



Public Health
England

NHS
England



NHS RightCare Commissioning for Value Focus Pack

Musculoskeletal conditions;
trauma and injuries
May 2016

RightCare

NHS Bath and North East Somerset CCG

OFFICIAL
Gateway ref: 04943

- Introduction: Welcome to your focus pack
- NHS RightCare
- Why act?
- Commissioning for Value
- A clinical perspective
- Your most similar CCGs
- Your data
 - Pathways on a page
 - Spend and activity
 - Opportunities
 - Further analysis
- Next steps and actions
- Further support and information
- Useful links
- Annexes

Welcome to your focus pack on musculoskeletal conditions; and trauma and injuries. The information contained in this pack is personalised for your CCG and should be used to support local discussions and inform a more in-depth analysis around MSK and trauma services. There is a page of useful links at the end and there is a video guide to the pack too.

Each of these focus packs provides detailed information on the opportunities to improve in the highest spending programmes previously covered by Commissioning for Value packs. They include a wider range of outcomes measures and information on the most common procedures and diagnoses for the condition in question.

By using this information, together with local intelligence and reports such as your Joint Strategic Needs Assessment, your CCG will be able to ensure its plans focus on those opportunities which have the potential to provide the biggest improvements in health outcomes, resource allocation and reducing inequalities.

One of the main focuses for the Commissioning for Value series has always been reducing unwarranted variation in outcomes. NHS England, Public Health England and CCGs have legal duties under the Health and Social Care Act 2012 with regard to reducing health inequalities. Commissioners should continue to use these packs and supporting tools to drive local action to reduce inequalities in access to services and in the health outcomes achieved.

The primary objective for NHS RightCare is to maximise value:

- the value that the patient derives from their own care and treatment
- the value the whole population derives from the investment in their healthcare

The approach has been tested and proven successful in recent years in a number of different health economies. The programme focusses on improving population value including improving outcomes, quality, and releasing capacity and resources for future investment.

To build on the success and value of the RightCare programme, NHS England and Public Health England are taking forward the RightCare approach to ensure it becomes embedded in the new commissioning and public health agendas for the NHS. It is now referenced in the Mandate to NHS England, the NHS Planning Guidance, the CCG Improvement and Assessment Framework and the Quality Premium for 2016/17.

The RightCare programme includes the Commissioning for Value packs and tools, the NHS Atlas series and a number of casebooks. NHS England has committed significant funding to rolling out the RightCare approach to all CCGs over the next two years. Wave 1 has 65 CCGs and these are now receiving early support from one of ten RightCare Delivery Partners. The remaining CCGs are in Wave 2 and will receive support from an expanded team of Delivery Partners later in 2016.

“ What Commissioning for Value does is shine an honest light on what we are doing. The RightCare approach then gives us a methodology for quality improvement, led by clinicians. It not only improves quality but also makes best use of the taxpayers’ pound ensuring the NHS continues to be one of the best value health and care systems in the world. ”

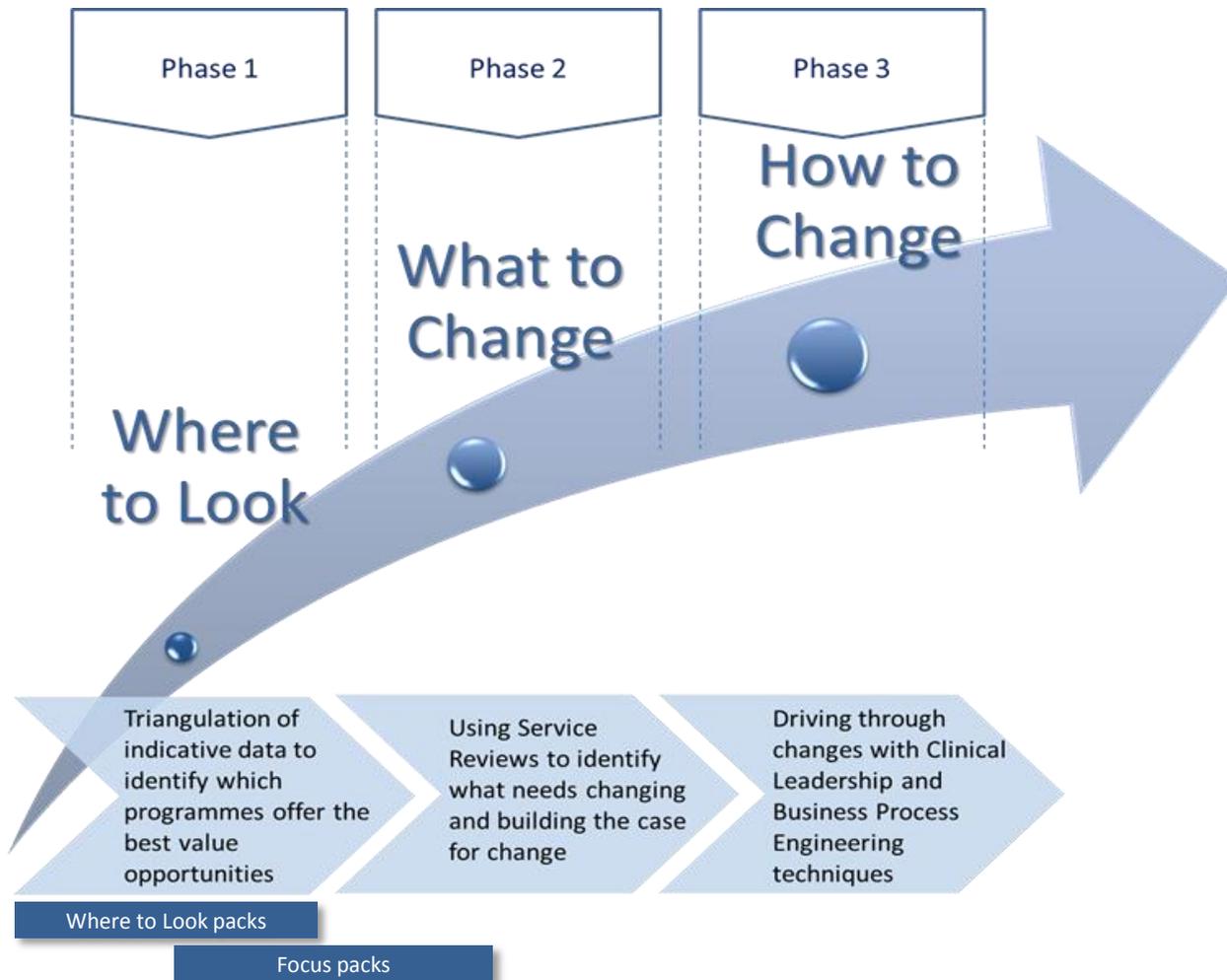
Professor Sir Bruce Keogh
National Medical Director, NHS England

“ The data and evidence available through tools such as Commissioning for Value will help commissioners make the most important decisions in delivering concrete and sustainable clinical and financial benefits across the NHS. We expect that the roll-out of the RightCare programme will drive up the quality of care while contributing significantly to meeting the efficiency challenge set out in the Five Year Forward View. ”

Paul Baumann
Chief Financial Officer, NHS England

“ In society more years are lived with musculoskeletal disability than any other long term condition. The Commissioning for Value packs provide the basis for healthcare communities to start to identify priorities and address inequalities to better deliver value to local populations and transform the lives of individuals living with musculoskeletal conditions. ”

Professor Peter Kay
National Clinical Director for Musculoskeletal Services, NHS England



Commissioning for Value is a partnership between NHS England and Public Health England. The *Where to Look* packs produced in January 2016 support the first phase of the NHS RightCare approach.

The *Where to Look* packs begin with a review of indicative data to highlight the top priorities or opportunities for transformation and improvement for your CCG.

These focus packs help CCGs to begin work on phase two *What to Change* by using indicative data along a pathway to identify improvement opportunities.

Value in healthcare is concerned with both improving quality and length of life.

Musculoskeletal disorders (back and neck pain, osteoarthritis and rheumatoid arthritis) account for about a quarter of the years lived with disability in England. They result in pain and physical inactivity which are recognised risk factors for developing other long-term conditions such as depression, cardiovascular conditions and some cancers. They also cause a considerable burden to social and informal care as both the prevalence and severity of these disorders increase with age.

Investment in elective activity cannot be interpreted as poor or good value without further investigation. There is now high quality routine data available to evaluate outcomes for the most common elective procedures, hip and knee replacements, using the National Joint Registry (NJR) and Patient Reported Outcome Measures (PROMs) data. This data is now being extended to cover other elective joint replacement procedures such as elbow, shoulder and ankle. More information about PROMs is available in Annex C.

The National Improving Spinal Care (NISC) Project is currently underway to implement NICE / Map of Medicine guidance for the management of low back and radicular pain. Injections for back pain (particularly lumbar facet joint injections) are increasing in activity year on year in the absence of strong clinical and cost-effectiveness evidence. Injections for back pain were not recommended by NICE guidance CG88 for pain up to twelve months duration. In the consultation phase of the updated NICE guidance in May 2016, this was extended to all durations. High activity should be investigated to identify if patients are being managed according to NICE / Map of Medicine guidance and the NISC Project.

There is strong evidence that hip and knee replacements are extremely cost-effective interventions when warranted by clinical need and patient preference. This can be tested at a local level by comparing activity rates with Patient Reported Outcome Measures (PROMs) data. See slides 60 and 61. Low rates may mean that population value could be improved by an increase in activity. High rates should only be interpreted as an opportunity to reduce activity after further investigation.

Rates of hip and knee replacements should be reviewed alongside prevalence estimates of severe hip and knee osteoarthritis.

Rates should also be reviewed alongside pre-treatment and health gain Oxford hip and knee scores and EQ-5D quality of life scores.

CCGs should identify with their main providers of hip and knee replacements whether they meet the requirements of the Best Practice Tariff which requires providers to have at least 50% participation in the PROMs programme and not to be an outlier in case-mix adjusted health gain as measured by the Oxford hip and knee scores. Additionally, providers should have at least 75% of all cases recorded on the NJR to ensure that there is ongoing surveillance of implant survivorship and that providers with high revision rates are identified.

RightCare Shared Decision Making aids are available for osteoarthritis of both the hip and knee:

<http://sdm.rightcare.nhs.uk/pda/osteoarthritis-of-the-hip/my-decision/>

<http://sdm.rightcare.nhs.uk/pda/osteoarthritis-of-the-knee/>

Your CCG is compared to the 10 most demographically similar CCGs. This is used to identify realistic opportunities to improve health and healthcare for your population. The analysis in this pack is based on a comparison with your most similar CCGs which are:

- Canterbury and Coastal
- Vale of York
- West Cheshire
- Lancashire North
- Lincolnshire West
- Norwich
- North East Essex
- West Leicestershire
- Harrogate and Rural District
- South Worcestershire

To help you understand more about how your most similar 10 CCGs are calculated, the Similar 10 Explorer Tool is available on the NHS England website. This tool allows you to view similarity across all the individual demographics used to calculate your most similar 10 CCGs. You can also customise your similar 10 cluster group by weighting towards a desired demographic factor.

In addition to the similar 10, there are CCG cluster groups which have been constructed using the same variables (eg deprivation) as the similar 10. This larger cluster group is used in the opportunity tables, represented by a green triangle. Your CCG is in the following cluster group:

- Areas with younger adults and university cities

This focus pack presents analysis of a wide range of indicators focussing on spend, activity, quality and outcomes. The indicators have been chosen with advice from national clinical leads and other key stakeholders including Arthritis Research UK, the National Osteoporosis Society and the North East Quality Observatory Service.

The data in this pack are the latest available*. The charts identify the metadata for each indicator and the full metadata set will be available on the Commissioning for Value pages of the NHS England website shortly. Data quality has been assessed and only indicators which are sufficiently robust have been included in the pack.

The data are presented as an exploration, starting with the pathways on a page, then moving to elective and non-elective spend, admissions, prescribing and procedures.

Should you have any queries about the indicators or the data, please refer to the contact details on the 'further information and support' page at the end of this pack.

*As the spend indicators have been updated since the publication of the 2016 refreshed 'Where to look' packs, figures for spend rates and potential opportunities may differ slightly from those packs.

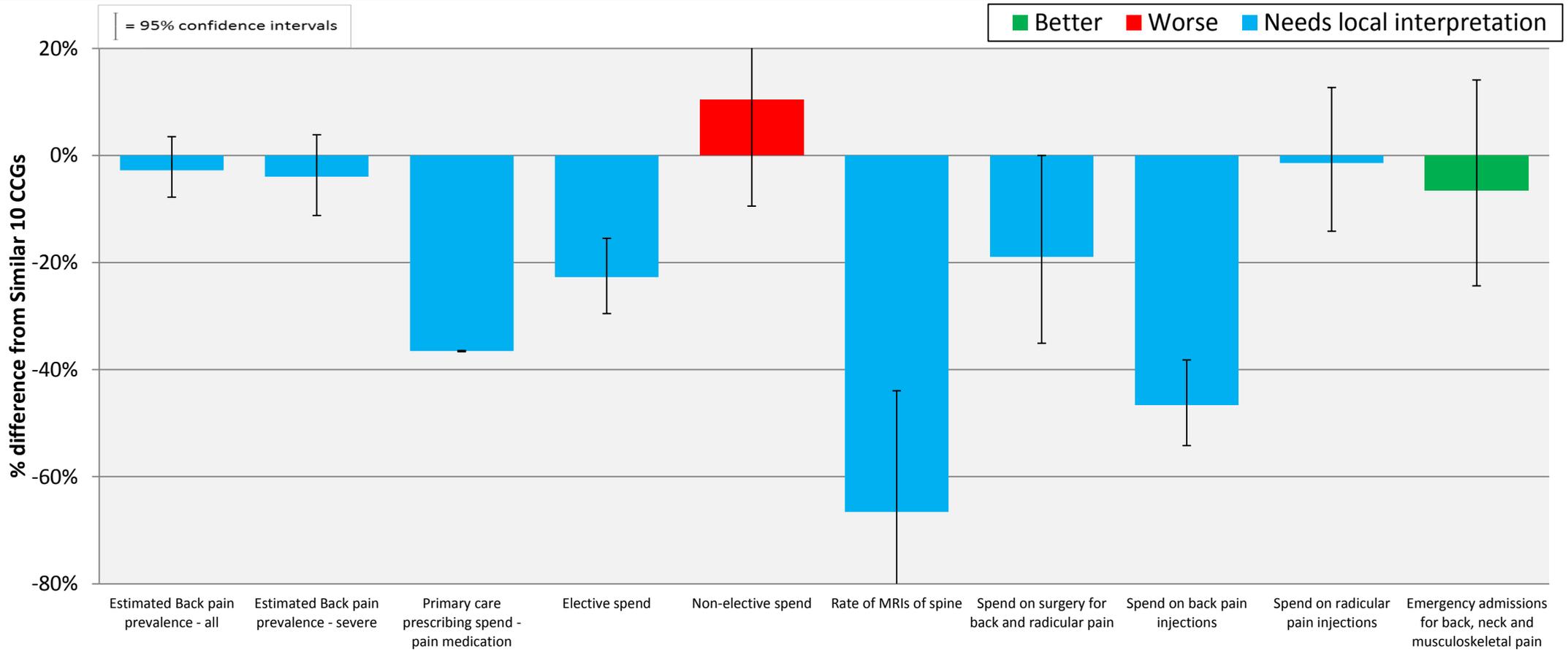
The musculoskeletal pathway in the refreshed 'where to look' 2016 packs has been replaced here by four individual MSK pathways. The majority of indicators in the previous MSK pathway now appear in the new osteoarthritis pathway. The trauma and injuries pathway remains the same; however the spend data has been updated.

The intention of these pathways is not to provide a definitive view on priorities but to help commissioners explore potential opportunities. These help commissioners to understand how performance in one part of the pathway may affect outcomes further along the pathway. Each indicator is shown as the percentage difference from the average of your 10 most similar CCGs.

The indicators are colour coded to help you see if your CCG has 'better' (**green**) or 'worse' (**red**) values than your peers. This is not always clear-cut, so (**blue**) is used where it is not possible to make this judgement. For example low prevalence may reflect that a CCG truly does have fewer patients with a certain condition, but it may reflect that other CCGs have better processes in place to identify and record prevalence in primary care. **Blue indicators could show significant opportunities for improvement.**

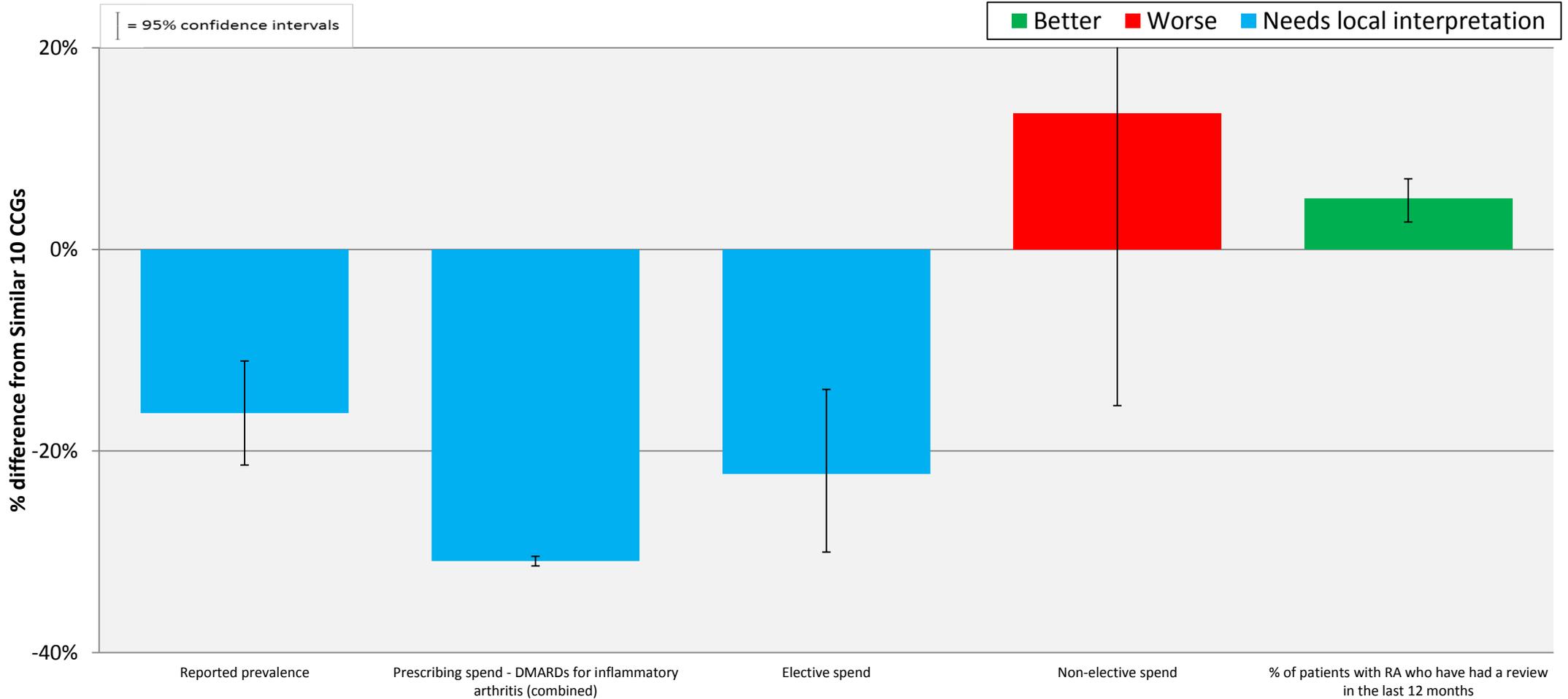
Even where an indicator is **green** there may still be an opportunity to improve. The programme opportunity tables, starting on page 64, identify the opportunities that exist for your CCG to improve to a level which matches the average of the best five of your similar 10 CCG group. Please note: The variation from the average of the similar 10 CCGs is statistically significant for those indicators where the confidence intervals do not cross the 0% axis.

Back, Neck and MSK Pain Pathway



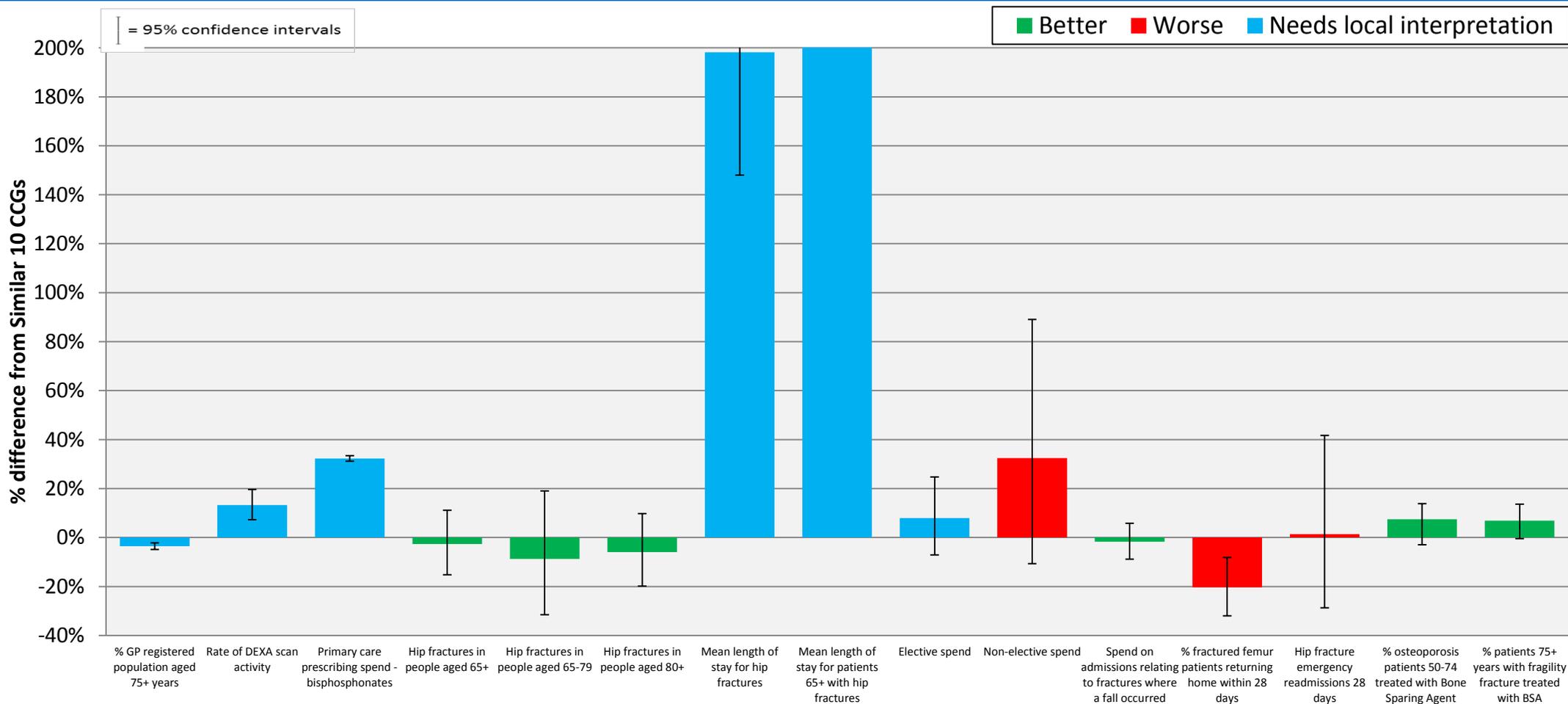
NICE Guidance:

<http://pathways.nice.org.uk/pathways/low-back-pain-early-management>



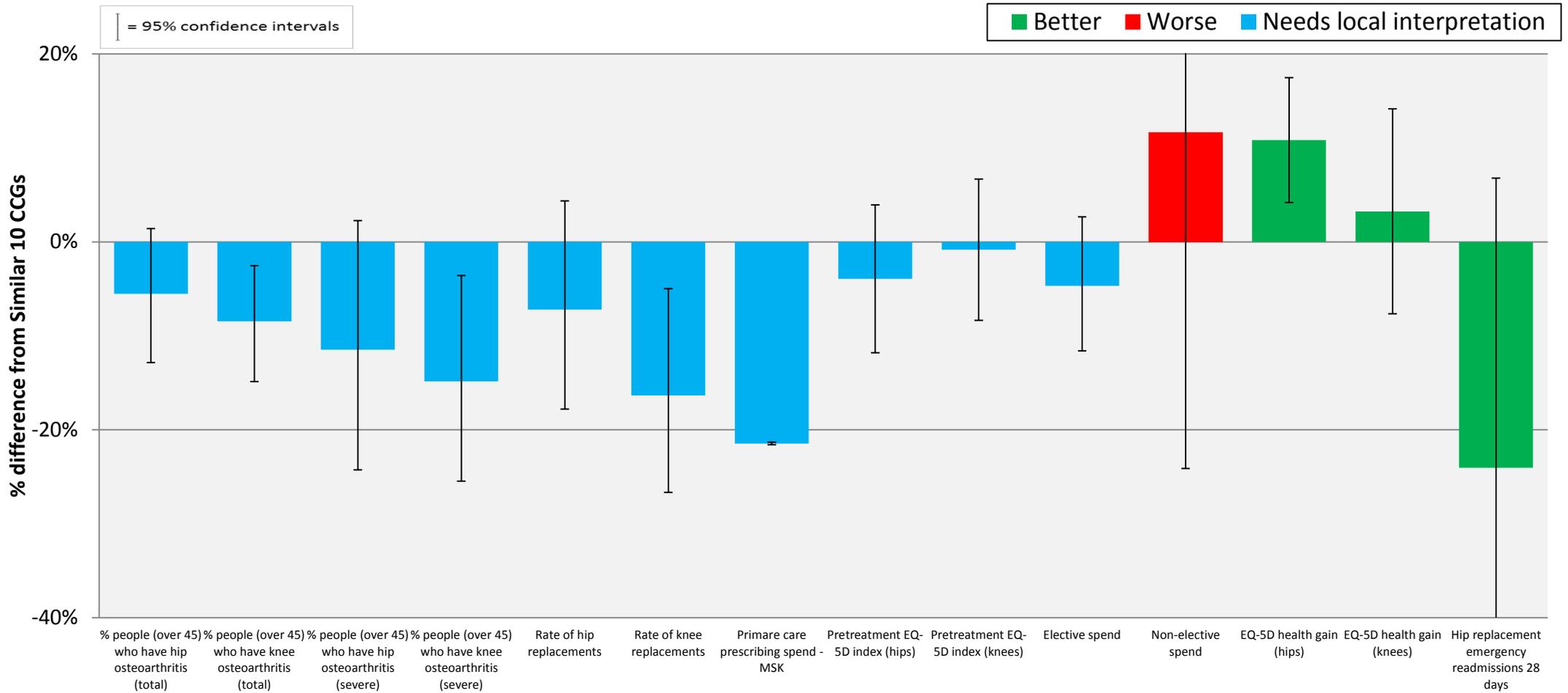
NICE Guidance:

<http://pathways.nice.org.uk/pathways/rheumatoid-arthritis>



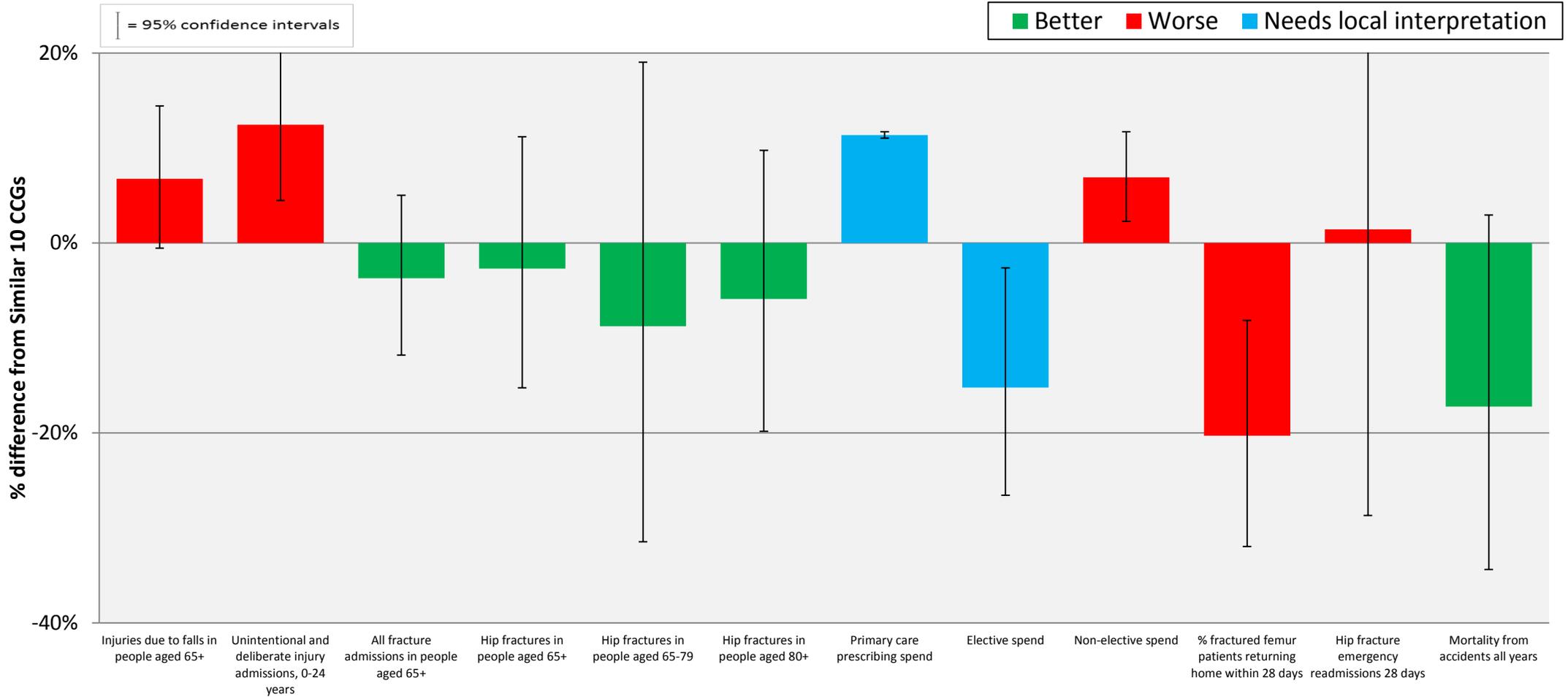
NICE Guidance:

<http://pathways.nice.org.uk/pathways/osteoporosis>



NICE Guidance:

<http://pathways.nice.org.uk/pathways/osteoarthritis>



NICE Guidance:

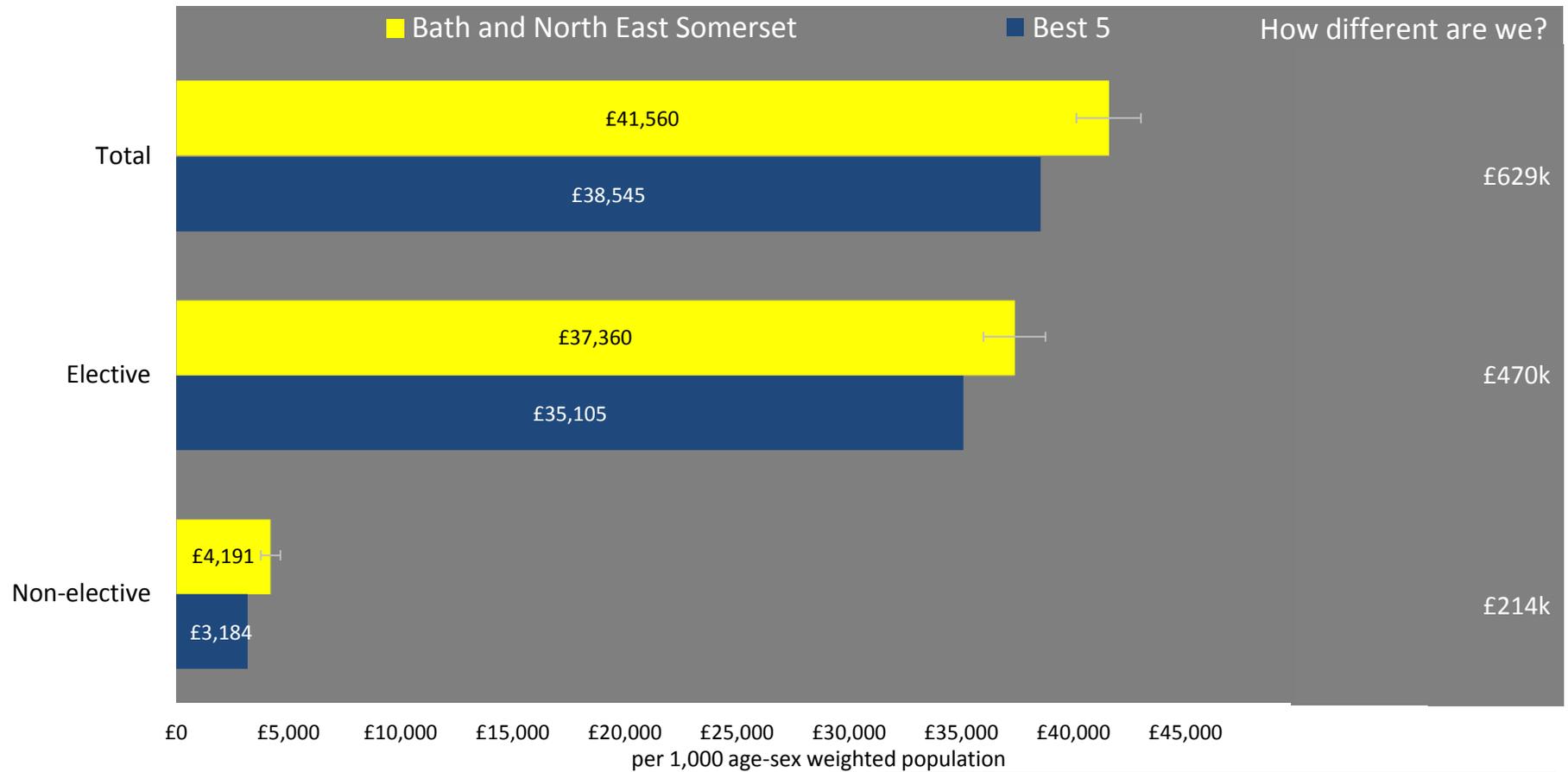
<http://pathways.nice.org.uk/pathways/trauma>

The intention of the following pages is to provide a more in-depth view of the spend and activity for the clinical areas included in this pack compared to your 10 most similar CCGs. The charts show the rate for your CCG (yellow bar), the average of the best five comparator (blue bar) and also the absolute difference (the 'how different are we?' column). They should be used to explore key lines of enquiry to identify potential opportunities for improvement.

The opportunity tables, starting on page 64, identify the best CCG in your similar 10, who you may want to contact – either directly, or through your Delivery Partner if you are in a Wave 1 CCG.

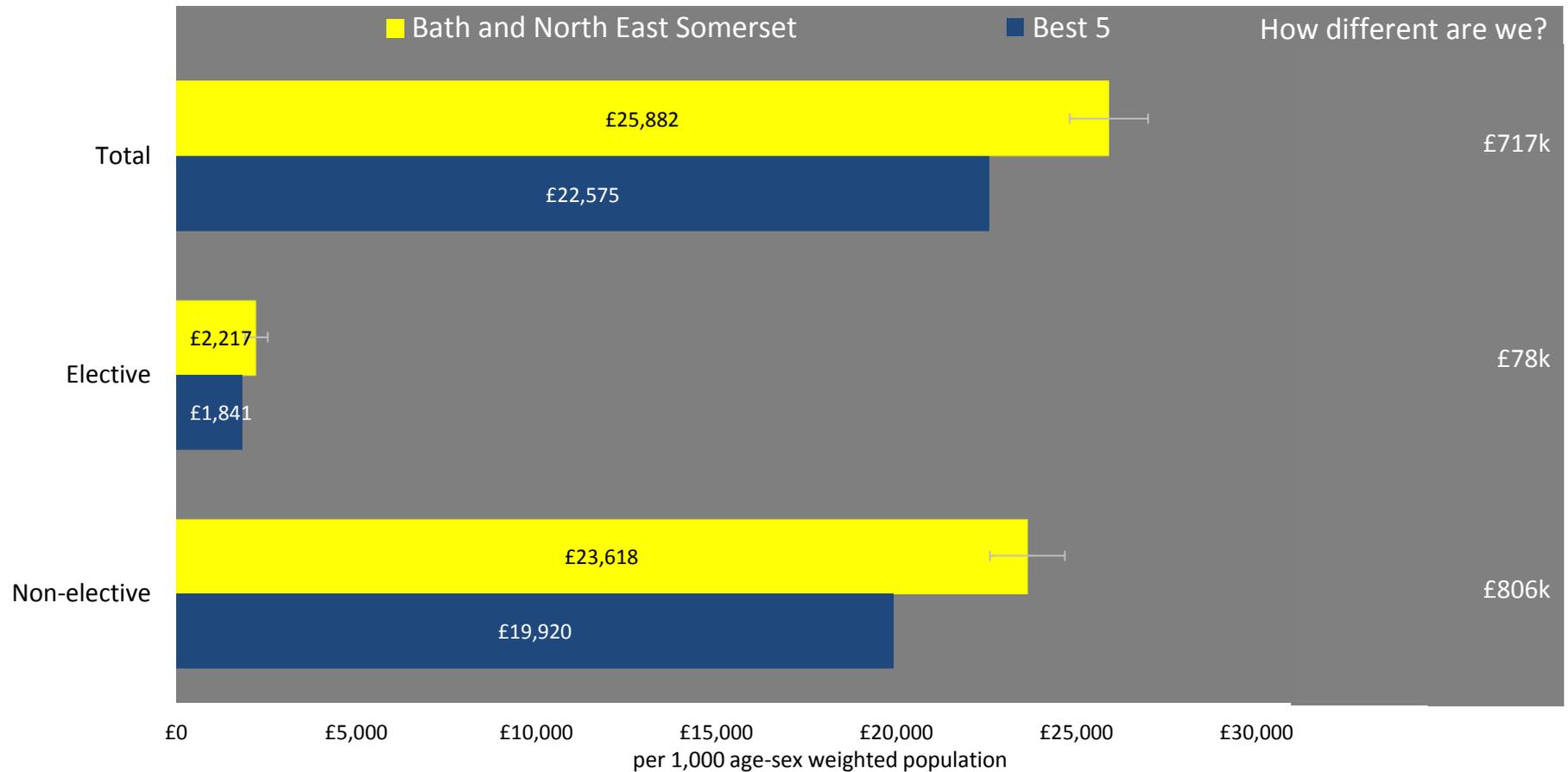
Prescribing and procedures groups and single interventions have been chosen to reflect highest spend. National Clinical Directors and other expert stakeholders have advised on the chemical groupings of drugs used to treat certain conditions within a pathway. Similarly they have advised on procedure grouping. Annex A gives details of those groupings.

For some indicators, the difference between the value for your CCG and the Best 5 is marked as Not Statistically Significant (NSS). This means that we cannot say with confidence (statistically defined as >95% confidence) that any difference between your CCG and the Best 5 is not simply due to chance. Values for these cases have been included in order to provide detailed information for use in considering whether to explore an area further.



95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

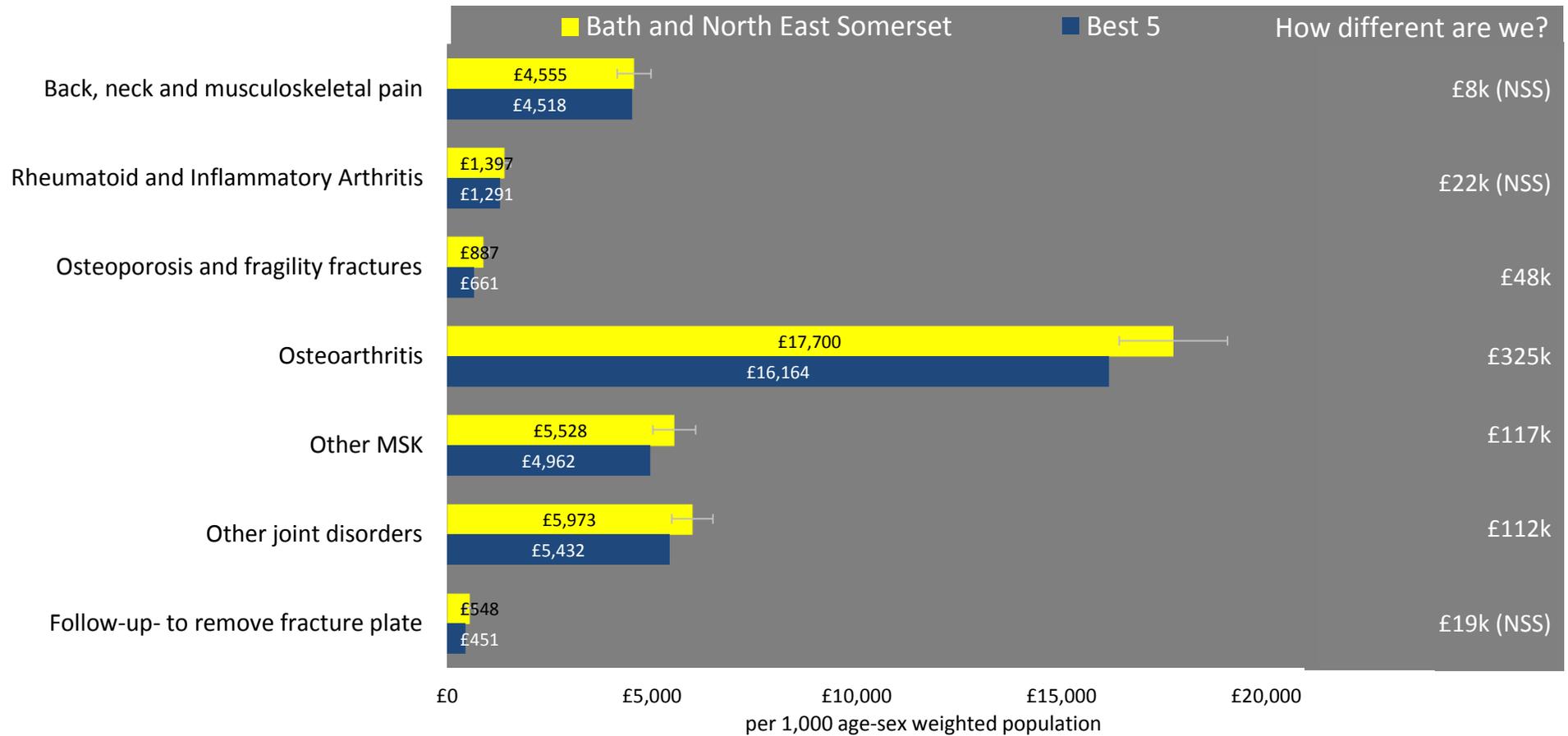
Trauma & Injuries - Spend



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK - Elective Spend

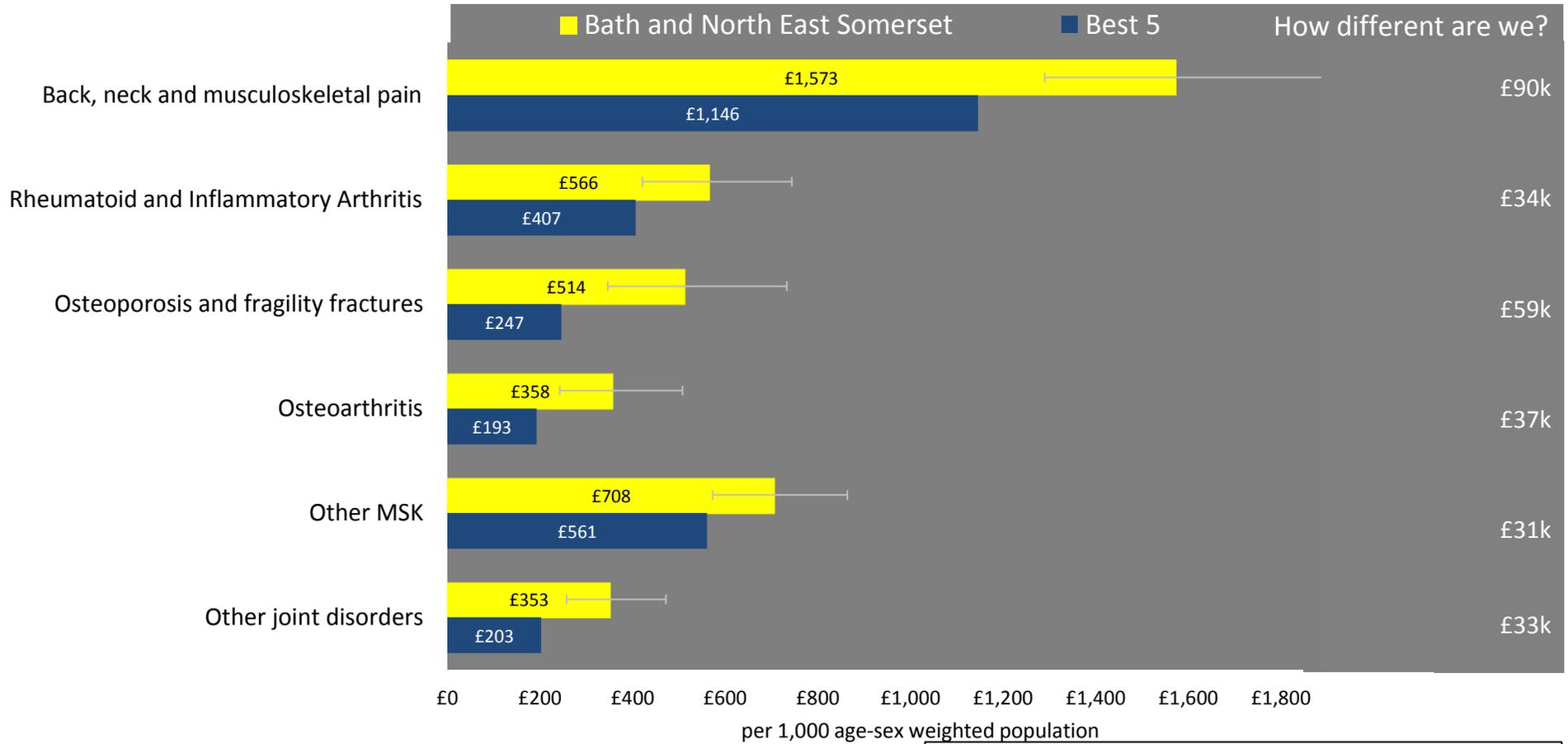
Condition Groups



95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

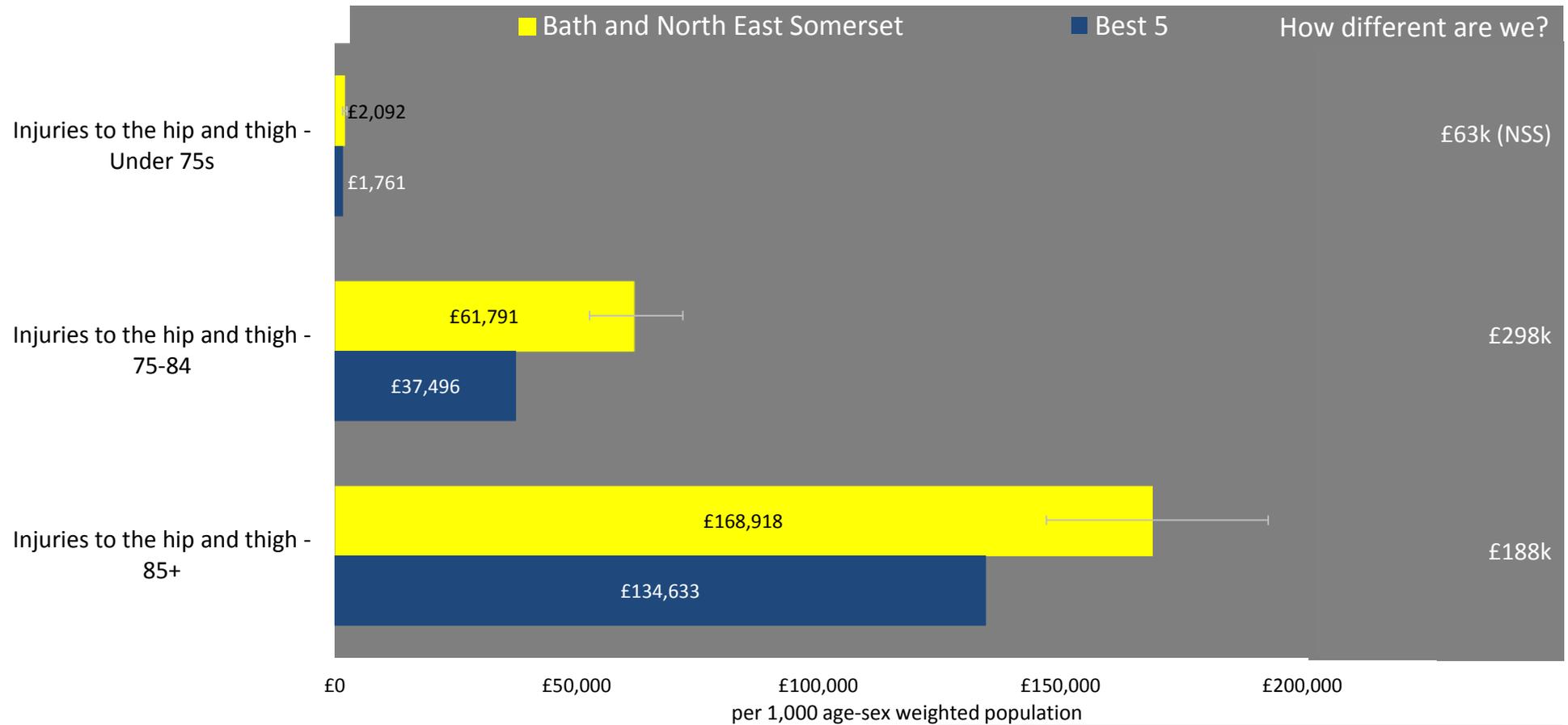
MSK - Non-Elective Spend

Condition Groups



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

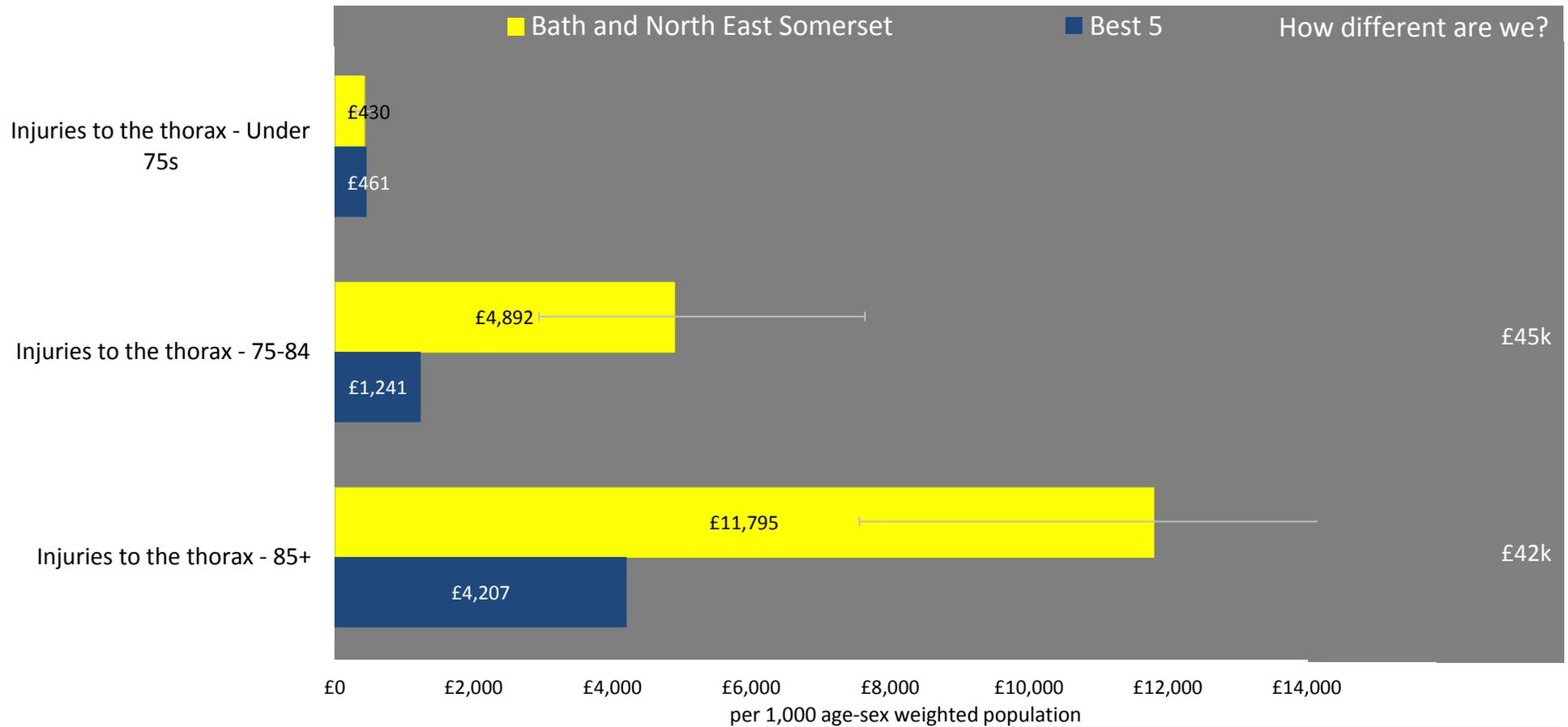
Trauma Spend - Injuries to the hip and thigh



Please note: Spend on Trauma and Injuries (slides 22-29) includes spend for both elective and non-elective admissions.

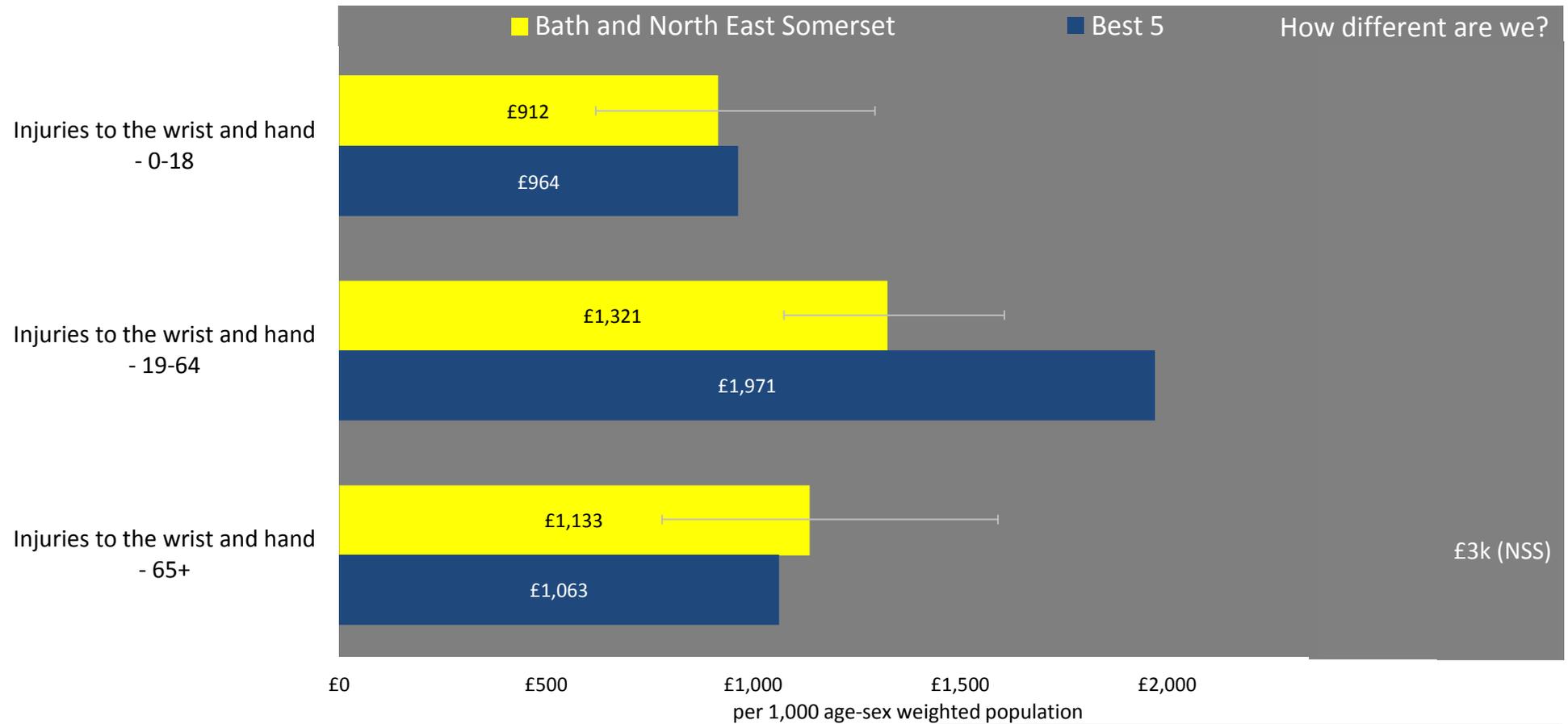
| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Trauma Spend - Injuries to the thorax



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

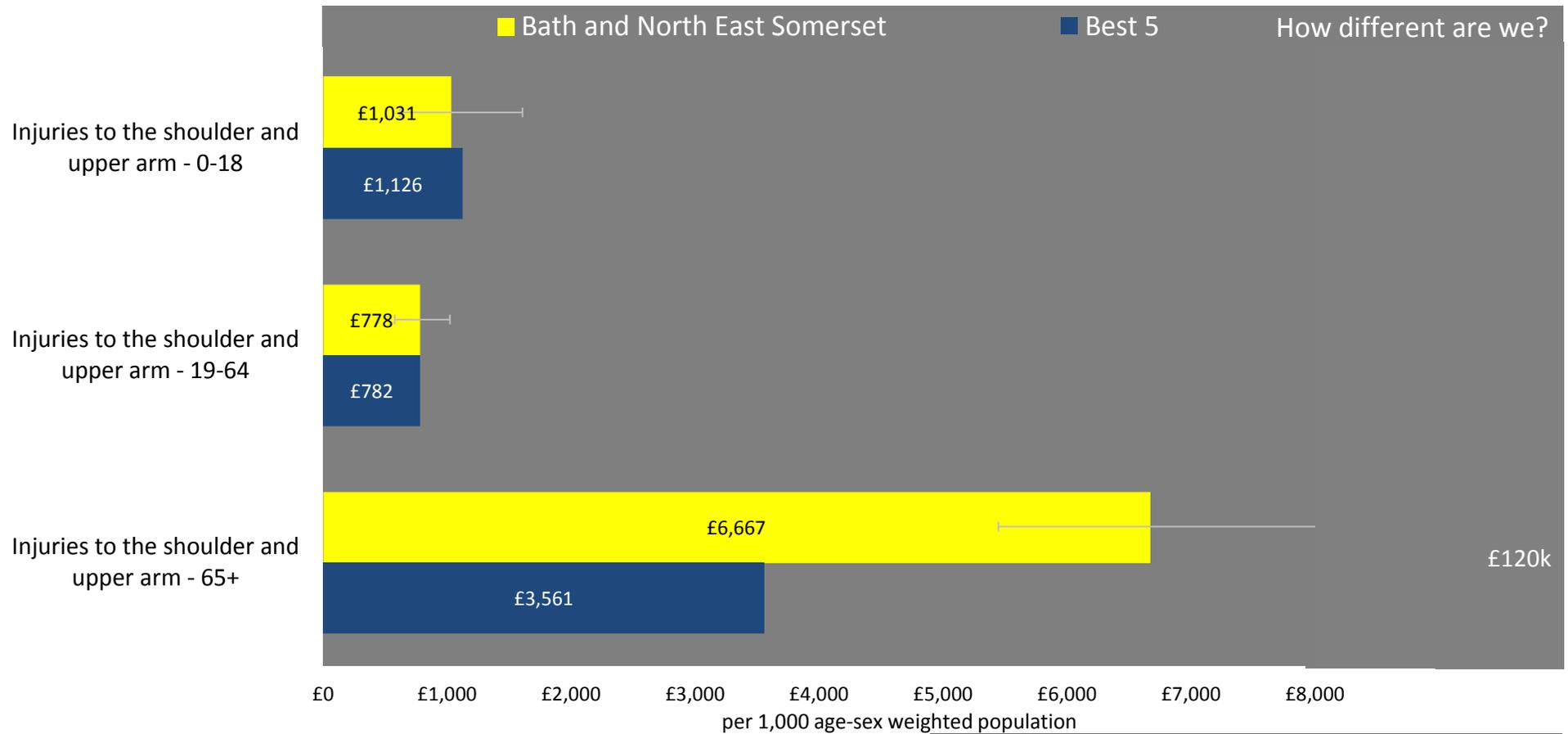
Trauma Spend - Injuries to the wrist and hand



£3k (NSS)

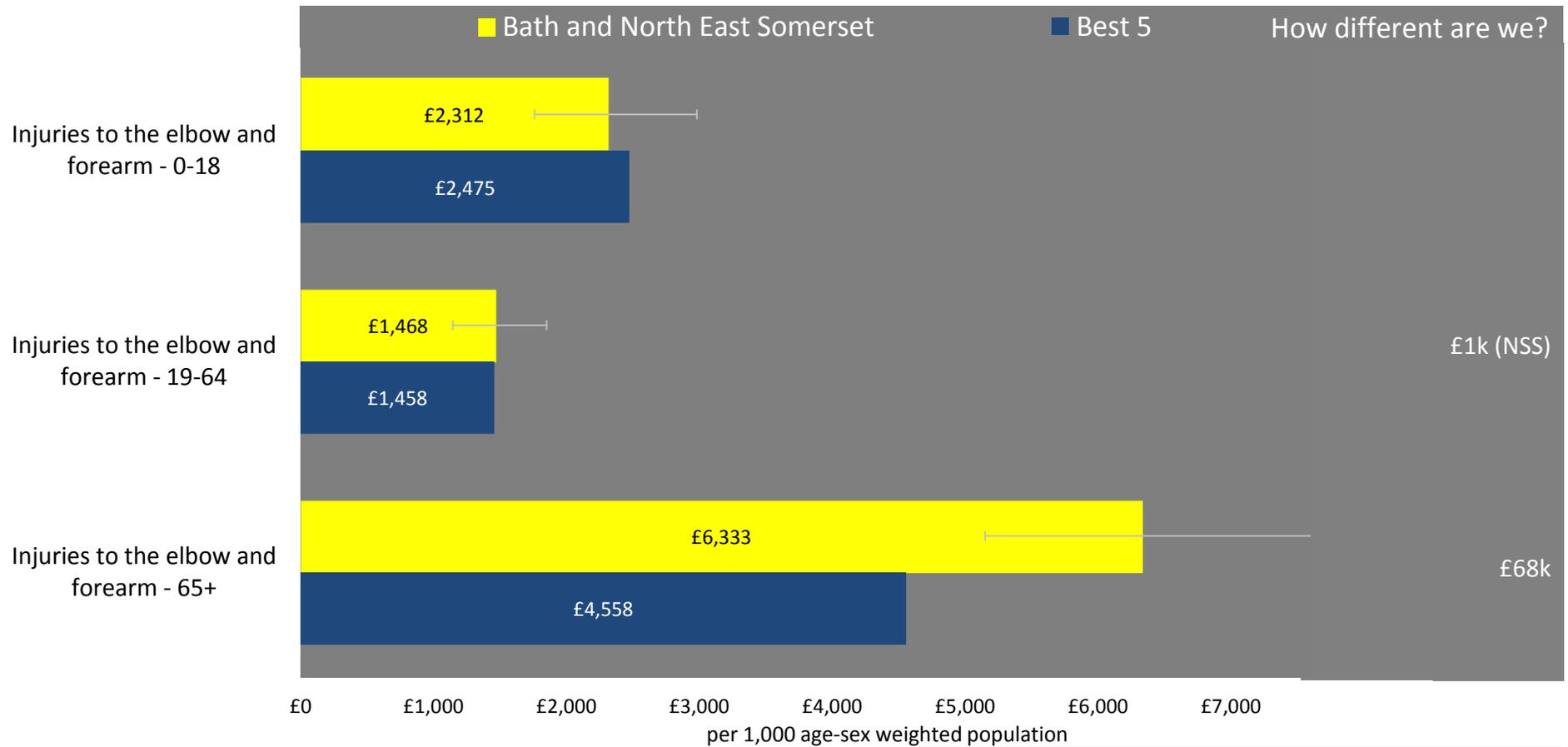
| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Trauma Spend - Injuries to the shoulder and upper arm



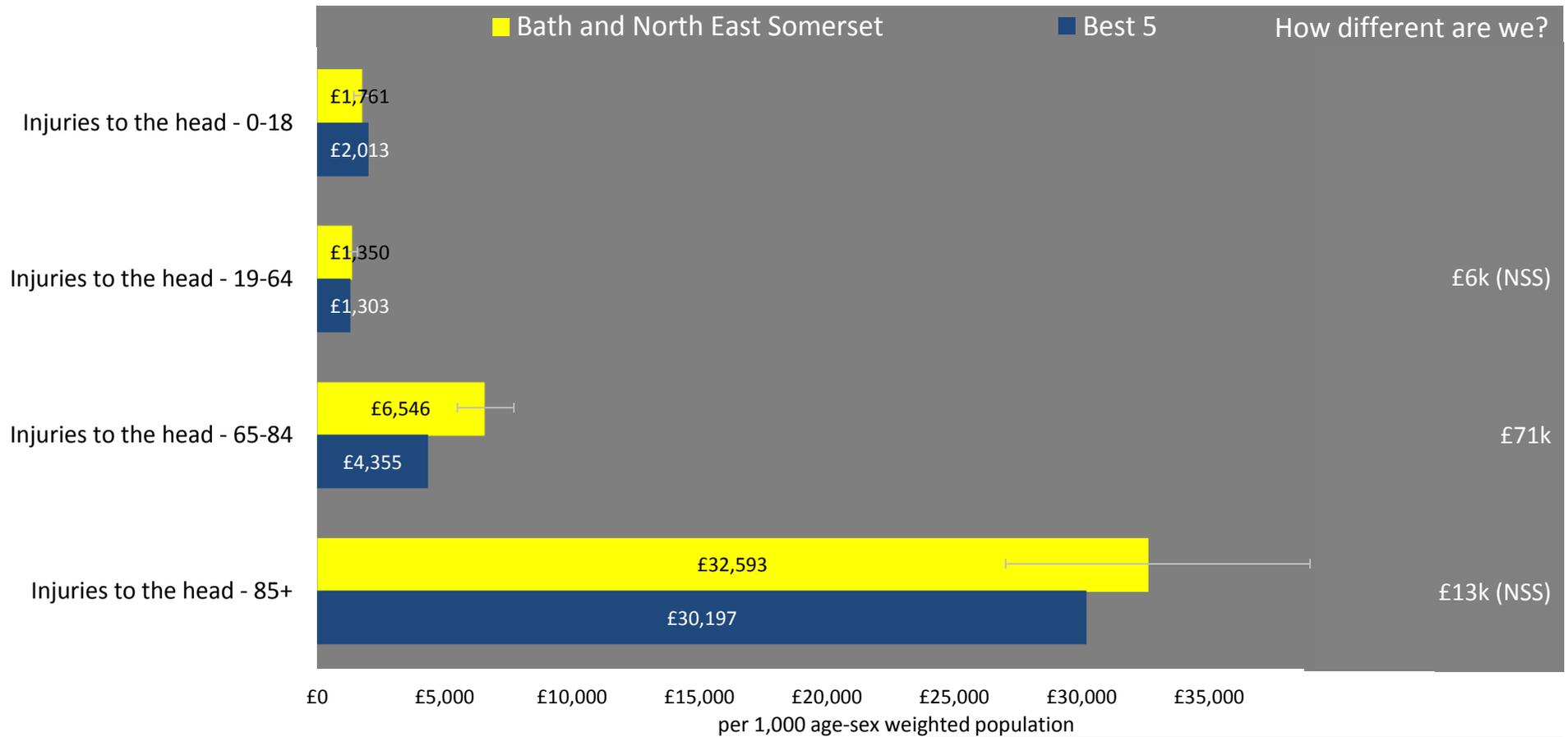
| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Trauma Spend - Injuries to the elbow and forearm

