

Protocols to Ease Transport of Extremely Low Birth Weight Babies Improves Safety while Maintaining Low IVH Rates

This webinar features Ashley M Childress, MPA, BSN, RNC-NIC, Nurse Manager at Bryan Neonatal Intensive Care Unit in South Carolina, discussing protocols to ease transport of extremely low birth weight babies, including using an ATOM Dual Incubator while traveling to the NICU.

Please tell us about yourself.

My name is Ashley Childress. I am a second career nurse with a previous background in Non-Profit Management and Social Work. After graduating from nursing school, I began as an adult oncology nurse and transferred into neonatal intensive care about a year and a half later. After a few years at the bedside, I moved into an Assistant Nurse Manager role and recently became our unit's Nurse Manager about a year and a half ago. When not at work, I enjoy spending time with my husband and two children.

Can you tell us about your NICU?

Our organization's mission is "Inspire Health. Serve with Compassion. Be the Difference." Our unit is classified as a Level IIIIC as defined by the American Academy of Pediatrics. Our unit has an internal transport and delivery team, a unit-based vascular access team, and a specialized Small Baby unit that recently began resuscitating infants at 22-weeks gestation.

Have you recently implemented any new protocols or procedures that you would like to share?

Over the course of the last several years we have addressed the significant issues extremely low birth weight (ELBW) often face by adopting the use of Prolacta and developing new protocols like our ROP protocol, early CPAP stabilization protocol, a new bathing protocol, and our IVH Bundle that includes admitting small babies directly into an ATOM Incubator before traveling to the NICU.

What clinical factors made you see a need for a change in said protocols or procedures?

We look at our outcomes annually and brainstorm as a team to determine how we can change our practices to better serve our patients. Our nurses work closely with physicians to develop and tweak the protocols as needed based on nursing workflow and constraints of our physical space, budget, etc.



What are the parameters for this new process?

Any baby born prior to 28-weeks gestation or weighing less than 1000gm is defined as ELBW and admitted to our Small Baby Unit.

Was staff accepting of the new process and how did this hinder or assist in implementation?

Absolutely. We encourage our specialty teams to engage in process improvement projects within the unit. We see that their passion for the project and buy-in is far more effective than anything our leadership team could achieve with a management or physician-only driven process change.

How was your success measured?

We follow our VONN data trends, as well as unit-tracked measures (post-delivery temperatures, feeding intolerance, etc.) on a monthly, quarterly, and annual basis.

What were the benchmarks and who was the team that oversaw this change?

Typically, we have a nurse team paired with leadership and a physician to discuss an area of opportunity and work through the process of setting goals, developing strategies to address the issue, implementing the changes, and collecting data in relation to the changes that were made.

How long had you been utilizing the new protocol before you noticed that the process was improving patient outcomes?

In regard to taking the ATOM Incubator to deliveries, we immediately had anecdotal from nursing that transporting babies from the delivery room to the unit was smoother, took less time, and the babies settled much more quickly. We see continued success in maintaining a low IVH rate in our ELBW population represented in our VONN results.

Was new technology used to implement the new process?

The ATOM Dual Incubator.

What specifically about the new technology helps make success possible?

The extended battery life (lithium ion technology) of this incubator allows us to keep the bed prewarmed and ready for admission even when unplugged from a power source. It also continues to effectively warm the patient regardless of whether it is serving as a radiant warmer or isolette, which is good during prolonged deliveries. Finally, the bed drives smoothly and is not difficult to maneuver like some older transporters or incubators.

Was the manufacturer of this technology supportive in helping you achieve your goals and how?

Yes – ATOM helped us customize the incubator for our needs and did on-site training when we purchased them. While we didn't originally intend to take these beds to ELBW deliveries, we quickly saw the benefit of utilizing them in this way.

Would you say that this process improvement supported by new technology would be beneficial for other facilities as well?

If the physical space of a delivery room/OR can support admitting directly to an ATOM incubator, this process could certainly positively impact infants born in other facilities.