

## Successful Transportation of Precious Cargo

### *Becoming an Expert Neonatal Transport Nurse*

Timothy M. Snow, RN, MSN, NNP-BC

I started my career as a neonatal transport nurse under the mentorship of an expert transport nurse with many more years of experience than myself. She analyzed, processed, and acted much faster than I. She was adept at both giving and receiving information throughout the entire transport process. She practiced excellent customer service at the referral hospital, while simultaneously recognizing the infant's disease process and beginning treatment, all before I could even assess the infant. She knew every medication, protocol, and procedure with precision.

My mentor became an expert neonatal transport nurse by making a conscious effort to educate herself over a period of many years. She was self-motivated to learn and took advantage of every given opportunity. She attended classes and conferences frequently to gain more and new information. She held more specialty certifications than anyone I knew. I describe her as confident, fearless, and willing to challenge the "old way" of doing things in a manner that led to improved quality for the patient.

While I found myself transitioning from being an expert neonatal intensive care unit (NICU) nurse into a novice transport nurse, my new role transition was not a comfortable change. I knew I needed further guidance and education to acquire a level of expertise like my mentor. So I began my journey to find my own path toward being an expert transport nurse. I soon found, however, that there were no published guidelines and few articles on neonatal nursing transport. Thus, I began to emulate my mentor and began to educate myself. This process was

slow and arduous but eventually I did attain an expert level of transport nursing practice. I wondered; how did my mentor do it so easily?

It has been 14 years since I began my transformation into an expert transport nurse and I believe we have a better idea of appropriate opportunities that translate into the development of an expert transport nurse, but there continues to be room for improvement. There is significant variation in the type of neonatal transport training that different institutions use, including orientation, determination of readiness for independent transport, use of protocols to guide transport care, and how quality assurance is monitored.<sup>1</sup> Ideally, training programs should include simulation for case management, team interaction, and function, while using a period for debriefing and discussion. Didactic presentations and transport observation/participation should also be included.<sup>2</sup> In addition to the improvement of transport nurse education, we should evaluate which education strategies promote the development of expert transport nurses. So the critical question arises, can all nurses become expert neonatal transport nurses by following a few of the examples of my former mentor?

I believe my mentor all those years ago became an expert by unknowingly using a variety of strategies that led to an increase in her knowledge base while also developing her intuition and problem-solving skills. Haag-Heitman<sup>3</sup> described several key factors that were shown to influence expertise development in nurses including risk-taking, deliberate practice, social models and mentors, and external rewards such as social recognition, new relationships, scholarships, travel opportunities, and occupational benefits.<sup>3,4</sup> Research involving social models, mentorship, and external rewards has revealed that individuals acquire skills through imitating experts while external rewards provide the most common benefits given by healthcare organizations to encourage expertise development.<sup>4,5</sup> Risk-taking and deliberate practice are interesting concepts that most accurately reflect how my mentor became an expert neonatal transport nurse.

---

**Author Affiliation:** Wake Forest Baptist Health, Winston-Salem, North Carolina.

*The author declares no conflict of interest.*

**Correspondence:** Timothy M. Snow, RN, MSN, NNP-BC, Wake Forest Baptist Health, Medical Center Blvd, Winston-Salem, NC 27157 (tsnow@wfubmc.edu).

Copyright © 2014 by The National Association of Neonatal Nurses

DOI: 10.1097/ANC.000000000000103

Deliberate practice is described as a personal, goal-oriented approach that is used to progressively improve skill development and performance. Deliberate practice is also a personal choice that a person makes to attain a progressively higher level of performance and knowledge over a period of years or decades to become an expert in their field.<sup>6</sup> The methods to attain this level of performance include a combination of formal education, in-service seminars, specialty certifications, asking questions, deemphasizing the fear of failure, teaching/coaching others, and use of written and/or electronic resources.<sup>3</sup> As neonatal nurses, we should first make a conscious decision to set out on this journey to become an expert by the use of all available resources. Expertise cannot and will not happen overnight. The majority of transport teams have a medical director who is ultimately in charge of education of the transport team; even so, it is imperative that each individual makes a conscious decision to educate him- or herself through academic endeavors, certification attainment, and exploration of opportunities that increase exposure to practical knowledge in the field of neonatal transport medicine.<sup>2</sup> Possible practical experiences may include controlled opportunities for procedure skills within a NICU or another similar unit such as the pediatric intensive care unit. Another excellent resource for practical knowledge attainment for individual or small teams is the simulation lab. Simulation offers a chance for a life-like scenario that offers a chance for recognition of disease processes, decision-making, and intervention. These simulations, in conjunction with debriefing after a scenario, can increase both individual skill and team cohesion.<sup>2</sup> Finally, neonatal transport nurses should exert a conscious effort to educate other nursing and medical professionals. They should be at the forefront of educating NICU nurses, other team members, and medical professionals at referral institutions through spontaneous education (while caring for an infant with particular disease, or during a procedure or intervention) or through planned didactic educational offerings.

