Public Health England

Protecting and improving the nation's health

CVD: Primary Care Intelligence Packs

NHS Bristol CCG

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Version 1

Contents

1. Introduction 3
2. CVD prevention
   - The narrative 11
   - The data 13
3. Hypertension
   - The narrative 16
   - The data 17
4. Stroke
   - The narrative 27
   - The data 28
5. Diabetes
   - The narrative 42
   - The data 43
6. Kidney
   - The narrative 53
   - The data 54
7. Heart
   - The narrative 65
   - The data 66
8. Outcomes 82
9. Appendix 88

Introduction

This intelligence pack has been compiled by GPs and nurses and pharmacists in the Primary Care CVD Leadership Forum in collaboration with the National Cardiovascular Intelligence Network

Matt Kearney
George Kassianos
Chris Harris
Ivan Benett
Mike Kirby
Helen Williams
Nigel Rowell
Sally Christie
Bruce Taylor
Richard Mendelsohn

Sarit Ghosh
Jo Whitmore
Jan Procter-King
Ruth Chambers
Peter Green
Quincy Chuhka
Ali Morgan
Clare Hawley
Mike Knapton
Chris Arden

Kathryn Griffith
Matthew Fay
Yassir Javaid
Ahmet Fuat
Kamlesh Khunti
Sheila McCorkindale
Stephen Kirk
Paul Wright
John Robson
David Fitzmaurice

Primary Care Leadership Forum CVD

Local intelligence as a tool for clinicians and commissioners to improve outcomes for our patients

Why should we use this CVD Intelligence Pack

The high risk conditions for cardiovascular disease (CVD) - such as hypertension, atrial fibrillation, high cholesterol, diabetes, non-diabetic hyperglycaemia and chronic kidney disease - are the low hanging fruit for prevention in the NHS because in each case late diagnosis and suboptimal treatment is common and there is substantial variation. High quality primary care is central to improving outcomes in CVD because primary care is where much prevention and most diagnosis and treatment is delivered.

This cardiovascular intelligence pack is a powerful resource for stimulating local conversations about quality improvement in primary care. Across a number of vascular conditions, looking at prevention, diagnosis, care and outcomes, the data allows comparison between clinical commissioning groups (CCGs) and between practices.

This is not about performance management because we know that variation can have more than one interpretation. But patients have a right to expect that we will ask challenging questions about how the best practices are achieving the best, what average or below average performers could do differently, and how they could be supported to perform as well as the best.

How to use the CVD intelligence pack

The intelligence pack has several sections – CVD prevention, hypertension, stroke and atrial fibrillation (AF), diabetes, kidney disease, heart disease and heart failure. Each section has one slide of narrative that makes the case and asks some questions. This is followed by data for a number of indicators, each with benchmarked comparison between CCGs and between practices.

Use the pack to identify where there is variation that needs exploring and to start asking challenging questions about where and how quality could be improved. We suggest you then develop a local action plan for quality improvement – this might include establishing communities of practice to build clinical leadership, systematic local audit to get a better understanding of the gaps in care and outcomes, and developing new models of care that mobilise the wider primary care team to reduce burden on general practice.

Data and methods

This slide pack compares the clinical commissioning group (CCG) with CCGs in its strategic transformation plan (STP) and England. Where a CCG is in more than one STP, it has been allocated to the STP with the greatest geographical or population coverage. The slide pack also compares the CCG to its 10 most similar CCGs in terms of demography, ethnicity and deprivation. For information on the methodology used to calculate the 10 most similar CCGs please go to: http://www.england.nhs.uk/resources/resources-for-ccgs/comm-for-value/

The 10 most similar CCGs to NHS Bristol CCG are:
NHS Coventry and Rugby CCG
NHS Southampton CCG
NHS Brighton and Hove CCG
NHS Portsmouth CCG
NHS Sheffield CCG
NHS Hull CCG
NHS Liverpool CCG
NHS Norwich CCG
NHS Sunderland CCG
NHS Salford CCG

The majority of data used in the packs is taken from the 2015/16 Quality and Outcomes Framework (QOF). Where this is not the case, this is indicated in the slide. All GP practices that were included in the 2015/16 QOF are included. Full source data are shown in the appendix.

For the majority of indicators, the additional number of people that would be treated if all practices were to achieve as well as the average of the top achieving practices is calculated. This is calculated by taking an average of the intervention rates (ie the denominator includes exceptions) for the best 50% of practices in the CCG and applying this rate to all practices in the CCG. Note, this number is not intended to be proof of a realisable improvement; rather it gives an indication of the magnitude of available opportunity.

Why does variation matter?

The variation that exists between demographically similar CCGs and between practices illustrates the local potential to improve care and outcomes for our patients

A key observation about benchmarking data is that it does not tell us why there is variation. Some of the variation may be explained by population or case mix and some may be unwarranted. We will not know unless we investigate.

Benchmarking is helpful because it highlights variation.

Of course it has long been acknowledged that some variation is inevitable in the healthcare and outcomes experienced by patients.

But John Wennberg, who has championed research into clinical variation over four decades and who founded the pioneering Dartmouth Atlas of Health Care, concluded that much variation is unwarranted – ie it cannot be explained on the basis of illness, medical evidence, or patient preference, but is accounted for by the willingness and ability of doctors to offer treatment.

Benchmarking may not be conclusive. Its strength lies not in the answers it provides but in the questions it generates for CCGs and practices**.**

For example:

1. How much variation is there in detection, management, exception reporting and outcomes?
2. How many people would benefit if average performers improved to the level of the best performers?
3. How many people would benefit if the lowest performers matched the achievement of the average?
4. What are better performers doing differently in the way they provide services in order to achieve better outcomes?
5. How can the CCG support low and average performers to help them match the achievement of the best?
6. How can we build clinical leadership to drive quality improvement?

There are legitimate reasons for exception reporting. But …….

Excepting patients from indicators puts them at risk of not receiving optimal care and of having worse outcomes. It is also likely to increase health inequalities. The substantial variation seen in exception reporting for some indicators suggests that some practices are more effective than others at reaching their whole population. Benchmarking exception reporting allows us to identify the practices that need support to implement the strategies adopted by low excepting practices.

Cluster methodology: your most similar practices

Each practice has been grouped on the basis of demographic data into 15 national clusters. These demographic factors cover:

- deprivation (practice level)
- age profile (% < 5, % < 18, % 15-24, % 65+, % 75+, % 85+)
- ethnicity (% population of white ethnicity)
- practice population side

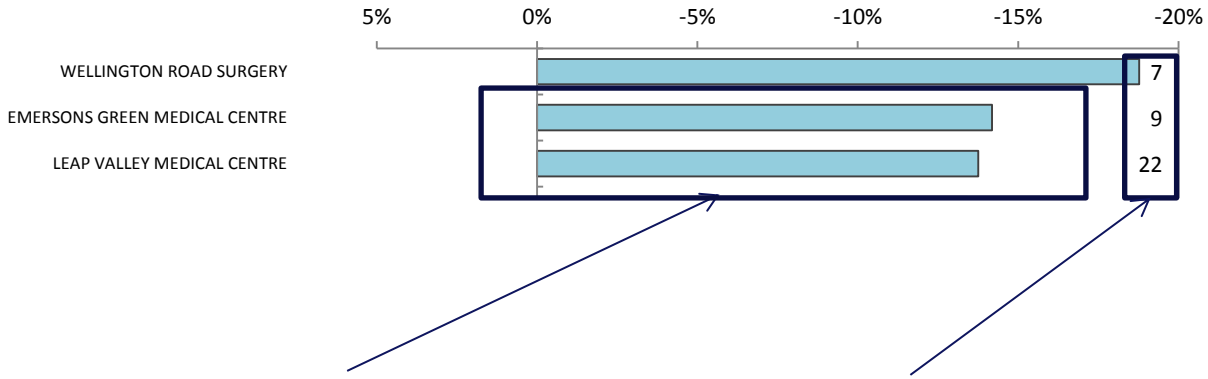
These demographic factors closely align with those used to calculate the “Similar 10 CCGs”.

These demographic factors have been used to compare practices with similar populations to account for potential factors which may drive variation. Some local interpretation will need to be applied to the data contained within the packs as practices with significant outlying population characteristics e.g. university populations or care home practices will need further contextualisation.

Further detailed information including full technical methodology and a full PDF report on each of the 15 practice clusters is available here: https://github.com/julianflowers/geopractice.

Cluster methodology: calculating potential gains

The performance of every practice in the GP cluster contributes to the average of the top performing 50% of practices to form a benchmark.



