



Royal College
of Physicians

National Respiratory Audit
Programme (NRAP)

A photograph of two men on a treadmill in a gym. The man in the foreground is wearing a white shirt and a grey vest, and is looking down. The man in the background is wearing a striped shirt and is also looking down. A large teal diagonal graphic is overlaid on the right side of the image.

Organisational audit 2024: pulmonary rehabilitation (PR) data deep dive

Resourcing and organisation
of asthma and COPD care in
hospitals, and PR services in
England and Wales

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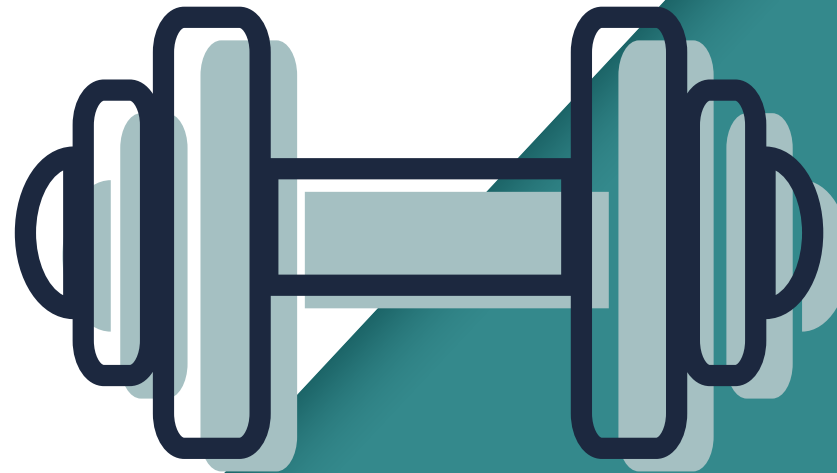
Summary of pulmonary rehabilitation data deep dive

Deep dive 1: alternative models of pulmonary rehabilitation

Deep dive 2: transport provision

Deep dive 3: measure of exercise capacity

Deep dive 4: staffing levels



Alternative models of pulmonary rehabilitation

The delivery of alternative models of rehabilitation.

What the data show

The audit reports that 100% of services (160/160) offer individuals who are referred the opportunity to access a supervised centre-based pulmonary rehabilitation (PR) programme.

Currently, only 58.1% of services (93/160) offer their PR via a home-based programme. 80.6% of these services (75/93) are able to offer supervised sessions in the home, all of which run for 5 weeks or longer. The majority of home-based programmes offer at least one supervised session per week, compared with the majority of centre-based programmes, offering at least two supervised sessions per week in a group setting.

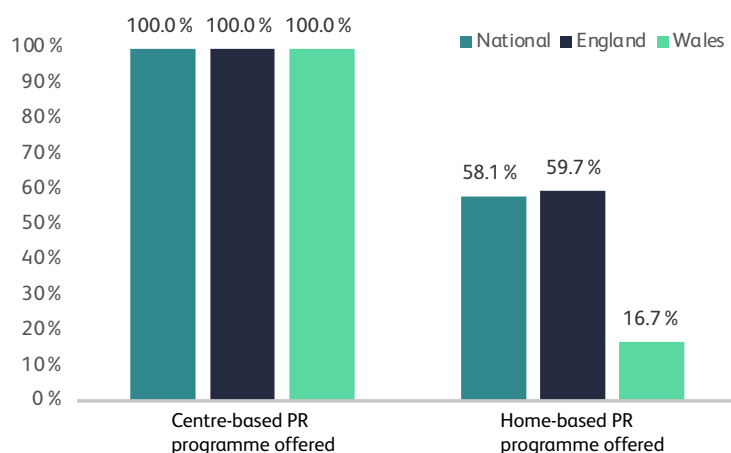


Fig 1. Comparison of centre-based with home-based PR programme offer

Why is this important?

The [BTS Clinical Statement](#) recommends that supervised centre-based PR should be offered to all service users. For service users who decline or drop out from supervised centre-based PR, an alternative model of PR may be offered (eg home based). Any alternative model should have a supporting evidence base (ideally within the NHS setting), and incorporate a directly supervised, validated exercise test from which individualised exercise can be prescribed, and validated outcome measures to evaluate efficacy.¹

Practical steps to healthcare improvement

NRAP would encourage pulmonary rehabilitation services, trusts and ICSs to:

- > offer alternatives to centre-based PR for participants who are unable to attend centre-based programmes. These should be evidence based as described in the [BTS Clinical Statement](#)¹
- > complete a holistic assessment (pre- and post-rehabilitation *irrespective of the mode of delivery*) for all participants
- > offer staff training to enable staff to deliver alternative forms of rehabilitation
- > access and read the [NICE Early Value Assessment](#) for digital PR to potentially use identified digital platforms of interest.²



Transport provision

There is variation across regions and integrated care systems in transport provision for PR service users.

