

A Novel Frailty Specific Same Day Emergency Care (SDEC) Score – An Initial Retrospective Validation Cohort.



**A.J. Burgess; K.H. James; T.B. Maddock;
D.J. Burberry; E.A. Davies**

Department of Geriatric Medicine, Morriston Hospital, SBUHB

Introduction Aim: Several scores have been developed to identify SDEC patients from Emergency Department (ED) triage and acute medical intakes. Scores are designed to improve system efficiency, overcrowding and patient experience but none have been developed for older adults. Previous work has shown that existing scores e.g. Glasgow Admission Prediction Score, Sydney Triage to Admission Risk Tool and the Ambulatory Score were not able to predict admission in our population(1). We have developed a novel, frailty-focused score.

Results

1011 attendances, 414 (40.9%) Male, mean age 82.3(±8.4) years, CFS 5.3(±1.2) and CCI 8.0(±1.8), 701(69.3%) discharged same-day and 629(62.2%) fallers.

OPAS: 776 attendances, 306 (39.4%) Male, age 82.4(±8.7) years, CFS 5.3(±1.1) and CCI 7.9(±1.9), 540 (69.5%) discharged same-day, 557(71.8%) fallers.

SDEC: 234 attendances, 108(46.2%) Male, age 81.8(±8.0) years, CFS 5.2(±1.3) and CCI 8.2(±1.7), 162(69.2%) discharged same-day, 72(30.1%) fallers.

There was significant difference between groups with NEWS (p<0.02), mortality (P<0.001) and presenting complaint (p<0.001). We used a cut-off Score ≤6.5 indicating admission (p<0.0001). Each variable's weighing was determined using T-tests and Chi-squared analysis.

Overall score Sensitivity 0.75, Specificity 0.63, Positive Predictive Value 0.65, Negative Predictive value 0.57, Area under Curve 0.65.

Methods

The Older Person's Assessment service is ED based, accepting patients on the basis of the presence of frailty syndromes in patients aged >70 years (falls, confusion, care dependence, polypharmacy and poor mobility). The service achieves same day discharge for >75% of patients. OPAS provide a comprehensive geriatric assessment (CGA) and is extended into medical SDEC within our Acute Medical Unit.

The databases were retrospectively analysed and interactions with age, Charlson Co-morbidity index (CCI) and Clinical Frailty Score (CFS) were evaluated alongside NEWS, 4AT, including who with and where the patient resides.

Gender	CCI
Age	Discharged last 30 days
Presenting complaint	4AT
News score	Living situation
CFS	Coping at home

Conclusion

Frailty is an important determinant in identifying whether ambulatory care is appropriate. The efficacy of the score is comparable to the results derived in validation cohorts of existing and recommended scores. We are currently prospectively testing the score but clinical judgement, alongside a MDT providing a CGA is gold standard care.

Further validation of the score is needed to prove its efficacy in a variety of different clinical settings with different populations