A retrospective study of over a million hospitalized patients shows that nutritional supplements provided to patients during hospitalization significantly reduces the length of stay and health care costs.

## Oral nutritional supplementation improves health outcomes and economic benefits in hospitalized adults

A growing body of evidence suggests that malnutrition is a serious and often unrecognized problem among hospitalized patients. Malnourished patients are more likely to experience an increased length of stay, higher health care costs, more complications, and a greater chance of readmission and mortality.

In a study published in the *American Journal of Managed Care*, researchers sought to determine whether oral nutritional supplements, delivering both macronutrients and micronutrients in addition to normal food intake, would improve outcomes in hospitalized patients.

Researchers used data gathered between 2000 and 2010 to examine the effect of oral nutritional supplements on hospital economic outcomes by comparing hospital stays where nutritional supplements were provided with similar hospital stays that did not provide supplements. A total of 1,160,088 total episodes were analyzed (580,044 given oral supplements matched with 580,044 not given supplements). The length of hospital stay and cost of treatment (including supplies, labor, depreciation of equipment, etc.) were measured in addition to the probability of hospital readmission within 30 days.

The researchers found that patients that were provided with nutritional supplements had a 21% (2.3 days) reduction in the length of hospital stay which also resulted in a cost savings of \$4,734. Supplementation also reduced the probability of patient readmission by 6.7%.

Consistent with results from previous randomized controlled trials, this study indicates that the use of oral nutritional supplements may lead to a significant decrease in the length of hospitalization, cost, and chances of readmission. And, given the prevalence of malnutrition among this population, nutritional supplementation would be a cost effective method of improving health outcomes while also reducing health care spending.

Tomas J Phillipson et al. Impact of Oral Nutritional Supplementation on Hospital Outcomes. Am J Manag Care. 2013;19(2):121-128.