Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

promising therapeutic option for COVID-19 in the future. Further analyses should be performed with larger sample sizes.

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COVID-19 in cystic fibrosis patients with and without lung transplantation: the Zurich cohort

C. Steinack[1], R. Hage[1], F. Gautschi[1], M.M. Schuurmans[1]. [1]*Zuerich, Pulmonology, Zuerich, Switzerland*

Objectives: Reports on short- and long-term presentations of COVID-19 in CF patients is limited. We aimed to describe clinical features and outcomes of all our CF patients with laboratory confirmed COVID-19 between March 2020 and January 2021 (ongoing observation).
Methods: Retrospective review of clinical data and treatment of CF patients with COVID-19 confirmed by RT-PCR or serological evidence (n = 11).
Results: Mean age at presentation was 32 (23–48) years, 27% (n = 3) were female. Six patients (55%) had a previous lung transplantation (post-Ltx). Two patients were on modulator therapy (Trikafta® and Symdeco®). The most common presenting symptoms were cough (36%), fever (27%), headache (27%) and dyspnea (18%). Nine patients (82%) had mild disease and were treated as outpatients. Two patients (18%) were post-LTx and were hospitalised with severe disease (1 on the normal ward, 1 in the intensive care unit). The most notable laboratory findings were lymphopenia, and elevated levels of C-reactive protein. In the two hospitalised patients, computed tomography of the chest showed ground-glass opacities with consolidations; 1 patient additionally had a small pleural effusion. These 2 patients were treated with remdesivir, as well as broad-spectrum antibiotics (meropenem). The patients with mild disease were treated with co-amoxicillin (n = 3, 27%). Dexamethasone was given in selected cases. Mechanical ventilation was not necessary for any of these patients. The hospitalised patients received oxygen by nasal cannula and high-flow oxygen therapy. All patients recovered. Residual symptoms are being monitored.
Conclusion: This is the first study of an adult CF-COVID-19 cohort in Switzerland, which included patients who underwent lung transplantation. Cough, fever, headache and dyspnea were the most common symptoms. Two patients (27%) had severe disease. The majority had a benign course and long-term symptoms are still under investigation.

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Rapid implementation of virtual clinics during the COVID-19 pandemic

D. Nazareth[1], C. Sumner[1], M. Walshaw[1]. [1]*Liverpool Heart and Chest Hospital, Adult CF Unit, Liverpool, United Kingdom*

Introduction: At the start of the UK COVID-19 pandemic, people with cystic fibrosis (pwCF) were designated "extremely clinically vulnerable," underwent shielding, with face-to-face clinical contact postponed. Prior to lockdown we had cancelled routine CF clinics and used this unique opportunity to rapidly redesign outpatient services providing remote video-assisted consultations (VAC) with digital technology. VAC also enabled vulnerable shielding MDT members or those self-isolating through COVID contact to provide care. We describe our experience in rolling out VAC.
Methods and results: We initially used AccurX®, a healthcare provider (HCP) text message-initiated video call service. From March 20th–April 17th 2020, 192 physician-led VACs were completed to support pwCF with the lowest FEV1% in our clinic. From April 18th we moved to the NHS England and NHS Improvement supported secure Attend Anywhere® service with pre-arranged appointment times, constructing 10 bespoke MDT waiting area 'clinics' with 44 active MDT users, including an all-discipline MDT clinic. Over 8 months, 1,348 consultations (602 hours) took place with most activity (1,163 consultations; 86%; 557 hours) in the MDT clinic. Other areas used were CF Nurse Specialist (n = 86), CFRD (n = 21), Dietetics (n = 12), Physiotherapy (n = 31) and Psychology (n = 19). Since August 2020, we have reinstated routine face-to-face clinics for emergencies and Annual Review, but >90% of our pwCF are now managed virtually via VAC with remote spirometric monitoring (Nuvoair®).
Conclusions: MDT members and pwCF report a high satisfaction with VAC with an increased number of pwCF using it. VAC has improved pwCF's access to MDT services, abolishing the need to travel for and the risk of cross-infection associated with physical routine review, whilst improving appointment convenience. There has also been improved collaboration between professionals with this new way of working, and we continue to adapt our services to the benefit of pwCF.

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Evaluating the impact of a telemedicine service during the COVID-19 pandemic in people with cystic fibrosis

A. Bull[1], T.S. FitzMaurice[2], D. Nazareth[2], M. Walshaw[2]. [1]*Liverpool Heart and Chest Hospital, Research Unit, Liverpool, United Kingdom;* [2]*Liverpool Heart and Chest Hospital, Adult CF Unit, Liverpool, United Kingdom*

Introduction: To provide continuity of care during the COVID-19 pandemic, our large adult CF unit implemented a telemedicine service in order that people with cystic fibrosis (pwCF) - categorised as 'extremely clinically vulnerable' in the UK – could access clinicians during periods of shielding. Here we report their opinions of and engagement with the service during the early pandemic.
Methods: A total of 44 consecutive pwCF attending virtual clinics completed a 23-part survey composed of free text and rating scale questions to evaluate the impact of the telemedicine service and the pandemic on their CF care. We also compared telemedicine and face-to-face (FTF) appointment attendance rates during the pandemic.
Results: Feedback was generally positive (see Table). The main areas of constructive criticism revolved around audio and visual quality, as well as connectivity issues associated with use of mobile devices to access the telemedicine portal. Positive comments of the telemedicine clinic included no travel requirements, and no risk of cross-infection. Between July and October 2020, attendance was higher at FTF appointments than telemedicine (166/186 vs 417/513, Chi-squared p = 0.01).

Rating scale question	Strongly disagree (%)	Disagree (%)	Neither (%)	Agree (%)	Strongly agree (%)
Satisfied with the clinics	0	0	7	61	32
Efficient	0	2	12	42	44
Save time	0	5	9	50	36
Easy to access	0	0	9	55	36
Meeting health needs	0	5	9	52	34
Preferable to FTF	2	7	5	43	43
Want to continue	2	0	14	41	43
Confidentiality/privacy respected	0	0	9	52	39
Satisfied with audio/ visual quality	2	7	23	48	20

Conclusions: The telemedicine service is generally popular with pwCF, and engagement with the service has been good. Clinicians need to be aware that technology issues may hamper appointment attendance and interaction for some users.

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TeCC (TeleMedicine, Cystic Fibrosis, Corona-Virus) study in a previous telemedicine-naive centre: clinical challenges, outcomes, and user experience in the first six months of a global pandemic

D. Morrissy[1,2], T. Vagg[3,2], M. McCarthy[1], J. Dorgan[1], C. Fleming[1], C. Howlett[1], J.A. Eustace[2], B.J. Plant[1,2]. [1]*Cork University Hospital, Cork Adult Cystic Fibrosis Centre, Cork, Ireland;* [2]*University College Cork, HRB Clinical Research Facility-Cork, Cork, Ireland;* [3]*University College Cork, School of Computer Science and Information Technology, Cork, Ireland*

Background: COVID-19 made it necessary to establish telemedicine as a first default for reviews in a previously telemedicine-naive clinic.
Objectives: To establish and assess telemedicine in the first 6 months of COVID-19 pandemic.
Methods: Utilising a multidisciplinary team (MDT) approach, we established a 'Covid Pack' of medical equipment (sent to each patient) and a suitable video conference platform to replicate the in-person clinic format. The virtual clinic was then rolled out (94 patients reviewed in the first 6