between day 1 salivary pepsin and symptom questionnaires. Salivary pepsin measurement over 7 days identified four patterns: persistently low (n=3); persistently high (n=3); high on day 1 only (n=6); and variable (n=13).

**Discussion** Peptest was acceptable to patients. Salivary pepsin measurement appears to be able to categorise different population groups by pattern of pepsin concentration throughout the week. As a feasibility study, it was not powered to identify correlation with clinical outcomes. Our Results suggest that using salivary pepsin as a marker of GOR is feasible and is worthy of further study in a large prospective cohort to evaluate its relationship to outcomes.

**REFERENCE**


**P189 REDUCING READMISSION IN HIGH RISK COPD PATIENTS**

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**Introduction and Objectives** COPD patients with acute exacerbations make up a significant proportion of the inpatient hospital population. This patient group is at risk of recurrent readmission to hospital, which not only reduces patient quality of life but also has financial implications. The aim of this study was to correctly identify COPD patients at high risk of readmission and to address reversible factors and/or creating an anticipatory care plan (ACP).

**Methods** 200 consecutive admissions with an acute exacerbation of COPD were reviewed to identify risk factors for readmission at 28 days or mortality within 6 months. Patients who were identified as high risk of readmission were reviewed using an algorithm to identify potential reversible factors and if ACP would be appropriate. This review was carried out either during admission or at the point of discharge.

**Results** The following factors were shown to predict readmission or death, recurrent admissions (≥2 in the last year) (readmission: p=0.002, OR=3.36, death: p=0.001, OR=11.64), NIV during admission (readmission: p=0.073, OR=4.06, death: p=0.023, OR=7.17) and long term oxygen therapy (readmission: p=0.034, OR=3.23, death: p=0.001, OR=9.22). 72 subjects were identified as having a high risk of readmission. Of these 72 subjects, 14 had the algorithm applied during admission (prospectively) and 58 at the point of discharge (retrospectively). 53% of the study population was readmitted within 28 days. 21% of the prospective group was readmitted compared to 60% of the retrospective group. 55% of the prospective group had an ACP in place compared to 32% of the retrospective group.

**Conclusions** By identifying characteristics associated with high risk of readmission in patients with COPD, we were able to apply an algorithm in the hope of reducing readmission. Although current numbers are small, initial Results indicate that the use of the algorithm during a hospital admission could significantly reduce readmission to hospital. Undoubtedly more data is required. In the future routine use of this proactive approach could potentially improve patient care as well as reduce the financial burden for healthcare providers.