

# National Early Inflammatory Arthritis Audit (NEIAA) State of the Nation Report 2023

Summary report

Data collection period: 1 April 2022 – 31 March 2023



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**The National Early Inflammatory Arthritis Audit (NEIAA)** is commissioned by the **Healthcare Quality Improvement Partnership (HQIP)** as part of the **National Clinical Audit and Patient Outcomes Programme (NCAPOP)** and run by the **British Society for Rheumatology (BSR)**. HQIP is led by a consortium of the **Academy of Medical Royal Colleges (AoMRC)**, the **Royal College of Nursing (RCN)**, and **National Voices**. Its aim is to promote quality improvement (QI) 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.

This NEIAA year 5 State of the Nation report was prepared by the following people, on behalf of the NEIAA patient panel, senior governance and project working groups.

Prof. James Galloway, Lead Methodologist, NEIAA; Senior Clinical Lecturer, Kings College London

Dr Jo Ledingham, Clinical Lead, NEIAA; Consultant Rheumatologist, Portsmouth Hospitals NHS Trust

Dr Liz Price, Clinical Lead, NEIAA; Consultant Rheumatologist, Great Western Hospital

**Sarah Gallagher**, Project Manager, BSR

**Neena Garnavos**, Head of Quality Improvement, BSR

**Callum Coalwood**, Administrator, BSR

Dr Ed Alveyn, Doctoral Research Fellow, Kings College London

Dr Maryam Adas, Doctoral Research Fellow, Kings College London

Dr Sam Norton, Reader in Research Methods and Statistics, Kings College London

Further information about the production of this report and acknowledgements, background, aims and scope of the work can be found in the online **appendices**.

# Introduction

Inflammatory arthritis encompasses a group of conditions that includes rheumatoid arthritis, psoriatic arthritis, axial spondyloarthritis, and undifferentiated inflammatory arthritis **(1)**. These often painful conditions affect over 700,000 people in the UK and can lead to disability, work loss, and reduced quality of life. A large body of research has demonstrated that effective treatment, if initiated early, can prevent major disability **(2,3,4)**.

NEIAA measures the quality of care delivered to patients in England and Wales with suspected and newly diagnosed early inflammatory arthritis (EIA). Quality of care is measured against the best practice guidelines set out by **NICE quality standard 33 (QS33)**. This is the fifth NEIAA annual report and the first State of the Nation report for the programme, presenting data on five key metrics of care: time to referral, time to assessment, time to treatment, response to treatment and patient-reported outcome measures (PROMs).

This report focuses on the **2013 version of the QS33** to allow for comparison to other audit years within this audit cycle. Comparative data describes historical data as it was at the time of data extraction for the year 5 report. This may vary from what has been reported in previous years as the audit is a continuous audit, meaning that rheumatology teams will continue to input data for patients past annual report data extraction deadlines. This may change national, country-level and regional-level averages, however will have no significance on the outcomes of this report.

We provide information to improve service delivery and outcomes. We also present near real-time data on NEIAA key metrics **here**.

NB. at time of publication, NEIAA is now operating under a new extended scope. Current eligibility for entry into NEIAA is for patients with a confirmed diagnosis of EIA and some rare immune mediated inflammatory diseases (IMIDs). For full details, please visit the **audit website**.

## Improvement resources

Our dedicated **QI resources** web page teaches and empowers rheumatology providers to use NEIAA data for local QI. Resources are regularly updated and

include case studies, driver diagrams, data analysis tools, clinic prompts, PROM data tools and clinical video guides.

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<sup>1</sup> As reported in the **Versus Arthritis State of Musculoskeletal Health Report**.

# National Early Inflammatory Arthritis Audit (NEIAA) State of the Nation Report 2023

## Key findings



## Patients enrolled per year

Audit participation has improved, however participation is still not at pre COVID-19 levels.



## Quality metrics



Referral to specialist rheumatology services has improved with 56% of patients (vs 54% in year 4) being referred within three working days.  
**(QS33 2013: QS 1)**



Assessment delay has increased with only 39% of patients (vs 41% in year 4) being seen for their first appointment within three weeks of receipt of referral.  
**(QS33 2013: QS 2)**



Treatment delay has decreased with 56% of patients (vs 52% in year 4) receiving treatment within six weeks of receipt of referral.  
**(QS33 2013: QS 3)**



Response to treatment has not changed with 36% of patients reporting a good response to treatment within three months of diagnosis.