What the data show

The audit reports that only 33.1 % of PR services (53/160) provide any funded transport to service users.

This is not consistent across regions or ICSs, with some trusts in the same ICS providing funding for transport and others not. This variation in provision results in differences in access to care for service users depending on their geographical location and may be contributing to health inequalities.

Why is this important?

The PR Commissioning Standards state that good PR services should aim to improve equity of access for service users. This includes the equity of being able to access centre-based rehabilitation and transport provision.³

Practical steps to healthcare improvement

NRAP would encourage pulmonary rehabilitation services, trusts and ICS's to:

- > work with commissioners to identify a need and provide funded transport for PR service users consistently

- > where possible, provide supervised centre-based PR in different locations to reduce the distance that service users need to travel, which may reduce the need for funded transport
- > ensure that home-based programmes are available for service users who are unable to access supervised centre-based PR due to the lack of funded transportation.

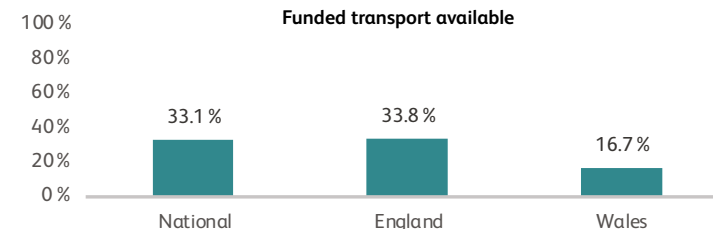


Fig 2. PR services offering funded transport for PR participants

Region / nation	n (services offer funded transport)	d (total no. of services)	% of services
1 England	52	154	33.8%
2 National (England and Wales)	53	160	33.1%
3 East of England	7	17	41.2%
4 London	13	26	50.0%
5 Midlands	7	21	33.3%
6 North East and Yorkshire	14	28	50.0%
7 North West	6	27	22.2%
8 South East	5	24	20.8%
9 South West	0	11	0.0%
10 Wales	1	6	16.7%

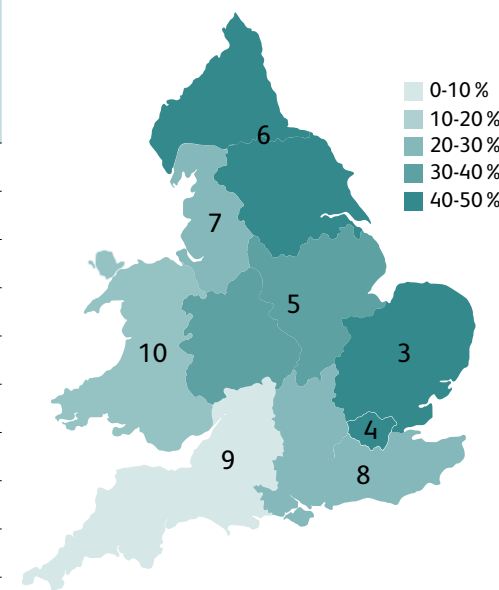


Fig 3. Table highlighting regional variation in services offering funded transport for PR participants

Measure of exercise capacity

A 30 m course is not consistently used when conducting the 6-minute walk test (6MWT) in initial and discharge assessments.

What the data show

The most recent audit reports that 48.8% of services (78/160) use the 6MWT. Of these, 85.9% of services (67/78) do not have any sites that use a 30 m course when conducting the 6MWT.

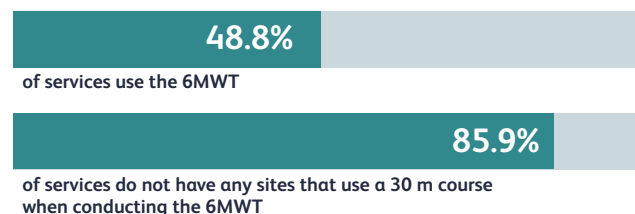


Fig 4. 6MWT infographics

Why is this important?

BTS guidance recommends using the 6MWT or incremental shuttle walk test (ISWT) as a measure of exercise capacity.⁴ The 6MWT should be conducted over a 30 m course and the ISWT requires a 10 m course. These exercise tests should be conducted at initial and discharge assessment.

Conducting the 6MWT using the recommended standards (including using a 30 m track) ensures that:

- > assessments are reliable
- > exercise can be prescribed accurately to service users
- > discharge assessments are unbiased.

Conducting the 6MWT following the recommended standards is a quality improvement priority for NRAP.⁵

Practical steps to healthcare improvement

NRAP would encourage PR services, trusts and ICSs to:

- > in the eventuality that space is limited to be able to conduct the 6MWT correctly, consider using the ISWT instead
- > join the Pulmonary Rehabilitation Services Accreditation Scheme (PRSAS) (www.prsas.org/), which supports clinical services to ensure that walking tests are conducted correctly, highlighting good practice
- > ensure that there is adequate assessment time for patients to complete an exercise test in line with ERS recommendations.⁶



Staffing levels

Occurrence of appropriate staffing levels within the PR programme.