Another key factor that frequently influences expert development is risk-taking behavior.<sup>3</sup> Risk takers, like most transport nurses, tend to be influential, self-confident, and innovative. They strive to improve and make breakthroughs.<sup>3</sup> I feel that risk-taking is a common inherent behavior in neonatal transport nursing. For example, we take on new risks by joining a neonatal transport team. Willingly climbing into an ambulance, helicopter, or fixed-wing aircraft is a known risk. Neonatal transport nurses then go from a controlled environment where a nurse practitioner or physician is available when needed to an environment where more independent practice is necessary. Neonatal transport nurses must assess infants without a physician present and

either initiate a protocol, perform an emergent procedure, or obtain consult from a physician via phone or radio. I propose we channel this risk-taking mindset that neonatal transport nurses have into a new direction. Medical risk-taking should never be uncalculated and reckless. When patient care is involved, risk taking must involve research, protocol development, and continuous quality improvement. We should learn to take innovative new treatments commonly used within the NICU and work to develop protocols that can safely guide their use on transport. Recently, teams have begun using nitric oxide, high-frequency jet ventilation, and both active and passive cooling on transport. We should develop protocols that address the transport of unusually sick infants such as babies with subgaleal hemorrhage, life-threatening airway deformities, or complex cardiac malformations while maintaining family-centered care. Transport nurses should learn to describe these experiences by teaching and publishing their successes in journals to convey their expertise to other professionals.

My exciting first few days with my transport mentor occurred many years ago and my career has evolved into the role of a neonatal nurse practitioner, yet I still follow many of the examples my mentor exuded. Meanwhile, my mentor still rides the ambulance, helicopter, and fixed wing aircraft picking up critically ill neonates and pediatric patients. All these years later she still displays confidence and professionalism. She continually pursues excellence while emphasizing customer service and family-centered care at the referral hospitals. She exemplifies both deliberate practice and well-constructed risk-taking. Although the answer to the question I posed earlier (can all nurses become an expert neonatal transport nurse) remains elusive. I believe that many more nurses would be successful transport nurses if they would make a conscious choice to begin the journey toward being an expert through deliberate practice and by well-thought-out risk-taking.

## References

1. Karlson KA, Trautman M, Price-Douglas W, Smith S. National survey of neonatal transport teams in the United States. *Pediatrics*. 2011;128(4). Peds. 2010-3796d.
2. Stroud MH, Trautman MS, Meyer K, Moss MM, Schwartz HP, Bigham MT, et al. Pediatric and neonatal interfacility transport: results from a National Consensus Conference. *Pediatrics*. 2013;132(2):359-366.
3. Haag-Heitman B. The development of expert performance in nursing. *J Nurs Staff Dev*. 2008;24(5):203-211.
4. Ericsson KA. Attaining excellence through deliberate practice: insights from the study of expert performance. In: Ferrari M, ed. *The Pursuit of Excellence Through Education*. Mahwah, NJ: Lawrence Erlbaum; 2002:21-55.
5. Dreyfus HL, Dreyfus SE. The relationship of theory and practice in the acquisition of skill. In: Brenner P, Tanner CA, Chelsa CA, eds. *Expertise in Nursing Practice: Caring Clinical Judgement and Ethics*. New York, NY: Springer; 1996:29-47.
6. Ericsson KA. Deliberate practice and the acquisition and maintenance of expert performance in medicine and related domains. *Acad Med*. 2004;79(suppl):S70-S81.