



## NRAP Good Practice Repository – Pulmonary Rehabilitation



Nottingham Integrated Respiratory and Home Oxygen Service  
Nottingham CityCare Partnership



**Reducing DNA rate to Nurse clinic by at least 50% per  
month:  
64% reduction in DNA in 2025**

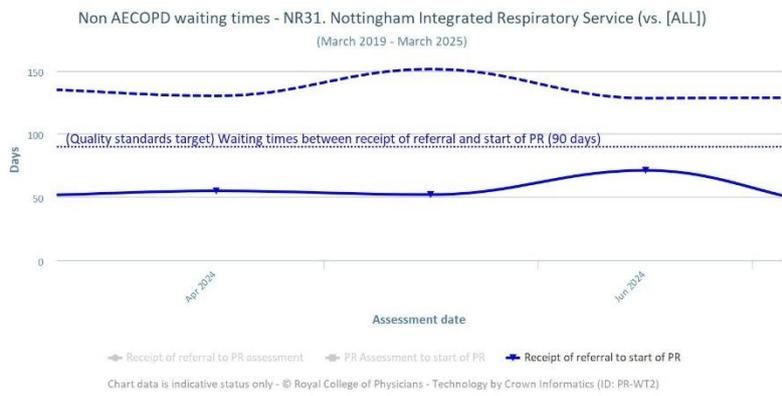


### Outline of improvement project

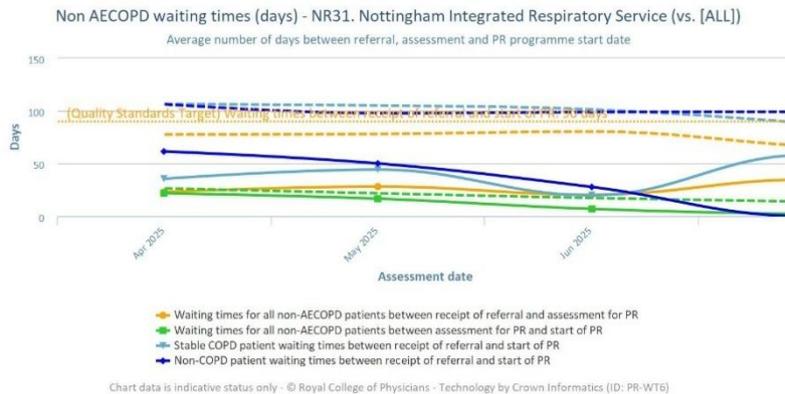
The team planned a respiratory workshop to ensure respiratory patients are offered education in line with the core initial management priorities for COPD and reduce the DNA (Did not attend) rates at nurse clinic by 50% (from the average per month April to June 2024 of n=23) We also aimed to increase the number of patients commencing Pulmonary Rehabilitation sessions through improved knowledge of PR following attendance at the workshop

### What has been achieved during this improvement project?

- The service has commenced respiratory workshop sessions at all pulmonary rehabilitation venues prior to patients commencing PR sessions.
- The service has reduced DNA rates at nurse clinic by 64%
- The service has seen similar referrals for pulmonary rehabilitation . (41 per month April to June 2024 and 37 per month April to June 2025, note PR is no longer a QOF point)
- The service has seen reduced waiting times to commence exercise classes for pulmonary rehabilitation. From NRAP run charts the waiting times for April, May and June 2024 were 54.8, 51.9 and 71 days respectively, for April, May and June 2025 they were 61.4, 50 and 21.7 days respectively. The workshops were commenced in one venue initially. Workshops have commenced at other venues since May 2025 and the team hope to see the continued reduced waiting times as the workshops become an embedded part of the service.



