



# Safe Oral Intake for Patients using High Flow Nasal Cannula Therapy: An Interdisciplinary Approach.

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## Background

High air pressures associated with high flow nasal cannula (HFNC) therapy could potentially push food into the patient's trachea. Our organization sought to establish a standard approach to this clinical problem.

An interprofessional team of nurses, speech therapists, respiratory therapists, managers and an internal medicine physician defined safe oral intake as:

- No increased oxygen requirements
- No intubation or re-intubations
- No initiation of BIPAP
- No worsening chest x-ray results
- No death post feeding

# Purpose

This quality improvement project aims to create clear guidelines for safe oral intake for hospitalized patients who require HFNC therapy. Utilizing a standard approach for oral intake on HFNC will reduce and in fact, prevent aspiration events and complications.

### Method

Nurses initiated a test of change (TOC) on the Intermediate Care Unit (IMCU) using LEAN methodology. All direct clinical staff were educated on the standard approach including guidelines on providing oral care, titrating HFNC settings for meals and medications, and assessing for any respiratory distress. Clinical staff filled out a data collection tool that documented patient tolerance of titration, their oral intake, and any undesirable events that occurred. Nurses collected data over eight months on twenty patients.

#### Figure 1: Data collection tool

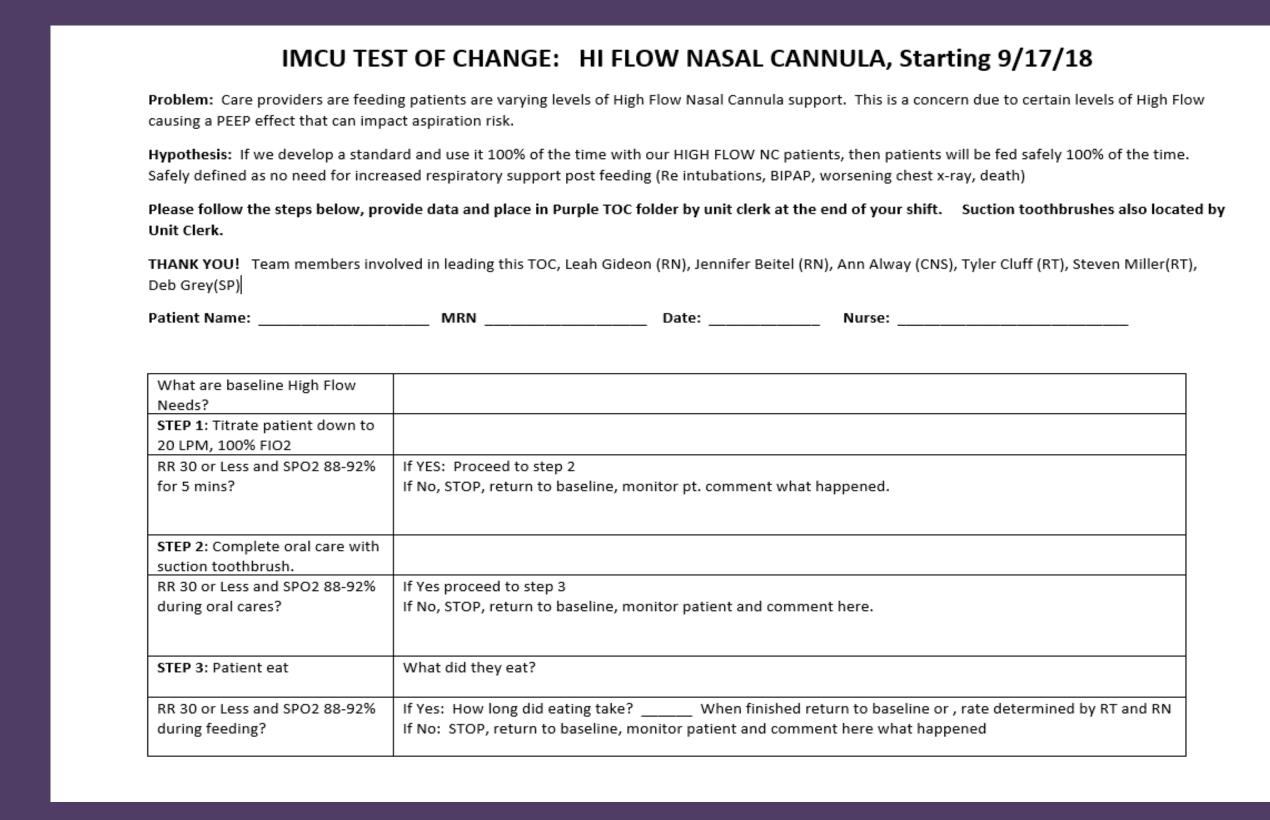


Figure 2: Set up of Swallow Precautions for **HFNC** 



### Results

- Of the twenty patients who qualified for the TOC, there were no new cases of aspiration pneumonia or undesirable events after HFNC was initiated.
- One modified barium study was performed on a patient who was on HFNC at 20L of oxygen. The barium study was inconclusive when relating clinical events to food intake.
- The interprofessional team gained new knowledge by collaborating together on this project.
- Other nursing units are now successfully using this standard approach. Further study is needed on the safety of HFNC therapy and oral intake, including food choice and texture

#### References

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