

Value of Nutrition Support Therapy: Impact on Clinical and Economic Outcomes in the United States

Tyler R, Barrocas A, Guenter P, Araujo Torres K, Bechtold ML, et al *JPEN J Parenter Enteral Nutr.* 2020;44(3):395-406.

Introduction:

The cost of healthcare has continued to increase, prompting leaders to seek ways to better control cost while improving the quality of care. Healthcare leaders are seeking expert recommendations on how to optimize patient outcomes by improving utilization of resources. The objective of this process is aimed at improving the patient experience, reducing hospital associated conditions, shortening the length of stay and reducing hospital readmissions. This approach to healthcare optimization is termed value-based healthcare. It is defined as the provision of optimal health interventions and patient experiences against the cost of providing those services. Nutrition support has an important role in this process and has the potential to improve patient outcomes while significantly decreasing the cost of care.

Study design:

Task 1: Evidence review of existing literature (2013-2018) demonstrating clinical and economic impact of nutrition support on patient outcomes across 13 therapeutic conditions

Out of a total of 1099 articles, 43 articles met the search criteria for 5 therapeutic areas, with 8 articles used for Medicare claims modeling.

Task 2: Claims-modeling analysis using the Medicare Parts A and B claims 5% sample database for 5 selected therapeutic areas—sepsis, gastrointestinal cancer, hospital-acquired infections, surgical complications, and pancreatitis

Study population:

Hospitalized patients with sepsis, gastrointestinal cancer, hospital-acquired infections, surgical complications and pancreatitis receiving nutrition support (parenteral nutrition, enteral nutrition, oral supplementation) or no nutrition support

Results:

The evidence review showed, most studies in nutrition support reported only clinical outcomes (n=82), 18 articles reported clinical outcomes and healthcare cost or utilization impacts, and 6 articles reported healthcare utilization outcomes only.

The total annual savings calculated from the 5 target conditions identified the potential for \$580 million in annual saving. As an example, based on the Medicare modeling the use of nutrition support in the management of patients with sepsis could result in an annual savings of \$52 million.

Conclusions:

The delivery of nutrition support therapy for hospitalized patients with sepsis, gastrointestinal cancer, hospital-acquired infections, surgical complications and pancreatitis with nutritional risk can result in savings of up to \$580 million per year by optimizing care, reducing complications, and shortening hospital length of stay. The expansion of nutrition support to the entire Medicare population with these conditions has the potential to further optimize healthcare outcomes and dramatically reduce costs.

Timely nutrition support improves clinical outcomes and delivers cost-savings.

Summary prepared by Nestlé Health Science.

The complete study may be accessed online:

<https://doi.org/10.1002/jpen.1768>