

# COVID-19 Respiratory outpatient clinics during and post COVID-19: the use of patient satisfaction and preference data to redesign service delivery

Authors: Malvika Bhatnagar,<sup>A</sup> Paul McCallion,<sup>B</sup> John Davison,<sup>C</sup> Tony DeSoyza<sup>D</sup> and Katy Hester<sup>E</sup>

## ABSTRACT

We used a survey to evaluate patient satisfaction with a remote system for the delivery of respiratory clinics and to capture future preferences. 98% of responders were satisfied with their current appointment being held remotely in order to reduce the risks from COVID-19. Regarding future preferences beyond the pandemic, 41% of respondents preferred a face-to-face appointment, 35% preferred a remote appointment and 24% had no preference of one modality over another. Additional qualitative data suggest that a flexible system allowing patients to choose the mode of attendance shortly before the appointment would be welcomed.

**KEYWORDS:** respiratory clinics, remote consultation, patient satisfaction and preference, redesign service

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## Background and methods

The COVID-19 pandemic has altered medical service delivery, but also provided an opportunity to examine our practices and determine areas requiring improvement. The Royal College of Physicians (RCP) and Royal College of General Practitioners (RCGP) released guidance on resetting outpatient services in the context of the pandemic using quality improvement methods.<sup>1</sup> In keeping with guidance, we conducted a study to evaluate a remote clinic delivery system by capturing patient satisfaction with the new system and their future preferences, with the aim of informing redesign of service delivery post-COVID-19.

**Authors:** <sup>A</sup>ST3 respiratory medicine, Newcastle upon Tyne Hospitals NHS Trust, Newcastle upon Tyne, UK; <sup>B</sup>senior physiotherapist, respiratory medicine, Newcastle upon Tyne Hospitals NHS Trust, Newcastle upon Tyne, UK; <sup>C</sup>senior nurse specialist for complex lung diseases, Newcastle upon Tyne Hospitals NHS Trust, Newcastle upon Tyne, UK; <sup>D</sup>honorary consultant physician, Newcastle upon Tyne Hospitals NHS Trust, Newcastle upon Tyne, UK; <sup>E</sup>consultant respiratory physician, Newcastle upon Tyne Hospitals NHS Trust, Newcastle upon Tyne, UK

We converted multiple respiratory clinics to telephone or video consultations. At the conclusion of remote appointments, patients (n=269, see Table 1) were asked a series of questions regarding their consultation and future preferences. Data were collected from multiple clinics, including four consultant-led clinics (a general respiratory clinic, two bronchiectasis clinics and a COPD clinic), two specialist nurse clinics (severe asthma and bronchiectasis clinics), and one physiotherapist clinic with mainly bronchiectasis patients.

## Results

We achieved a response rate of 92% (248/269), with 98% of responders being satisfied with their current appointment being held remotely. When asked about future preferences for appointments, 41% of respondents preferred a face-to-face appointment when safe to do so, 35% preferred a remote appointment (29% telephone, 6% video), and 24% had no preference of one modality over another.

## Discussion

Physical footfall in clinics could, therefore, potentially be reduced by almost 60% without adversely affecting patient satisfaction. Exploration of patients' preferences for future clinic formats revealed an overarching theme of 'wanting choice of clinic format', wherein patients could choose the mode of attendance, with 'perceived wellness' being a common theme influencing their decisions. These qualitative data suggest that incorporating systems that facilitate conversion between modalities as the appointment nears would seem to be the optimum approach. This would further improve patient satisfaction and most appropriate allocation and uptake of clinic slots.

Our response rate was high, perhaps due to concurrent data collection at conclusion of the remote appointment. This is, therefore, likely to describe patient preferences more accurately than studies with lower response rates. The data also reflect a mixed patient population from multidisciplinary clinics.

This project focused on patient preferences. More work to ascertain clinical effectiveness and identification of suitable patients and schedules for facilitating remote services safely is needed.

**Table 1. Characteristics of patients surveyed**

Characteristic	Options/measures	Results [N=269]
<b>Clinic 'attended'</b>	Consultant general	22
	Consultant	76
	bronchiectasis	
	Consultant COPD	57
	Specialist nurse clinic	73
	Physiotherapist clinic	41
<b>New referral or review</b>	New	83 (31%)
	Review	186 (69%)
<b>Distance from hospital</b>	Miles (median/range)	5 (<1–166)
<b>Age</b>	Years (median/range)	69 (19–94)
<b>Diagnosis/ reason for referral</b>	Bronchiectasis	239 (67%)
	COPD	39 (11%)
	Bronchiectasis/asthma	24 (6%)
	Bronchiectasis/COPD	18 (5%)
	Cough	17 (5%)
	Asthma	11 (3%)
	SOB	9 (2%)
	Other	2 (1%)
<b>Clinically stable?</b>	Yes	229 (87%)
	No	33 (13%)
<b>Call duration</b>	Minutes (median/range)	14 (1–42)

COPD = chronic obstructive pulmonary disease;  
SOB = shortness of breath

## Conclusions

The conversion of respiratory outpatient appointments to remote consultations was well received within our cohort. Being able to provide a significant proportion of multidisciplinary patient appointments remotely allows for potential reductions in costs, travel time and environmental impacts. It also has potential to reduce waiting time for those requiring face-to-face assessment, for example, those with severe asthma or being investigated for lung cancer who may be more suited to an in-person appointment. Reducing overcrowding in waiting rooms decreases risks of infection even beyond COVID-19. Most patients wanted choice of mode of attendance closer to the appointment. Redesigning services with these features will be a big step towards improving efficiency of outpatient services in line with patient preferences and novel ways of working post-COVID-19. ■

## Reference

- 1 Royal College of Physicians. *Rebuilding the NHS – Resetting outpatient services for the 21st century in the context of COVID-19*. RCP, 2020. Available from [www.rcplondon.ac.uk/guidelines-policy/rebuilding-nhs-resetting-outpatient-services-21st-century-context-covid-19](http://www.rcplondon.ac.uk/guidelines-policy/rebuilding-nhs-resetting-outpatient-services-21st-century-context-covid-19).

**Address for correspondence: Dr Katy LM Hester, Cardiothoracic Directorate, Freeman Hospital, Newcastle upon Tyne Hospitals NHS Trust; Freeman Road, High Heaton, Newcastle upon Tyne, NE7 7DN UK.  
Email: [katy.hester@nhs.net](mailto:katy.hester@nhs.net)**