Patient Reported Outcome Measures (PROMs)  
Clinically meaningful improvements were recorded for all PROMs between baseline and 3-month follow-up:

- Quality of Life
- Functional and work impairment
- Anxiety and depression

## Organisational metrics

Data over the five years of NEIAA have shown the presence of a dedicated EIA clinic and higher levels of staffing are associated with an increase chance of meeting quality statements 2 (assessment within three weeks) and 3 (treatment within six weeks).



# National recommendations

**1** Ensure that public awareness is raised to encourage early presentation in primary care of people with suspected EIA and early referral into specialised rheumatology services. **(QS33 2013: QS 1)**



Action by: National Patient Charities

**2** EIA pathways should be mandated in secondary care to provide timely assessment, diagnosis and access to treatment for patients with EIA. **(QS33 2013: QS 2 & 3)**



Action by: Integrated Care Boards (ICBs, England) and NHS Health Boards (Wales)

**3** NEIAA data alongside the strategies described in the elective recovery programme, GIRFT and the outpatient recovery and transformation programme must be used to inform and expediate post COVID-19 pandemic recovery strategies for secondary care rheumatology services.



Action by: Care Quality Commission (CQC, England) and Healthcare Inspectorate Wales (HIW)

**4** Collection of outpatient secondary care diagnostic information should be mandated as a priority to inform service design and delivery. **(GIRFT recommendations 7 and 8)**



Action by: NHS England and NHS Wales

**5** The rheumatology Multi-Disciplinary Team (MDT) provision should be expanded to meet the rising demand and expectations in line with recommendations in the **BSR rheumatology workforce report**. **(QS33 2013: QS 2 and 3)**



Action by: Secretary of State for Health and Social Care

# Key messages

Full data tables and clinical interpretation can be found in the **appendices**.

## 1. Audit participation

Audit participation is starting to recover following the COVID-19 pandemic, however, case ascertainment (the proportion of patients entered into the audit against the total number of eligible patients) is still lower than expected based on the estimated number of EIA cases from primary care sources **(1)**.

One of the challenges faced as a speciality and as a secondary care audit is the lack of consistently used diagnostic coding (codes entered into patient records that allow for identification and data extraction of specific diseases within rheumatology). Consistent diagnostic information in rheumatology would allow services to identify patients eligible for the audit more easily, and would enable us to better utilise routinely collected data for audit analyses and recommendations.

### (Recommendation 4)

## 2. Demography

Generally, key patient characteristics remained stable over the 5 years of the audit:

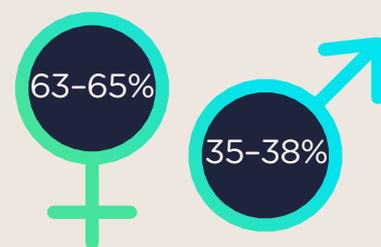
- more female patients are enrolled than males (65–66% female vs 34–35% male)
- approximately 50% of patients are in the 40–64 age category
- approximately half of enrolled patients work <20 hours per week, and half >20 hours.
- measures of deprivation reflect those of the general population of England and Wales.

## 3. Ethnicity

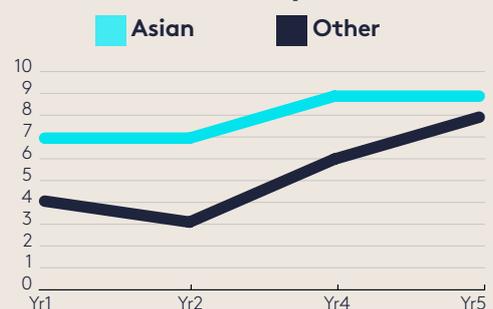
A high proportion of patients are of white ethnicity as seen in previous years (77%); however, we have seen a steady increase year on year in patients categorised as Asian or Other (Asian: 7% in year 1 v 9% in year 5, Other: 4% in year 1 v 8% in year 5). A report on **ethnicity** in NEIAA has been published separately.



Sex  
years 1–5



Ethnicity



#### 4. Referral

The proportion of patients referred to a rheumatology service within the national target of three working days (**QS33 2013: QS 1**) has increased by 2% from year 4 (54% in year 4 vs 56% in year 5) and 15% since the start of the audit (41% in year 1 [2018]).

However, 44% of patients are still not referred within target of three working days and 48% of patients have been experiencing symptoms for longer than six months prior to referral (as reported by clinicians).