What the data show

With respect to staffing, there are two data points of interest. The data show that:

- > 96.2% of services (154/160) have a clinical lead in post. However, only 77.9% of the clinical leads (120/154) have designated time to develop the service. The majority of clinical leads are physiotherapists working at an agenda for change grade 7 (66.1%).
- > The proportion of services that have administrative and/or clerical support is 55.6% (89/160), slightly over one in two services.

Why is this important?

BTS guidance identifies that PR provider leads should have designated sessional time to coordinate management and delivery of the service.⁴ This should include regular education of potential referrers about PR and referral pathways; working closely with commissioners to understand the demographics of the local population; the expansion, training and skills maintenance of a specialist workforce to deliver PR; and the collation of key organisational metrics. In addition, this designated time is a KPI for the national audit.⁵ Participation in the audit is identified in the BTS Quality Standards⁷ and the PRSAS programme.

Practical steps to healthcare improvement

NRAP would encourage PR services, trusts and ICSs to:

- > enable service leads to work with trusts and ICSs to facilitate leadership time to deliver a timely, safe and effective programme that is sensitive to the needs of the local community
- > continue their regular participation in the national audit as required by NHS England (NHS England » Pulmonary rehabilitation commissioning standards), as this is the foundation of quality improvements in the service.³

Audit support should be an integral part of any service, and services should work with commissioners to ensure the appropriate staffing levels to upload data rather than relying on the clinical team.

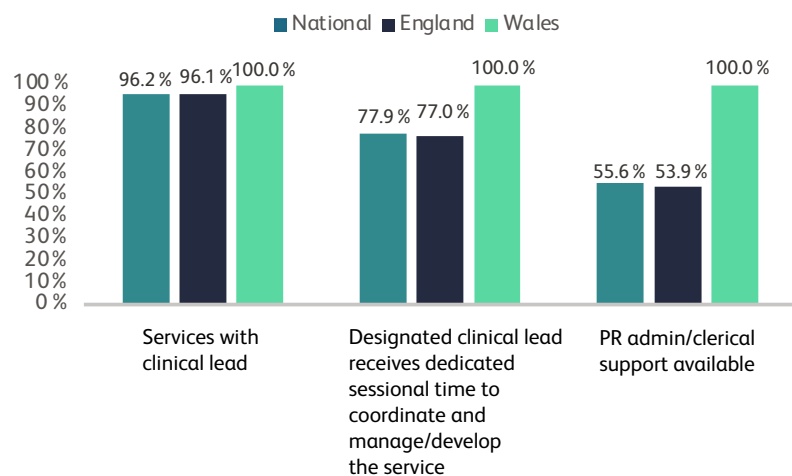
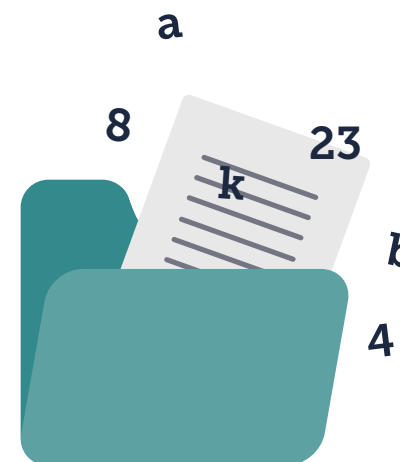


Fig 5. Staffing within PR services



The Royal College of Physicians (RCP)

The RCP plays a leading role in the delivery of high-quality patient care by setting standards of medical practice and promoting clinical excellence. The RCP provides physicians in over 30 medical specialties with education, training and support throughout their careers. As an independent charity representing 40,000 fellows and members worldwide, the RCP advises and works with the government, patients, allied healthcare professionals and the public to improve health and healthcare.

Healthcare Quality Improvement Partnership (HQIP)

The National Respiratory Audit Programme (NRAP) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP). HQIP is led by a consortium of the Academy of Medical Royal Colleges and the Royal College of Nursing. Its aim is to promote quality improvement in patient outcomes, and in particular, to increase the impact that clinical audit, outcome review programmes and registries have on healthcare quality in England and Wales.

HQIP holds the contract to commission, manage and develop NCAPOP, comprising around 40 projects covering care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh Government and, with some individual projects, other devolved administrations and crown dependencies. www.hqip.org.uk/national-programmes.

National Respiratory Audit Programme (NRAP)

The National Respiratory Audit Programme (NRAP) aims to improve the quality of care, services and clinical outcomes for patients with respiratory disease across England and Wales. It does this by using data to support and train clinicians, empowering people living with respiratory disease and their carers, and informing national and local policy. NRAP has a track record of delivery and is critical in assessing progress against the NHS Long Term Plan. To find out more about NRAP, visit our [website](#).

Acknowledgements

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