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P149   **TELEHEALTH AND ACCESS TO MEDICATIONS IN AN ERA OF COVID-19. EXPERIENCE FROM VIRTUAL CLINICS FOR PATIENTS WITH SEVERE ASTHMA ON BIOLOGICS**

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Introduction Enforced social distancing (i.e. lockdowns) greatly facilitated control of Coronavirus Disease 2019 (COVID-19). Whilst access to hospitals was restricted, outpatient care continued remotely. At our institute, the biologic therapy for asthma is only prescribed after evaluation by a pulmonologist specializing in severe asthma. The treatment is administered on site by specialist nurses who follow manufacturers' recommendations. The aim of this study was to determine the satisfaction of patients with severe asthma with telemedicine, and the impact of COVID-19 lockdown on their receipt of biologics and other treatments for asthma.

Methods A cross-sectional survey of 58 patients with severe asthma scheduled to receive biologic therapy at our hospital during the lockdown was performed with ethical approval.

Results Fifty-four patients participated (F 37; mean age 46.7 years; response rate 93.1%). Their experience of biologic therapy, medication supply, and telemedicine are displayed in table 1. Mean time since diagnosis was 19.2 years (SD 11.5 years). All had been on biologic therapy Omalizumab (45), Mepolizumab (7), or Dupilumab (2) for over three months (mean 38.4 months± SD 26.5 months).

Fifty (92.6%) had telephone follow-up, 31 (57.4%) were satisfied with telemedicine, 45 (81.4%) agreed that biologic therapy improved their asthma, and 40 (74.1%) received scheduled biologic therapy. Of the 45 patients living in the city, nine did not receive biologic therapy, two cited the lockdown as the reason for this; two did not receive an appointment; two did not perceive any benefit; two had other reasons. Five of the nine patients living outside the city did not receive biologic therapy, 3 because of the lockdown, and 1 for fear of acquiring COVID-19. Alarmingly, 16 (29.6%) suggested that they had insufficient

Abstract P149 Table 1 Patient perceptions on availability of medications, telemedicine and biologic therapy

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Asthma improved with biologic	4	3	2	8	37
Sufficient medications	7	9	3	11	24
Difficulty obtaining medication	21	9	7	10	17
Satisfied with telemedicine	2	3	18	14	17

medications, and 27 (50%) reported difficulty obtaining medications.

Conclusions Many patients were satisfied with telemedicine, so this could be used to deliver routine outpatient tertiary care post-pandemic. However, during the lockdown, some patients did not receive scheduled biologic therapy and had insufficient medications. Thus, logistics around supplying medications, and biologics must be considered in plans preparing for a second wave of COVID-19. Teaching patients to self-inject biologic therapy should be considered.


P150   **EVALUATION OF MYCOPD, A DIGITAL SELF-MANAGEMENT TECHNOLOGY FOR PEOPLE WITH COPD, IN A REMOTE AND RURAL POPULATION**

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Aim The prevalence of chronic obstructive pulmonary disease (COPD) in poor, remote, and rural populations is twice that of cities (15.4% versus 8.4%).[1] COPD costs the NHS an estimated £1.9bn/year[2] and is characterised by exacerbation frequency and severity. Disease education and self-management are critical to reducing the healthcare burden for patients with COPD.

We evaluated myCOPD, a digital self-management technology in a predominantly remote and rural population. We
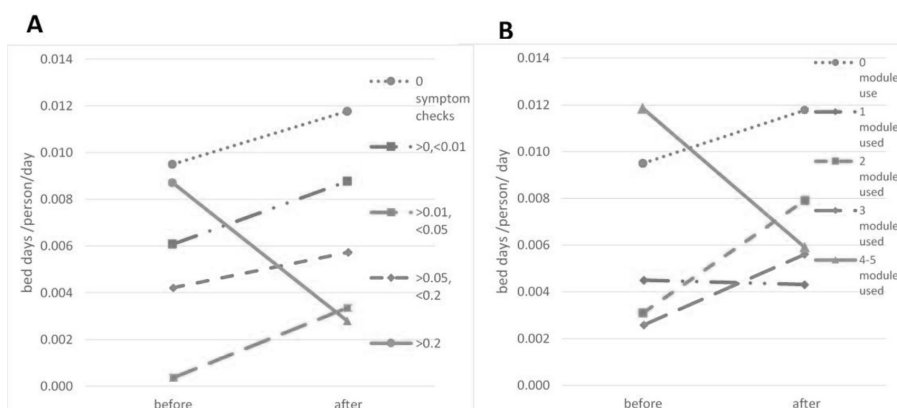
Abstract P150 Figure 1 Individuals with a high level of engagement with myCOPD defined either by (A) frequency of symptom scoring or (B) number of modules used show a reduction in bed days (bed days/person/day)

assessed whether myCOPD was effective in reducing hospital admissions, inpatient bed days and other NHS service usage.

