NRAP Good Practice Repository – Pulmonary Rehabilitation

George Eliot Pulmonary Rehabilitation Team
George Eliot Hospital NHS Trust

KPI 3
Patients enrolled on a PR programme who go on to complete a discharge assessment
George Eliot Hospital NHS Trust achieved:
June 2024: 43% - June 2025: 56%*
***% of patients submitted to the audit.**

Outline of improvement project

Prior to June 2024, the service practice was that patients were referred into pulmonary rehabilitation (PR) and booked into an assessment appointment for 45 minutes. During these 45 minutes, we took a subjective history and completed an incremental shuttle walk test.

At this point we realised we had a lot of waisted appointments due to DNA rates being so high. Prior to this, once we had a referral, we sent letters to patients who then needed to ring the department to opt in to the service. This was a way to avoid the high DNA rates and assess patients who wanted to come to the classes.

Due to the importance of completing a practice walk test, we had to move the subjective assessment to a telephone consultation in a separate clinic slot, giving the team enough time to complete the 2 shuttle walk tests within the 45 minute assessment. This made our service achieve KPI 2 from the NRAP report, patients completing a practice walk test.

During this time we went out to GP surgeries and spoke with secondary care colleagues about our service. We have provided education to primary care within their Protected Learning time to make them aware of all the inclusion and exclusion criteria for PR but also what skills and knowledge our respiratory outpatient physios can provide for patients.

From December 2024, the new project was set for patients to attend a 1-to-1 Respiratory outpatient assessment to review medications, check inhaler technique, teach airway clearance and breathlessness management strategies and optimise the patient's condition to then refer them into an assessment appointment. During the respiratory outpatient appointment there was time to discuss in more detail what pulmonary rehabilitation is and the benefits of PR. This was so important to patients who were previously not attending a pulmonary rehabilitation assessment as there was time to relate the benefits of the classes in a more patient centred way. If patients were unsuitable for the class or really didn't want to attend, then they were not referred forward to the pulmonary rehabilitation classes. They still benefitted from management techniques taught in a 1 to 1 assessment but not the benefit of the PR classes.

When it came to the patients' first pulmonary rehabilitation assessment, we had more time to complete the 2 ISWT's, set goals and give outcome measures to patients such as CRQ, EQ5D5L and other disease specific questionnaires. As per the changes in national guidance and quality standards, we needed to be able to perform a lower limb strength assessment. This then gave us more time before the patients' first class to complete a strength assessment that we previously didn't have time or equipment to complete.

What has been achieved during this improvement project?

- A reduction in DNA rates within the class. Attendance numbers for the class have been higher due to patient being more medically stable and have the correct attitude to attend the class and therefore completion. In the period of April to June 2024 we had 105 DNA in the class. In the same months for 2025 we had 67.
- The improvement through this project has increased the completion of pulmonary rehabilitation classes, from starting the classes to discharge from June 2024 - 43% to June 2025 – 56%. Although we didn't achieve our aim of getting 60% completion we have made a 13% improvement.
- It has created more time in pulmonary rehabilitation to complete a 2nd walk test and complete a lower limb strength assessment and given us an opportunity where we are able to submit for accreditation. This has helped with KPI 2, making sure we have 100% in 2 walk tests prior to the classes and also help us achieve the quality standards for lower limb strength assessment which is the topic of interest within pulmonary rehabilitation and accreditation.
- We have had a very positive effect on KPI 1 seen in the table below with average wait from referral to assessment greatly improving from an average of 161 days to 64 days meeting the 90 day target.

- The changes we have made, have been alongside applying for accreditation. We have been focused on structuring not just the classes but also the induction, training and meetings within the service.
- Initially we collected data on each person referred through the new pathway to see if it was beneficial and the results are seen in the table below.

	Completion Rate	Drop Out Rate	Days to Class	90 day KPI
January to March 2024	41%	62%	111	54%
January to March 2025	61.76%	29.4%	110	87%

- Due to the time it took to follow each patient from referral to discharge and the high caseload that the team had, it was very difficult to keep up with this level of data collection. From the data that we did collect in the table above, the new service had a very positive effect on drop out rate, completion rate and especially our 90 day KPI.
- One of our aims was to review the completion rate of patients from referral into the class. We were under resourced to continue this but we were able to keep our collection of data for patients referred into Respiratory outpatient service. We have a number of breathing pattern disorder patients included in the numbers who aren't eligible for pulmonary rehabilitation. Although most patients referred into respiratory outpatients have a respiratory condition and therefore eligible for PR, we couldn't include those numbers for this project. This is something we have noted and will narrow down with data collection in the future.

How did you achieve this improvement?

Patients who were referred seemed more willing to attend a 1 to 1 assessment rather than previously going straight into a PR assessment, so attendances were high. With a more thorough initial assessment in respiratory outpatients, patients have a better self-management programme and pulmonary rehabilitation has been discussed prior to attending a walk test assessment. This has helped with uptake into the class but also retention of patients. They are more medically stable to complete and those who do not wish to attend are either not referred or encouraged of its benefits.

	April to June 2024	April to June 2025
Total patients assessed	58	61
Completers	25	34
Percentage	43%	56%

Non completers	33	27
Average Wait for PR Ax.	161	64
Longest Wait	300	159
Quickest Wait	23	21

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

Numbers for pulmonary rehabilitation have increased from 48 in June 2024 to 111 in June 2025. The referrals since we have made the change are for both Resp OP and pulmonary rehabilitation but the majority of patients seen in Resp OP would be suitable for PR.

