

GE Healthcare

Baptist Hospital Foundation,
Mother Infant Center of Excellence

Nashville, TN

Giraffe^{*} OmniBed^{*} + Giraffe Shuttle^{*}

Case Study



imagination at work

Solution Overview

The facility

- Middle Tennessee's primary childbirth center, with more than 7,000 births per year
- 52-bed Level III Beaman Neonatal Intensive Care Unit (NICU)
- Neonatologists, obstetrics physicians and anesthesiologists available in-house 24/7
- Largest group of high-risk pregnancy specialists in the southern Kentucky, northern Alabama and middle Tennessee regions

The opportunity

Improve admission temperatures of infants admitted to the NICU by minimizing the number of bed transfers required when moving between Labor & Delivery and the NICU.

The GE solution

GE Healthcare's Giraffe Shuttle, when used with the Giraffe OmniBed, provides the ability to deliver uninterrupted thermal support and help reduce stress associated with bed transfers traditionally related with transporting premature infants from one care area to another.

Keys to success

- Support seamless intra-hospital transportation of newborns to maintain thermal and physiological stability
- Decrease risk of potential intraventricular hemorrhage (IVH) as a result of handling a newborn's head during bed transfers

Baptist Hospital Foundation made GE Healthcare's Giraffe Shuttle a central element of treating patients in the Golden Hour of Neonatal Care.

Baptist Hospital Foundation (BHF) in Nashville is Middle Tennessee's primary childbirth facility. Welcoming more than 7,000 infants into the world every year, BHF seeks to provide a comfortable space for both babies and families while making exceptional patient treatment its No. 1

priority. Ten percent of infants born at BHF are admitted to BHF's NICU—and for these newborns, state-of-the-art technology and medical expertise is especially vital.

BHF offers the largest group of maternal fetal medicine specialists in the region, including in-house neonatologists, obstetricians and anesthesiologists who are on call 24 hours a day.

Creating a stable continuum of infant care

One of the significant physiological challenges for pre-term babies is the ability to maintain body temperature. Many factors can contribute to a drop in body temperature: cooler room temperature, low birth weight, and the need to transfer the infant across multiple beds to facilitate the move to the NICU. As the infant is admitted to the NICU, research has shown for every 1° C below 36° C, the survival rate drops by 28 percent. After birth, babies are traditionally moved up to four times—from their mother to the Labor & Delivery warmer, to the scale, to the transport incubator and then finally to the NICU warmer or incubator—making it challenging to maintain a stable temperature.

With infant health and safety top of mind, BHF sought a solution to minimize the number of times a baby is transferred from bed to bed to address the challenge of improving NICU admission temperatures as well as reducing the potential stress associated with the bed transfers in general.

Making it possible for newborns to occupy only one bed from Labor & Delivery throughout transport and admission to the NICU, Giraffe Shuttle is a transportable power source that can attach and provide electrical power to GE Healthcare's Giraffe family—the Giraffe Incubator, Warmer and OmniBed. Offering up to 45 minutes of reliable power, Giraffe Shuttle allows for continuity of care and also provides power for auxiliary equipment as well as for medical gas management that may be required for patient care during intra-hospital transport.

Customer Feedback

(The following statements represent customer experiences and feedback on potential benefits of the Giraffe Shuttle to the patient)

What made you decide to get Giraffe Shuttle?

BHF sought a solution for a safer way to protect pre-term babies from intraventricular hemorrhage (IVH)—bleeding into the ventricles of the brain—and to provide a smoother process for transporting newborns to and from different areas of the hospital, while keeping temperature stable. BHF was also looking for a customizable bed that would allow for two oxygen, as well as two air hook-ups to continue to provide blended gas support without interruption for an extended period of time.

What personnel training did you need to do once you got it?

As with any new technology being introduced in a hospital, training was necessary when introducing the Giraffe Shuttle to BHF staff. GE Healthcare provided initial training upon implementation and remained available for additional training as needed.

What difference have you seen it make in the NICU's operations?

Through implementing the Giraffe Shuttle, BHF has truly streamlined the process by which a pre-term baby is moved throughout the hospital. By introducing this efficient approach, there has also been increased cooperation among departments as the Giraffe Shuttle is treated with great respect and is viewed as an important part of keeping newborns as safe as possible. Overall, there have been fewer transfers between surfaces allowing for decreased handling of the pre-term babies.

What do you see as the biggest advantage of using Giraffe Shuttle?

The greatest advantage of using the Giraffe Shuttle has been the ability for BHF to reduce risk related to IVH, as pre-term babies are not disturbed when being transported throughout the facility. The reduced handling of pre-term babies also reduces the risk of infection given that a newborn's skin is thin and easily susceptible to infection. An added bonus clinicians are seeing is the ability the Giraffe Shuttle offers for keeping the newborn's temperature constant. The Giraffe Shuttle also meets new NRP (neonatal resuscitation program) 2012 guidelines including pulse oximetry, mounted t-piece, cardiorespiratory monitoring as well as blended gas sources.

What improvements have you seen to patient health and stability since getting the Shuttle?

Both temperature stability and the streamlined approach for hospital transportation have improved newborn patient health as well as efficiency throughout BHF. The Giraffe Shuttle provides the ability to maintain a stable temperature which is extremely important for pre-term babies.

Benefits

Making Giraffe Shuttle central to its NICU operations helped BHF improve NICU admission temperatures while providing faster, more efficient service to its neonatal patients.

- **Helping ensure infant health with simpler transport**
By eliminating the need to transfer a baby from bed to bed or to and from an incubator, Giraffe Shuttle helps reduce the potential for clinical problems that can result from interrupted patient thermoregulation, patient touching, handling and movement—all of which can challenge physiological stability.
- **Increasing workflow efficiency**
Giraffe Shuttle not only increases patient thermoregulation, it also helps maximize caregivers' time. With Giraffe Shuttle, infants need only occupy a single bed, eliminating the need for multiple bed transfers or for additional equipment to be prepped or cleaned. With fewer bed transfers, the time necessary to prepare for movement to the NICU has been reduced, improving overall efficiencies in neonatal care. As Giraffe Shuttle helps ensure a consistent temperature, infants are admitted to the NICU in a more stable state, enabling caregivers to tend to more babies at once.
- **Emphasizing the Golden Hour of Neonatal Care**
The first hour of a newborn's life is the most critical, especially if the infant is born pre-term or if there are other medical complications. Giraffe Shuttle can help enable caregivers to quickly and safely transport the newborn from Labor & Delivery to the NICU while taking Apgar Scores, monitoring for complications and providing necessary thermal support. At BHF, Giraffe Shuttle is clearly noted as a critical step in ensuring thermoregulation during the Golden Hour of Neonatal Care.
- **Enabling "One Baby, One Bed"**
Giraffe Shuttle supports GE Healthcare's "One Baby, One Bed" concept. Knowing that babies can now be fully supported in a single bed—even when moving through the hospital—provides greater peace of mind for caregivers and parents.
- **Offering easy use and design excellence**
Giraffe Shuttle's slim silhouette is designed to make it easier for caregivers to steer the bed in tight spaces, through doorways, down hallways, and around corners. Further, it contains no latex, so there's no need to worry about exposing infants or caregivers to a potential allergen.

About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services helps our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our “healthymagination” vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality and efficiency around the world. Headquartered in the United Kingdom, GE Healthcare is a \$16 billion unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employs more than 46,000 people committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at www.gehealthcare.com.