#### (Recommendation 1)



**48%**  
still experiencing symptoms  
for longer than six months  
prior to referral

#### 5. Conversion to confirmed EIA

Of the patients entered into the audit with suspected EIA, approximately a third go on to receive a confirmed diagnosis of EIA and are eligible for management within an EIA pathway (38% this year).



**38%**  
eligible for management  
within an EIA pathway

#### 6. Access to assessment

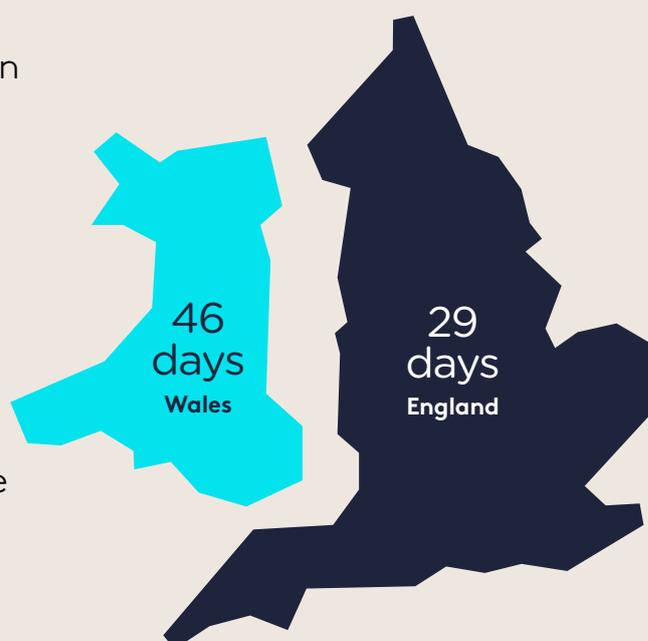
The proportion of patients seen for their first appointment in rheumatology within three weeks of receipt of referral (**QS33 2013: QS 2**) has not recovered since the pandemic (48% in year 2 [2019/2020] v 39% in year 5).

The average waiting time in England has remained stable (29 days) but has increased in Wales (38 days in year 4 v 46 days in year 5).

Nationally the average waiting times are 31 days, 10 days longer than the quality standard of 21 days.

#### (Recommendation 2, 3 and 5)

#### Time to assessment (QS33 2013: QS2)



<sup>2</sup> We rely upon the clinician's opinion as to whether or not it is appropriate to enrol a patient into an EIA pathway. Patients who do not need disease modifying anti-rheumatic drug (DMARD) initiation should not be included (such as CCP-positive arthralgia with no signs of joint inflammation, or axSpA patients without peripheral joint disease). Patients are eligible for follow up if they have RA pattern of disease, regardless of their inflammatory arthritis diagnosis.

## 7. Access to treatment

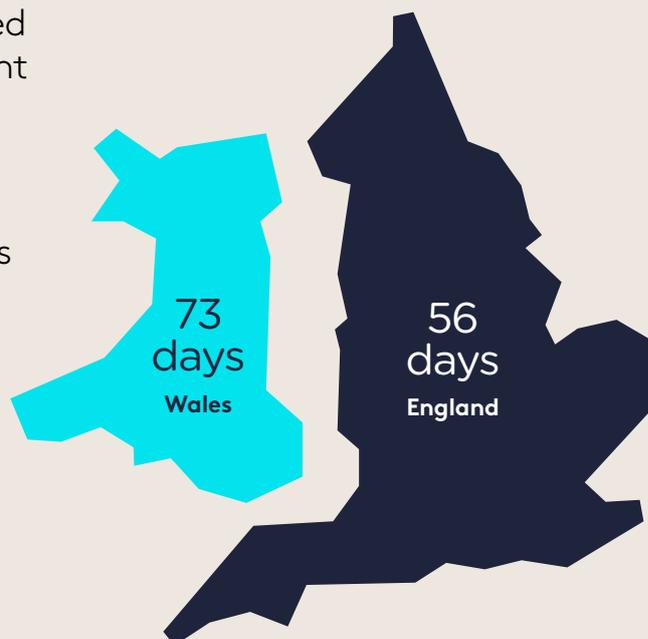
Access to timely treatment has improved with 56% of patients receiving treatment within six weeks **(QS33 2013: QS 3)** compared to 52% in year 4.