- Using the GP cluster method of calculating potential gains, if all practices were to achieve as well as the average of the best achieving practices, then an additional 15 people would be treated.

Raw difference between the practice value and the average of the highest or lowest 50% of similar cluster practices

Potential opportunity if the practice value was to move to the average of the highest 50% of similar cluster practices

Potential opportunity if the CCG value were to move to the average of the top 5 performing closest CCGs

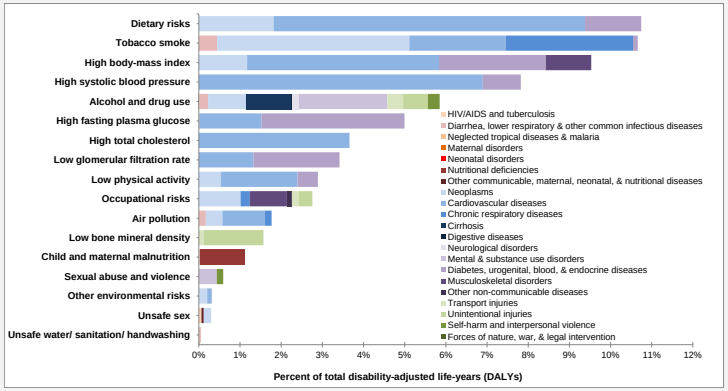
The difference between the benchmark and the selected practices is displayed on this chart. The benchmark will most likely be different for different practices as they are in different clusters, so the difference is the key measure here. If the practice performance is below the benchmark, the difference is applied to the denominator plus exceptions to demonstrate potential gains on a practice basis. The potential gains on a CCG basis are calculated based on the difference between the top 5 performing closest CCGs and the selected CCG, applied to the denominator plus exceptions.

CVD prevention

CVD prevention

"The NHS needs a radical upgrade in prevention if it is to be sustainable"
5 year Forward View 2014

This is because England faces an epidemic of largely preventable non-communicable diseases, such as heart disease and stroke, cancer, Type 2 diabetes and liver disease.



The Global Burden of Disease Study (next slide) shows us that the leading causes of premature mortality include diet, tobacco, obesity, raised blood pressure, physical inactivity and raised cholesterol. The radical upgrade in prevention needs population-level approaches. But it also needs interventions in primary care for individuals with behavioural and clinical risk factors.

The size of the prevention problem

- 2/3 of adults are obese or overweight
- 1/3 of adults are physically inactive
- average smoking prevalence is 17% but is much higher in some communities
- in high risk conditions like atrial fibrillation, high blood pressure, diabetes and high ten year CVD risk score, up to half of all people do not receive preventive treatments that are known to be highly effective at preventing heart attacks and strokes
- around 90% of people with familial hypercholestero-laemia are undiagnosed and untreated despite their average 10 year reduction in life expectancy

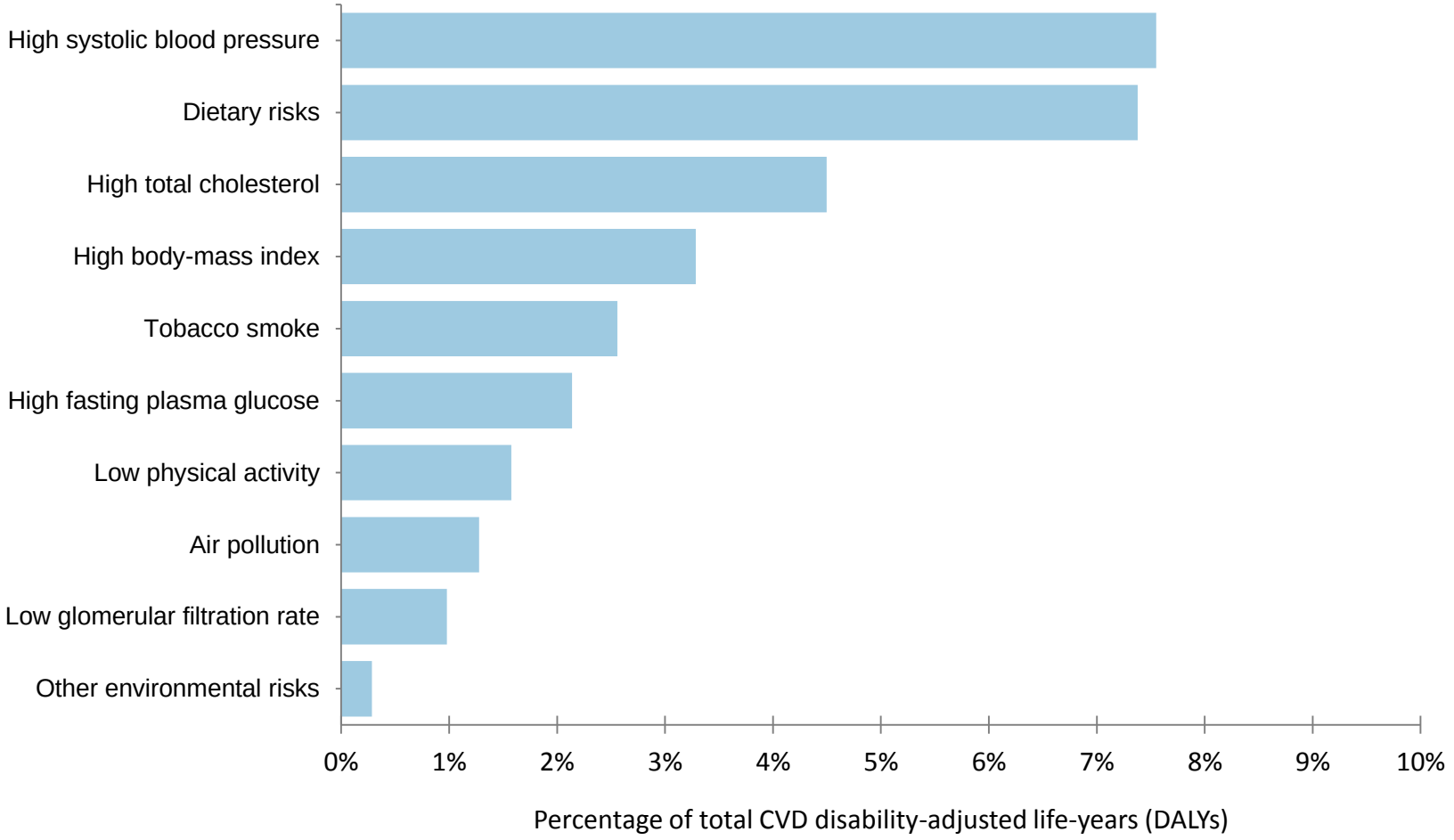
Social prescribing and wellbeing hubs offer new models for supporting behaviour change while reducing burden on general practice.

The NHS Health Check is a systematic approach to identifying local people at high risk of CVD, offering behaviour change support and early detection of the high risk but often undiagnosed conditions such as hypertension, atrial fibrillation, CKD, diabetes and pre-diabetes.

Question: What proportion of our local eligible population is receiving the NHS Health Check and how effective is the follow-up management of their clinical risk factors in primary care?

