

myCOPD universal guidance

The product website contains useful information and videos that cover both the patient and the clinician interfaces for myCOPD

<https://mymhealth.com/mymhealth/mycopd>

The clinician on line course can be seen at

<https://www.youtube.com/watch?v=VYaWovmVGpU&list=PLe9wnhjMRuanO-ghMKxi006Cu0bUGVujv>

## COPD

There are approximately 900,000 patients in the UK with Chronic Obstructive Pulmonary Disease (COPD), which is caused primarily by smoking. It is forecasted to be the world's 3<sup>rd</sup> largest killer by 2030. COPD accounts for up to 13% of all acute medical admissions and costs the NHS more than £800 million each year. It is a chronic progressive disease with no known cure and patients are breathless on almost a daily basis.



The mainstay of treatment for patients with COPD is inhaled therapies and pulmonary rehabilitation (PR). Unfortunately, over 90% of patients are unable to use their inhaled medication correctly. These treatments have been shown to reduce exacerbation frequency, hospital admissions and length of stay by 25-35%. Patients find access to PR difficult for several reasons; services are limited in their capacity and many patients find it difficult to access the 6-week course of 2 hours, twice a week, due to other commitments and travel constraints. Maintenance classes for patients are sparse, and often much of the benefit that patients experience from the PR course is lost due to inactivity.

myCOPD is a comprehensive web application (which means it can be accessed on almost any device that connect to the internet) and has been built by specialists (COPD consultants, specialist nurses, respiratory physiotherapists and psychologists) bringing to patients the very best care at a time and place that suits them across the entire COPD pathway.

myCOPD has evidence of efficacy from 3 clinical trials.

In summary:

- myCOPD has been shown to correct 98% of patients' inhaler technique errors (present in 90% of patients).
- myCOPD improves adherence to medication to 70% (estimated to be as low as 8% in many studies).
- myCOPD has also be shown to be as good as class based PR in a randomised controlled trial
- myCOPD doubles the rate of recovery of patients hospitalised with COPD exacerbations

myCOPD has been built with patients to deliver 3 important functions.

1. Education and inhaler training
2. Self-management
3. Pulmonary rehabilitation

### **Patient web application functions**

During the registration process patients learn how to use the various app functions.

- Daily Symptom Reporting
- Medication Diary
- Self-Management Plan
- COPD Assessment Test (CAT) and feedback
- 6-week Pulmonary Rehabilitation Program and maintenance class,
- Full Inhaler technique library – patients only see the inhaler videos for their inhaler device
- Prescription Assessment against NICE guidelines
- 19 world class educational videos delivering a masterclass course to patients

1. Anatomy of the lungs and what is COPD
2. Exercise
3. Smoking cessation
4. Breathlessness part 1&2
5. Medication and treatment
6. Pacing Part 1&2
7. Oxygen
8. Chest Clearance
9. Exacerbations
10. Anxiety and depression
11. Nutrition
12. Travelling
13. Benefits
14. Sex and breathlessness
15. Self-management
16. Weather
17. Pollution

- Quitting Smoking area
- Mindfulness
- Chest Clearance
- Pollution Forecast
- Weather Forecast
- Oxygen Alert Card
- Medication Management function
- Personal Details
- Appointments function
- Notifications – to receive message and details from clinical team
- How to use – shows patients how to get the most out of the app

myCOPD has primarily been developed to help patients self-manage and engage with online PR. It is an extremely powerful tool however when combined with the clinician app which can be used to manage patients with COPD at both an individual and population level.

### **Clinician app functions**

The clinician app, like the patient app is accessed through a web browser.

- Manage patients at both an individual and population level
- View patients current and past symptom and CAT scores
- Delivers the annual review

- Care plans and exacerbation review templates for community services
- Dynamic list allows you to order patients according to symptom and CAT scores
- The map function projects the patients' symptom and self-management scores onto a map of the local geography facilitating the delivery of care in community
- View patient medication history
- View patient profile and respiratory metrics
- Remotely change patient details and medication – all changes will be instantly transferred to the patient app, for example; changing a patients' inhaler will automatically change their medication diary, self-management plan and inhaler videos.
- Set up appointments for your patient
- Send messages to individual patients via the patient app or broadcast health messages to your entire COPD population
- Update yourself how to deliver the very best inhaler instruction.

### **Manager application function**

The manager app function is part of the app suite. This facilitates the use of the app and ensures that the user defined roles and access to patient data follow closely the patient pathway from primary to community to acute care.