The average time to treatment has also improved in England, reducing by 3 days (59 days in year 4 v 56 days in year 5) and in Wales reducing by 1 day (74 days in year 4 v 73 days in year 5).

However, this does mean that nationally treatment delays are on average 12 days higher than the quality standard of 42 days (54 days).

**(Recommendation 2 and 5)**

### Time to treatment (QS33 2013: QS3)



## 8. Treatment response

A third of patients (36%) achieved a good response to treatment at 3-months.

A further 31% of patients showed a moderate response .

These rates lag behind those seen in controlled studies.

We have seen little change in good response rates since the audit's inception in 2018 suggesting we should consider a more aggressive approach with earlier treatment escalation, and possibly review threshold for biologics.

**(Recommendation 2)**



<sup>3</sup> Disease activity in rheumatoid arthritis is measured using the Disease Activity Score in 28 joints (DAS-28) and combines information from swollen joints, tender joints, the acute phase response and general health. The European League Against Rheumatism (EULAR) criteria are based on DAS and categorise patients as non-responders, moderate responders or good responders depending on the extent of change and the level of disease activity reached **(5)**. We report on change between baseline and 3 months of treatment.

## 9. PROMs

At the point of diagnosis (baseline), patients reported that their condition was having a more severe impact on their quality of life, than at 3-months . A majority of patients (53%) still describe a moderate or severe impact of inflammatory arthritis on their quality of life at 3-months.

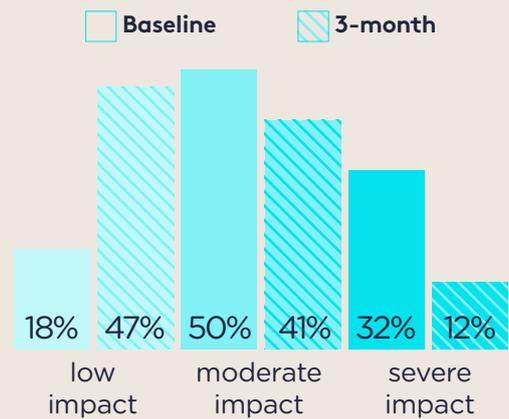
More patients reported functional and work impairment , and symptoms of anxiety and/or depression at baseline compared to at 3-month follow-up.

Improvements were seen across all domains, with changes consistently exceeding the Minimum Clinically Important Difference (MCID) for each measure over the first three months of specialist care.

These findings are similar to those seen in the previous years of the audit. Since the COVID-19 pandemic, however, higher levels of anxiety and depression have been reported at baseline than in pre-pandemic years.

### (Recommendation 1 and 2)

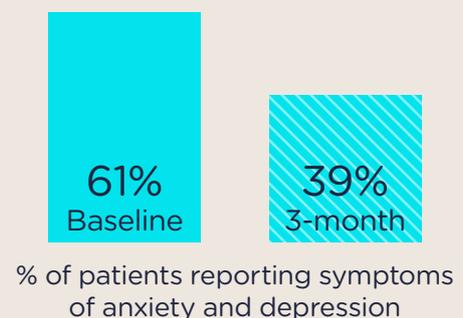
### Impact on quality of life



### Functional and work impairment



### Anxiety and depression



<sup>4</sup> As measured by the **Musculoskeletal Health Questionnaire**

<sup>5</sup> As measured by the **Work Productivity and Activity Impairment (WPAI) questionnaire**

<sup>6</sup> As measured by the **Patient Health Questionnaire 2-item (PHQ-2) and Generalised Anxiety Disorder 2-item**

<sup>7</sup> The smallest difference in score in the domain of interest which patients perceive as beneficial and which would mandate, in the absence of troublesome side effects and excessive cost, a change in the patient's management.

## 10. Organisational metrics

Data collected in the last five years of NEIAA have shown that having a dedicated EIA clinic is associated with a 40% greater likelihood of being assessed within 3 weeks and a 70% greater likelihood of starting treatment within six weeks.

Higher staffing levels have also been shown to be associated with better performance against quality statements 2 (specialist assessment within three weeks) and 3 (access to treatment within six weeks).

For each additional specialist nurse or consultant in a rheumatology department the probability of a patient receiving rheumatology review within three weeks was increased by 10% (nurse) or 6% (doctor), whilst the probability of initiating appropriate treatment within the recommended time frame was increased by 11% (nurse) or 12% (doctor).

