**Poster presentations**

**192 PREDICTORS OF LENGTH OF STAY (LOS) AT TIME OF ADMISSION IN A FRAIL INPATIENT COHORT: FAIL TO PREPARE, PREPARE TO FRAIL**

Christine McCarthy, Edel Mannion, Elaine Loughlin, Robert Murphy, Stephanie Robinson
University Hospital Galway, Galway, Ireland

**Background:** Frailty has a known association with increased length of stay in hospital. Prolonged hospital admission is fraught with challenges for frail adults such as delirium, falls, institutionalisation and nosocomial infections. Specific predictors of length of stay have not been measured within a frail older population. Our goal is to determine predictors of LOS and barriers to discharge on admission.

**Methods:** A literature review revealed predictors of hospital length of stay at admission in the general geriatric population, including age, confusion, falls, incontinence, impairment in gait/balance, malnutrition, social complexity and polypharmacy. Over a 6-month period (July-December ’17) data pertaining to potential predictors, in addition to LOS, was collected prospectively on all consecutive acute medical admissions to a specialist frailty service in an Irish University Teaching Hospital. Both univariate and multivariate linear regression were used to model the impact of predictors on LOS.

**Results:** We analysed 135 consecutive admissions—64% were female, median age was 84 (IQR: 80–88). The majority of patients (93%) were community dwelling. The median Clinical Frailty Scale (CFS) at baseline was 5 (IQR: 4–6). The most common frailty syndromes at presentation included “off functional baseline” 85% (n = 115), “polypharmacy” 83% (n = 113), “falls” 53% (n = 71), “confusion” 36% (n = 49) and “incontinence” 33% (n = 44). In relation to regression analysis none of: age, CFS, frailty syndrome type, depression, nutritional status or medication number significantly predicted LOS. Predictors that approached significance in the multivariate model were presence of care giver burden (p = 0.066) and living alone (p = 0.079).

**Conclusion:** The frail inpatient cohort is a heterogeneous patient group. Ongoing study of this population is required to ascertain predictors of prolonged hospitalisation. Further study is also required to determine targets for intervention. Predictors of length of stay should be measured in conjunction with measures of length of ageing in place and further research of this relationship is required.