

New Opportunities for Verification of Enteral Tube Location Project

# LETTER FROM THE INCOMING AND OUTGOING CHAIRS

Greetings everyone from the NOVEL project! We have had another busy year and want to share some of our accomplishments and plans with you. First, 2022 was our 10<sup>th</sup> year of working to define and disseminate best practice for NG tube placement verification. Since we defined best practice with our 2019 publication in *Nutrition in Clinical Practice*, we have been working to disseminate this information.

The other news from this past year is the selection of a new chair for the NOVEL project; Dr. LaDonna Northington. Dr. Northington is a charter member of our group and has been the principal investigator for two of our studies. While no longer in a leadership role, outgoing chair Beth Lyman will remain on the NOVEL project.

Below is a list of our current members:

- LaDonna Northington, RN, DNS; representing the Society of Pediatric Nurses
- Peggi Guenter, PhD, RN, FASPEN; representing ASPEN
- Cheri Hunt; BSN, MHA, RN, NEA-BC: representing nurse administrators
- Sharon Irving, PhD, CRNP, FCCM, FAAN, FASPEN; representing the American Association of Critical Care Nurses
- Carol Kemper, PhD, RN, CPHQ, CPPS, FAAN; representing CHA Patient Safety Organization
- Beth Lyman, MSN, RN, CNSC, FASPEN, FAAN; representing ASPEN
- Candice Moore, MSN, RN; representing outpatient care
- Leslie Parker, PhD, ARNP, NNP-BC; representing neonatal nursing
- Rosemary Pauley, APRN, MS; representing the Association of Pediatric Gastroenterology and Nutrition Nurses
- Gina Rempel, MD, FRCPC; representing ASPEN
- Deahna Visscher; parent member

LaDonna Northington, RN, DNS Incoming Chair, ASPEN NOVEL Project

Beth Lyman, MSN, RN, CNSC, FASPEN, FAAN Outgoing Chair, ASPEN NOVEL Project

# SUMMARY OF 2022 ACTIVITIES

#### **Chief Nursing Officers**

We participated in a webinar with Chief Nursing Officers (CNO's) from the Children's Healthcare Association to disseminate best practice information. We elected to focus our efforts to communicate the need to improve adoption of pH or radiograph (in certain clinical situations) to nurse managers. This strategy was based on the results of our study published in 2021 that indicated nursing administration was a main driver in practice changes toward the use of pH measurement. Aside from the webinar, we have added a recently retired CNO to our membership and have written an article geared to nurse managers.

## **NICU** Population

The 2021 study also confirmed that NICU staff often do not use pH measurement, despite this practice being common across other areas of institutions. We have added a NICU NP/nurse researcher to our group to assist us to better understand this issue.

As a result of the barriers and challenges identified by NICU nurses in our studies, we are in the process of organizing a workgroup of clinical nurses, NP's, neonatologists, pharmacists, nutritionists, and staff educators. The first meeting will be held in early 2023. At that time, goals and objectives will be established. Two foci of the workgroup will be identification of barriers and challenges, as well as identification of best practice guidelines for this population.

## Presentations

In this past year, several presentations have been given by NOVEL project members around the topic of de-implementation science and the continuing use of auscultation or aspiration to verify NG tube placement. Presentations were made at the annual ASPEN meeting, the Academy of Medical-Surgical Nurses and the American Pediatric Surgical Nurses Association.

- Beth Lyman presented at the annual ASPEN conference in March 2022 on "Deimplementation: Human Factors in Challenging Commonly Held Nutrition Practices."
- Dr. Sharon Irving presented "Does evidence improve practice? Impact of the NOVEL project 5 years later" at the American Pediatric Surgical Nurses Association conference in May 2022. This presentation recapped the work of the NOVEL group and ongoing challenges for implementing best practices.
- Beth Lyman also presented at the Academy of Medical-Surgical Nurses annual meeting in September 2022 on de-implementation.

#### Publications

 Northington L, Kemper C, Rempel G, Lyman B, Pauley R, Visscher D, Moore C, Guenter P; NOVEL Project, ASPEN Enteral Nutrition Committee. Evaluation of methods used to verify nasogastric feeding tube placement in hospitalized infants and children - A follow-up study. J Pediatr Nurs. 2022 Mar-Apr;63:72-77.