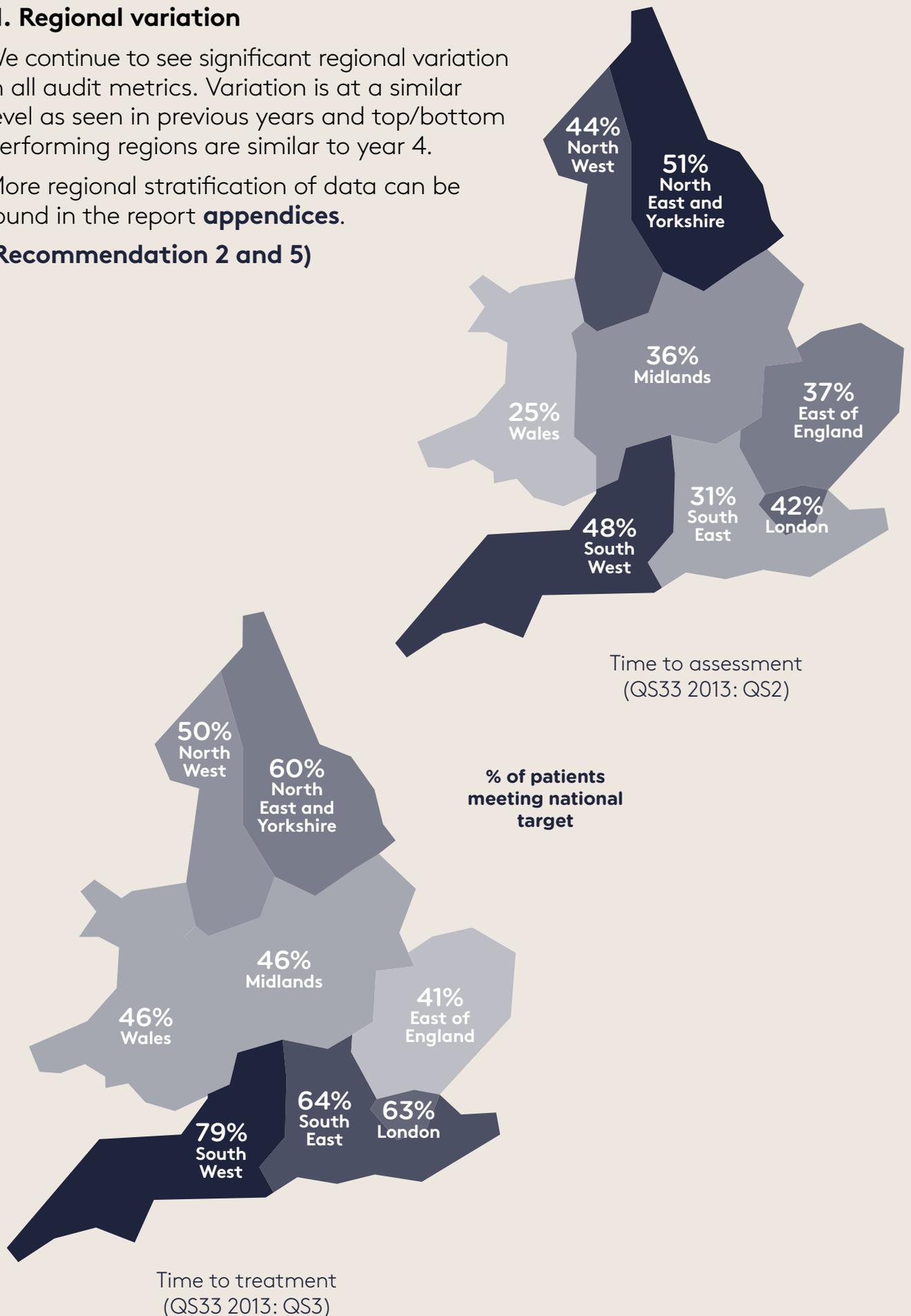
### **(Recommendation 2 and 5)**

## 11. Regional variation

We continue to see significant regional variation in all audit metrics. Variation is at a similar level as seen in previous years and top/bottom performing regions are similar to year 4.

More regional stratification of data can be found in the report **appendices**.

**(Recommendation 2 and 5)**





**British Society for  
Rheumatology**

British Society for Rheumatology  
Bride House  
18-20 Bride Lane  
London, EC4Y 8EE

+44 (0)20 7842 0900  
[rheumatology.org.uk](http://rheumatology.org.uk)  
[arthritisaudit.org.uk](http://arthritisaudit.org.uk)