### **Study Summary**

## Impact of Oral Nutritional Supplementation on Hospital Outcomes

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#### Study Objective:

To assess of impact of oral nutritional supplements (ONS) on length of stay (LOS), hospitalization costs, and the probability of a readmission with 30 days of hospital discharge. ONS was defined as a complete oral nutritional supplement,

#### Methodology:

This retrospective health economic study utilized the Premier Perspective database which contains information on 44 million adult inpatient episodes spanning an 11-year period from 2000 to 2011. From the database, 724,027 adult ONS episodes (1.6% of total admissions) for any inpatient diagnosis were matched to an adult non-ONS episode. Once differences in age, illness acuity, and demographics were accounted for, a matched sample of approximately 1.2 million episodes was analyzed to quantify the effect of ONS on length of stay (LOS), costs, and probability of a 30-day readmission.

#### **Results:**

- ONS patients had a shorter LOS by 2.3 days (21% reduction) from 10.9 days to 8.6 days.
- ONS patients had a decreased episode cost of \$4,724 (21.6% reduction) from \$21,950 to \$17,216.
- ONS patients had a reduced probability of readmission with 30 days of hospital discharge from 34.3% to 32% (6.7% decline).

#### **Conclusion:**

Malnutrition is a pervasive problem that continues to receive limited attention. Without quick intervention, nutritional deficits develop quickly and can lead to serious complications including involuntary weight loss, compromised immune function, and impaired healing. Patients at highest risk for complications associated with under nutrition and malnutrition include the elderly those with GI dysfunction, and oncology patients.

This study, which demonstrated positive outcomes on LOS, costs, and probability of a 30-day readmission, adds to a growing body of evidence supporting the use of ONS in hospitalized patients. ONS can be a cost-effective way to improve patient outcomes and help decrease hospitalization costs. ONS are available in a variety of caloric densities, protein content, packaging options, flavors, and textures (puddings). Providing an ONS between or with meals is a convenient, effective, and inexpensive way to provide the extra calories and protein that can make the difference between well-nourished and malnourished. As pressure continues to shorten hospital stays and decrease costs while disease acuity and comorbidities increase, ONS may help health care providers improve patient outcomes.

# Summary prepared by Nestle HealthCare Nutrition. For complete copy of the study, please go to the following site:

http://www.ncbi.nlm.nih.gov/pubmed/?term=philipson+american+journal+managed+care+2013+ 19%3A121-128