NICE National Institute for Health and Care Excellence

Resource impact summary report

Resource impact
Published: 30 April 2024
Last updated: 19 December 2024

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Recommendation

myCOPD can be used in the NHS while more evidence is generated, to deliver pulmonary rehabilitation programmes for adults with chronic obstructive pulmonary disease (COPD) who cannot have or do not want face-to-face pulmonary rehabilitation.

SPACE for COPD is awaiting appropriate regulatory approval so is not included in the recommendations for use at this time.

As the guidance is an early value assessment, the resource impact tools are not directing organisations to assess the cost of full rollout of this technology. If there is an unmet need, the technology could be a solution. Organisations may therefore wish to identify the potential resource impact.

Eligible population for the digital technologies

Around 1.1 million people are on the quality and outcomes framework register for COPD in England (NHS Digital Quality and Outcomes Framework 2023-24). This is around 1,940 people per 100,000 population.

Data from the Quality and Outcomes Framework, 2022/23 suggests an unmet need in the provision of pulmonary rehabilitation, with less than half of those eligible (43.02%) being offered it. This figure could be higher due to further progress made since the NHS Long Term Plan. In addition, some people who are offered pulmonary rehabilitation are not able to, or do not want to, attend face-to-face exercise sessions.

Digital technologies would offer an alternative to people who may not be able to access or may not wish to attend face-to-face exercise sessions. They may also include disease education, and nutritional, psychological and behavioural interventions. This would allow better access to care. A digital technology will not replace face-to-face pulmonary rehabilitation in the care pathway, components such as initial assessments will still need to be carried out in-person. Some pulmonary rehabilitation services are already aware of, and are using, these technologies, however practice is likely to vary across different settings.

Based on the economic assessment, digital technologies are likely to be either similar or less effective compared with face-to-face exercise sessions in pulmonary rehabilitation.

Standard care face-to-face pulmonary rehabilitation is the comparator treatment in this early value assessment.

Clinical evidence suggests that myCOPD may improve exercise capacity and symptoms of COPD. There are no particular safety concerns with using a digital technology to deliver pulmonary rehabilitation. The technology may address an unmet need for people with COPD who are eligible for pulmonary rehabilitation but who are not offered it. The technology can be used to complement standard care face-to-face pulmonary rehabilitation programmes. People using a digital technology will need fewer face-to-face exercise sessions as they can carry out exercise sessions at home. myCOPD also supports self-management by providing educational sessions, self-care tools and educational resources for people with all stages of COPD.

Digital pulmonary rehabilitation could be cheaper to provide than standard care face-to-face pulmonary rehabilitation when comparing the license costs of digital technologies and staff time, with the staff time for delivering all the components of pulmonary rehabilitation programmes face-to-face. However, it is uncertain what staff time is needed to deliver face-to-face exercise sessions as this will depend on the service configuration. The local resource impact template allows users to assess the resource impact locally.

Table 1 estimates how many exercise sessions users would need to do at home using digital options for the topic to be cost neutral.

Where this approach to helping adults manage their condition is adopted, it may require additional resources to implement, which may be significant at a local level. Benefits derived from using digital technology may help mitigate additional costs.

Due to a lack of robust data on current practice and other variables such as whether digital therapies are an appropriate treatment option, the size of the resource impact will need to be determined at a local level. A local resource impact template has been produced to help organisations estimate the resource impact.

Depending on current local practice, areas that may impact resources include:

- software, training and licence costs of the technology (see table 1)

- staff capacity to support delivery of the digital components of pulmonary rehabilitation programmes which is needed from healthcare professionals
- time required for training to support people using digital technologies
- cost of integration with NHS systems such as EMIS
- other costs such as IT equipment may be needed for those who do not have access to smartphones, tablets, or a computer.

Implementing the guidance may:

- Reduce waiting times and improve access to care in a timely manner.
- Increase programme completion rates.
- Encourage uptake among more diverse user populations.
- Improve access to pulmonary rehabilitation services by offering greater flexibility, more choice and self-management through remote online interventions. Key considerations on the value of digitally enabled therapies are usability, ability to engage with users and effectiveness when compared with standard care.
- Increase engagement and adherence to pulmonary rehabilitation programmes.
- Potentially reduce unplanned hospital admissions, reduce exacerbations, prevent deterioration and reduce health inequalities in access to and outcomes of care (however there are evidence gaps, therefore there is high uncertainty here).
- Better health outcomes and care experience for people who are unable to or do not wish to receive face-to-face exercise sessions.
- By widening access to pulmonary rehabilitation with alternatives to face-to-face exercise treatment for COPD may help address some health inequality for people living in deprived areas.
- There may be some reduction in the requirement for supporting standard care from respiratory services. This can be assessed locally in the template.