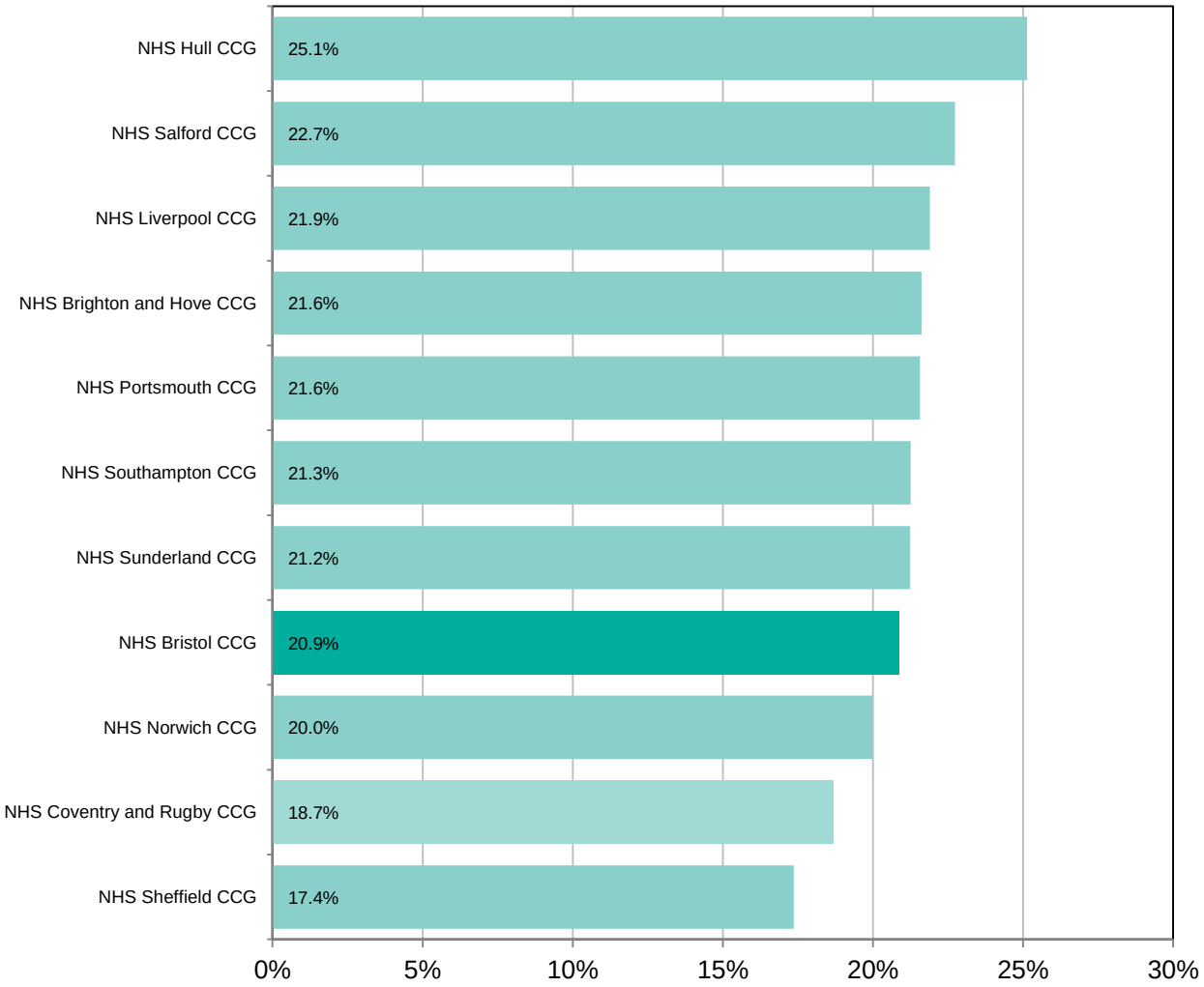
Global Burden of Disease Study 2015

Risk Factors for premature death and disability caused by CVD in England, expressed as a percentage of total disability-adjusted life-years



Estimated smoking prevalence (QOF) by CCG

Comparison with demographically similar CCGs

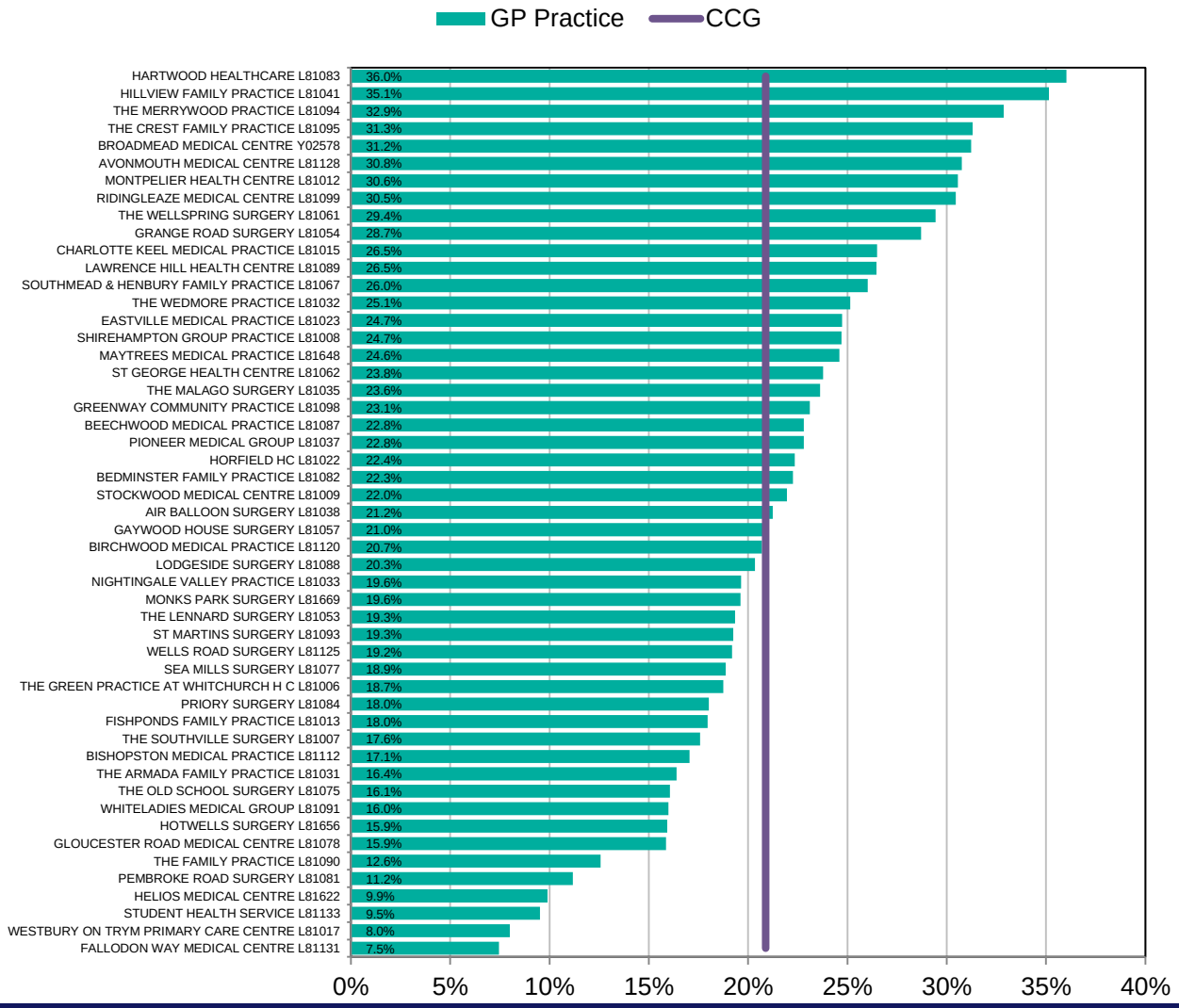


- prevalence of 20.9% in NHS Bristol CCG

Note: It has been found that the proportion of patients recorded as smokers correlates well with IHS smoking prevalence and is a good estimate of the actual smoking prevalence in local areas, http://bmjopen.bmj.com/content/4/7/e005217.abstract

Definition: denominator of QOF clinical indicator SMOKE004 (number of patients 15+ who are recorded as current smokers) divided by GP practice's estimated number of patients 15+

Estimated smoking prevalence (QOF) by GP practice



- 86,306 people who are recorded as smokers in NHS Bristol CCG
- GP practice range: 7.5% to 36.0%

Note: This method is thought to be a reasonably robust method in estimating smoking prevalence for the majority of GP practices. However, caution is advised for extreme estimates of smoking prevalence and those with high numbers of smoking status not recorded and exceptions.

Hypertension

Hypertension

The Global Burden of Disease Study confirmed high blood pressure as a leading cause of premature death and disability

High blood pressure is common and costly

- it affects around a quarter of all adults
- the NHS costs of hypertension are around £2bn
- social costs are probably considerably higher

What do we know?

- at least half of all heart attacks and strokes are caused by high blood pressure and it is a major risk factor for chronic kidney disease and cognitive decline
- treatment is very effective – every 10mmHg reduction in systolic blood pressure lowers risk of heart attack and stroke by 20%
- despite this 4 out of 10 adults with hypertension, over 5 and a half million people in England, remain undiagnosed
- and even when the condition is identified, treatment is often suboptimal, with blood pressure poorly controlled in about 1 out of 3 individuals

The Missing Millions

On average, each CCG in England has 26,000 residents with undiagnosed hypertension – these individuals are unaware of their increased cardiovascular risk and are untreated.

What questions should we ask in our CCG?