The fixed blue line on the diagram indicates the number of days to commence a PR class between April and June in 2024. (The run charts have recently been amended hence the difference in appearance)



The fixed blue line on the diagram indicates the number of days to commence a PR class between April and June in 2025. (The run charts have recently been amended hence the difference in appearance)

## How did you achieve this improvement?

- Respiratory workshop commenced.
  - This involved a change in service delivery, working out when the sessions would run (we opted to run at a rehab venue in time slots usually allocated for assessments)
  - Which staff would be required (Physiotherapist, Nurse and Community Support worker)
  - Resources required (information boards, inhaler technique equipment and nutrition resources)
  - IT systems required
  - Team engagement via email, staff information board and team meeting so all team members could be involved in the process.
- Driver diagram commenced.
- PDSA cycle completed to monitor progress of starting the sessions.
- Engagement with thriving Nottingham for support with smoking cessation services
- Meetings with the business unit to enable the service to collect data from the Respiratory workshops using templates on system one.
- See driver document on the final page.

## How are you going to ensure your intervention is going to lead to sustainable improvement in future?

- The respiratory workshops including access to self-management plans has been promoted across the organisation and has been well received. There seems to be an appetite for brief intervention education sessions as delivered within the Respiratory Workshop.
- The team have run the sessions without additional resources, by using venues and staff already allocated to PR.
- The team will monitor waiting times for patients referred to PR to ensure that use of the venues for workshops is not impacting on waiting times to start the sessions (as we are currently using assessment times to deliver the workshops).

### Good Practice Repository – case study

National Respiratory Audit Programme

[NRAPinbox@rcp.ac.uk](mailto:NRAPinbox@rcp.ac.uk) | 020 3075 1526 [www.rcp.ac.uk/nrap](http://www.rcp.ac.uk/nrap)



- The team have started to collect patient feedback on the sessions. We will review the feedback and make relevant amendments to the Respiratory Workshops.
- Now the sessions are established we will start to promote more widely with referrers, we will be looking to monitor uptake of places on the workshop, number of patients engaging with PR (if they are appropriate for the sessions) and the support offered to patients not engaging with PR (these patients would previously not have received the interventions provided during the workshop)
- PDSA cycles will be used to monitor suggestions for improvement and changes made to this aspect of our service.

### **Did you face any challenges or difficulties when implementing your project? If so, how did you overcome them?**

- We had to ensure staff engagement and training as new referral process involved with the respiratory workshop. We needed to ensure staff had time allocated to read emails and attend team meetings to understand the process.
- The new process commenced for an already busy service and during winter pressures where time and resources are under pressure.
- Reduced organisational data support due to reshuffling within the organisation lead to the new templates to collect data taking longer to be available.
- The service has not been promoted to referrers as yet as we needed to establish the format of the sessions and their feasibility. The service therefore needs to give more details to patients about the workshop when referred.

### **What advice would you give to other respiratory services hoping to replicate your service improvement idea?**

Our services would suggest looking at how they can commence similar patient engagement session with current resources. We looked at reducing rehab PR assessments slightly to accommodate the sessions. We felt that the reduction in DNA's to nurse clinic and the likelihood of reduced DNA to Physiotherapy assessments due to greater understanding of the benefits of attending would mean that we could manage without these assessment slots. We felt the benefit gained from improved access what are considered "initial management priorities for COPD" to all new patients referred including those unsuitable or unable to attend PR sessions was worth trialling this new way of working.

### **Have you generated any supporting resources you would like to share with others?**

We have developed a SystmOne template for the sessions which also helped as a guide for staff on which aspects of the workshop patients have accessed.

#### **Good Practice Repository – case study**

National Respiratory Audit Programme

[NRAPinbox@rcp.ac.uk](mailto:NRAPinbox@rcp.ac.uk) | 020 3075 1526 [www.rcp.ac.uk/nrap](http://www.rcp.ac.uk/nrap)



**It is important that services NRAP promotes within the good practice repository are aware of quality standards in their area of practice. Which quality standards are relevant to your QIP, and how did your project fit within the quality standards in general?**

(for example, British Thoracic Society and NICE guidance)

NICE guidelines for 'initial management' priorities as per NICE guidelines (2019) which are;

