has recovered nicely," Pietz said. "Her liver was very injured and her heart was very distressed. Fortunately, her brain and her neurological development seem very normal."

Because of the massive bleeding, Olivia's body was deprived of necessary oxygen. When that happens, the body has a priority way of shutting down organs that starts with the kidneys. The last thing is the heart and brain.

Olivia's condition improves daily and, except for her kidneys, all of her organs have responded to treatment. If her kidneys don't respond, she will have to deal with dialysis until she's old enough for a transplant.

Morales — who works as a dialysis nurse — doesn't miss the irony that of all the medical conditions Olivia faced it's her kidneys that have been the slowest to respond. The process of recovery has been slow but the team has helped the baby reach such a healthy level that there's talk she could be leaving the facility in the next few weeks.

Team expertise

Olivia's case shows the importance of the hospital's Level IV designation, which requires a team of specialists.

"I feel lucky. When I interviewed for the job, I said I feel like I have been in training my entire life for this job," Pietz said. "But I'm standing on a lot of shoulders."

Every bed in the NICU has a team of doctors and nurses who handle primary care or can call on a wealth of resources if needed. And the unit continues to push the envelope with new ways to help patients, including work on a new type of ventilator.

The NICU calls on doctors with sub-specialties — heart, liver, etc. — from the more than 500 doctors on staff. Not all of them work directly with the NICU, but they can be called on for expert advice.

"We are a Level IV because we have every sub-specialty we need," said Emily Hunt, a clinical nurse specialist who has been at Valley Children's for 10 years working in both the NICU and the pediatric intensive care unit, or PICU. "Those include being able to do a bypass, surgery here for any diagnosis and also the sub-specialties of the clinics."

Valley Children's has a half dozen pediatric surgeons on staff. The only thing that can't be done at the local facility is a transplant. There aren't enough cases to warrant having such a team in place. So, should a child need a transplant, the hospital works closely with the Lucile Packard Children's Hospital Stanford in Palo Alto to provide the pre- and post-operative care.

Hunt sees Valley Children's Hospital as both a place to work and as a hospital she might have to use because she's also a mom.

"It's the realization that there is this hospital here that offers services even for the healthy child that gets them here and acquainted with how good this staff and this medical group are throughout the facility," Hunt says.

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