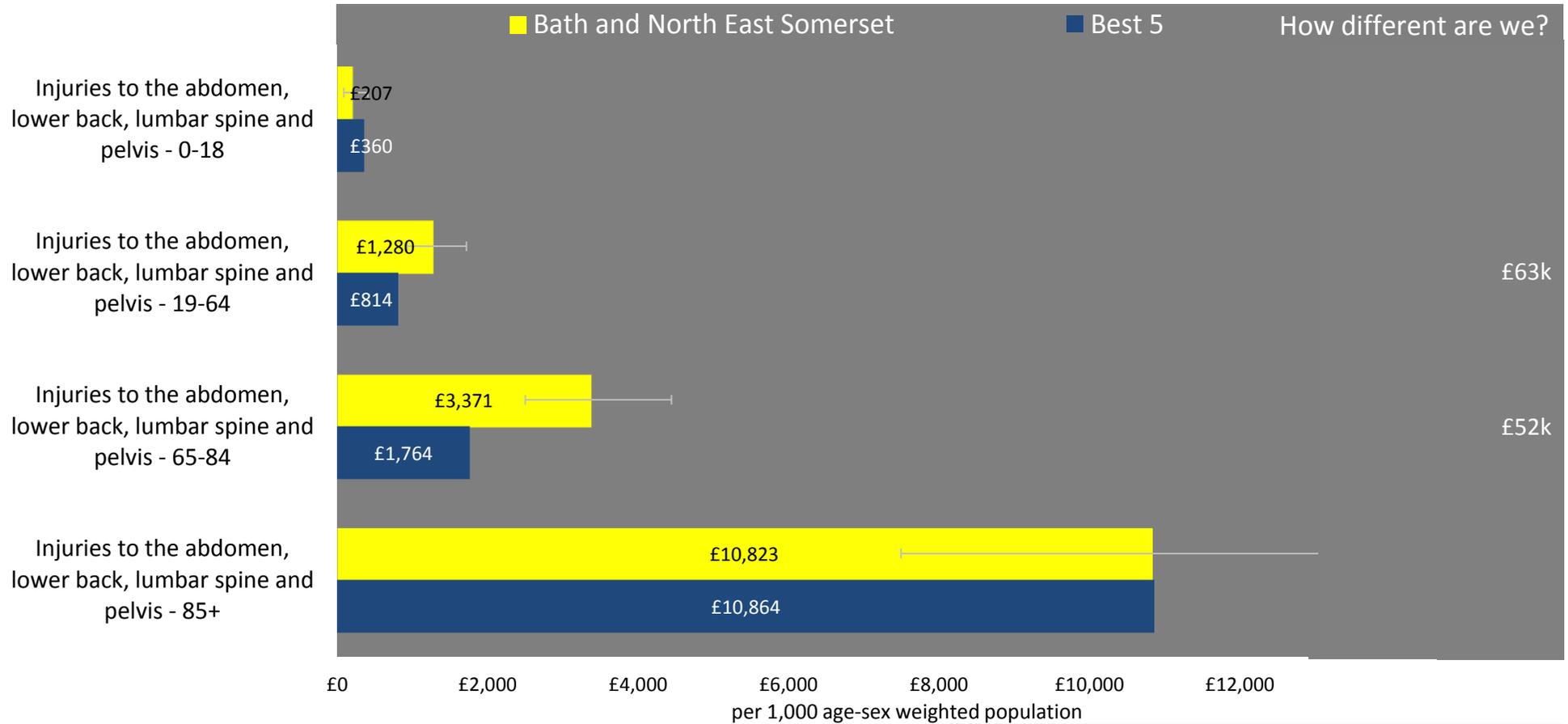


| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

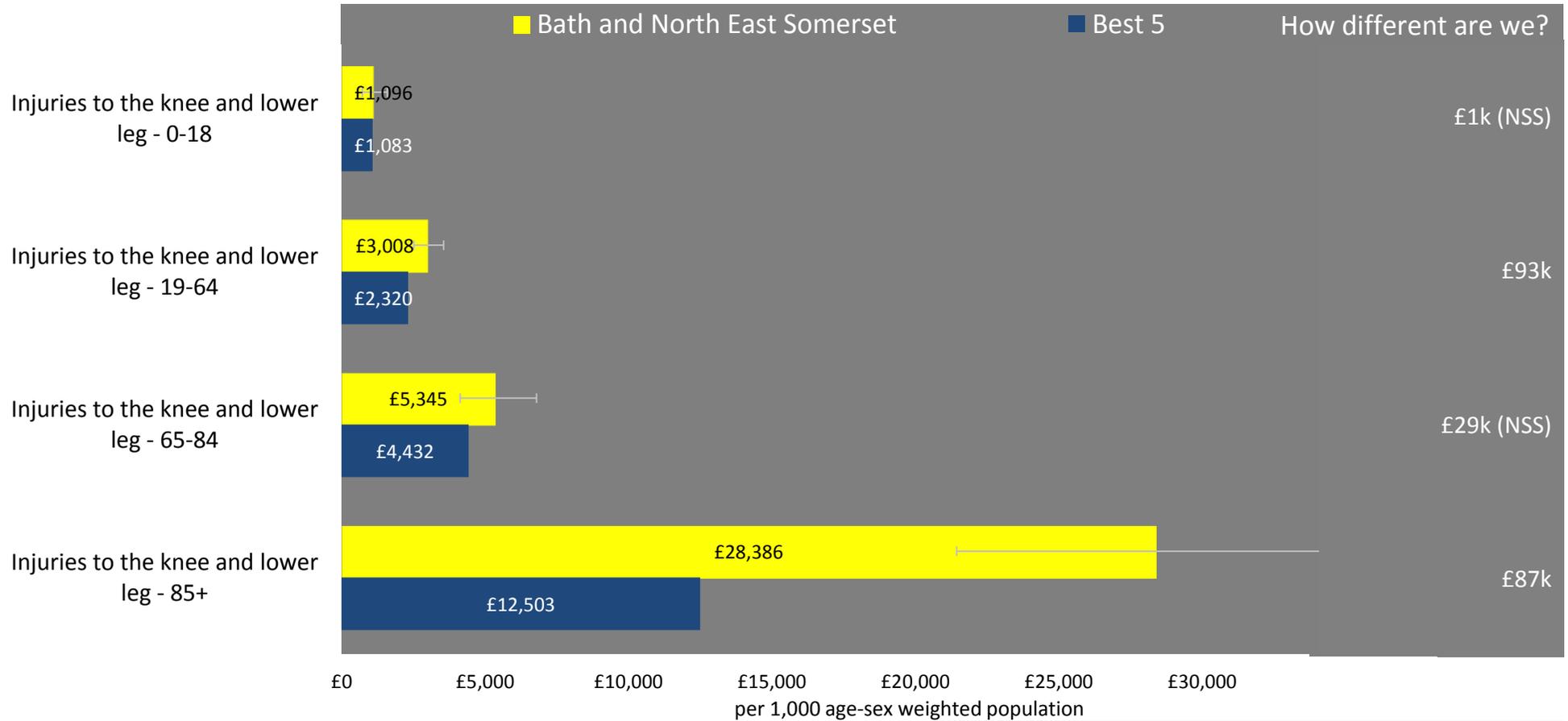
Trauma Spend - Injuries to the head



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators



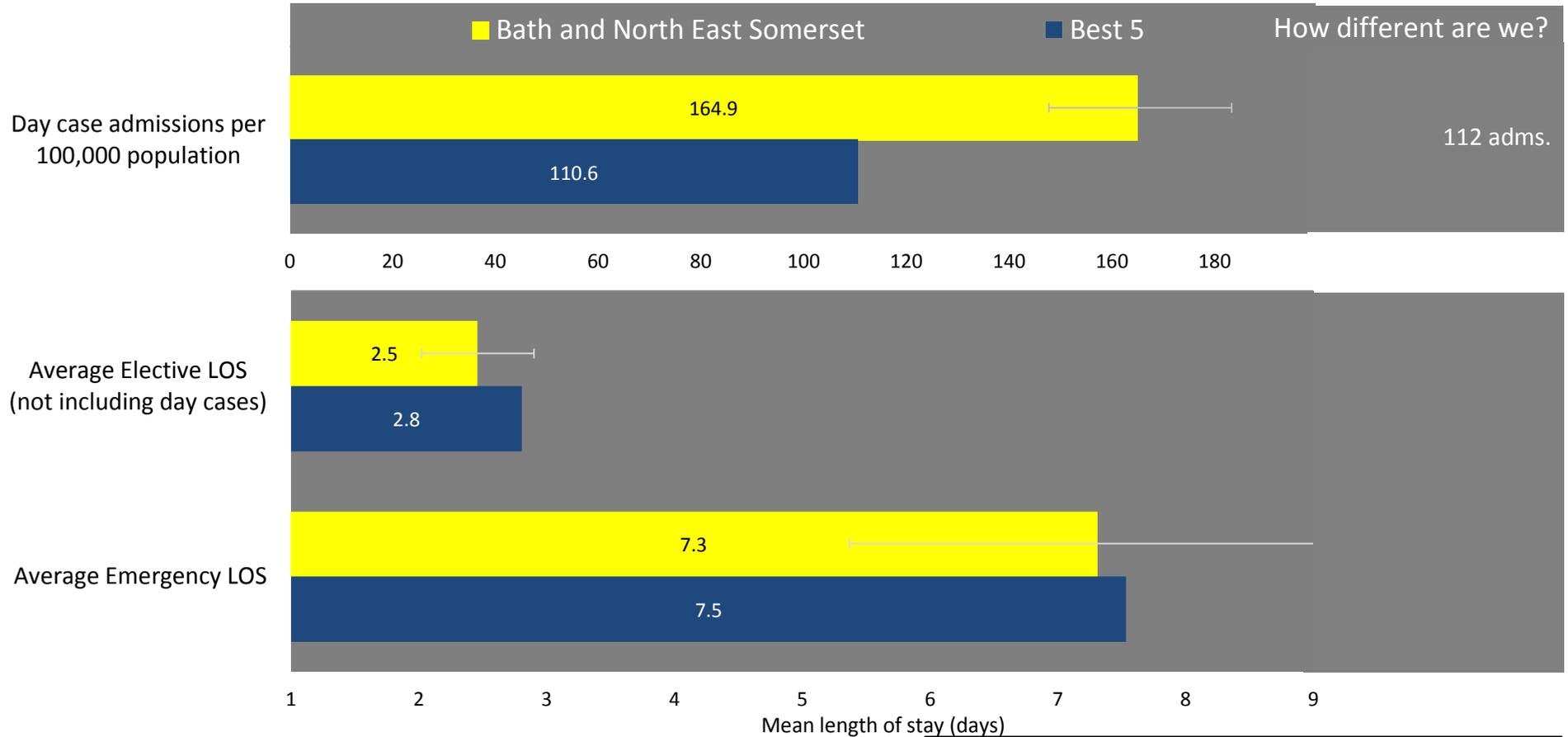
95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK admissions - Back, neck and musculoskeletal pain

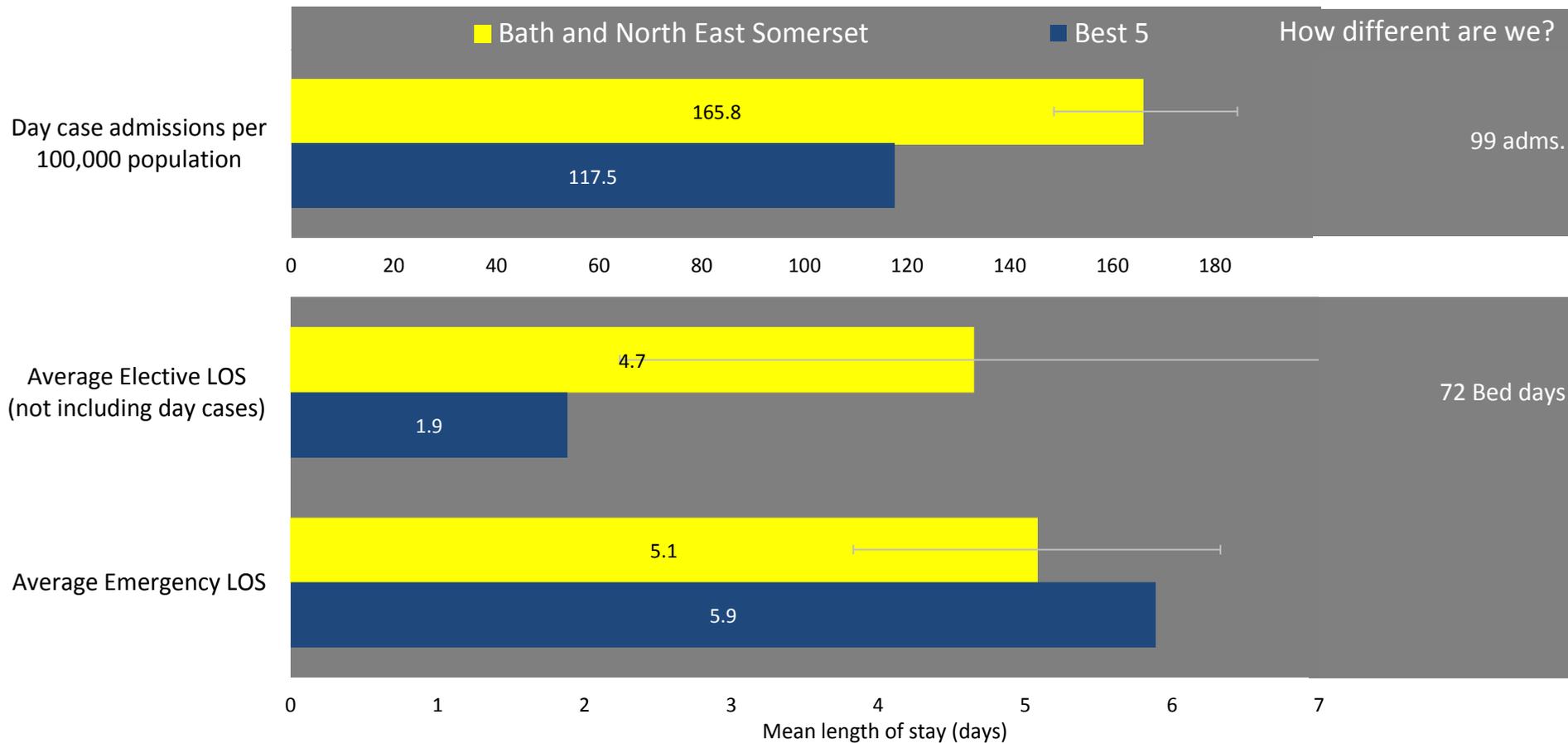
per 100,000 age-sex weighted population



95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK admissions - Rheumatoid and Inflammatory arthritis

per 100,000 age-sex weighted population



How different are we?

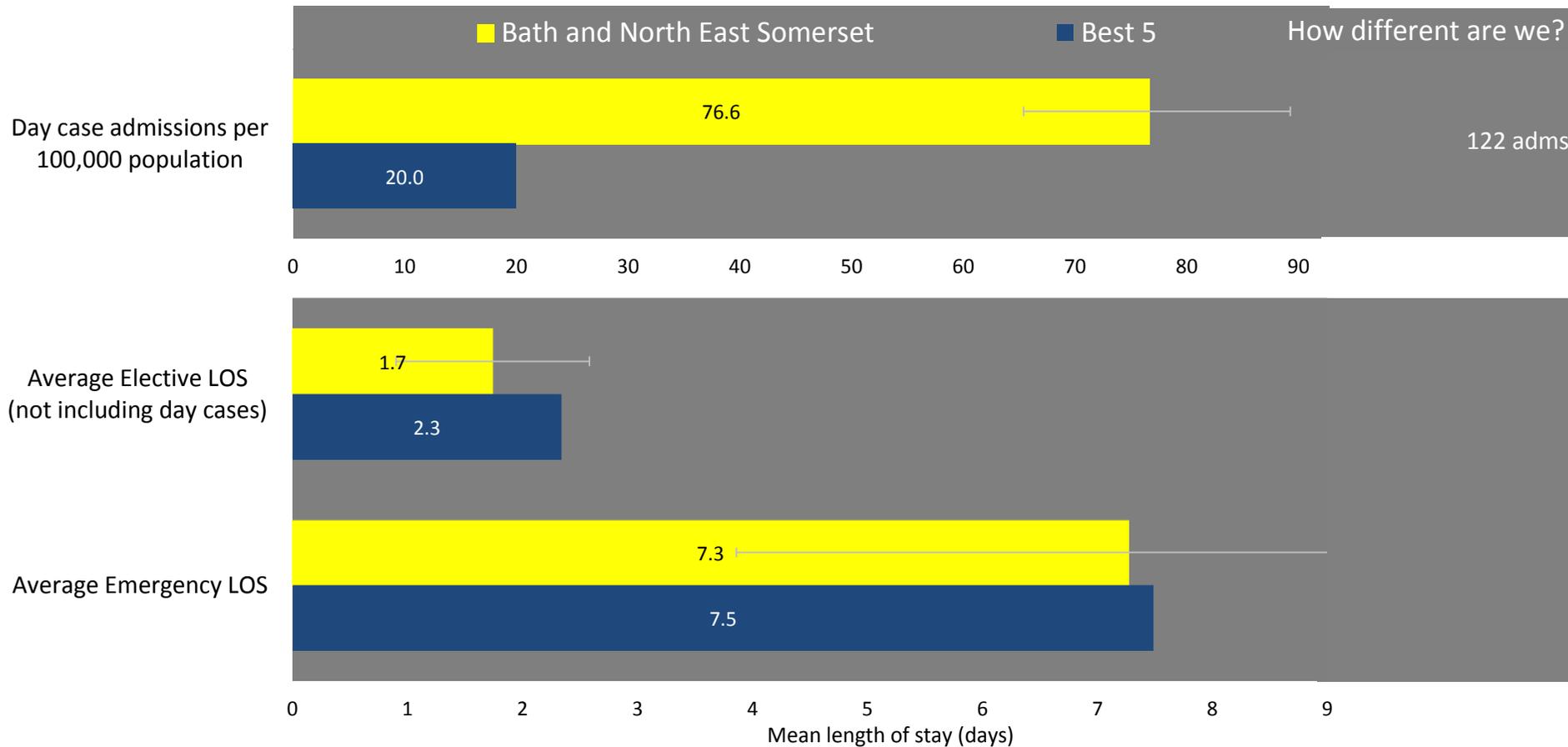
99 adms.

72 Bed days

95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

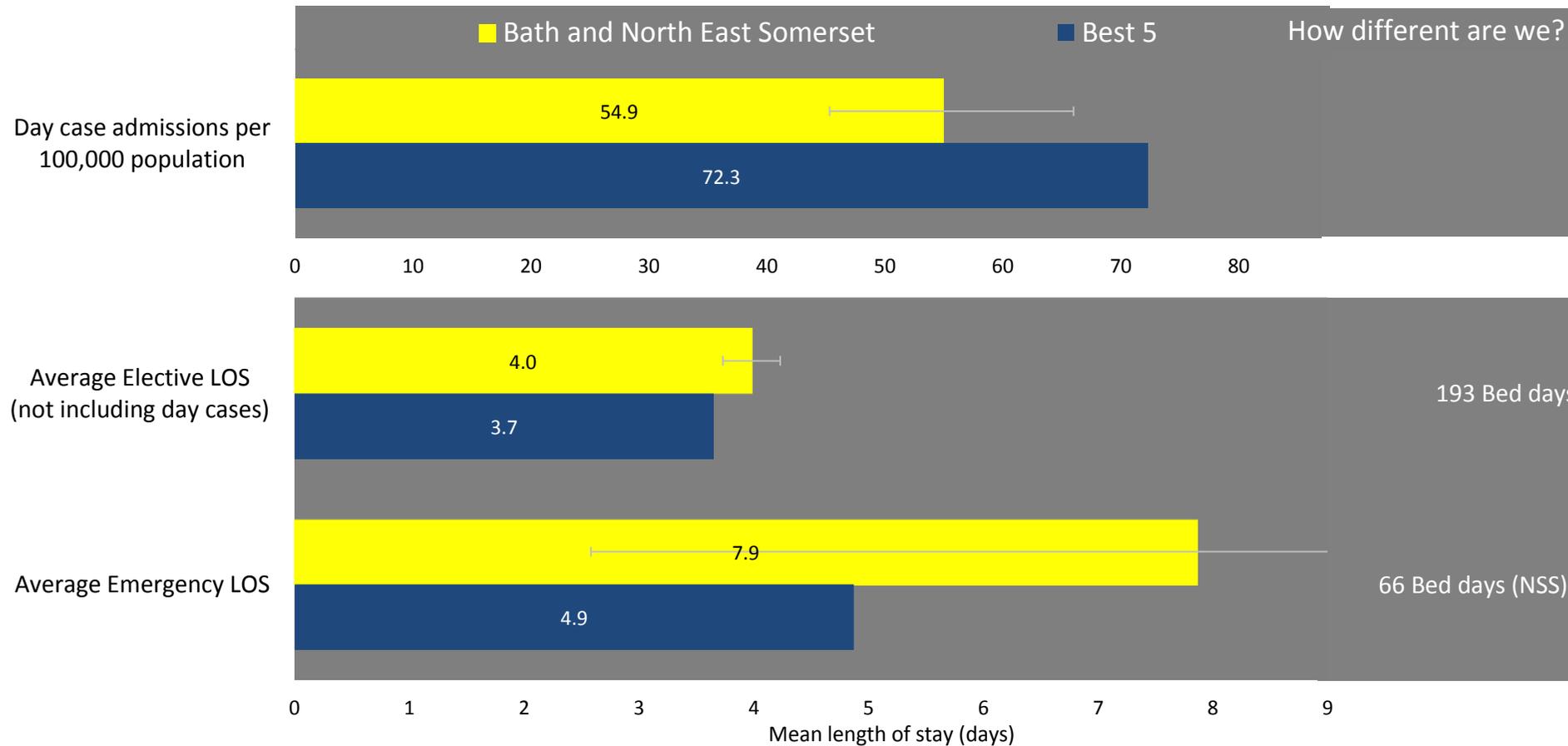
MSK admissions - Osteoporosis and fragility fractures

per 100,000 age-sex weighted population



95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

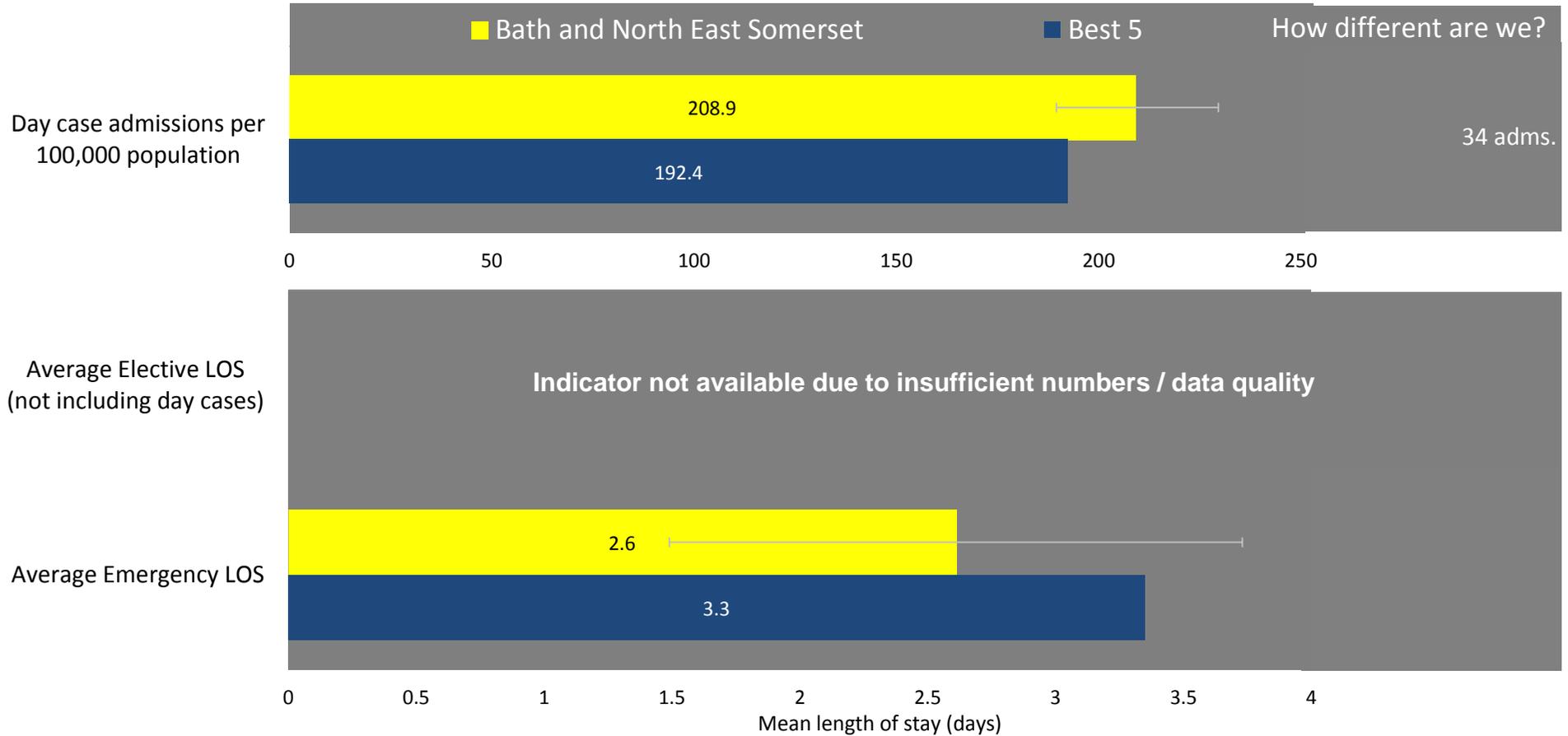
per 100,000 age-sex weighted population



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

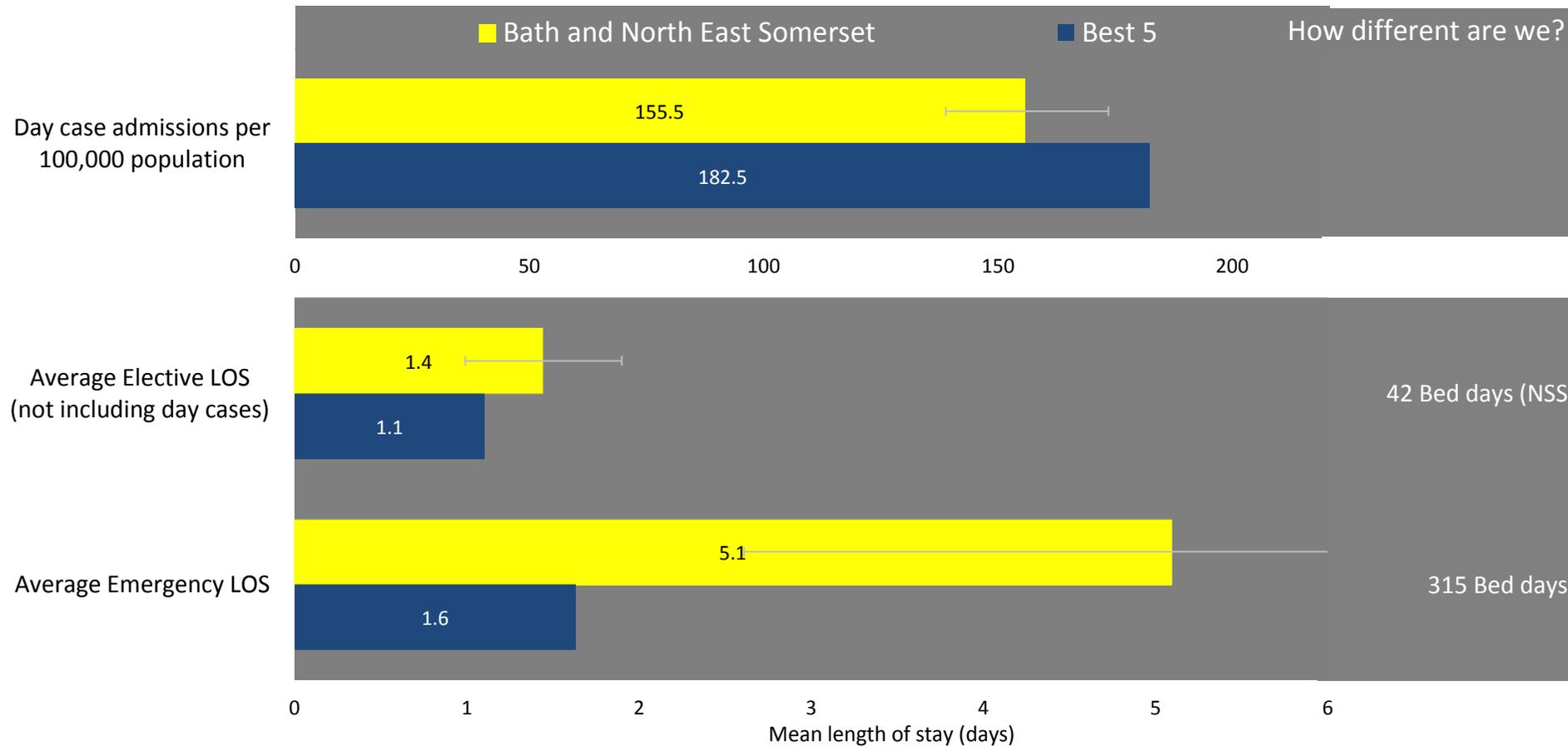
MSK admissions - Other joint disorders

per 100,000 age-sex weighted population



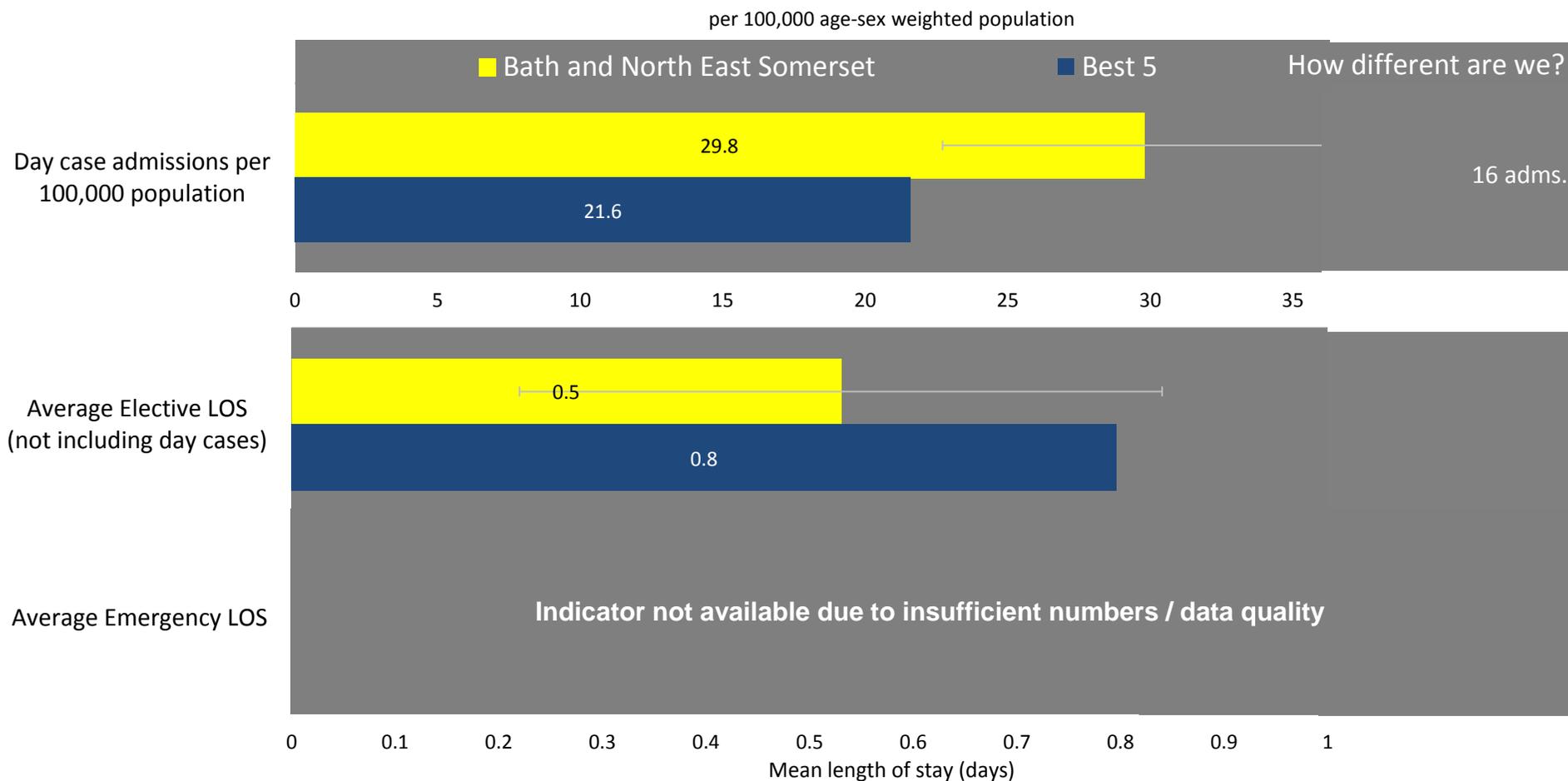
| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

per 100,000 age-sex weighted population



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

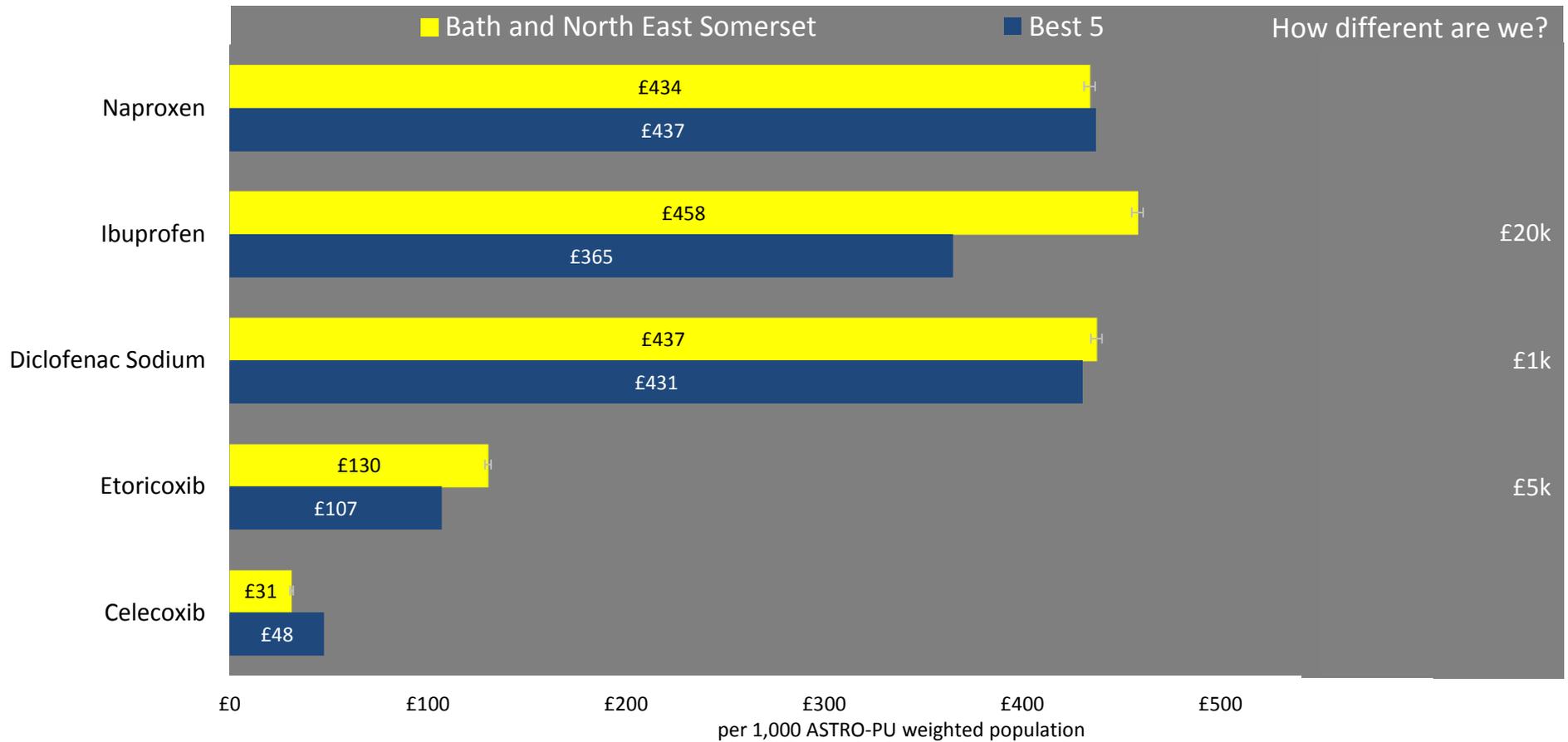
MSK admissions - Removal of fracture plates



95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Primary Care Prescribing Spend

Nonsteroidal anti-inflammatory drugs (NSAIDs) treating inflammation and pain



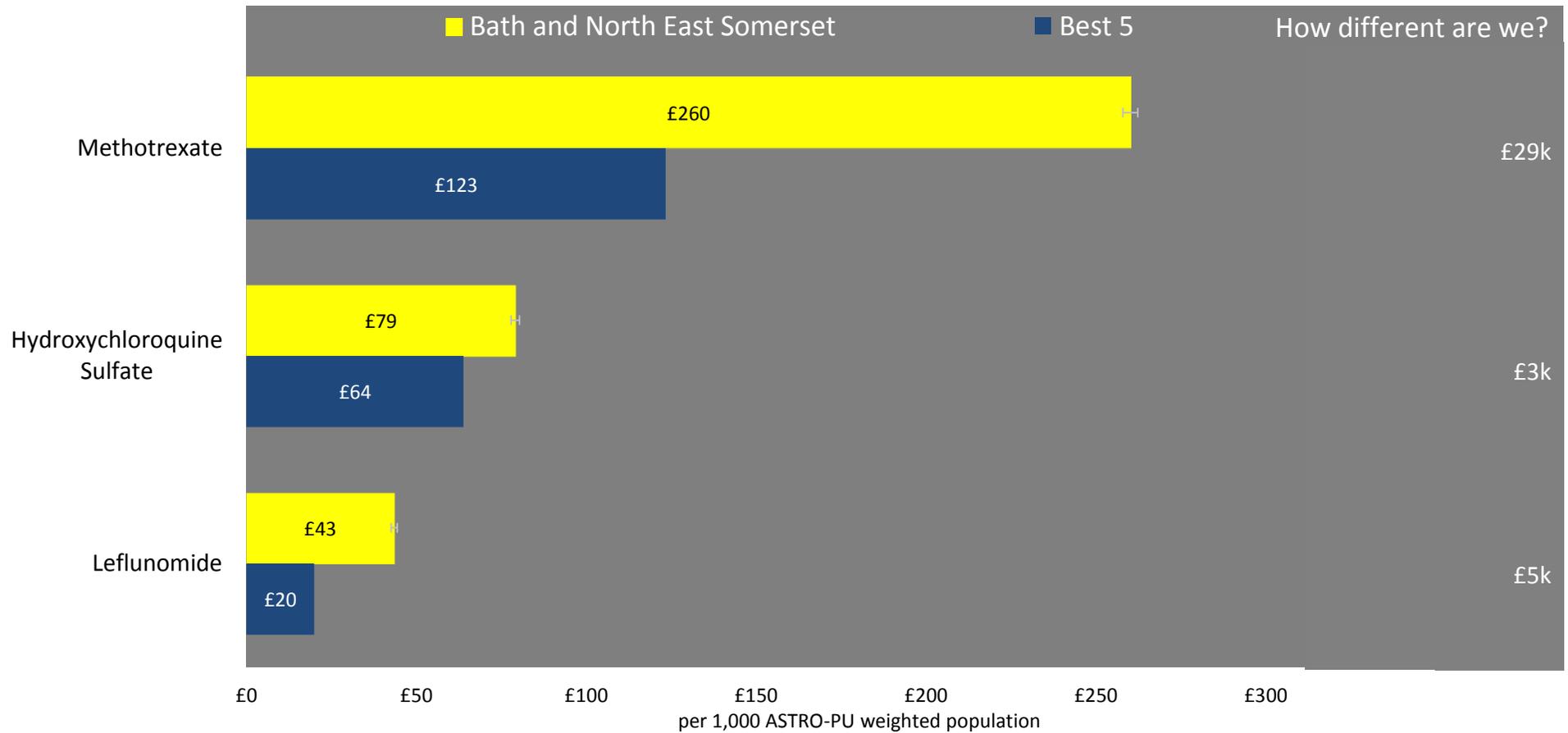
Medicines Optimisation Dashboard: <https://www.england.nhs.uk/ourwork/pe/mo-dash/>

Innovation Scorecard: <https://www.england.nhs.uk/ourwork/innovation/innovation-scorecard/>

95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Primary Care Prescribing Spend

Disease-modifying antirheumatic drugs (DMARDs) for inflammatory arthritis

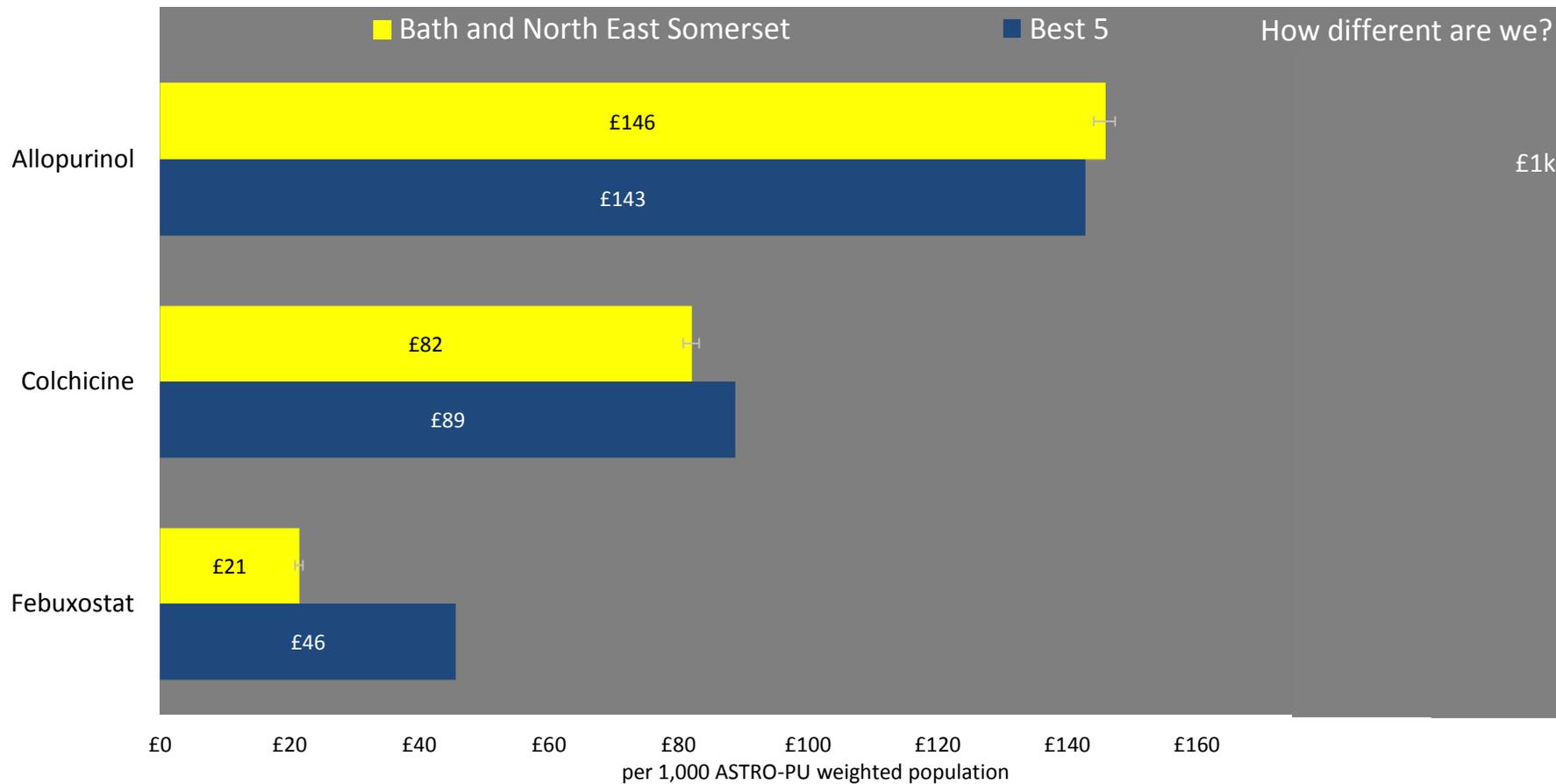


Medicines Optimisation Dashboard: <https://www.england.nhs.uk/ourwork/pe/mo-dash/>

Innovation Scorecard: <https://www.england.nhs.uk/ourwork/innovation/innovation-scorecard/>

95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Primary Care Prescribing Spend - Gout therapies



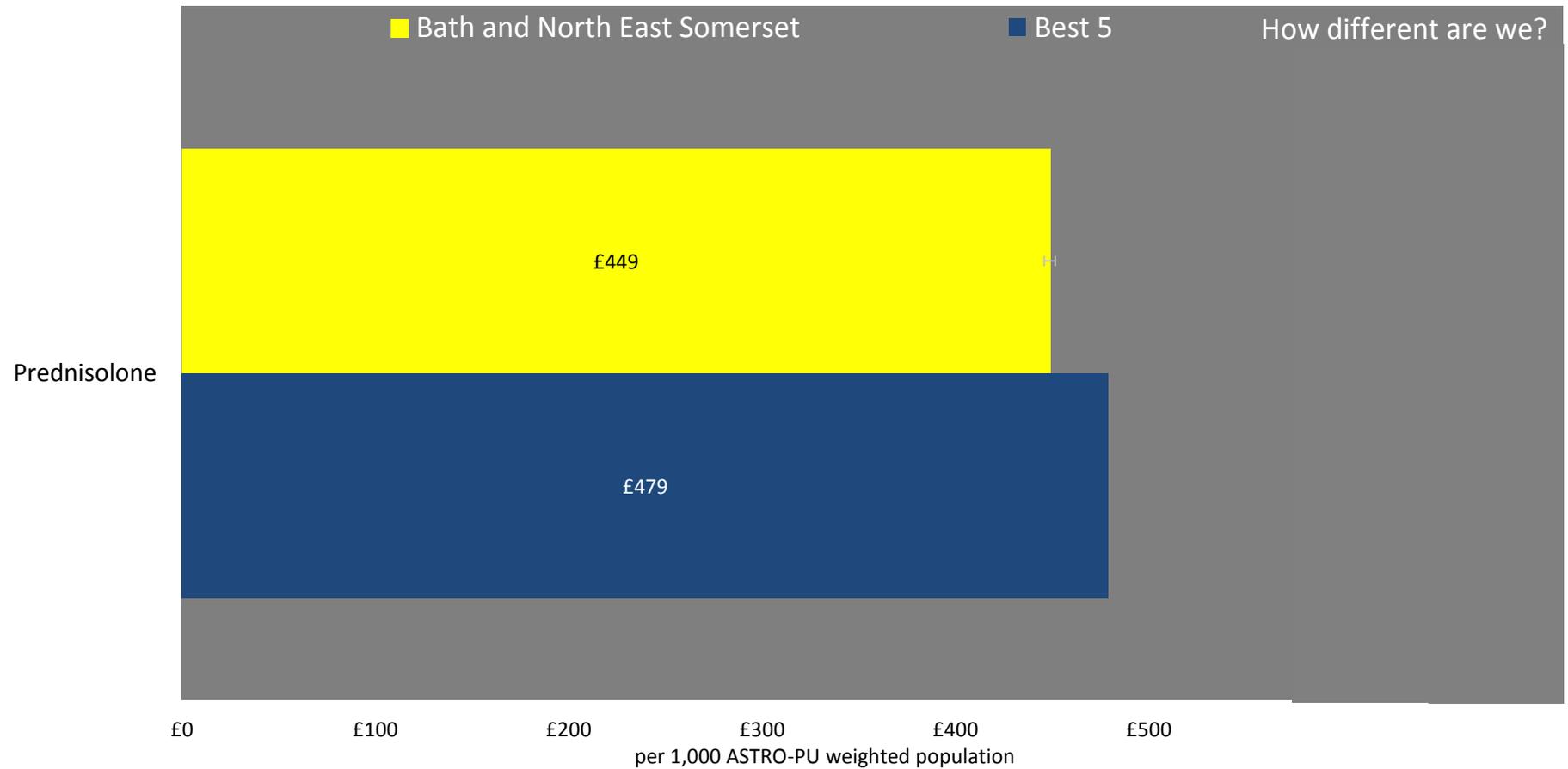
Medicines Optimisation Dashboard: <https://www.england.nhs.uk/ourwork/pe/mo-dash/>

Innovation Scorecard: <https://www.england.nhs.uk/ourwork/innovation/innovation-scorecard/>

95% confidence intervals

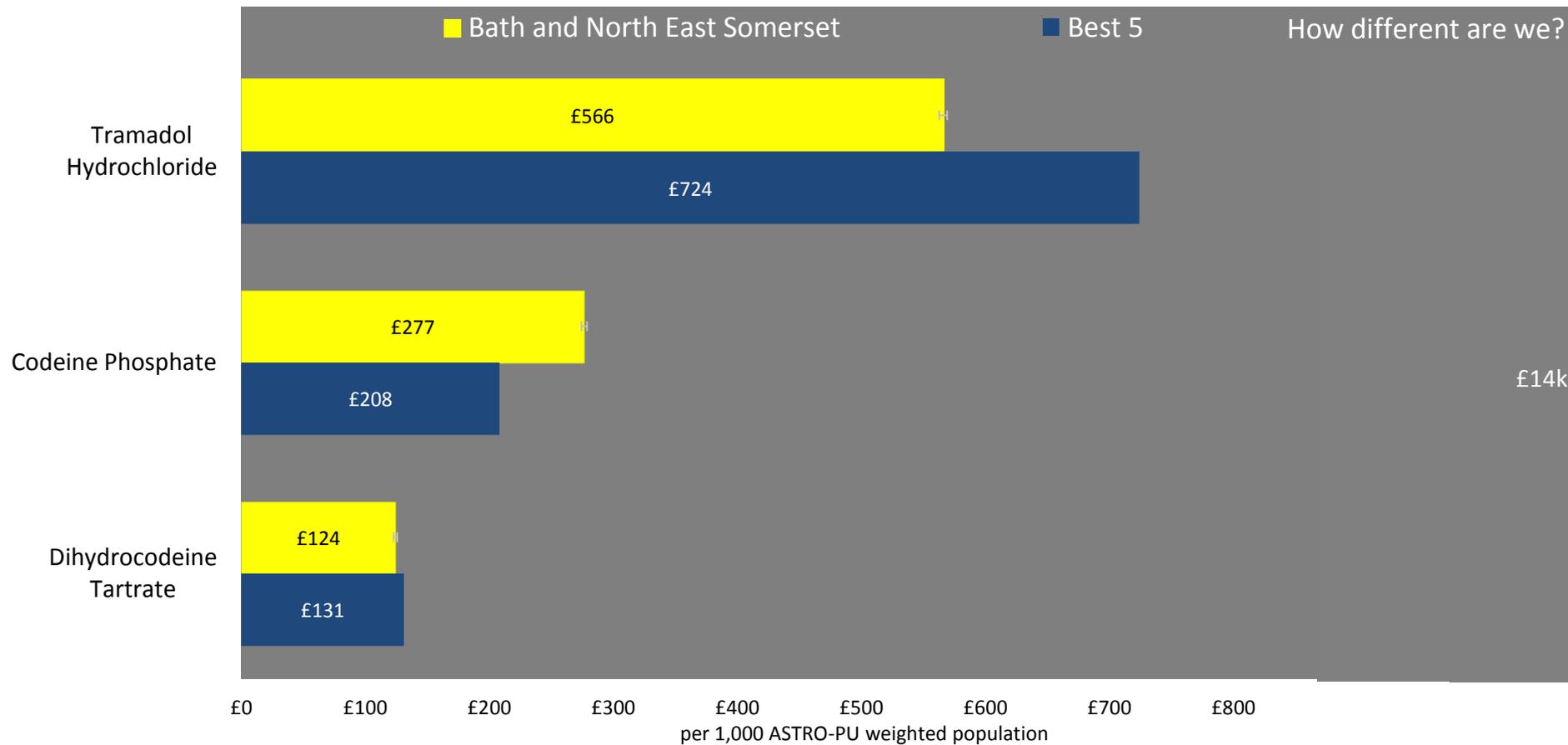
NSS Not statistically significant*

*Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators



95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

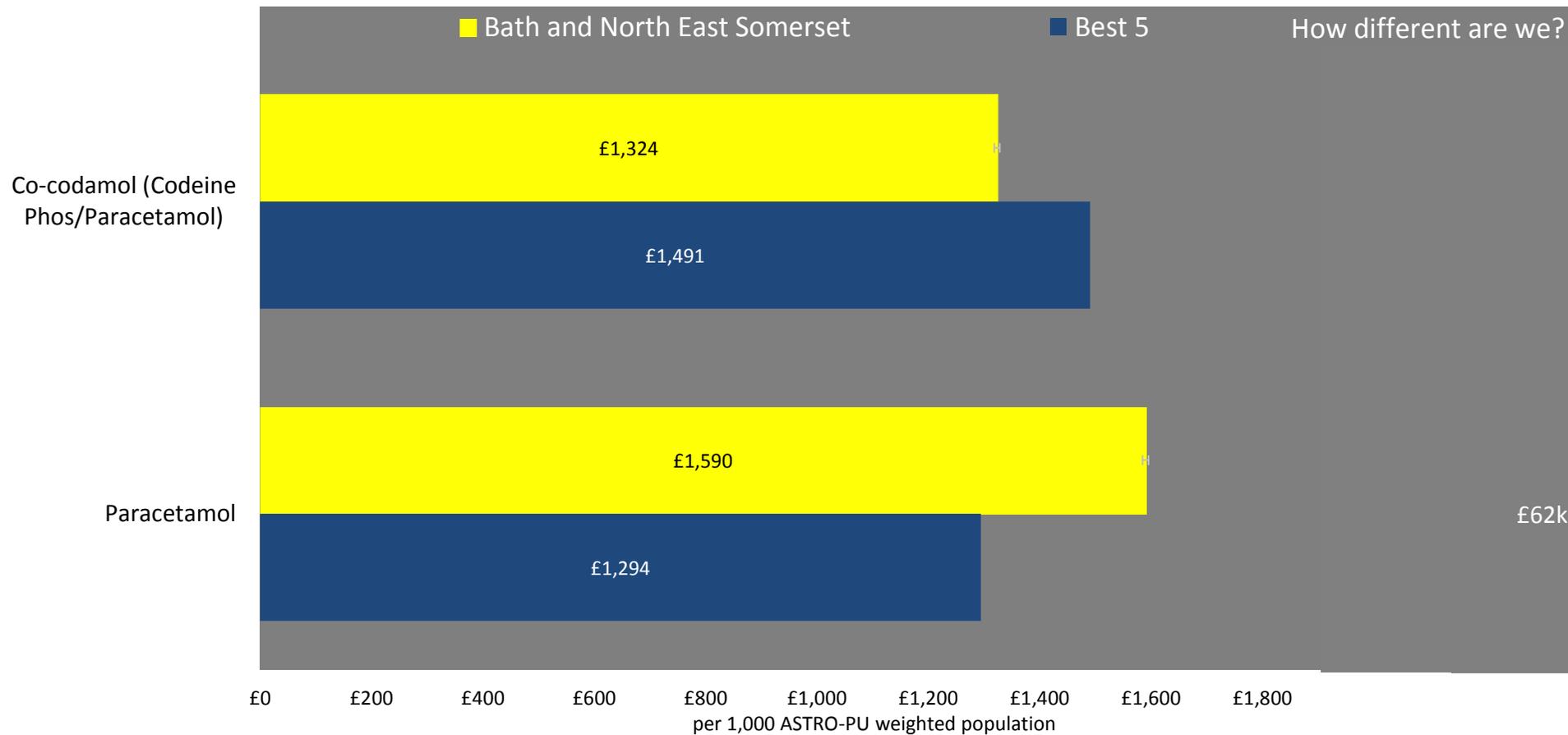
Primary Care Prescribing Spend - Opioid analgesics



£14k

| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

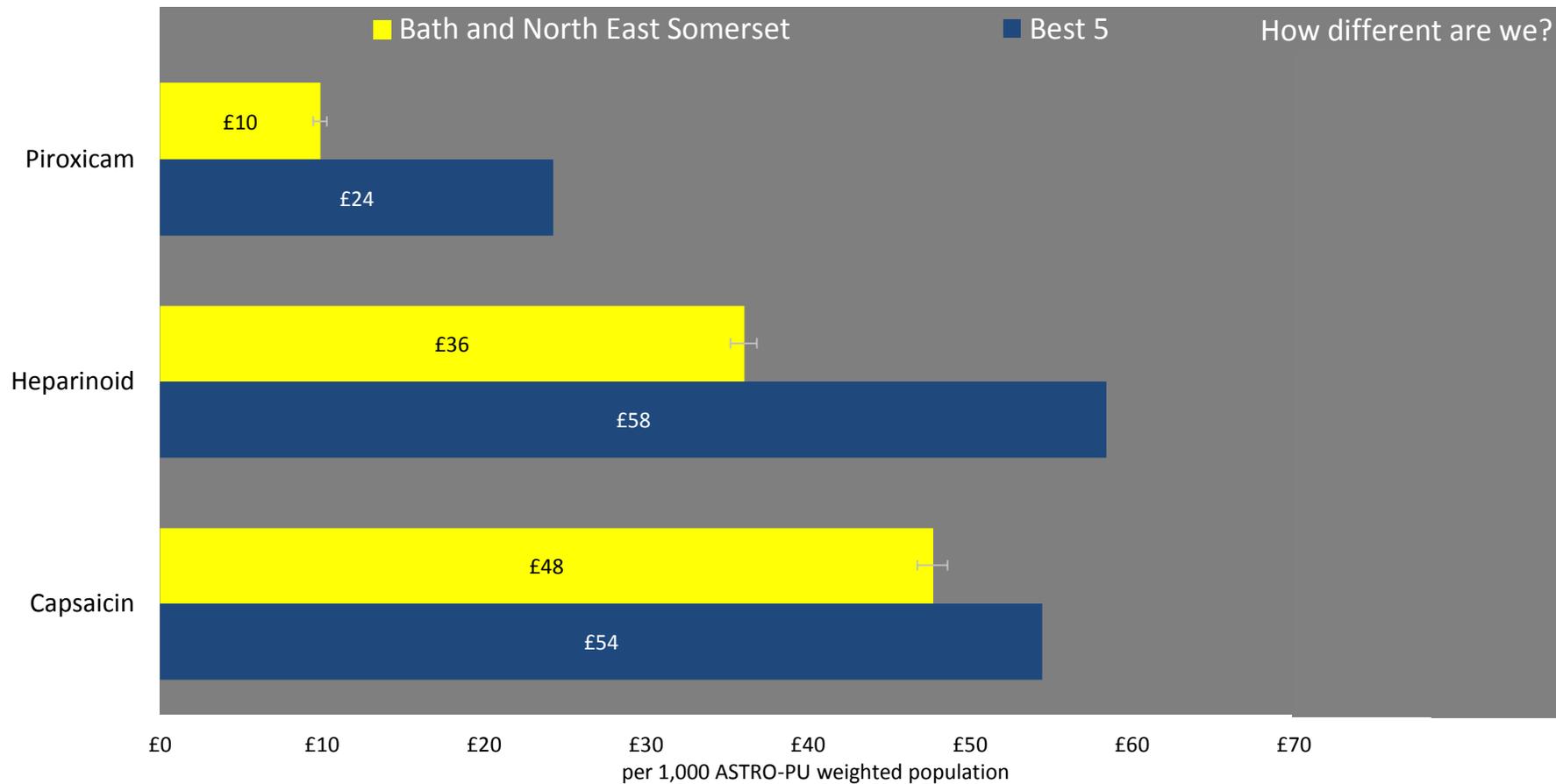
Primary Care Prescribing Spend - Non-Opioid analgesics



How different are we?

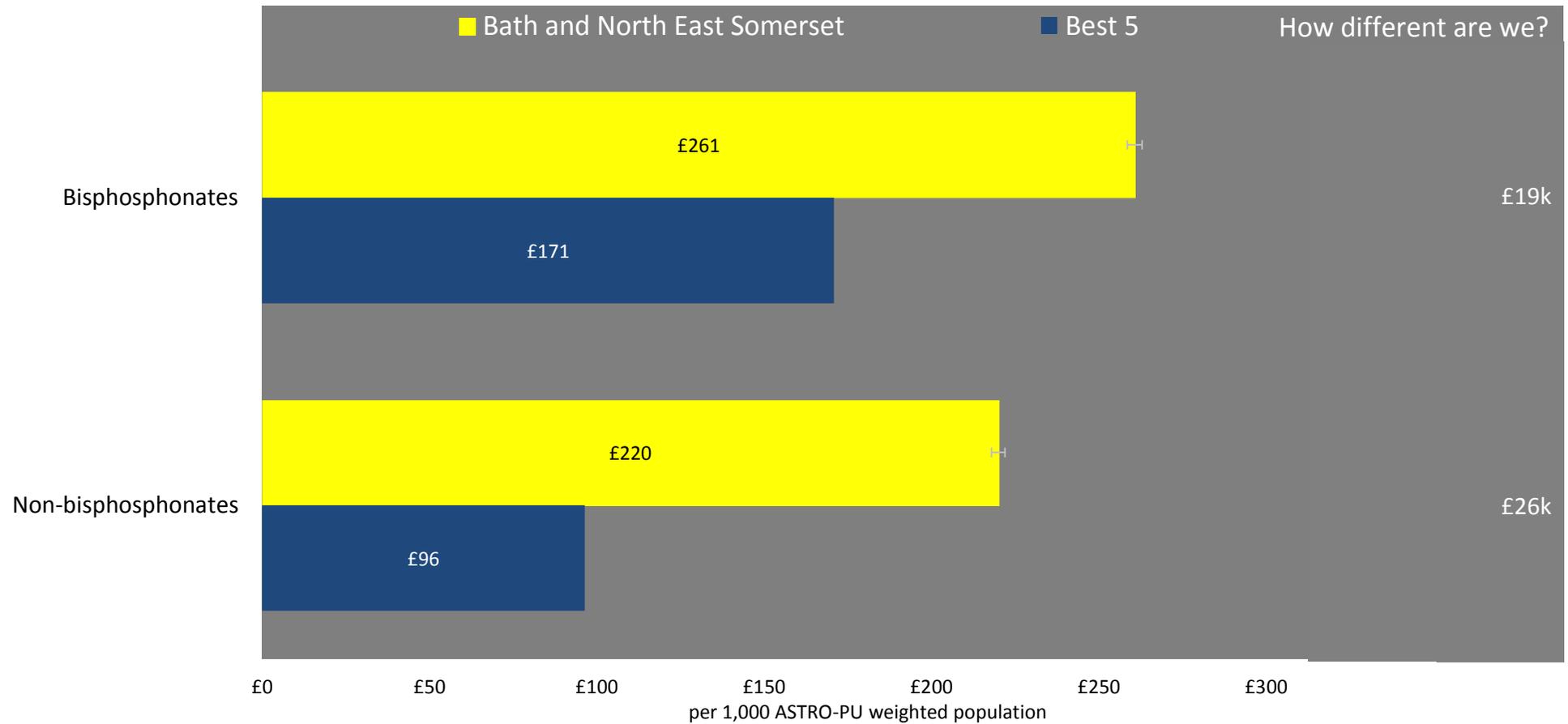
95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Primary Care Prescribing Spend - Other high spend MSK



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

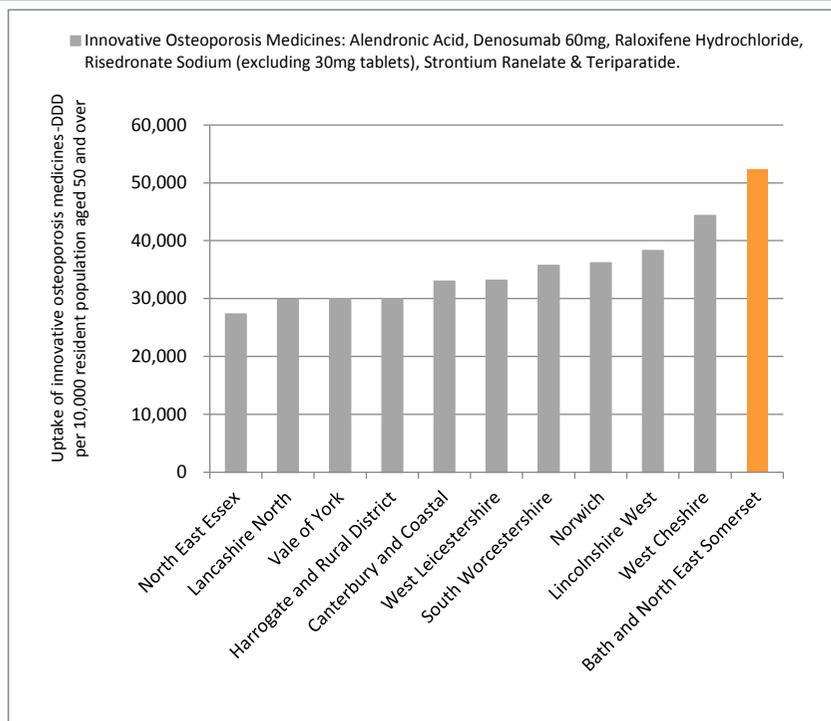
Primary Care Prescribing Spend - Osteoporosis drugs



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Osteoporosis Innovative Medicines

Does this CCG have appropriate uptake of innovative osteoporosis medicines?



The chart shows ranked variation in uptake of innovative osteoporosis medicines (TA160, TA161, TA204, TA265) for the CCG (orange bar) and its ten most similar CCGs (grey bars)

If there is relatively low uptake, taking into consideration relative cost effectiveness of these medicines and other interventions, might there be a case for higher uptake?

If there is relatively high uptake, taking into consideration relative cost effectiveness of these medicines and other interventions might there be a case for lower uptake?

Uptake of medicines predominantly prescribed in primary care (Defined Daily Doses)

73

	Alendronic Acid	Denosumab 60mg ¹	Raloxifene Hydrochloride sodium salt	Sodium (exclude 30mg tabs)	Strontium Ranelate	Teriparatide ²	Total
Bath and North East Somerset	45,114	1,220	165	5,720	163	0	52,382
Canterbury and Coastal	28,864	1,260	244	2,343	325	0	33,036
Vale of York	26,648	363	344	2,533	132	0	30,020
West Cheshire	39,232	580	738	3,636	170	0	44,356
Lancashire North	26,761	615	338	2,058	158	0	29,930
Lincolnshire West	34,590	20	243	3,299	176	0	38,329
Norwich	33,246	678	333	1,619	326	0	36,201
North East Essex	24,589	389	178	1,964	228	7	27,355
West Leicestershire	29,973	225	407	2,292	284	0	33,181
Harrogate and Rural District	24,288	2,791	348	2,161	451	0	30,039
South Worcestershire	31,860	541	340	2,668	328	0	35,737
Mean of 10 nearest neighbours	30,005	746	351	2,457	258	1	33,818

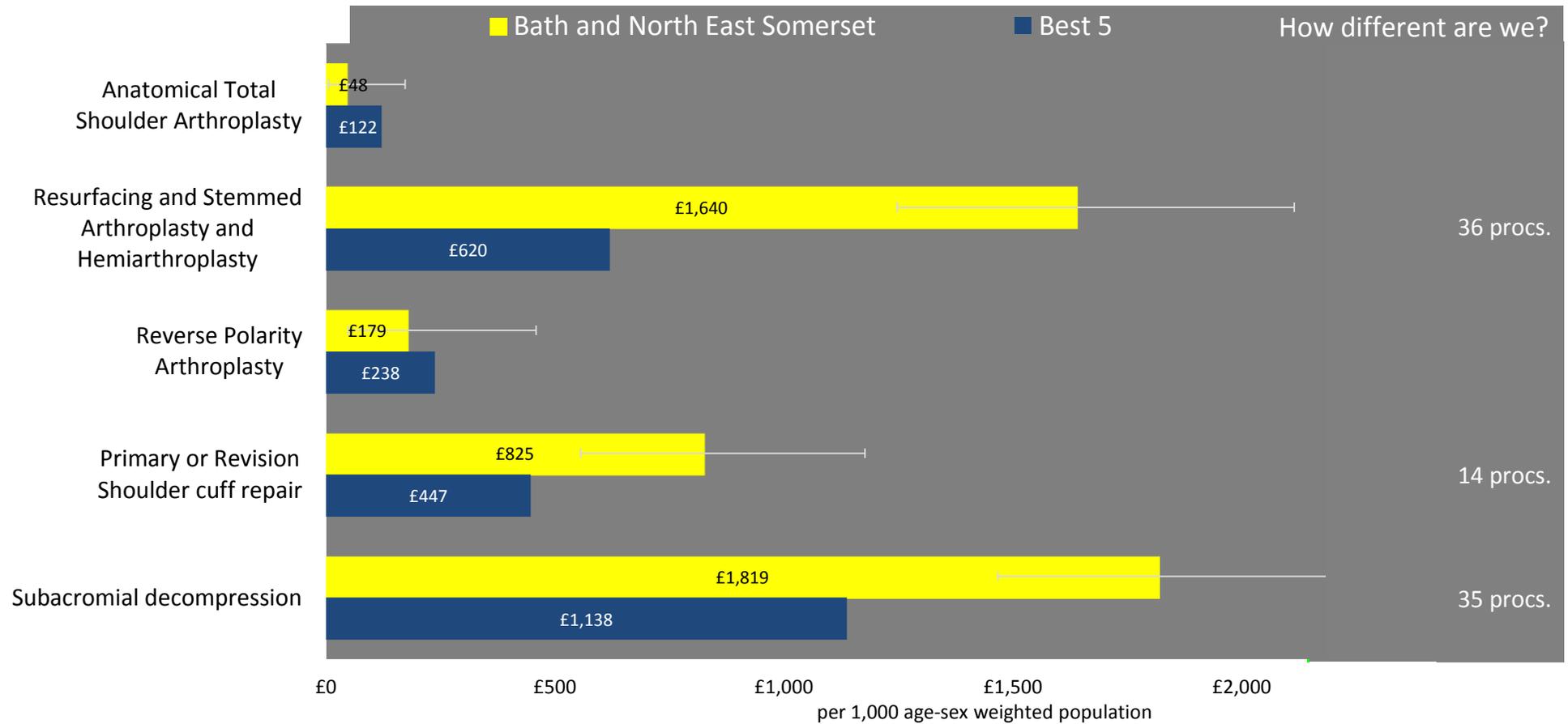
1. Nationally as much Denosumab is prescribed in secondary care as primary care
2. Teriparatide is predominantly prescribed in secondary care

Note: Although uptake data from the innovation scorecard have not been adjusted for demography & disease prevalence, the chart above compares the 10 nearest neighbours. Uptake data is from Q2 2015-2016.