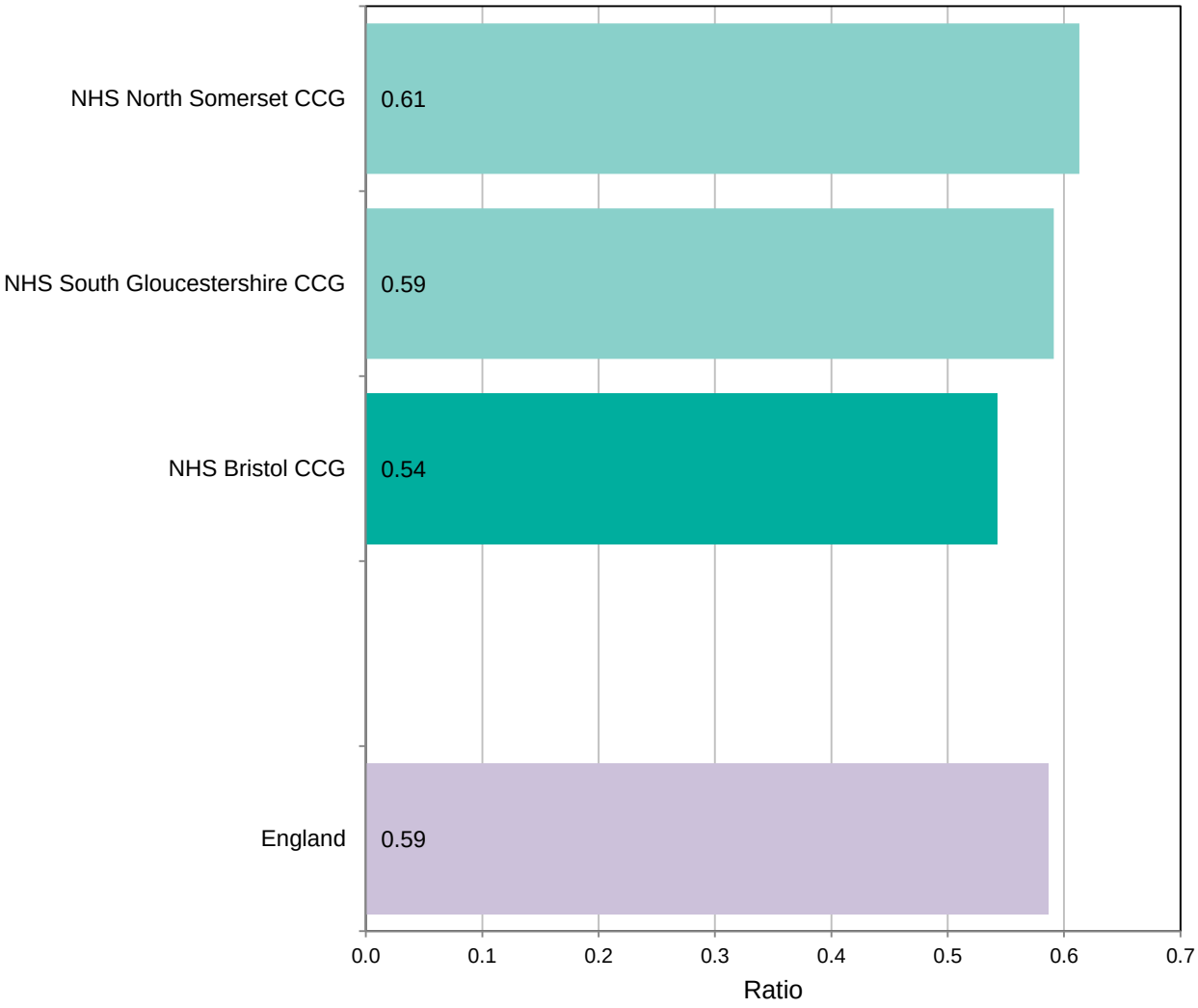
1. for each indicator how wide is the variation in achievement and exception reporting?
2. how many people would benefit if all practices performed as well as the best?
3. how can we support practices who are average or below average to perform as well as the best in:
    - detection of hypertension
    - management of hypertension

What might help?

- support practices to share audit data and systematically identify gaps and opportunities for improved detection and management of hypertension
- work with practices and local authorities to maximise uptake and follow up in the NHS Health Check
- support access to self-test BP stations in waiting rooms and to ambulatory blood pressure monitoring.
- commission community pharmacists to offer blood pressure measurement, diagnosis and management support, including support for adherence to medication

Hypertension observed prevalence compared with expected prevalence by CCG

Comparison with CCGs in the STP

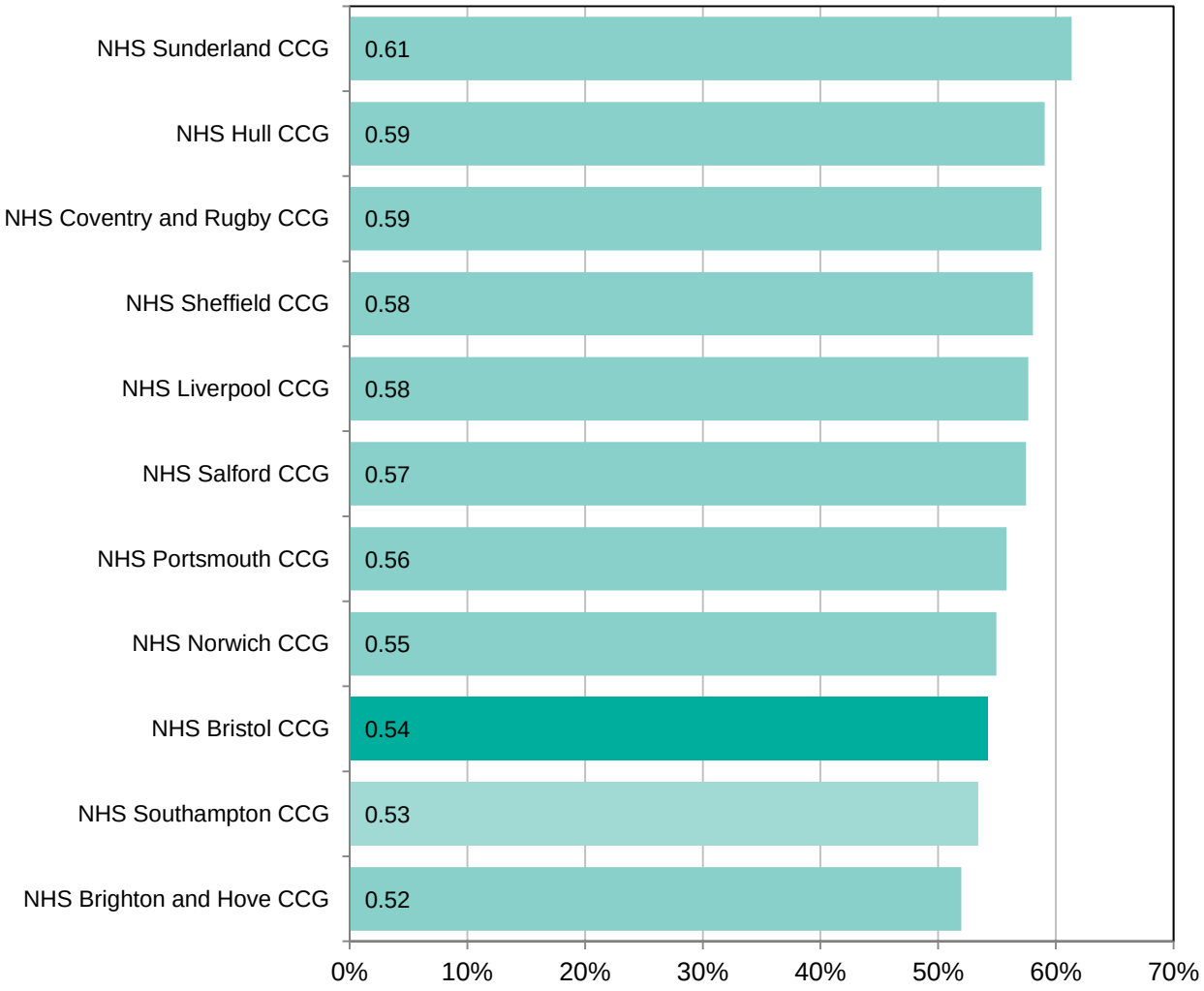


- the ratio of those diagnosed with hypertension versus those expected to have hypertension is 0.54. This compares to 0.59 for England
- this suggests that 54% of people with hypertension have been diagnosed

