

Janet Mullen, BSN, BEd, RN, CWOCN, CFCN  
UPMC Passavant

## Project Aim

To decrease the number of ear Hospital Acquired Pressure Ulcers (HAPU) related to the use of nasal cannulas in the adult, acute population by at least 50 percent.

## Description of the Problem

- ⚡ Audits identified greater than 25% of HAPUs occurred over the ears related to the use of nasal cannulas.
- ⚡ Analysis of the problem: revealed that pressure ulcer development was the result of the use of rigid oxygen tubing



## Background

- ⚡ A Hospital Acquired Pressure Ulcer (HAPU) is a negative outcome from a quality of life and a financial reimbursement standpoint, and all healthcare providers play a role in protecting the patient from this adverse event.
- ⚡ "Skin Saver" team audits, provide hospital wide monthly snap shots of pressure ulcer prevalence utilizing the NDNQI criteria.

### References

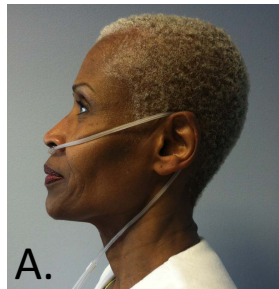
Black, J., Edberg, L., Baharrizani, M., Langemo, D., Goldberg, M., Mitchell, L., Cuddihy, J. (2011). Pressure ulcers: Avoidable or unavoidable? *Ostomy Wound Management*, 57(2), 24-37.  
 Bryant, R., Nix D. (2012). *Acute & chronic wounds current management concepts: Skin pathology and types of damage*. St Louis, MO: Mosby.  
 Gelfand, A. (2008). How much time does it take to get a pressure ulcer? *Ostomy Wound Management*, 54(10), 26-35.  
 Jankowski, J., Madigan, S. (2013). Identifying gaps, barriers, and solutions in implementing pressure ulcer prevention programs. *Joint Commission Resources* 37(6), 253-264.

## Actions Taken

A multidisciplinary team, comprised of Skin Savers, Wound Care, Central Distribution, Nursing, Respiratory and Quality, convened to perform a FOCUS PDSA and formulate an action plan.

Decision/Action Plan:

- ⚡ Trial a soft nasal cannula, on a designated nursing unit, and compare pressure ulcer prevalence to like units utilizing the existing product comprised of a rigid plastic material.
- ⚡ Education to staff on appropriate application of the nasal cannula and the importance of daily assessment, and early intervention.



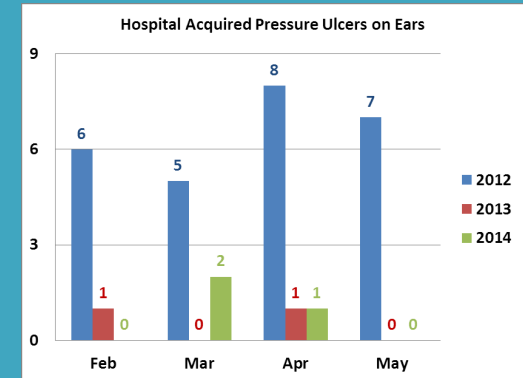
### Project Team

- ⚡ Janet Mullen BSN, BEd, RN, CWOCN, CFCN, Sr. Professional Wound Care Nurse
- ⚡ Jessica Johnston, BSN RN, COCN, Professional Staff Nurse, Wound Care
- ⚡ Yvonne Weideman, DNP, MBA, RN, CNE, Professional Staff Nurse, Wound Care
- ⚡ Janet Surrena, MSN, RN, Unit Director, Wound Care
- ⚡ Constance Pearson, MPM, CPHQ, RN, Quality and Risk Department
- ⚡ Linda Bryner, RRT, Director, Respiratory Therapy
- ⚡ Tom Schall, Director, Central Distribution
- ⚡ Cindy Stauber, MSN, RN, Unit Director, 3 Main
- ⚡ Terrie Craig, MSN, APRN, BC-RN, Nurse Clinician, 3 Main
- ⚡ Melanie Jackson, BSN, RN, Nurse Clinician, 3 Main
- ⚡ Carol Gorman, RN, Senior Professional Staff Nurse, 3 Main
- ⚡ Melissa Godfrey, RRT Lead Respiratory Therapist, Quality Council Representative
- ⚡ "Skin Savers" Skin Care Team Unit Representatives



## Summary of Results

- ⚡ The trial resulted in a decrease in the number of pressure ulcers on the designated unit of 100%..
- ⚡ Sustained improvement with greater than 90% decrease in the prevalence of pressure ulcers related to the ear over the past two years



## Impact on Organization

- ⚡ \$50,000 savings for Passavant Hospital
- ⚡ Proprietary elastomeric medical thermoplastic Nasal Cannula implemented throughout facility and health system
- ⚡ The Wound & Skin Department adopted the PDSA Focus as the template for all future quality improvement efforts.

Note from Westmed, Inc.: the *proprietary elastomeric medical thermoplastic* referred to in this poster is the Comfort Soft Plus® material embodied in the Comfort Soft Plus® Nasal Oxygen Cannula shown in Figure A and the "BiFlo™" Nasal Mask shown in Figure B. Westmed's proprietary Comfort Soft Plus® material is designed to stretch and flex to relieve interface pressure and virtually eliminate pressure ulcers on and behind the ears. Please learn more about the complete line of Westmed Comfort Soft Plus® nasal cannulas at: [westmedinc.com/soft-cannulas/](http://westmedinc.com/soft-cannulas/)