Sources: Innovation Scorecard May 2016, Prescribing and Medicines Team, HSCIC using data from ePACT (NHS Business Services Authority); CCG Resident Population: ONS. Re-used with the permission of the HSCIC. All rights reserved.

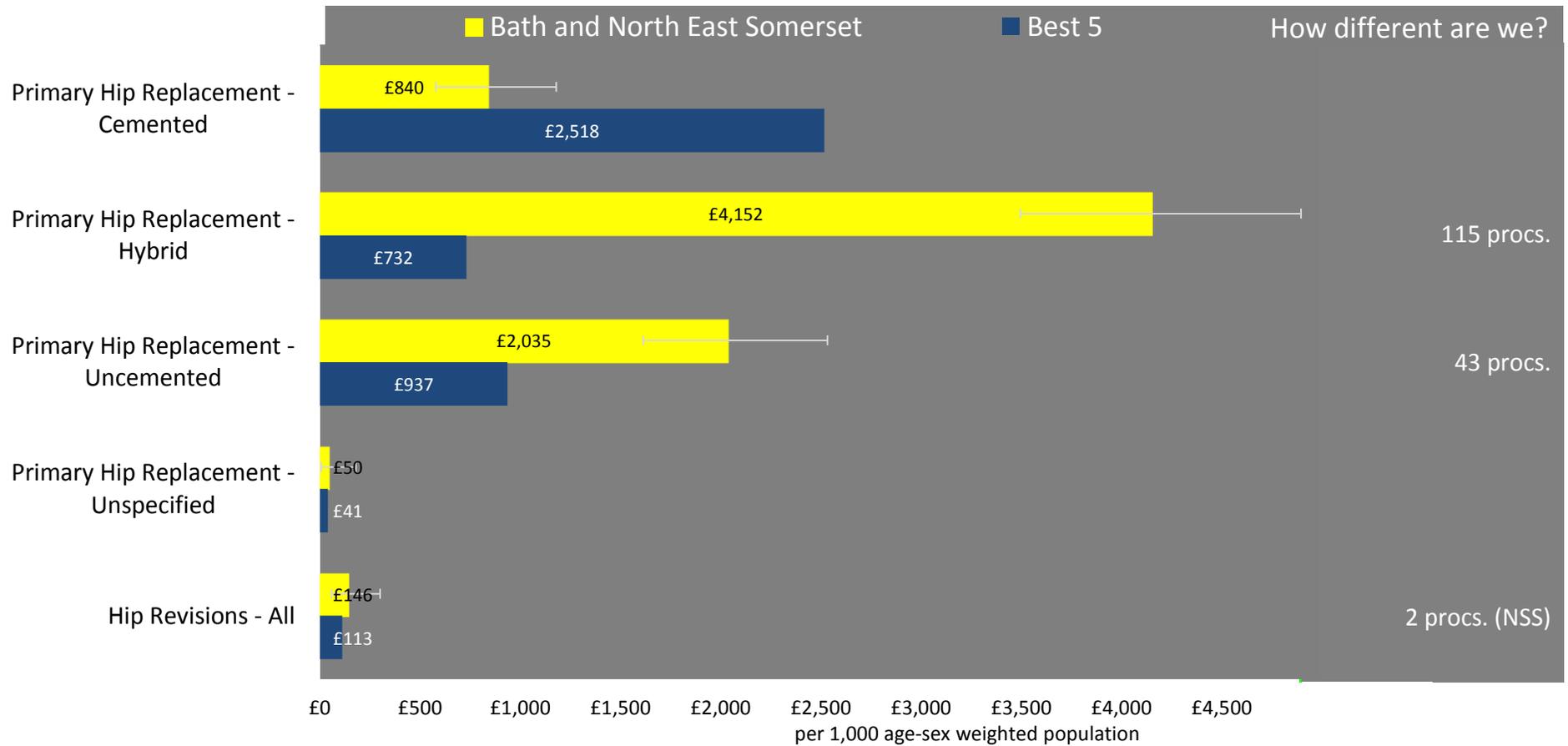
<http://www.hscic.gov.uk/catalogue/PUB19259>

<https://www.england.nhs.uk/ourwork/innovation/innovation-scorecard/>



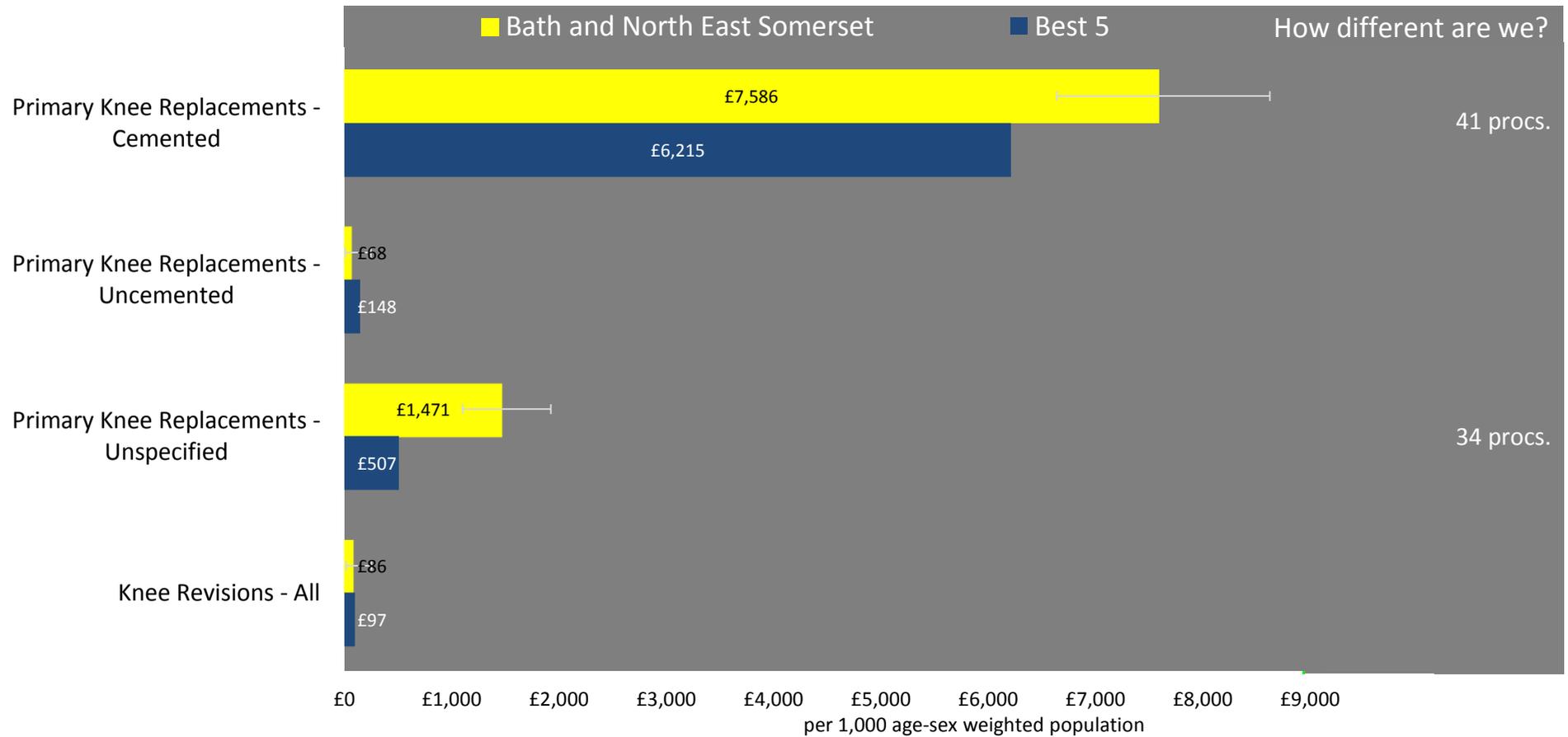
| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK Procedures - Hip replacements



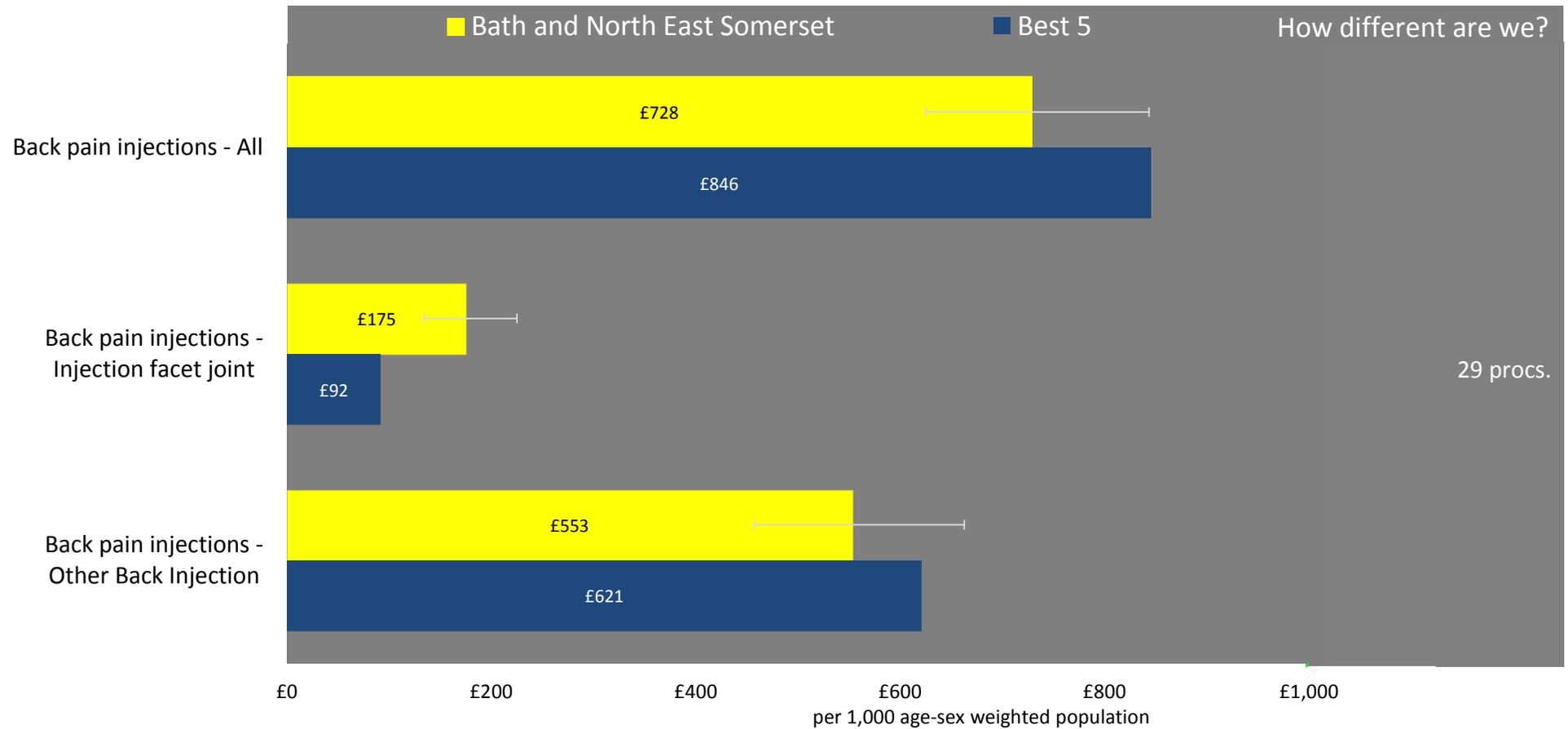
| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK Procedures - Knee replacements



 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK Procedures - Back and radicular pain

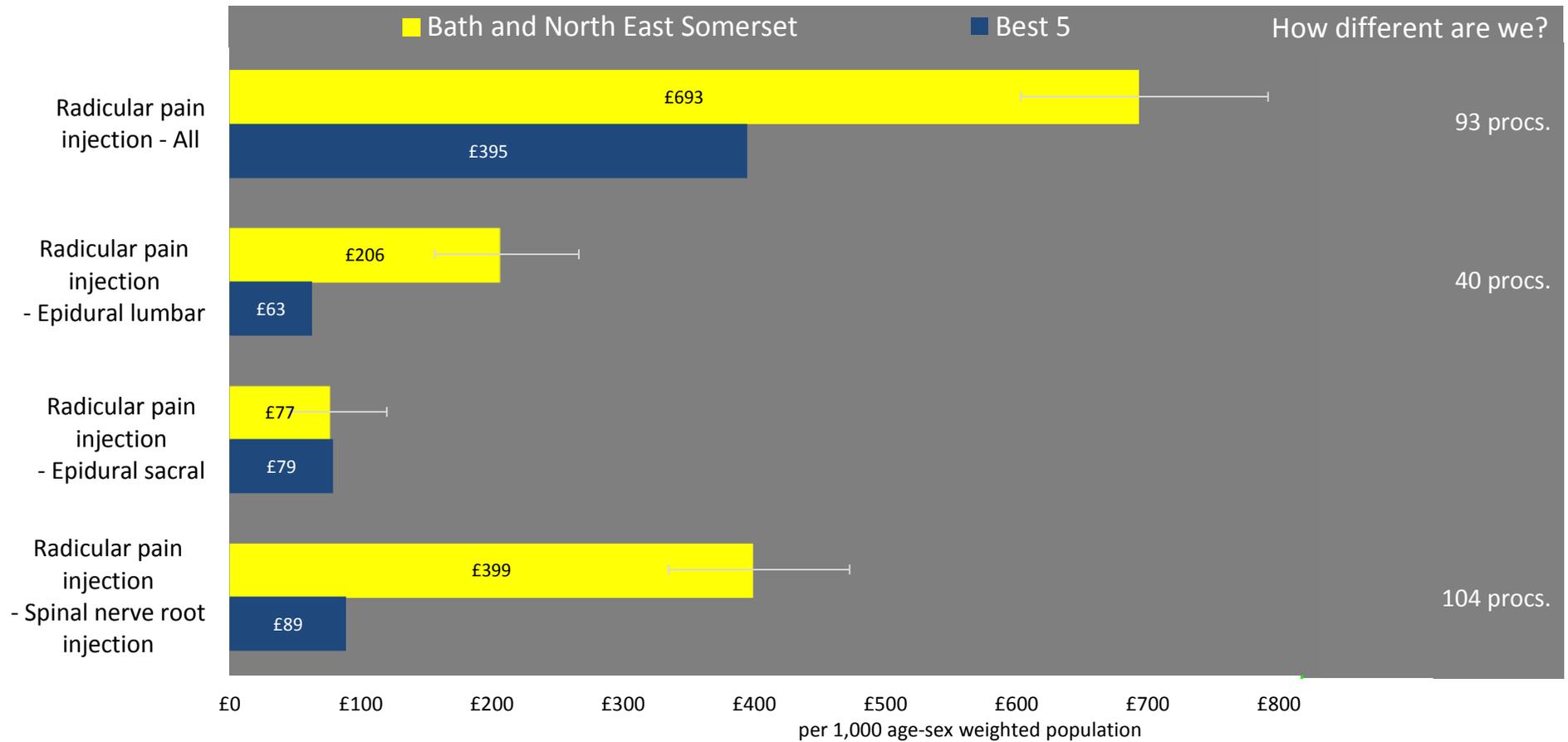


How different are we?

29 procs.

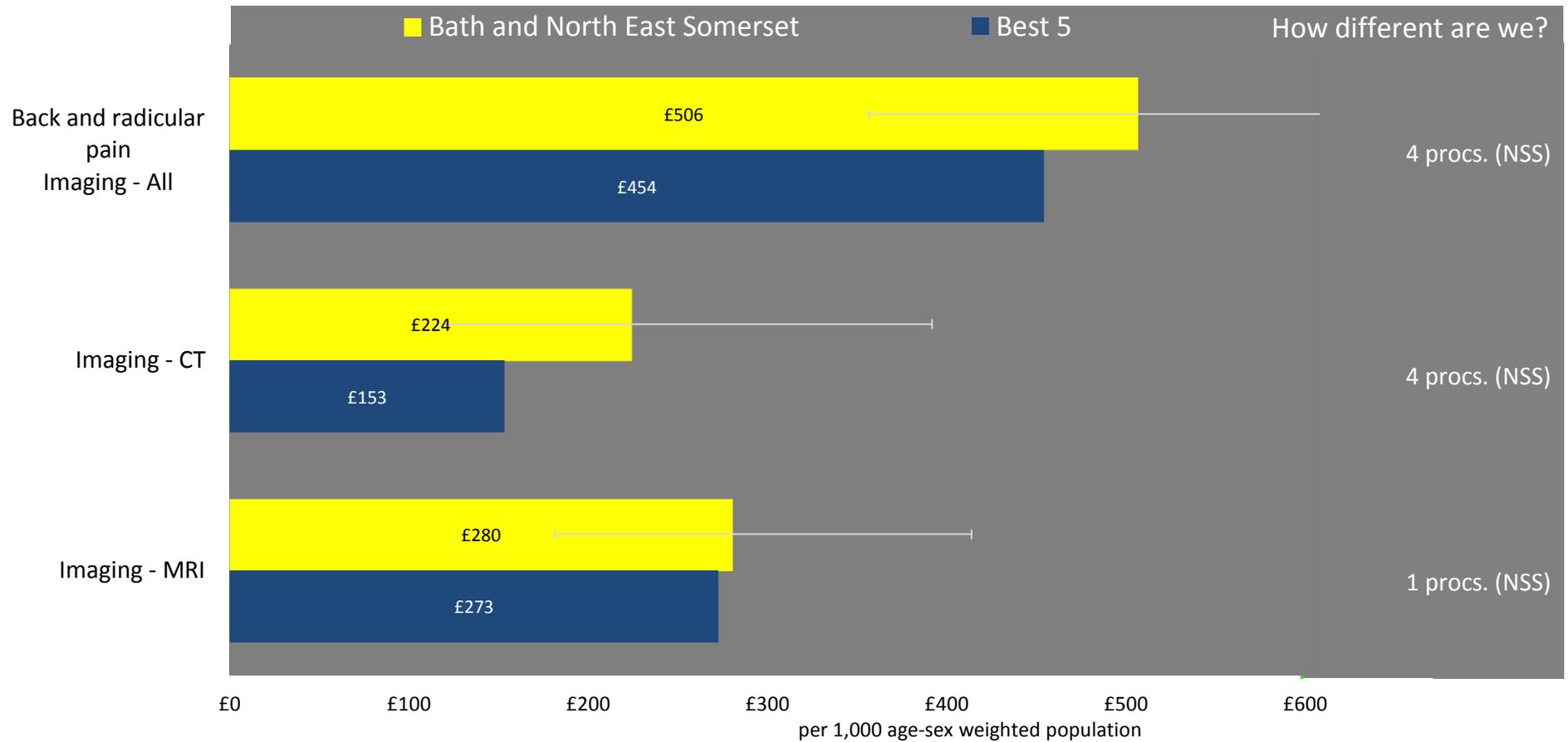
 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK Procedures - Back and radicular pain continued



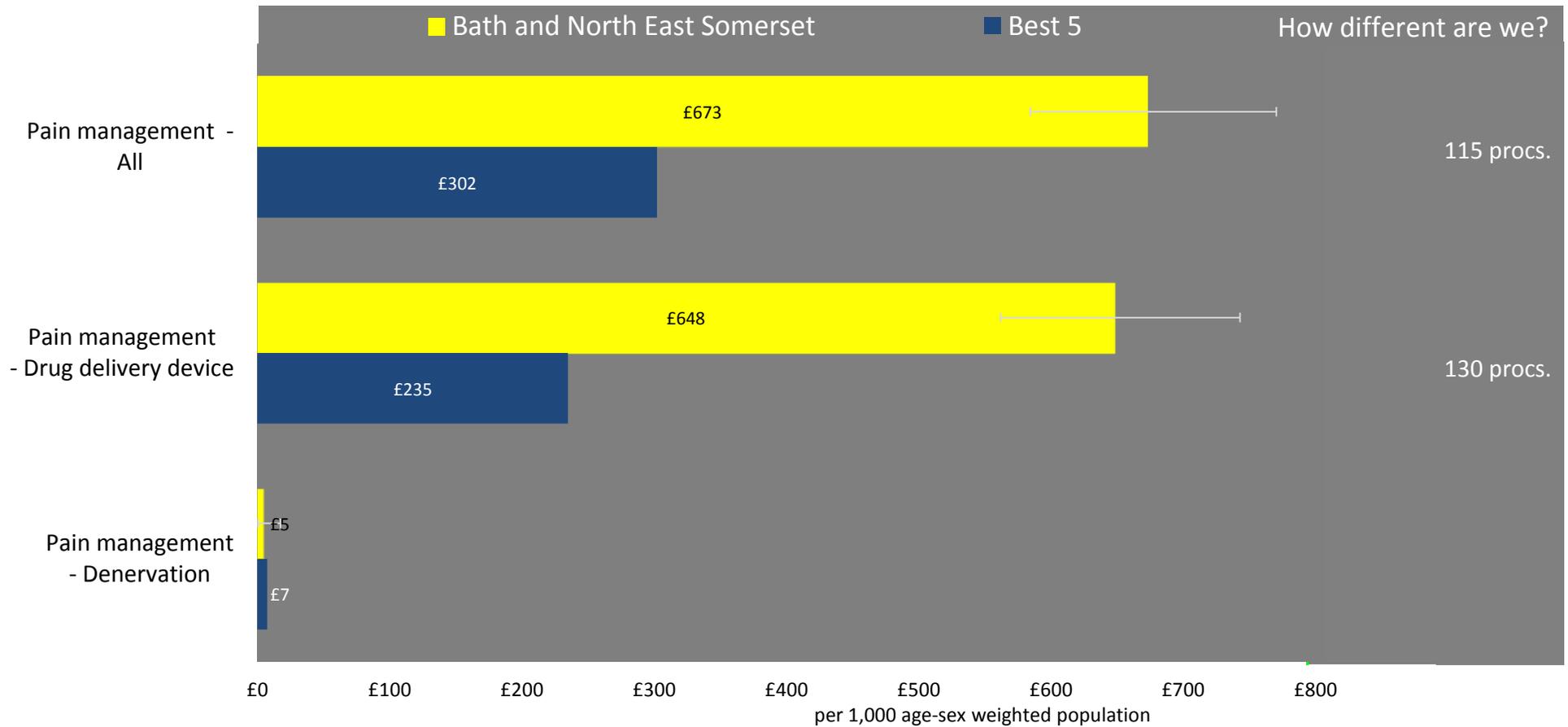
↓ 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK Procedures - Back and radicular pain continued



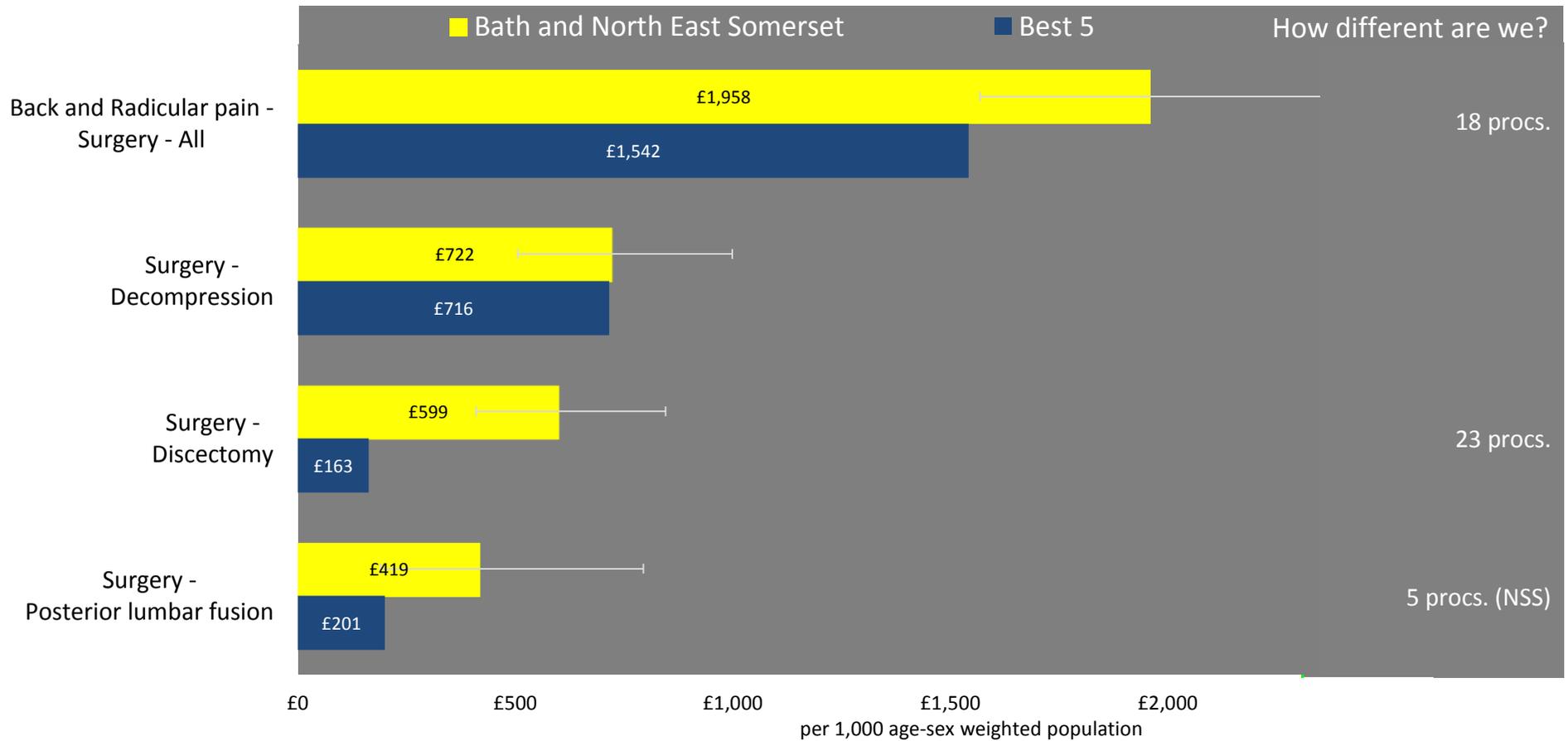
↓ 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK Procedures - Back and radicular pain continued

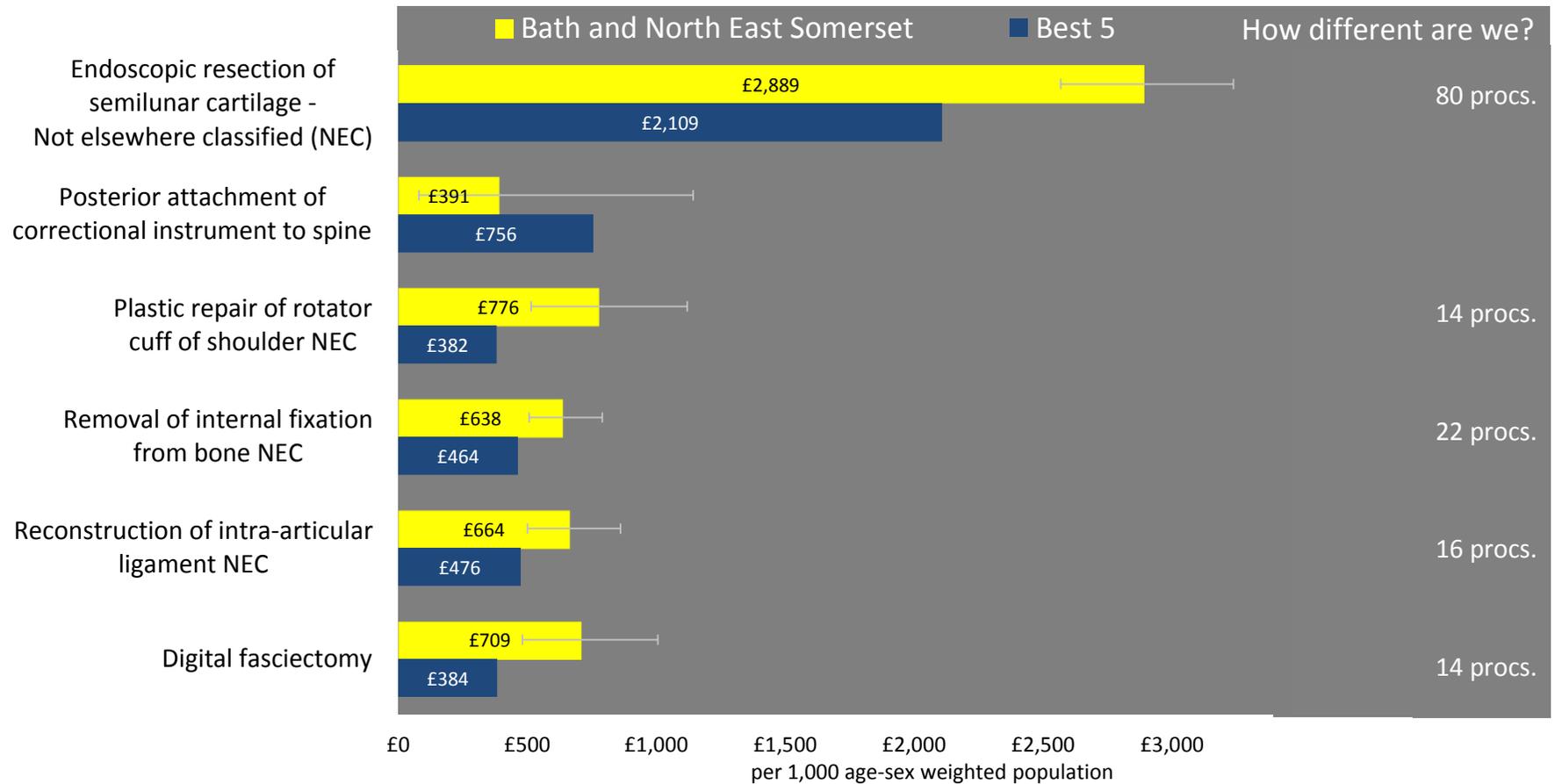


↓ 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK Procedures - Back and radicular pain continued

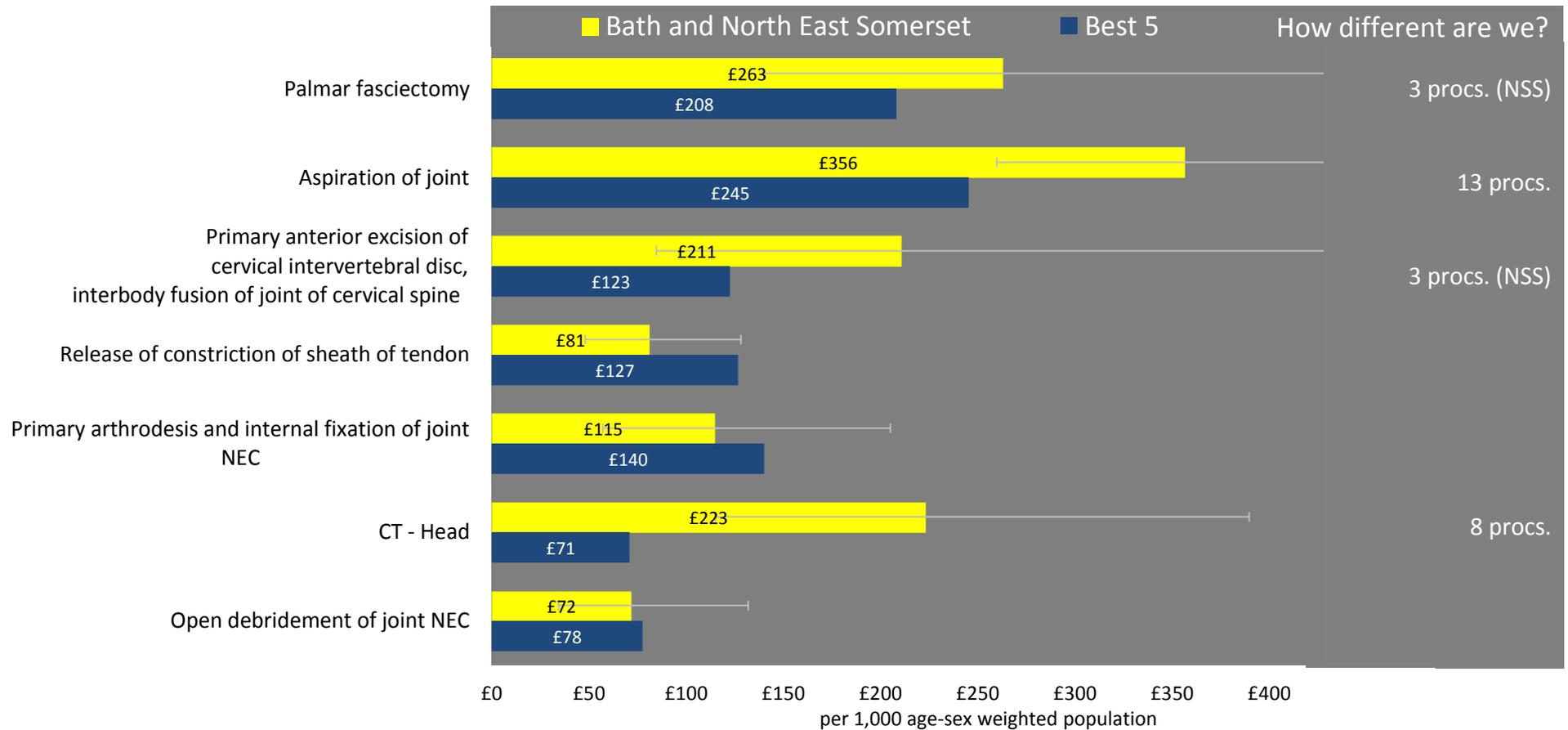


MSK Procedures - Other high spend MSK

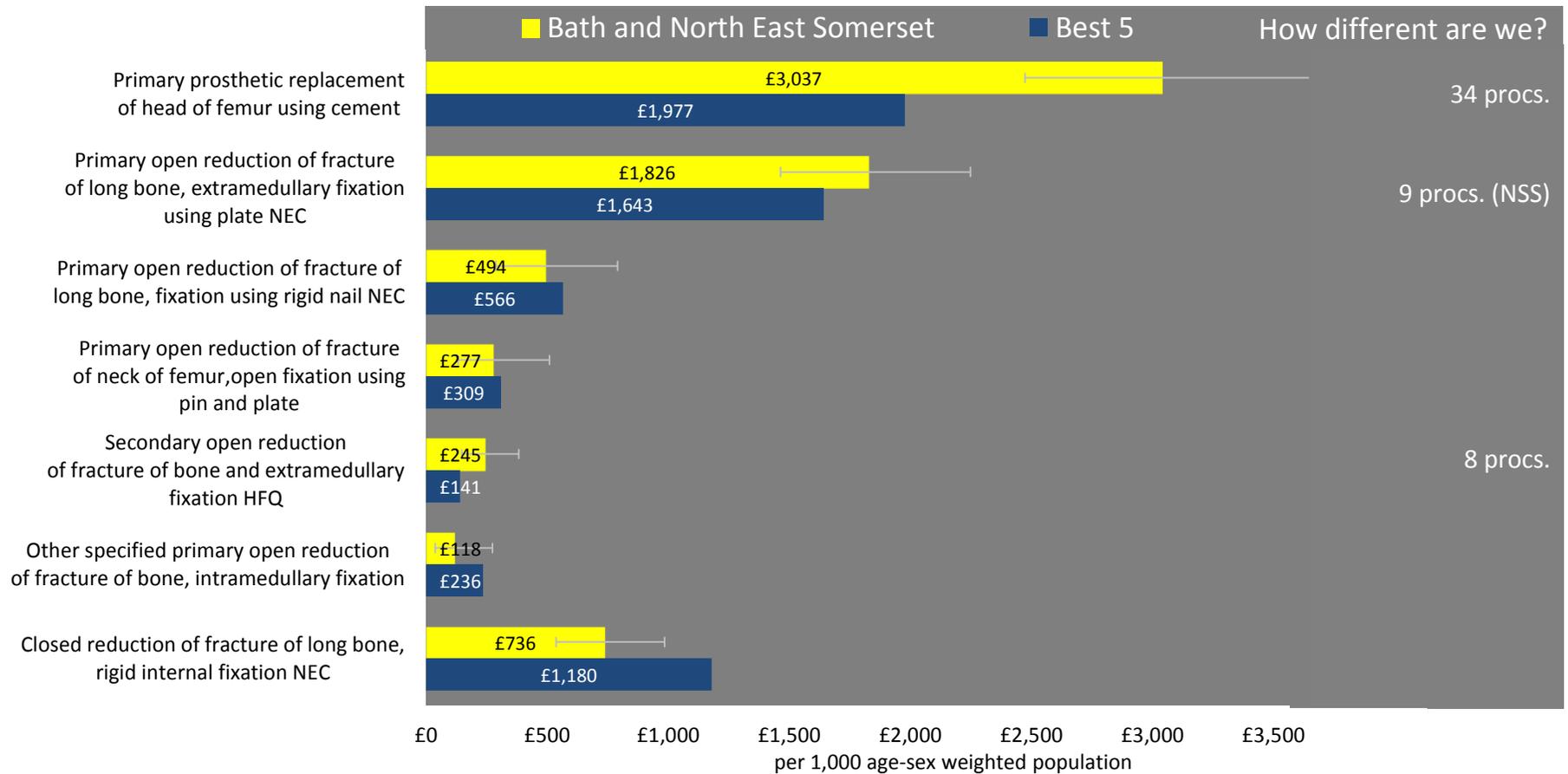


95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

MSK Procedures - Other high spend MSK continued

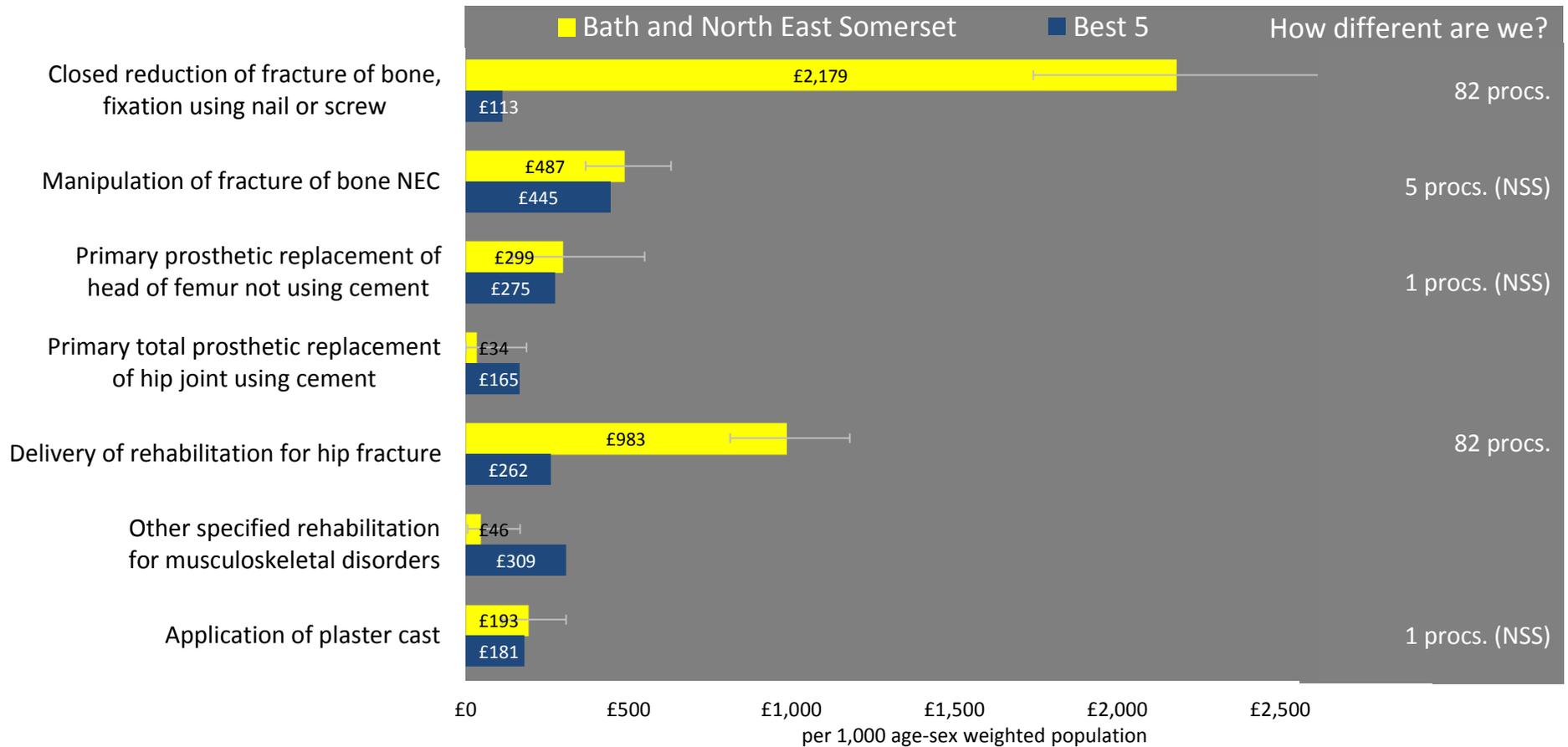


 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

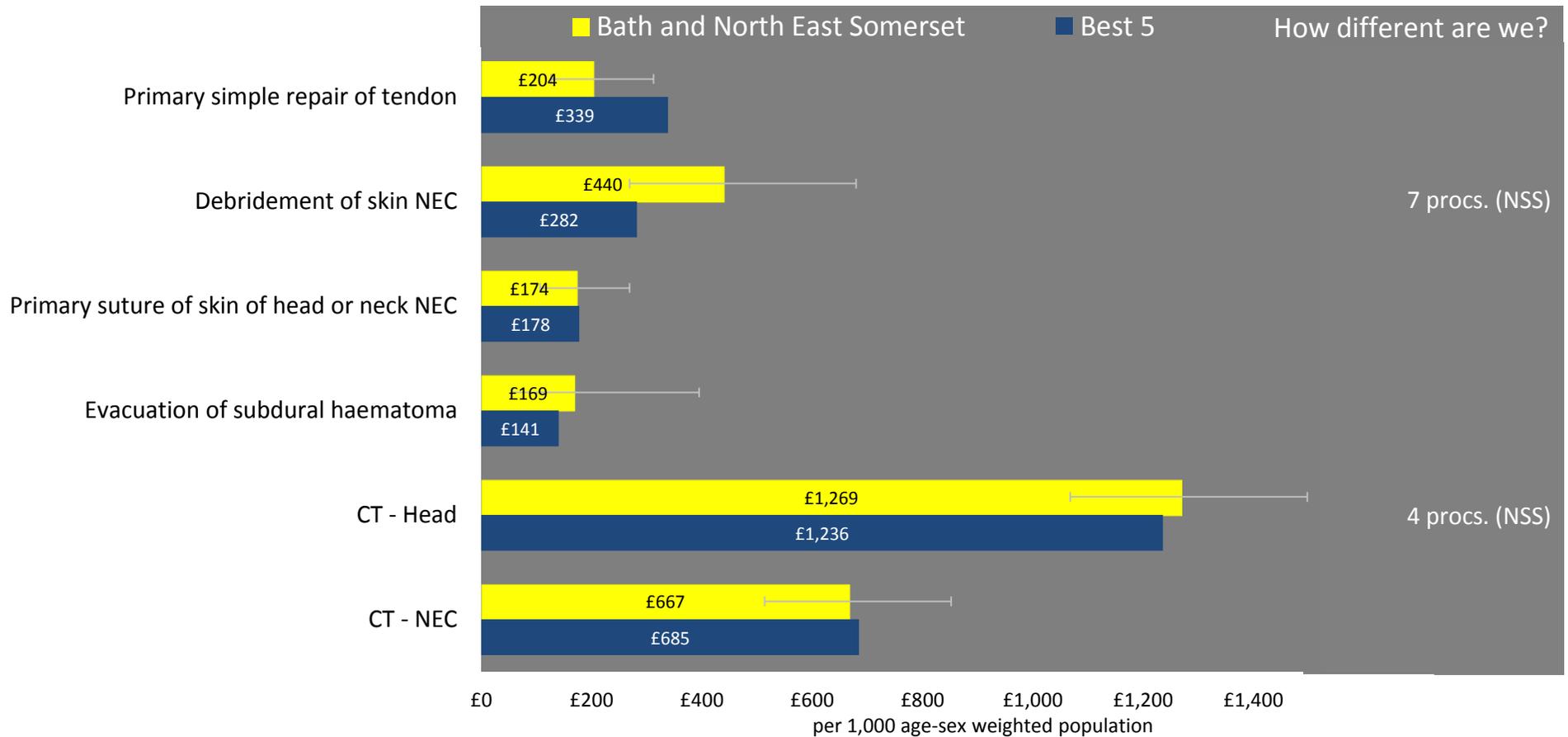


↓ 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

Trauma and injuries- Procedures continued



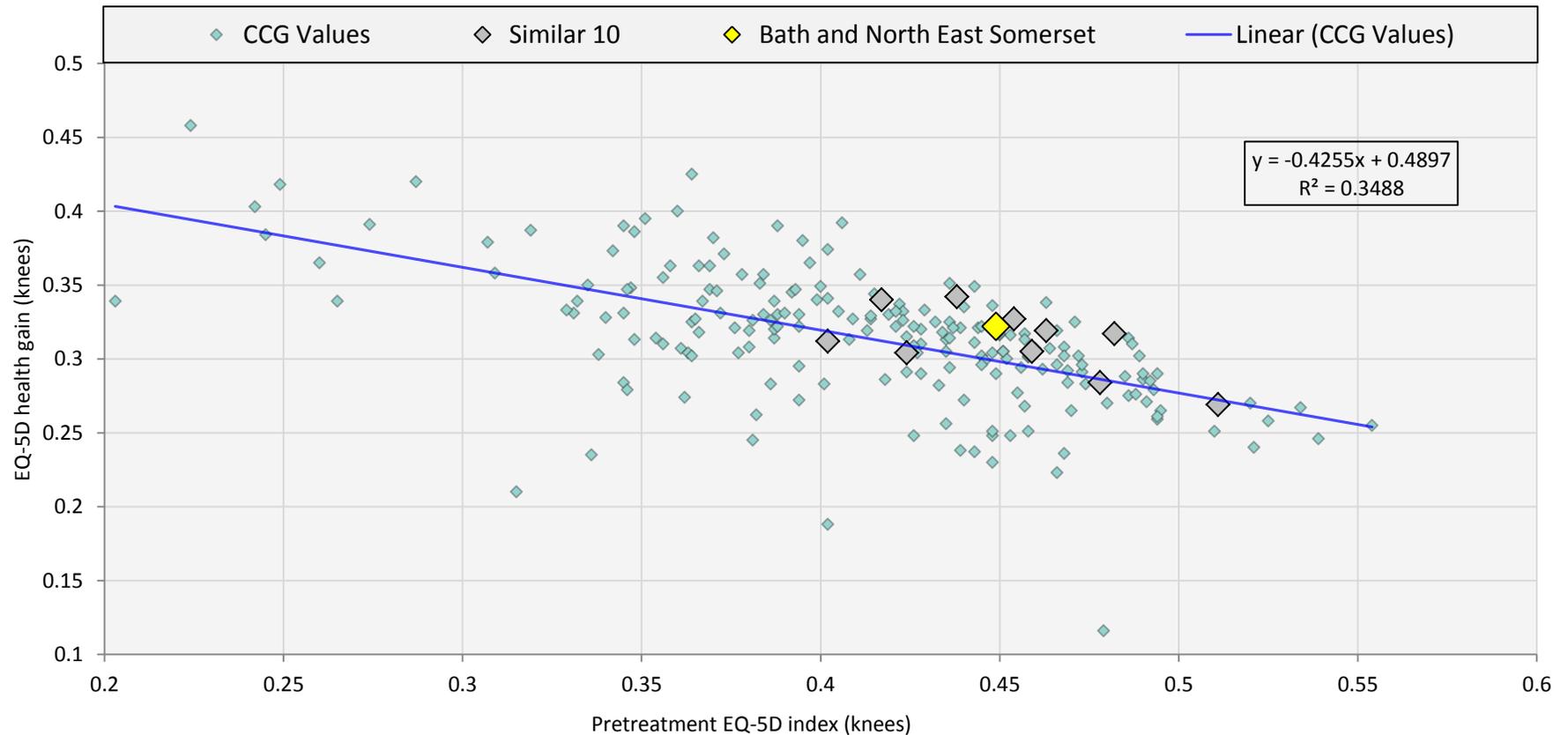
↓ 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators



| 95% confidence intervals
NSS Not statistically significant*
 *Where an opportunity is 'NSS' CCGs can investigate further whether this reflects a true opportunity e.g. by looking at more than 1 year's data or triangulating with other indicators

The Commissioning for Value Explorer Tool allows the comparison of two indicators, the diagram below is an example. This is an invaluable tool to enable users to assess how one indicator relates to another. The similar 10 can be highlighted too. It is important to remember that correlations do not imply causation but the relationships can help target where to look. The explorer tool is available here:

<http://www.england.nhs.uk/resources/resources-for-ccgs/comm-for-value/>

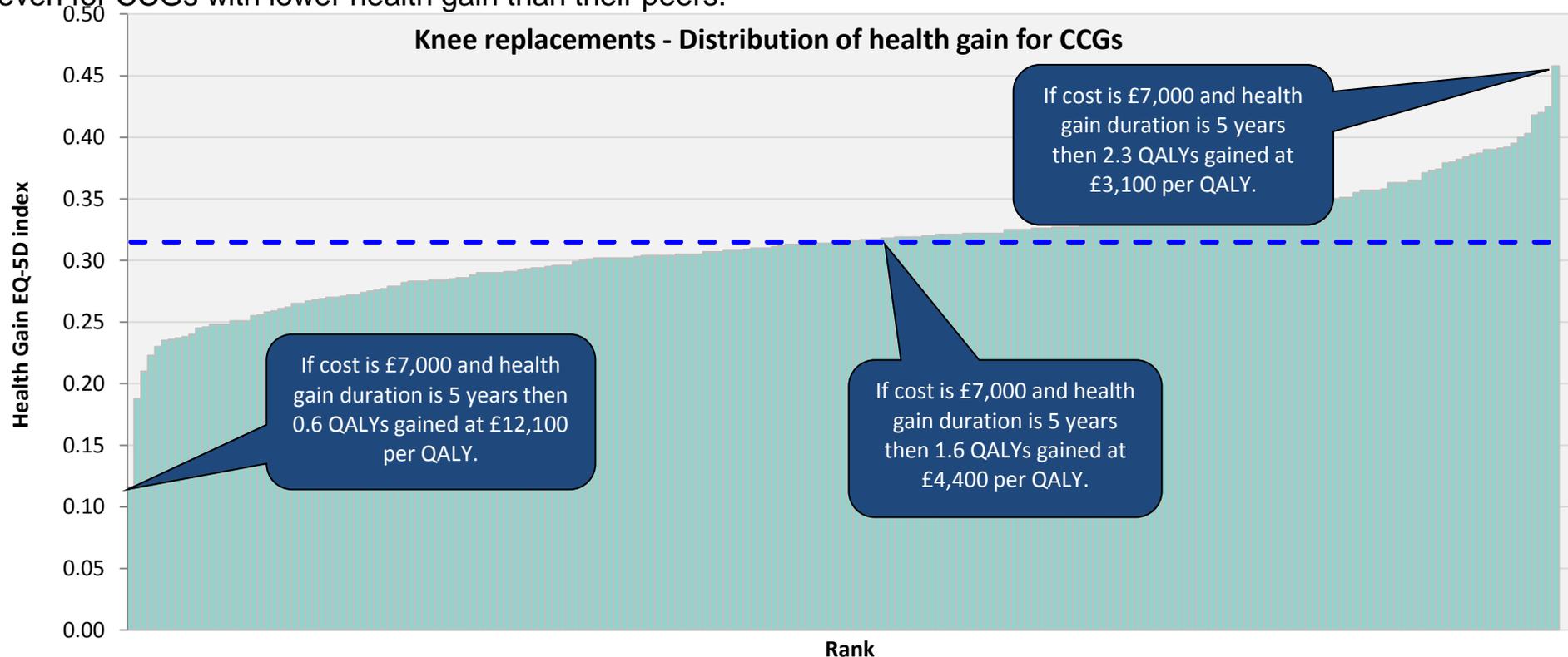


What is the range of health gain for knee replacements across CCGs?

On average knee replacements*;

- provide a large health gain for patients
- are good value for money

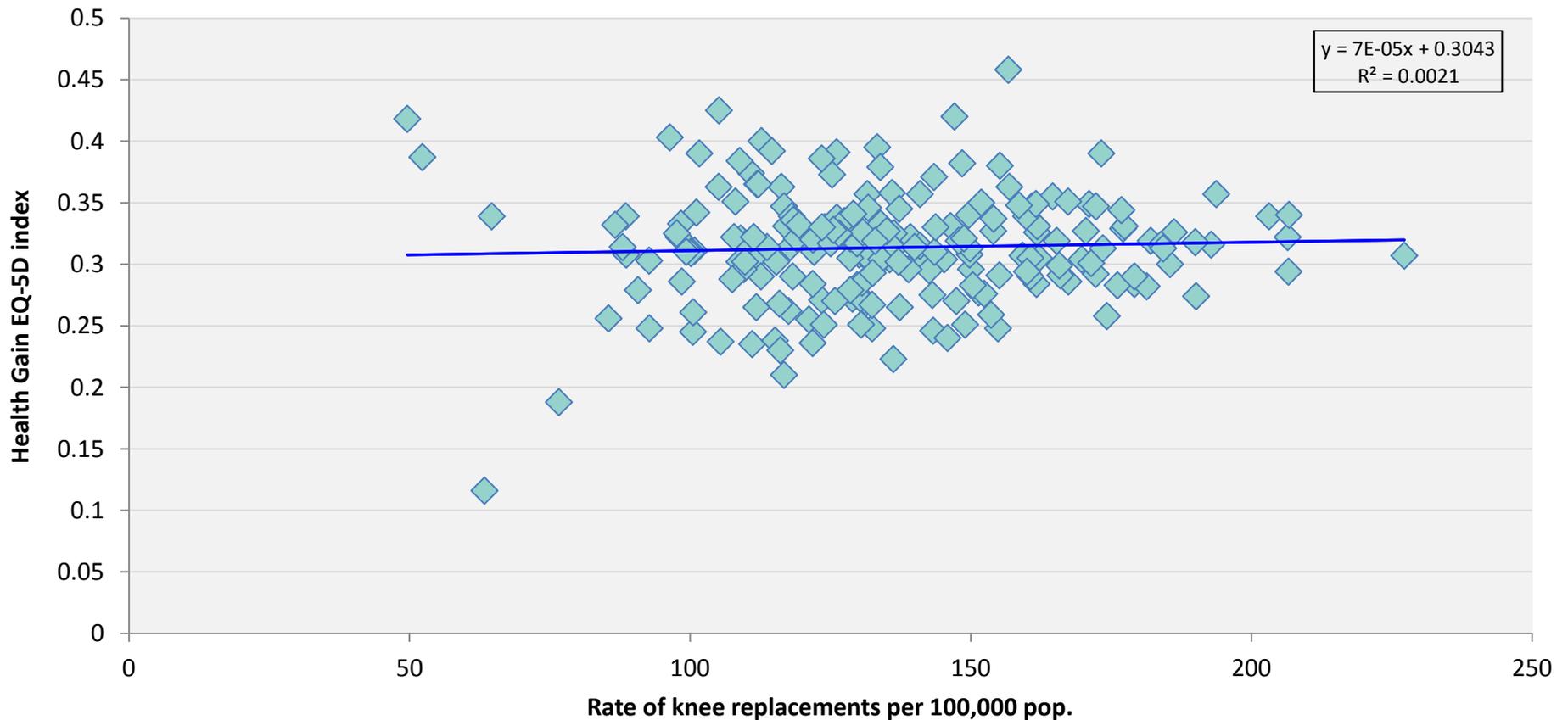
even for CCGs with lower health gain than their peers.



*Similarly for hip replacements except the health gain tends to be larger. The England average EQ-5D Index health gain is 0.437.

What is the health gain for knee replacements - even if we perform more procedures than our peer CCGs?

CCGs that perform higher rates of knee replacements* tend to get the same large health gain for patients at the same value for money as CCGs that perform lower rates.



*Similarly for hip replacements except the health gain tends to be larger. The England average EQ-5D Index health gain is 0.437.

The opportunity tables present all focus pack indicators for five aspects of the pathway.

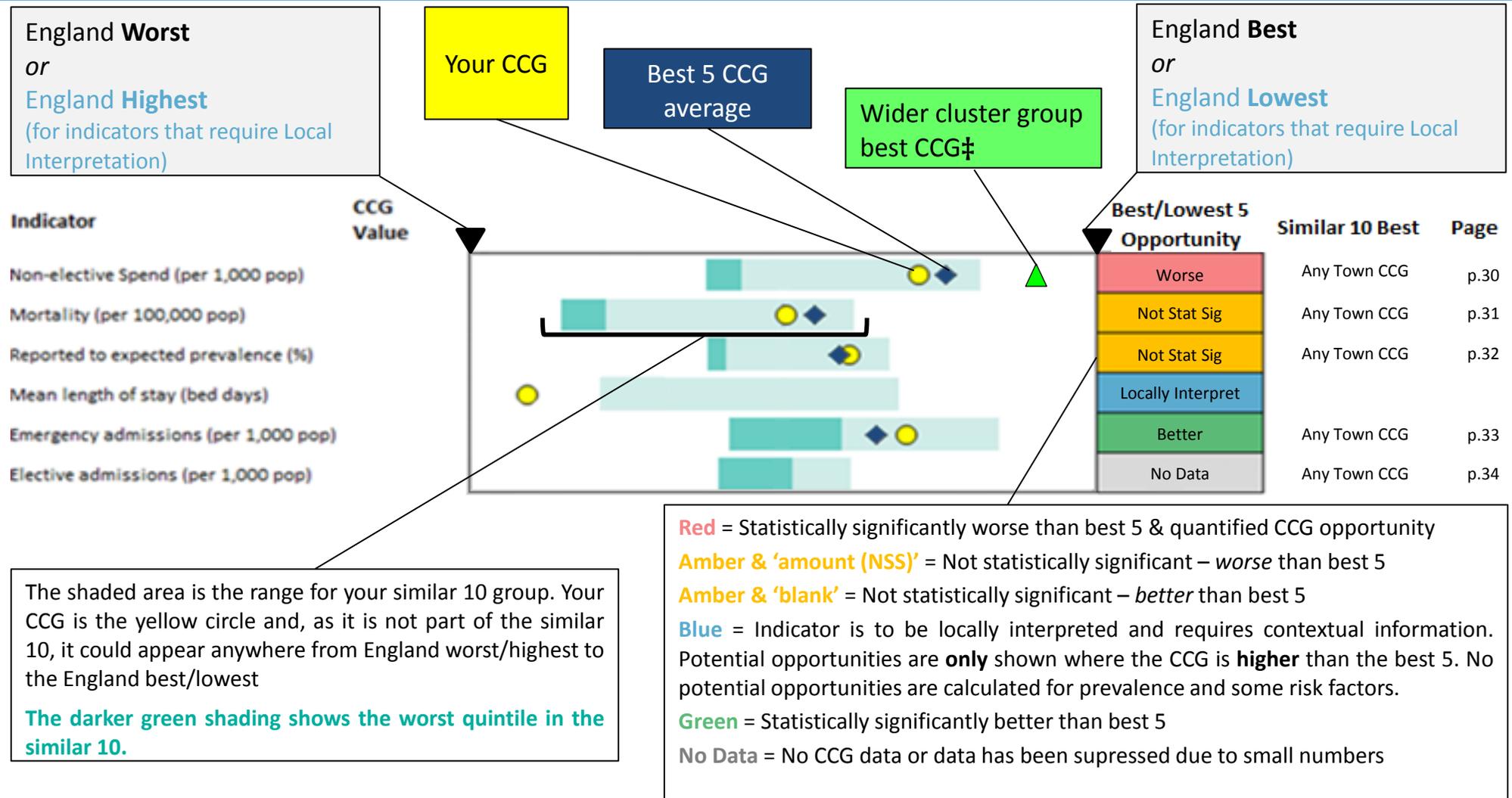
• **Risk** • **Prevalence and detection** • **Service and quality** • **Spend** • **Outcomes**

The width of the spine chart shows the England range. Your CCG is benchmarked against its similar 10 group. The shaded area of the spine chart within the table shows the range for the similar 10 group. Where the CCG is highest or lowest compared with its similar 10 group it is shown as outside that group range. This has been done to clearly show where the CCG is in relation to the similar 10 and the England worst/highest and best/lowest values.

Opportunities have been calculated for all indicators apart from those that relate to recorded prevalence and some risk factors. Where an indicator can be clearly interpreted as worse or better the spine charts show the position of the CCG, the best five average, and the wider cluster best CCG. The opportunity is quantified where the CCG is worse in relation to the Best 5 average.

Where an indicator needs to be locally interpreted (for example elective spend) and the CCG is higher than the average of the 5 CCGs with the lowest values, the opportunity table shows the potential opportunity. By calculating the potential opportunity it is possible to answer the question “Is it worth investigating this further?” The Best 5 average and the cluster best are not shown on the spine chart for these indicators.

Opportunity table: Interpretation

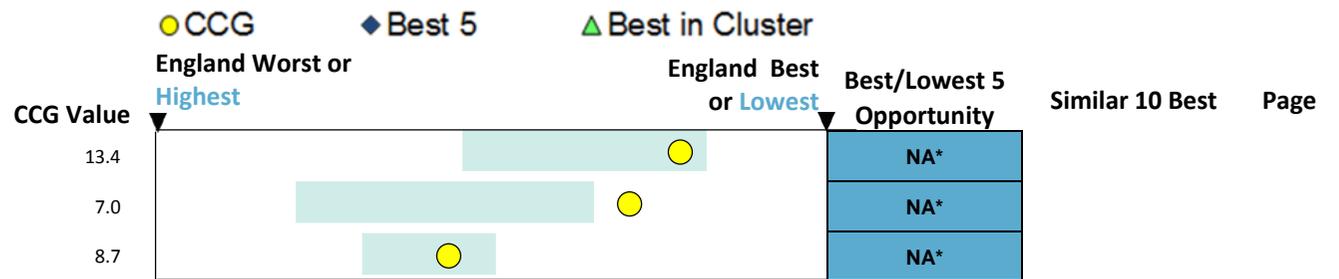


‡ The wider cluster group best CCG is not always in the similar 10. It is included to indicate a 'stretch' target. Your wider CCG cluster group is identified on page 9.

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator

- Smoking prevalence, 18+
- Obesity prevalence, 16+
- % GP registered population, 75+



Please note: For smoking and obesity, opportunities are not presented due to difficulties calculating these, rather than because they need local interpretation.

