Introduction

- The Surprise Question (SQ) “Would you be surprised if this person died in the next 12 months” (No = SQ-), is considered useful in predicting mortality and the need for Palliative Care.
- Recent meta-analysis suggests it has only moderate accuracy in predicting death.
- It is known if it has predictive validity for other adverse outcomes, including (1) admission in the Emergency Department (ED), (2) increased length of stay (LOS) and (3) 30-day readmission rates or if it correlates with frailty and other predictors of adverse outcomes and reduced life expectancy in older adults.

Methods

- We screened consecutive patients aged ≥70 attending a large University Hospital ED over a period of two weeks.
- The SQ was scored by a trained physician after completing a comprehensive geriatric assessment (CGA). Additional measures of frailty were recorded, including: the Clinical Frailty Scale (CFS), Risk Instrument for Screening in the Community (RISC) of death (< one year), Caregiver Burden Scale (CBS), ISAR measures of frailty were recorded, including: the: Clinical Frailty Scale (CFS), Risk Instrument for Screening in the Community (RISC) of death (< one year), Caregiver Burden Scale (CBS)
- Admission, readmission and mortality (at 1 year) data were obtained from HIPE.

Results

- The SQ was available for 191 patients, median age 79 +/-10 & 55% were female. Co-morbidity as measured by the Charlson Co-morbidity Index (CCI) was high, median 5 +/-2 (see Table 2).
- In all, 56 out of 191 (29%) screened SQ positive (i.e. rater not surprised), see Fig 1.
- Most 147/191 (77%) were admitted. At one year 33/191 (17%) of all patients were dead – more SQ+ than SQ- (see Fig 2).
- There were no statistically significant differences in age (80 versus 79, p=0.2) or gender (55% versus 46%, p=0.07) in SQ positive versus negative.
- SQ positive patients more frail median CFS 6/9 versus 4/9 (p<0.001) and had lower QOL (Euroqol-5D scores, p<0.001).
- Correlations between the SQ and the RISC score for mortality (r=0.68) and the CBS (r=0.35) were moderate-strong but poor for each measure of frailty and the Euroqol-5D (all <0.1).
- Accuracy of the SQ in predicting death was poor (area under the curve 0.65); Accuracy LOS and readmission rates were also poor (AUC 0.65), see Fig 3a-d.

Conclusions

- A large proportion (approximately one-third) >70 attending ED screened positive on the SQ.
- SQ+ patients were more likely to be admitted, have a longer LOS, readmitted within 30 days if discharged and to die within one year.
- These were significantly more frail with lower QOL. The SQ correlated with caregiver burden and with a similar mortality scale but not frailty or quality of life.
- Like with mortality, the predictive accuracy of the SQ for healthcare system-important outcomes such as prolonged LOS and readmission appears poor.