

NOVEL News aspEN

New Opportunities for Verification of Enteral Tube Location Project

Letter from the Chair

It is my pleasure to give you a progress report on the NOVEL project. In case you need a reminder, NOVEL stands for New Opportunities for Verification of Enteral tube Location. Our goal is to bring multiple organizations together to promote consistency of practice using existing bedside methods for verification and re-verification of NG tube placement. We want to get the word out to clinicians that auscultation and aspiration should not be used as first line methods to verify placement. We have many accomplishments to share with you but first I would like to share the names and affiliations of our members:

Beth Lyman MSN, RN, CNSC, Children's Mercy Kansas City (representing American Society for Parenteral and Enteral Nutrition or A.S.P.E.N.)

Sharon Irving PhD, RN, CRNP, University of Pennsylvania School of Nursing and Children's Hospital of Philadelphia (representing American Association of Critical-Care Nurses or AACN)

LaDonna Northington, DNS, RN, University of Mississippi (representing Society of Pediatric Nurses or SPN)

Carol Kemper, PhD, RN, CPHQ, CPPS, Children's Mercy, Kansas City (representing Child Health Patient Safety Organization)

Kerry Wilder, BSN, RN, MBA, Texas Scottish Rite Hospital for Children (representing National Association of Neonatal Nurses or NANN)

Jane Anne Yaworski MSN, RN, Children's Hospital of Pittsburgh (representing A.S.P.E.N.)

Deahna Visscher, Parent member, Denver, Colorado

Lori Duesing MSN, RN CPNP-AC, Children's Hospital of Wisconsin (representing The Association of Pediatric Gastroenterology and Nutrition Nurses or APGNN)

Candice Moore, BSN, RN, Cincinnati Children's Hospital (representing home care)

Gina Rempel, MD, FRCPC, FAAP, Children's Hospital Winnipeg, University of Manitoba (representing A.S.P.E.N.)

Wednesday Sevilla, MD, MPH, UT-La Bonheur Children's Hospital (representing A.S.P.E.N.)

Peggi Guenter, PhD, RN, FAAN, A.S.P.E.N.

All of these dedicated people bring a passion for this mega issue in pediatrics which is evident below in our accomplishments this year. While we continue to promote consistency of practice, there is still much work to be done in that area. What do you do in your facility? If nurses continue to use auscultation and inspection of aspirated gastric contents, please advocate for changing that practice. There are many who know the literature and practice recommendations but follow their employment setting protocols and many have not updated the practice standard. If you work near one of the NOVEL project members, consider inviting that person to speak at your facility. Many of our group give talks on a regular basis to help get the word out.

As we continue our work it has become evident we need to break into work groups and get additional help. Typically one of the NOVEL project members becomes the liaison to the work group. We have added members to the bigger group as needed, as well. In that regard, we could use a NICU staff nurse member for the NICU work group. If you know of a nurse that might be interested, please have him/her email me.

Aside from our work in the United States, we have expanded our membership and reach to other countries. This has allowed us to benefit from health care programs and generate a body of knowledge applicable in diverse settings. It has also allowed us to assist those countries who strive to improve their practices.

Beth Lyman, RN MSN CNSC
NOVEL Project Chair and Sr. Program Coordinator for the
Nutrition Support Team, Children's Mercy Hospital, Kansas
City, MO, blyman@cmh.edu

HOME CARE SURVEY COMPLETED

We have recently completed a two part survey and are currently analyzing the data. One was for home care agencies that care for pediatric patients with NG tubes and the other was for families/caregivers of those patients. We hope to get a good idea of what is happening when children are sent home with NG tubes. This home care work group is led by LaDonna Northington, DNS, RN from the University of Mississippi and including Candy Moore, BSN, RN from Cincinnati Children's Home Care, and Lori Duesing, PNP, RN from the Medical College of Wisconsin. **Watch for results of this survey soon. Thanks for your help participating in and disseminating the survey!**

NICU STUDY GROUP FORMED

The NG tube study clearly pointed to the need to conduct research in the NICU population. We now have a workgroup to design a study looking at methods of measurement and placement verification. This busy group has a conference call every other week! We hope to get a proposal submitted for NIH funding in 2016. This group consists of: Kerry Wilder, BSN, RN, MBA from Texas Scottish Rite Hospital for Children, Debra Brandon, PhD, RN from Duke University, Leslie Parker, PhD, RN from the University of Florida, Brian Lane, MD from Rady Children's in San Diego, and Sheila Kaseman, NNP from Colorado Children's. Watch for more information about this multi-center study!

STUDY PROJECTS

Retrospective look at use of pH in neonates as a measure of NG tube placement. This study is being done to describe the use of pH to verify NG or OG tube placement in neonates of varying weights, gestational age, and feeding regimens. Some of these neonates received acid suppression medication. Over 2000 data points will be retrospectively reviewed. This study is being done by 2 NOVEL project members and others with Carol Kemper as the PI.

NICU Practice. In July 2015, the NOVEL Project surveyed NICU clinicians and found that most use the NEMU method of measurement for tube placement and most use aspiration and auscultation for tube placement verification. About half of the respondents send babies home with NG tubes and teach the families the NEMU method. This data will be incorporated into the grant proposal by the NICU study group.

EDUCATION PROJECT

The group plans to develop an article in 2016 on home NG tube placement education that will serve as a template for institutions to use. We want to standardize how parents are taught to measure and confirm placement if they do this procedure on their child. Look for this later in the year after our home care study data analysis is completed. We are enlisting the help of our colleagues in Canada and Australia as their healthcare systems have standardized this practice quite nicely.

TECHNOLOGY UPDATE

The initial mission of the NOVEL project was to promote the development or alteration of existing technology to accurately verify NG tube placement, both initial placement and re-verification. While I am not at liberty to give out many details about the products, please know that several promising concepts are at various phases in the pipeline. Anyone with connections to biomedical engineers or inventors is encouraged to contact me so we can start a conversation. A group of college seniors took this on as a class project and received a \$1.5 million award to further develop their concept.

NOVEL IN LITERATURE

Nursing 2015 Letter to Editor
(<http://journals.lww.com/nursing/toc/2015/10000#-1948711788>)

American Nurse Today Verifying NG feeding tube placement in pediatric patients
Beth Lyman, MSN, RN, CNSC; Jane Anne Yaworksi, MSN, RN; Lori Duesing, MSN, RN, CPNP-AC; Candice Moore, BSN, RN, CPN January 2016, vol 11 (1).

NOVEL IN THE CLASSROOM

A.S.P.E.N. Webinar – *Temporary Enteral Access Placement in Pediatric Patients: A Continuing Conundrum* Beth Lyman, Sharon Irving, and Kerry Wilder March 25, 2015
(<http://www.prolibraries.com/aspden/?select=session&sessionID=1861>)

Society of Pediatric Nurses Webinar *Nasogastric Enteral Access Devices: Placement and Verification* LaDonna Northington, PhD, RN October 7, 2015 (<http://www.pedsnurses.org/webinars>)

PASPEN Fall Conference *Multi-disciplinary Approach to Management of Pediatric Feeding Tube Placement/Verification and Medication Considerations* Sharon Irving PhD, RN, CRNP November 6, 2016

NANN Meeting Beth Lyman *NICU nurses use of pH for verification of NG tubes in neonates.* October 22-25, 2015