* No opportunity is calculated for risk and reported prevalence indicators

Please refer to slide 63 for full guidance on interpretation of this table of opportunities

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator



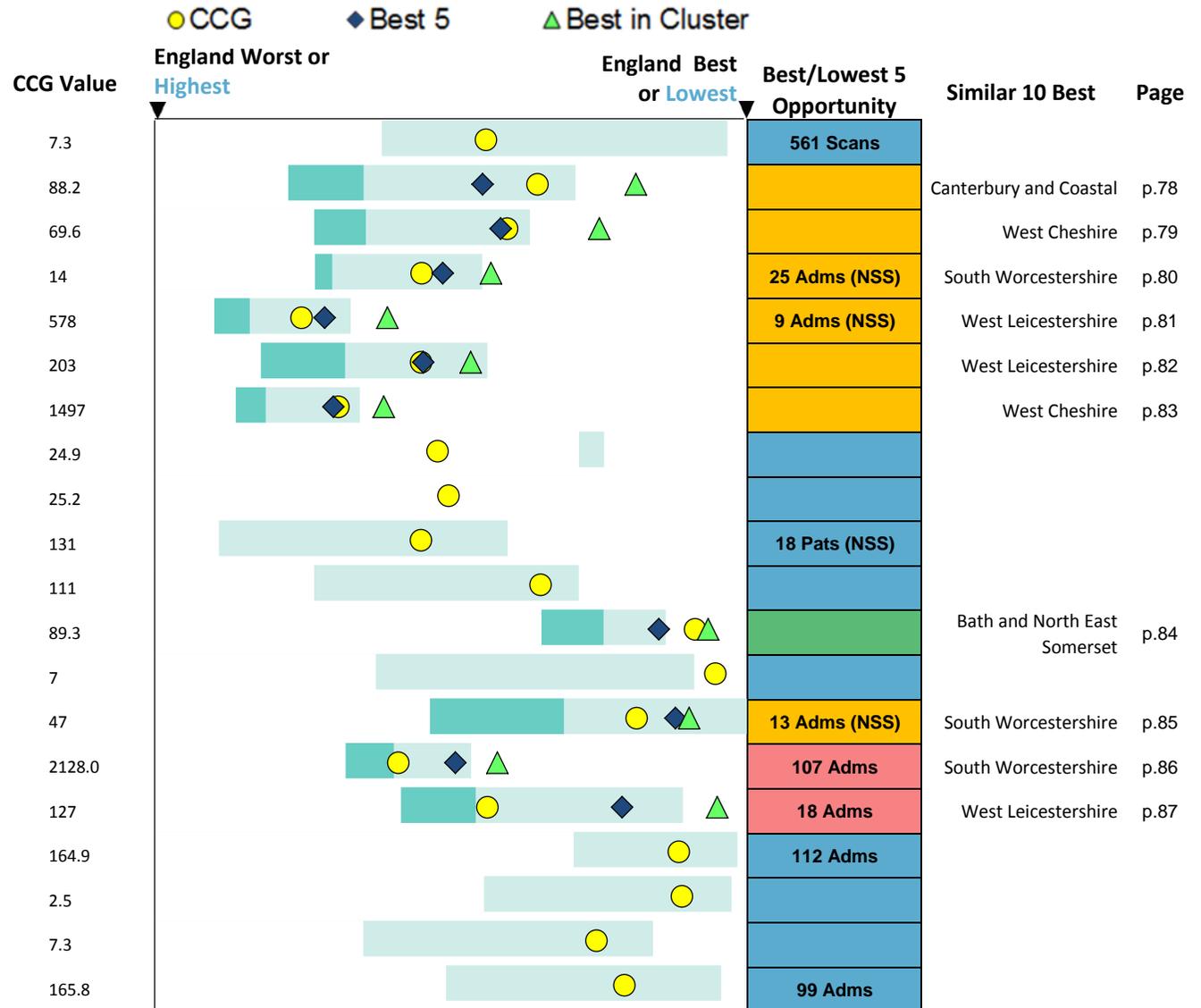
* No opportunity is calculated for risk and reported prevalence indicators

Please refer to slide 63 for full guidance on interpretation of this table of opportunities

MSK and Trauma & Injuries - Opportunity table - Activity and quality

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator



Please refer to slide 63 for full guidance on interpretation of this table of opportunities

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator

CCG Value

● CCG ◆ Best 5 ▲ Best in Cluster

England Worst or Highest

England Best or Lowest

Best/Lowest 5 Opportunity

Similar 10 Best

Page

Indicator	CCG Value	England Worst or Highest	England Best or Lowest	Best/Lowest 5 Opportunity
Rheumatoid & Inflammatory Arthritis-Average LOS-elective (bed days)	4.7			72 Bed days
Rheumatoid & Inflammatory Arthritis-Average LOS-emergency (bed days)	5.1			
Osteoporosis & fragility fractures - day case admissions (**)	76.6			122 Adms
Osteoporosis & fragility fractures-Average LOS-elective (bed days)	1.7			
Osteoporosis & fragility fractures-Average LOS-emergency (bed days)	7.3			
Osteoarthritis - day case admissions (**)	54.9			
Osteoarthritis - Average LOS - elective (bed days)	4.0			193 Bed days
Osteoarthritis - Average LOS - emergency (bed days)	7.9			66 Bed days (NSS)
Other joint disorders - day case admissions (**)	208.9			34 Adms (NSS)
Other joint disorders - Average LOS - emergency (bed days)	2.6			
Other MSK conditions - day case admissions (**)	155.5			
Other MSK conditions - Average LOS - elective (bed days)	1.4			42 Bed days (NSS)
Other MSK conditions - Average LOS - emergency (bed days)	5.1			315 Bed days
Follow-up- to remove fracture plate - day case admissions (**)	29.8			16 Adms
Follow-up- to remove fracture plate-Average LOS-elective (bed days)	0.5			
GP Exception Rate - Rheumatoid Arthritis (%)	5.7			NA*
GP Exception Rate - Osteoporosis (%)	10.3			NA*

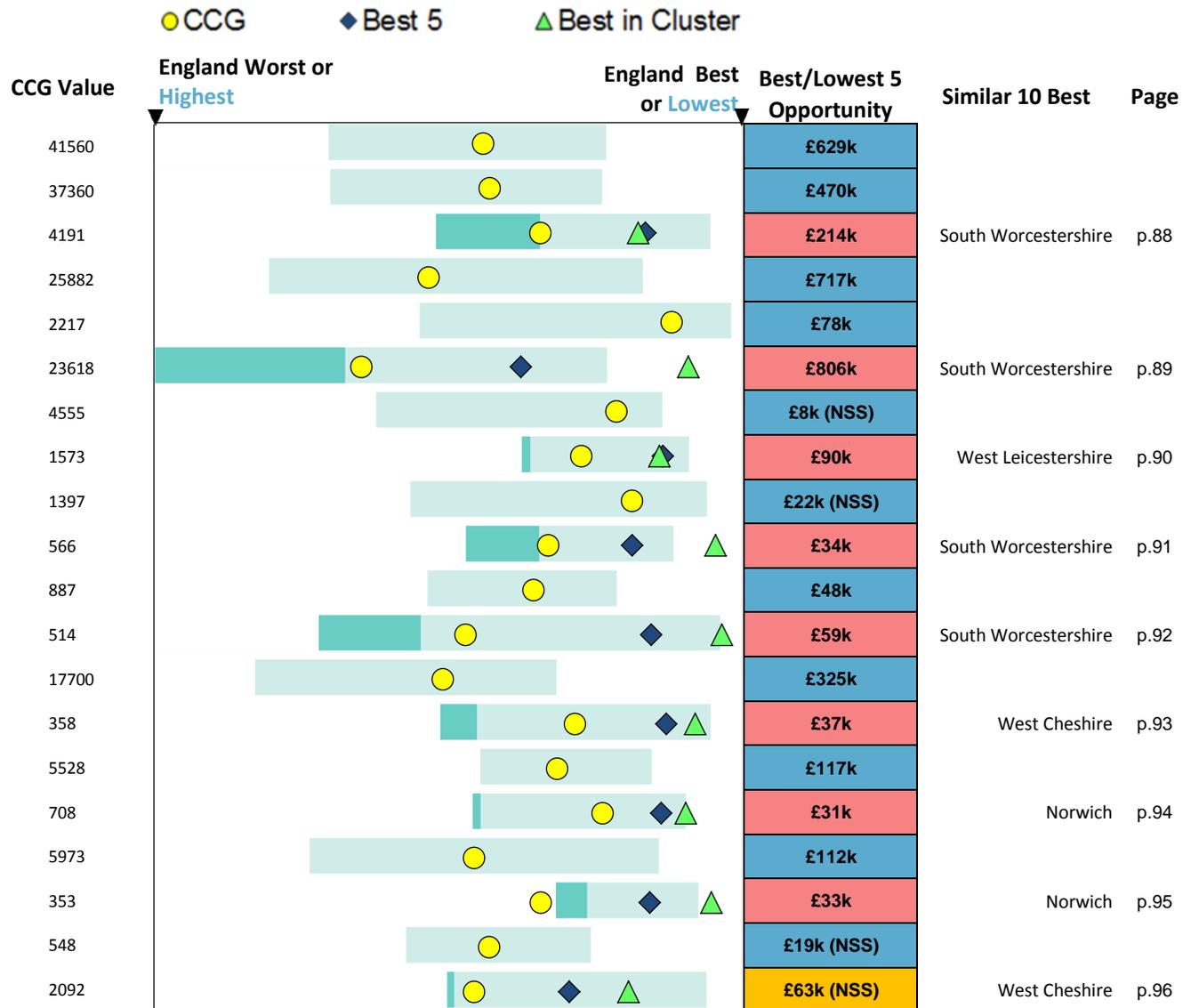
* No opportunity is calculated for exception rates

Please refer to slide 63 for full guidance on interpretation of this table of opportunities

MSK and Trauma & Injuries - Opportunity table - Spend

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator



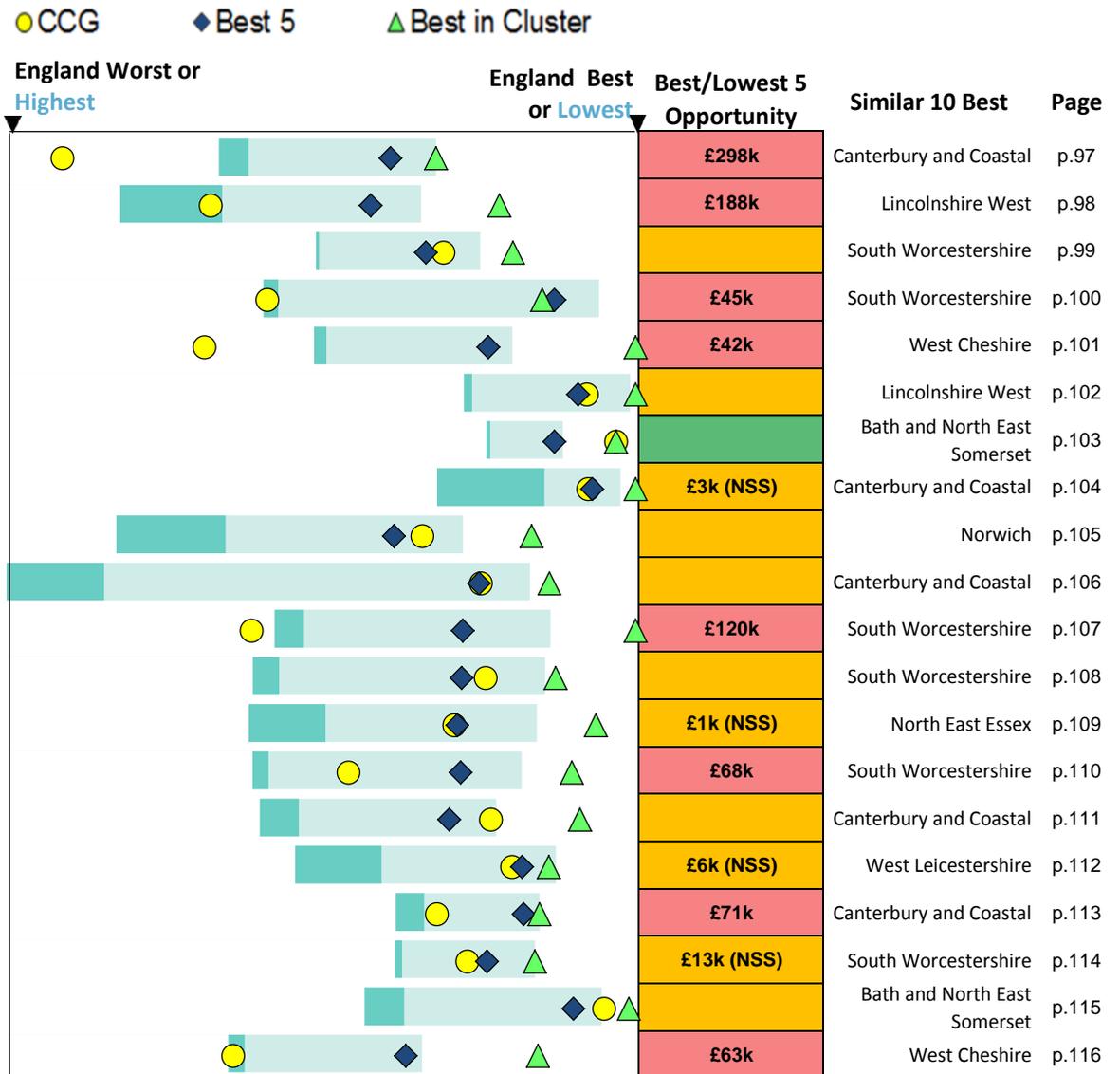
Please refer to slide 63 for full guidance on interpretation of this table of opportunities

MSK and Trauma & Injuries - Opportunity table - Spend

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator

Indicator	CCG Value
Injuries to the hip and thigh - 75-84 (*)	61791
Injuries to the hip and thigh - 85+ (*)	168918
Injuries to the thorax - Under 75s (*)	430
Injuries to the thorax - 75-84 (*)	4892
Injuries to the thorax - 85+ (*)	11795
Injuries to the wrist and hand - 0-18 (*)	912
Injuries to the wrist and hand - 19-64 (*)	1321
Injuries to the wrist and hand - 65+ (*)	1133
Injuries to the shoulder and upper arm - 0-18 (*)	1031
Injuries to the shoulder and upper arm - 19-64 (*)	778
Injuries to the shoulder and upper arm - 65+ (*)	6667
Injuries to the elbow and forearm - 0-18 (*)	2312
Injuries to the elbow and forearm - 19-64 (*)	1468
Injuries to the elbow and forearm - 65+ (*)	6333
Injuries to the head - 0-18 (*)	1761
Injuries to the head - 19-64 (*)	1350
Injuries to the head - 65-84 (*)	6546
Injuries to the head - 85+ (*)	32593
Injuries to abdomen,lower back, lumbar spine and pelvis - 0-18 (*)	207
Injuries to abdomen,lower back, lumbar spine and pelvis - 19-64 (*)	1280

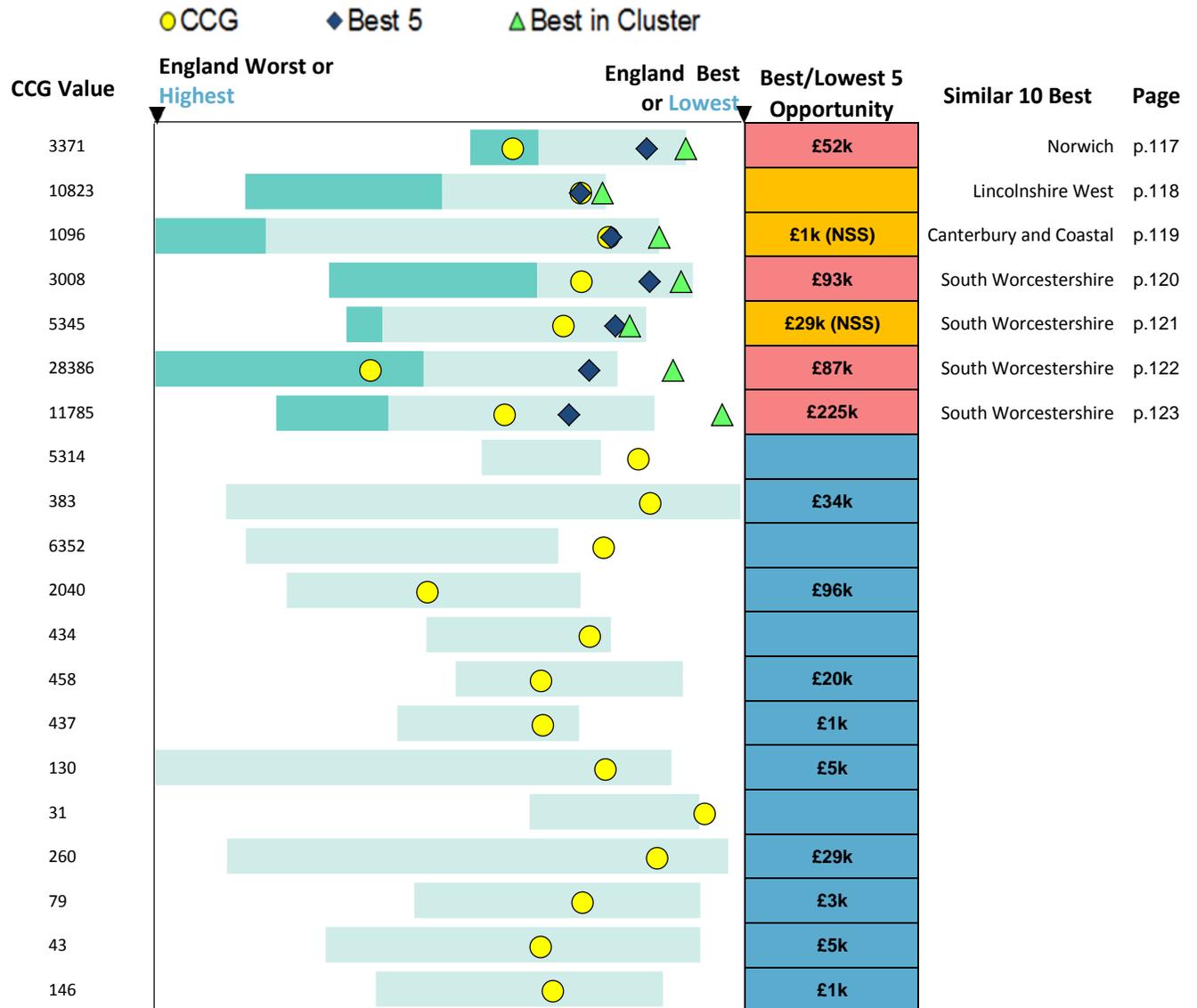


Please refer to slide 63 for full guidance on interpretation of this table of opportunities

MSK and Trauma & Injuries - Opportunity table - Spend

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

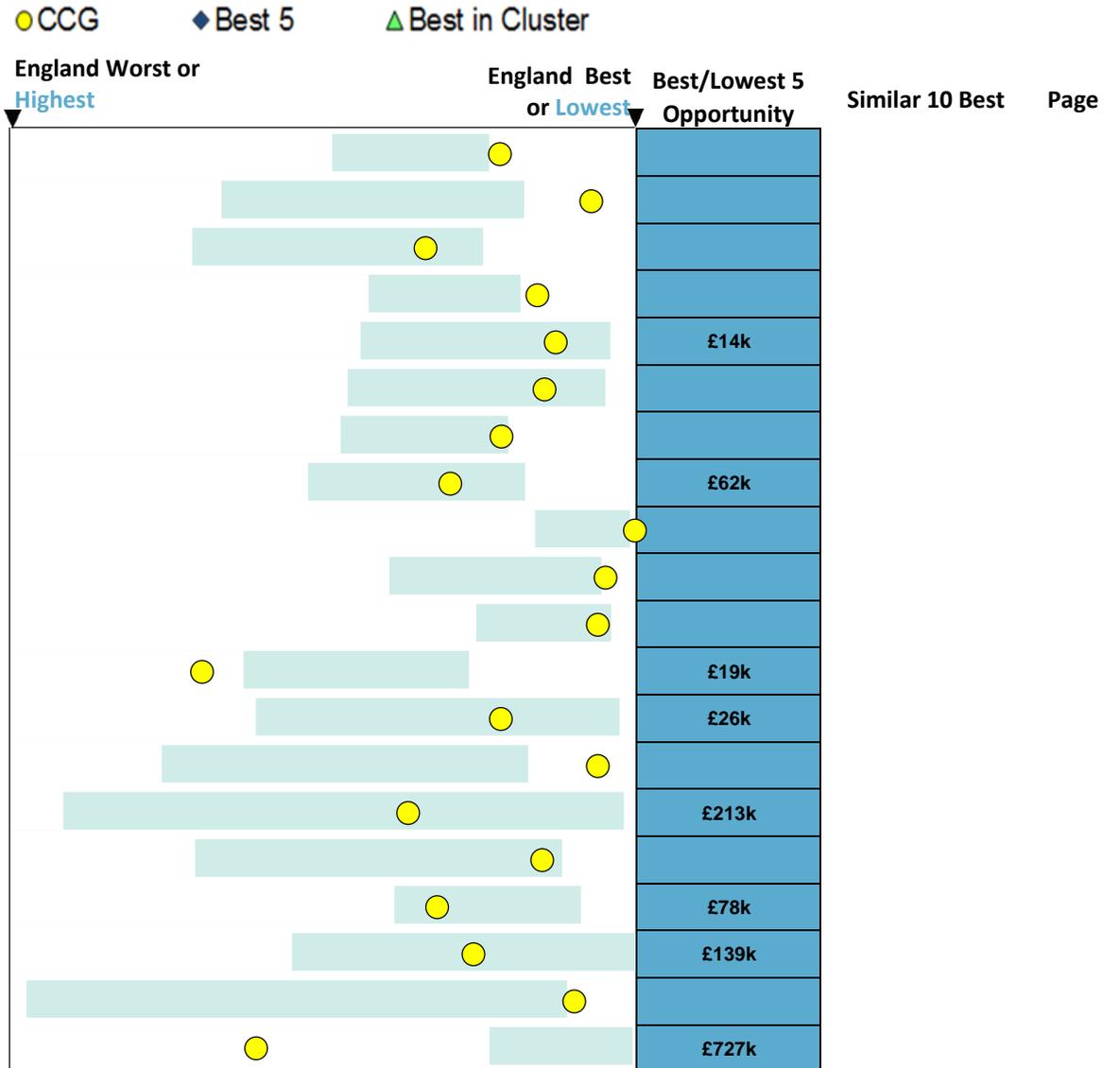
Indicator



Please refer to slide 63 for full guidance on interpretation of this table of opportunities

MSK and Trauma & Injuries - Opportunity table - Spend

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

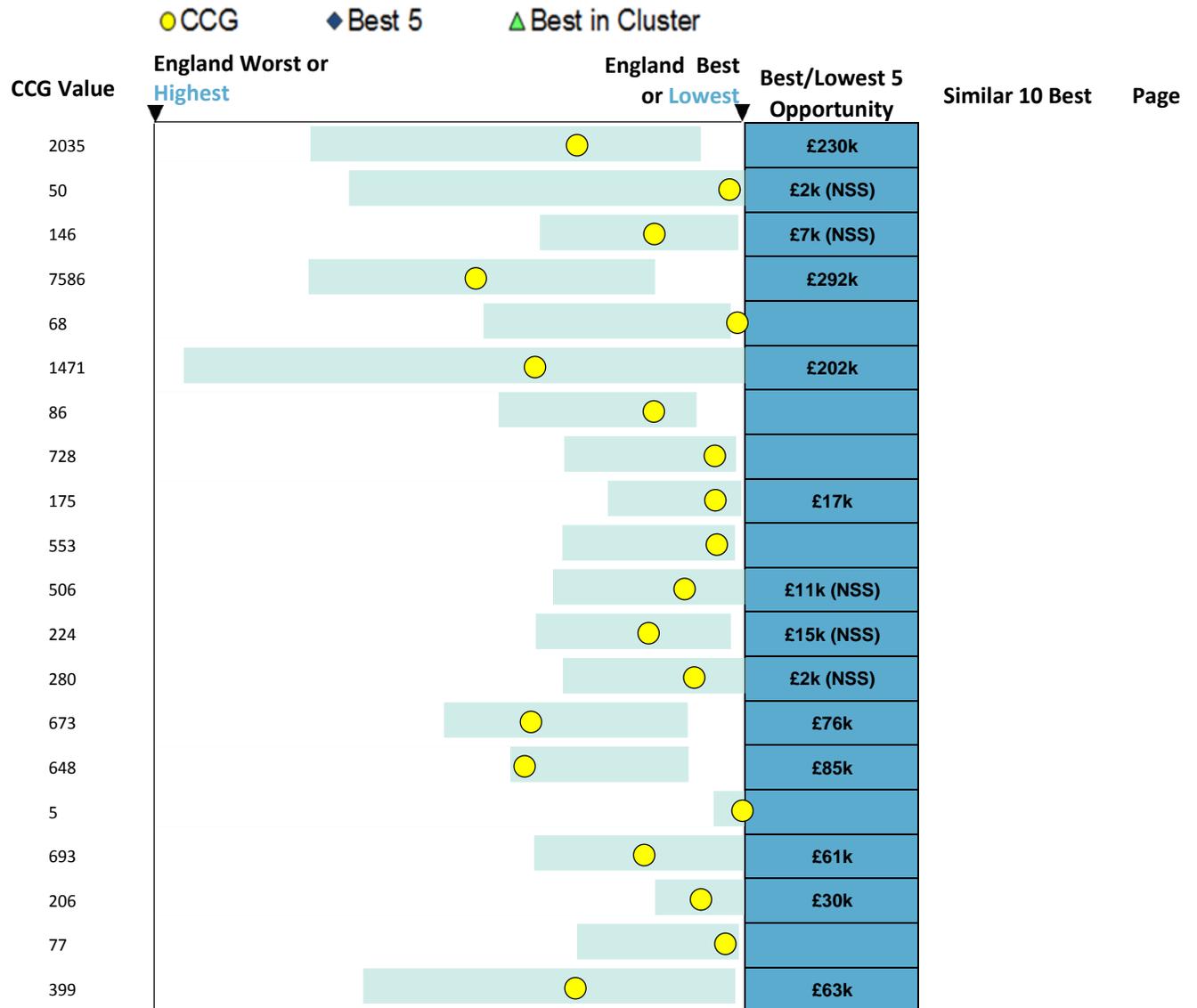


Please refer to slide 63 for full guidance on interpretation of this table of opportunities

MSK and Trauma & Injuries - Opportunity table - Spend

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator



Please refer to slide 63 for full guidance on interpretation of this table of opportunities

MSK and Trauma & Injuries - Opportunity table - Spend

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population



Please refer to slide 63 for full guidance on interpretation of this table of opportunities

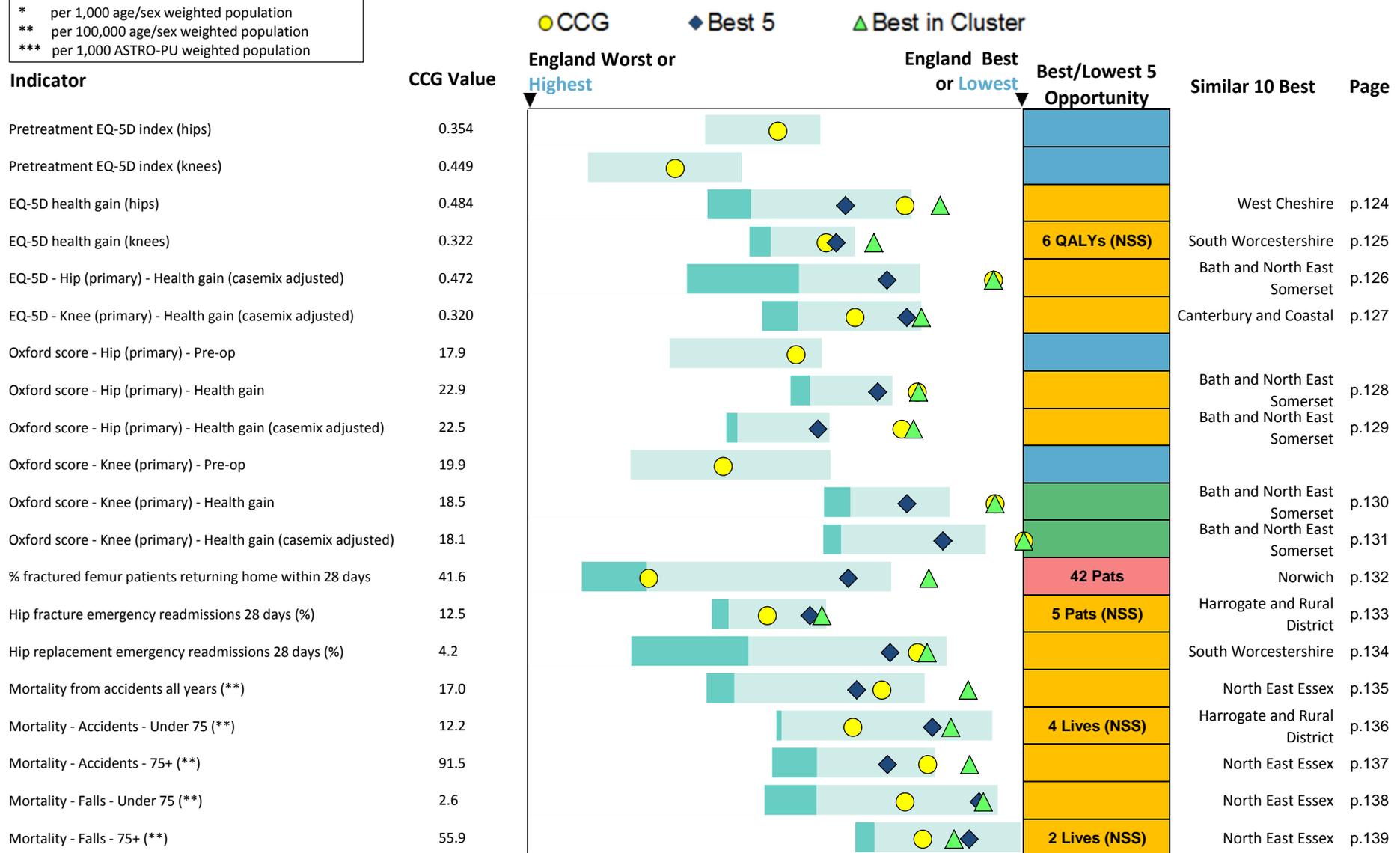
* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator	CCG Value	England Worst or Highest	England Best or Lowest	Best/Lowest 5 Opportunity	Similar 10 Best	Page
T&I Proc.- Open reduction -fracture of neck of femur and open fixation using pin and plate (*)	277					
T&I Proc.- 2nd open reduction of fracture of bone and extramedullary fixation HFQ (*)	245			£22k		
T&I Proc.- Other specified primary open reduction of fracture of bone and intramedullary fixation (*)	118					
T&I Proc.- Closed reduction of fracture of long bone and rigid internal fixation NEC (*)	736					
T&I Proc.- Closed reduction of fracture of bone and fixation using nail or screw (*)	2179			£471k		
T&I Proc.- Manipulation of fracture of bone NEC (*)	487			£8k (NSS)		
T&I Proc.- Primary prosth. replace. - head of femur-not cement (*)	299			£6k (NSS)		
T&I Proc.- Primary total prosth. replace. - hip joint- cement (*)	34					
T&I Proc.- Delivery of rehabilitation for hip fracture (*)	983			£167k		
T&I Proc.- Other specified rehabilitation for MSK disorders (*)	46					
T&I Proc.- Application of plaster cast (*)	193			£3k (NSS)		
T&I Proc.- Primary simple repair of tendon (*)	204					
T&I Proc.- Debridement of skin NEC (*)	440			£34k (NSS)		
T&I Proc.- Primary suture of skin of head or neck NEC (*)	174					
T&I Proc.- Evacuation of subdural haematoma (*)	169			£6k (NSS)		
T&I Proc.- CT - Head (*)	1269			£8k (NSS)		
T&I Proc.- CT - NEC (*)	667					

Please refer to slide 63 for full guidance on interpretation of this table of opportunities

MSK and Trauma & Injuries - Opportunity table - Outcomes

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population



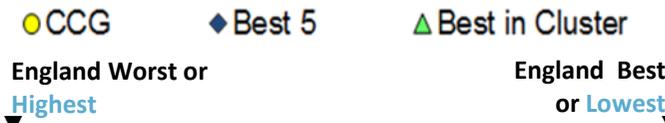
*No opportunity presented for PROMs indicators except EQ-5D index health gain

Please refer to slide 63 for full guidance on interpretation of this table of opportunities

* per 1,000 age/sex weighted population
 ** per 100,000 age/sex weighted population
 *** per 1,000 ASTRO-PU weighted population

Indicator

CCG Value



Best/Lowest 5 Opportunity

Similar 10 Best

Page

Mortality - all ages - transport accident (**)	3.1		0 Life years	North East Essex	p.140
Life years lost Accidents (all)	447.2		126 Life years	Harrogate and Rural District	p.141
Life years lost falls (all)	75.4		9 Life years	North East Essex	p.142
Life years lost transport (all)	125.4		42 Life years	North East Essex	p.143

Please refer to slide 63 for full guidance on interpretation of this table of opportunities

The following pages provide a further analysis of a range of indicators in the focus pack. The indicators selected are those where we have been able to assign a judgement on whether a lower or higher value is *better* eg a lower value is better for mortality, and a higher value better for case finding.

Top chart:

The opportunity box from the spine chart is shown in the top right of the blue banner. The top chart shows the whole England distribution together with the highlighted Similar 10 group (grey bars) and your CCG (yellow bar). The England average is shown by the dashed blue line. The England value and the Best 5 average values are shown below this chart.

Bottom chart:

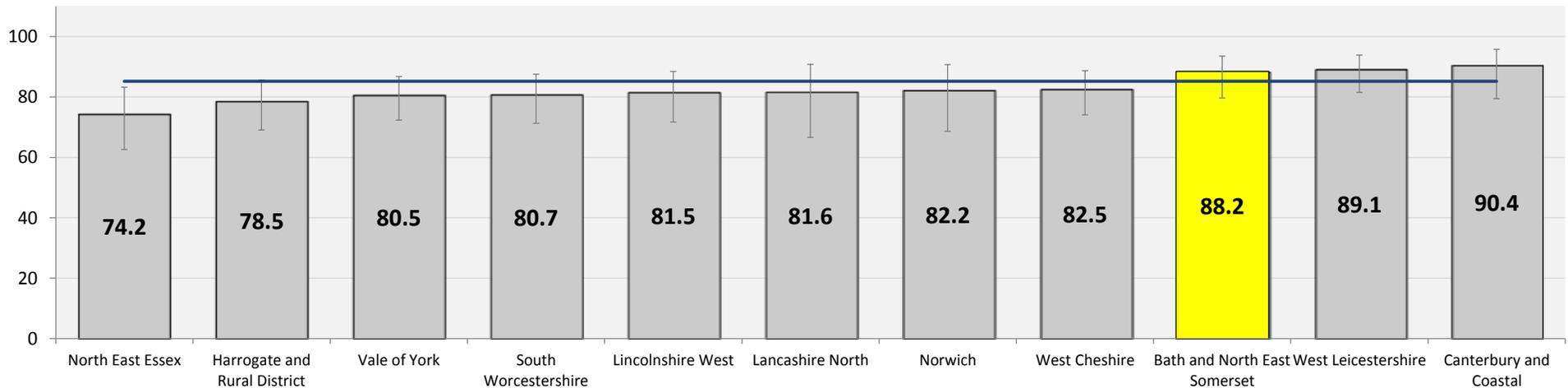
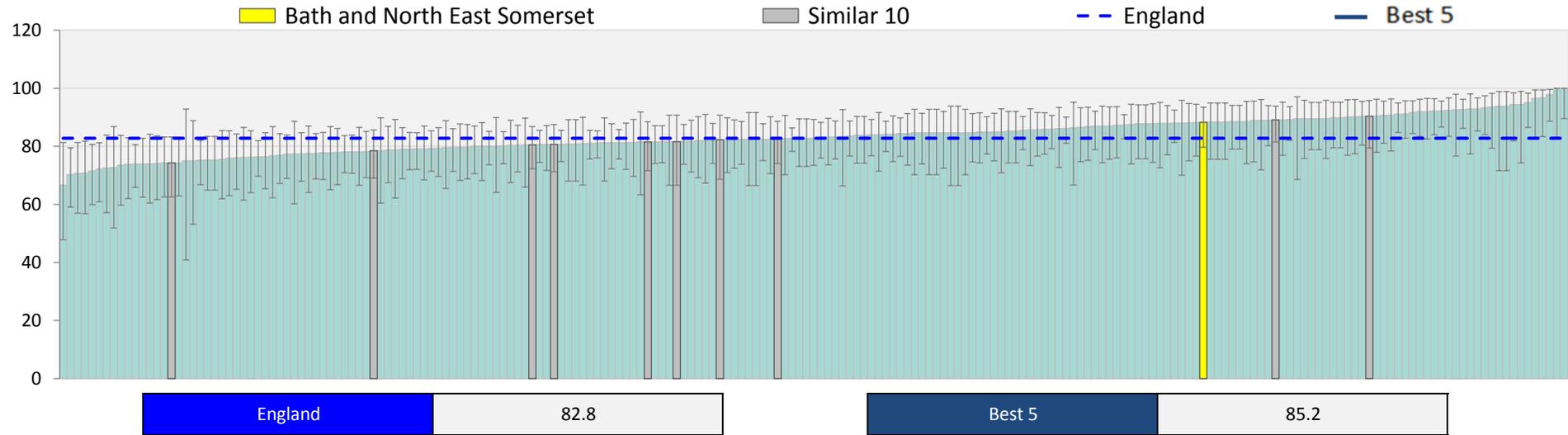
Shows your CCG and the Similar 10 group together with their indicator values. The Best 5 CCG average is shown by a dark blue line.

The full indicator name, source and time period are shown at the bottom left.

The analysis presented in the following pages can be replicated for *all* indicators in the focus pack using the Commissioning for Value Focus Pack Tool. The tool is available on the Commissioning for Value web pages. The link is shown on page 147.

% osteoporosis patients 50-74 treated with Bone Sparing Agent

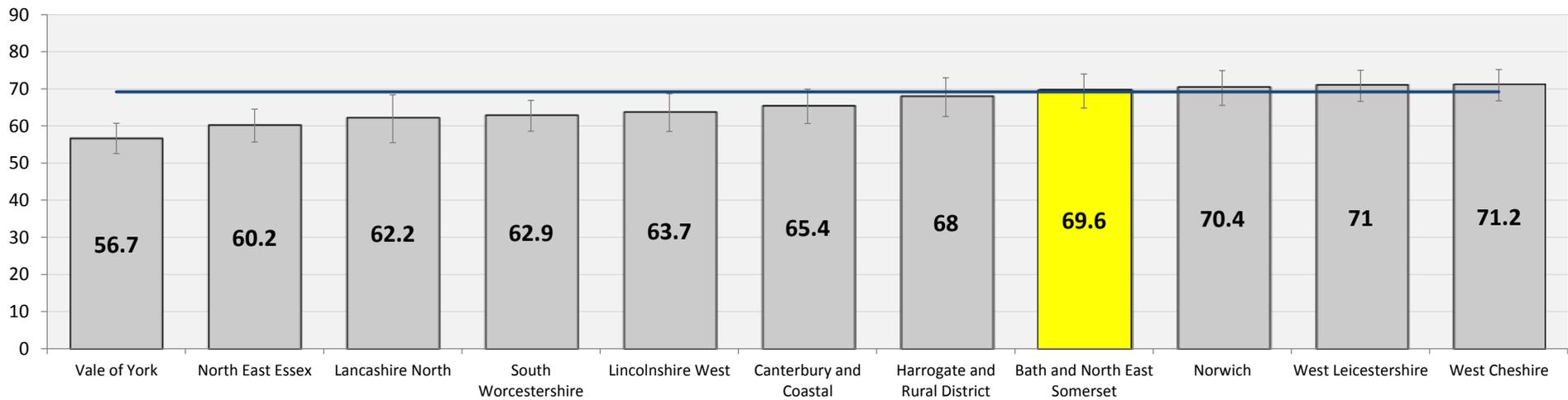
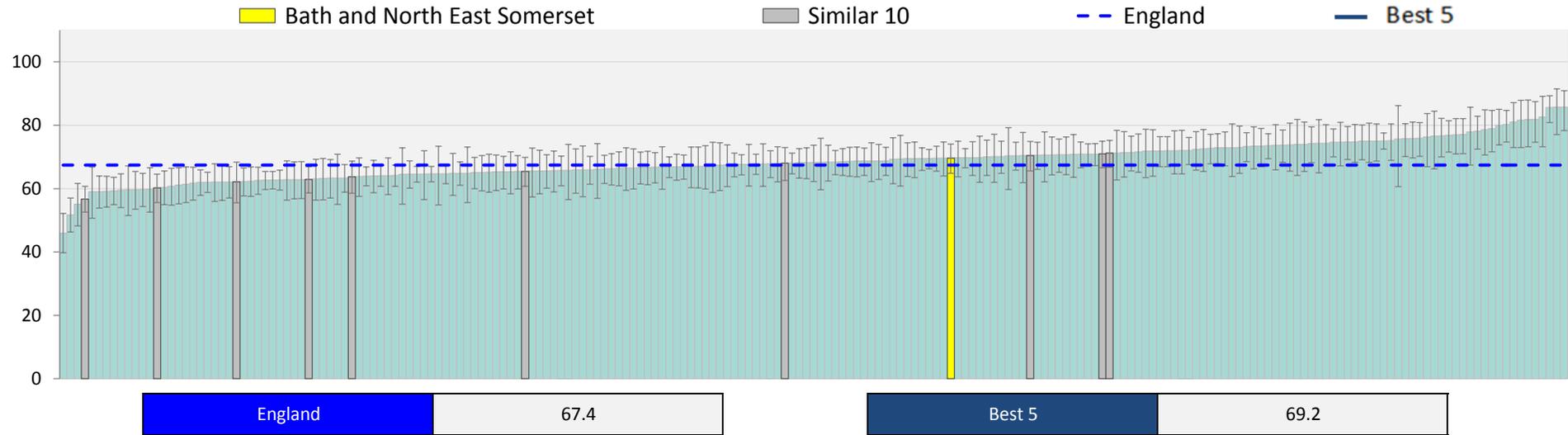
78



Definition: % of patients aged 50-75 years, with a fragility fracture on or after 1 April 2012, in whom osteoporosis is confirmed on DXA scan, who are currently treated with an appropriate bone-sparing agent (OST002)
 Source: Quality and Outcomes Framework (QoF), The Health and Social Care Information Centre
 Year: 2014/15

% patients 75+ years with fragility fracture treated with Bone Sparing Agent

79

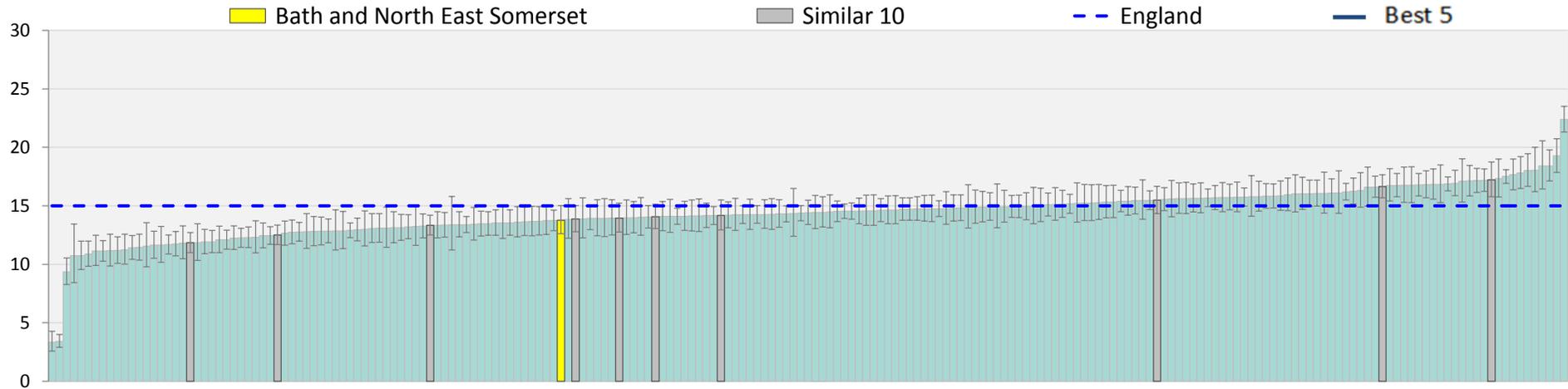


Definition: % of patients aged 75+ years with a fragility fracture treated with an appropriate bone-sparing agent (OST03)
 Source: Quality and Outcomes Framework (QoF), The Health and Social Care Information Centre
 Year: 2013/14

Rate of all fracture admissions in people aged 65+ (per 1,000 pop. 65+)

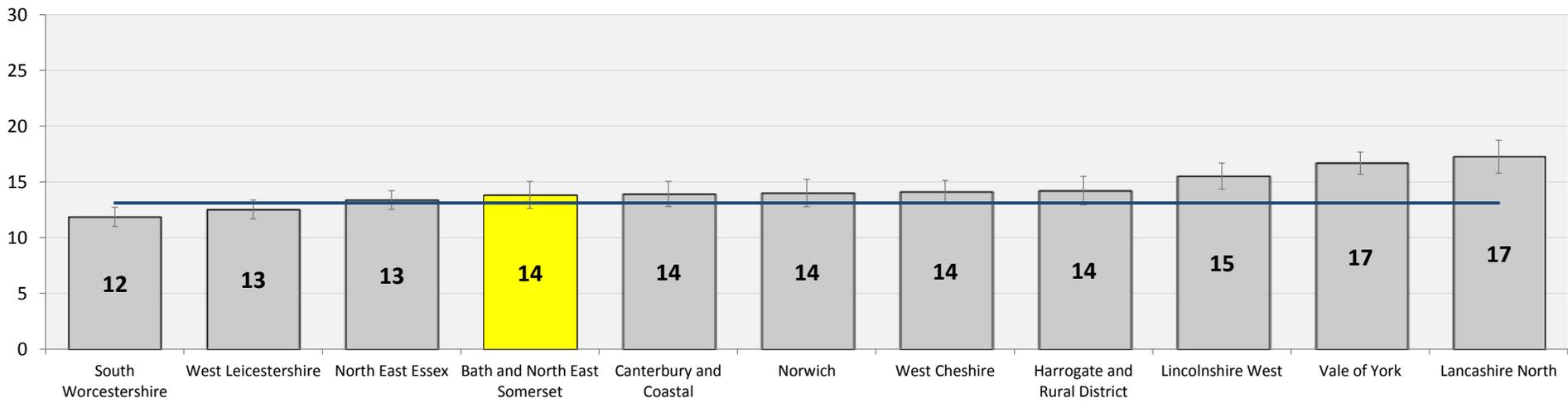
25 Adms (NSS)

80



England 15.0

Best 5 13.0

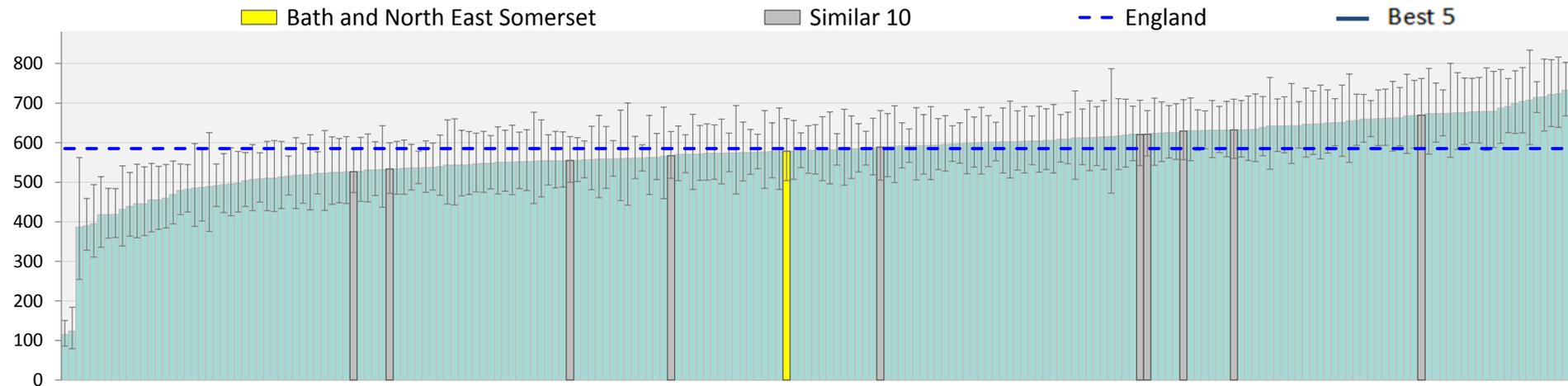


Definition: Rate of all fracture admissions per 1,000 population aged 65+
 Source: Hospital Episode statistics (HES)
 Year: 2014/15

Hip fractures in people aged 65+ (per 100,000 pop)

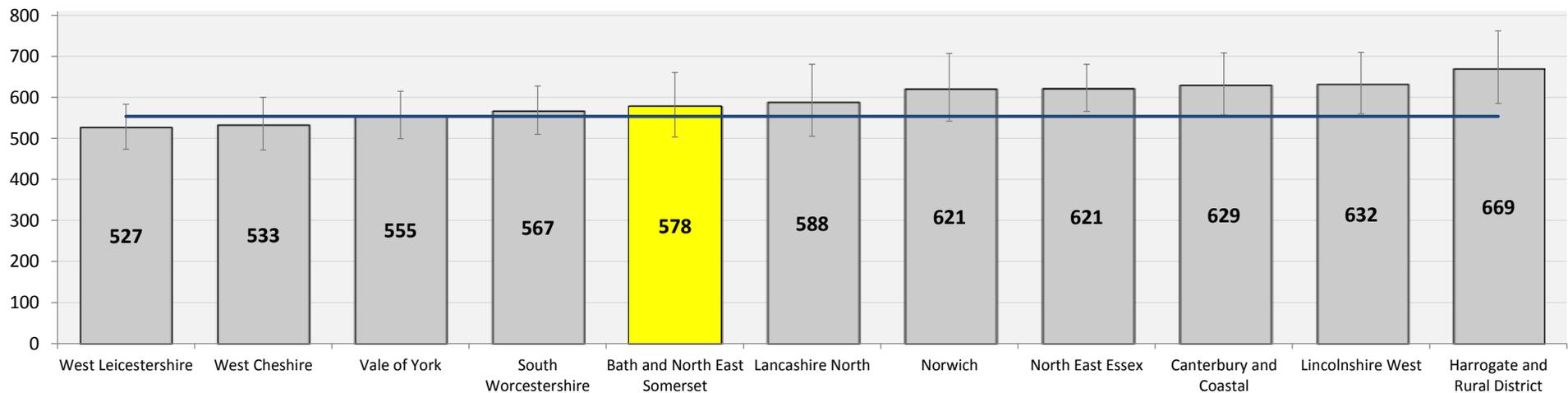
9 Adms (NSS)

81



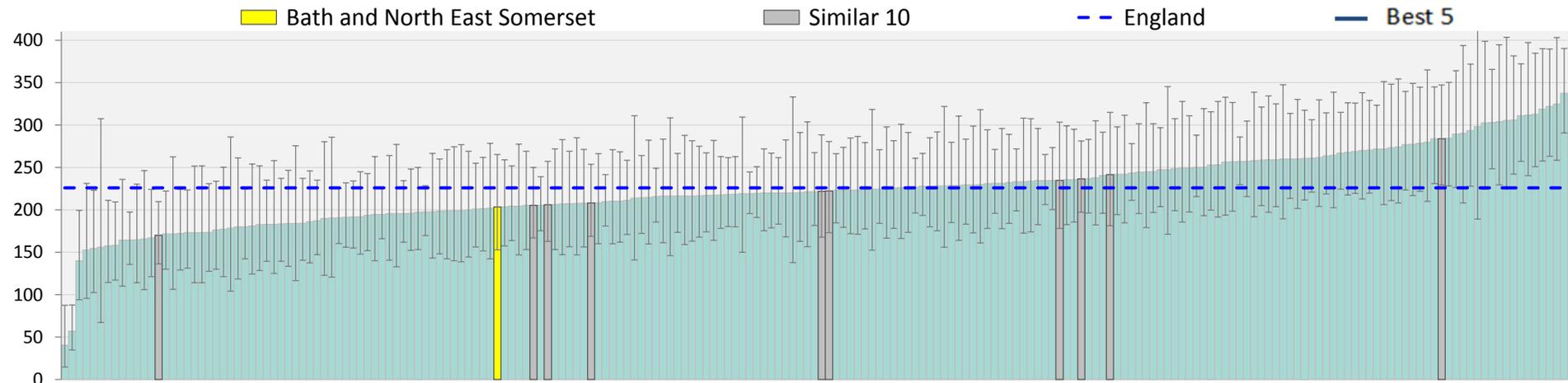
England 585.0

Best 5 554.0



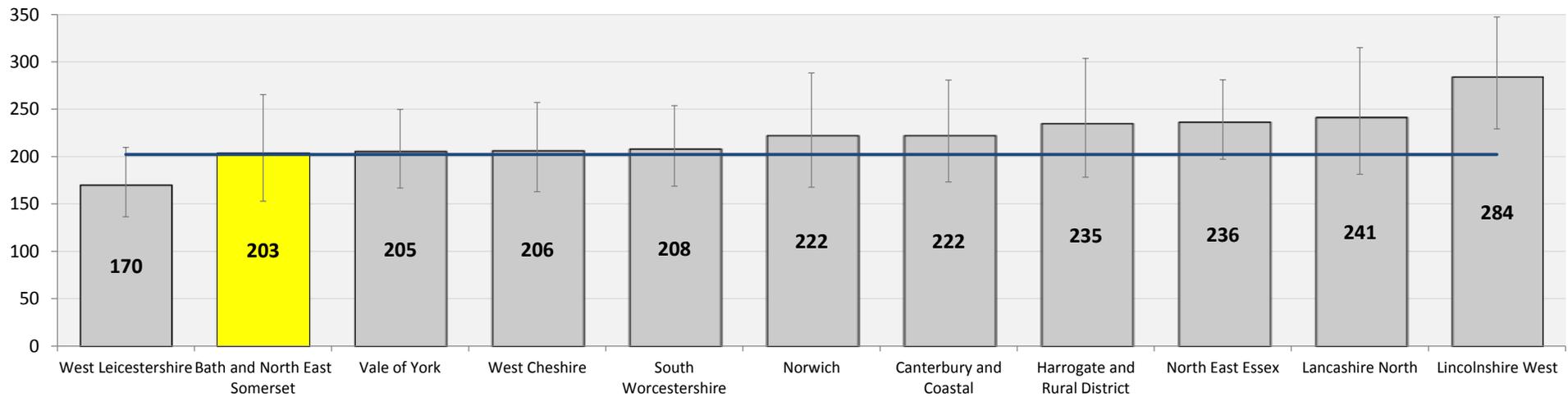
Definition: Hip fractures per 100,000 population aged 65+
 Source: Hospital Episode statistics (HES)
 Year: 2014/15

Hip fractures in people aged 65-79 (per 100,000 pop)



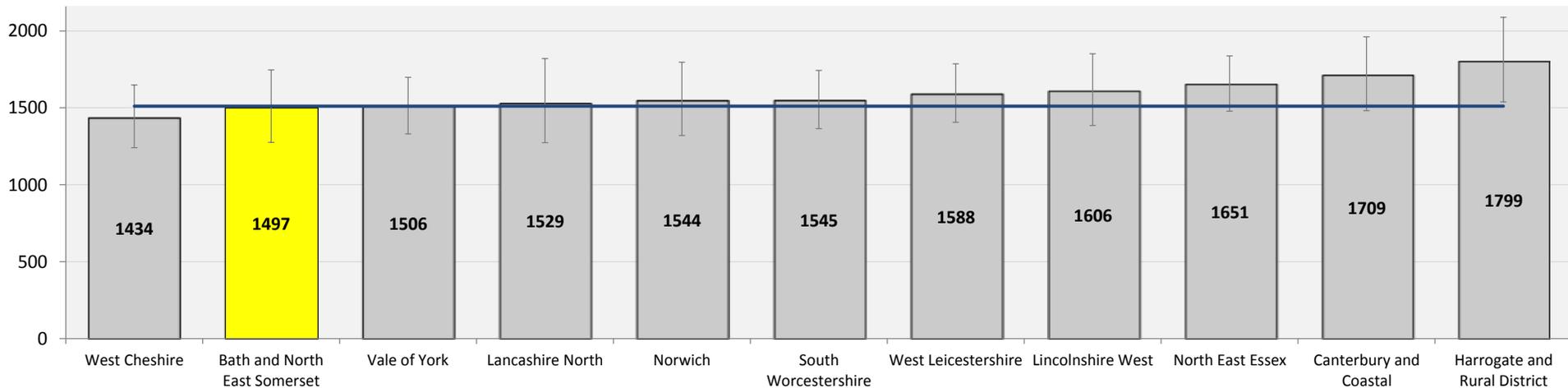
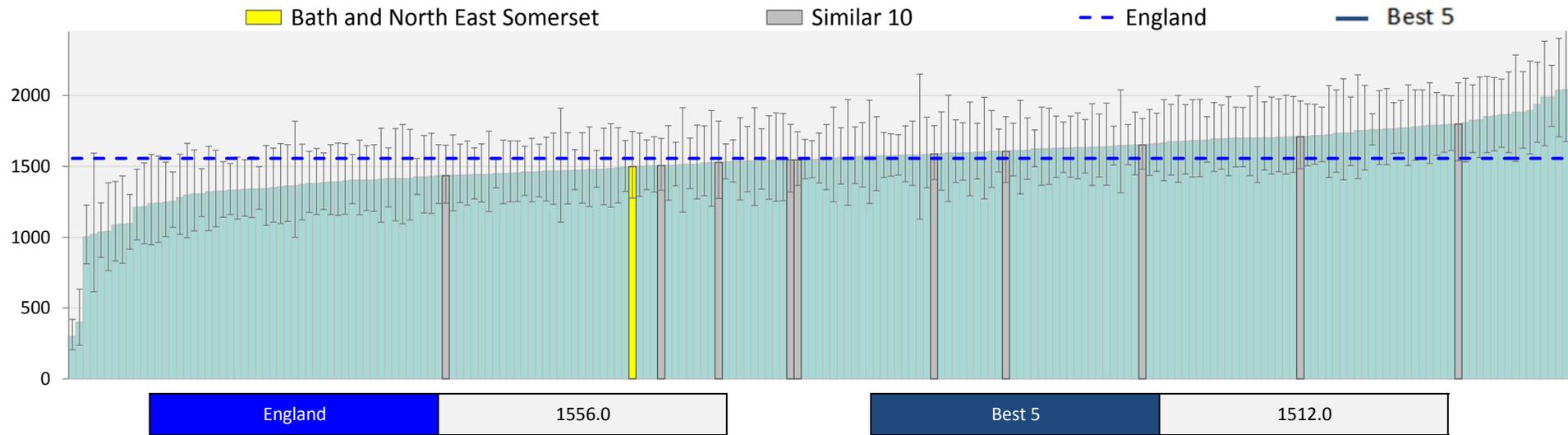
England 226.0

Best 5 202.0



Definition: Hip fractures per 100,000 population aged 65-79
 Source: Hospital Episode statistics (HES)
 Year: 2014/15

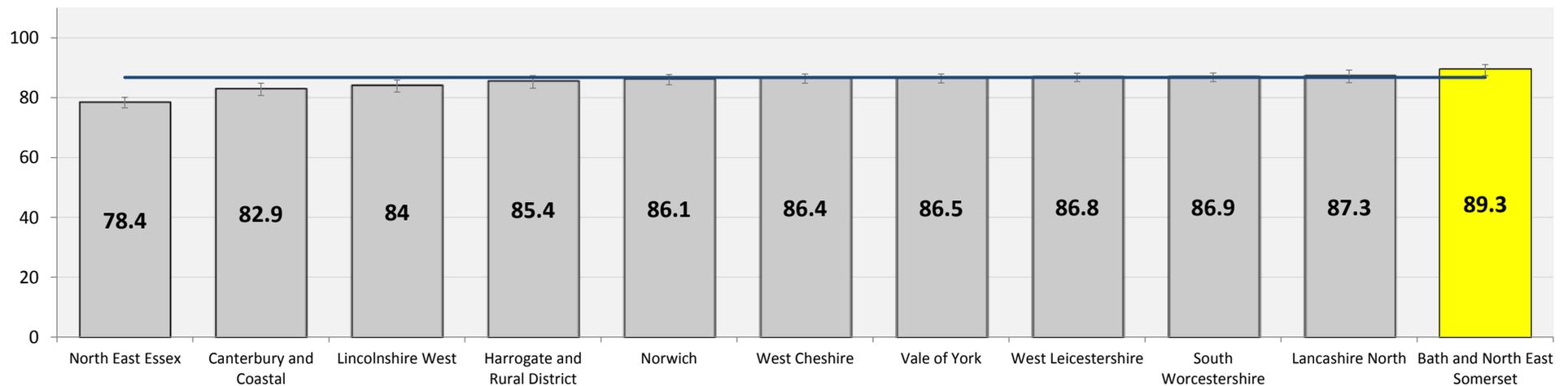
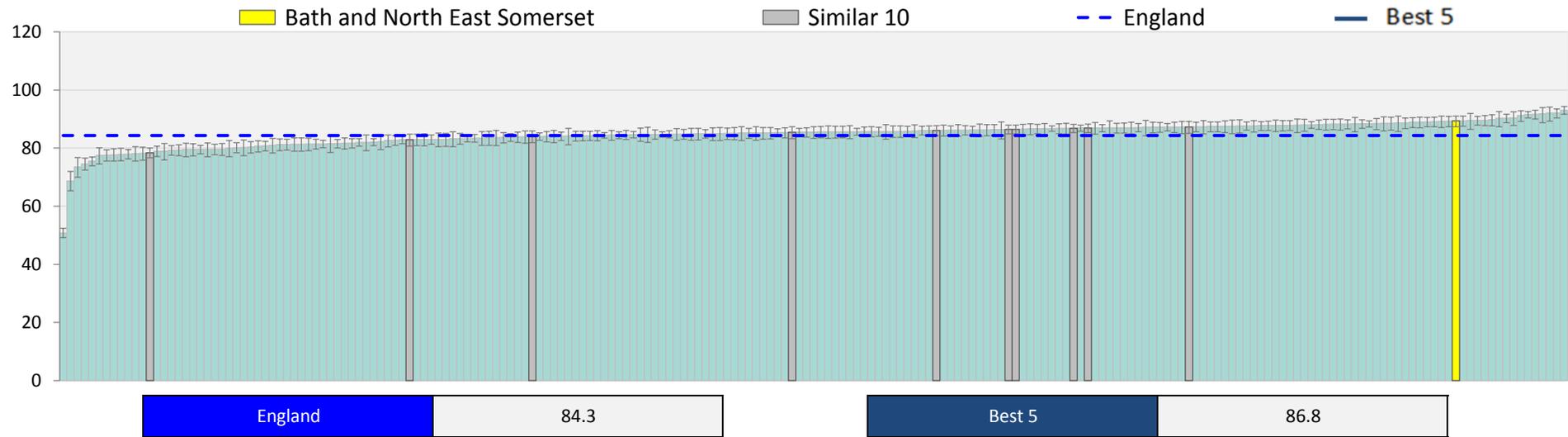
Hip fractures in people aged 80+ (per 100,000 pop)



Definition: Hip fractures per 100,000 population aged 80+
 Source: Hospital Episode statistics (HES)
 Year: 2014/15

% of patients with Rheumatoid Arthritis who have had a review in the last 12 months

84

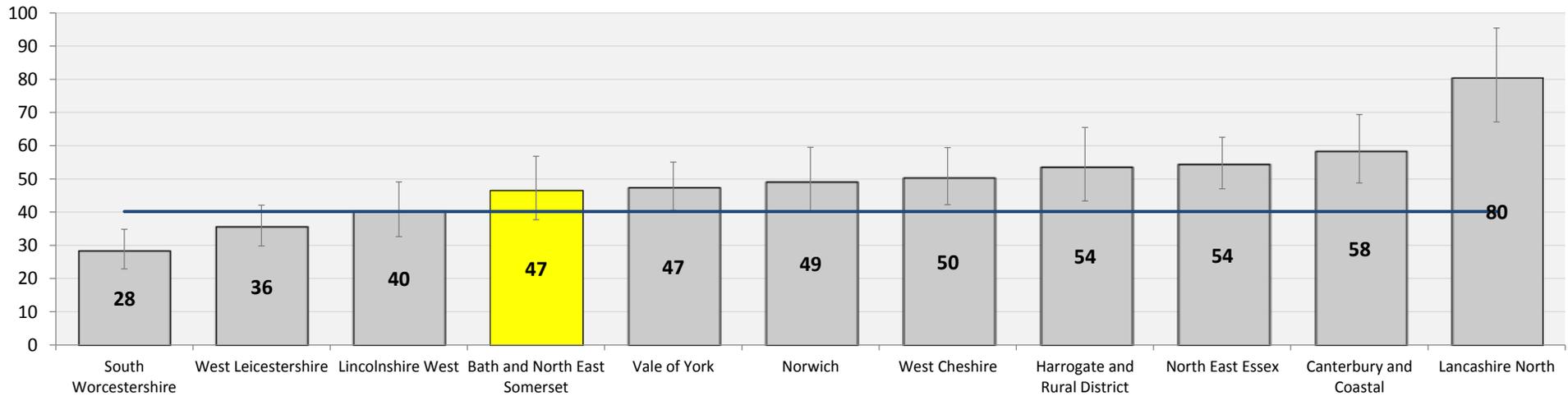
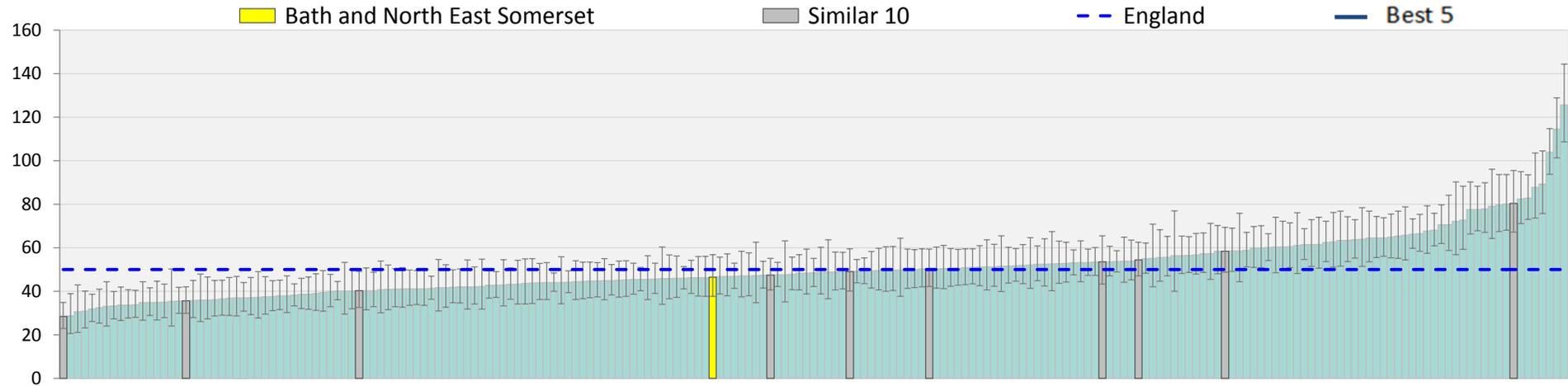


Definition: The percentage of patients with rheumatoid arthritis, on the register, who have had a face-to-face review in the preceding 12 months
 Source: Quality and Outcomes Framework, HSCIC
 Year: 2014/15

Emergency admissions for Back, neck and MSK pain (per 100,000 pop)

13 Adms (NSS)

85

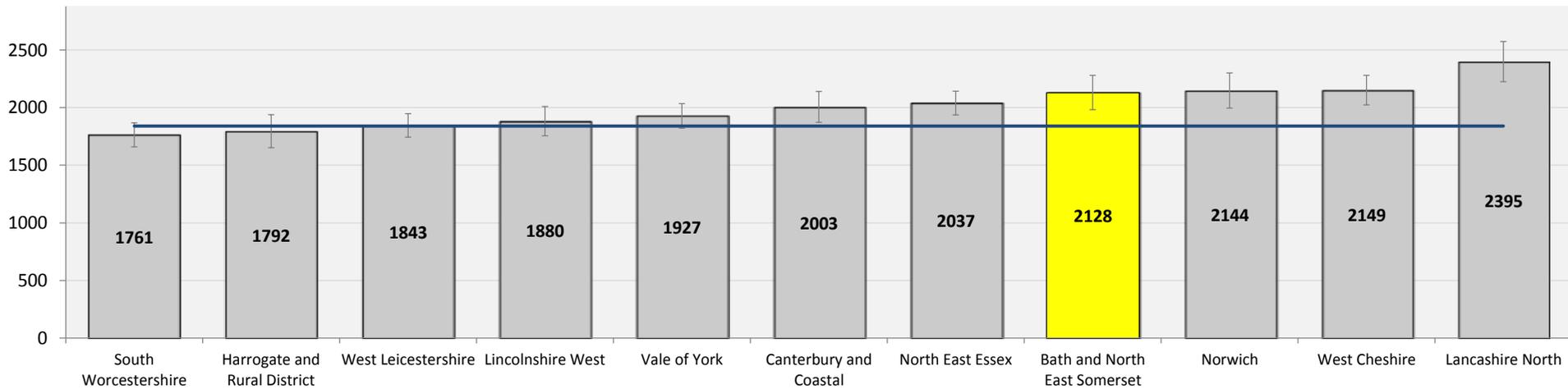
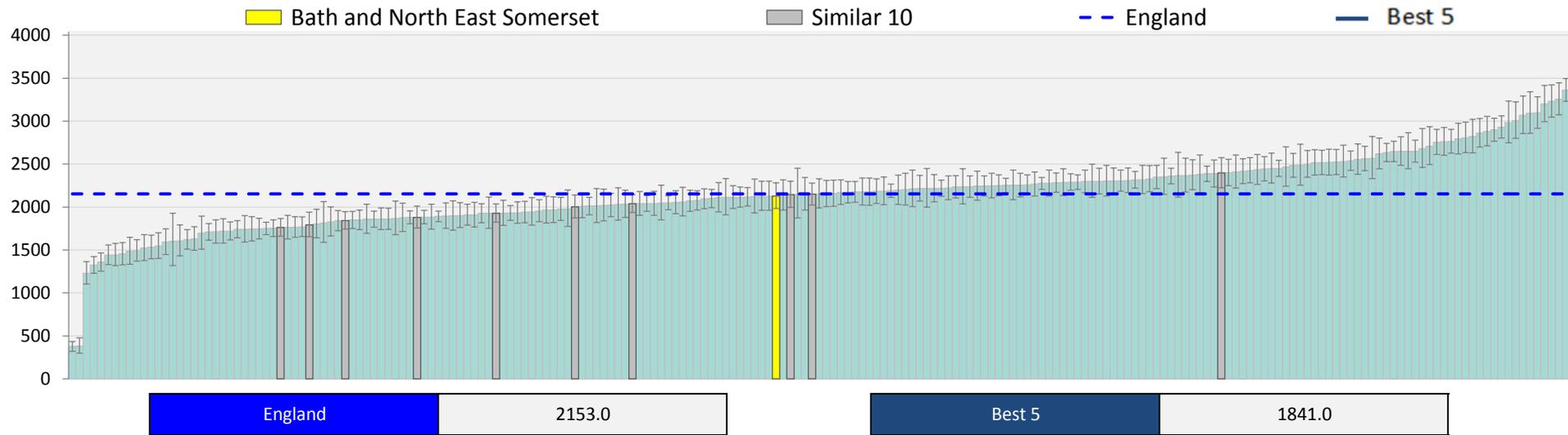


Definition: Number of Emergency admissions for back, neck and musculoskeletal pain per 100,000 Population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries due to falls in people aged 65+ (per 100,000 pop)

