delivered safe care). We integrated a middle range psychological theory with our findings to recommend a focus for training nurses in streaming and service improvements. We recommend a collaborative approach to service development, guidance and training (including input from emergency department clinicians, primary care clinicians) and a range of training strategies that are suitable for less experienced junior nurses and more experienced senior nurses and nurse practitioners.

Aims/Objectives/Background This is the first external validation of a European empirically derived prediction model for identifying major trauma in an unselected group of injured patients transported by ambulance in the United Kingdom.

Methods/Design This was an external validation of a Dutch prediction model for identifying major trauma using a retrospective cohort of injured patients who ambulance crews transported to hospitals in the South West region of England. Major trauma was defined as Injury Severity Score (ISS)>15.

Participants were patients ≥16 years with a suspected injury and transported by ambulance from February 1, 2017 to February 1, 2018. This study had a census sample of cases available to us over a one year period.

We tested the accuracy of the prediction model in terms of discrimination, calibration, clinical usefulness, sensitivity and specificity and under- and over triage rates compared to existing trauma triage practices in the South West region.

Results/Conclusions A total of 68,698 adult patients were included in the final external validation cohort. The median age of patients was 72 (IQR: 46–84); 55.5% were female; and 524 (0.8%) had an ISS>15. In comparison the Dutch cohort was younger (45 years), more were male (58.3%) and more had an ISS>15. (8.8%) The model achieved good discrimination with a C-Statistic 0.75 (95% CI, 0.73 – 0.78). At a maximal specificity of 50% the model resulted in a sensitivity of 86%. The model improved undertriage rates at the expense of increased overtriage rates compared with routine trauma triage methods in the South West of England.

The Dutch prediction model for identifying major trauma can lower the undertriage rate to 17%, however it would increase the overtriage rate to 50% in this UK cohort. Further research is needed to determine whether the model can be practically implemented by paramedics and is cost-effective.

Aim Study of shortness of breath (SOB) point-of-care biomarker panel in patients presenting with shortness of breath in Emergency Department.

Objective To study the sensitivity and specificity of SOB point-of-care biomarker panel in diagnosing Acute Coronary Syndrome (ACS), Heart Failure (HF) and Pulmonary Embolism (PE).

Background Shortness of breath (SOB) is one of the commonest symptoms of patients presenting to the emergency department (ED).

The differential diagnosis of SOB is very vast, knowing the frequency and severity potential of ACS, HF and PE should be considered.

Methods/Design 165 consecutive subjects 18 or more years old, presenting to the ED due to a primary complaint of SOB were included in this prospective study.

After detailed history and thorough physical examination, the blood samples of patients included in the study were