

# Main Diagnoses in Tube-Fed Adults in the Post-Acute Care setting: Clinical and Health Economic Benefits Associated with the Use of Commercial Blenderized Enteral Nutrition Formula

Desai A<sup>1</sup>, Henrikson A<sup>2</sup>, Allen F<sup>2</sup>, Yeddula S<sup>3</sup>, Araujo Torres K<sup>2</sup>

1. Market Access, Nestlé Health Science, 2. Medical Affairs, Nestlé Health Science, 3. Clarivate Data Analytics & Insights

Reference: J Parenter Enteral Nutr. 2023;47(S2):S104.

## Objective:

Describe the clinical and health economic outcomes among adult patients diagnosed with malnutrition, diseases of the digestive system, and cancer receiving commercially blenderized tube feeding formulas (CBTF) in post-acute care.

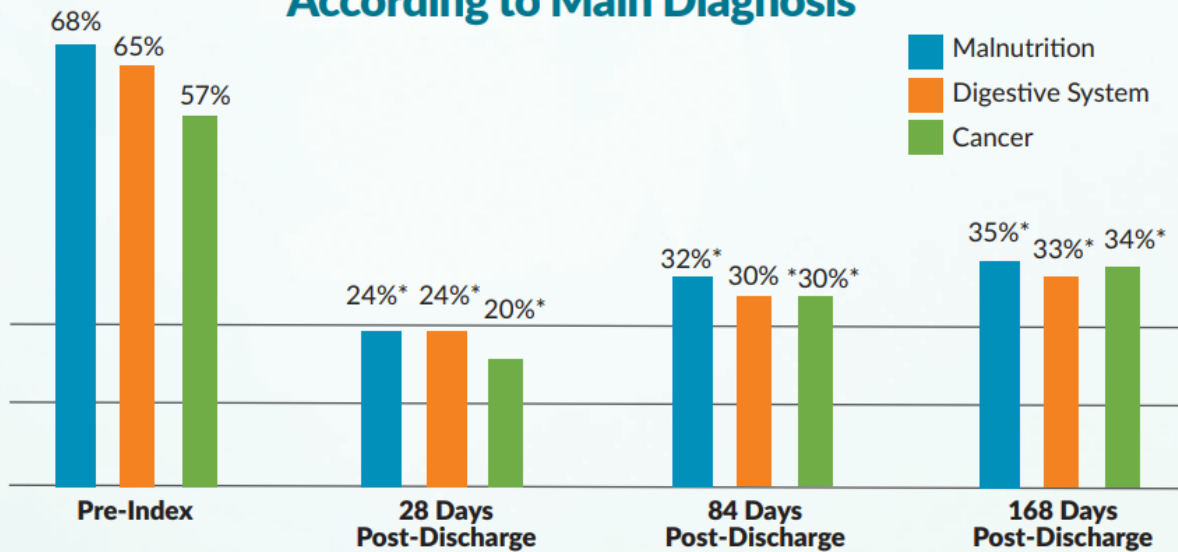
## Methods:

A retrospective, observational study was conducted using nationally representative US claims data obtained from the Decision Resources Group Real World Evidence Data Repository, which covers 98% of US health plans, including medical and pharmacy claims. Patient characteristics, diagnoses, concomitant medication use, GI intolerance symptoms, healthcare resource utilization (HCRU) and cost of care were assessed in adults ( $\geq 14$  years) receiving a CBTF formula (Compleat<sup>®</sup> Organic Blends, Nestlé HealthCare Nutrition, US) as sole-source nutrition for  $\geq 7$  days in post-acute care between January 1, 2018 and December 30, 2020. The index date was defined as date of hospital discharge. GI intolerance and HCRU were compared in pre-index (within 1 year before discharge date) and post-index (last record in study period at 28-, 84-, and 168- days post-discharge) periods.

## Results:

The study included 124 adults using the CBTF formula in the post-acute setting (52% female; mean age 41.8 [23.90] years) from all US regions. Nearly 95% were reported to have a disease of the digestive system, 50% had a diagnosis of malnutrition, and 35% had a diagnosis of cancer. Compared to the pre-discharge period, significantly (pre-discharge period, significantly ( $p < 0.05$ )) fewer patients experienced GI intolerance symptoms at 28-days post-discharge while receiving CBTF formula, and this reduction was maintained for patients with malnutrition, cancer, and diseases of the digestive system at 84- and 168-days post-index. Significant reductions in constipation, nausea and vomiting, abdominal pain, diarrhea, and gagging and retching were observed at 28-days post-discharge for patients with malnutrition and for those with diseases of the digestive system. In those with digestive diseases, significantly ( $p < 0.05$ ) fewer patients required inpatient (51% vs 16%) and emergency department visits (11% vs 3%) at 168-days post-discharge. The mean number of outpatient visits was also significantly reduced (8 vs 5) compared to pre-discharge. Similarly, significant reductions in HCRU were observed for patients diagnoses with malnutrition and cancer. Mean outpatient visits significantly ( $p < 0.05$ ) decreased at 168-days post-discharge for patients with cancer (20 vs 8), as did mean cost associated with outpatient visits.

## Adult Patients Experiencing GI Intolerance Symptoms Pre-Index and 28-, 84-, 168-Days Post-Discharge: According to Main Diagnosis



\*Chi-square test (pre-index vs. post-discharge, alpha=0.05 level of significance)

### Conclusion:

Use of a commercially blenderized tube feeding formulas among post-acute care adult patients diagnosed with malnutrition, diseases of the digestive system, and cancer was well-tolerated and associated with significant reductions in GI intolerance symptoms. Significant reductions in health care resource utilization were observed, demonstrating the potential role of commercially blenderized tube feeding formula in improving clinical and health economic outcomes for adults with chronic conditions.

Study funded by Nestlé Health Science.

Reference: Desai A. et al. J Parenter Enteral Nutr. 2023;47(S2):S104.

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