107 Adms

86

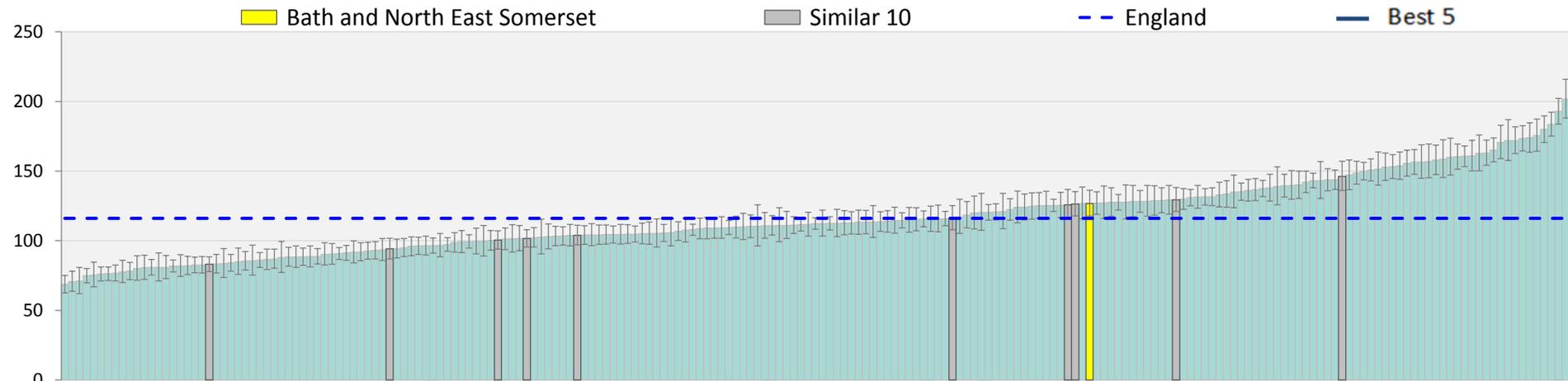


Definition: Injuries due to falls per 100,000 population aged 65+
 Source: Hospital Episode statistics (HES)
 Year: 2014/15

Unintentional and deliberate injury admissions, 0-24 years (per 100,000 pop)

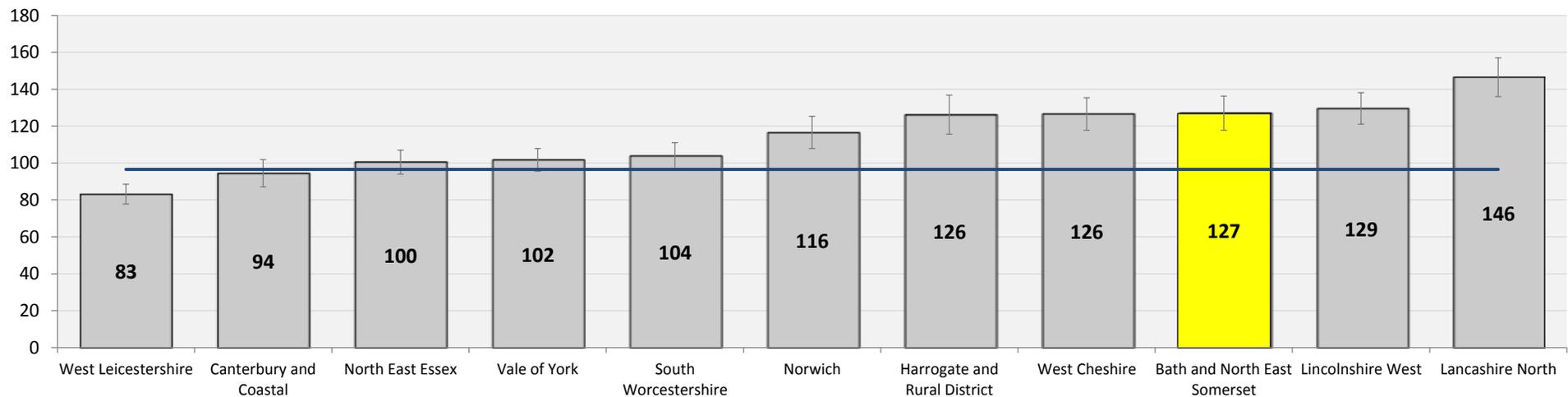
18 Adms

87



England 116.0

Best 5 97.0



Definition: Hospital admissions caused by unintentional and deliberate injury for those aged 0-24 per 10,000 population

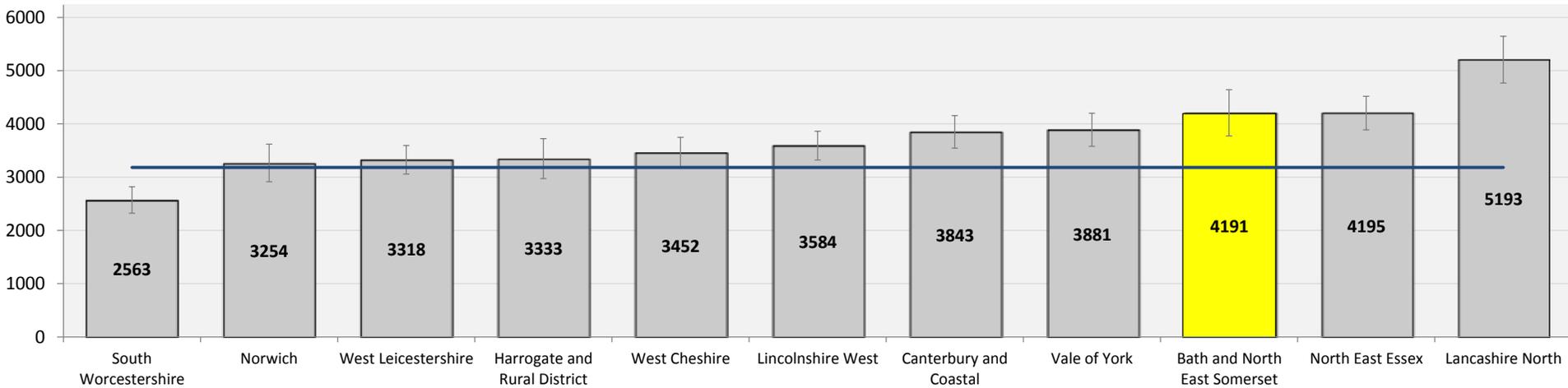
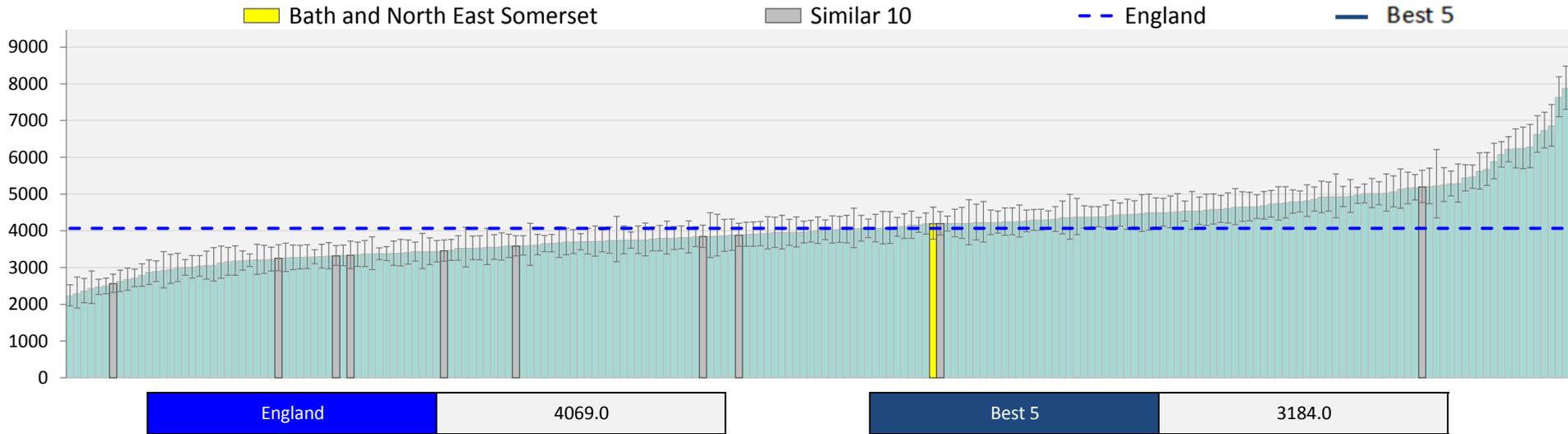
Source: Hospital Episode Statistics (HES), The Health and Social Care Information Centre. Office for National Statistics (ONS). Community Mental Health Profile (CMHP), Fingertips, Public Health England

Year: 2012/13

MSK - Non-elective spend (£ per 1,000 pop)

£214k

88

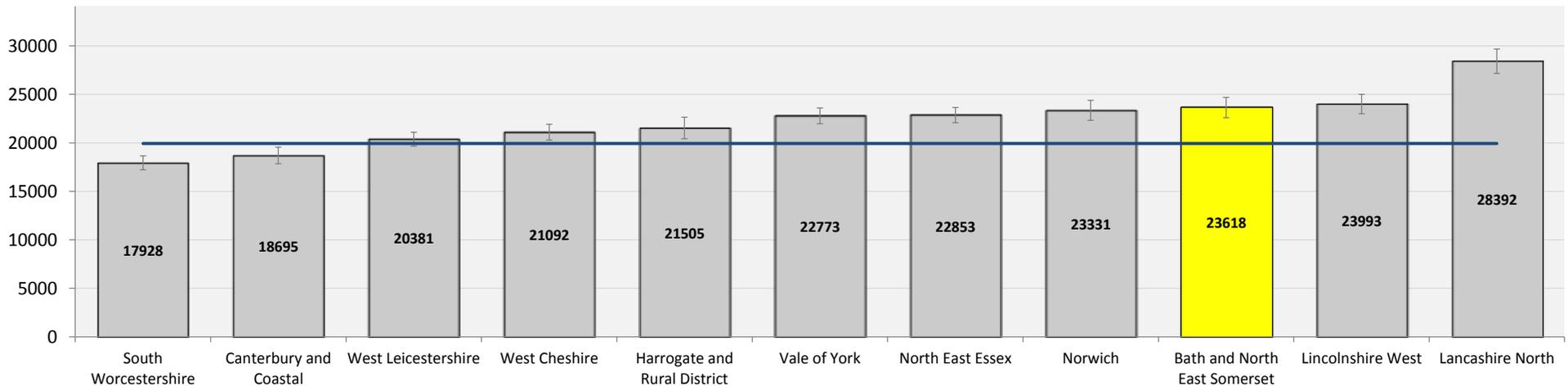
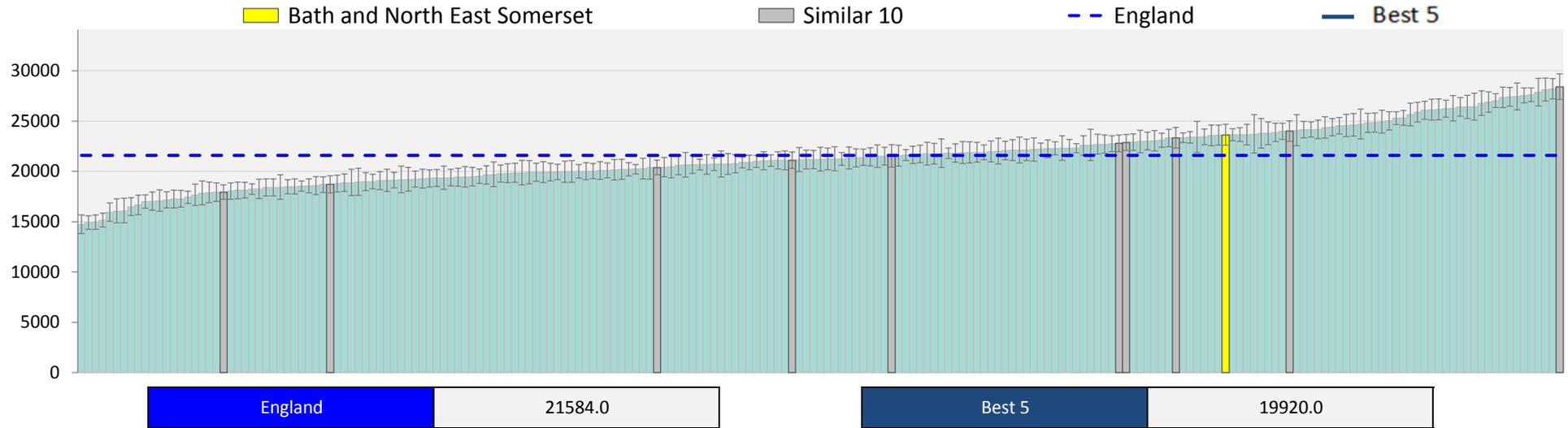


Definition: MSK - Total Non-elective spend on admissions per 1,000 population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Trauma - Non-elective spend (£ per 1,000 pop)

£806k

89

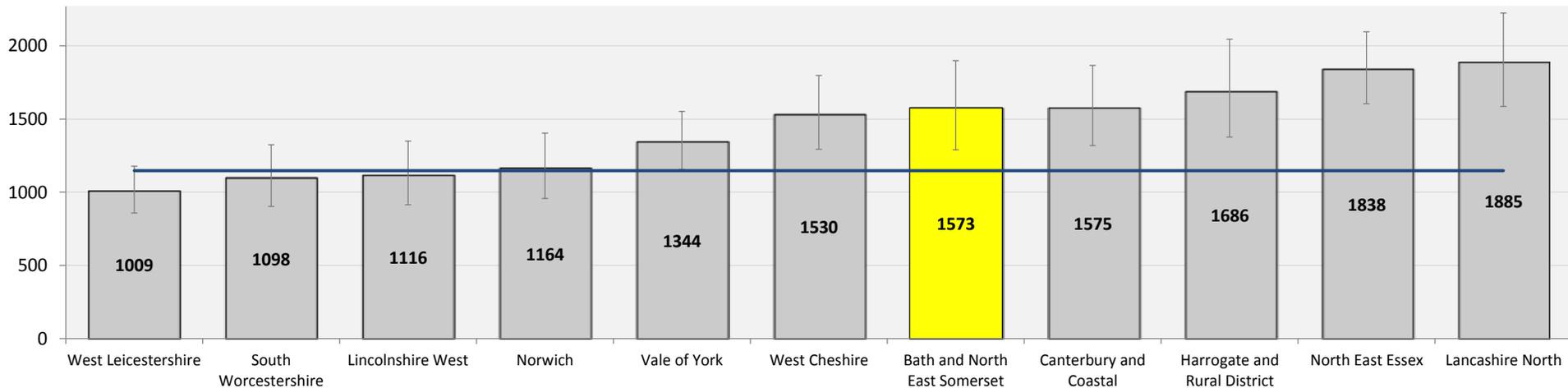
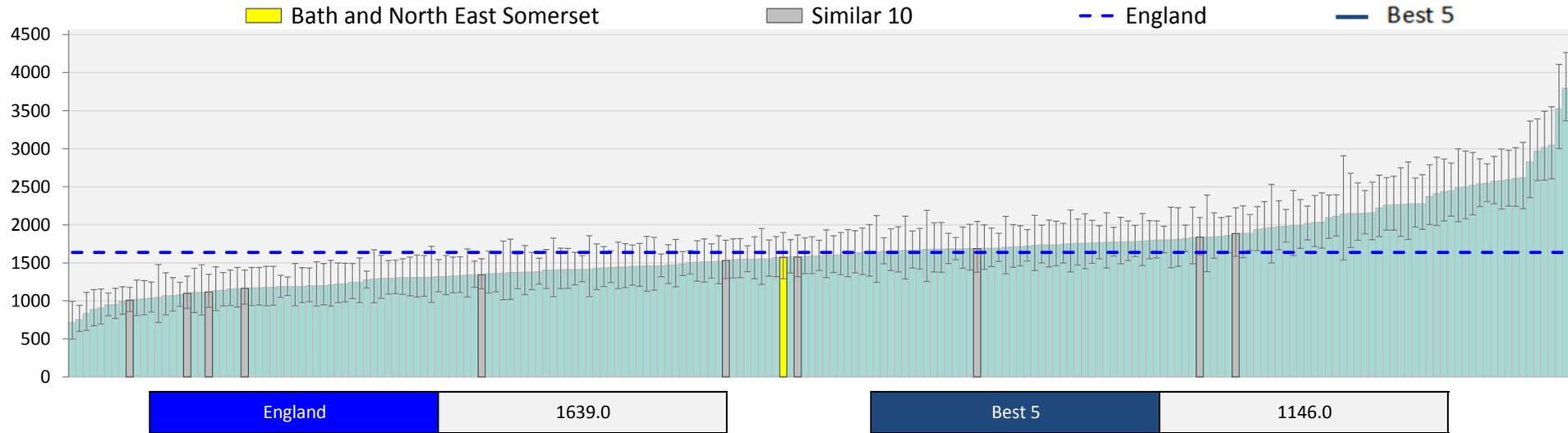


Definition: Trauma and Injuries - Total Non-elective spend on admissions per 1,000 population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Back, neck and MSK pain - non-elective spend (£ per 1,000 pop)

£90k

90

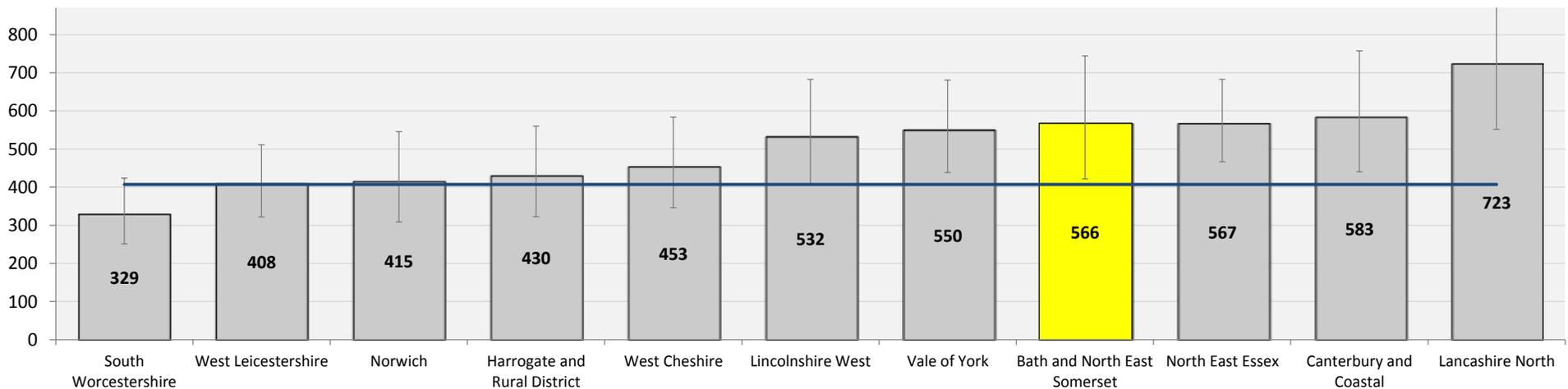
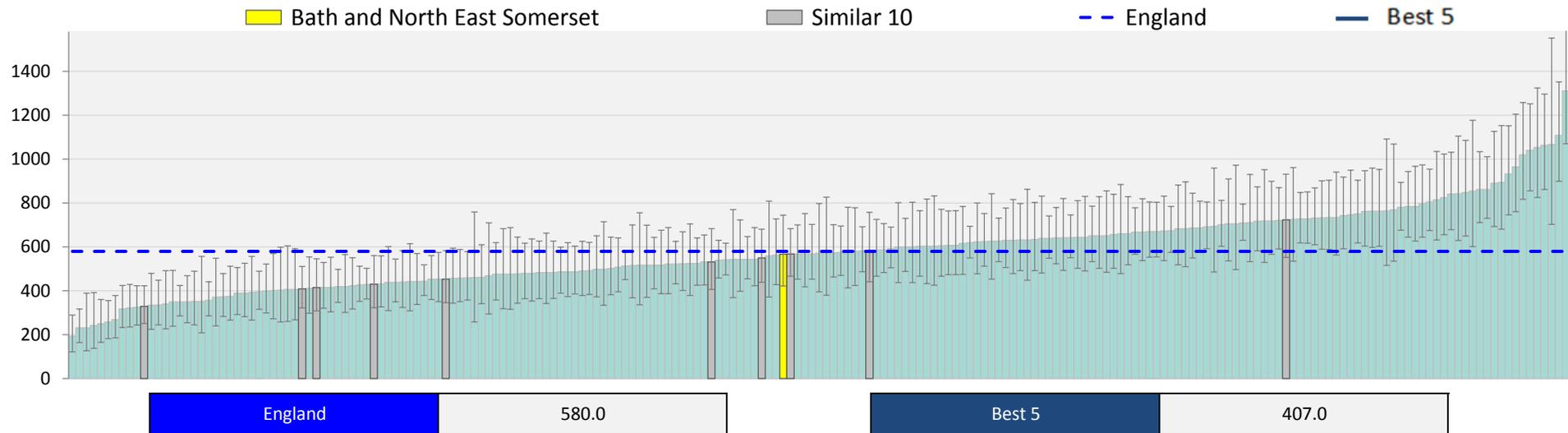


Definition: Back, neck and musculoskeletal pain - Total Non-elective spend on admissions per 1,000 population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Rheumatoid and Inflammatory Arthritis - non-elective spend (£ per 1,000 pop)

£34k

91

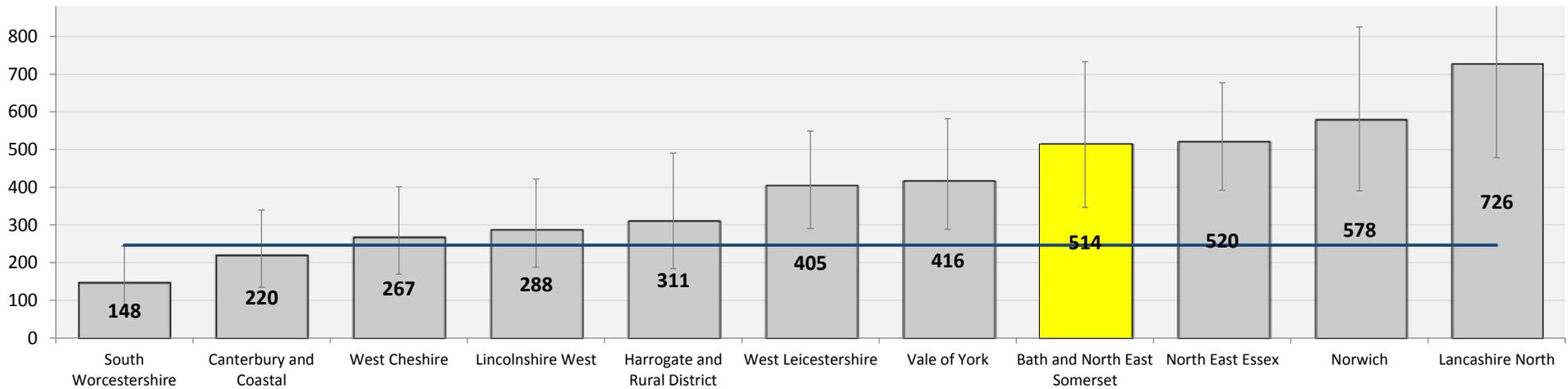
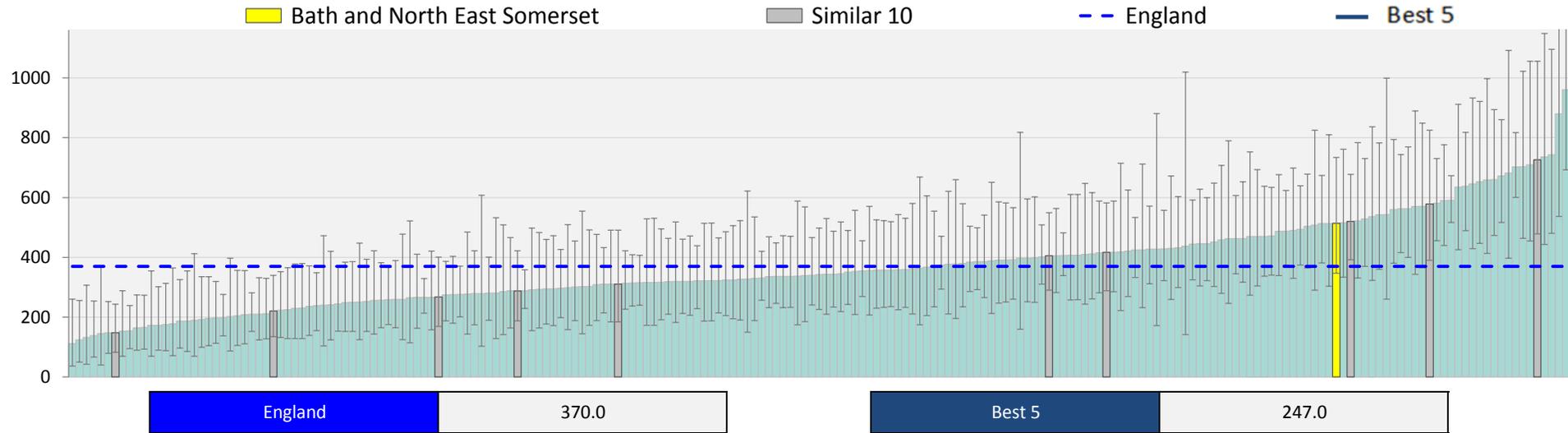


Definition: Rheumatoid and Inflammatory Arthritis - Total Non-elective spend on admissions per 1,000 population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Osteoporosis and fragility fractures - non-elective spend (£ per 1,000 pop)

£59k

92

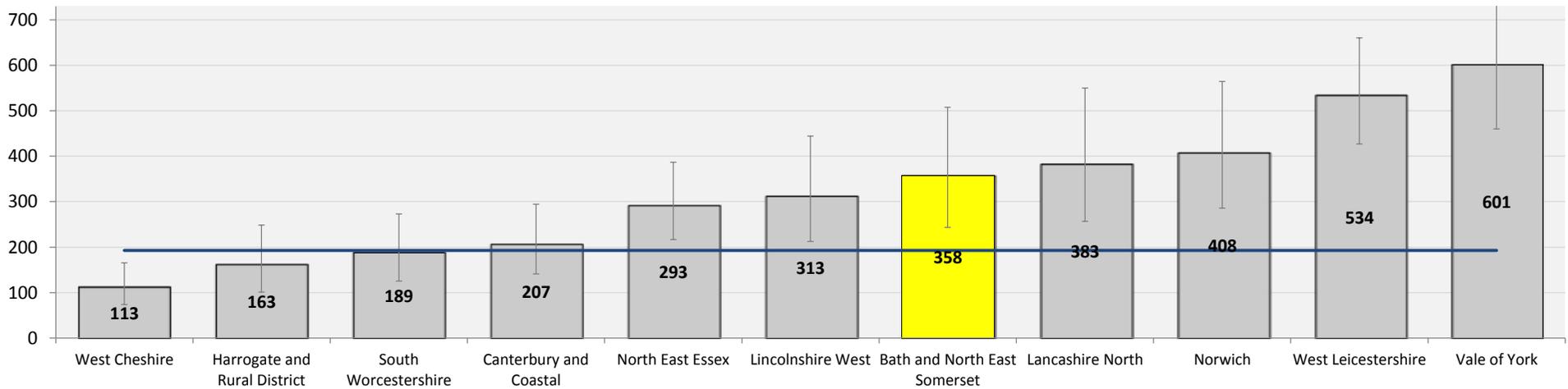
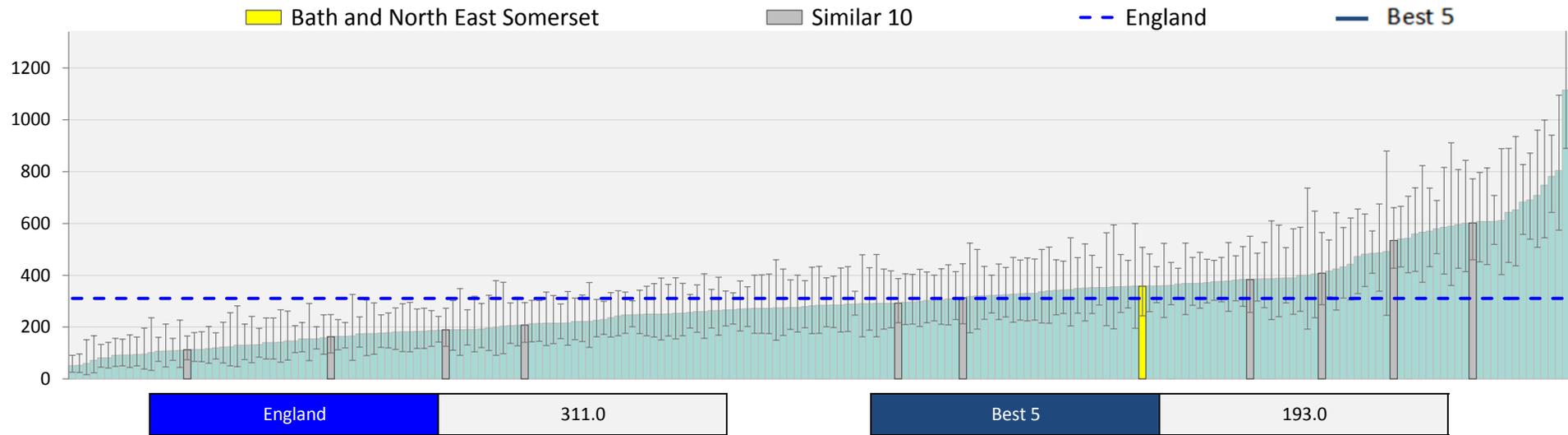


Definition: Osteoporosis and fragility fractures - Total Non-elective spend on admissions per 1,000 population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Osteoarthritis - non-elective spend (£ per 1,000 pop)

£37k

93

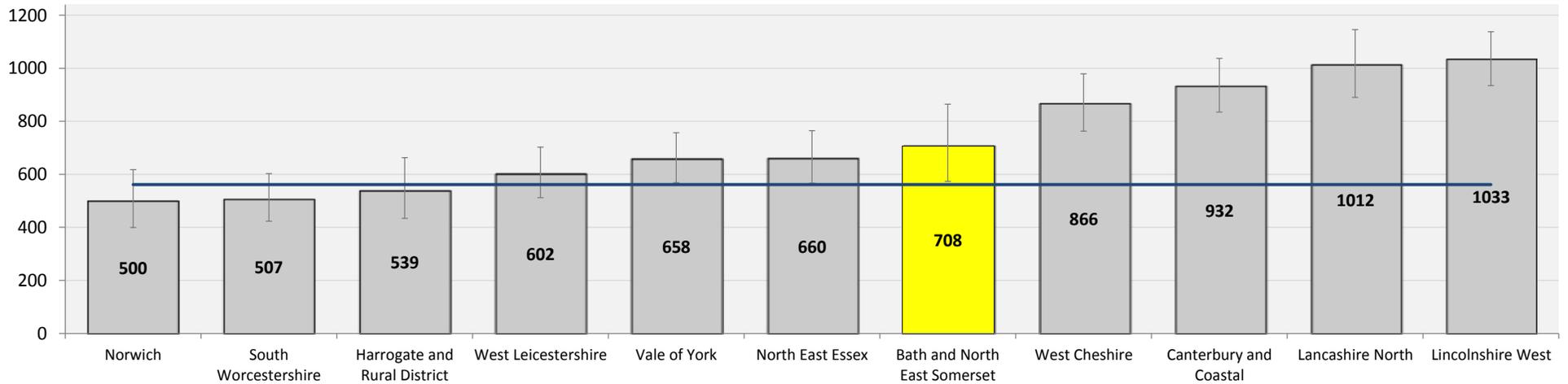
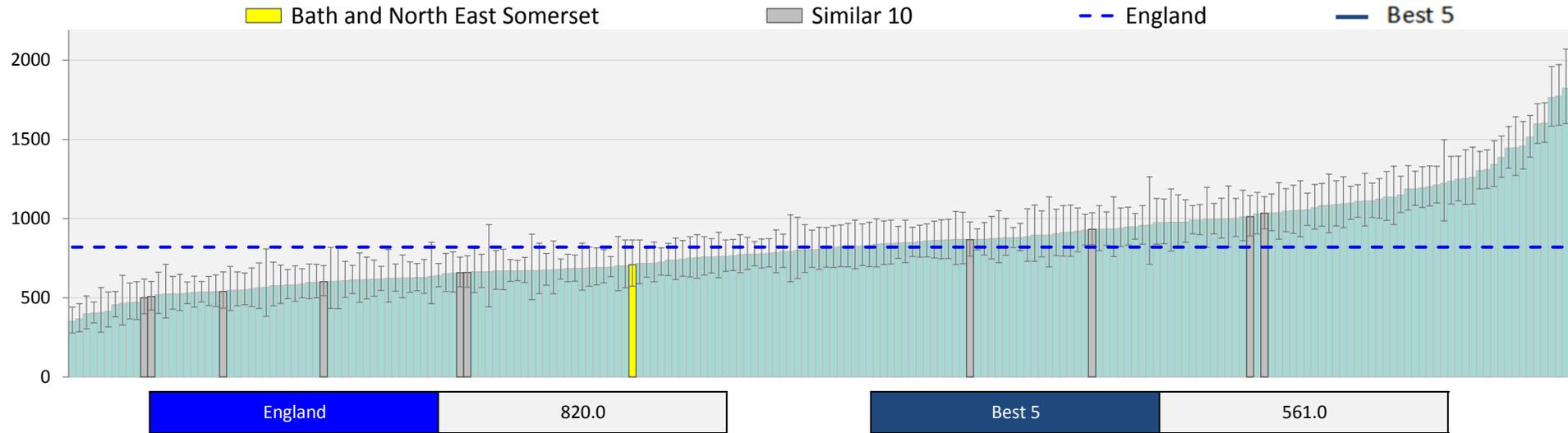


Definition: Osteoarthritis - Total Non-elective spend on admissions per 1,000 population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Other MSK conditions - non-elective spend (£ per 1,000 pop)

£31k

94

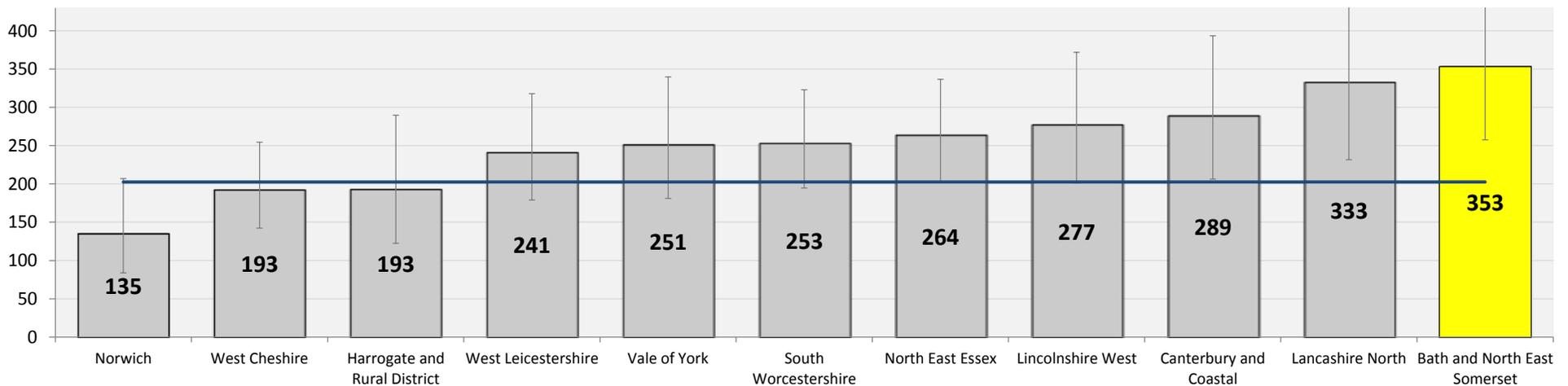
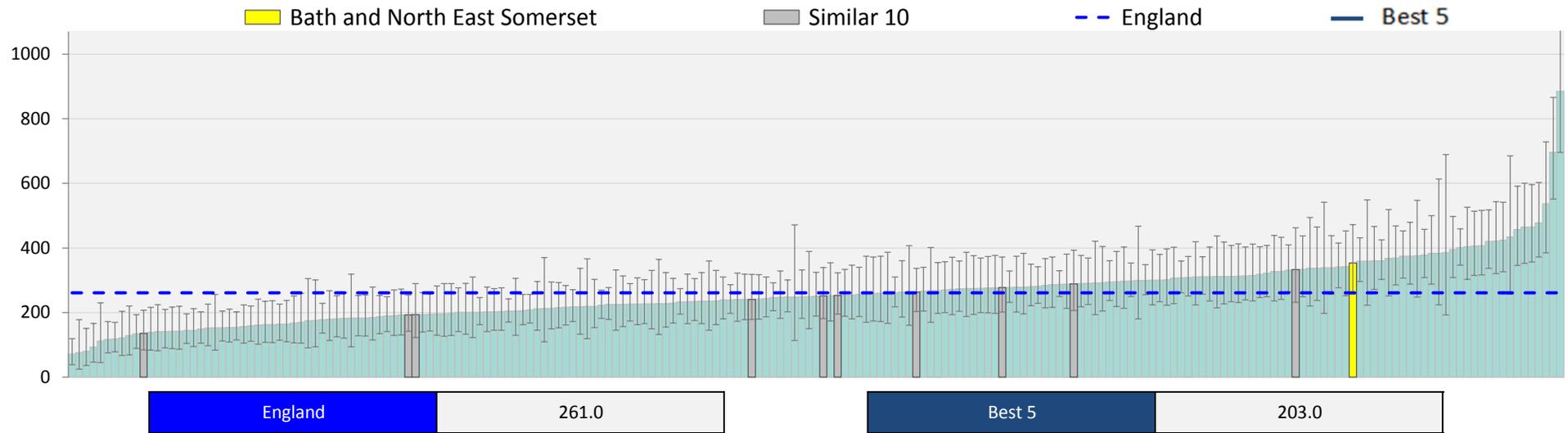


Definition: Other MSK - Total Non-elective spend on admissions per 1,000 population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Other joint disorders - non-elective spend (£ per 1,000 pop)

£33k

95

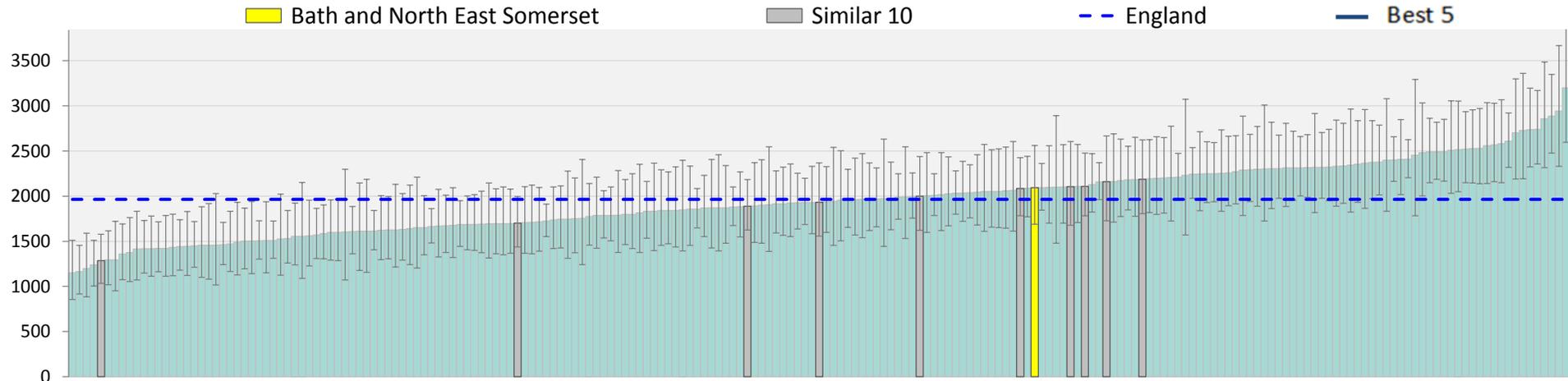


Definition: Other joint disorders (not including osteoarthritis or rheumatoid arthritis) - Total Non-elective spend on admissions per 1,000 population
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the hip and thigh - Under 75s - Spend (£ per 1,000 pop)

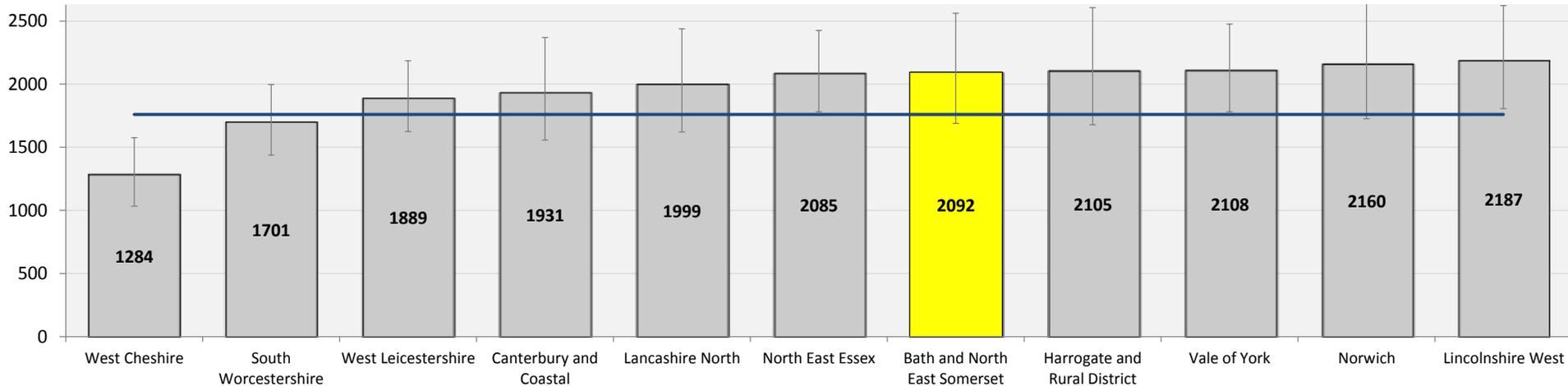
£63k (NSS)

96



England 1964.0

Best 5 1761.0

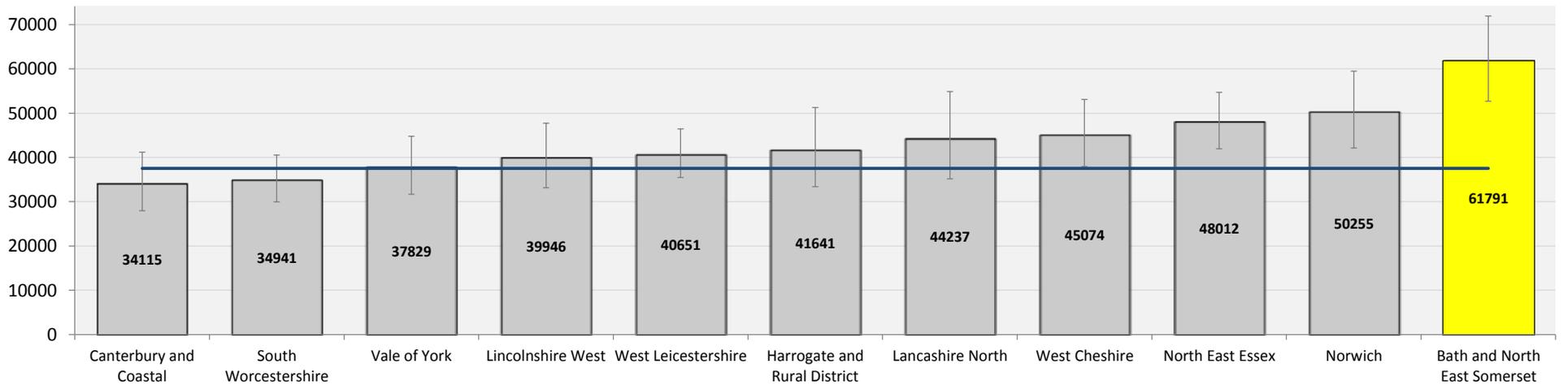
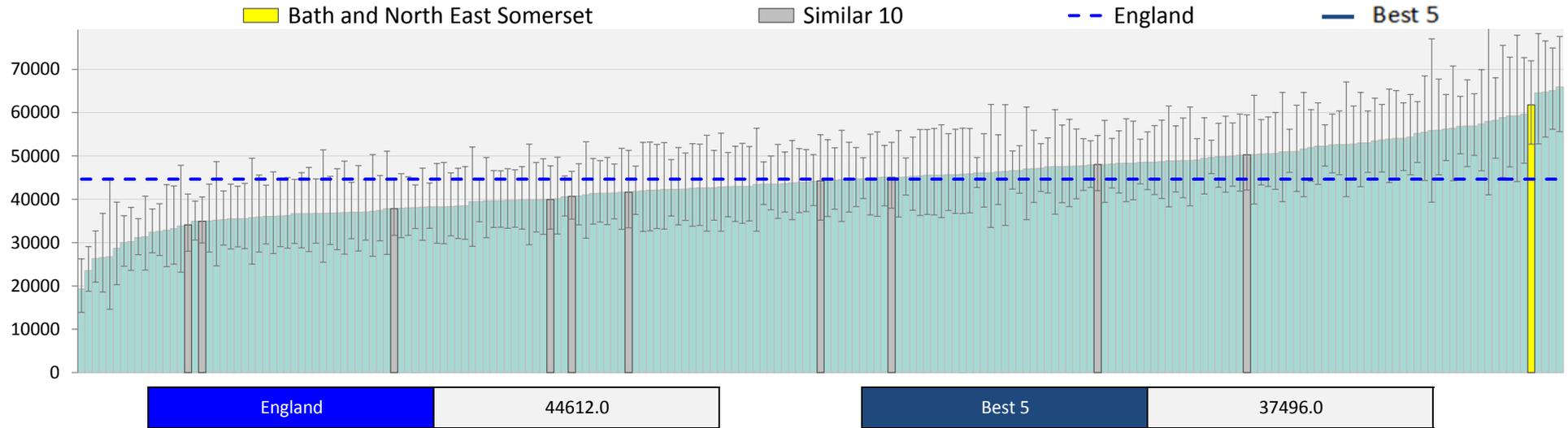


Definition: Spend - Injuries to hip and thigh - Under 75s
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the hip and thigh - 75-84 - Spend (£ per 1,000 pop)

£298k

97

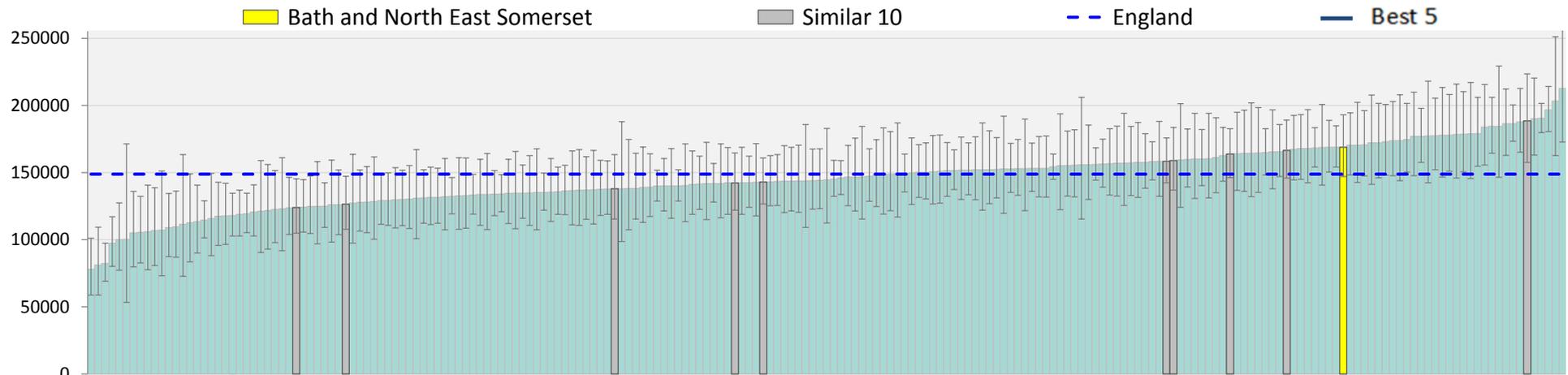


Definition: Spend - Injuries to hip and thigh - 75-84
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the hip and thigh - 85+ - Spend (£ per 1,000 pop)

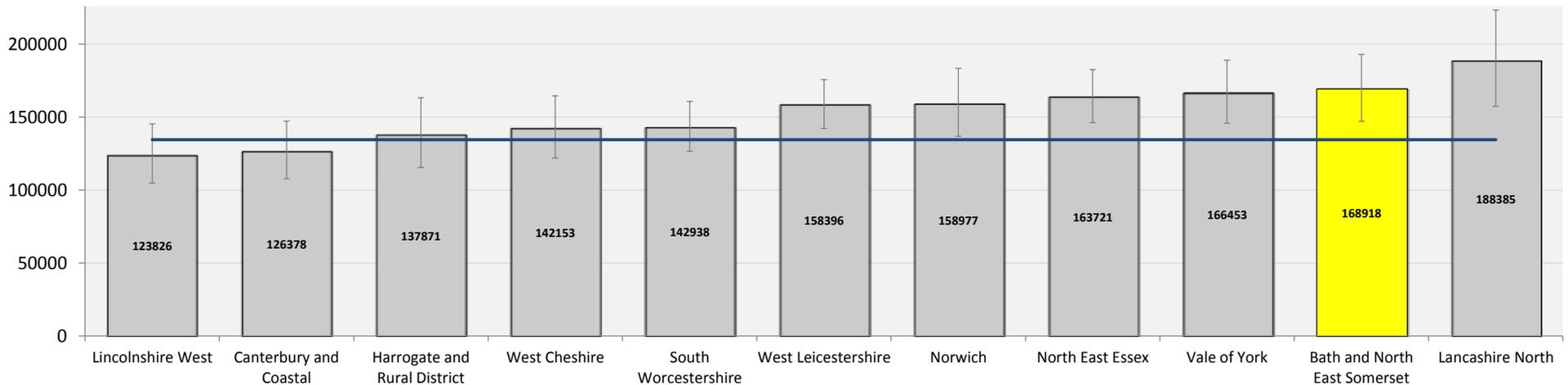
£188k

98



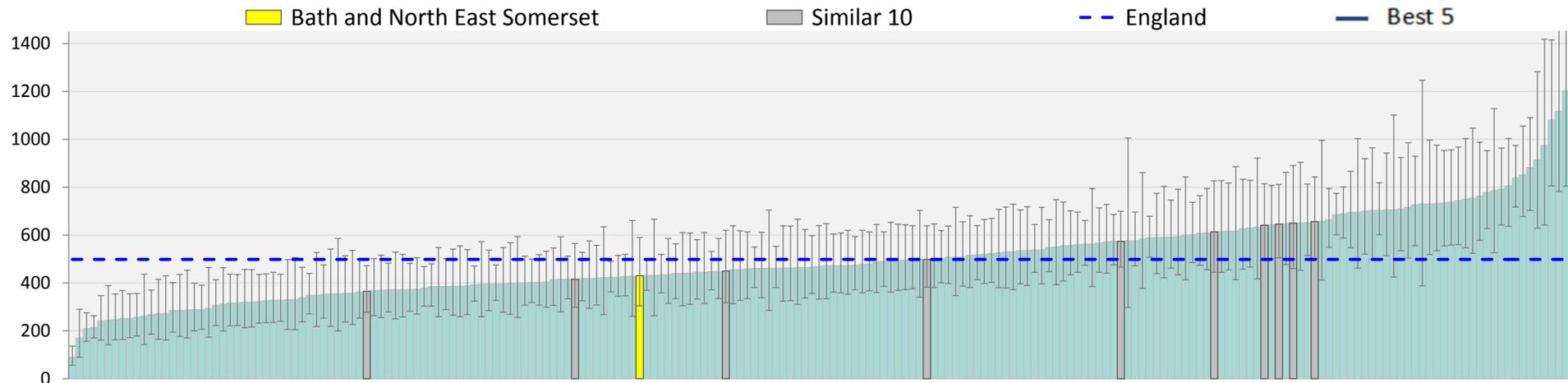
England 148722.0

Best 5 134633.0



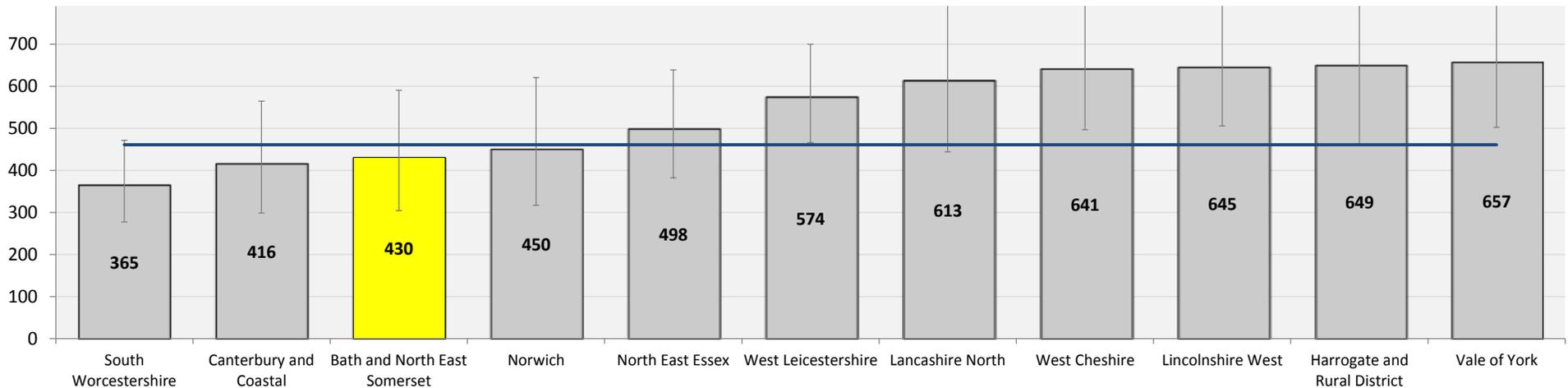
Definition: Spend - Injuries to hip and thigh - 85+
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the thorax - Under 75s - Spend (£ per 1,000 pop)



England 499.0

Best 5 461.0

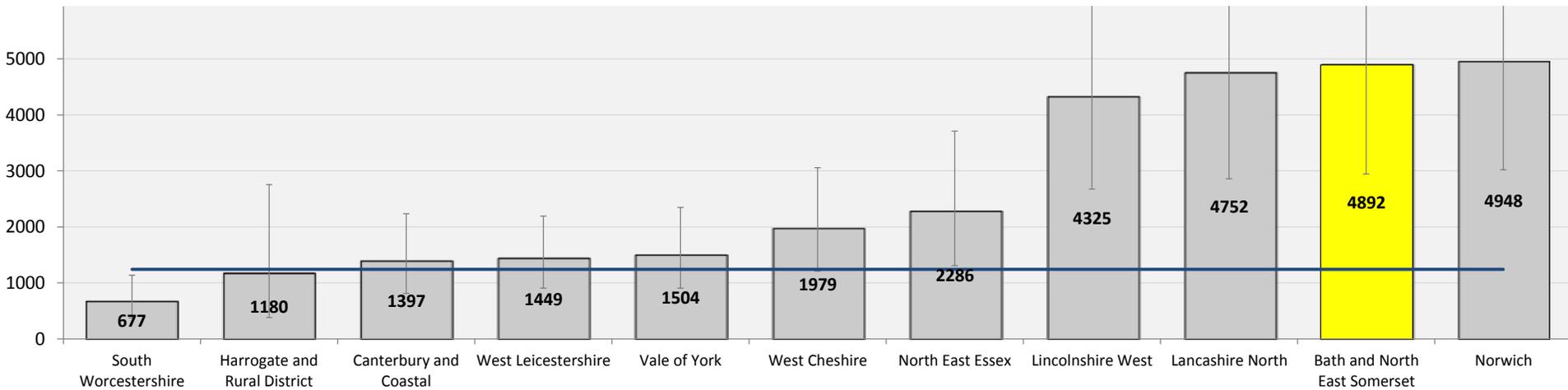
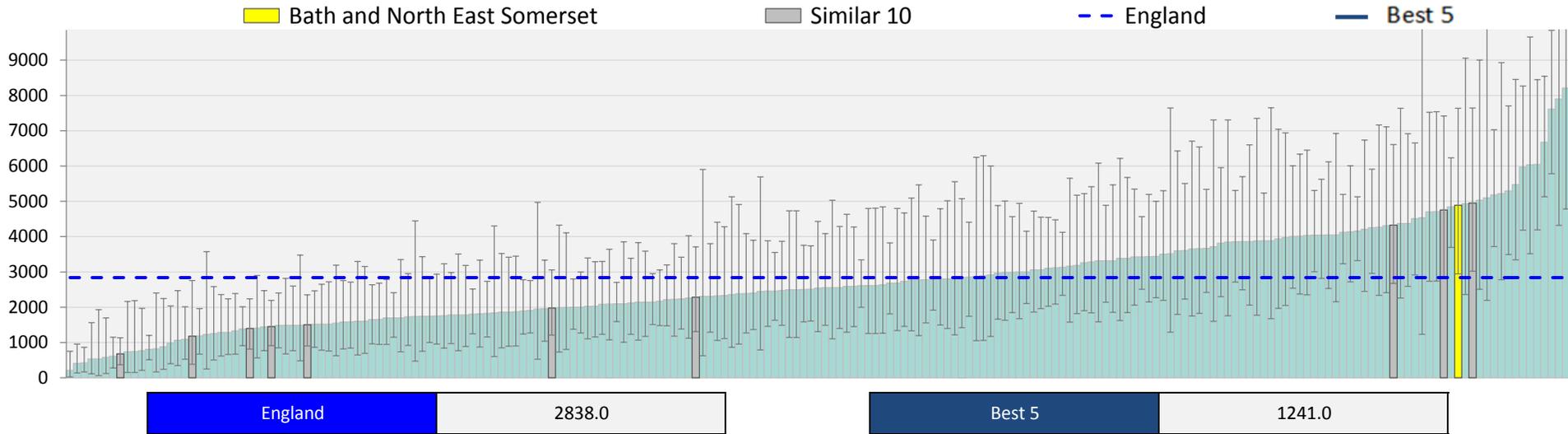


Definition: Spend - Injuries to thorax - Under 75s
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the thorax - 75-84 - Spend (£ per 1,000 pop)

£45k

100

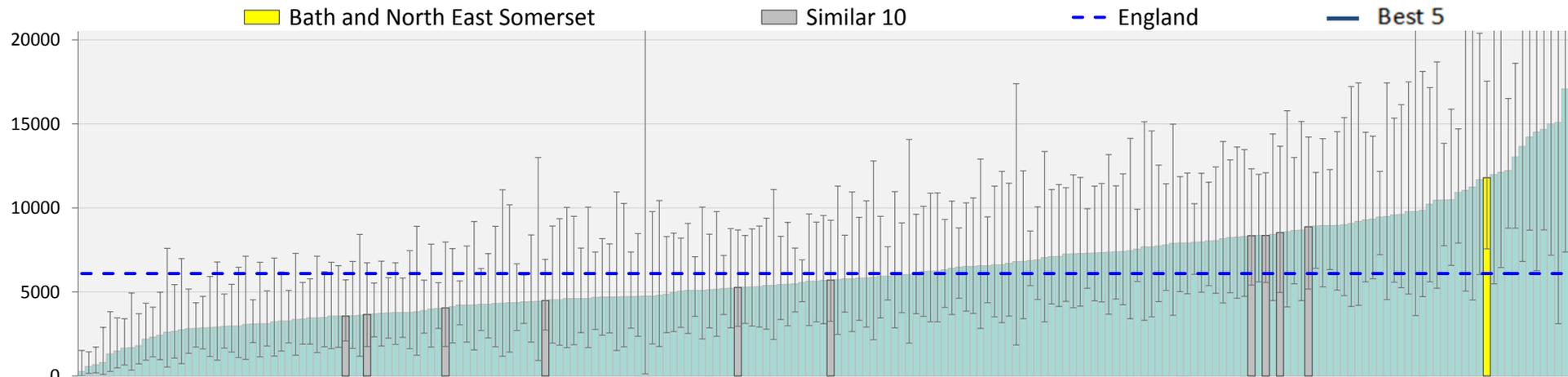


Definition: Spend - Injuries to thorax - 75-84
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the thorax - 85+ - Spend (£ per 1,000 pop)

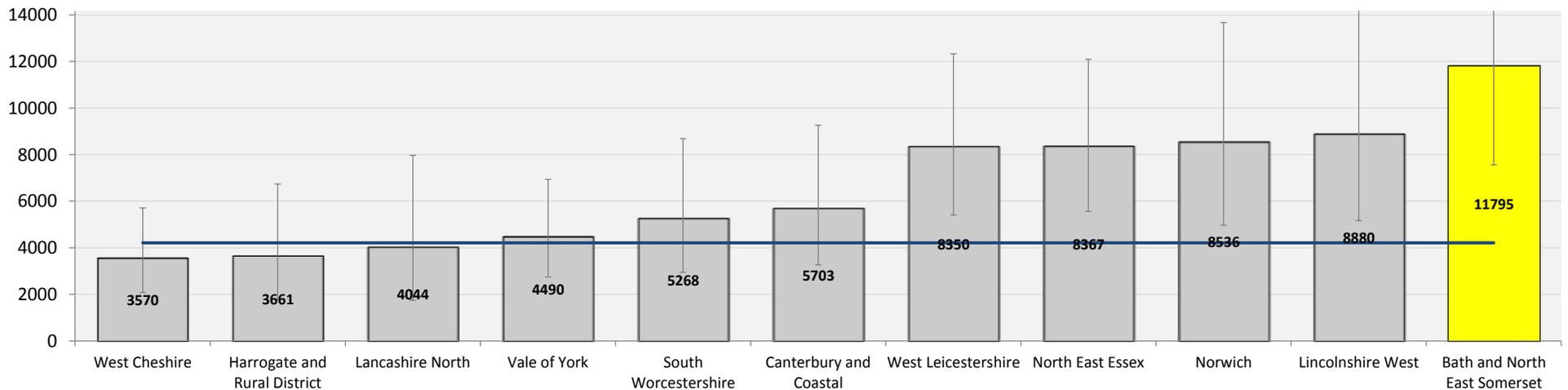
£42k

101



England 6100.0

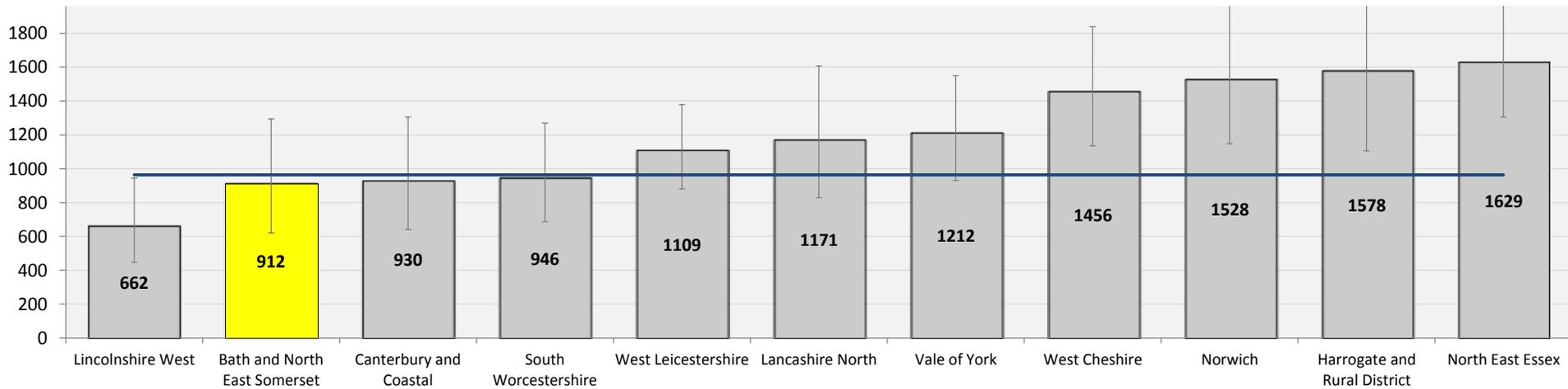
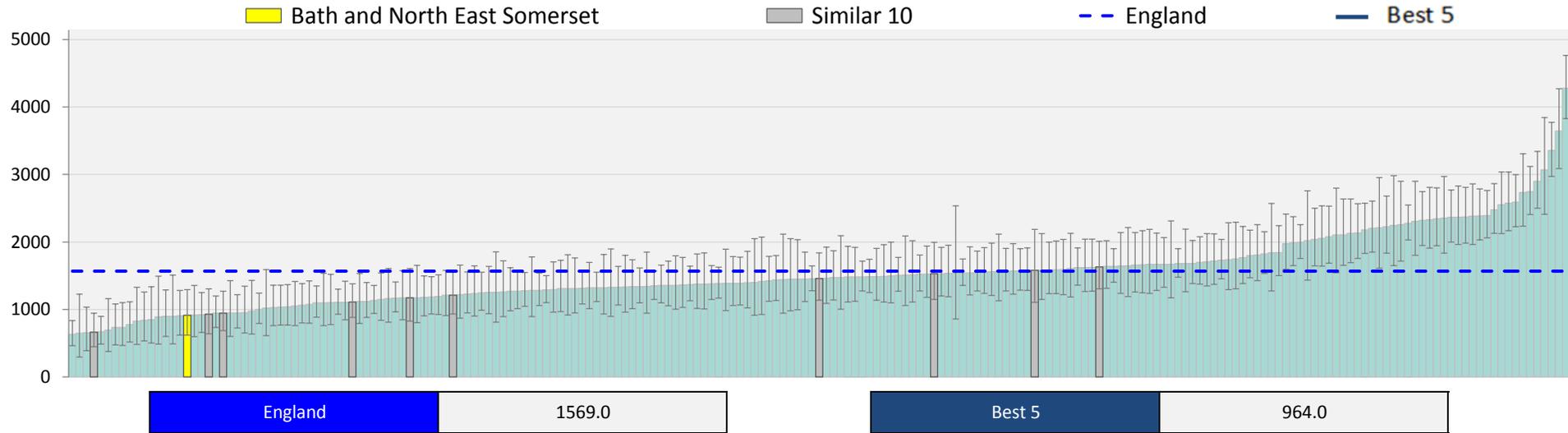
Best 5 4207.0



Definition: Spend - Injuries to thorax - 85+
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the wrist and hand - 0-18 - Spend (£ per 1,000 pop)

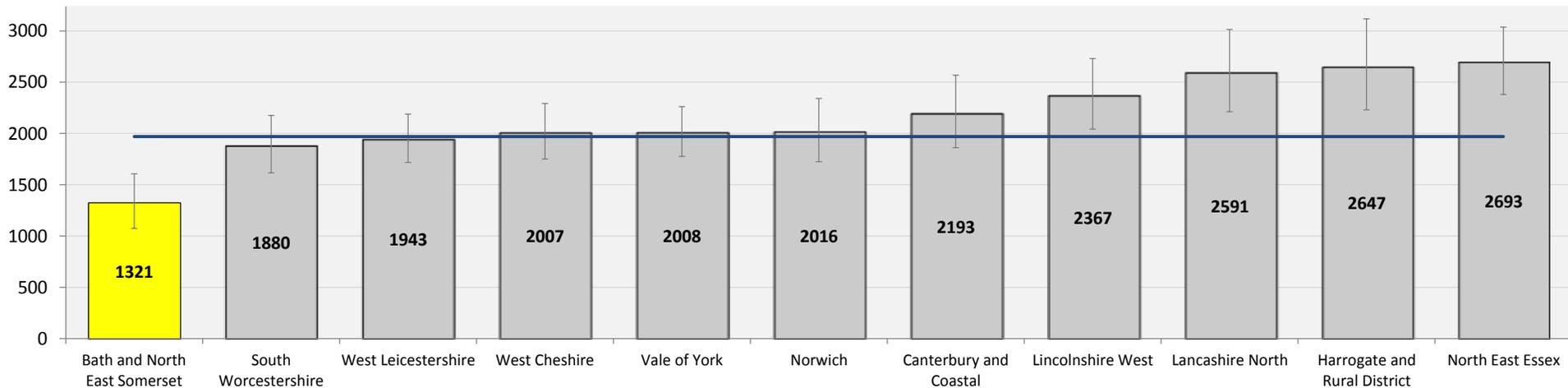
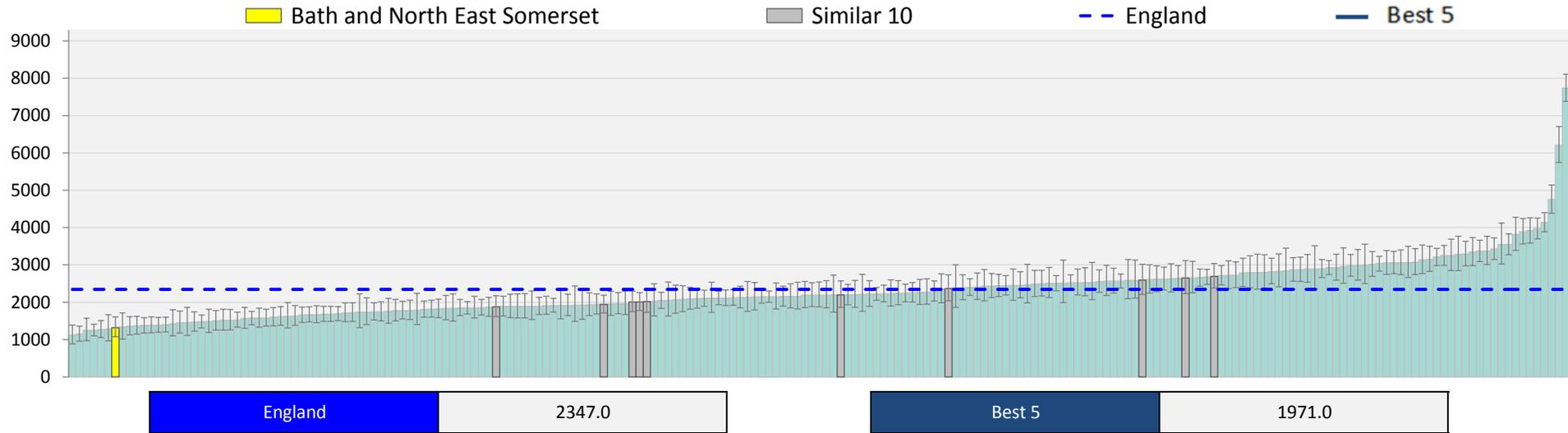
102



