Elevated COPD patient engagement and timely care prioritisation facilitated by use of text message accuRx Florey questionnaire in routine primary care



accuRx

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Background

- The COVID19 pandemic has meant that care delivery in primary care has had to quickly adapt to meet patient needs, especially for those patients considered vulnerable and at risk, such as those with long-term chronic conditions.¹
- A report from the Taskforce for Lung Health² showed that nearly 35,000 people had missed out on a \bullet referral for specialist respiratory care, treatment or diagnosis in England during the first lockdown.
- The use of SMS messaging was observed to increase 3-fold during the early months of the pandemic \bullet and an integrated remote care solutions such as the accuRx platform was identified as a tool to support engagement with patients diagnosed with Chronic Obstructive Pulmonary Disease (COPD).³
- GSK have co-developed and sponsored the delivery of a free COPD questionnaire (Florey) with accuRx to enable patients to complete questions from the COPD Assessment Test (CAT), MRC dyspnoea scale, their recent exacerbation history and smoking status remotely and shared directly with GP systems.
- The CAT is a clinically validated questionnaire. GSK were supporters of its development, with a multi- \bullet disciplinary group of international experts in COPD.⁴

Figure 2: Example screens seen by HCP and patient (dummy patient data)

Message Patient – C X ALI, Mary (Mrs) : NHS No. 933-928-3152 29-May-1953 (65y) Female	 @COPD team patient ALI, Mary (Mrs) has responded: Questionnaire : COPD CAT questionnaire CAT score: 25 Frequency of cough: 1 	5. How out of breath do you get?	
Patient (SMS)	Phlegm on chest: 2 Tightness of chest: 0 When out of breath: 3 Limited by COPD at home: 3 Quality of sleep: 3 Level of energy: 3 MRC Grade: 3 Exacerbations in past 12 months: 2 Admissions due to exacerbations: No Smoking status: Current smoker How much smoked: 10-19 cigarettes or equivalent per day How many years smoked: 20 Reference: CAT >20 - consider:	1 - Not troubled by breathlessness except on strenuous exercise.	Thank you for completing this questionnaire.
This patient has not opted out of receiving SMS messages Mary's number 07777777777		2 - Short of breath when hurrying, or walking up a slight hill.	Your practice will review this information in the next 28 days and be in touch if further action is required. As always, please contact reception if you need to speak to a clinician. Smoking leads to health problems such as cancer, heart disease and strokes. The benefits of stopping smoking include: better health, more money and cleaner air for those around you! Do you want to stop smoking? Here is some advice on ways to quit smoking, local
Template Pathway Florey COPD CAT, MRC questionnaire (partnered - GSK)		3 - I walk slower than people the same age on level ground because of breathlessness, or I have to stop for breath when walking at my own pace.	
Message Text Dear Mrs Ali, I'd like you to complete some questions about your breathing condition (COPD) via the link below. Thanks, Dr Holland		4 - I get short of breath after walking 100 yards or after a few minutes on level ground.	
Please follow this link (link will autogenerate here). You need internet on your phone (otherwise you can open the link on a computer or contact reception). The Accurx Surgery	 Referral to specialist care Reviewing maintenance therapy Referral for pulmonary rehabilitation Smoking cessation Annual influenza vaccination 	5 - I am too breathless to leave the house or breathless when dressing or undressing.	services and general tips: www.nhs.uk/smokefree
358 characters remaining	- Reduce exposure to exacerbation risk factors	40% completed < >	U Contraction of the second seco

Programme Aims

- Deliver a significant update to the previous accuRx COPD questionnaire to now include: CAT questions and increased depth of exacerbation and smoking assessment.
- Optimise the use of questionnaire tool to support the stratification and prioritisation of practice COPD populations, alongside identification of un-meet patient need.
- Provide a remote care platform to facilitate simple and routine engagement with patients on the management of their COPD.
- Use of the tool to drive efficiency in the delivery of routine COPD care. For example, routine automatic capture and structured coding of clinical data frees up the HCP time to focus on the broader clinical conversation with the patient.
- The questionnaire is seen as a pre-annual review (and follow-up) support tool, NOT as a tool to replace the COPD annual review.