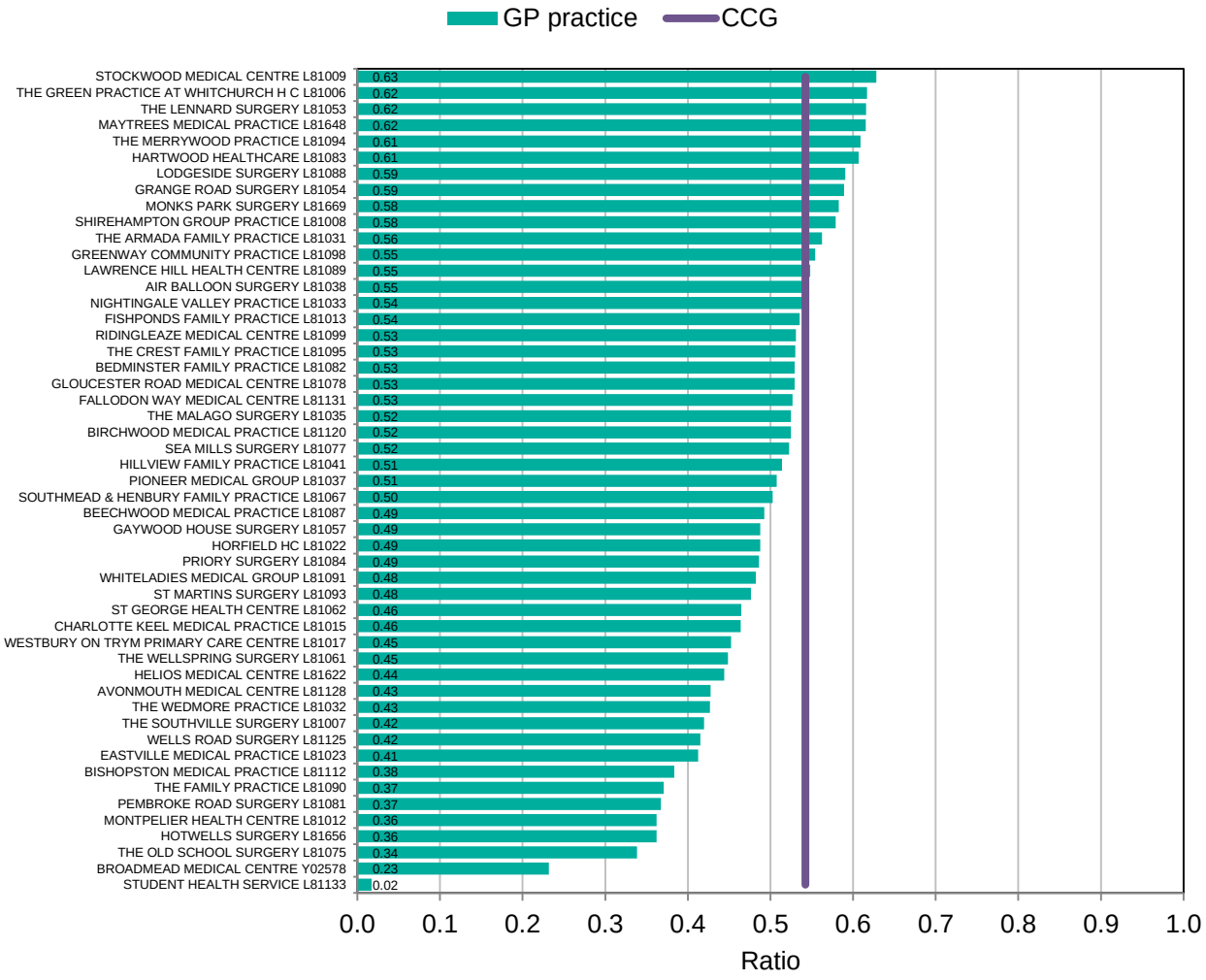
Note: this slide shows Hypertension prevalence estimates created using data from QOF hypertension registers 2014/15 and Undiagnosed hypertension estimates for adults 16 years and older. 2014. Department of Primary Care & Public Health, Imperial College London

Hypertension observed prevalence compared with expected prevalence by CCG

Comparison with demographically similar CCGs



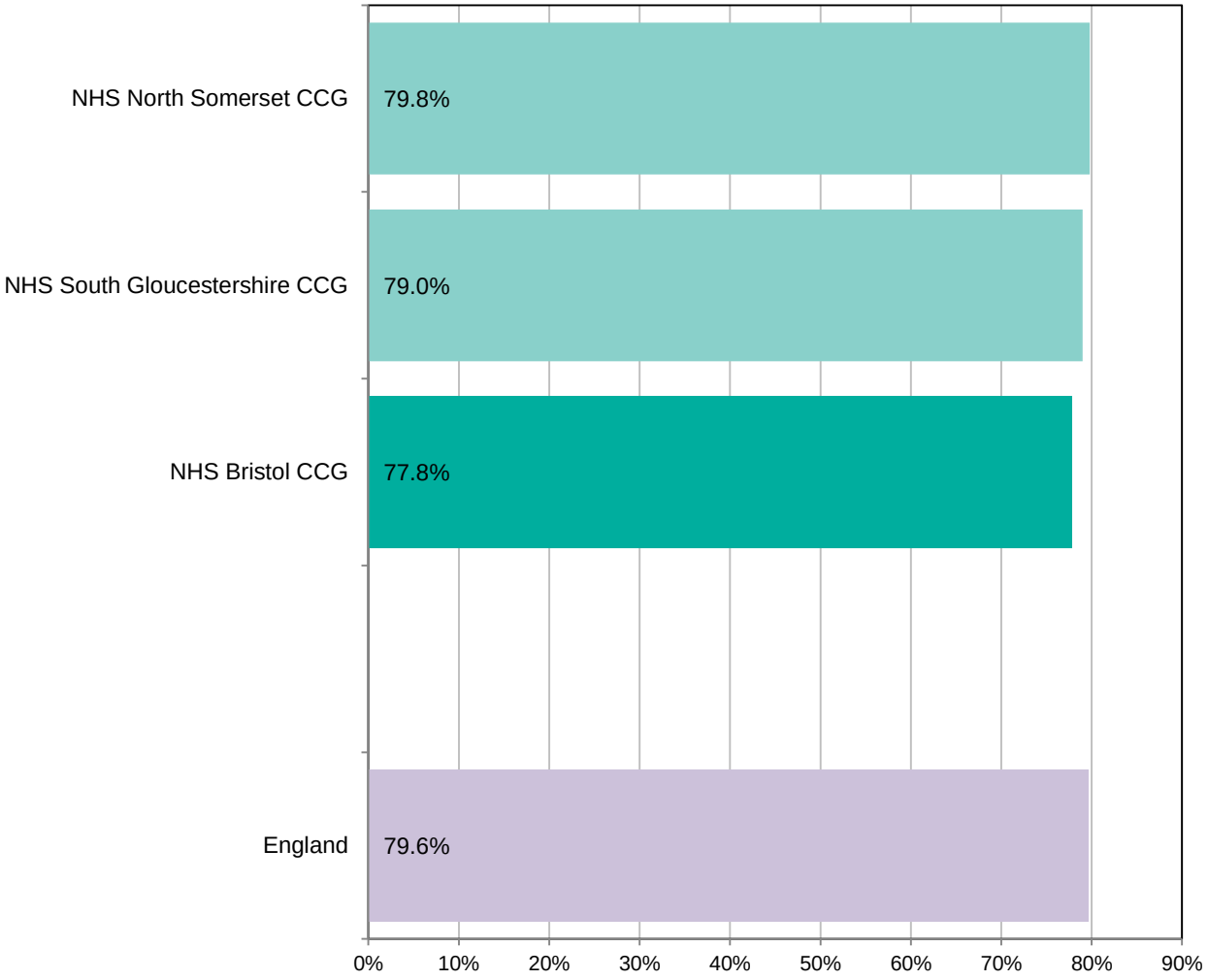
Hypertension observed prevalence compared with expected prevalence by GP practice



- it is estimated that there are 44,550 people with undiagnosed hypertension in NHS Bristol CCG
- GP practice range of observed to expected hypertension prevalence 0.02 to 0.63

Percentage of patients with hypertension whose last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less by CCG