Definition: Spend - Injuries to wrist and hand - 0-18
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the wrist and hand - 19-64 - Spend (£ per 1,000 pop)

103

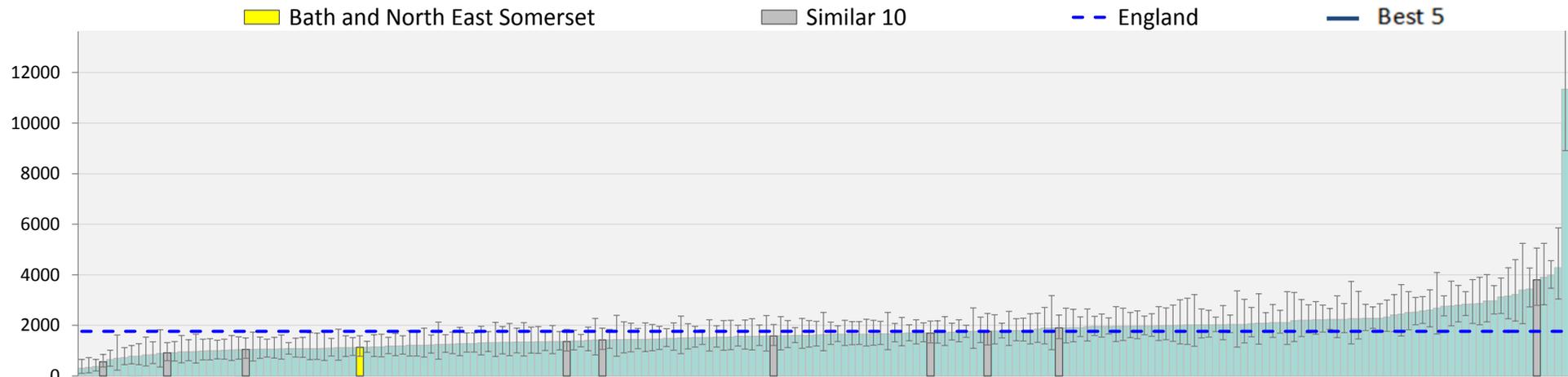


Definition: Spend - Injuries to wrist and hand - 19-64
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the wrist and hand - 65+ - Spend (£ per 1,000 pop)

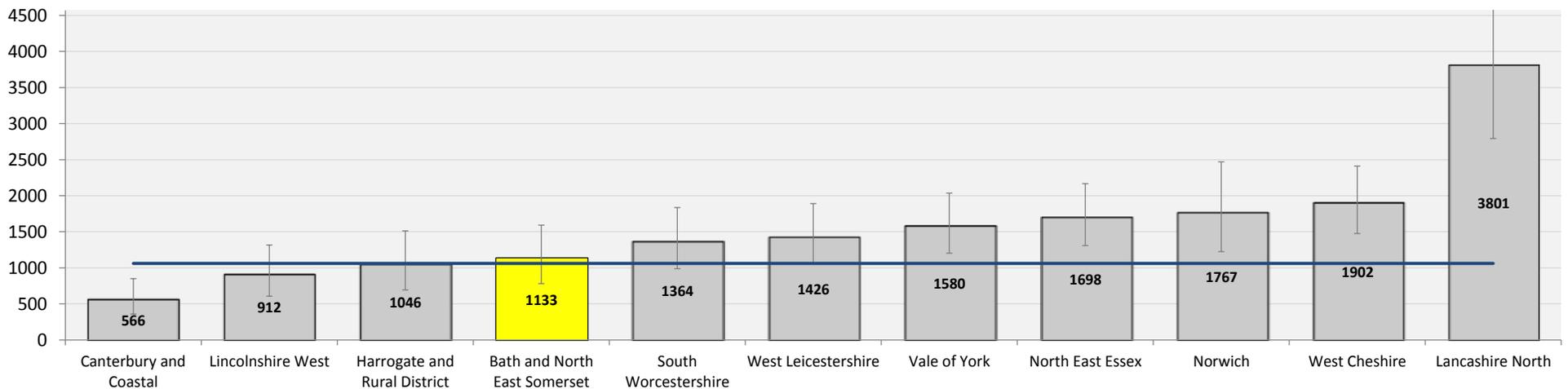
£3k (NSS)

104



England 1763.0

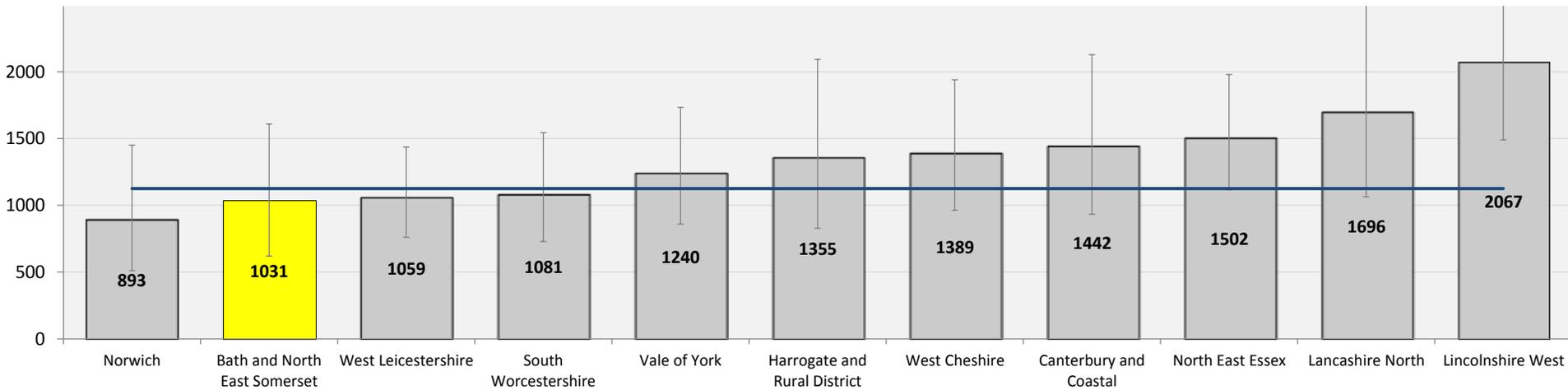
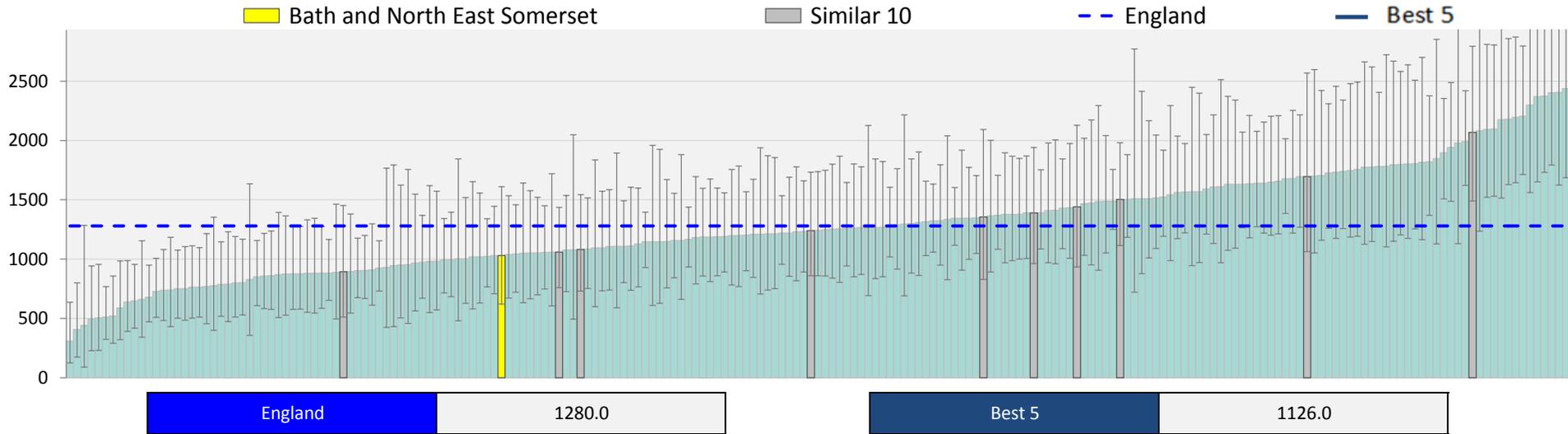
Best 5 1063.0



Definition: Spend - Injuries to wrist and hand - 65+
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the shoulder and upper arm - 0-18 - Spend (£ per 1,000 pop)

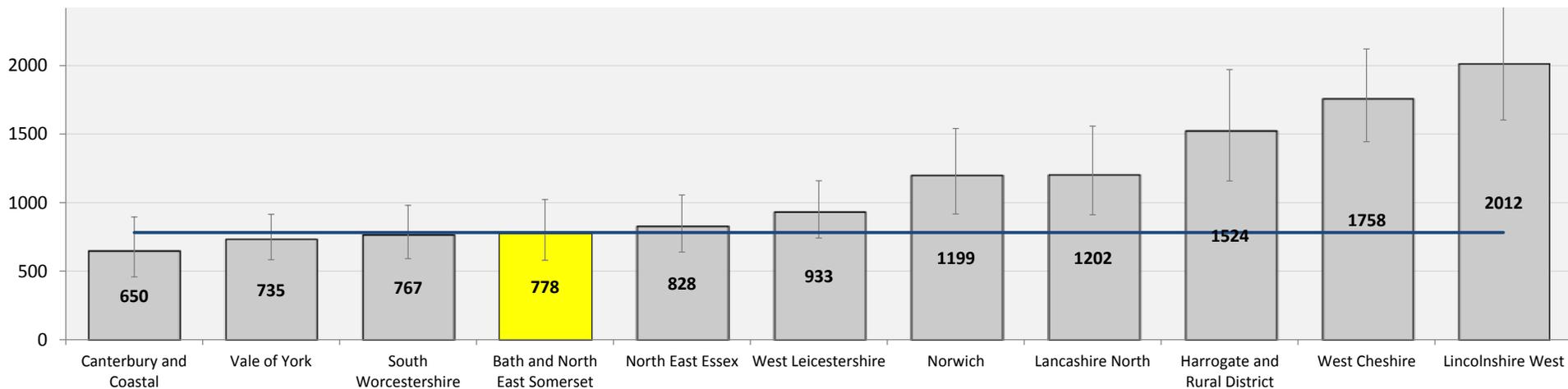
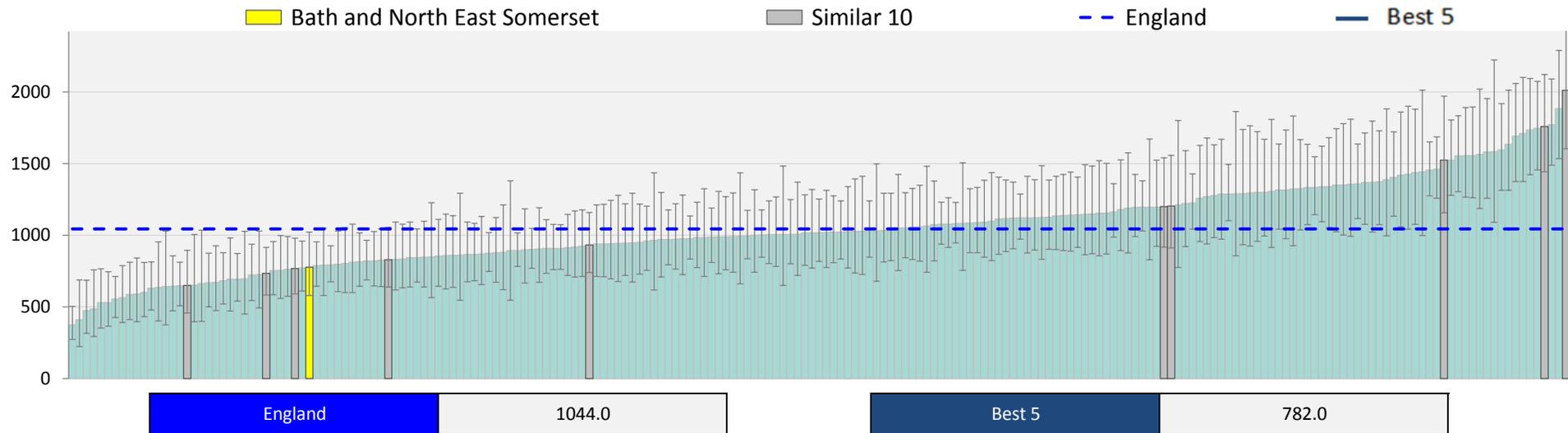
105



Definition: Spend - Injuries to shoulder and upper arm - 0-18
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the shoulder and upper arm - 19-64 - Spend (£ per 1,000 pop)

106

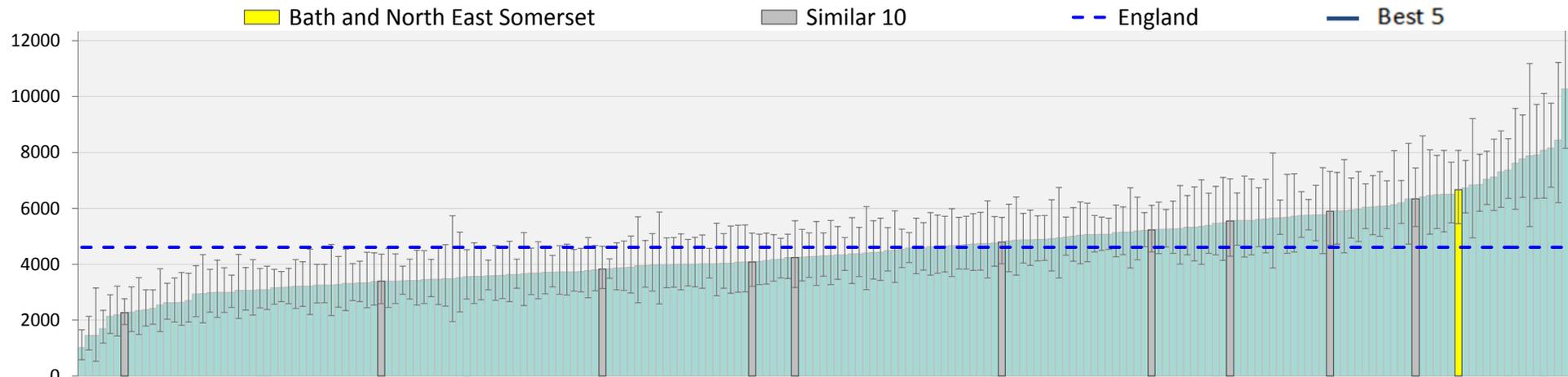


Definition: Spend - Injuries to shoulder and upper arm - 19-64
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the shoulder and upper arm - 65+ - Spend (£ per 1,000 pop)

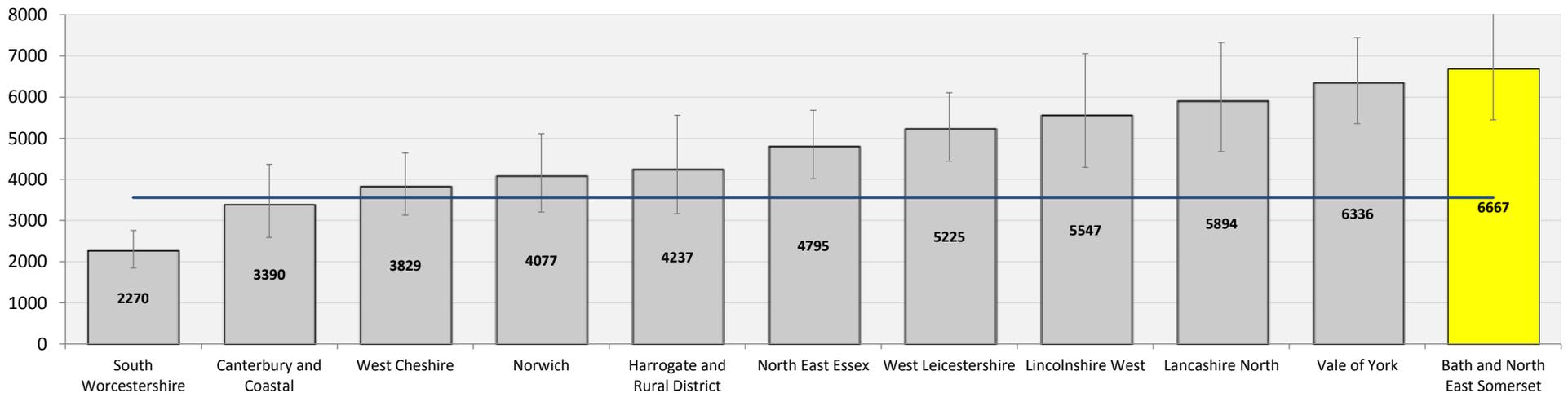
£120k

107



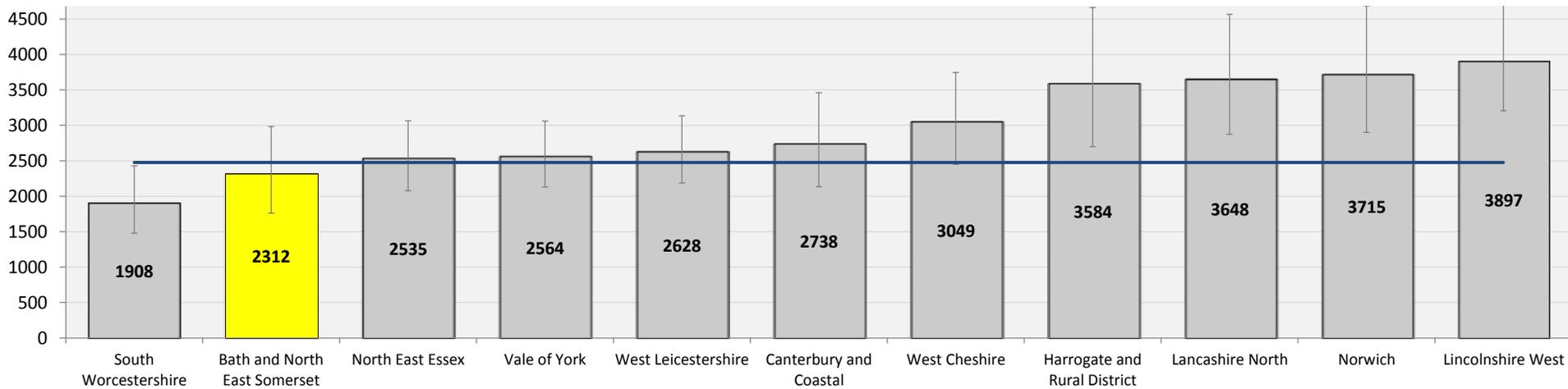
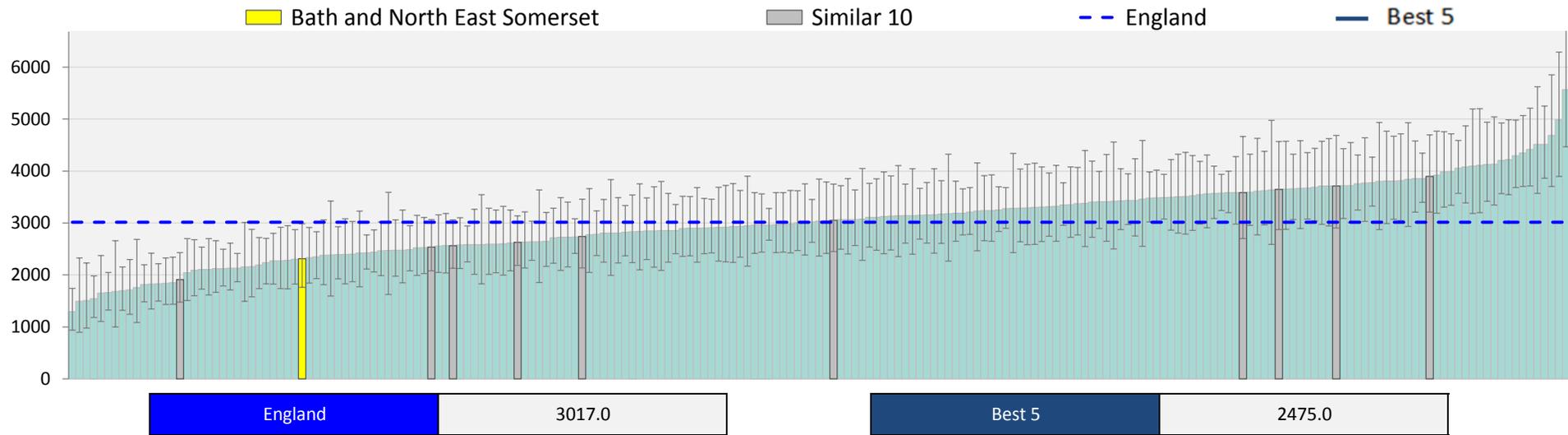
England 4611.0

Best 5 3561.0



Definition: Spend - Injuries to shoulder and upper arm - 65+
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the elbow and forearm - 0-18 - Spend (£ per 1,000 pop)

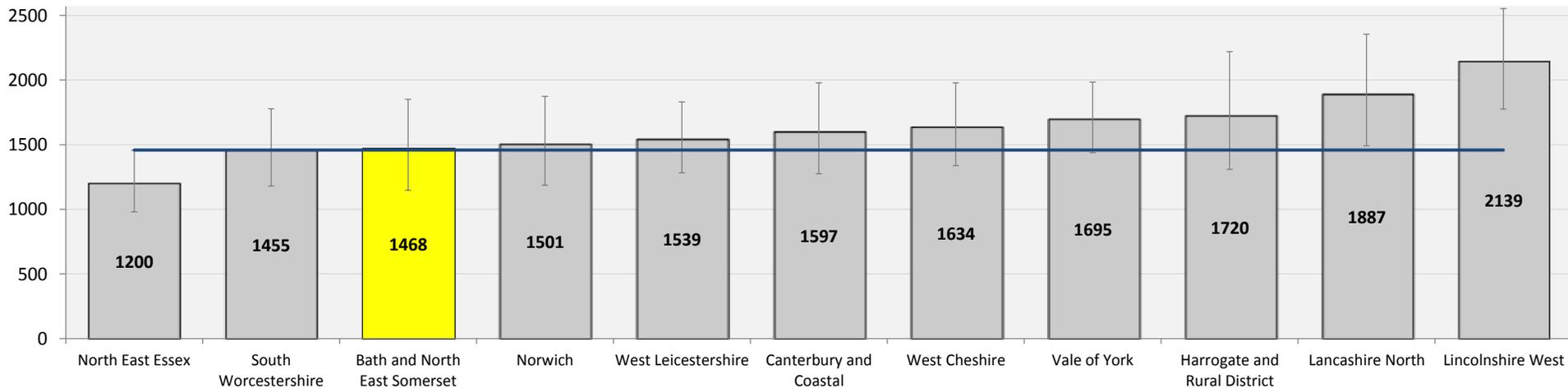
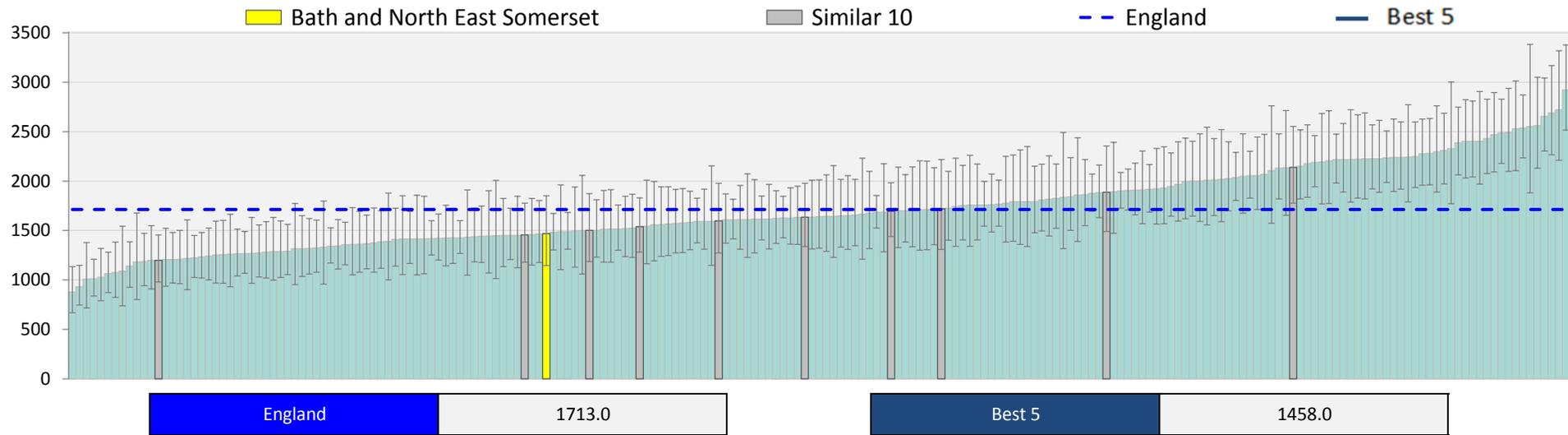


Definition: Spend - Injuries to elbow and forearm - 0-18
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the elbow and forearm - 19-64 - Spend (£ per 1,000 pop)

£1k (NSS)

109

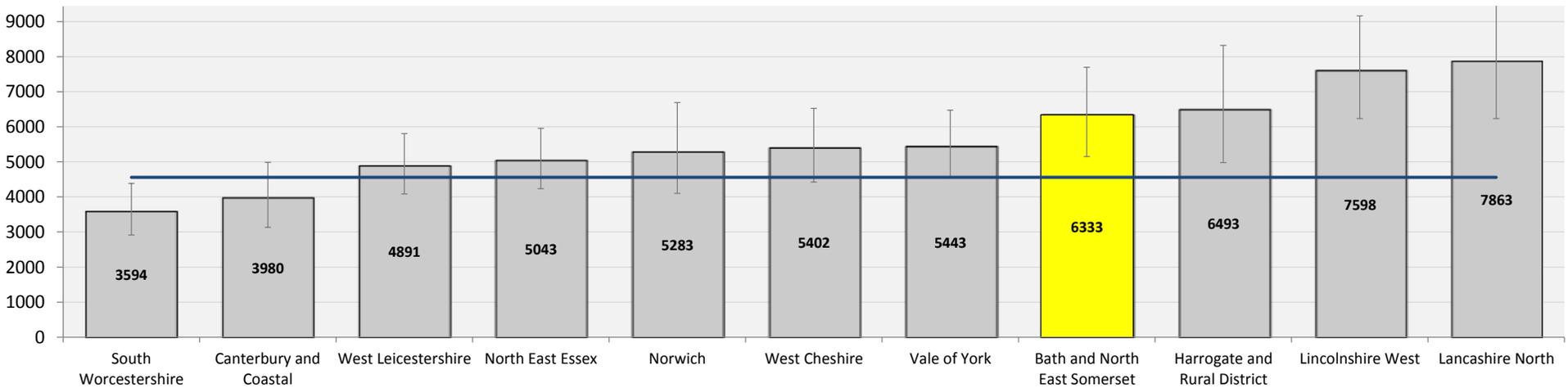
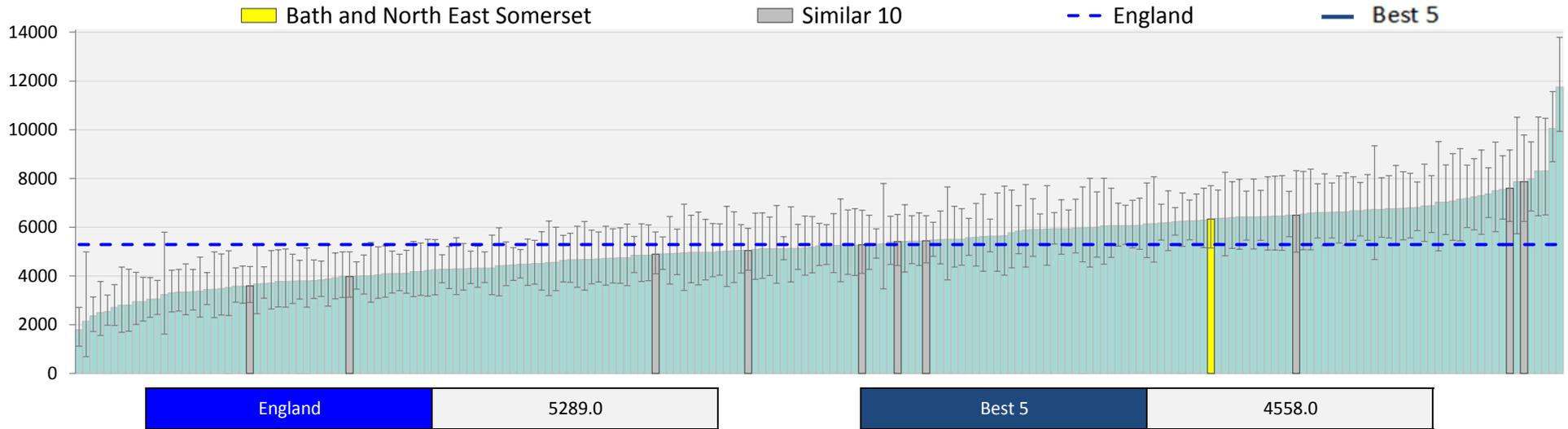


Definition: Spend - Injuries to elbow and forearm - 19-64
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the elbow and forearm - 65+ - Spend (£ per 1,000 pop)

£68k

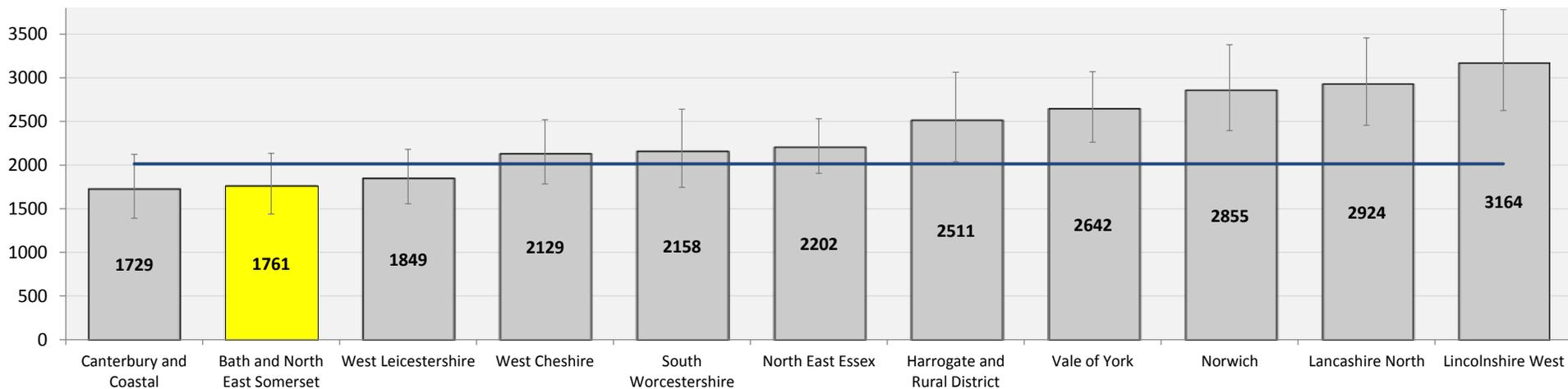
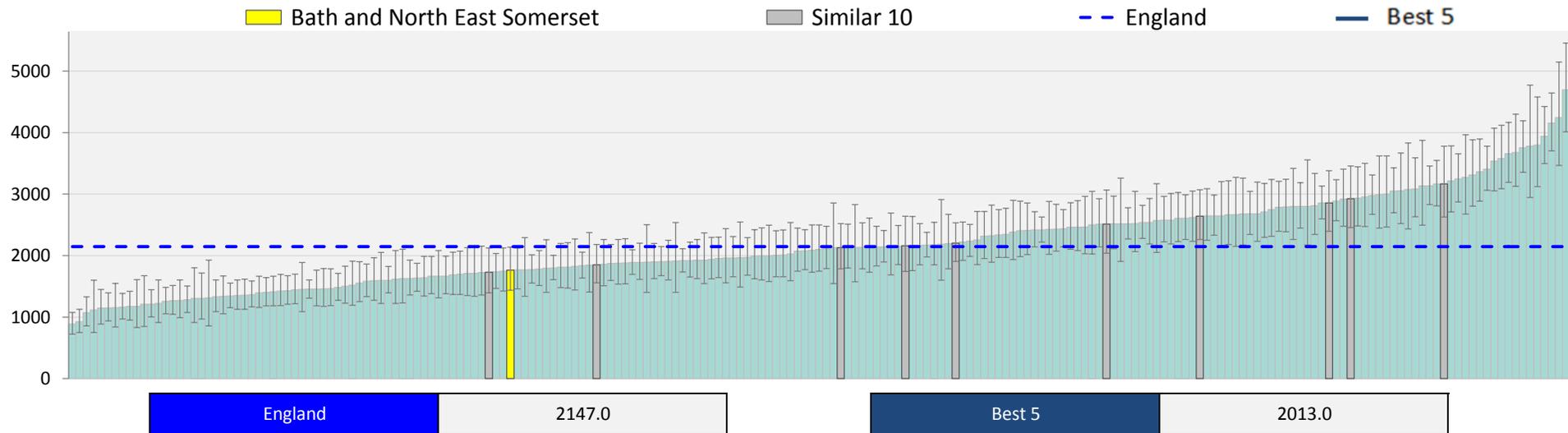
110



Definition: Spend - Injuries to elbow and forearm - 65+
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the head - 0-18 - Spend (£ per 1,000 pop)

111

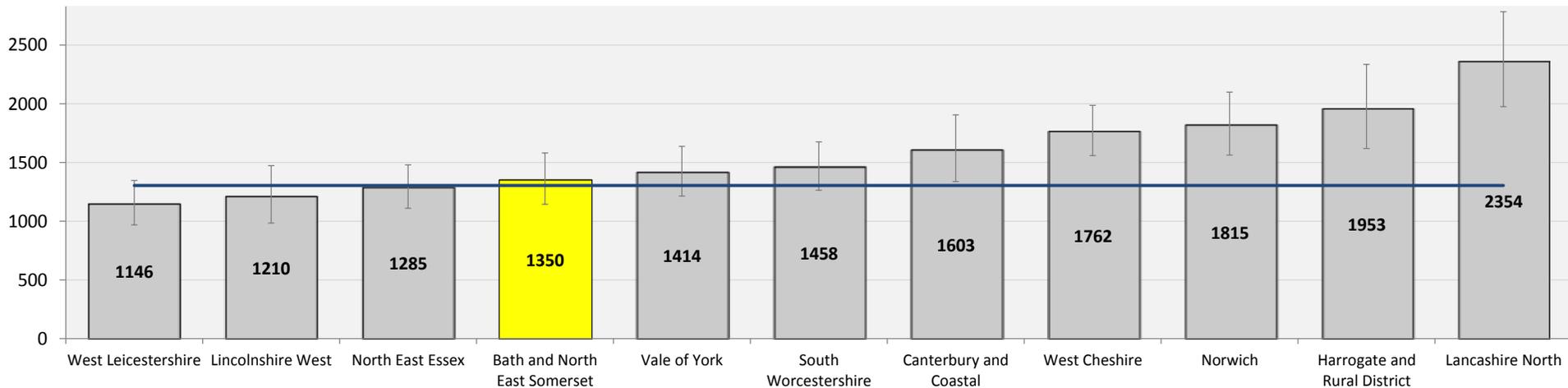
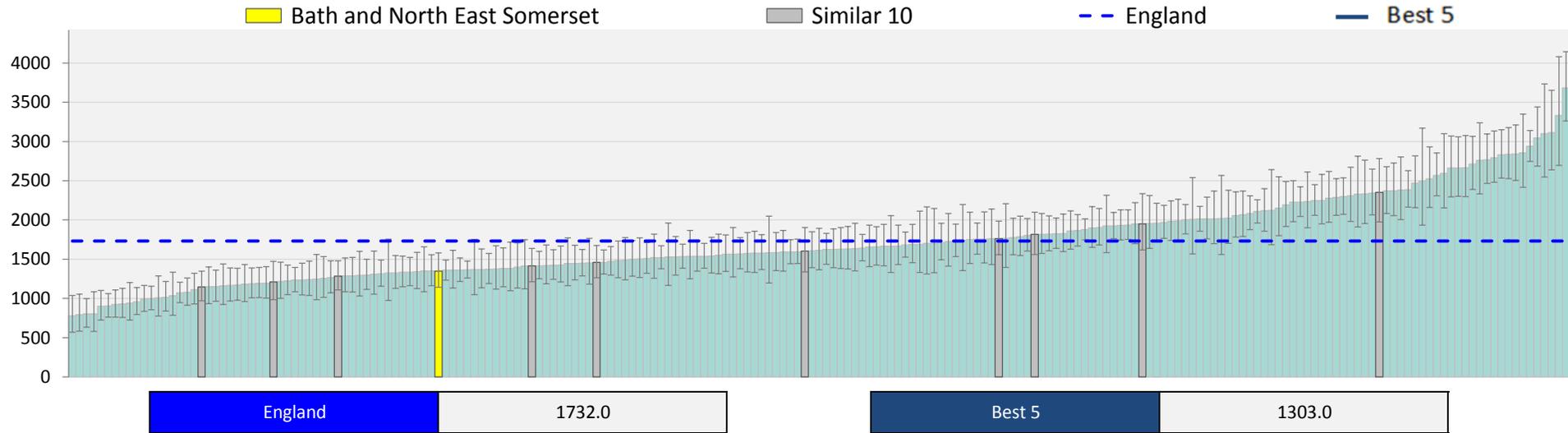


Definition: Spend - Injuries to the head - 0-18
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the head - 19-64 - Spend (£ per 1,000 pop)

£6k (NSS)

112

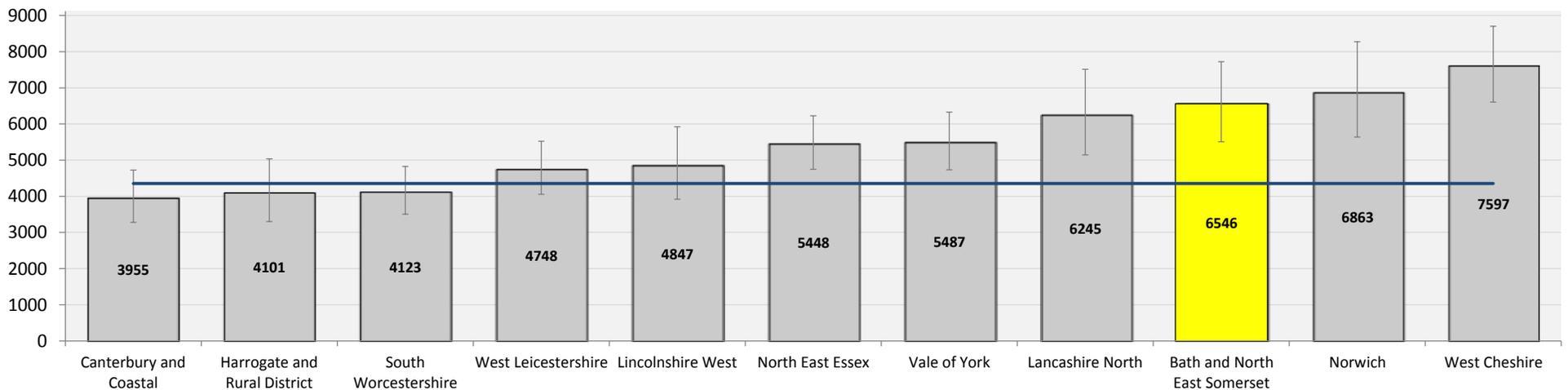
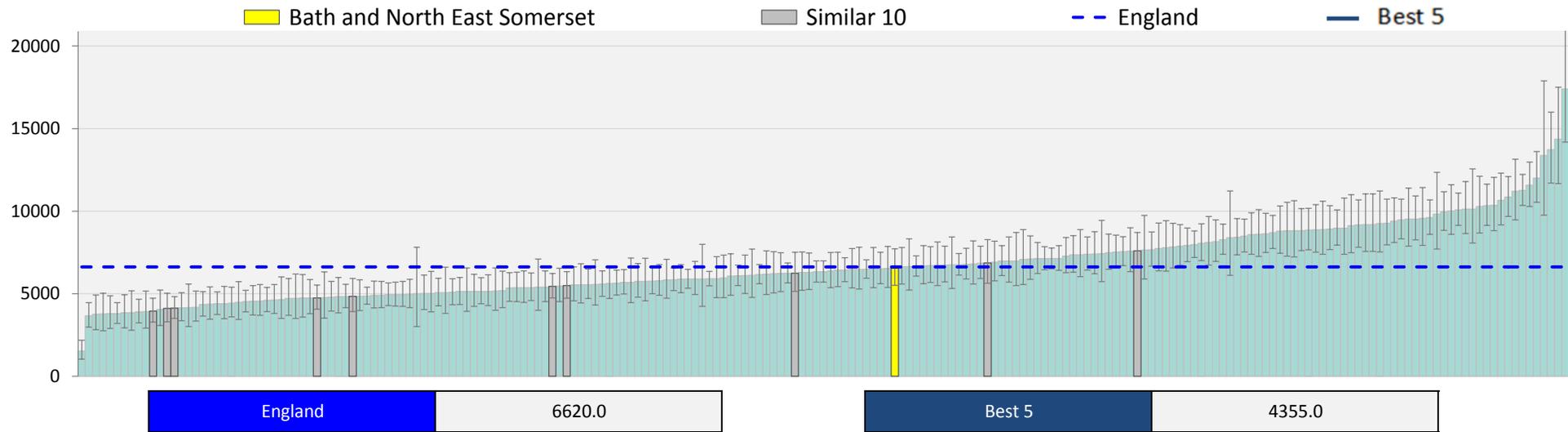


Definition: Spend - Injuries to the head - 19-64
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the head - 65-84 - Spend (£ per 1,000 pop)

£71k

113

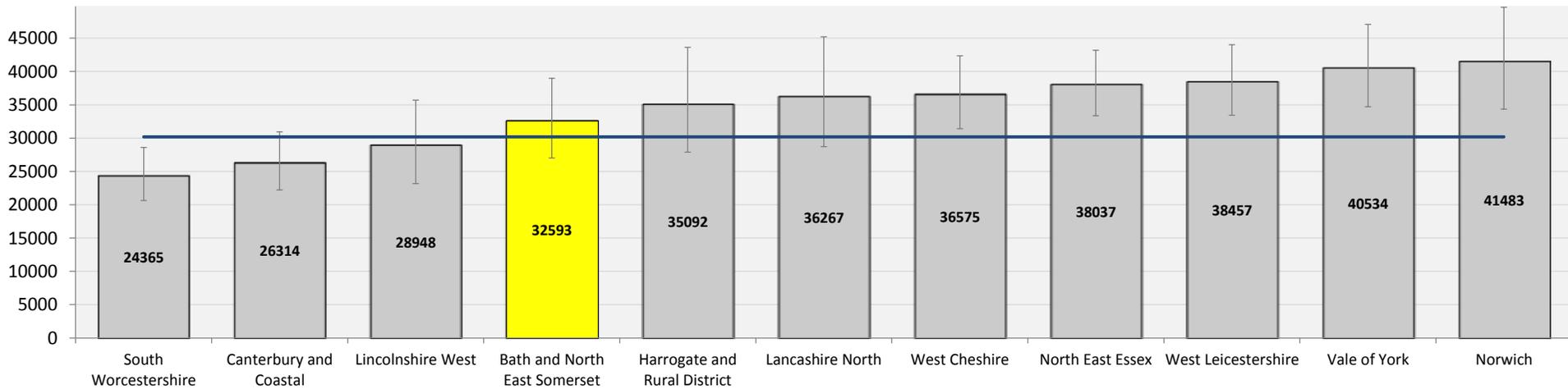
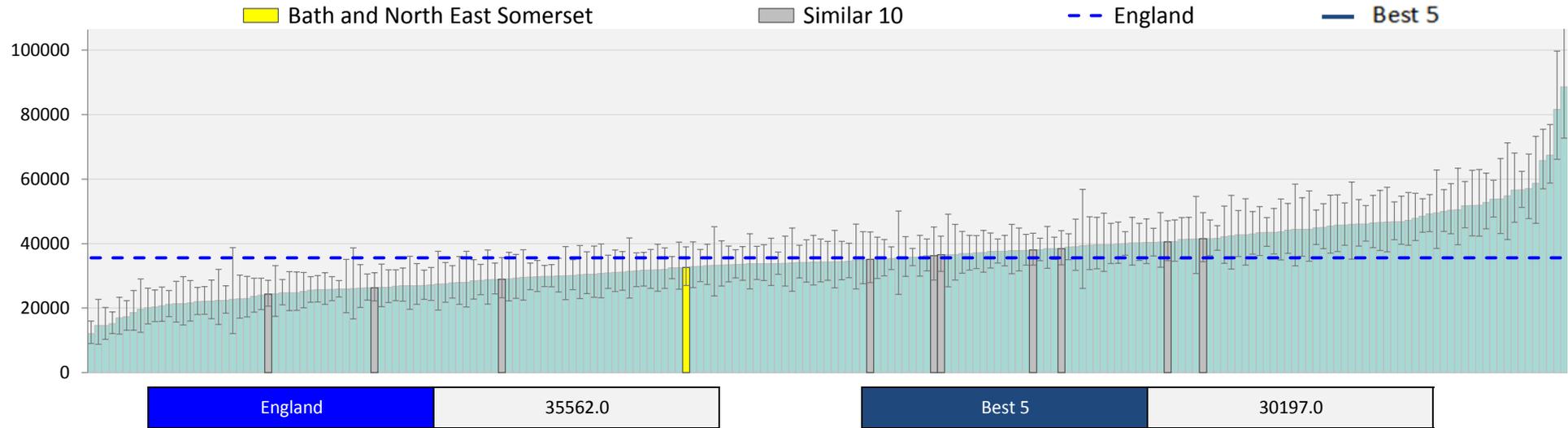


Definition: Spend - Injuries to the head - 65-84
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the head - 85+ - Spend (£ per 1,000 pop)

£13k (NSS)

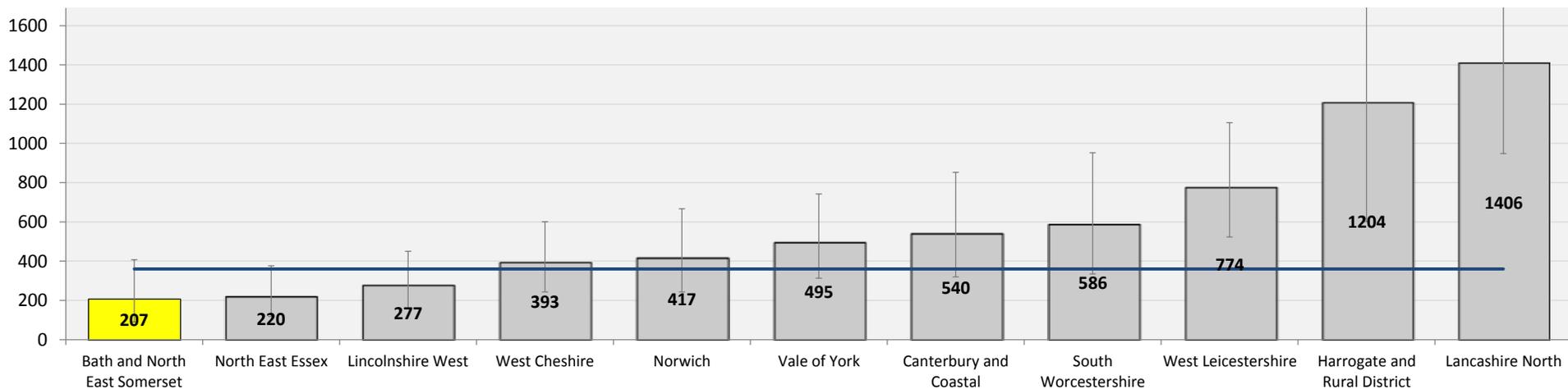
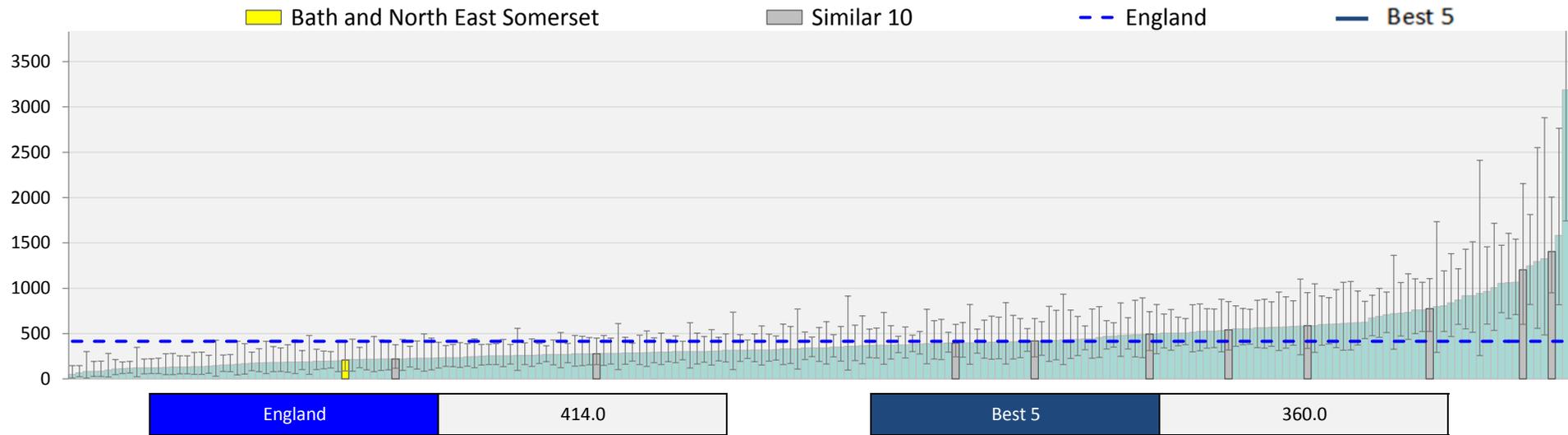
114



Definition: Spend - Injuries to the head - 85+
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to abdomen, lower back, lumbar spine and pelvis - 0-18 - Spend (£ per 1,000 pop)

115

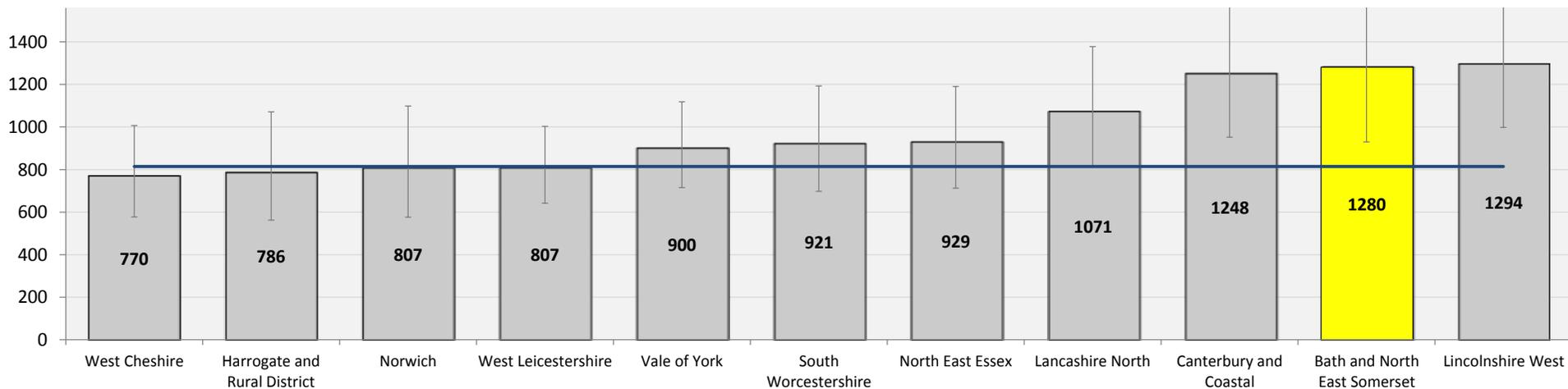
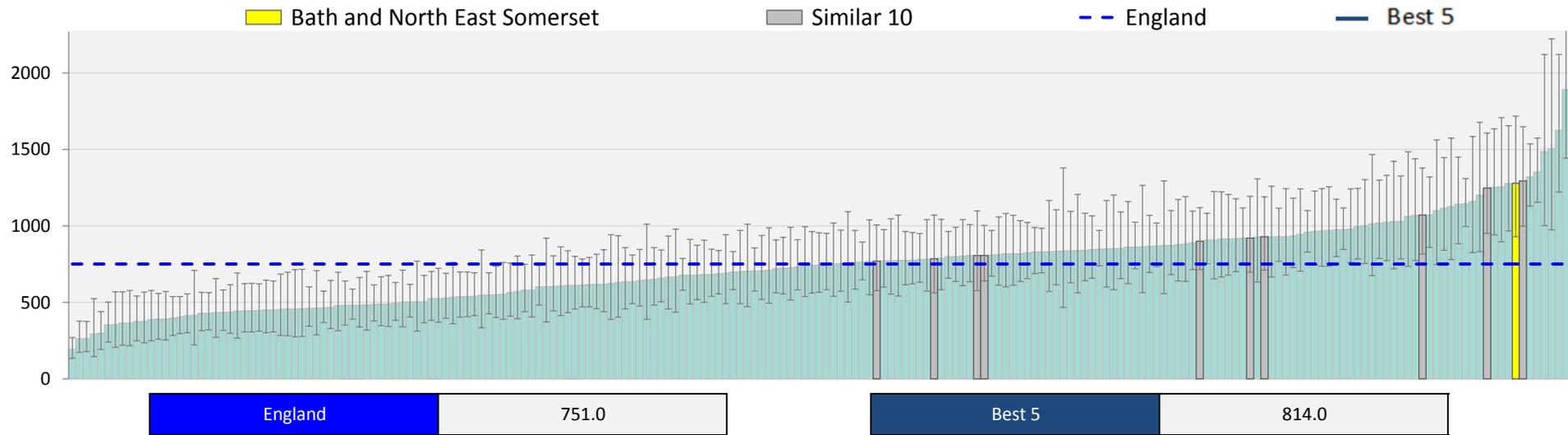


Definition: Spend - Injuries to the abdomen, lower back, lumbar spine and pelvis - 0-18
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to abdomen, lower back, lumbar spine and pelvis - 19-64 - Spend (£ per 1,000 pop)

£63k

116

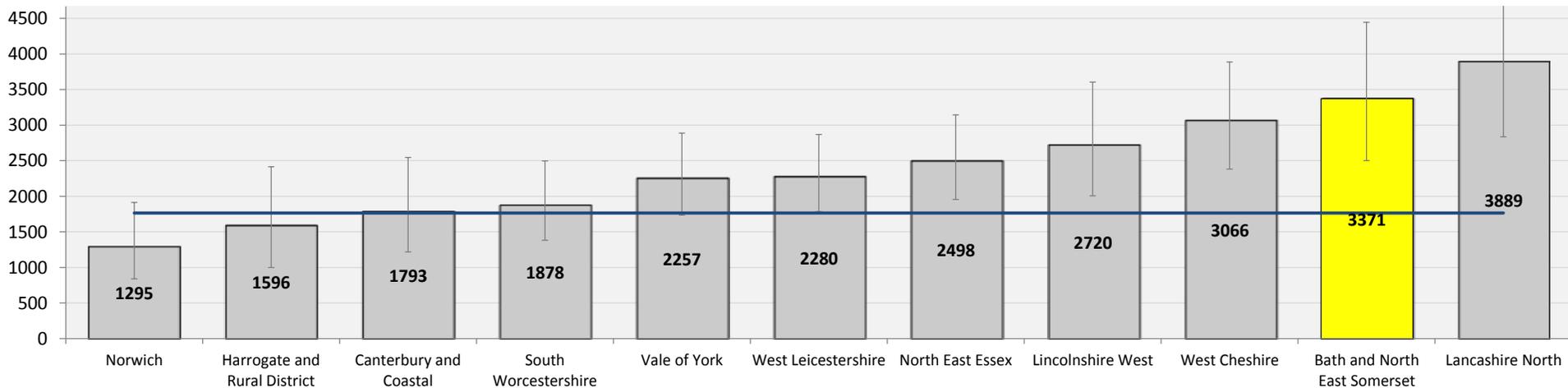
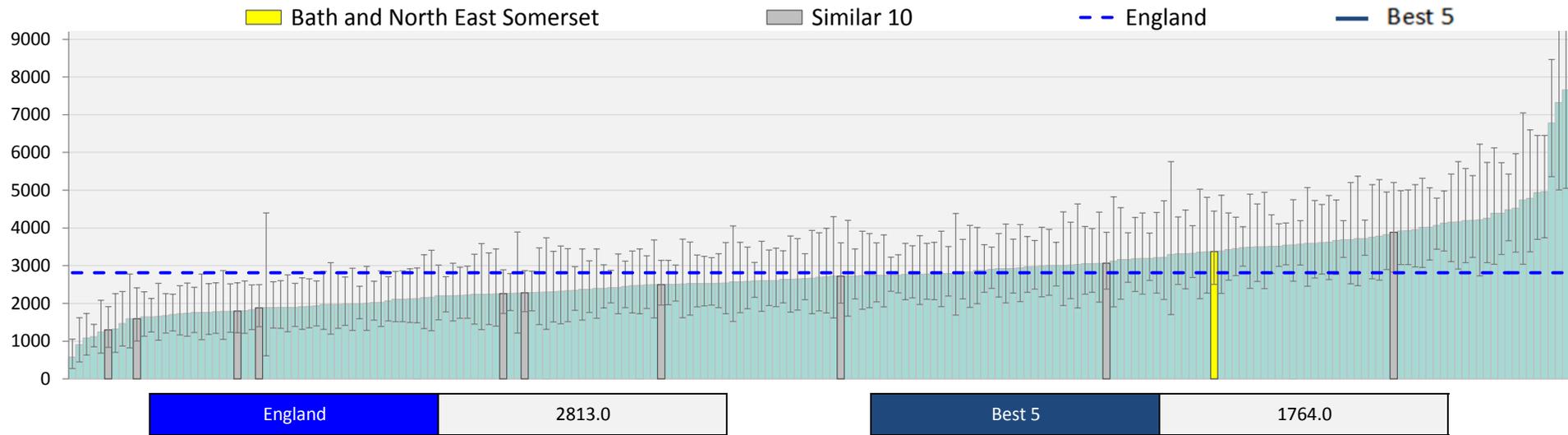


Definition: Spend - Injuries to the abdomen, lower back, lumbar spine and pelvis - 19-64
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to abdomen, lower back, lumbar spine and pelvis - 65-84 - Spend (£ per 1,000 pop)

£52k

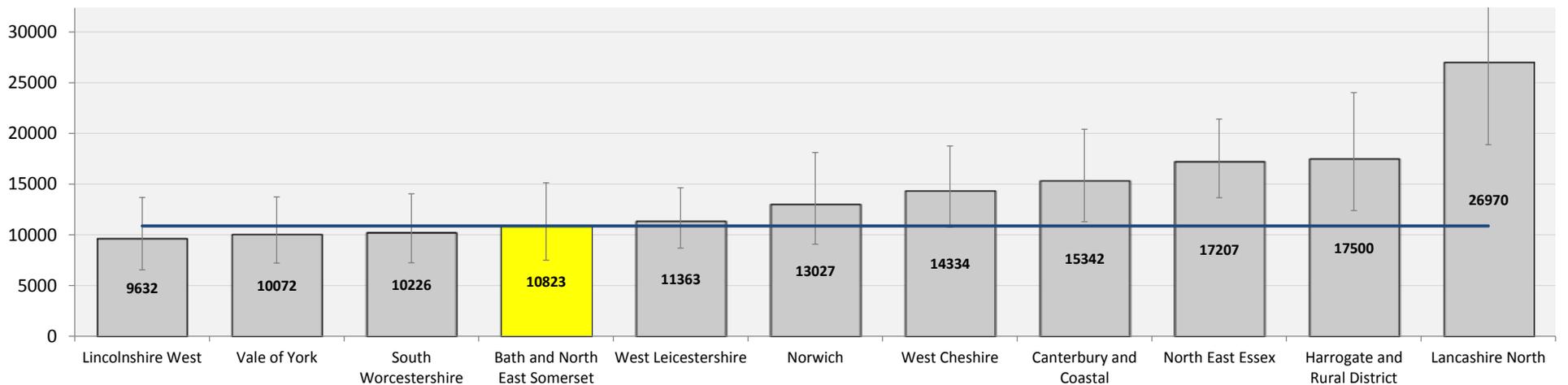
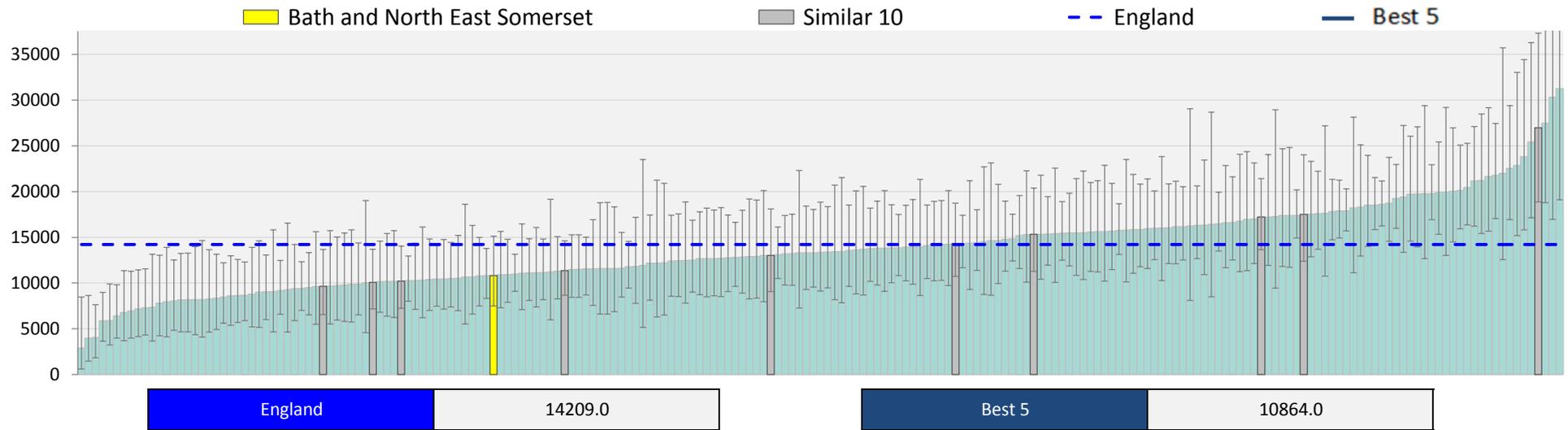
117



Definition: Spend - Injuries to the abdomen, lower back, lumbar spine and pelvis - 65-84
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to abdomen, lower back, lumbar spine and pelvis - 85+ - Spend (£ per 1,000 pop)

118

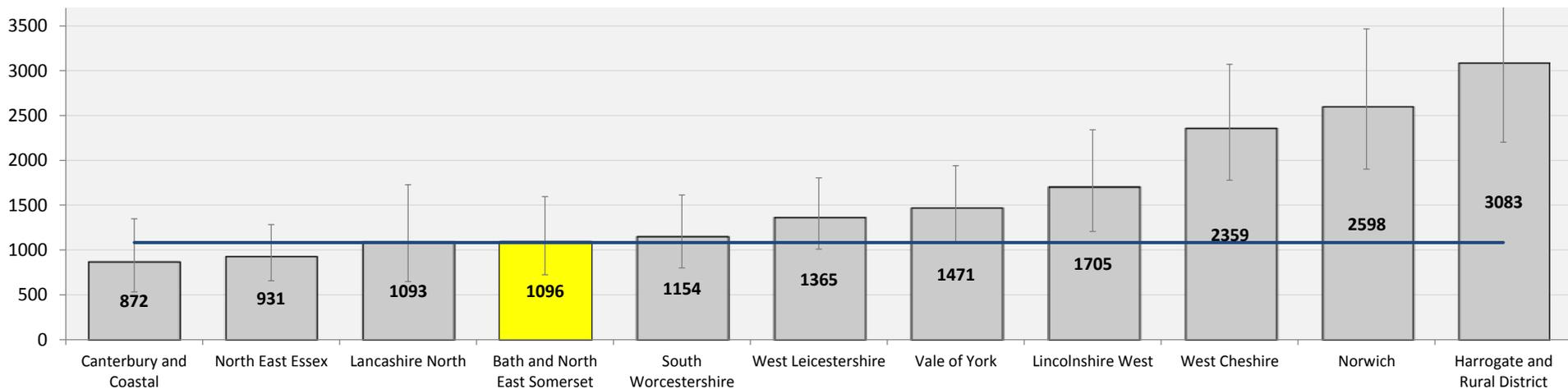
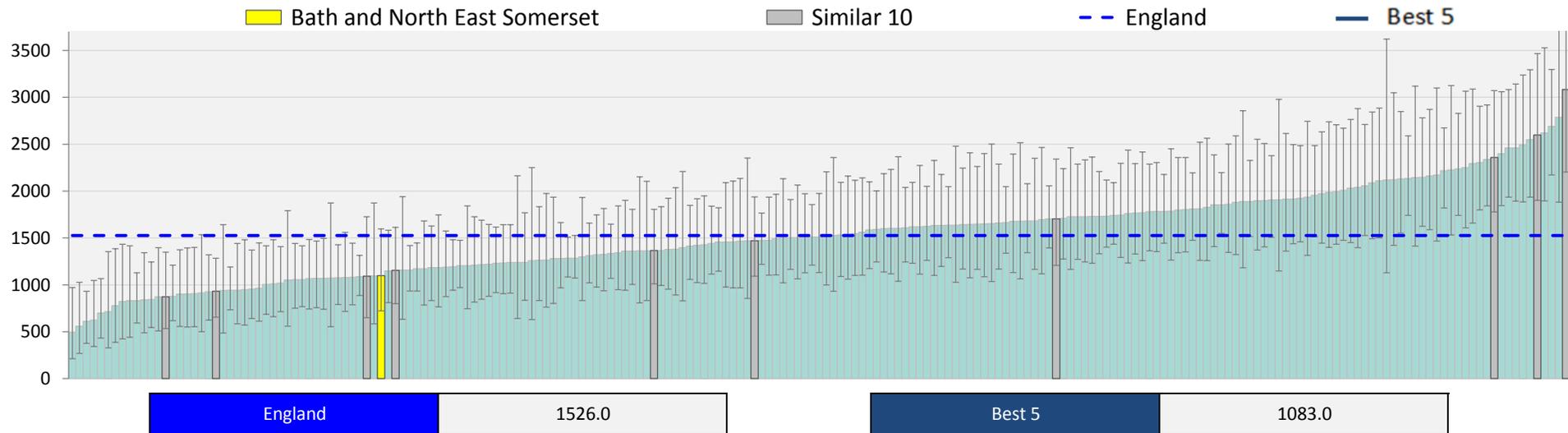