We have managed to change this service due to a seconded band 7 physiotherapist post, covering both Resp OP and PR. We have used the funding through the NHSE 10 year plan for PR to extend this role so we can continue to provide this service. A business case has also been submitted within the department which covers this role, to extend this into a substantive post. If this post is not funded through the hospital then other KPIs will be hugely impacted such as waiting times and could lead to further GP appointments and hospital admissions from patients not receiving timely PR. The project has had a very positive effect on the waiting times for patients. KPI 1 is now at 82.1% of patients reaching the 90 day target. If we don't have this staff member in post then there are less appointments for patients to attend prior to PR, which will increase the waiting time prior to class.

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

Due to the increase in the number of referrals through the service we saw that KPI 1:patients start within 90 days was affected, as we had completed advertising of the service to primary and secondary care and we had more referrals than we had assessment slots. This backlog has initiated another review of the service on how we can allocate the staff to open another class to try and reduce the waiting list.

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

The change to the service is very worthwhile as the quality of care we provide has improved by encouraging self-management and education prior to the class and in turn improving completion rates. The service for the patients is extremely thorough as their airway clearance, inhaler compliance, medication review is all completed prior to attending the classes so they are as optimised as can be before starting the classes.

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

Not during this project.

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?

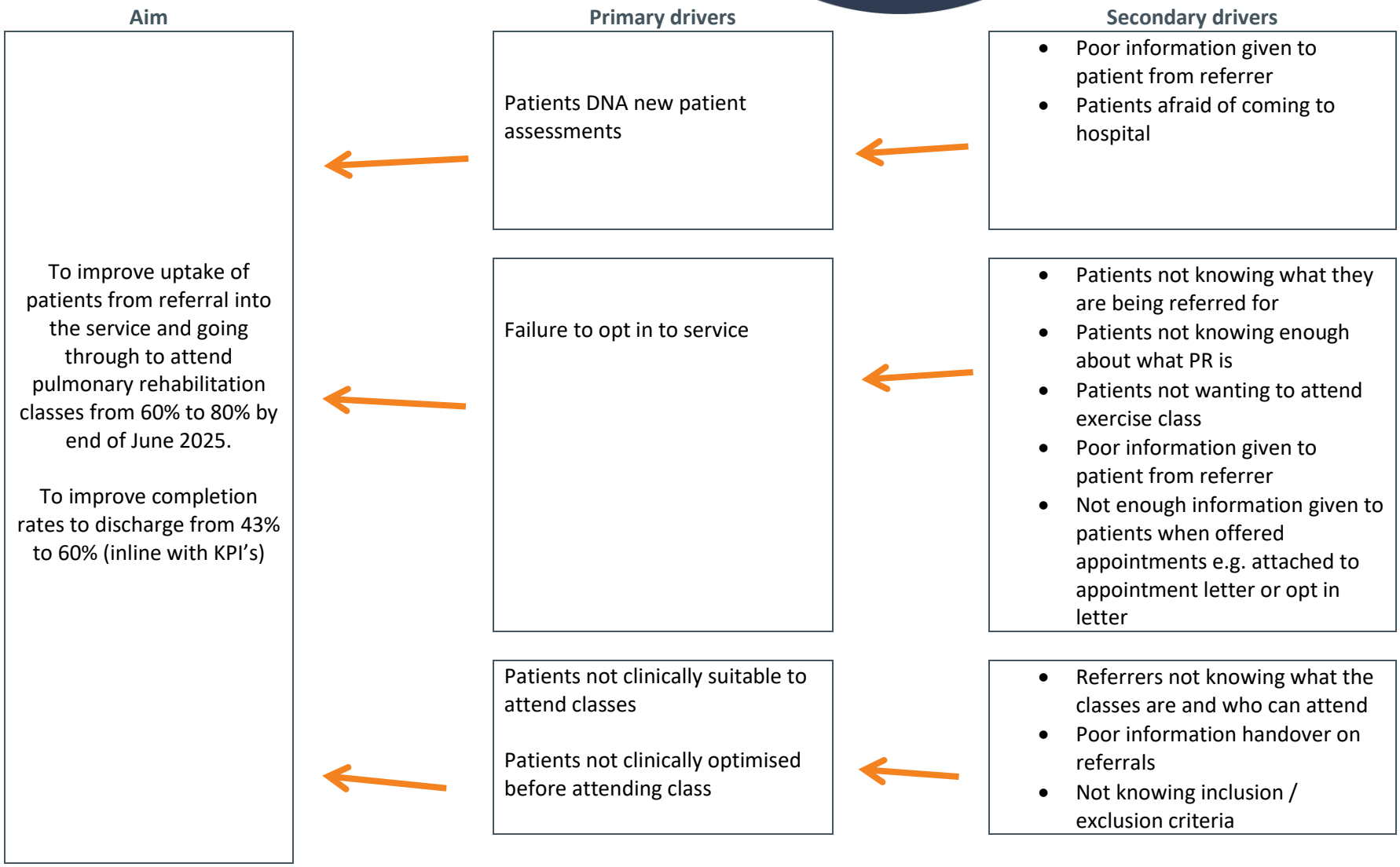
We always relate to the BTS Pulmonary Rehabilitation Quality Standards for Pulmonary Rehabilitation in Adults 2014. We are aware that the new quality standards are up for consultation currently.

The project has been focused on the access into pulmonary rehabilitation. We have advertised pulmonary rehabilitation to primary and secondary care providers and this has increased the amount of referrals into the service, therefore offering more patients the opportunity to attend PR. We offer PR to any patient with a respiratory diagnosis who has a MRC score of 3-5.

With this project we have identified that our 90-day target for stable COPD patients has improved as per the tables in this report.

We feel that the other quality statements in the quality standards are adhered to already as part of our service.

Healthcare improvement driver diagram:



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