Method 120 people were recruited over 6 months. We compared data regarding hospital admissions, inpatient bed days, clinic attendances, out of hours contacts and home visits 12 months before and up to 12 months after myCOPD activation. To account for differences in activation rates and the early termination of the study due to COVID-19 data was reported as daily outcome measures.

Results The average participant age was 67, with a GOLD score 1–4 (average 2.7). The average 6-fold urban-rural score was 4.23 indicating a predominantly remote and/or rural population. 78% of patients activated myCOPD, 70% recorded their symptom score at least once, and 45% used >1 myCOPD module. There was no association between myCOPD use and participant demographics.

There were no statistically significant differences in hospital admissions, inpatient bed days, or other health service utilisation before and after myCOPD activation. However, a subgroup analysis found that those individuals with the greatest degree of myCOPD engagement either by frequency of symptom scoring (figure 1A) or by numbers of modules used (figure 1B) did show a reduction in bed days.

Conclusion These data indicate no association between myCOPD use and either reduced bed days or other NHS service use on a whole group level however it may be of benefit to individuals with higher levels of engagement. Overall these results have significant implications regarding the design and evaluation of novel service innovations in COPD and other chronic disorders.

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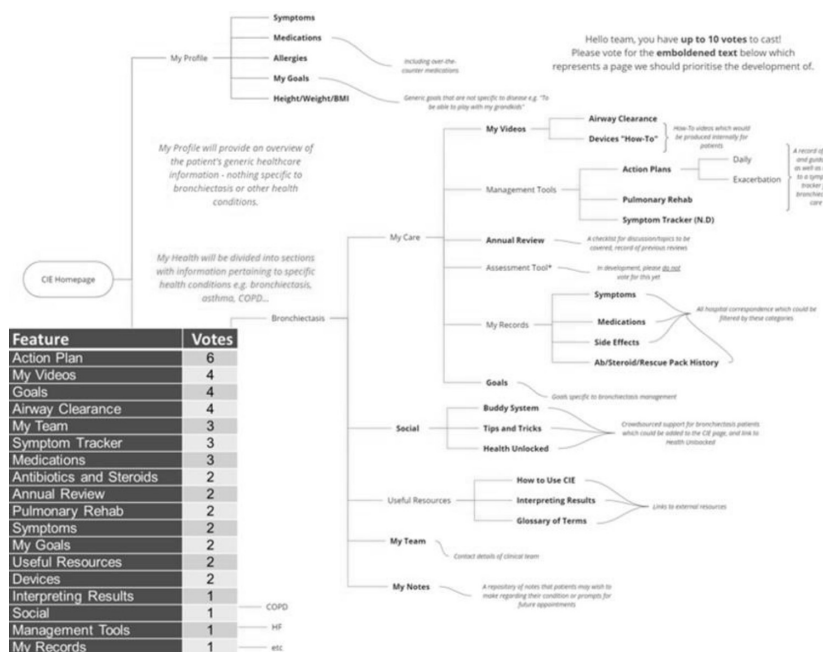
Introduction Bronchiectasis patients rely on self-management to minimise symptoms, prevent exacerbations, and halt disease progression. A collaboration between Imperial College London, the Trust, and three patient partners was developed to transform the current paper-based self-management plan into a digitised tool embedded in the personal health record.

The aims of this project are to improve the appropriateness of healthcare utilisation, provide easy access to care information, share information across the care team, and digitise routine patient education (e.g. airway clearance).

Methods We convened a series of codesign workshops with representatives of the bronchiectasis multidisciplinary team and three public partners who live with bronchiectasis. Participants developed an idealised self-management webpage, in terms of contents, practical use, and potential patient safety risks. The contents of the plan were also informed by an expert panel with national representation.

A priority-setting exercise with the entire multidisciplinary team identified highest-priority features. The prototype was then adapted for inclusion in the patient-facing record. A process evaluation will guide revisions to the plan. Correlations between engagement, health status, and demographic variables will also be explored.

Results The expert panel produced a list of 20 key skills and information for effective self-management. There was a high degree of consensus on what should be included, with 97.2% of participants agreeing on the final set. Topics included: airway clearance, shared decision-making, antimicrobial resistance, and knowing when to seek medical help.

Abstract P151 Figure 1