## **DE-IMPLEMENTATION**

# What is De-implementation science and what does it have to do with NG tube placement verification? *By Beth Lyman*

De-implementation science is the process of convincing people to STOP doing something that is deemed low value, ineffective or possibly even dangerous. This is a relatively new behavioral change science and pertains to all disciplines in healthcare as well as professions outside of our field. The recognition that some practices are held near and dear to the hearts of nurses and that old habits are hard to break has been the impetus for researchers to explore how to de-implement a practice. The NOVEL project is particularly interested in this theoretical framework as we continue to discourage the use of auscultation and aspiration as methods to verify NG tube placement. Progress has been made but there is more work to be done. While there are many excellent papers in the literature, the following is a summary of two papers about de-implementation science concepts as they pertain to NG tube placement verification.

A paper by Upvall and Bourgault defines concepts of de-implementation practice using auscultation for NG tube placement verification as their model example. Prior to a formal de-implementation design process, these authors recommend an assessment of contextual factors such as prior history with the practice to be discontinued, institutional leadership support at the top levels as well as unit-based champions, and "political" considerations that could include physician support. Another key consideration is the individual nurse and his/her willingness to let go of a practice that heretofore has not been deemed a problem (in his/her opinion). Some nurses may reject letting go of auscultation because he/she was taught to do it in nursing school (circa? Year). Another fair consideration that will affect individual nurse practice change is the change fatigue factor suggesting so many practices being changed at one time is bound to result in push back from staff. These authors suggest prioritizing practices to be de-implemented. Without a doubt, these authors suggest it is harder to undo something "We have always done this way" than it is to add a new procedure.<sup>1</sup>

Another paper by Prusaczyk et al in 2020 differentiates implementation science from de-implementation science by using concepts first described for the former change theory.<sup>2</sup> Acceptability for de-implementation science describes the practice to be discontinued as unacceptable or unsafe. These authors suggest leadership explore the difference between the procedure to be discontinued and the idea of stopping the practice. In other words, is the thought of stopping the practice more problematic than the practice itself to staff? The concept of appropriateness for de-implementation science would focus on the practice no longer being safe or cost effective or clinically effective. Cost may or may not help the case of de-implementation as some nurses push back from this approach as they may consider patient care to be more important than cost considerations. This is becoming less of an argument as more and more we realize cost can come in terms of loss of institutional reputation, devastation of a nurse who commits an error using an ineffective procedure or even patient harm. Penetration is the concept of being able to practice the same way across all levels of care. This is pertinent to NG tube placement verification as NICU staff tend to use auscultation or aspiration instead of pH measurement. While there are many concepts of de-implementation science, this will give you a sense of why we are using this as a platform for many of our talks.

<sup>1.</sup> Upvall MJ, Bourgault AM. De-implementation: a concept analysis. Nurs Forum. 2018;53:386-372. Doi: 10.1111/nuf.12256.

<sup>2.</sup> Prusczyk B, Swindle T, Curran G. Defining and conceptualizing outcomes for de-implementation: key distinctions from implementation outcomes. Implementation Science Communications. 2020;1:43. Doi.org/10.1186/s43058-020-00030-3.

## PEDIATRIC G-TUBE REPLACEMENT AND VERIFICATION

As a parallel to the NOVEL Project, a group has been convened to review the literature and develop a best practices paper on pediatric low-profile g-tube replacement and verification. This group, led by Beth Lyman, has again pulled together representatives from interprofessional associations and disciplines to work on this issue. It is anticipated that a best practices document and some educational offerings will come from these efforts. Representatives come from pediatric GI, pediatric surgery, emergency department medicine and nursing specialties.

#### PLANS FOR 2023

The NOVEL Project team continues to demonstrate commitment to our mission. We are heading into the 11th year on this project. Currently, the team is in the final stages of completing a manuscript for nursing administrators focusing on practice change, one of the themes from our most recent study. Additionally, we are in the process of forming a subgroup comprised of NICU clinicians to examine best practices for this population. We are excited for the work ahead of us.

## A NOTE FROM OUR PARENT MEMBER, DEAHNA VISSCHER

In 2008 my son Grant Lars Visscher died because an NG tube was misplaced into his lungs. Since that tragic day I have been on a mission to make feeding tube placement verification safer for all patients. My journey led me to being a member of the patient safety team at the hospital he died at, to becoming a member of the NOVEL project, to presenting a safety issue with the Patient Safety Movement Foundation in hopes that they would champion my cause. In 2018 they filmed my son's story so that all can see the importance of finding a solution for better verification of feeding tube placement. Please use my video to help communicate the importance of NG tube safety. I know if we all work together, use evidence-based practices, and support technological advances, our future can have zero harm when it comes to NG tube placements. You may also reach out to me if you'd like me to speak with your organization: 720-201-0311. Watch Grant's story.