Methods

- Project launch date was 27 October 2020. The service is provided free to the NHS.
- The questionnaire (Florey)⁵ response provides data submitted by the patient to facilitate an initial HCP assessment and automatic coding of date-stamped CAT, MRC, exacerbation and smoking data to the patient record. Full SNOMED coding details are available.⁶
- The pathway of Florey use can be seen in figure 1. There is no need for the patient to download additional software as part of the Florey completion process.
- The accuRx platform is available on both EMIS and SystmOne GP systems.
- Example screens seen by both HCP and patient are illustrated in figure 2. For smokers, explicit linkage to NHS Smoking Cessation service is provided.
- The Florey tool facilitates data capture and engagement with patients prior to review. Additional tools are available to deliver explicit prioritisation, stratification and COPD review.^{7,8}
- The accuRx platform is available for free download (<u>https://www.accurx.com/</u>). The COPD Florey is automatically included as part of the green toolbar selections and is available alongside other GP practice services and tools.





Patient

- The capability to send a COPD Florey to a cohort of practice patients ("batch send") was introduced in 2021 to further improve practice efficiency.
- Practices maintain control and access to the patient-level data. The questionnaire does not \bullet recommend the use of any respiratory products, including GSK products. The practice remain the sole decision makers following their clinical review of the data gathered using the Florey.

Progress & Anticipated Benefits

- Variation by month in usage and response rates since launch are summarised in Figure 3.
- Up to the end of August 2021, 104,270 unique patients have been sent a COPD Florey, with the usage volume trend increasing over time.
- Average response rate is an encouraging 61% (similar to other accuRx Floreys), a fairly consistent rate to date with a maximum monthly percentage of 66% and minimum of 54%.
- As of August 2021, 99% of GP practices in NHS England practices have the core accuRx platform installed, respective percentages for Wales and Northern Ireland are 69% and 36%. Of this total practice set, 37% have sent at least one COPD Florey.⁹
- Florey usage did show a peak of usage in March/April 2021, likely associated in supporting the gathering of Quality and Outcomes Framework data.
- Using batch send of the COPD Florey both further improves GP practice efficiency and could enable a \bullet large cohort analysis of data sets to support a Population Healthcare Management approach in the delivery clinical care over larger health economies.¹⁰

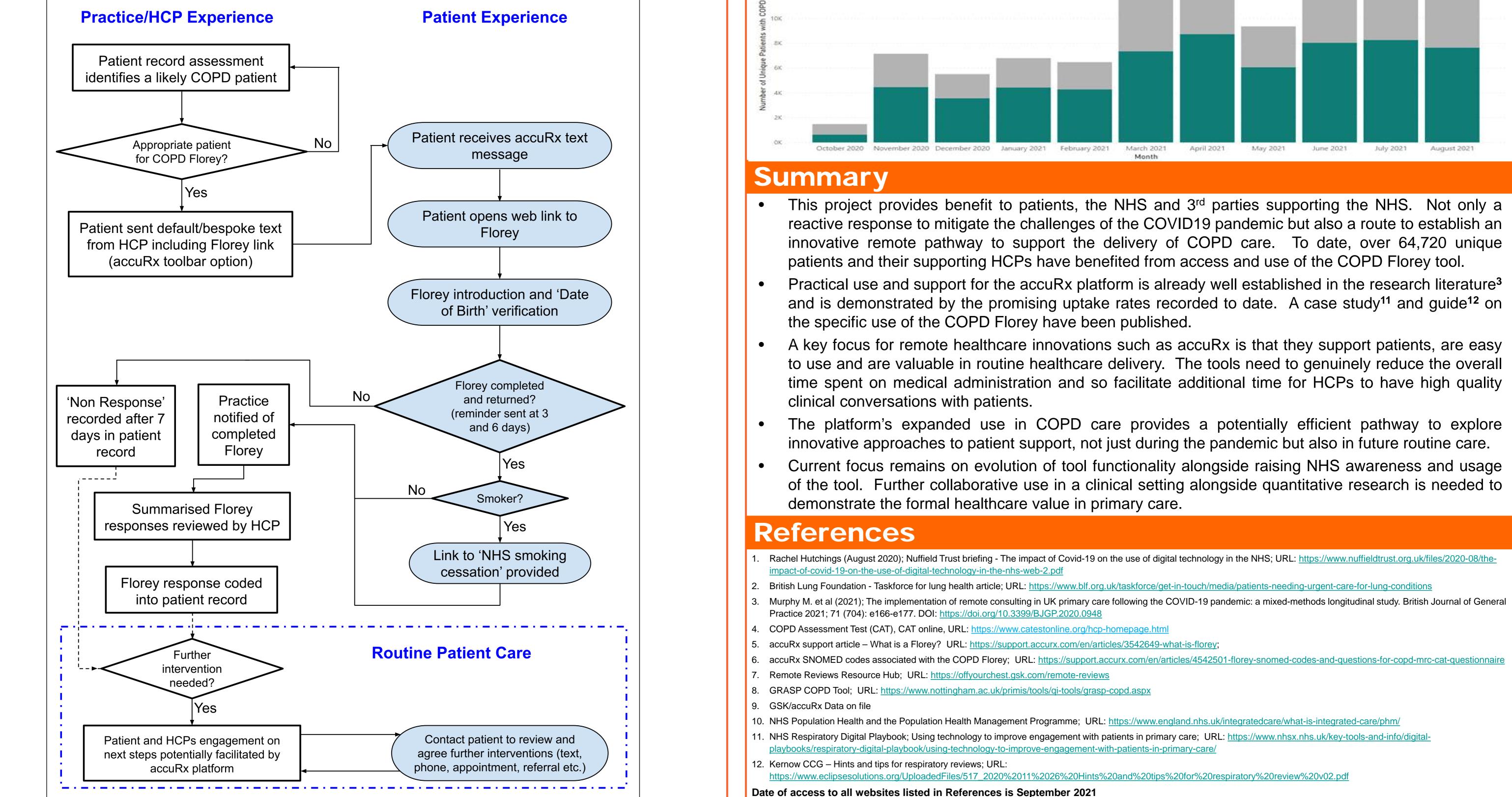
Figure 3: COPD Florey usage metrics since launch

