

Nara Bassinet

Category:

Product Entry / Medical Device

Name of Company:

Tekna, Inc. / Stryker Medical

Design Credits:

Tekna, Inc., Matt Czach, Bryce Porter, Kevin Osborn, Tim LaRoy
Stryker Medical

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Nara Bassinet

The Nara Bassinet is a new innovation in the Labor and Delivery Department of the hospital that brings mothers close to their newborns during the time when closeness matters most and provides caregivers with a safer, more ergonomic solution.

The bassinet market or product category has been relatively ignored for decades. Traditionally, the product is sold as an accessory or bundled with other furniture and commodity equipment purchases. Thus, the product and paradigm that was created in the marketplace was driven by the suppliers of wood and stainless steel materials, rather than driven by clinical need and value to the end user. Overcoming these orthodoxies and the perception of the purchase process was more challenging than developing the appropriate product for the environment and user experience.

The Nara Bassinet is the first product in this space that provides a holistic solution for a dynamic group of end users. It is also the first product in this space that puts the patient (both mom and newborn) as the primary driver for the inspired solution. The overall design, materials, and feature development consider the entire lifecycle of the product to meet user needs ranging from new mom, clinical staff, and hospital cleaning staff.

The current products in this category can be described as one of two things: a wood filing cabinets or a metal filing cabinet. This begged the question, why are we pushing newborn babies around the hospital on filing cabinets?

The Nara Bassinet was designed from the ground up as a medical product that played an important role in the delivery of care to newborns. Nara's simple, safe design was intended to bring mothers close to their newborns, during a time when closeness matters most. The narrow cabinet design and height adjustability helps to promote mother-to-infant closeness from the bedside. Additionally, the basket was specifically designed to improve visibility, eye contact, and interaction for mothers to their newborns.

When researching user needs, we discovered that traditional bassinets were rarely the appropriate height for many of the required tasks and offered no flexibility for the range of heights of users. Nara was designed with height adjustability in mind to provide ergonomic positioning for caregivers who are in standing postures, while providing the ability to be lowered to any bed height.

Improving safety was also of highest priority when developing Nara. Current MDR (Medical Device Reporting) filings with the FDA identified many instances with current bassinets tipping over, dumping newborns to the floor. The Nara Bassinet is designed to reduce tipping and the basket is secured by three points of contact, providing moms and caregivers piece of mind.

The height adjustability of the bassinet allows nursing staff and clinicians to adjust the product to the most comfortable and ergonomic position to deliver care. This feature also allows moms, who may be recovering from cesarean section, the ability to interact with the newborn while remaining in bed and reducing the need to reach or lift.

Nara's one of kind basket securing method and overall improved stability of the product has addressed newborn safety issues reported in historical MDR filings. Materials selection and overall design resolution promotes easy cleanability and disinfection, thereby making turnover more efficient and reducing the risk of hospital acquired infections (traditional bassinets are wood and porous).

End user observation also provided insights for new features that improve workflow. Nara's two-way drawer system offers easy access to storage from either side, helping limit disturbance to the newborn.

The research, opportunity identification, industrial design, mechanical engineering, regulatory support for a Class II medical device, and contract manufacturing was provided by Tekna. It is also a new product in an area of the hospital that can provide pull-through sale opportunities with the ability to add to an entire line of products in Labor and Delivery. So far, reaction from hospital staff has been overwhelmingly positive and the product is viewed as bringing a much-needed innovation to the delivery of care. Early sales have also been very positive, converting entire fleets of older bassinets with a demonstration of the new product.

The benefits of the Nara Bassinet will have a dramatic affect on the local community and state economy. Locally designed, manufactured, and leveraging a supply chain based exclusively in Michigan, the product has already provided new jobs, growth in the local community, and supports local business partners.

Provide One to Five photographs.



Video (optional)

<https://www.youtube.com/watch?v=5fllKDbUZM>