Definition: Spend - Injuries to the abdomen, lower back, lumbar spine and pelvis - 85+
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the knee and lower leg - 0-18 - Spend (£ per 1,000 pop)

£1k (NSS)

119

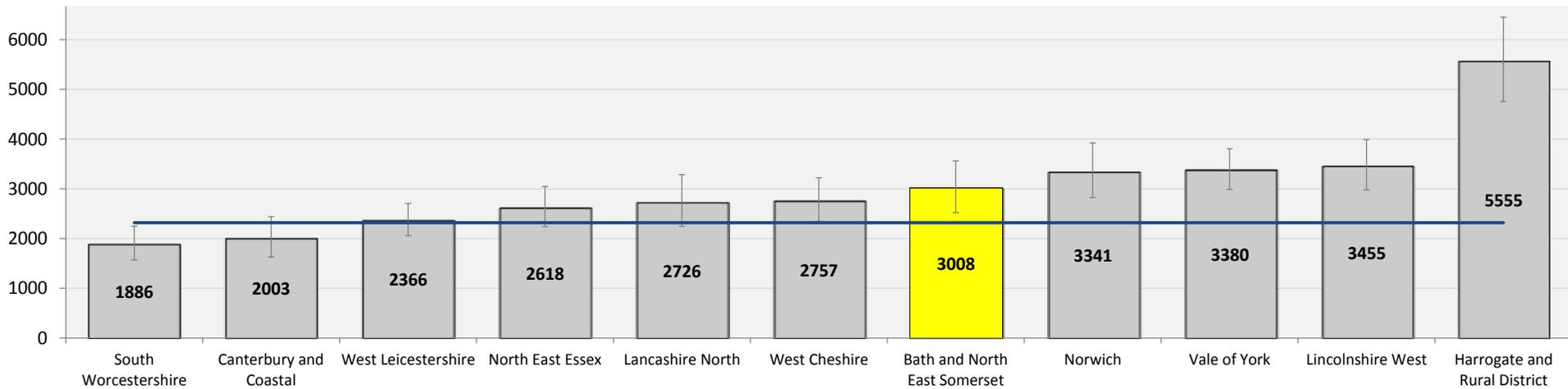
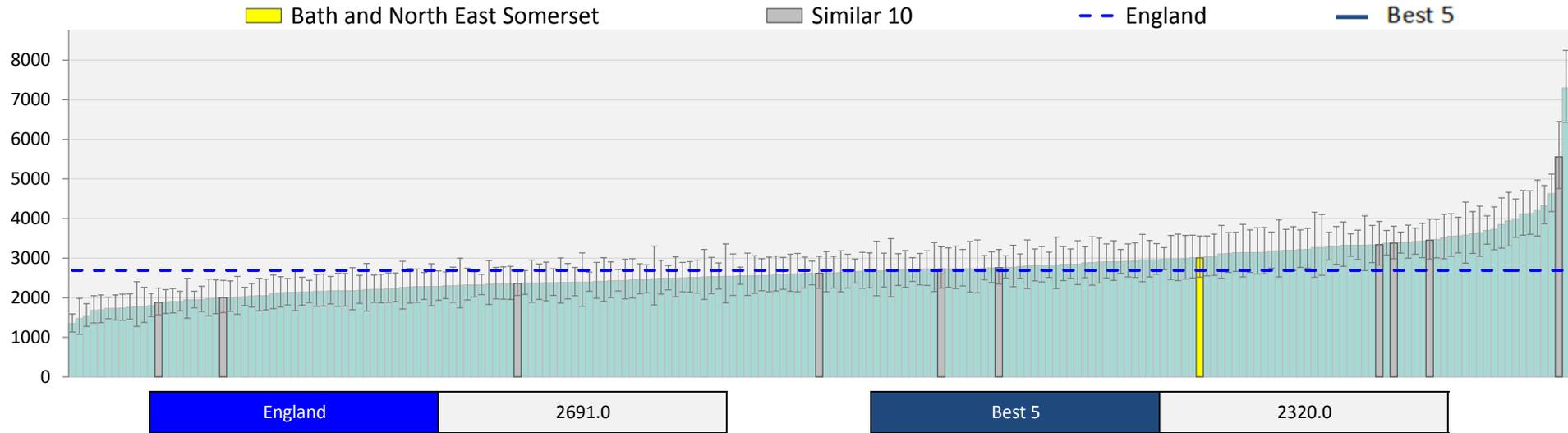


Definition: Spend - Injuries to the knee and lower leg - 0-18
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the knee and lower leg - 19-64 - Spend (£ per 1,000 pop)

£93k

120

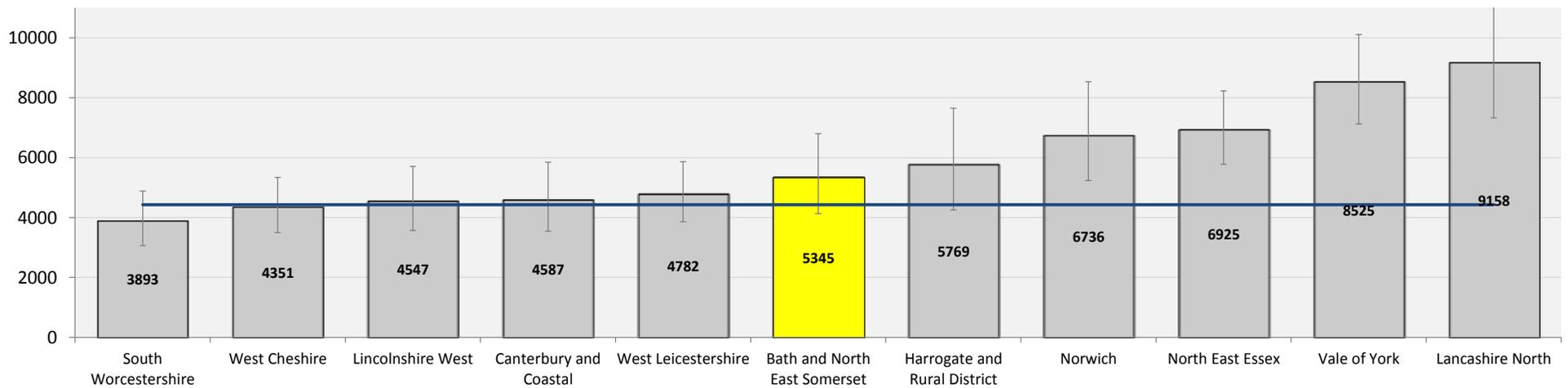
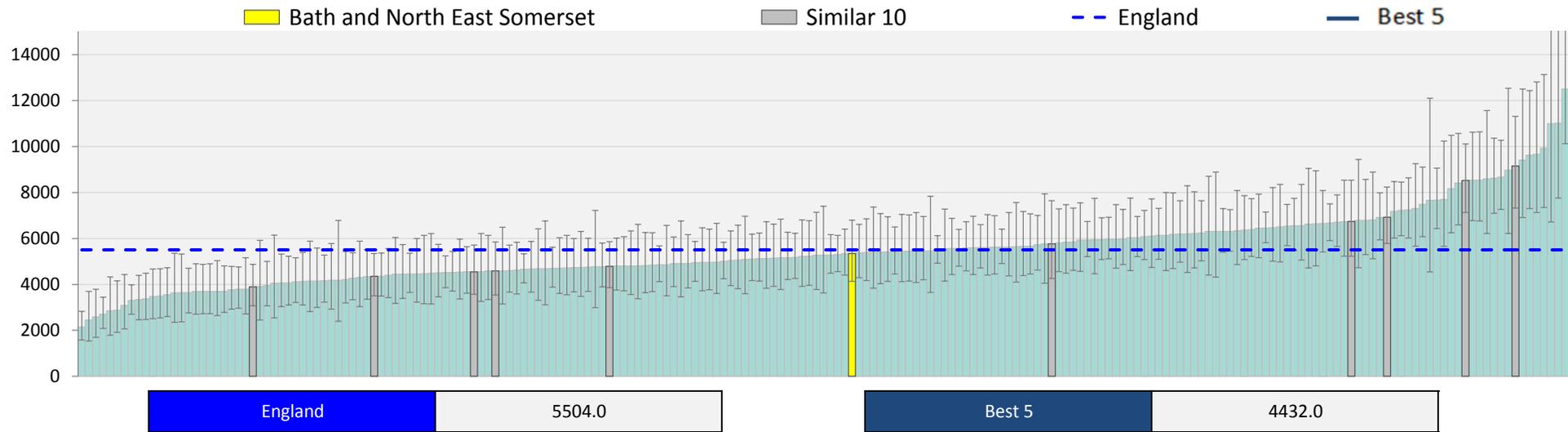


Definition: Spend - Injuries to the knee and lower leg - 19-64
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the knee and lower leg - 65-84 - Spend (£ per 1,000 pop)

£29k (NSS)

121

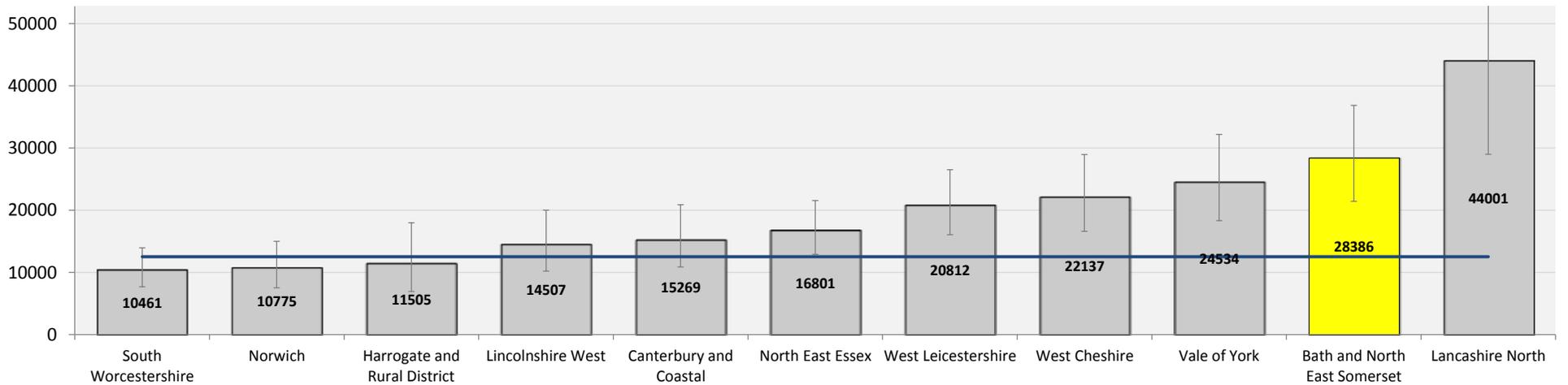
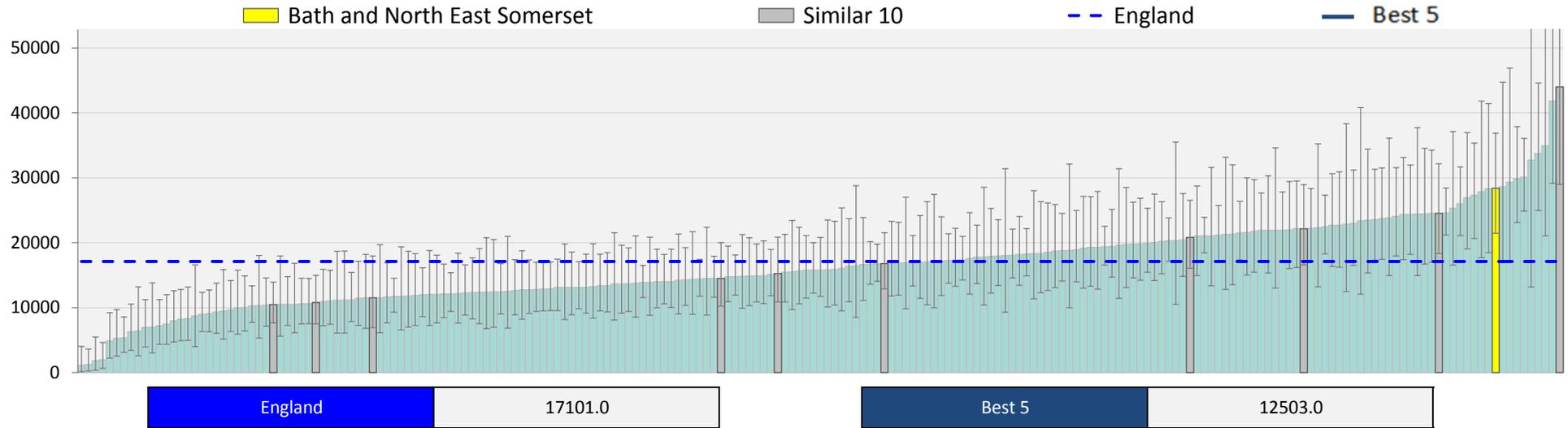


Definition: Spend - Injuries to the knee and lower leg - 65-84
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Injuries to the knee and lower leg - 85+ - Spend (£ per 1,000 pop)

£87k

122

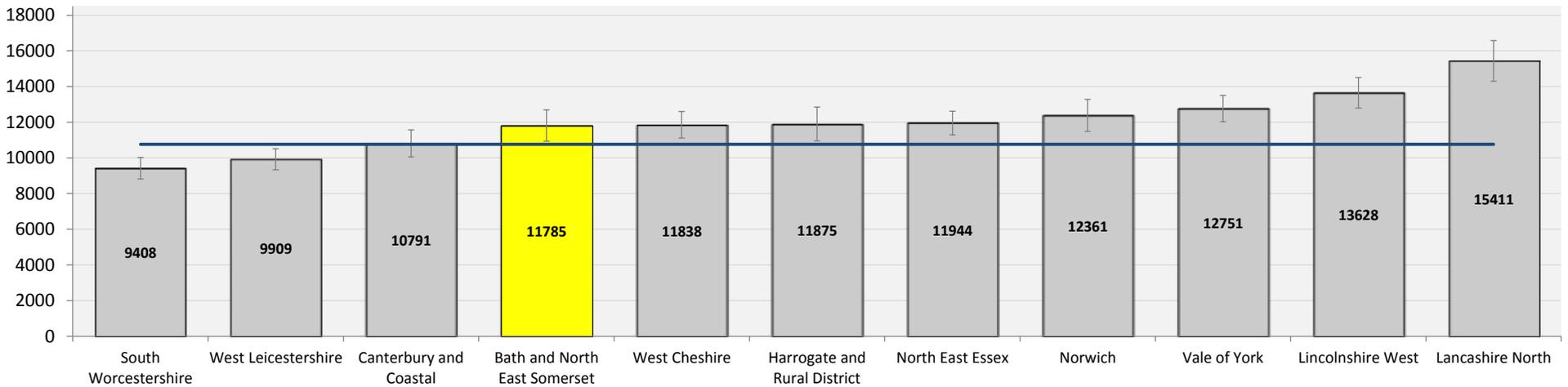
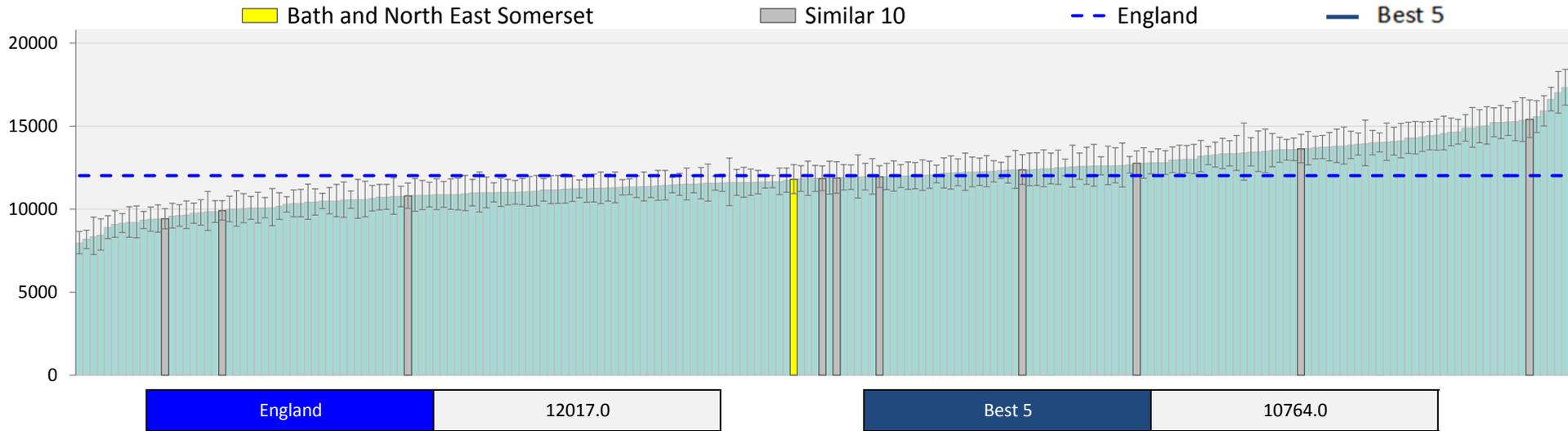


Definition: Spend - Injuries to the knee and lower leg - 85+
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

Spend on admissions relating to fractures where a fall occurred (£ per 1,000 pop)

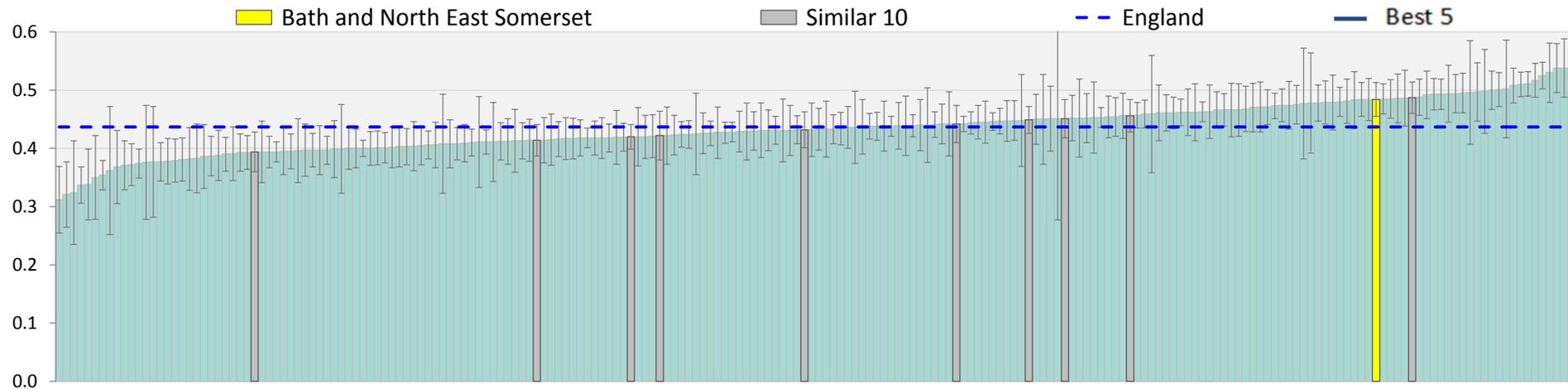
£225k

123



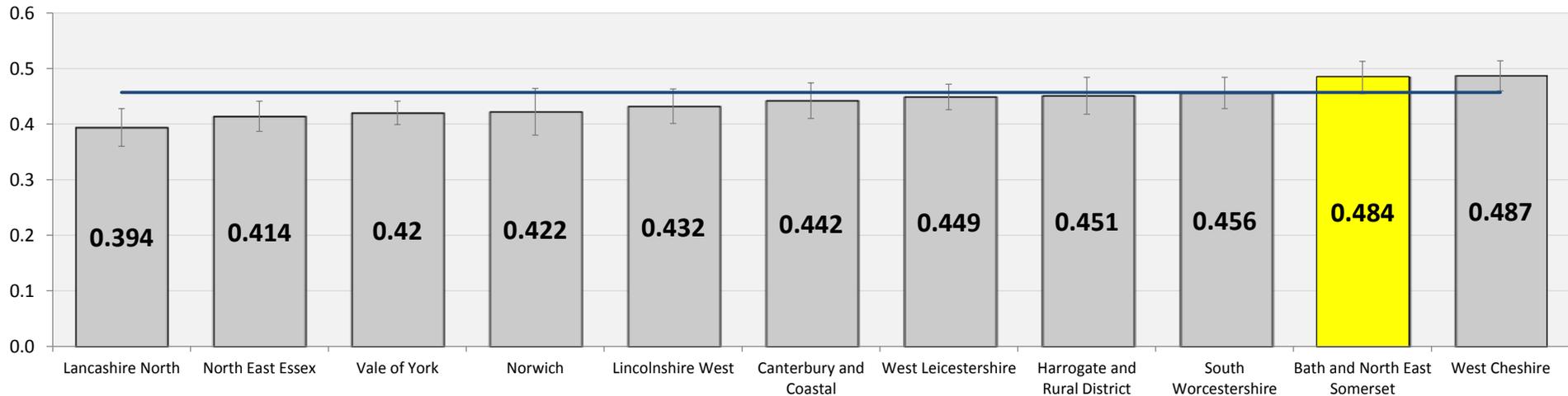
Definition: Spend on admissions relating to fractures where a fall occurred
 Source: Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart)
 Year: 2014/15

EQ-5D health gain (hips)



England 0.437

Best 5 0.457

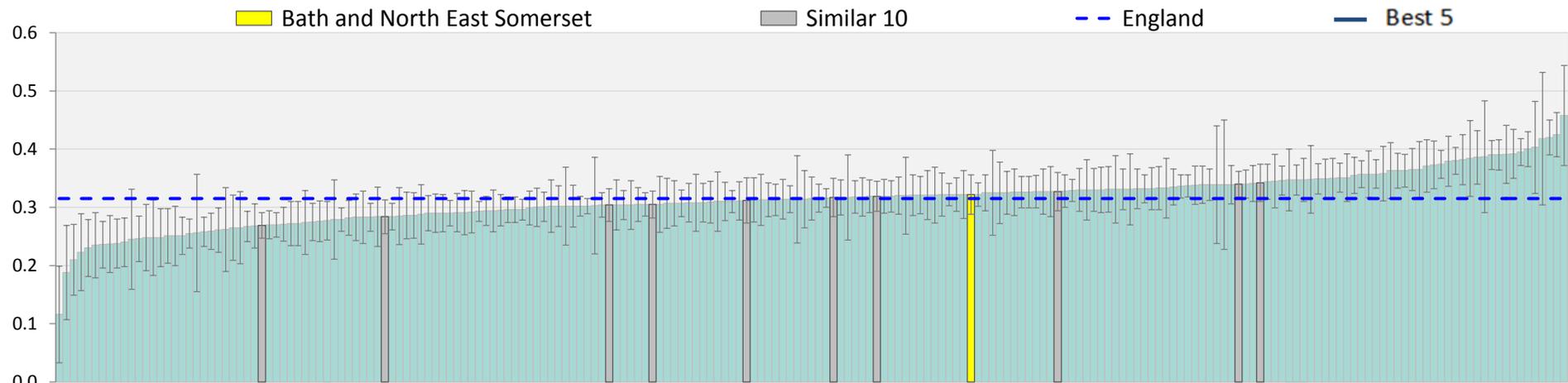


Definition: Hip replacement, EQ-5D, Health Gain
 Source: Patient Reported Outcome Measures (PROMs), The Health and Social Care Information Centre
 Year: 2014/15

EQ-5D health gain (knees)

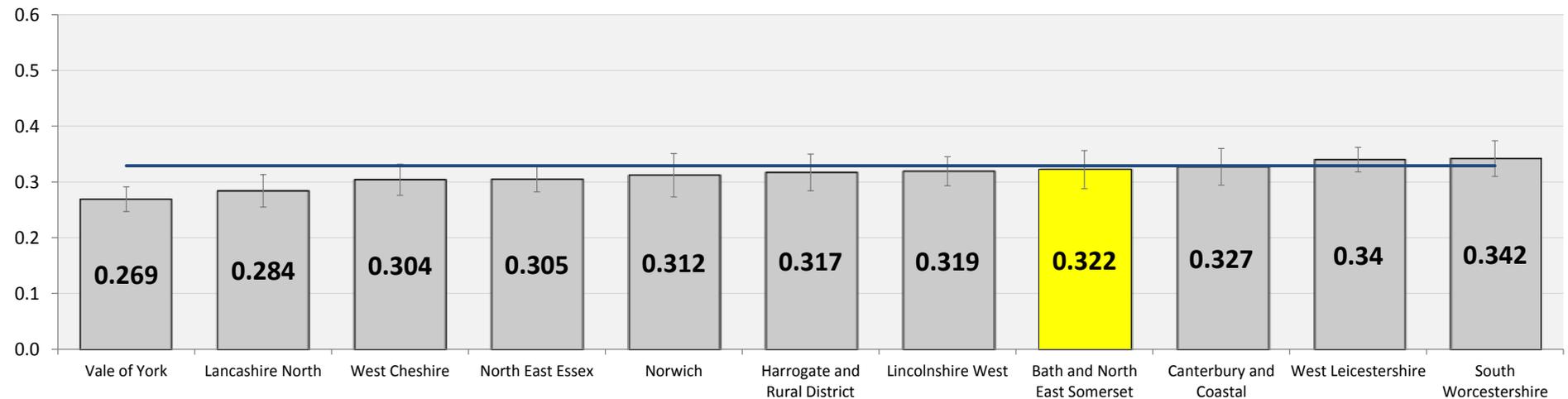
6 QALYs (NSS)

125



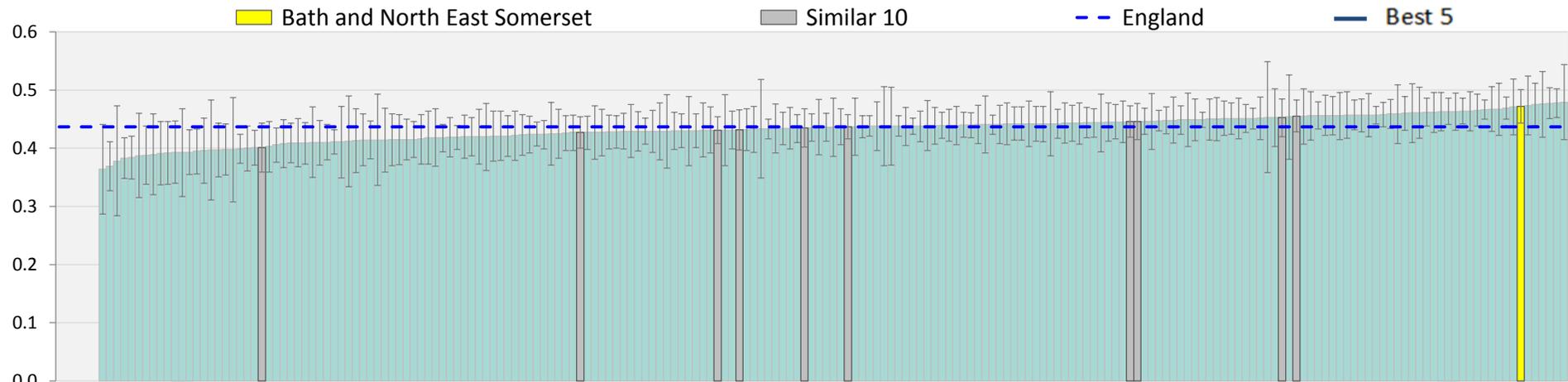
England 0.315

Best 5 0.329

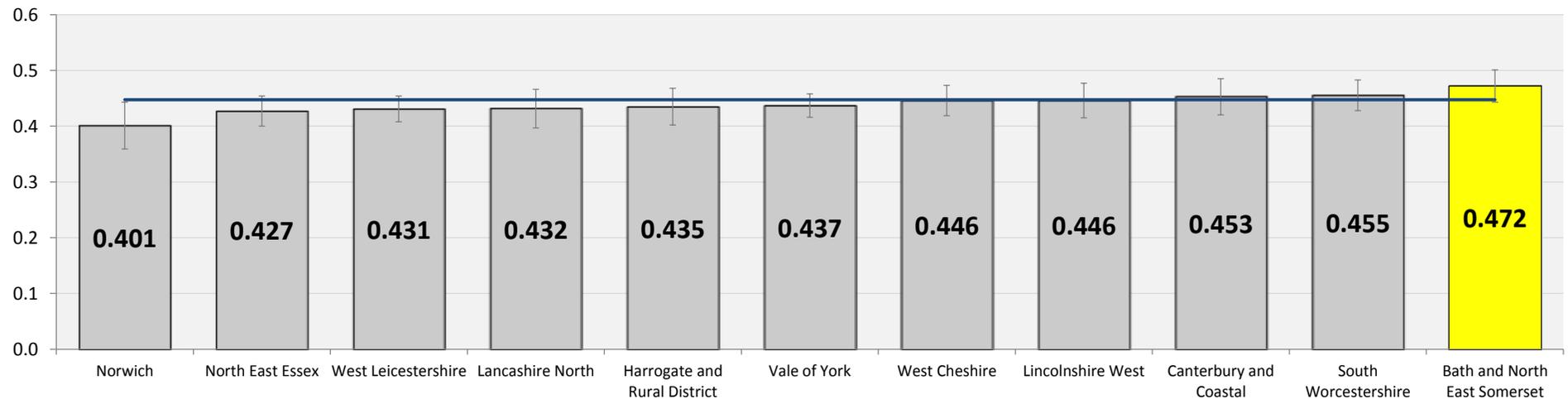


Definition: Knee replacement, EQ-5D, Health Gain
 Source: Patient Reported Outcome Measures (PROMs), The Health and Social Care Information Centre
 Year: 2014/15

EQ-5D - Hip (primary) - Health gain (casemix adjusted)



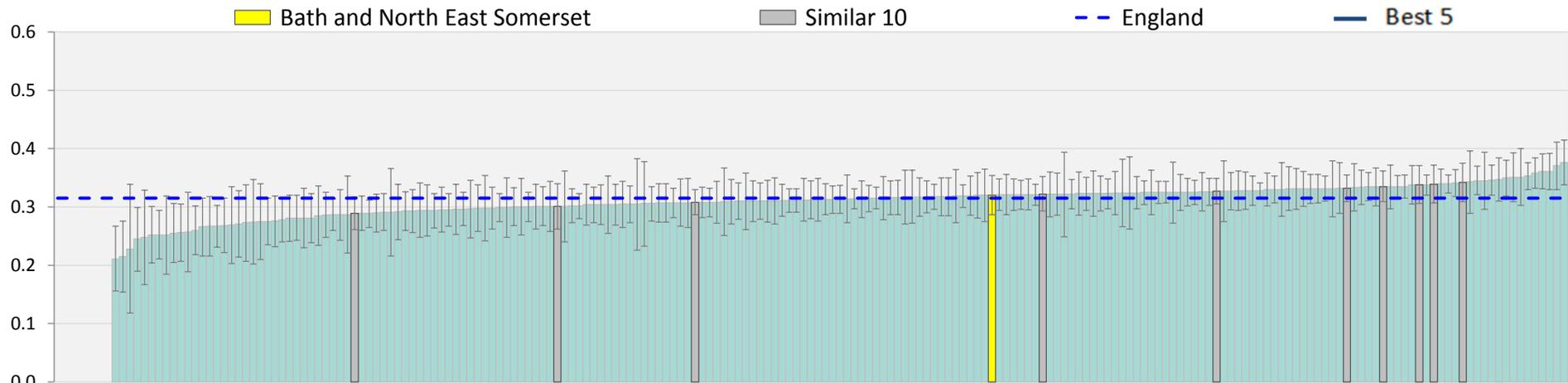
England	0.437	Best 5	0.447
---------	-------	--------	-------



Definition: EQ-5D - Hip (primary) - Health gain (casemix adjusted)
 Source: Patient Reported Outcome Measures (PROMs), The Health and Social Care Information Centre
 Year: 2014/15

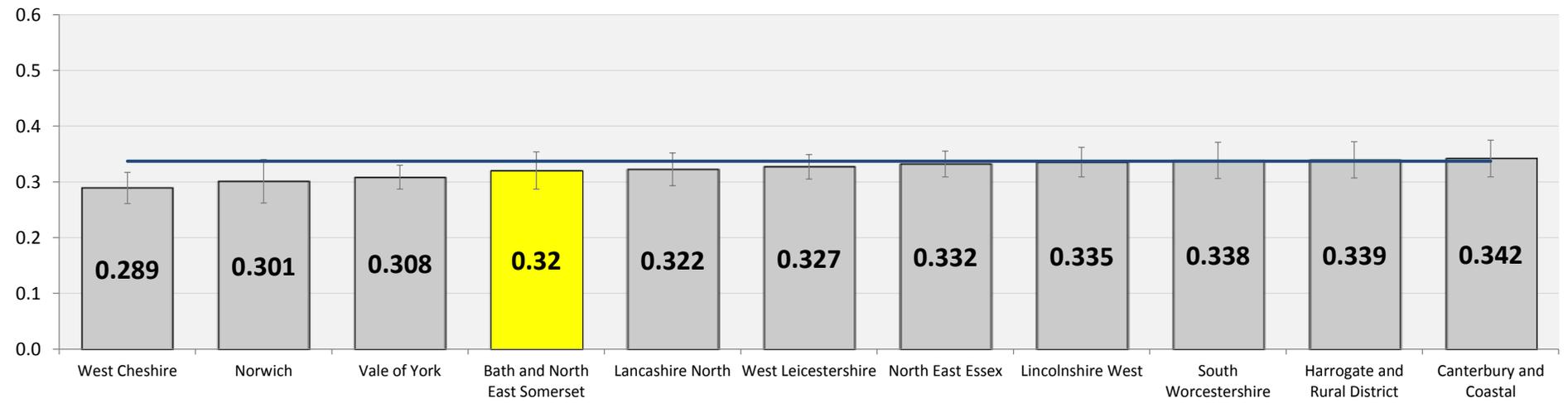
No opportunity presented for PROMs indicators except EQ-5D index health gain

EQ-5D - Knee (primary) - Health gain (casemix adjusted)



England 0.315

Best 5 0.337

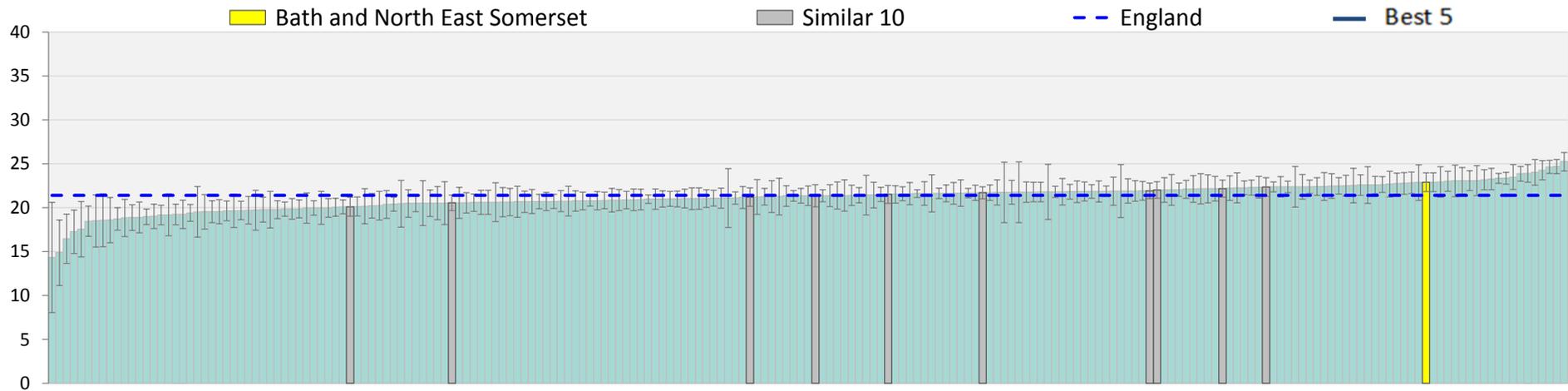


Definition: EQ-5D - Knee (primary) - Health gain (casemix adjusted)
 Source: Patient Reported Outcome Measures (PROMs), The Health and Social Care Information Centre
 Year: 2014/15

No opportunity presented for PROMs indicators except EQ-5D index health gain

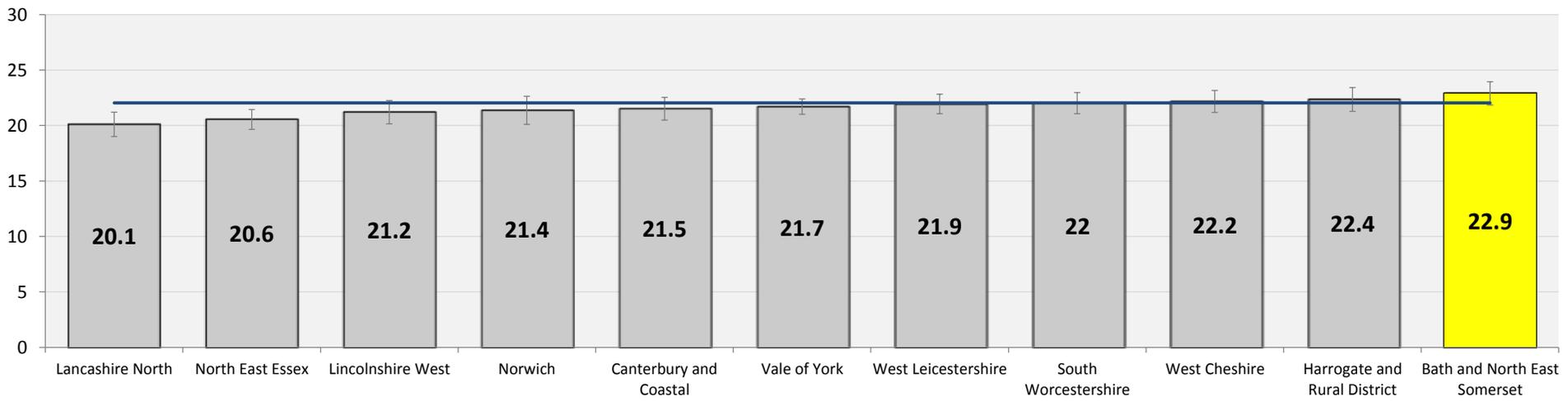
Oxford score - Hip (primary) - Health gain

128



England 21.4

Best 5 22.0

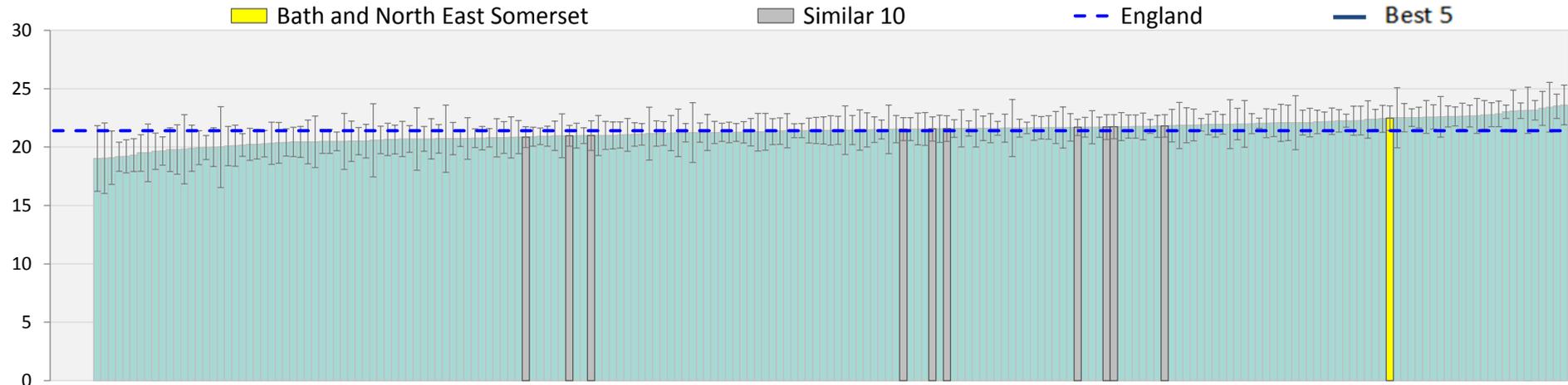


Definition: Hip replacement, Oxford Hip Score, Health Gain
 Source: Patient Reported Outcome Measures (PROMs), The Health and Social Care Information Centre
 Year: 2014/15

No opportunity presented for PROMs indicators except EQ-5D index health gain

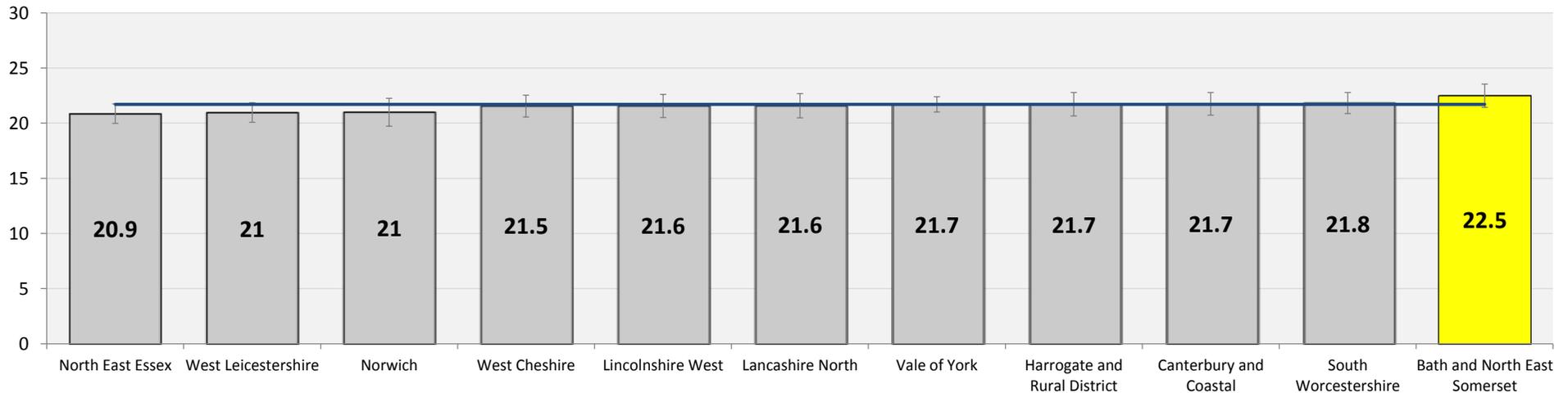
Oxford score - Hip (primary) - Health gain (casemix adjusted)

129



England 21.4

Best 5 21.7

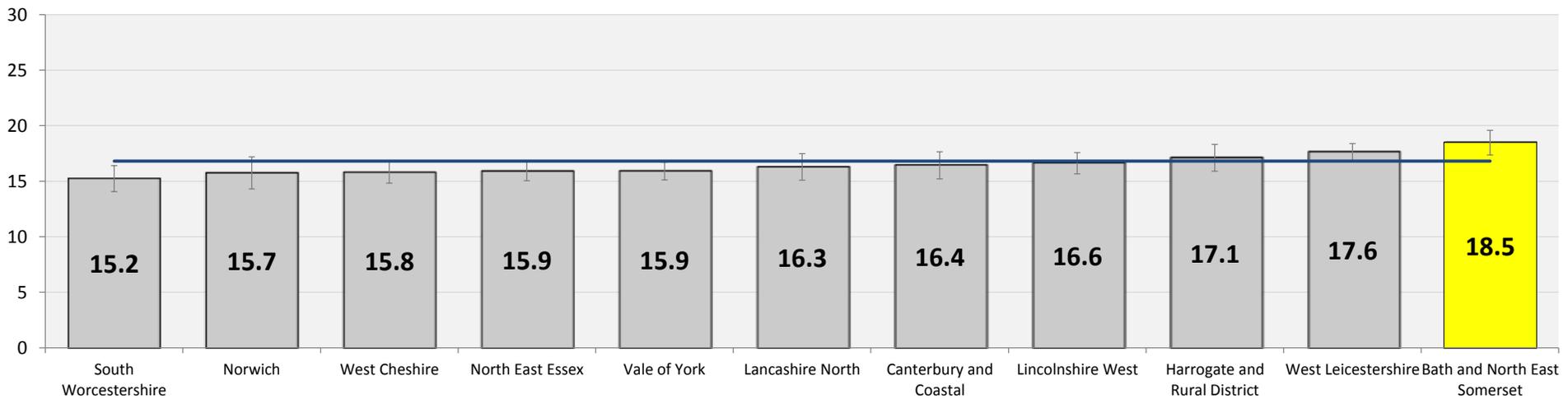
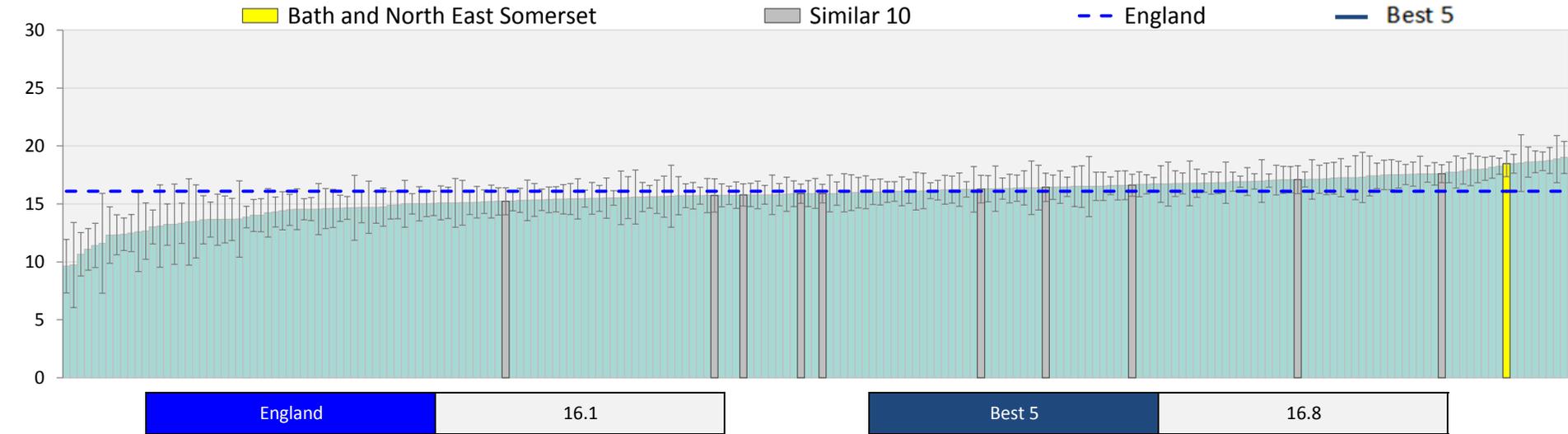


Definition: Hip replacement, Oxford Hip Score, Health Gain (casemix adjusted)
 Source: Patient Reported Outcome Measures (PROMs), The Health and Social Care Information Centre
 Year: 2014/15

No opportunity presented for PROMs indicators except EQ-5D index health gain

Oxford score - Knee (primary) - Health gain

130



Definition: Knee replacement, Oxford Knee Score, Health Gain

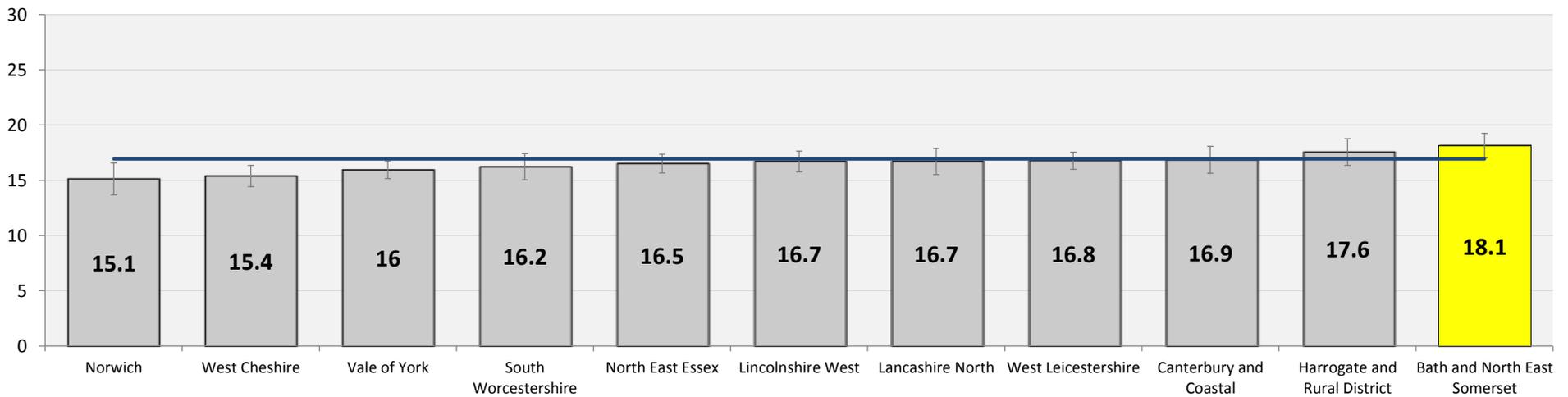
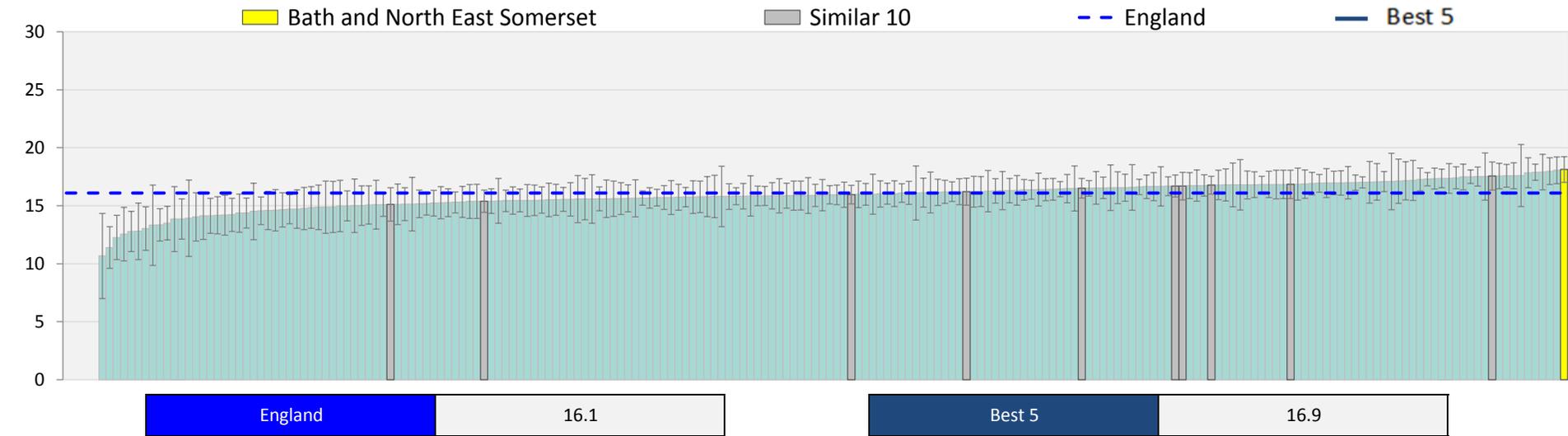
Source: Patient Reported Outcome Measures (PROMs), The Health and Social Care Information Centre

Year: 2014/15

No opportunity presented for PROMs indicators except EQ-5D index health gain

Oxford score - Knee (primary) - Health gain (casemix adjusted)

131



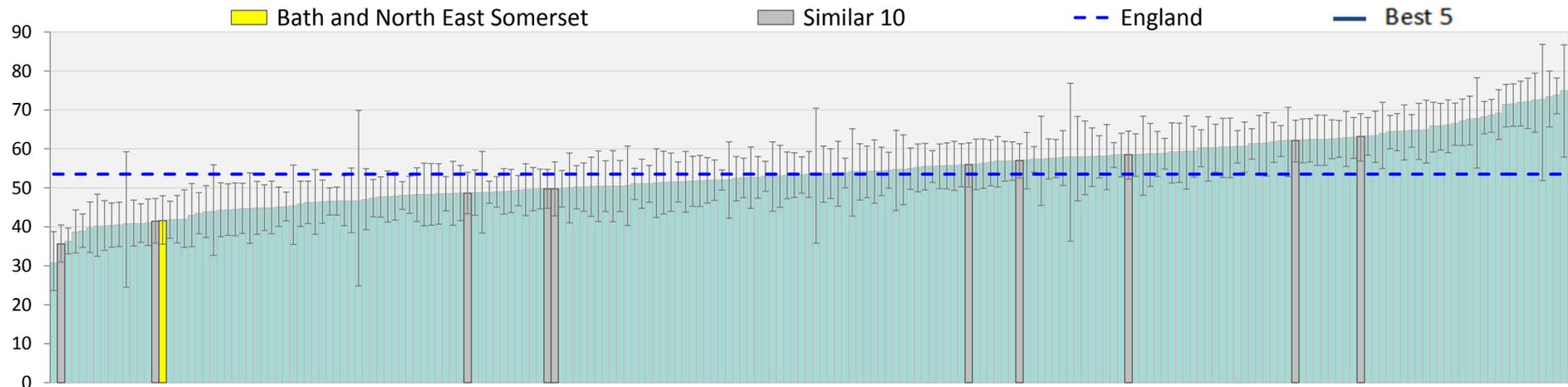
Definition: Oxford Score - Knee (primary) - Health gain (casemix adjusted)
 Source: Patient Reported Outcome Measures (PROMs), The Health and Social Care Information Centre
 Year: 2014/15

No opportunity presented for PROMs indicators except EQ-5D index health gain

% fractured femur patients returning home within 28 days

42 Pats

132

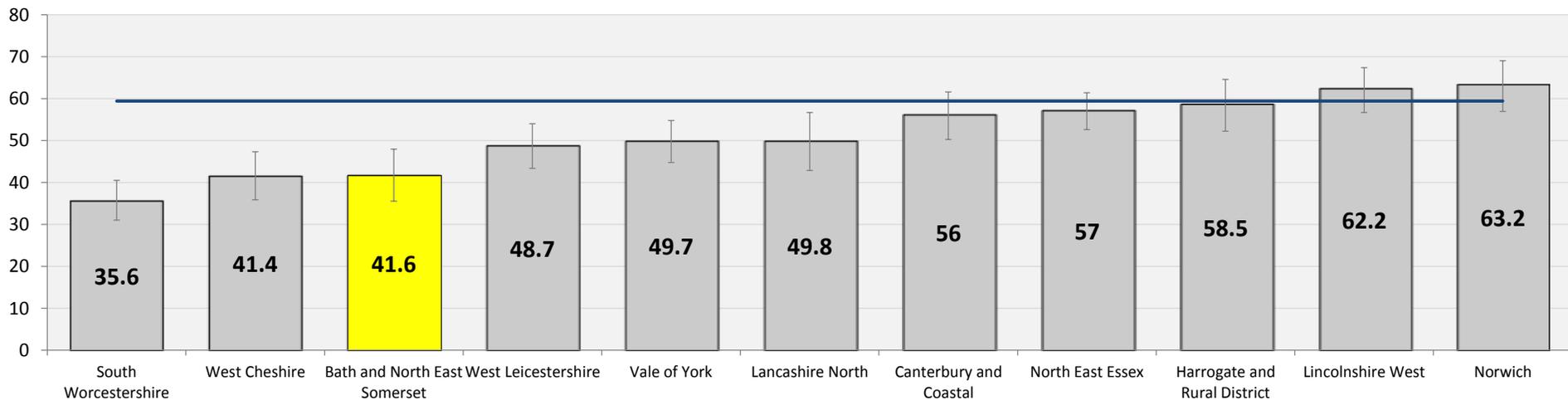


England

53.5

Best 5

59.4



Definition: Percentage of patients returning to usual place of residence following hospital treatment for fractured femur

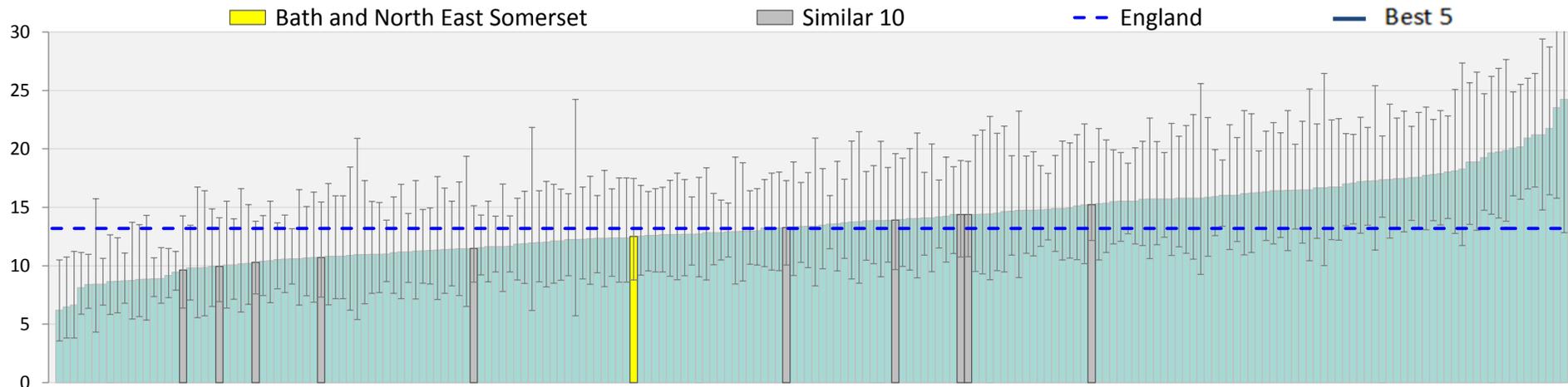
Source: Hospital Episode statistics (HES)

Year: 2014/15

Hip fracture emergency readmissions 28 days (%)

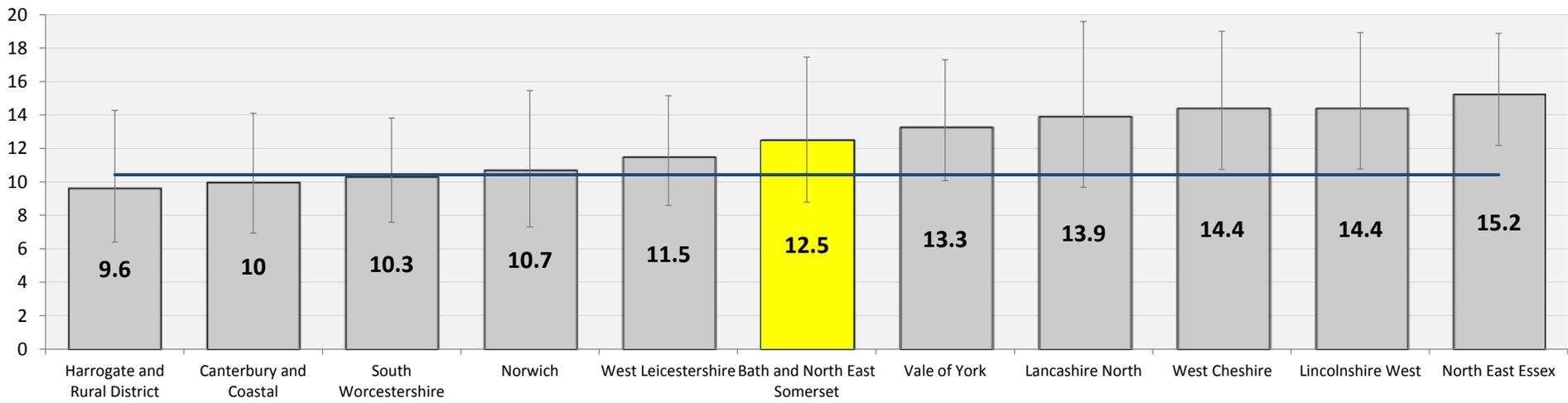
5 Pats (NSS)

133



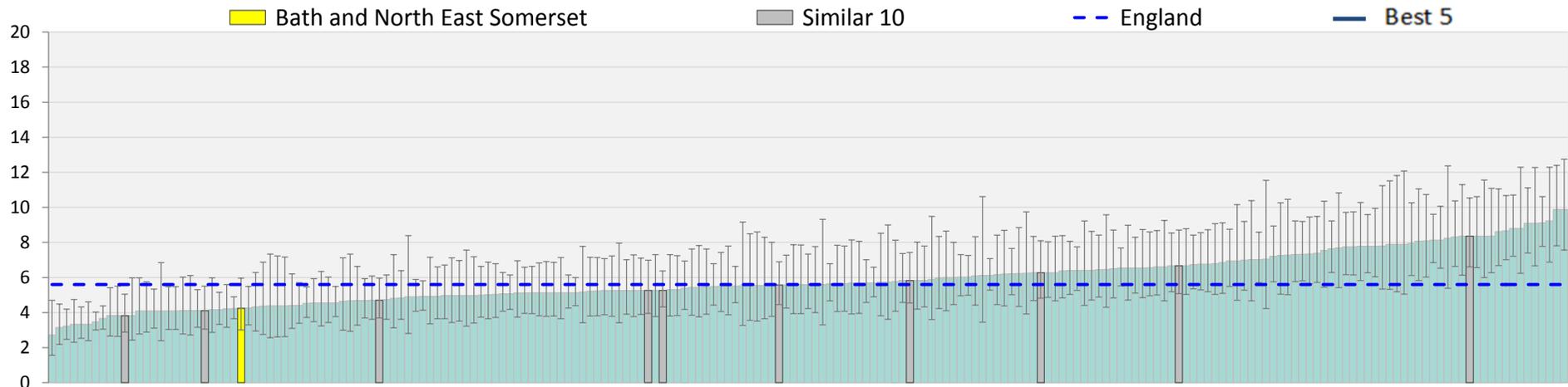
England 13.2

Best 5 10.4



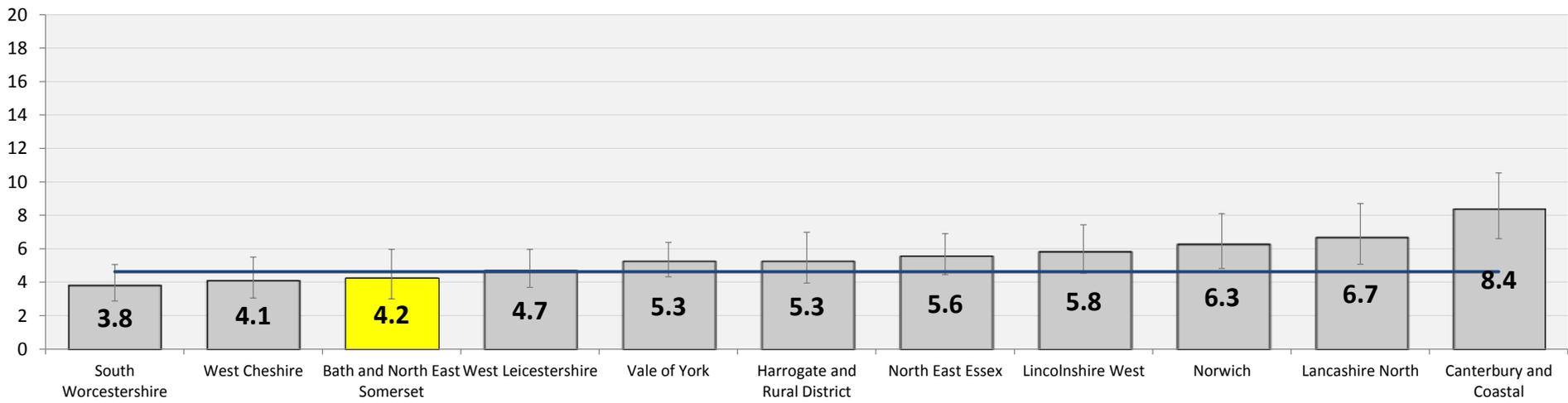
Definition: Emergency readmissions to hospital within 28 days for patients: hip fractures
 Source: Hospital Episode statistics (HES)
 Year: 2014/15

Hip replacement emergency readmissions 28 days (%)



England 5.6

Best 5 4.6



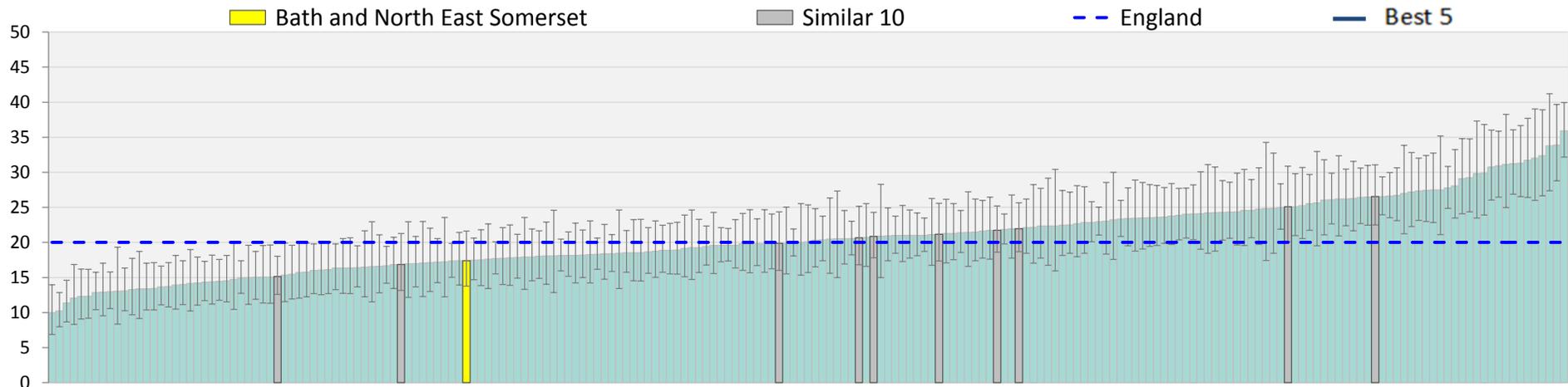
Definition: Emergency readmissions to hospital within 28 days for patients: hip replacements (%)

Source: Hospital Episode Statistics (HES), The Health and Social Care Information Centre. The Indicator Portal, The Health and Social Care Information Centre

Year: 2009/10-2011/12

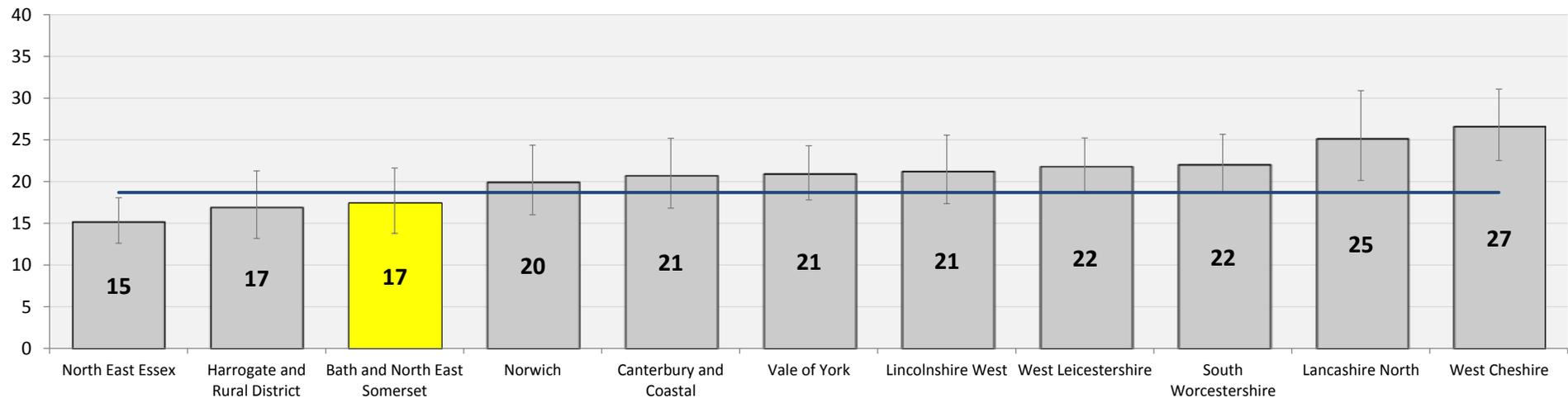
Mortality from accidents all years (per 100,000 pop)

