

## Study Summary:

# Real World Evidence on Clinical and Health Economic Outcomes Among Pediatric Patients in Post-Acute Care Receiving Commercial Blenderized Tube Feeding Formulas

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### **Background:**

Due to its clinical and economic benefits, the use of home enteral nutrition (HEN) as part of post-acute care is increasing in the US.<sup>1</sup> However, intolerance to enteral formulas can be a challenge in children receiving HEN and can lead to increased healthcare resource utilization (HCRU).<sup>2</sup>

### **Objectives:**

- To describe demographic and clinical characteristics of pediatric patients receiving a commercial blenderized tube feeding (CBTF) formula in post-acute care.
- To evaluate clinical and health economic outcomes among these patients up to 168 days after hospital discharge.

### **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, concomitant medication use, gastrointestinal (GI) intolerance symptoms, HCRU, and cost of care were assessed in children (< 14 years) receiving a CBTF formula (Compleat<sup>®</sup> Pediatric Organic Blends, Nestlé HealthCare Nutrition, US) as sole-source nutrition for ≥7 days in post-acute care between January 1, 2018 and December 30, 2020. The index date was defined as the date of hospital discharge. Outcomes 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 469 children using the CBTF formula in the post-acute setting.
- The most common diagnoses pre-index were diseases of the digestive system (81%), respiratory diseases (78%), and congenital conditions (76%).
- Significantly fewer patients experienced GI intolerance symptoms at 28 days post-index while receiving the CBTF formula than pre-index ( $p < 0.001$ ), and this reduction was maintained at 84 and 168 days post-index.
- Significantly fewer patients required emergency department visits, inpatient visits, urgent care, and other services (assisted living, intermediate care, other facilities) post-index compared to pre-index ( $p < 0.05$ ).
- Mean emergency department ( $p < 0.001$ ), inpatient ( $p = 0.014$ ), and outpatient ( $p < 0.001$ ) visits were significantly lower at 168 days post-index compared with pre-index.
- Reductions in HCRU resulted in significant reductions in mean costs of emergency department ( $p < 0.001$ ), inpatient ( $p = 0.042$ ), and outpatient ( $p < 0.001$ ) visits at 168 days post-index compared with pre-index.

### **Conclusion:**

Use of this CBTF formula in children in the post-acute care setting was well tolerated and associated with significant reductions in GI intolerance symptoms. Significant reductions in HCRU and associated costs were observed, demonstrating the potential role of CBTF in improving clinical and health economic outcomes among children in post-acute care.

The poster, presented at the ASPEN 2022 Nutrition Science and Practice Conference, can be accessed at: <https://www.nestlemedicalhub.com/evidence>