Comparison with CCGs in the STP

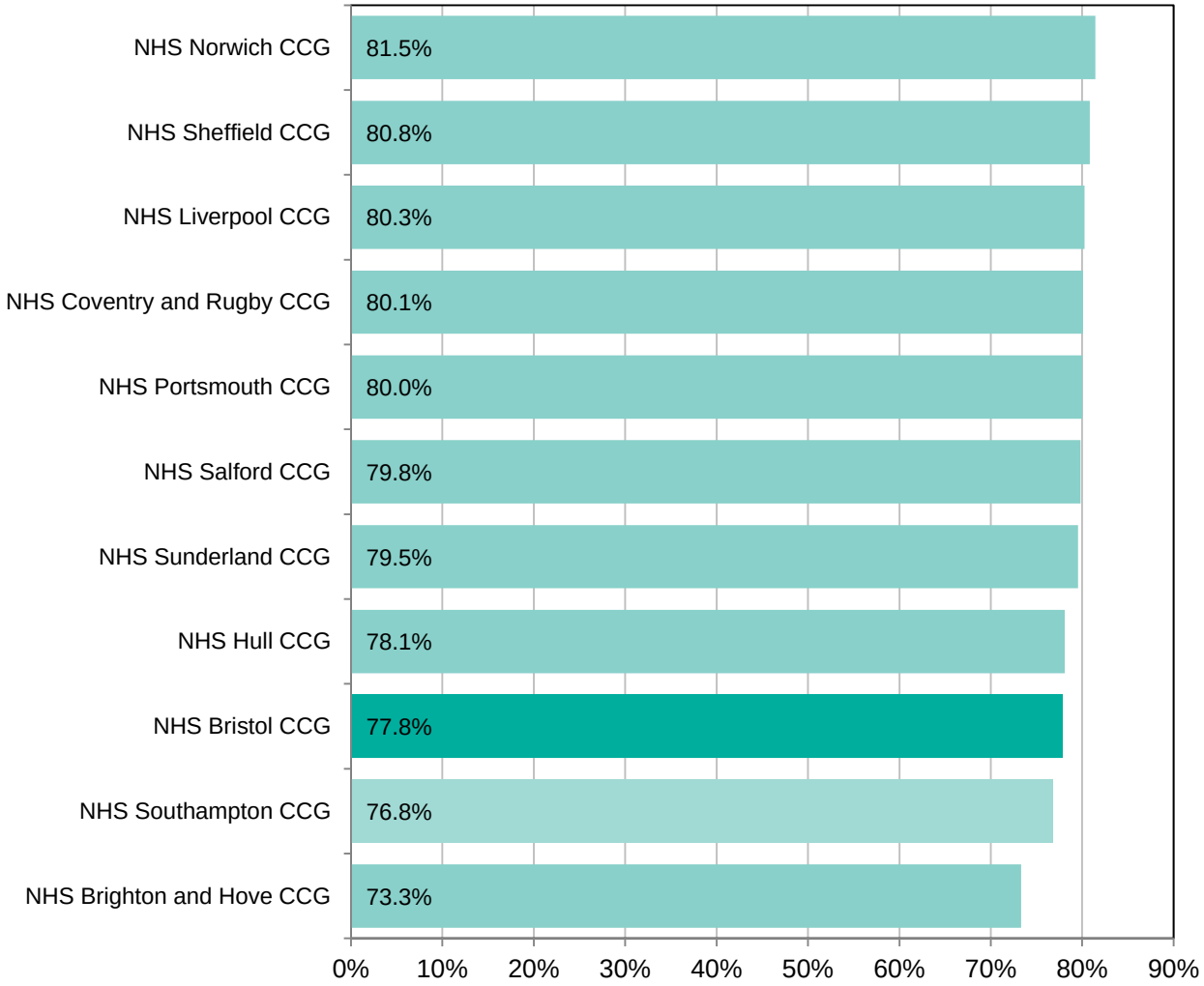


- 53,662 people with hypertension (diagnosed)* in NHS Bristol CCG
- 41,772 (77.8%) people whose blood pressure is <= 150/90
- 3,364 (6.3%) people who are excepted from optimal control
- 8,526 (15.9%) additional people whose blood pressure is not <= 150/90

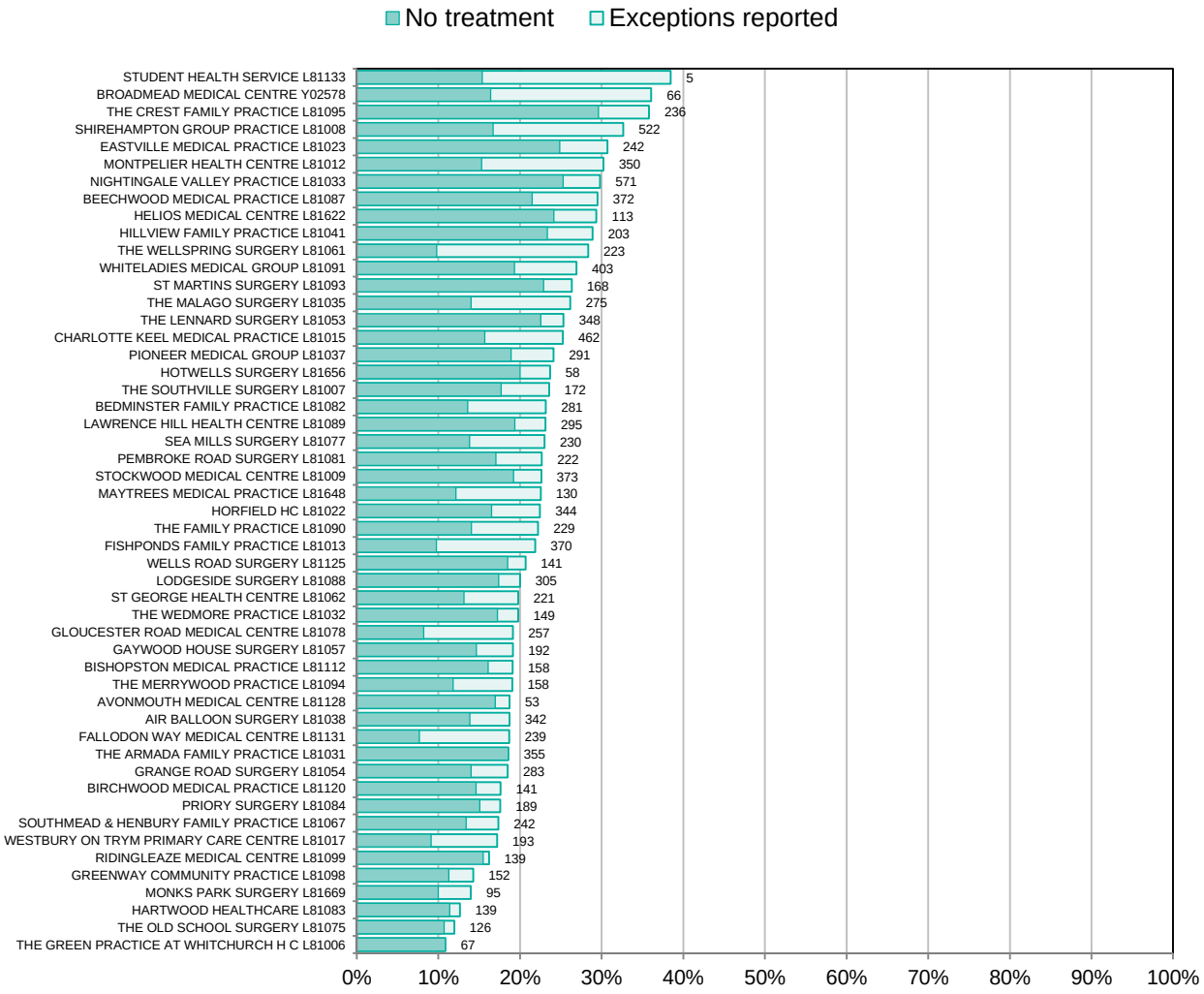
*Using QOF clinical indicator HYP006 denominator plus exceptions

Percentage of patients with hypertension whose last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less by CCG