135



England 20.0

Best 5 19.0

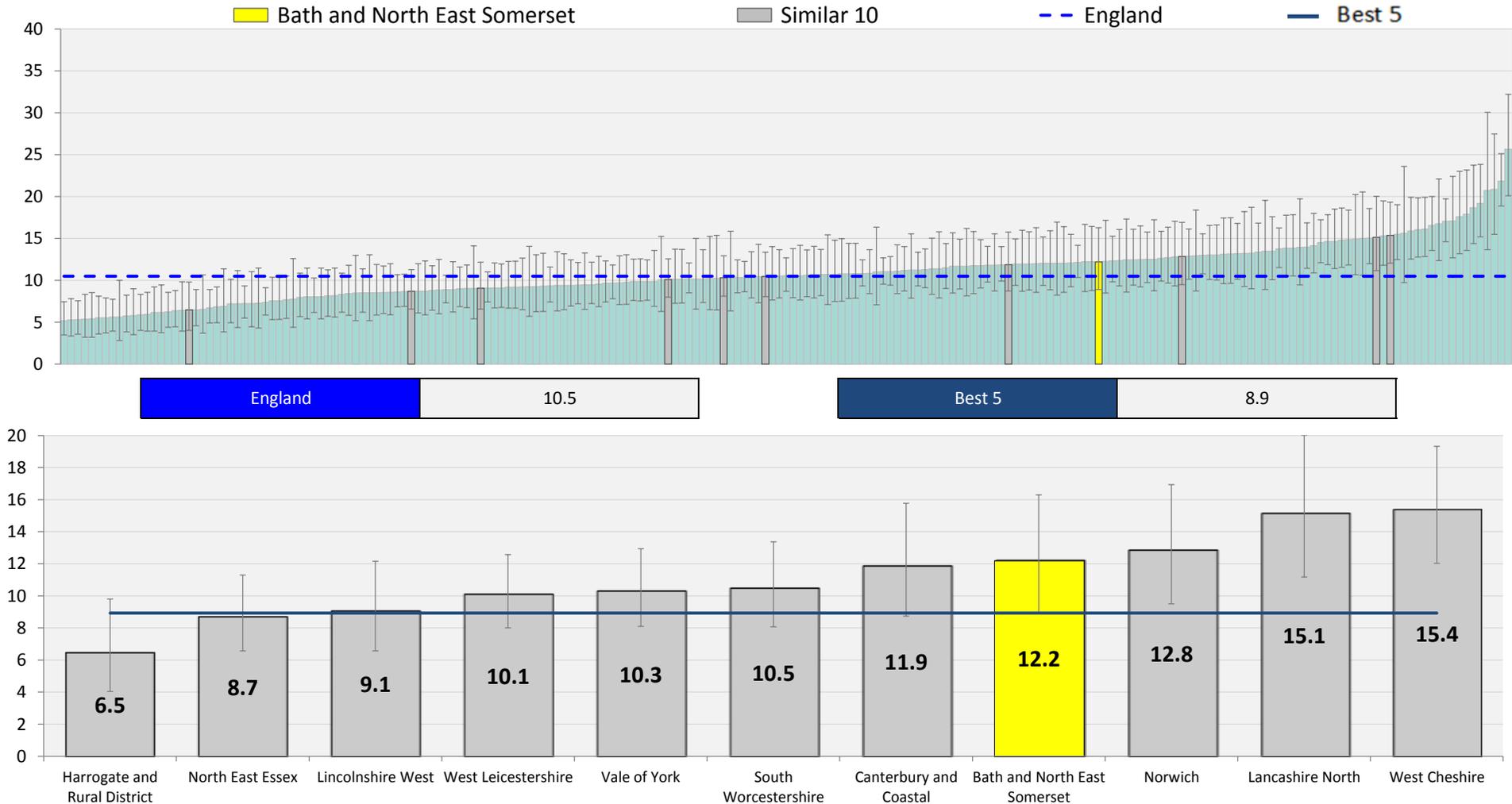


Definition: Mortality from accidents: all age directly age-standardised rates (DSR) per 100,000 European Standard Population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

Mortality - Accidents - Under 75 (per 100,000 pop)

4 Lives (NSS)

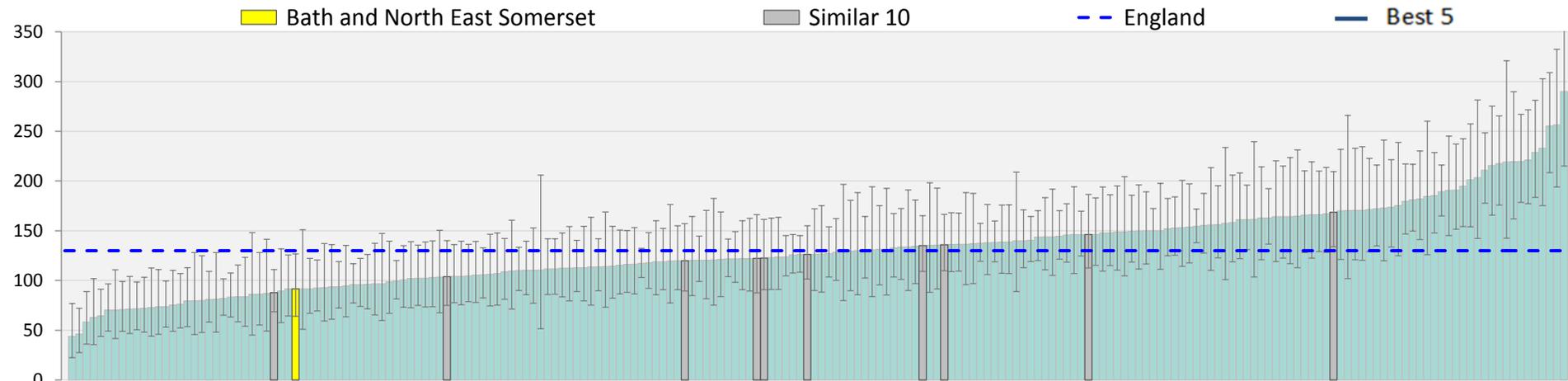
136



Definition: Mortality from accidents: Under 75 Directly age-standardised rates (DSR) per 100,000 European Standard population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

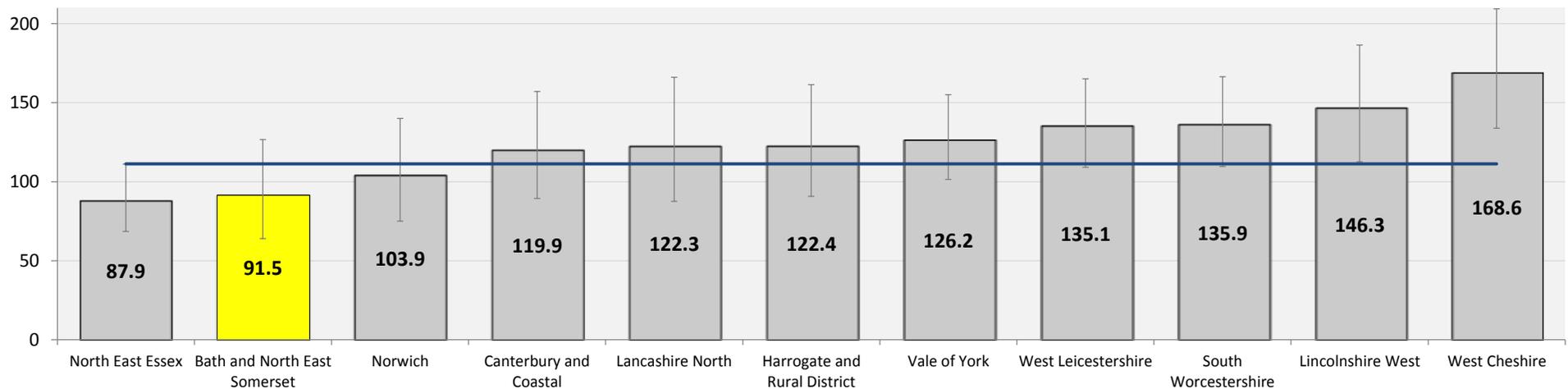
Mortality - Accidents - 75+ (per 100,000 pop)

137



England 130.0

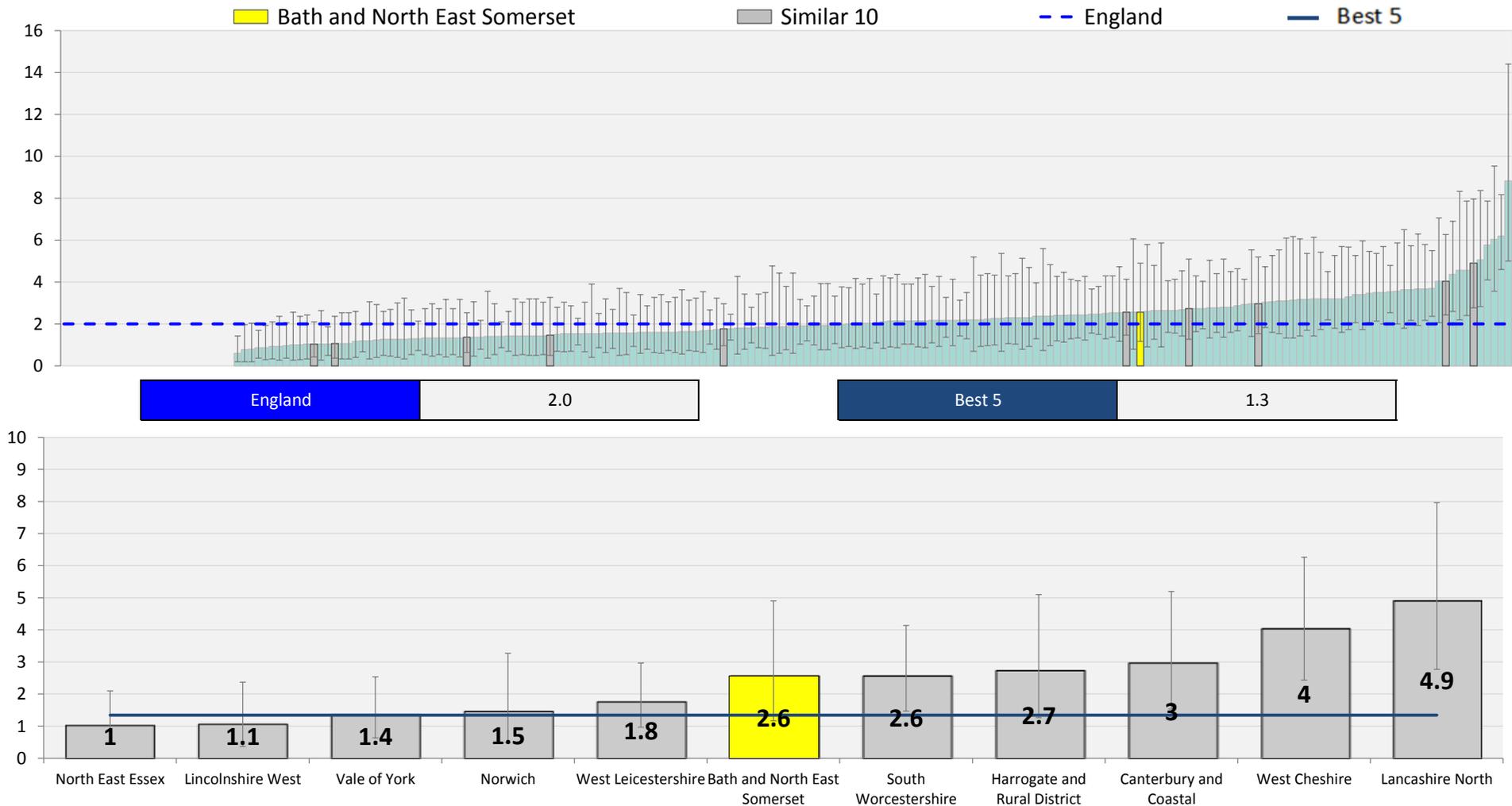
Best 5 111.3



Definition: Mortality from accidents: 75+ Directly age-standardised rates (DSR) per 100,000 European Standard population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

Mortality - Falls - Under 75 (per 100,000 pop)

138

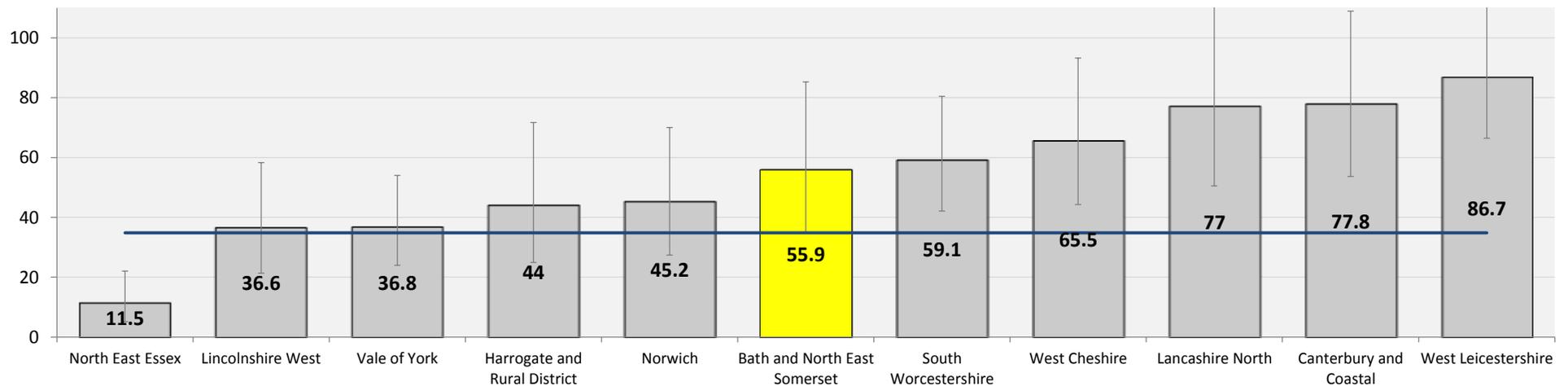
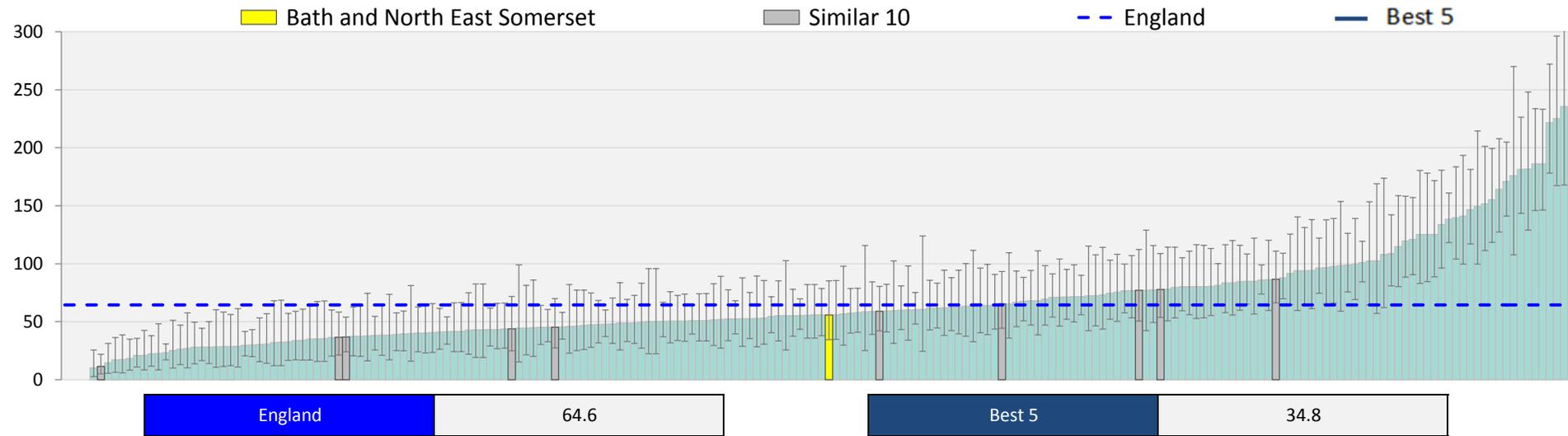


Definition: Mortality from accidental falls: Under 75 Directly age-standardised rates (DSR) per 100,000 European Standard population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

Mortality - Falls - 75+ (per 100,000 pop)

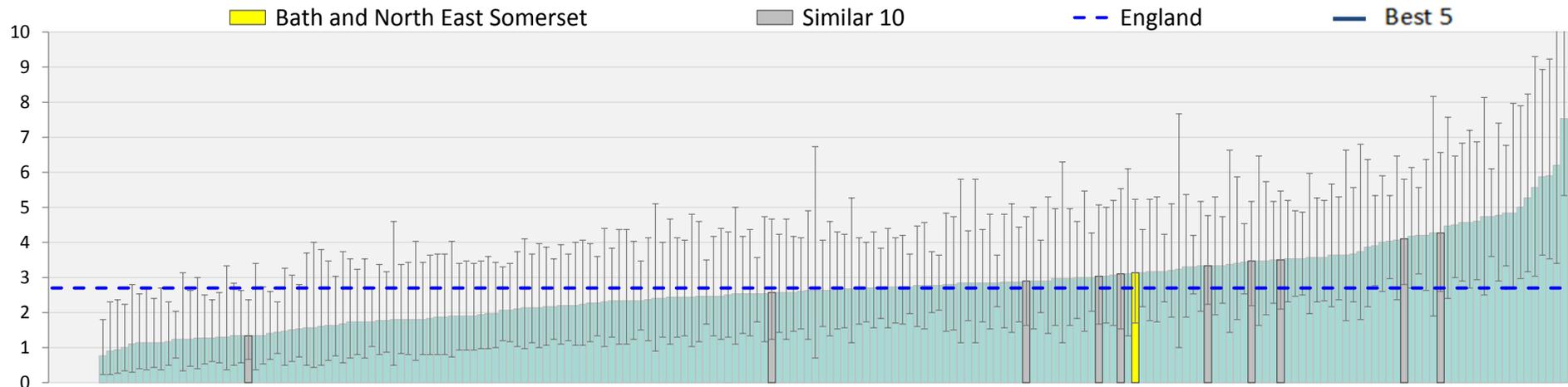
2 Lives (NSS)

139



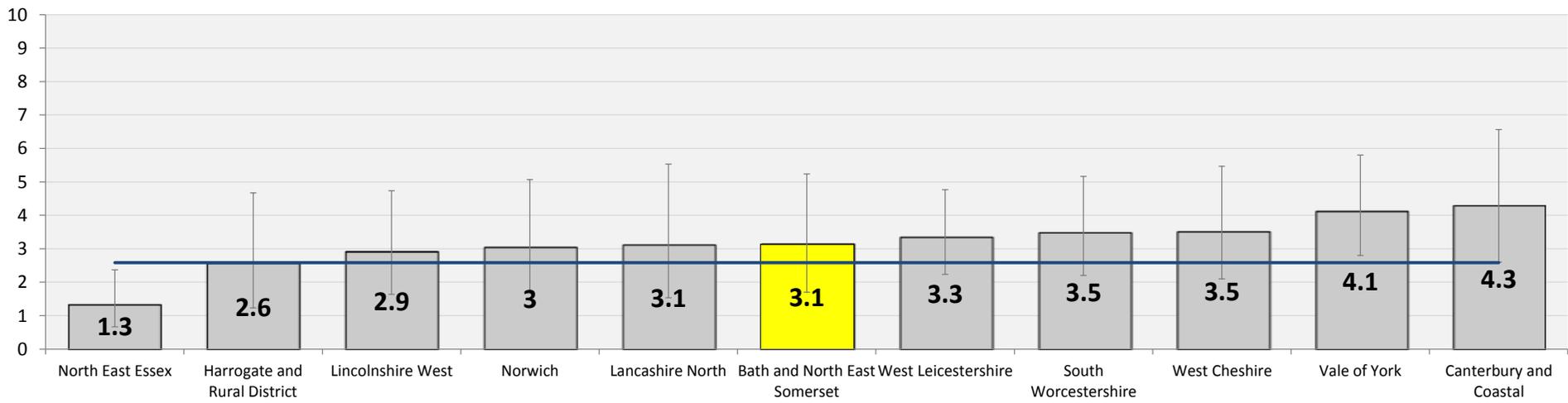
Definition: Mortality from accidental falls: 75+ Directly age-standardised rates (DSR) per 100,000 European Standard population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

Mortality - all ages - transport accident (per 100,000 pop)



England 2.7

Best 5 2.6

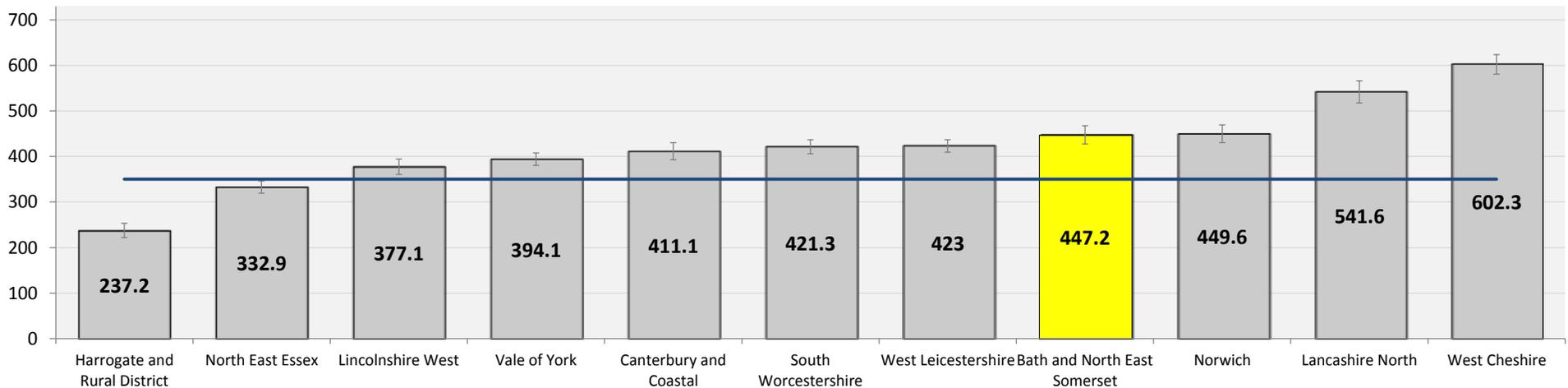
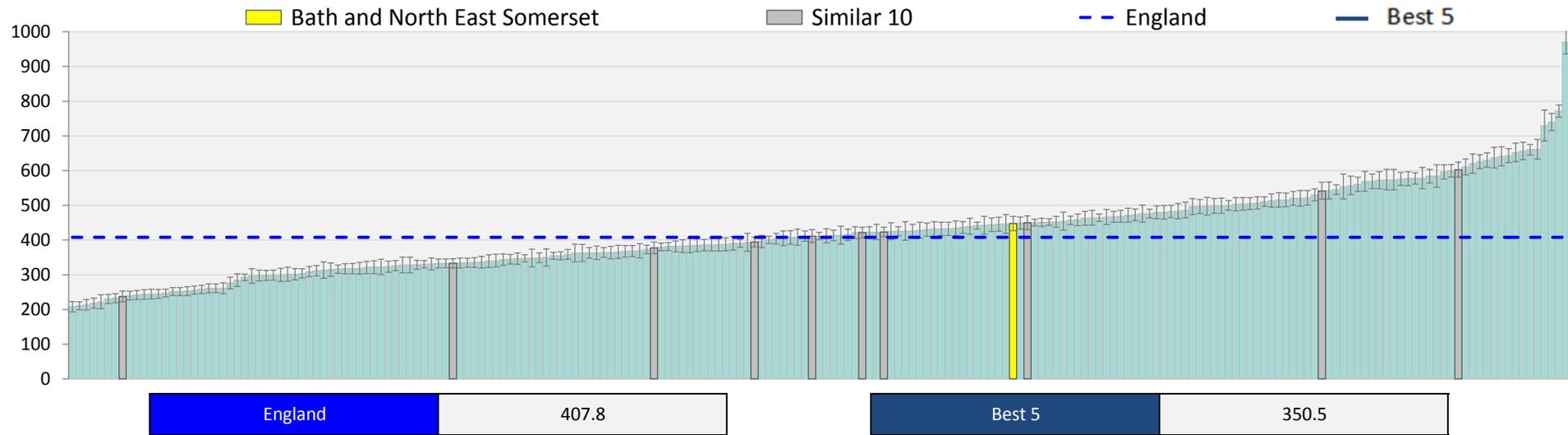


Definition: Mortality from transport accidents: Directly age-standardised rates (DSR) per 100,000 European Standard population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

Life years lost Accidents (all)

126 Life years

141

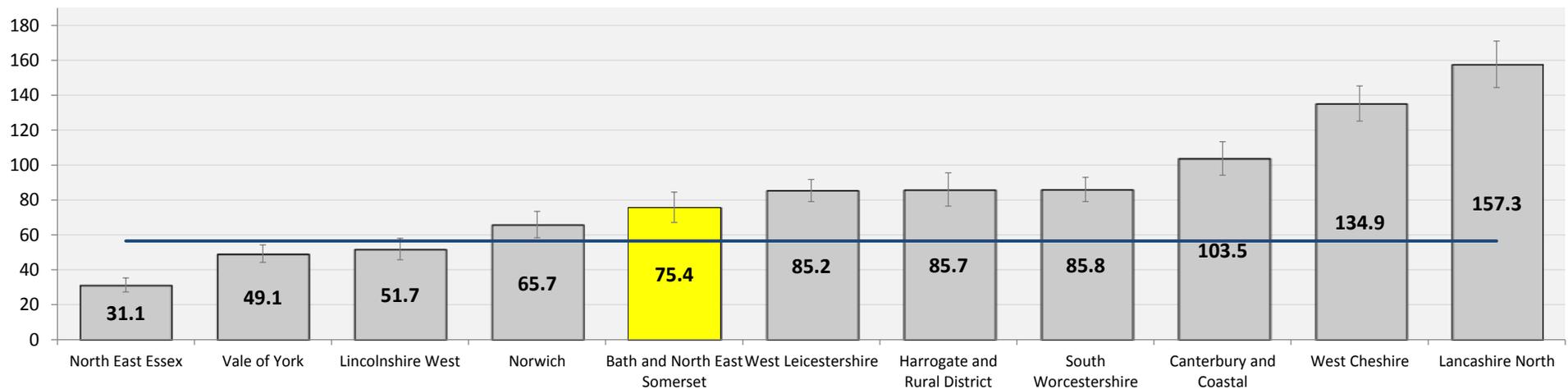
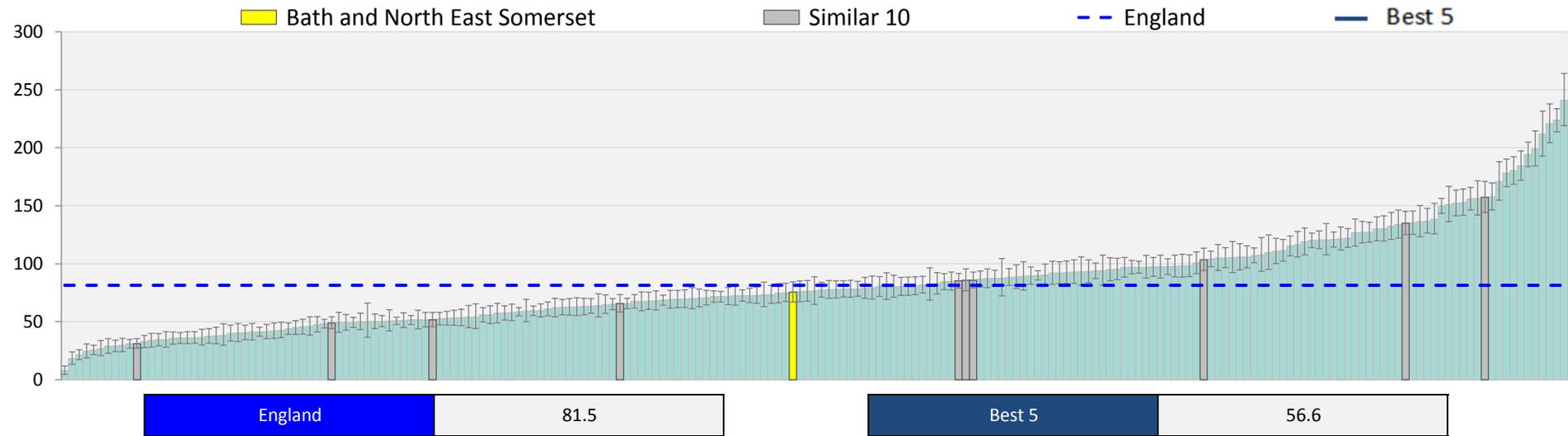


Definition: Years of life lost due to mortality from accidents: Directly age-standardised rates (DSR) per 100,000 European Standard population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

Life years lost falls (all)

9 Life years

142

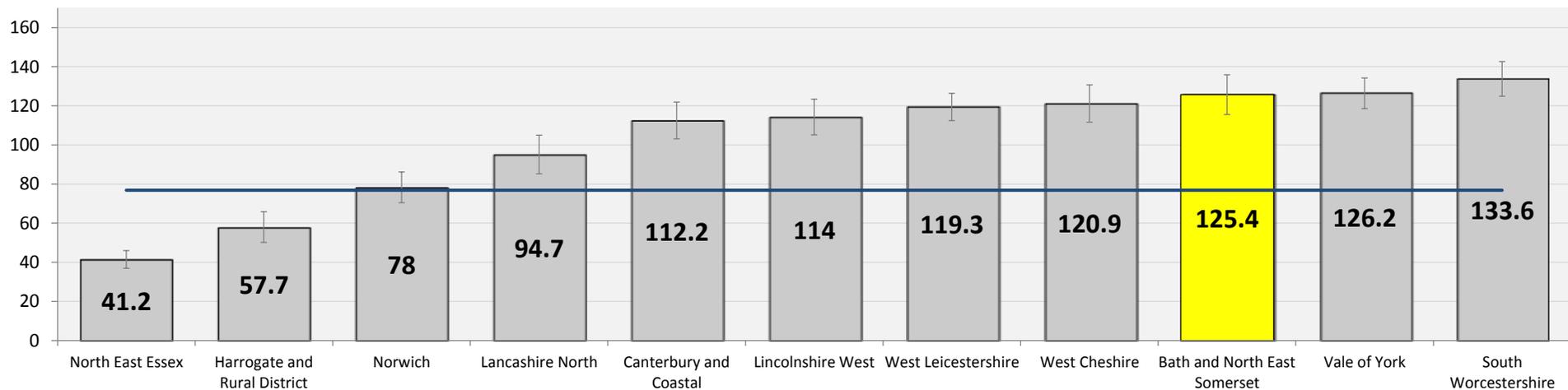
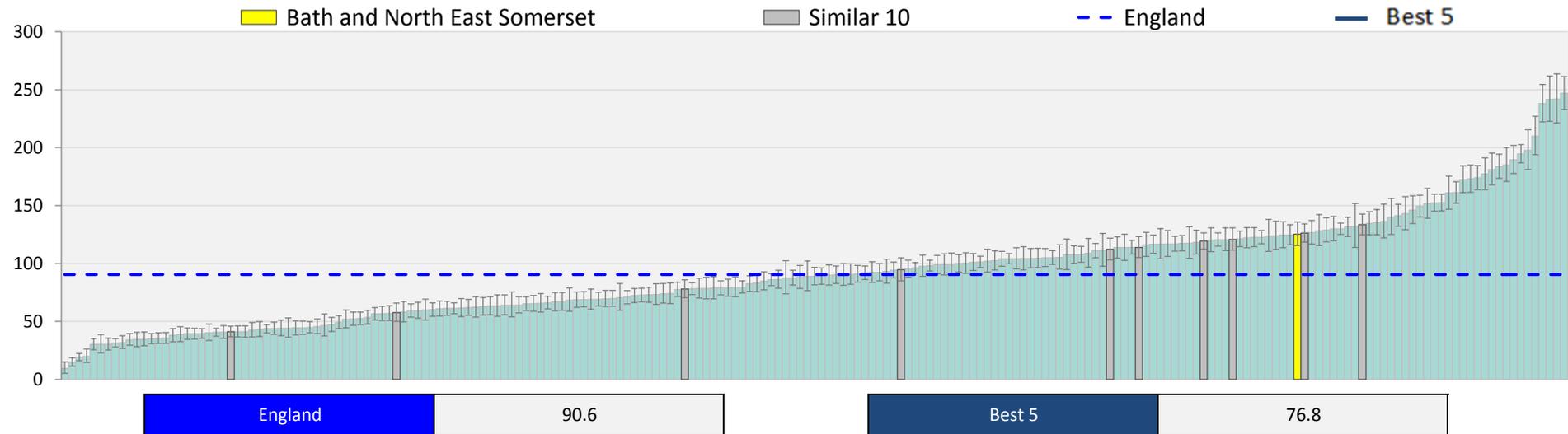


Definition: Years of life lost due to mortality from accidental falls: Directly age-standardised rates (DSR) per 100,000 European Standard population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

Life years lost transport (all)

42 Life years

143



Definition: Years of life lost due to mortality due to transport accidents: Directly age-standardised rates (DSR) per 100,000 European Standard population
 Source: Primary Care Mortality Database, HSCIC
 Year: 2011-13

Commissioners can take the following actions now:

- Identify the key opportunities for improvement within the pathways included in the MSK, Trauma and Injuries focus pack for your population and compare with current reform activity and improvement plans
- Engage with clinicians and other local stakeholders, including public health teams in local authorities and commissioning support organisations and explore the opportunities along the pathways further using local data
- Revisit the Commissioning for Value web pages regularly as new content, including updates to tools to support the use of the Commissioning for Value packs, is regularly added
- Watch the focus pack videos, and explore other clinical resources
- Always consider risk factor reduction (e.g. smoking prevalence) as an opportunity to improve population health and reduce disease prevalence
- Discuss the opportunities highlighted in this pack as part of the STP planning process and consider STP wide action where appropriate
- For Wave One CCGs, speak to your Delivery Partner about other practical steps for your locality
- For Wave Two CCGs, start to identify and act to improve the opportunities highlighted

The Commissioning for Value benchmarking tool, explorer tool, full details of all the data used, and links to other useful tools are available on the Commissioning for Value pages of the NHS England website.

The NHS RightCare website offers resources to support CCGs in adopting the Commissioning for Value approach. These include:

- Online videos and 'how to' guides
- Case studies with learning from other CCGs

If you have any questions or require any further information or support you can email the Commissioning for Value support team direct at: england.healthinvestmentnetwork@nhs.net

There are further resources on key surgical pathways and data available at The Royal College of Surgeons National Surgical Commissioning Centre. All the resources listed below are freely available at the website shown on page 147.

- **Commissioning guides:** have been developed through a NICE accredited process and outline the 'high value' care pathway for a particular surgical complaint. Further information on the development of the commissioning guides is available online. Guides related to MSK conditions include: Painful osteoarthritis of the hip; Painful osteoarthritis of the knee; Subacromial shoulder pain; Painful tingling fingers (carpal and cubital tunnel); and Low back pain
- **Data tools linked to commissioning guides:** use Hospital Episode Statistics (HES). All the tools have been developed with input from a multidisciplinary guideline development group and clinical coders and the technical definitions and guidance on navigating the tools are available to download. The data within these tools should be used as a start of a conversation between commissioners and their providers to examine possible areas for improved efficiency and quality improvement
- **The Quality Dashboards and Procedure Explorer Tool (PET):** There are 30 separate quality dashboards which show quality indicators for surgical procedures commissioned by commissioners. The PET tool shows further detailed information on individual procedures. Data tools for the pathways are:
 - Total Hip replacement and hip resurfacing
 - Total or partial knee replacement
 - Knee arthroscopy and osteotomy
 - Carpal and cubital tunnel surgery
 - Rotator cuff revision, subacromial decompression
 - Facet joint injection/medial branch block

Commissioning for Value pages of the NHS England website:

<http://www.england.nhs.uk/resources/resources-for-ccgs/comm-for-value/>

Commissioning for Value Similar 10 Explorer Tool:

<https://www.england.nhs.uk/wp-content/uploads/2016/01/cfv-16-similar-10-explr-tool.xlsm>

Supporting videos for the CFV focus packs:

<https://www.youtube.com/playlist?list=PL6IQwMACXkj1e17bcMvaHuy1gd9XrZT92>

NHS RightCare website:

<http://www.rightcare.nhs.uk/index.php/commissioning-for-value/>

NHS England MSK and Person Centred Care team:

england.longtermconditions@nhs.net

Royal College of Surgeons National Surgical Commissioning Centre:

<http://www.rcseng.ac.uk/surgical-commissioning>

Continued on the next page

Arthritis Research UK:

<http://www.arthritisresearchuk.org/>

National Osteoporosis Society:

<https://www.nos.org.uk/>

North East Quality Observatory Service:

<http://www.negos.nhs.uk>

National Institute for Health and Care Excellence:

<https://www.nice.org.uk/>

National Improving Spinal Care Project:

<http://ukssb.com/pages/Improving-Spinal-Care-Project/National-Backpain-Pathway.html>

Annex A: Condition and drug groupings

Condition Group	Programme Budget Category	Primary Diagnosis Code
Back, neck and musculoskeletal pain	15X	Any Primary Diagnosis Code that begins with M40, M41, M42, M43, M46, M47, M48, M49, M50, M51, M52, M53, M54, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95 or M96 and mapped to 15X.
Rheumatoid and Inflammatory Arthritis	15X	Any Primary Diagnosis Code that begins with M00, M01, M02, M03, M05, M06, M07, M08, M09, M10, M11, M12, M13, M14 or M45 and mapped to 15X.
Osteoporosis and fragility fractures	15X	Any Primary Diagnosis Code that begins with M80, M81, M82, M83, M84 or M85 and mapped to 15X.
Osteoarthritis	15X	Any Primary Diagnosis Code that begins with M15, M16, M17, M18 or M19 and mapped to 15X.
Other joint disorders (not including rheumatoid and inflammatory arthritis or osteoarthritis)	15X	Any Primary Diagnosis Code that begins with M20, M21, M22, M23, M24 or M25 and mapped to 15X.
Other MSK	15X	Any Primary Diagnosis Code that begins with M30, M31, M32, M33, M34, M35, M36, M60, M61, M62, M63, M65, M66, M67, M68, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M97, M98 or M99 and mapped to 15X.

Programme Budget Category 15X = Problems of the Musculoskeletal System

Problems due to trauma and injuries; Spend groups

151

Condition Group	Programme Budget Category	Primary Diagnosis Code
Injuries to the hip and thigh	16X	Any Primary Diagnosis Code that begins with S70, S71, S72, S73, S74, S75, S76, S77, S78 or S79 and mapped to 16X.
Injuries to the thorax	16X	Any Primary Diagnosis Code that begins with S20, S21, S22, S23, S24, S25, S26, S27, S28 or S29 and mapped to 16X.
Injuries to the wrist and hand	16X	Any Primary Diagnosis Code that begins with S60, S61, S62, S63, S64, S65, S66, S67, S68 or S69 and mapped to 16X.
Injuries to the shoulder and upper arm	16X	Any Primary Diagnosis Code that begins with S40, S41, S42, S43, S44, S45, S46, S47, S48 or S49 and mapped to 16X.
Injuries to the elbow and forearm	16X	Any Primary Diagnosis Code that begins with S50, S51, S52, S53, S54, S55, S56, S57, S58 or S59 and mapped to 16X.
Injuries to the head	16X	Any Primary Diagnosis Code that begins with S00, S01, S02, S03, S04, S05, S06, S07, S08, S09 and mapped to 16X.
Injuries to the abdomen, lower back, lumbar spine and pelvis	16X	Any Primary Diagnosis Code that begins with S30, S31, S32, S33, S34, S35, S36, S37, S38 or S39 and mapped to 16X.
Injuries to the knee and lower leg	16X	Any Primary Diagnosis Code that begins with S80, S81, S82, S83, S84, S85, S86, S87, S88 or S89 and mapped to 16X.

Programme Budget Category 16X = Problems due to Trauma and Injuries

Back and radicular pain ICD10 and OPCS4.7 codes

Definitions for low back and radicular pain are based on diagnosis codes (ICD-10) and relevant secondary care procedures codes (OPCS 4.7) were developed by the NEQOS (Liz Lingard, Andrea Brown and Adam Fearing) working with Professor Charles Greenough (National Clinical Director for Spinal Disorders, South Tees NHS Foundation Trust). These codes have been supported by Mr Ashley Cole, Chair of Specialised Spinal Surgery Clinical Reference Group (Consultant Orthopaedic Surgeon, Northern General Hospital and Sheffield Children's Hospital). NEQOS has producing detailed regional CCG and Provider level reports to support the Getting It Right First Time (GIRFT) project and the National Pathfinder Project for Acute Low Back and Radicular Pain. More information is available at: www.neqos.nhs.uk

Hip and Knee Replacement codes

Codes used in this focus pack are consistent with the OPCS4.7 codes published by the NJR. It should be noted that the Hip and Knee replacement codes used by the HSCIC for the PROMs programme are not consistent with the codes used by the National Joint Registry (NJR). These inconsistencies have been discussed with clinical experts from the British Orthopaedic Association and the leads for the national PROMs programme within NHS England and the HSCIC (September 2015) and it was agreed that OPCS4.7 codes published by the NJR should be the accepted standard for all future indicator development. NEQOS produces a bi-annual Provider level Hip and Knee Dashboard that includes process and outcomes indicators. More information is available at: www.neqos.nhs.uk).

Shoulder surgery codes

Development of shoulder replacement and sub-acromial decompression with/without rotator cuff repair indicators was a collaboration between NEQOS (Liz Lingard and Kayoung Goffe) and Orthopaedic Surgeons led by Amar Rangan (National Clinical Director for Shoulder Disorders) with Mike Reed, Jaime Candal-Couto, Simon Jameson, Andreas Hinsche, Sivaraman Balasubramanian, Rajesh Nanda in the North East and Adam Watts, Chris Peach, Matthew Kent Phil Turner, David Johnson in the North West. This work was funded by Orthopaedic Research UK.

High spend procedures mapped to Programme Budget Code: 15X*

OPCS Procedure Codes for Anatomical Total Shoulder Arthroplasty: O061, O068, O069, O071, O078, O079, O081, O088, O089, W961, W968, W969, W971, W978, W979, W981, W988, W989
--

OPCS Procedure Codes for Resurfacing and Stemmed Hemiarthroplasty: W494, W504, W515, W581, Z814, W491, W498, W499, W501, W508, W509, W511, W518, W519
--

OPCS Procedure Codes for Reverse Polarity Arthroplasty: W965, W975, W986

OPCS Procedure Codes for Revision Shoulder cuff repair: T791, T793, T794, T795

OPCS Procedure Code for Subacromial decompression: O291
--

* Primary procedures where the primary diagnosis for the admission fell within the Programme Budget Category 15X

High spend procedures mapped to Programme Budget Code: 15X

OPCS Procedure Codes for Primary Hip Replacement - Cemented: W371, W378, W379, W521
OPCS Procedure Codes for Primary Hip Replacement - Uncemented: W381, W388, W389, W531
OPCS Procedure Codes for Primary Hip Replacement - Unspecified: W391, W399 or ((W541, W581) and (Z843 or Z761 or Z756))
OPCS Procedure Codes for Primary Hip Replacement - Hybrid: W931, W939, W941, W949, W951, W958, W959
OPCS Procedure Codes for Hip Revisions - Total: W370, W372, W373, W374, W380, W382, W383, W384, W392, W393, W394, W395, W462, W472, W482, W522, W523, W532, W533, W542, W543, W544, W572, W574, W582, W932, W933, W940, W942, W943, W952, W953, W954
OPCS Procedure Codes for Primary Knee Replacements – Cemented: W401, W408, W409, W521
OPCS Procedure Codes for Primary Knee Replacements - Uncemented: W411, W418, W419, W531
OPCS Procedure Codes for Primary Knee Replacements - Unspecified: W421, W428, W429 or ((W541, W581) and (Z846 or Z765 or Z845 or Z844 or Z774 or Z787))
OPCS Procedure Codes for Knee Revisions - Total: O180, O182, O183, O184, W400, W402, W403, W404, W410, W412, W413, W414, W420, W422, W423, W424, W425, W522, W523, W532, W533, W542, W543, W544, W553, W564, W574, W582, W603, W613, W641, W642

MSK procedures: Back/Radicular pain injections

155

High spend procedures mapped to Programme Budget Code: 15X

OPCS Procedure Code	Full procedure description	Procedure type	Procedure group
V544	Injection around spinal facet of spine	Back pain injections	Injection facet joint
W903	Injection of therapeutic substance into joint	Back Pain Injections	Other Back Injection
X375	Intramuscular injection for local action	Back Pain Injections	Other Back Injection
X382	Injection of steroid for local action NEC	Back Pain Injections	Other Back Injection
A521	Therapeutic lumbar epidural injection	Radicular pain injection	Epidural lumbar
A522	Therapeutic sacral epidural injection	Radicular pain injection	Epidural sacral
A528	Other specified therapeutic epidural injection	Radicular pain injection	Epidural (not specified)
A529	Unspecified therapeutic epidural injection	Radicular pain injection	Epidural (not specified)
A577	Injection of therapeutic substance around spinal nerve root	Radicular pain injection	Spinal nerve root injection

High spend procedures mapped to Programme Budget Code: 15X

OPCS Procedure Code	Full procedure description	Procedure group
U054	Computed tomography of spine	CT
U055	Magnetic resonance imaging of spine	MRI
U211	Magnetic resonance imaging NEC	MRI
U212	Computed tomography NEC	CT
V523	Discography of intervertebral disc	Discography

High spend procedures mapped to Programme Budget Code: 15X

OPCS Procedure Code	Full procedure description	Procedure group
A483	Insertion of neurostimulator adjacent to spinal cord	Neurostimulators
A484	Attention to neurostimulator adjacent to spinal cord NEC	Neurostimulators
A485	Reprogramming of neurostimulator adjacent to spinal cord	Neurostimulators
A486	Removal of neurostimulator adjacent to spinal cord	Neurostimulators
A487	Insertion of neurostimulator electrodes into the spinal cord	Neurostimulators
A543	Implantation of intrathecal drug delivery device adjacent to spinal cord	Drug delivery device
A544	Attention to intrathecal drug delivery device adjacent to spinal cord	Drug delivery device
A545	Removal of intrathecal drug delivery device adjacent to spinal cord	Drug delivery device
A572	Rhizotomy of spinal nerve root	Spinal nerve root destruction
A573	Radiofrequency controlled thermal destruction of spinal nerve root	Spinal nerve root destruction
A574	Injection of destructive substance into spinal nerve root	Spinal nerve root destruction
A575	Destruction of spinal nerve root NEC	Spinal nerve root destruction
A705	Electroacupuncture	Acupuncture

OPCS Procedure Code	Full procedure description	Procedure group
A706	Acupuncture NEC	Acupuncture
A707	Application of transcutaneous electrical nerve stimulator	TENS
V485	Radiofrequency controlled thermal denervation of spinal facet joint of lumbar vertebra	Denervation
V486	Denervation of spinal facet joint of lumbar vertebra NEC	Denervation
V487	Radiofrequency controlled thermal denervation of spinal facet joint of vertebra NEC	Denervation
V488	Other specified denervation of spinal facet joint of vertebra	Denervation
V489	Unspecified denervation of spinal facet joint of vertebra	Denervation
V623	Primary percutaneous intradiscal radiofrequency thermocoagulation to lumbar intervertebral disc	Radiofrequency thermocoagulation to disc
V628	Other specified primary percutaneous intradiscal radiofrequency thermocoagulation to intervertebral disc	Radiofrequency thermocoagulation to disc
V629	Unspecified primary percutaneous intradiscal radiofrequency thermocoagulation to intervertebral disc	Radiofrequency thermocoagulation to disc
V633	Revisional percutaneous intradiscal radiofrequency thermocoagulation to lumbar intervertebral disc	Radiofrequency thermocoagulation to disc
V638	Other specified revisional percutaneous intradiscal radiofrequency thermocoagulation to intervertebral disc	Radiofrequency thermocoagulation to disc
V639	Unspecified revisional percutaneous intradiscal radiofrequency thermocoagulation to intervertebral disc	Radiofrequency thermocoagulation to disc
X292	Continuous intravenous infusion of therapeutic substance NEC	Drug delivery device

High spend procedures mapped to Programme Budget Code: 15X

OPCS Procedure Codes for Surgery - All: A578, A579, V251, V252, V253, V254, V255, V256, V258, V259, V261, V262, V263, V264, V265, V266, V268, V269, V281, V282, V288, V289, V331, V332, V333, V334, V335, V336, V337, V338, V339, V341, V342, V343, V344, V345, V346, V347, V348, V349, V351, V352, V358, V359, V363, V368, V369, V382, V383, V384, V385, V386, V388, V389, V393, V394, V395, V396, V397, V398, V399, V401, V404, V408, V409, V493, V521, V522, V528, V529, V548, V549, V563, V564, V568, V569, V573, V574, V603, V608, V609, V613, V618, V619, V671, V672, V678, V679, V681, V682, V688, V689

OPCS Procedure Codes for Surgery – Decompression: V252, V254, V255, V256, V258, V259, V603, V608, V609, V671, V672, V678, V679

OPCS Procedure Codes for Surgery - Discectomy: V331, V332, V337, V338, V339, V351, V358, V359

OPCS Procedure Codes for Surgery - Posterior lumbar fusion: V382, V383, V384, V385, V386, V388, V389, V404, V408, V409

High spend procedures mapped to Programme Budget Code: 15X

OPCS Procedure Code	Full procedure description	Short name in focus packs
W822	Endoscopic resection of semilunar cartilage NEC	Endoscopic resection of semilunar cartilage NEC
V411	Posterior attachment of correctional instrument to spine	Posterior attachment of correctional instrument to spine
T791	Plastic repair of rotator cuff of shoulder NEC	Plastic repair of rotator cuff of shoulder NEC
W283	Removal of internal fixation from bone NEC	Removal of internal fixation from bone NEC
W742	Reconstruction of intra-articular ligament NEC	Reconstruction of intra-articular ligament NEC
T525	Digital fasciectomy	Digital fasciectomy
T521	Palmar fasciectomy	Palmar fasciectomy
W901	Aspiration of joint	Aspiration of joint
V294	Primary anterior excision of cervical intervertebral disc and interbody fusion of joint of cervical spine	Primary anterior excision of cervical intervertebral disc and interbody fusion of joint of cervical spine
T723	Release of constriction of sheath of tendon	Release of constriction of sheath of tendon
W621	Primary arthrodesis and internal fixation of joint NEC	Primary arthrodesis and internal fixation of joint NEC
U051	Computed tomography of head	CT - Head
W802	Open debridement of joint NEC	Open debridement of joint NEC

Trauma and injuries procedures

161

High spend procedures mapped to Programme Budget Code: 16X

OPCS Procedure Code	Full procedure description	Short name in focus packs
W461	Primary prosthetic replacement of head of femur using cement	Primary prosthetic replacement of head of femur using cement
W201	Primary open reduction of fracture of long bone and extramedullary fixation using plate NEC	Primary open reduction of fracture of long bone and extramedullary fixation using plate NEC
U051	Computed tomography of head	CT - Head
W242	Closed reduction of fracture of long bone and rigid internal fixation NEC	Closed reduction of fracture of long bone and rigid internal fixation NEC
W246	Closed reduction of fracture of bone and fixation using nail or screw	Closed reduction of fracture of bone and fixation using nail or screw
U212	Computed tomography NEC	CT - NEC
W192	Primary open reduction of fracture of long bone and fixation using rigid nail NEC	Primary open reduction of fracture of long bone and fixation using rigid nail NEC
W262	Manipulation of fracture of bone NEC	Manipulation of fracture of bone NEC
W191	Primary open reduction of fracture of neck of femur and open fixation using pin and plate	Primary open reduction of fracture of neck of femur and open fixation using pin and plate
U502	Delivery of rehabilitation for hip fracture	Delivery of rehabilitation for hip fracture
W471	Primary prosthetic replacement of head of femur not using cement	Primary prosthetic replacement of head of femur not using cement
W198	Other specified primary open reduction of fracture of bone and intramedullary fixation	Other specified primary open reduction of fracture of bone and intramedullary fixation
T676	Primary simple repair of tendon	Primary simple repair of tendon
W232	Secondary open reduction of fracture of bone and extramedullary fixation HFQ	Secondary open reduction of fracture of bone and extramedullary fixation HFQ
U508	Other specified rehabilitation for musculoskeletal disorders	Other specified rehabilitation for musculoskeletal disorders
S571	Debridement of skin NEC	Debridement of skin NEC
X481	Application of plaster cast	Application of plaster cast
S411	Primary suture of skin of head or neck NEC	Primary suture of skin of head or neck NEC
W371	Primary total prosthetic replacement of hip joint using cement	Primary total prosthetic replacement of hip joint using cement
A411	Evacuation of subdural haematoma	Evacuation of subdural haematoma

Condition drug groups	Chemical level drugs included
Pain medication	Nefopam hydrochloride, Tapentadol Hydrochloride, Tramadol Hydrochloride, Amitriptyline Hydrochloride, Pregabalin, Nortriptyline, Gabapentin, Celecoxib, Diclofenac Potassium, Diclofenac Sodium, Etoricoxib, Ibuprofen, Indometacin, Meloxicam, Naproxen, Capsaicin
Bisphosphonates	Other Calcium Supplement Preps, Other Vitamin D Preps, Alendronic acid, Zoledronic Acid, Ibandronic Acid
Non-bisphosphonates	Calcitriol, Teriparatide, Denosumab, Raloxifene Hydrochloride, Strontium Ranelate

Individual drugs	BNF Category
Naproxen	Non-steroidal anti-inflammatory drugs
Ibuprofen	Non-steroidal anti-inflammatory drugs
Diclofenac Sodium	Non-steroidal anti-inflammatory drugs
Etoricoxib	Non-steroidal anti-inflammatory drugs
Celecoxib	Non-steroidal anti-inflammatory drugs
Methotrexate	Drugs that suppress the rheumatic disease process
Hydroxychloroquine Sulfate	Drugs that suppress the rheumatic disease process
Leflunomide	Drugs that suppress the rheumatic disease process
Allopurinol	Gout and cytotoxic-induced hyperuricaemia
Colchicine	Gout and cytotoxic-induced hyperuricaemia
Febuxostat	Gout and cytotoxic-induced hyperuricaemia
Prednisolone	Glucocorticoid therapy
Tramadol Hydrochloride	Opioid analgesics
Codeine Phosphate	Opioid analgesics
Dihydrocodeine Tartrate	Opioid analgesics
Co-codamol (Codeine Phos/Paracetamol)	Non-opioid analgesics and compound analgesic preparations
Paracetamol	Non-opioid analgesics and compound analgesic preparations
Piroxicam	Non-steroidal anti-inflammatory drugs
Heparinoid	Parenteral anticoagulants
Capsaicin	Rubefacients, topical NSAIDs, capsaicin, and poultices

Admission Method	Admission Method Description
11	11: Waiting list
12	12: Booked
13	13: Planned
21	21: Accident and emergency or dental casualty department of the health care provider
22	22: General practitioner: after a request for immediate admission has been made direct to a hospital provider, i.e. Not through a bed bureau, by a general practitioner or deputy
23	23: Bed bureau
24	24: Consultant clinic, of this or another health care provider
25	25: Admission via mental health crisis resolution team
28	28: Other means, examples are: admitted from the accident and emergency department of another provider where they had not been admitted; transfer of an admitted patient from another hospital provider in an emergency; baby born at home as intended
2A	2A: Accident and emergency department of another provider where the patient had not been admitted
2B	2B: Transfer of an admitted patient from another hospital provider in an emergency
2C	2C: Baby born at home as intended
2D	2D: Other emergency admission
31	31: Admitted ante-partum
32	32: Admitted post-partum
81	81: Transfer of any admitted patient from other hospital provider other than in an emergency
82	82: The birth of a baby in this health care provider
83	83: Baby born outside the health care provider except when born at home as intended.

Patient Classification	Patient Classification Description
1	1: Ordinary admission
2	2: Day case admission

Person Gender Code	Person Gender Description
1	1: Male
2	2: Female

Annex B: High level metadata

Analysis	Elective/Non-elective spend analysis
Time Period	2014/15
Age Group	0 – 120
Admissions method	Elective - 11, 12, 13** Non-Elective - 21, 22, 23, 24, 25, 28, 2A, 2B, 2C, 2D, 31, 32, 81, 82, 83** [Total spend indicators includes all elective and non elective admissions method codes]
Patient Classification	Elective - 1, 2** Non-Elective – 1**
Sex	1, 2**
Coding scheme used	Programme Budget Category (PBC), ICD10 Primary Diagnosis Codes
Numerator	Total spend on elective/non-elective admissions based on PBC/condition
Numerator Source	Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart) http://www.hscic.gov.uk/sus
Denominator	Age/Sex Standardised Population. Rate= (Numerator/Denominator) * 1000

**See annex for SUS SEM Code definitions

Secondary User Services Extract Mart (SUS SEM) data is used.
Only patients with a mandatory tariff recorded have been selected.
The fields that were pulled from SUS SEM include:

- CCG code (based on the GP practice code)
- Sex (this field is used for age/sex standardisation)
- Age_Quinary (Age Band)
- Number of spells
- Net_SLA_Payment (the cost before MFF is applied)

The data does not include CCGs which were not found in the official list of CCGs across England.

Age_Quinary field is presented in 5-year age bands (0-4, 5-9, 10-14, etc.) including the “85+” age band for people aged 85 and over. This field is used for age/sex standardisation.

Number of spells field counts all the patients admitted to hospital for a procedure and discharged in the financial year 2014/15 and groups into each age band.

[Patients admitted in 2014/15 but not discharged until 2015/16 will not count towards the spend. A small number of patients admitted in 2013/14 but not discharged until 2014/15 will count towards the spend for 2014/15.]

Net_SLA_Payment field is the cost before Market Forces Factor (MFF) is applied. This field gives spend on elective/non-elective admissions for all patients in the age band in 2014/15.

The number of elective/non-elective admissions were suppressed where it was less than or equal to 5 at CCG level.

Analysis	Day case admissions analysis
Time Period	2014/15
Age Group	0 – 120
Admissions method	11, 12, 13
Patient Classification	2
Sex	1, 2
Coding scheme used	Programme Budget Category (PBC), ICD10
Numerator	Number of day case admissions based on PBC/condition
Numerator Source	Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart) http://www.hscic.gov.uk/sus
Denominator	Age/Sex Standardised Population. Rate= (Numerator/Denominator) * 100000

Secondary User Services Extract Mart (SUS SEM) data is used.

Only patients with a mandatory tariff recorded have been selected.

The fields that were pulled from SUS SEM include:

- CCG code (based on the GP practice code)
- Sex (this field is used for age/sex standardisation)
- Age_Quinary (Age Band)
- Number of spells

The data does not include CCGs which were not found in the official list of CCGs across England.

Age_Quinary field is presented in 5-year age bands (0-4, 5-9, 10-14, etc.) including the “85+” age band for people aged 85 and over. This field is used for age/sex standardisation.

Number of spells field counts all the day case admissions in 2014/15 and groups into each age band.

The number of day case admissions were suppressed where it was less than or equal to 5 at CCG level.

Analysis	Emergency admissions analysis
Time Period	2014/15
Age Group	Children: 0 – 18 Adults: 19 - 120
Admissions method	Emergency - 21, 22, 23, 24, 25, 28, 2A, 2B, 2C, 2D
Patient Classification	1
Sex	1, 2
Coding scheme used	Programme Budget Category (PBC), ICD10
Numerator	Number of emergency admissions based on PBC/condition
Numerator Source	Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart) http://www.hscic.gov.uk/sus
Denominator	Age/Sex Standardised Population. Rate= (Numerator/Denominator) * 100000

Secondary User Services Extract Mart (SUS SEM) data is used.

Only patients with a mandatory tariff recorded have been selected.

The fields that were pulled from SUS SEM include:

- CCG code (based on the GP practice code)
- Sex (this field is used for age/sex standardisation)
- Age_Quinary (Age Band)
- Number of spells

The data does not include CCGs which were not found in the official list of CCGs across England.

Age_Quinary field is presented in 5-year age bands (0-4, 5-9, 10-14, etc.) including the “85+” age band for people aged 85 and over. This field is used for age/sex standardisation.

Number of spells field counts all the emergency admissions in the financial year 2014/15 and groups into each age band.

The number of emergency admissions were suppressed where it was less than or equal to 5 at CCG level.

Length of stay indicators

169

Analysis	Length of Stay analysis
Time Period	2014/15
Age Group	0 - 120
Admissions method	Elective - 11, 12, 13 Emergency - 21, 22, 23, 24, 25, 28, 2A, 2B, 2C, 2D
Patient Classification	1
Sex	1, 2
Coding scheme used	Programme Budget Category (PBC), ICD10
Numerator	Total number of bed days for elective/emergency admissions based on PBC/condition (not including day cases)
Numerator Source	Temporary National Repository – Hospital Admissions Databases, SUS SEM (Secondary User Services Extract Mart) http://www.hscic.gov.uk/sus
Denominator	Total number of elective/emergency admissions not including day cases based on PBC/condition.

Secondary User Services Extract Mart (SUS SEM) data is used. Length of Stay data have been extracted at record level.

Only patients with a mandatory tariff recorded have been selected.

Data filtered by Length of Stay less than 180 days.

The fields that were pulled from SUS SEM include:

- APCS_Ident
- CCG code (based on the GP practice code)
- Spell_LoS (Length of Stay)

The data does not include CCGs which were not found in the official list of CCGs across England.

APCS_Ident field was later used to count the number of elective/emergency admissions since the data was extracted at record level.

Spell_LoS field is the spell length of stay derived using Admission Date and Discharge Date.

Standard deviation has been calculated for each CCG in order to calculate confidence intervals using record level data. Length of Stay data was then grouped by CCG to get the total number of bed days (Sum of Spell_LoS field) and total number of elective/emergency admissions (count of APCS_Ident field) for each CCG.

The number of elective/emergency admissions were suppressed where it was less than or equal to 5 at CCG level.

Analysis	Procedures spend and activity analysis
Time Period	2014/15
Age Group	0 – 120
Admissions method	11, 12, 13, 21, 22, 23, 24, 25, 28, 2A, 2B, 2C, 2D, 31, 32, 81, 82, 83
Patient Classification	1, 2
Sex	1, 2
Coding scheme used	Programme Budget Category (PBC), OPCS
Numerator	Total spend on discharges based on PBC and procedures
Numerator Source	Temporary National Repository – Hospital Admissions Databases, SUSSEM (Secondary User Services Extract Mart) http://www.hscic.gov.uk/sus
Denominator	Age/Sex Standardised Population. Rate= (Numerator/Denominator) * 1000

Secondary User Services Extract Mart (SUS SEM) data is used. Only patients with a mandatory tariff recorded have been selected.

For these indicators, spend on a procedure is the total cost of all spells where the procedure listed is the primary procedure in the spell, and where the primary diagnosis for the spell falls under the programme budget category listed. The figure for “How different are we?” converts the CCG’s spending rate above the benchmark spending rate into the equivalent number of procedures.

The fields that were pulled from SUS SEM for spend on procedures include:

- CCG code (based on the GP practice code)
- Sex (this field is used for age/sex standardisation)
- Age_Quinary (Age Band)
- Number of spells
- Net_SLA_Payment (the cost before MFF is applied)

The data does not include CCGs which were not found in the official list of CCGs across England.

Age_Quinary field is presented in 5-year age bands (0-4, 5-9, 10-14, etc.) including the “85+” age band for people aged 85 and over. This field is used for age/sex standardisation.

Number of spells field counts all the patients admitted to hospital for a procedure and discharged in the financial year 2014/15 and groups into each age band. [Patients admitted in 2014/15 but not discharged until 2015/16 will not count towards the spend. A small number of patients admitted in 2013/14 but not discharged until 2014/15 will count towards the spend for 2014/15.]

Net_SLA_Payment field is the cost before Market Forces Factor (MFF) is applied. This field gives spend on discharges for all patients in the age band in 2014/15.

The fields that were pulled from SUS SEM for procedures activity include:

- CCG code (based on the GP practice code)
- Number of spells (count s all admissions in 2014/15 and groups by CCG).

The number of admissions/discharges were suppressed where it was less than or equal to 5 at CCG level.

Analysis	Prescribing Spend
Time period	January 2015 - December 2015
Numerator	Net Ingredient cost (NIC) of BNF Chemical Substance Net Ingredient cost (NIC) is the basic price of a drug as stated in Part II Clause 8 of the Drug Tariff
Numerator Source	ePACT.net – data provided by the NHS Business Services Authority
Denominator	CCG ASTRO-PU weighted population Age, Sex and Temporary Resident Originated Prescribing Units
Rate	Numerator / Denominator x 1000 (spend rate per 1,000 ASTRO-PU weighted population)

We have presented a range of indicators grouping a selection of BNF chemical substances together and aggregating the total Net Ingredient cost. We have also presented individual BNF chemical spend indicators where the total spend is large enough and where advised by national clinical leads. The indicators have been standardised using the ASTRO-PU weightings and are shown per 1,000 ASTRO-PU population to allow fair comparison between CCGs.

Net Ingredient cost (NIC) is the basic price of a drug as stated in Part II Clause 8 of the Drug Tariff.

ASTRO-PU (Age, Sex and Temporary Resident Originated Prescribing Units) weightings have been used to weights the CCG population for age and sex to allow for better comparison of prescribing patterns. Further information regarding ASTRO-PU populations and other prescribing specific populations can be found at <http://www.hscic.gov.uk/prescribing/measures>

Annex C: Additional information on PROMs

Patients are asked about their health just before and six months after hip and knee replacement surgery to assess the impact of treatment.

- Pre-op score: health of patient before the operation
- Post-op score: health of patient six months after the operation

Health gain: difference between the post-op and pre-op scores which estimates the effect of the treatment.

Patients answer two different sets of questions about their health:

- The Oxford Hip Score and Oxford Knee Score are based on questions which are specific to the joint.
E.g. pain in the joint, how painful to stand because of the joint, limping because of the joint etc.
- The EQ-5D Index is based on questions about the overall health of the patient.
E.g. pain/discomfort, mobility, self-care, usual activities, anxiety/depression.

The EQ-5D Index concerns overall health, so the same questions are asked for both hip or knee surgery.

The Oxford Score health gain better estimates the impact of the treatment on the patient's joint.

The EQ-5D Index health gain better estimates the impact of the treatment on the patient's overall health.

The Oxford Scores for pre-op and post-op health range from 0 to 48 (with 48 as best).

The EQ-5D Scores for pre-op and post-op health range from -0.59 to 1 (with 1 as best).

Often EQ-5D Index health scores of 1 are referred to as “perfect health” and 0 as being ‘equivalent to death’.

Patients have characteristics (such as age, sex, co-morbidities) that are beyond the control of the providers but which affect the average health gain that patients receive.

Comparing average health gain scores between providers could be misleading as the case-mix of patients that one provider treats may be different to the case-mix of patients at another provider.

The average case-mix adjusted health gain takes these factors that are beyond the control of the providers into account so providers can be more fairly compared with each other.

The average Oxford Score case-mix adjusted health gain is the best measure for comparing the surgeries between two providers. Commissioners will be interested in these scores and comparisons. It can be useful to understand how different providers are performing and inform the commissioner about the case-mix of their patients.

However, the EQ-5D Index health gain (which has not been case-mix adjusted and is described on the previous page) will be of greater interest to commissioners because this is the actual health gain their patients receive and it considers the wider impact of the treatment on the patient's overall health. Commissioners will also want to compare themselves to others commissioners on this measure too.

The EQ-5D Index health gain is the actual health gain experienced by the patient and so this is the measure to use for value for money calculations. The EQ-5D Index health gain is used to determine the number of QALYs (Quality Adjusted Life Years) that patients receive from treatment and in cost per QALY calculations.

As the EQ-5D Index is a general measure of overall health, it can be used to compare the benefit and value for money of different procedures. The PROMs programme looks at hip and knee replacements, varicose veins and groin hernia procedures.

More information and data on PROMs is available from the website: <http://www.hscic.gov.uk/proms>

Annex D: Methodology

The potential opportunity highlights the scale of change that would be achieved if the CCG Value moved to the Benchmark Value of the average of the 'Best 5' or 'Lowest 5' CCGs in its group of similar 10 CCGs.

Generally, where a high CCG Value is considered 'worse' then it is calculated using the formula:

$$\text{Potential Opportunity} = (\text{CCG Value} - \text{Benchmark Value}) * \text{Denominator}$$

The denominator is the most suitable population data for that indicator eg CCG registered population, CCG weighted population, CCG patients on disease register etc. The denominator is also scaled to match the Value. So if the CCG Value and Benchmark Value are given in "per 1,000 population" then the denominator is expressed in thousands, ie 12,000 becomes 12.

For procedures, the potential opportunity can be expressed in pounds, or dividing this by the unit cost then it can be expressed in the equivalent number of procedures.