- Smoking cessation. Brief intervention advice will be given, referrals to stop smoking services made if appropriate and literature given on how to self refer.
- Vaccination. The importance of up to date vaccinations in protecting health will be communicated to the patient, what vaccines they are eligible for and information on how to book in for their vaccinations
- Active lifestyle. Pulmonary rehab (PR) will be promoted, the PR Video will be played to show patients what is involved in PR and we will advertise local voluntary/charity groups such as Breath Easy.
- Self management education. Inhaler technique will be demonstrated and assessed, written self management plan discussed and given to patient, practical advice on breathlessness management (physio led) and risk factor management.
- Management of co-morbidities. Leaflets on DESMOND, Other disease services etc.
- Social prescribing present to give advice and support?
- Promotion of other CityCare services

PR Quality Standards state patients should be seen in an exercise class within 90 days of referral. Our service has seen patients in under 62 days in the last year, with most months less than 50 days.

**Healthcare Improvement driver diagram:**

Please see next page.

# Driver Diagram



Programme (NRAP)

Aim	Primary Drivers	Secondary Drivers	Change Ideas	
<p>To reduce the DNA rated at nurse clinic by 50% from average per month April to June 2024 (=23) and increase the number of patients commencing Pulmonary Rehabilitation classes.</p>	<p>Promotion of PR workshop</p>	<p>Increase staff awareness (within the service and to referrers) of the benefits of PR both within and external to the team.</p>	<p>Promote use of patient video and leaflet to team and referrers. Continue to seek opportunities for promoting the service (GP conferences/ GP PLT events/ Practice nurse events/ opportunities from Communications team) Share details on performance (uptake/completion/ achieving clinical changes) of workshop/ PR within team meetings (regular agenda item)</p>	
		<p>PR considered a priority within NCCP</p>	<p>Launch at team meeting/ staff education by end of 2024 Update Senior managers on progress of QI project ? attend board Develop patient stories on benefits of introducing workshop</p>	
		<p>Understanding of reasons for poor uptake of PR amongst the team.</p>	<p>Patient survey (DNA survey QI project and patient feedback from workshops, needs excel spreadsheet to collect data) Staff survey (to continue annually and to include workshop changes)</p>	
		<p>Intervention with 5 “Initial management Priorities” as per NICE guidance.</p>	<p>Staff training re 5 “Initial management Priorities” as per NICE guidance.</p>	<p>Resources (for education stands boards for nutrition/ vaccination/ inhaler technique, needs presentation for start of session) System one changes (ledgers for workshop, for recording patient interactions, caseloads) Capturing data (ensure system one updated with relevant information)</p>
			<p>Update SOP</p>	<p>Develop process/ flow chart to visualise patient journey Once embedded in practice amend clinic and triage SOP</p>
			<p>Prevention of admissions for respiratory patients.</p>	<p>Update PR education session on self-management Introduce SMP in workshop</p>
	<p>Consistently offering the workshop to respiratory patients who are new to the service including those who may be unsuitable for PR (including motivation to attend, medical conditions that would exclude PR)</p>		<p>Staff training</p>	<p>Communication including via email/ laminate flow charts Presentation to team at team meeting Data capture to feedback to staff</p>
		<p>Volunteer support within the service</p>	<p>Liaise with volunteer team re job description Create advert and advertise role in PR reassessment Obtain feedback on the role</p>	
		<p>Logistical processes involved in the patient journey</p>	<p>Develop crib sheet and flow chart (add to SOP when embedded) Email flow charts/ crib sheets and laminate Education for GP practices when workshops up and running</p>	



**Royal College  
of Physicians**

National Respiratory Audit  
Programme (NRAP)

**Good Practice Repository – case study**

National Respiratory Audit Programme

[NRAPinbox@rcp.ac.uk](mailto:NRAPinbox@rcp.ac.uk) | 020 3075 1526 [www.rcp.ac.uk/nrap](http://www.rcp.ac.uk/nrap)