Comparison with demographically similar CCGs



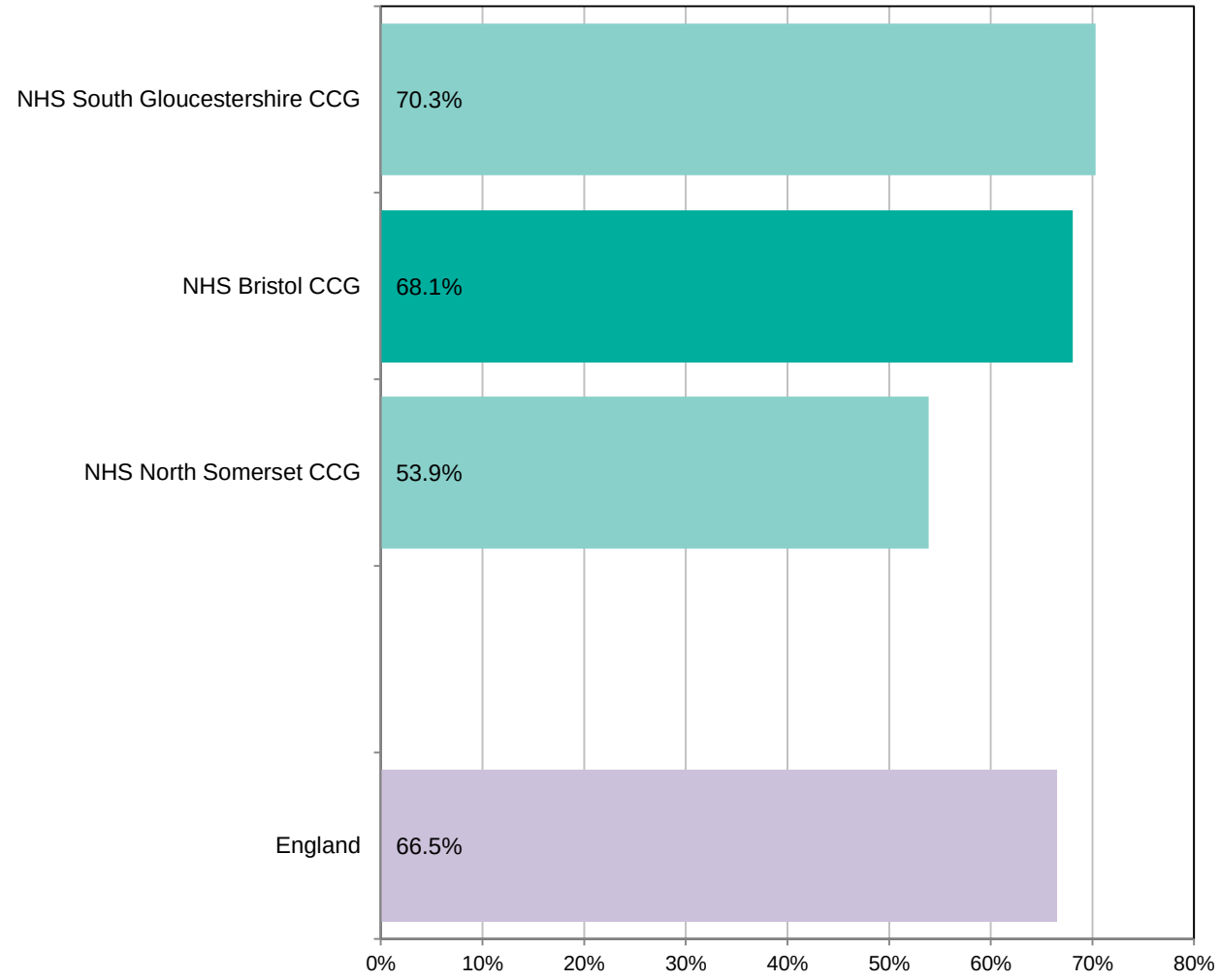
Percentage of patients with hypertension whose last blood pressure reading (measured in the preceding 12 months) is not 150/90 mmHg or less by GP practice



- in total, including exceptions, there are 11,890 people whose blood pressure is not <= 150/90
- GP practice range: 10.8% to 38.5%

New diagnosis of hypertension who have been given a CVD risk assessment whose CVD risk exceeds 20% and treated with statins by CCG

Comparison with CCGs in the STP

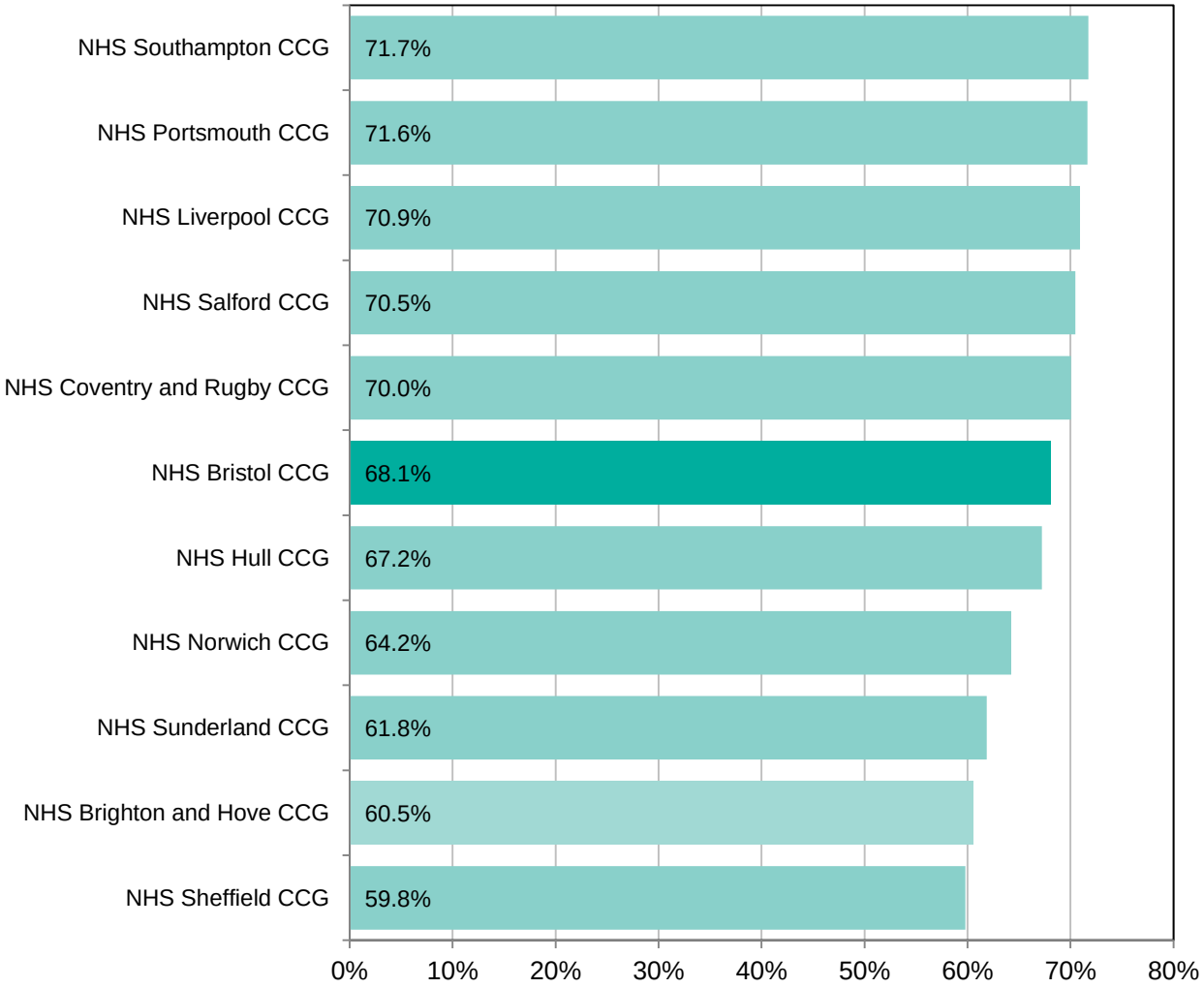


- 260 people with a new diagnosis* of hypertension with a CVD risk of 20% or higher in NHS Bristol CCG
- 177 (68.1%) people who are currently treated with statins
- 83 (31.9%) people who are exempted from treatment with statins
- 0 (0%) additional people who are not currently treated with statins