### **IT specification**

Dedicated support team 8am-5pm for providers  
 Data hosted on NHS IT servers.  
 CE Marking MHRA Class 1 device.  
 NHS IG Toolkit Compliant

### **Current procurement route**

myCOPD can only be purchased through my mhealth limited currently. The minimum order per CCG is 1000 licenses

Send PO to [sales@mymhealth.com](mailto:sales@mymhealth.com)

Price

Patient license - £20 for lifetime access  
 Annual fee - this covers unlimited updates, data storage, clinician and manager app access - £5 per/yr per patient active on the system

So for example 1000 patients = £20,000 for patient licenses and £5000 per/yr ongoing cost

Training - £400/day plus T&S – we recommend 1-2 days of training per CCG, each attendee 2-3 hours.

Online training course – Free

### **Training**

The my mhealth team are experienced in helping providers and commissioners to embed myCOPD into current clinical pathways and practice. Working with current teams we help identify the deployment strategy to enable the widest deployment and impact on the local patient population. The training days for clinicians and administrators is delivered face to face and lasts 2-3 hours, we can teach a maximum of 10 attendees per session. Within this cost we include a comprehensive online course to be accessed any time.

## Business case

### Cost-benefit analysis

An individual patient license costs £20 for a lifetime. There is a £5 annual fee, per patient. This covers multiple software upgrades, performance enhancements, application improvement, education updates, hosting, security etc. All updates will be performed automatically. This cost includes the clinician and management module that allows the clinical team to manage COPD patients at both an individual and population level across the entire pathway.

In an independent DOH economic analysis, myCOPD has been estimated to reduce admissions and exacerbations by 25-35% by correcting inhaler technique allowing the evidence based reduction in exacerbations and hospitalisation to be realised.

### Current Cost of COPD

Based on an average CCG with 5000 patients with COPD and 700 patient COPD admissions per year.

The average cost of pulmonary rehabilitation service in an average CCG = £180,000

Average cost of 700 patient admissions (@ £1560 per admission) = £1,092,000.

### Investment Cost

Assuming deployment across the entire patient pathway to 80% of COPD patients with known internet access and a 15% new COPD diagnosis rate per year; and 15% of COPD patients removed from the system (death, not using system).

£20 per unit cost

£5 per year maintenance cost

£400 per day training (2-3 days usually required for year 1)

Total cost of myCOPD

Year 1: £80,000 (Unit Cost) and £20,000 (annual cost) and £1200 training = £101,200

Year 2/3: £15,000 (Unit Cost) and £20,000 (annual cost) = £35,000

### Savings

#### 1. Admissions

25% reduction in admissions = £273,000 saving

Assuming in 80% of the population = £218,4000

#### 2. Pulmonary rehab

Assuming new model of delivery of PR with screening team, and rehabilitating only those patients unable to perform online PR in class based program. You will be able to rehabilitate the 4000 patients using myCOPD (with same outcomes).

Assume £80,000 needed to run screening program and rehabilitate those unable to receive rehabilitation at home. = reduction in cost of delivering PR using current model = £100,000

### 3. Savings

Year 1 = 318,400 – 101,200 = £217,200

Year 2,3 = 318,400 – 35,000 = £283,400

## **FAQs**

### **Who can use myCOPD?**

Anyone that can use a computer and has access to the internet can use myCOPD

### **What stage of disease is relevant for myCOPD?**

All patients, at any stage of their disease will benefit from myCOPD. They are best delivered at the point of diagnosis and across the whole patient pathway.

### **What do you need to use myCOPD?**

myCOPD can be used on almost any device that connects to the internet. Most desktop computers, laptops, tablets and smart phones are capable of using our apps.

### **How does a patient access myCOPD?**

It is accessed by typing in the website address, and inserting a username and password.

### **What does myCOPD do?**

All of the apps provide patients with expert information through text and beautiful video, management plans and exercise programs, enabling them to manage and improve their health and wellbeing. This data can be used with the patients' clinician allowing real time remote monitoring and management.

### **Where is the patient data stored?**

If you are an NHS patient, the data is managed inside the NHS and protected by the highly secure NHS online security network

## **Conclusion**

Embedding myCOPD in the patient pathway (primary care, acute care, community care and pulmonary rehabilitation) can improve outcomes, reduce health care inequalities, reduce admissions and enable the delivery of evidence based pulmonary rehabilitation at population level. This achieves significant savings across the healthcare economy.