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## THE IMPACT OF ORAL NUTRITIONAL SUPPLEMENTATION IN MEDICARE PATIENTS WITH COPD

### RESEARCH POSTER PRESENTATIONS - SESSION III

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*Julia Thornton Snider, PhD<sup>1</sup>, Mark Linthicum, MPP<sup>1</sup>, Chris LaVallee, MS<sup>1</sup>, Darius N. Lakdawalla, PhD<sup>2</sup>, (1)Precision Health Economics (PHE), Los Angeles, CA, USA. (2)University of Southern California and Precision Health Economics (PHE), Los Angeles, CA, USA.*

#### OBJECTIVES

Chronic obstructive pulmonary disease (COPD) is a leading cause of death and disability in the US. Due to its progressive nature and high prevalence, COPD imposes a considerable burden on Medicare and will be important to reimbursement under the Affordable Care Act. Evidence suggests that oral nutritional supplements (ONS) may be an effective means of improving COPD outcomes, but the extent of this effect among aged 65+ Medicare inpatients is unclear.

#### METHODS

Analyses were conducted using the Premier Research Database on Medicare patients aged 65+ and carrying a primary diagnosis of COPD. Propensity score matching was employed to create a one-to-one matched sample of ONS and non-ONS episodes. Because ONS were likely to be given to patients with poor unobserved health status, instrumental variables (IV) regression analysis was performed to address selection bias. IV analyses quantified the effect of ONS use on length of stay (LOS), episode cost, and the probability of 30-day readmission. Covariates included patient and provider characteristics and a time trend.

#### RESULTS

Out of 10,322 ONS episodes and 368,097 non-ONS episodes, a one-to-one matched sample was created (N=14,326). IV regression analysis indicated that ONS use reduced LOS by 1.88 days (21.5%), from 8.75 to 6.87 days ( $p<0.01$ ). Similarly, episode costs were reduced by \$1,570 (12.5%), from \$12,523 to \$10,953 ( $p<0.01$ ). Among those episodes which could be tracked for follow-up, ONS use lowered the probability of 30-day readmission by 13.1%, from 0.335 to 0.291 ( $p<0.01$ ).

#### CONCLUSIONS

ONS presents an inexpensive, effective means for reducing LOS, episode cost, and readmission risk in hospitalized Medicare patients with COPD. As such, ONS may offer an opportunity to reduce costs to Medicare while improving quality of outcomes.