Respiratory Physiotherapy facilitates the flow of patients with COPD

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BACKGROUND
Chronic Obstructive Pulmonary Disease (COPD) is a leading cause of morbidity and mortality in adults, with the World Health Organisation predicting that the disease will be the third most common cause of mortality worldwide by 2030. The average length of stay (LOS) for a patient with this condition is 4-8 days and costs £3000.

As the number of patients with COPD is expected to rise significantly over the next few years, it is imperative that services explore new methods of respiratory working. As such, in September 2016 the Physiotherapy service at Glasgow Royal Infirmary (GRI) introduced a Respiratory Physiotherapy service in the Acute Medical Receiving Unit (AMRU).

AIM
To explore the impact of the Respiratory Physiotherapy service in AMRU on patients with COPD.

PATIENT FLOW

Patients with AECOPD present at Emergency Department or Acute Assessment Unit

Pre-Respiratory Service
- Patients waiting for Respiratory Physiotherapy
- Discharged without Physiotherapy assessment OR

Downstream Ward

Respiratory Physiotherapy started

Respiratory Service
- Screened Mon-Fri by Respiratory Physiotherapist
- Intervention started for chest and/or early rehab

Discharged OR Downstream Ward

Referred to appropriate Community Services

Treatment continued by Respiratory Physiotherapy Team

METHOD
- Trakcare used to collect referrals made to Physiotherapy from Downstream wards
- Pre-Respiratory Service- January 2016 and Post-Service Introduction- January 2017 data was retrieved
  - January expected to have highest admissions of patients with COPD exacerbations.
  - Clinical Portal used to pull data relevant to the outcome measures (Figure 1)
- Data recorded and analysed

Outcomes Measures

- Was the patient seen in AMRU?
- Length of time from referral to treatment
- Type of Physiotherapy received (Respiratory or Rehab)

Outcome Measures

- Overall LOS
- LOS in AMRU

RESULTS
Data analysed from 37 patients in January 2016 and 38 patients in January 2017

Justification for Respiratory Physiotherapy Service
The prevalence of respiratory conditions can be appreciated from the proportional distribution of AMRU Physiotherapy treatments received subsequent to introduction of the service– overwhelmingly Respiratory Physiotherapy

Impact
Impact of AMRU Respiratory Service:
- 50% had Physiotherapy started in AMRU– 100% increase on previous year
- Patients were assessed by a Physiotherapist on average 2.2 days earlier
- Significantly reduced LOS

CONCLUSION
The introduction of a Respiratory Physiotherapy service into AMRU has reduced time to Physiotherapy assessment and treatment. This has been shown to correlate with a reduced overall LOS.

It can therefore be suggested that early Physiotherapy intervention has an impact on reducing LOS in patients presenting with COPD exacerbations.

NEXT STEPS
- To explore the symptoms of COPD that patients are presenting with
- To identify and investigate cases when patients still do not receive Respiratory Physiotherapy in AMRU
- To further increase early rehab in AMRU
- To explore role of AHPs in Emergency Departments and Acute Assessment Units

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