PREDICTING MORTALITY AND HEALTH CARE UTILIZATION WITH A SINGLE QUESTION.  **KB DeSalvo**\(^1\), VS Fan\(^2\), M McDonell\(^2\), SD Fihn\(^2\), \(^1\) Tulane School of Medicine, New Orleans, LA, \(^2\) Seattle VA, Seattle, Washington

**Background:** Identifying high-risk patients is essential for efficient and effective health care delivery. Available risk prediction measures are often too complex or time consuming to collect in routine practice.

**Objective:** The ability of a single item global health status measure (SF-1) to predict patient outcomes including mortality and resource utilization was tested and compared to existing, multi-item measures.

**Methods:** We analyzed prospective cohort data on 21,732 patients collected as part of the Veteran’s Affairs’ Ambulatory Care Quality Improvement Project (ACQUIP), a RCT investigating quality of care interventions. All patients received a baseline assessment that included a multi-item measure of general health (SF-36) and comorbid conditions. The predictive and discriminative ability of the SF-1 was compared to the Physical Component Score (PCS) of the SF-36 and the Seattle Index of Comorbidity (SIC), a 7-item measure. The SF-1 is an item from the SF-36 and the wording is: *In general, how would you rate your health? Excellent, Very Good, Good, Fair, Poor?* We created an age-adjusted, logistic regression model for each predictor and evaluated mortality, hospitalizations and high ambulatory use (top 10\(^{th}\) percentile of visits) during the year subsequent to baseline evaluation. We compared the discriminative ability of the predictors by developing receiver operator characteristic (ROC) curves and comparing the associated area under the curve (AUC).

**Results:** The overall mortality rate for the group was 10.7%. Compared to subjects reporting ‘Excellent’ or ‘Very Good’ health, patients reporting ‘Poor’ health were 7 times more likely to die in the ensuing year (OR 7.2 [95% CI 5.1, 10.1]). 32% of patients were hospitalized during the study period and patients with ‘Poor’ self-rated health were significantly more likely to be hospitalized (OR 3.94 [95% CI 3.4, 4.6]). Those reporting ‘Poor’ health were also more likely to be high ambulatory care utilizers in the ensuing year (OR 2.9 [95% CI [2.4, 3.5]. The SF-1, PCS and SIC had comparable AUC for predicting mortality (AUC 0.74, 0.73, and 0.73, respectively); hospitalization (AUC 0.63, 0.64, and 0.61, respectively); and high outpatient use (AUC 0.61, 0.61, 0.60, respectively).

**Conclusions:** The SF-1 response categories discriminate patients with varying risks. Patients reporting ‘Poor’ health are at significantly greater odds of dying or requiring health care resources compared with their peers. The SF-1, collectable at the point-of-care, is comparable to more extensive, established risk predictors making it a useful routine, risk prediction tool.