Conclusion Typical seasonal variation in hospitalisation for AECOPD was lost during 2022, following two years of pandemic lock-down and management. It remains to be seen if seasonality will return in future years.

P204 USING THE DECAF SCORE TO RISK STRATIFY AND ANALYSE THE INPATIENT JOURNEY OF PATIENTS WITH ACUTE EXACERBATION OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Introduction Acute exacerbation of chronic obstructive pulmonary disease (AECOPD) is common but carries significant morbidity and mortality. Often, patients with AECOPD have a chaotic inpatient journey which may be affecting their length of stay (LOS) and specialist care.

Aims Using the DECAF score to risk stratify, we wanted to evaluate our inpatient COPD service and patient journey and compare our average LOS and use of early supported discharge (ESD).

Method In May 2022, we prospectively collected data on all patients who presented to our hospital with AECOPD. 40 patients admitted during this period. 32 patients were included in final analysis, 8 had incomplete data. All patients were given a DECAF score. Those with LOS >5 days had a second assessment on day 5 determining their reason to reside. We reviewed social factors and key indicators such as oxygen requirement, PaCO₂ and NEWS2 score.

Results Of our 32 patients, 17 had a DECAF score of 0–1. Of those, 13 were eligible for ESD at day 1. 0/13 were referred to ESD. Within that cohort of 13, 8 had an eventual LOS of >5 days. The average LOS for DECAF 0–1 was 9 days. Patients moved to a respiratory ward had an overall lower length of stay compared to non-respiratory wards. The average length of stay in the DECAF 2–5 group was 9.7 days on a respiratory ward compared to 17.4 on a non-respiratory ward.

12/21 patients who had a documented ‘medically fit for discharge’ date were discharged on that same day, indicating that social factors may play less of a role in delayed discharges than we had previously suspected. Very high DECAF scores (>4) were all moved to respiratory wards appropriately during this period.

Conclusions Our early supported discharge scheme is underutilised in the low DECAF population. Patient journeys and discharge rates are being adversely affected by bed management. Risk stratifying patients on admission using the DECAF score helps to demonstrate which patients would benefit from respiratory specialty input and those that could be supported on an ESD scheme.

REFERENCE

P205 EFFECT OF METFORMIN ON REDUCING THE RISK OF COPD EXACERBATIONS: A UK NESTED CASE-CONTROL STUDY

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Background Some second-line medications used to treat type-2 diabetes have been shown in observational studies to reduce COPD exacerbations. The evidence for the first-line medication, metformin, is unclear but animal studies have shown that metformin decreases airway glucose and bacterial colonisation. Diabetes is common in COPD but often managed with diet for a prolonged period before starting medication. We hypothesised that metformin reduces COPD exacerbations and that its effects are enhanced when combined with other diabetic medications.

Method We adopted a nested case-control design using primary care data (Clinical Practice Research Datalink) linked to secondary care data. The case-control was nested from a cohort of COPD patients with diabetes, naive to metformin at the start of follow-up. Cases were exacerbations (course of oral corticosteroids or hospital admission); controls were matched 4:1 by age, sex and GP practice. Conditional logistic regression was used to measure the association between metformin and exacerbations, after adjusting for COPD severity (MRC score, inhaler use and FEV1), BMI, HbA1c, smoking status, social deprivation, cardiovascular disease. The 1-year exposure window was divided into time since last prescription. Interaction analyses were conducted to assess if the association