Reduction in standard face-to-face exercise sessions per person for technologies to be cost

neutral

For people who can and prefer to switch from standard face-to-face exercise pulmonary rehabilitation sessions to a digital option, there are potential capacity benefits where a digital technology can be used to replace some face-to-face exercise sessions. This is shown in table 1, which estimates the reduction in the number of face-to-face exercise sessions needed for myCOPD to be cost neutral. The capacity costs assume assessments and webinars are delivered by a band 6 nurse on the mid-point of the salary scale, the current hourly rate is £31.51 (Agenda for Change pay scales 2023/24). For group exercise sessions, the cost is based on the economic assessment report and reflects the full staffing cost involved in planning, delivering in- person exercise and education sessions and staff travel time.

Table 1 assumes standard face-to-face pulmonary rehabilitation programmes consist of 12 exercise sessions (table 13 of the external assessment group report) and are delivered on a group basis. The rationale for using group face-to-face sessions here is because digital technologies may help when there is no face-to-face pulmonary rehabilitation exercise programme available. For example, people living in rural areas where there may be limited ability to make up the numbers needed for group sessions, or no face-to-face exercise sessions available, or for people unable to travel because of how severe their COPD is, and for people who cannot or do not want to take time off work.

In practice, face-to-face pulmonary rehabilitation exercise sessions may be delivered as group or individual sessions; the resource impact template allows users to assess different delivery methods.

Staff time needed for each type of assessment is taken from the EAG report.

Table 1 Estimated reduction in face-to-face exercise sessions for topic to be cost neutral

Description	Sessions & staff time (minutes)	Cost per hour £	My COPD (mins)	Standard care Pulmonary rehabilitation (mins)	Cost of digital technology £	Cost of standard care per person £
Initial assessment	1 x 75	31.51	75	75	39	39
Face-to-face exercise sessions (standard care)	12 x120	31.51		1,440	-	378
Final Assessment	1 x 60	31.51	60	60	32	32

Description	Sessions & staff time (minutes)	Cost per hour £	My COPD (mins)	Standard care Pulmonary rehabilitation (mins)	Cost of digital technology £	Cost of standard care per person £
Assessment calls	6 x 15	31.51	90	-	47	-
Webinars	3 x 15	31.51	45	-	24	-
Cost per user £(estimated)	-	-	-	-	70	-
Total	-	-	**270**	**1,575**	**212**	**449**
Number of face-to-face exercise sessions for digital options to be cost neutral	3.8 x 120	31.51	450	-	237	-
Reduction in staff time / exercise sessions	(2.25) x 120	-	(270)	-	-	-
Total cost	-	-	-	-	**449**	**449**

1. A proxy price estimate per user is used based on economic assessments and company info. The cost per patient is influenced by the pricing models for the technology. Digital options could deliver similar capacity benefits to the NHS whilst also addressing some of the unmet need in pulmonary rehabilitation for people with COPD.

2. Pulmonary rehabilitation sessions are delivered alongside myCOPD. The calculation in this row (£449 standard care minus £212 cost of technologies before exercise sessions = £237 / £31.51 x2 cost per session lasting 2 hours = 3.8 sessions) is a simple assessment showing how many of the 12 face-to-face exercise sessions could be replaced with digital sessions for the technology to be cost neutral (equal the same cost of 12 sessions). There are caveats to this (please see note 1 above). The cost per hour is based on a Band 6 mid-point salary, includes on - costs and is based on 1,560 annual hours per year.

3.The cost per person of standard care = £378 is consistent with the economic assessment report for cost per person attending group pulmonary rehabilitation exercise sessions of £377.13. This cost equates to 120 hours needed to deliver 12 group sessions (10 hours per group session) for an average attendance of 10 people (120 x £31.51 / 10). Based on specialist physiotherapist opinion, a minimum of 2 hours is needed to deliver the exercise and education components of group sessions. The remaining time (8 hours) includes staff travel time, planning time, multidisciplinary team time and administrative time per group session. For simplicity, the salary bands used are a default assumption based on a weighted average whole time equivalent of staff involved. This is derived in the

economic assessment which is based on National COPD Audit data.

The price of myCOPD used above is an approximate total cost per user. Actual costs will vary depending on the level of uptake within a service and the size of the service that procured the product. The pricing per user includes licence costs, setup, training of healthcare professionals and customer support. In practice costs may apply to a whole site or trust. The local template allows users to enter values on each basis to calculate per user costs. Please contact the company for details on pricing.

Pulmonary rehabilitation services for people with COPD are commissioned by integrated care boards. Pulmonary rehabilitation providers are NHS hospital trusts.

About this resource impact summary report

This resource impact summary report accompanies the NICE health technology evaluation guidance on digital technologies to deliver pulmonary rehabilitation programmes for adults with COPD: early value assessment and should be read with it. See terms and conditions on the NICE website.

ISBN: 978-1-4731-6709-4