

10.05 A remote monitoring project for post lung transplant recipients using a patientMpower digital mobile application (pMp app).

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Background: Lung transplant recipients in Ireland receive lifelong follow up at the National Lung Transplant Centre. The focus of this project was the early identification of complications post-transplant, using pMp app. The project commenced in March 2021 with funding from HSE Slaintecare Integration Fund. **Methods:** From March 2021 to March 2022, 49 patients were enrolled. There are currently 37 active participants. Bluetooth enabled handheld spirometer, pulse oximeter, weighing scales and blood pressure monitor were provided and linked to the pMp app. An algorithm was developed to standardise review of patient data. A nurse monitored data during office hours. Service evaluation was completed between August 2021 and March 2022. **Results:** More than half of the participants (51%; $n=19$) remained stable at home. Among the remaining (49%) who had episodes of decline in lung function or other concerning readings, 22% ($n=8$) were found to have infection; 3% ($n=1$) with rejection; 8% ($n=3$) were false alarms due to poor technique. 16% ($n=6$) had other issues such as hypo/hypertension and weight gain/loss. Six patients self-withdrew. Three monthly satisfaction questionnaires were issued to all active participants. In March 2022 there were 28 responses (75.6%). 96% of the participants found pMp app easy to use; 82% felt that the app gave them confidence and reassurance; 100% supported continuation of the service. **Conclusion:** Remote monitoring was successfully introduced. It demonstrated a positive impact on patient experience and the clinical care with the early identification of decline in lung function allowing timely investigation.

Conflict of Interest: None to declare