

## 5.06 Assessing the impact of a remote monitoring virtual COPD management programme one year on

Sarah Nolan<sup>1</sup>, Cathy Gillen<sup>1</sup>, Mary McCallan<sup>1</sup>

<sup>1</sup>Our Lady of Lourdes Hospital, Drogheda, Co. Louth, Ireland

**Background:** The purpose of this project was to explore the impact of a remote monitoring project in improving patients' COPD self-management in the year since programme cessation with the aim of reducing acute healthcare utilisation, GP presentations, antibiotic and steroid prescription.

**Methods:** Oxygen saturation and heart rate of 18 COPD patients were monitored daily on a secure digital platform for 4-6 months. They received self-management plans including education. Deviations from individualised baseline parameters triggered intervention from the monitoring team.

**Results:** In the year post monitoring, overall, hospital admissions, length of stay, GP presentations and antibiotic prescriptions decreased by 5.88%, 18.5%, 6.17% and 1.32% respectively, whereas steroid prescriptions increased by 7.14% (see table. 1). 8 patients had an increase in hospital admissions versus the year prior (see table 2). Total length of stay, GP presentations, steroid and antibiotic had no significant findings (see table 1).

**Conclusions:** The impact on reducing acute healthcare utilisation in the year post completing the programme was minimal, with a significant increase on clinician workload as 1 WTE Physiotherapist was required to monitor patients. Integration of real-time digital healthcare is important but the impact on clinician workload and service outcomes must be evaluated to ensure clinical utility.

**Keywords:** COPD, remote monitoring, digital healthcare, acute healthcare utilisation

**Disclosures:** N/A

**Funding:** This study was funded by the 'mPower' project and SEUPB

**Conflict of Interest:** The authors declare that they have no conflict of interest.

**Table 1.** Healthcare and medication utilisation in the year pre and year post monitoring period.

	Year Pre monitoring	Year Post monitoring
Total number of Hospital admissions	17	16
Total length of stay	108	88
Total number of GP presentations	81	76
Total number of antibiotics prescribed	76	75
Total number of steroids prescribed	70	75

No. of patients who had an	Year post monitoring versus year pre-monitoring	
	Increase	Decrease
Hospital admissions	8	0
Length of stay	4	6
GP presentations	4	6
Antibiotics prescribed	5	8
Steroids prescribed	5	8

**Table 2.** Trends in healthcare and medication utilisation in year post versus year pre-monitoring.