104.27K

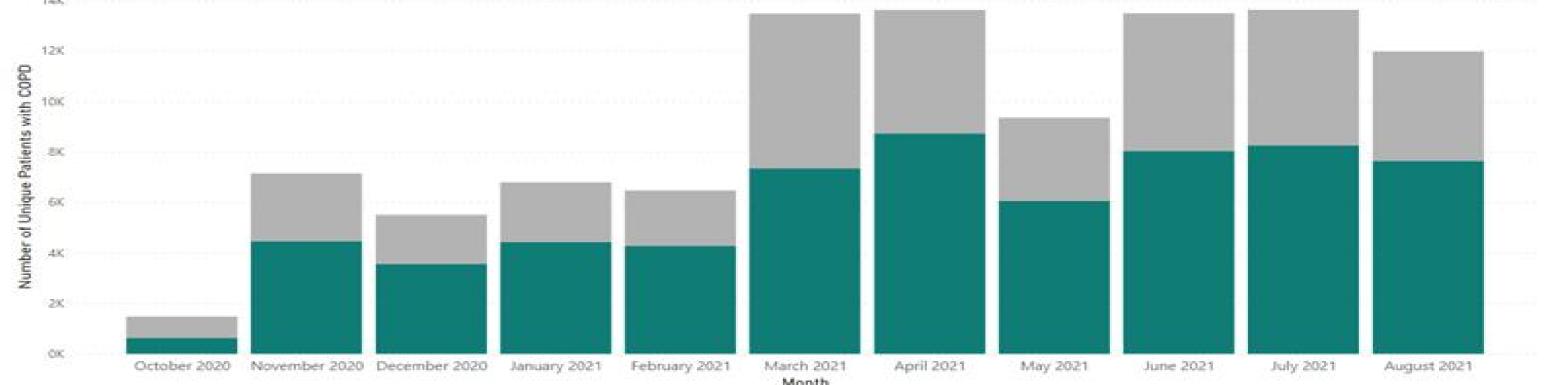
63.72K

61% COPD Florey Completion Rate

Figure 1: COPD Florey usage from the HCP and patient perspectives







Acknowledgements

Many associated individuals have been involved in the design and implementation of this project including: Ben Murray, Sandeep Sarkar, Robynne Wong, Jacob Haddad & Eric King.

First presented at the PCRS conference on 24-25 September 2021

Material Certification: NP-GB-RS-PSTR-210001 September 2021