

NRAP Good Practice Repository – Pulmonary Rehabilitation

North Bristol Lung Exercise and Education Programme (LEEP)

Cossham Hospital

North Bristol NHS Trust



AECOPD Waiting Time

North Bristol Lung Exercise and Education Programme achieved:

**35% of patients started within 30 days post
project versus 25% of patients pre project ***

**of patients submitted to the audit.*

Outline of your improvement project

The project aimed to increase the number of patients starting post exacerbation Pulmonary Rehabilitation (PR) within the 30-day quality standard. It also aimed to increase the number of patients referred to PR post exacerbation that start a PR programme at any point.

Good Practice Repository – case study

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Converting referrals to starting PR Aim 40%	Pre project	Since project
% of referrals that get to the point of starting Early post exacerbation PR	32%	31%
Disappointingly the project did not show an increase in the proportion of referred patients getting to start PR		

How did you achieve this improvement?

- We decided to re-brand the ‘early pulmonary rehabilitation’ service to ‘post exacerbation PR’ as we felt the terminology made the service’s aims clearer.
- We started to ring-fence QI time monthly for the service with meetings to review data and plan interventions.
- We surveyed referrers regarding knowledge and confidence about the post exacerbation PR pathway and referring into it to guide educational provision required.
- The service pathway was mapped out with identification of the bottlenecks to rapid PR start in order to address these.
- The team created a new database to focus on patients referred for post exacerbation PR and to enable analysis of the patients on that pathway.
- We reviewed patient medical records to understand why patients weren’t being referred to post exacerbation PR and why patients were declining assessment for PR.
- We engaged management to agree to a new post exacerbation PR pathway co-ordinator using NHSE PR funding which has helped in the rapid identification, triage and engagement of patients for rapid assessment and start.
- All of the interventions done were mapped out in a project timeline.

PDSA Cycles

We did several PDSA cycles for different interventions done. One was to evaluate a new post exacerbation leaflet; another evaluated the training interventions delivered to different parts of the MDT and another evaluated the changes made to the referral route for post exacerbation PR.

Stakeholder Engagement

- We engaged with the Respiratory Specialist Team working on the acute hospital wards reviewing inpatients as part of the COPD discharge bundles who refer the majority of patients for post exacerbation PR – with surveys and training.

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- We engaged with the wider respiratory MDT with communications and training in the post exacerbation PR pathway and benefits.
- We also involved pulmonary rehabilitation patients in the creation of a new post exacerbation PR leaflet for the service.

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

- Continue to use NHSE Transformation PR funding to fund post exacerbation PR pathway co-ordinator
- Continue to ring-fence monthly QI time in service diary
- Ongoing regular wider respiratory team teaching about PR benefits and pathway
- Monthly reviews of post exacerbation PR data to identify further improvements required – discussion at team meetings
- Further interventions based on data from our data collection tools

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

- 1) Time - we found it was very important to ring-fence service time to carry out quality improvement as other duties would often encroach on planned QI time. We quickly saw that ad hoc QI time doesn't work.
- 2) Whole team involvement was very challenging as we could rarely all be present at regular QI meetings. This led to imbalance in task assignment and involvement in the project.
- 3) We were keen to adopt a shared leadership approach but it quickly became evident that a leader was required to drive the project forwards. The service lead naturally took this role on and guided the team.

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

- Ring-fencing of time for the QI work
- Assign a project lead to drive the project forwards
- Creation of data collection tools to enable easy monitoring and review. Isolate the data you are working with to ensure team focus.
- Use of a timeline to map the QI journey including key dates of project, implementation of changes and reviews of data done



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

It was useful to network with other PR services doing similar projects for sharing of ideas to trial when implementing.

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)

BTS Guidelines for PR (2013) recommend that individuals hospitalised for AECOPD should be offered PR at hospital discharge to commence within 30 days of discharge.

BTS Quality standard 3 – “people admitted to hospital with an AECOPD are referred for PR at discharge.....people who are referred are enrolled within 1 month of leaving hospital”

NICE COPD Guidelines 2019 recommend PR for people who have had an admission with an acute exacerbation.

BTS Clinical Statement (2023) the scope for PR includes peri-hospitalised exacerbation of COPD, PR should be outpatient, started after hospital admission and that PR should be reoffered to people who initially decline in the immediate post-hospitalisation period. Implementation of PR following an exacerbation remains a challenge. Real-world data suggest that uptake is between 1.5% and 9%, strategies to improve referral, uptake and completion have been limited.

Healthcare improvement driver diagram:

- 1. Outcome measure
- 2. Process measure
- 3. Process measure

