Measuring Food Insecurity and Healthy Days in a Primary Care Setting

Background
Food insecurity experienced at any time across the lifespan has an adverse impact on health; however, the relationship between food insecurity and health-related quality of life (HRQOL) has not been rigorously examined in a primary care setting. This program administered a food insecurity screening and a HRQOL survey (i.e., Healthy Days) to patients in three primary care clinics in south Florida. Those who screened positive for food insecurity were provided food resources on site and referred to community resources.

Objective
To measure the prevalence of food insecurity; and the association between food insecurity status, HRQOL, and various patient characteristics, among the study population.

Methods
Study Design: Cross-sectional
Study Period: October 24, 2016 to November 18, 2016
Data Source: Surveys, medical claims, and electronic health record (EHR) data for 369 patients from primary care clinics with commercial, Medicare or Medicaid health plan coverage from Humana Inc.

Measures:
• Food insecurity status: Measured by The Hunger Vital Sign®; a validated food insecurity screening tool:
  - Within the past 12 months we worried about whether our food would run out before we got money to buy more. (never, sometimes, or often true)
  - Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more. (never, sometimes, or often true)
• HRQOL: Measured by Healthy Days; a validated HRQOL measure developed by the Centers for Disease Control and Prevention:
  - Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 was your physical health not good? (1-30 days)
  - Now thinking about mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 was your mental health not good? (1-30 days)
• Patient characteristics: age, sex, race/ethnicity, and Medicare-Medicaid dual eligibility status

Analysis: Chi-square measured associations between food insecurity status, Healthy Days, and categorical age, sex, race/ethnicity, Medicare-Medicaid dual eligibility status.

Conclusions
Food insecurity was prevalent and associated with Healthy Days, age, race/ethnicity, Medicare-Medicaid dual-eligibility status, among the study population.

There may be an improvement to improve quality of life, for certain patient populations, by addressing food insecurity in the primary care setting.

Limitations
• Findings are subject to limitations inherent to claims and EHR data (e.g., coding errors, missing data, fixed variables) and self report survey data (e.g., recall bias, acquiescence bias, extreme responding).
• This study included patients in select clinics from a single healthcare company and may not be generalizable to all populations.
• The cross-sectional nature of the data prevents inferences of a temporal or causal relationship between measures.

References