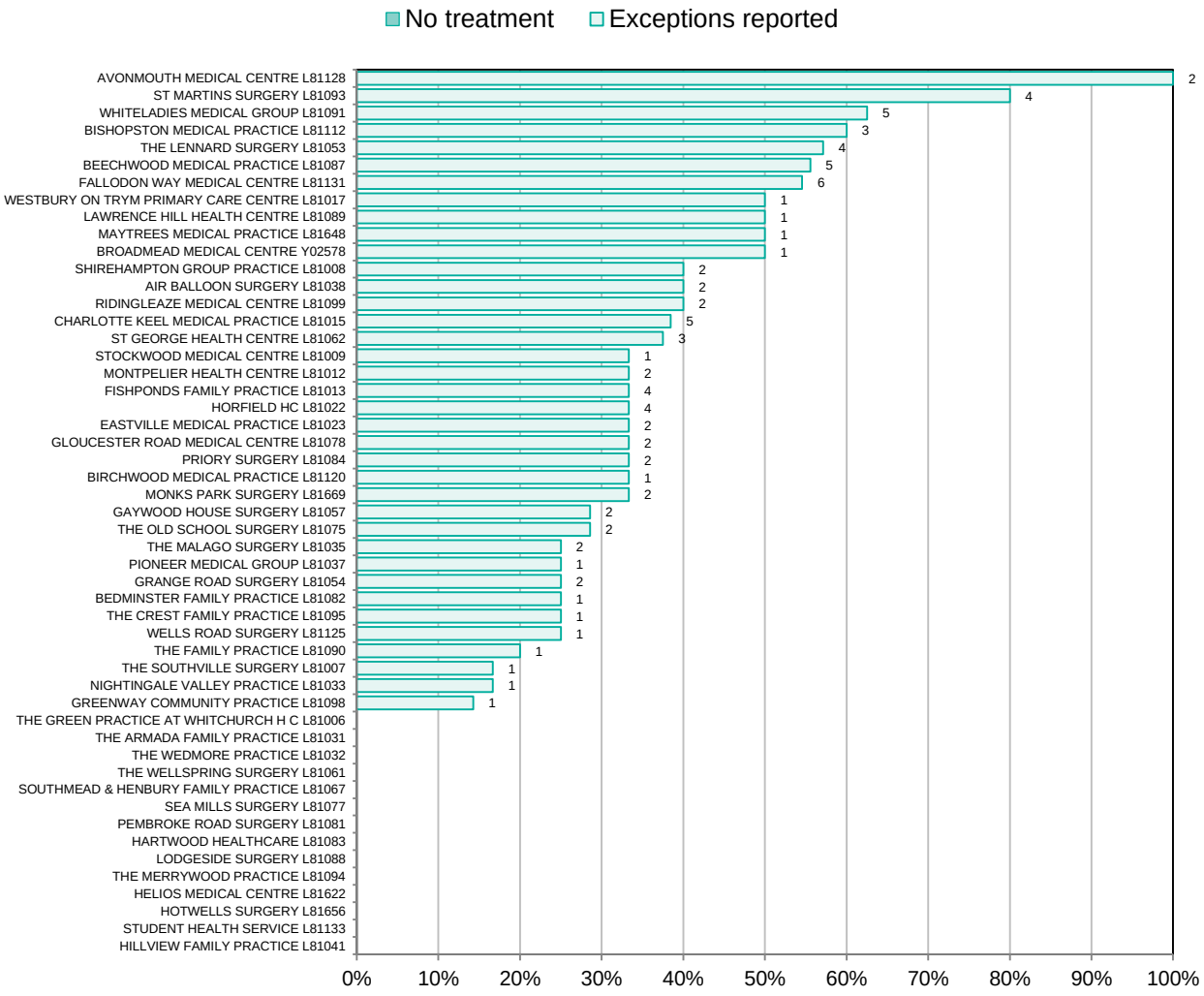
*Using the QOF clinical indicator CVD-PP001 denominator plus exceptions

New diagnosis of hypertension who have been given a CVD risk assessment whose CVD risk exceeds 20% and treated with statins by CCG

Comparison with demographically similar CCGs



New diagnosis of hypertension who have been given a CVD risk assessment whose CVD risk exceeds 20% and not treated with statins by GP practice



- in total, including exceptions, there are 83 people who are not treated with statins
- GP practice range: 0.0% to 100.0%

Stroke

Stroke prevention

Only a half of people with known AF who then suffer a stroke have been anticoagulated before their stroke.

What questions should we ask in our CCG?

1. for each indicator how wide is the variation in detection, treatment and exception reporting?
2. how many people would benefit if all practices performed as well as the best?
3. how can we support practices who are average and below average to perform as well as the best in detection of atrial fibrillation and stroke prevention with anticoagulation.

Stroke is one of the leading causes of premature death and disability. Stroke is devastating for individuals and families, and accounts for a substantial proportion of health and social care expenditure.

Atrial fibrillation increases the risk of stroke by a factor of 5, and strokes caused by AF are often more severe, with higher mortality and greater disability.

Anticoagulation reduces the risk of stroke in people with AF by two thirds.

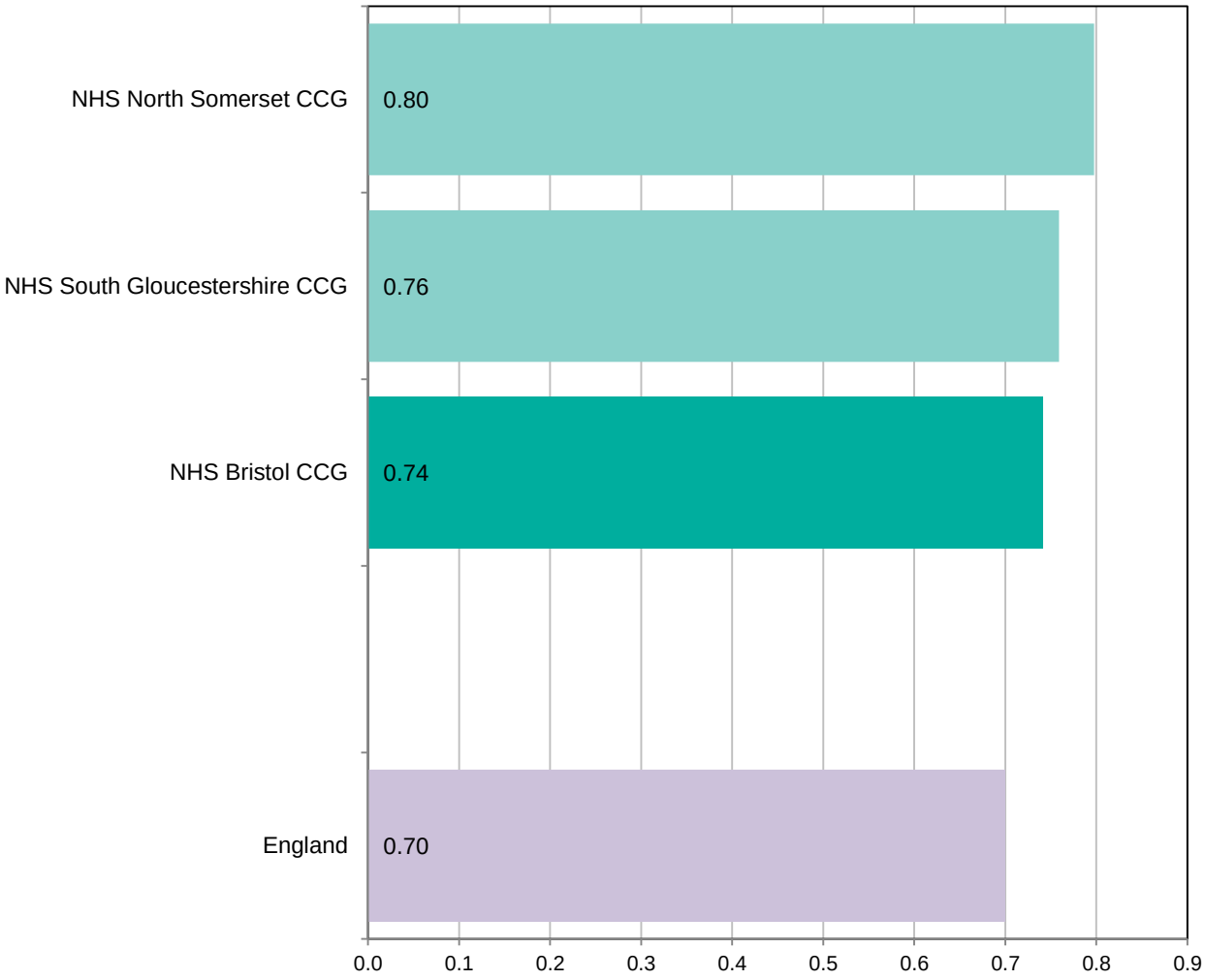
Despite this, AF is underdiagnosed and under treated: up to a third of people with AF are unaware they have the condition and even when diagnosed inadequate treatment is common – large numbers do not receive anticoagulants or have poor anticoagulant control.

What might help?

- increase opportunistic pulse checking especially in over 65s
- support practices to share audit data and systematically identify gaps and opportunities for improved detection and management of AF - eg GRASP-AF
- promote systematic use of CHADS-VASC and HASBLED to ensure those at high risk are offered stroke prevention
- promote systematic use of Warfarin Patient Safety Audit Tool to ensure optimal time in therapeutic range for people on warfarin
- develop local consensus statement on risk-benefit balance for anticoagulants, including the newer treatments (NOACs)
- work with practices and local authorities to maximise uptake and clinical follow up in the NHS Health Check
- commission community pharmacists to offer pulse checks, anticoagulant monitoring, and support for adherence to medication

Atrial fibrillation observed prevalence compared to expected prevalence by CCG

Comparison with CCGs in the STP

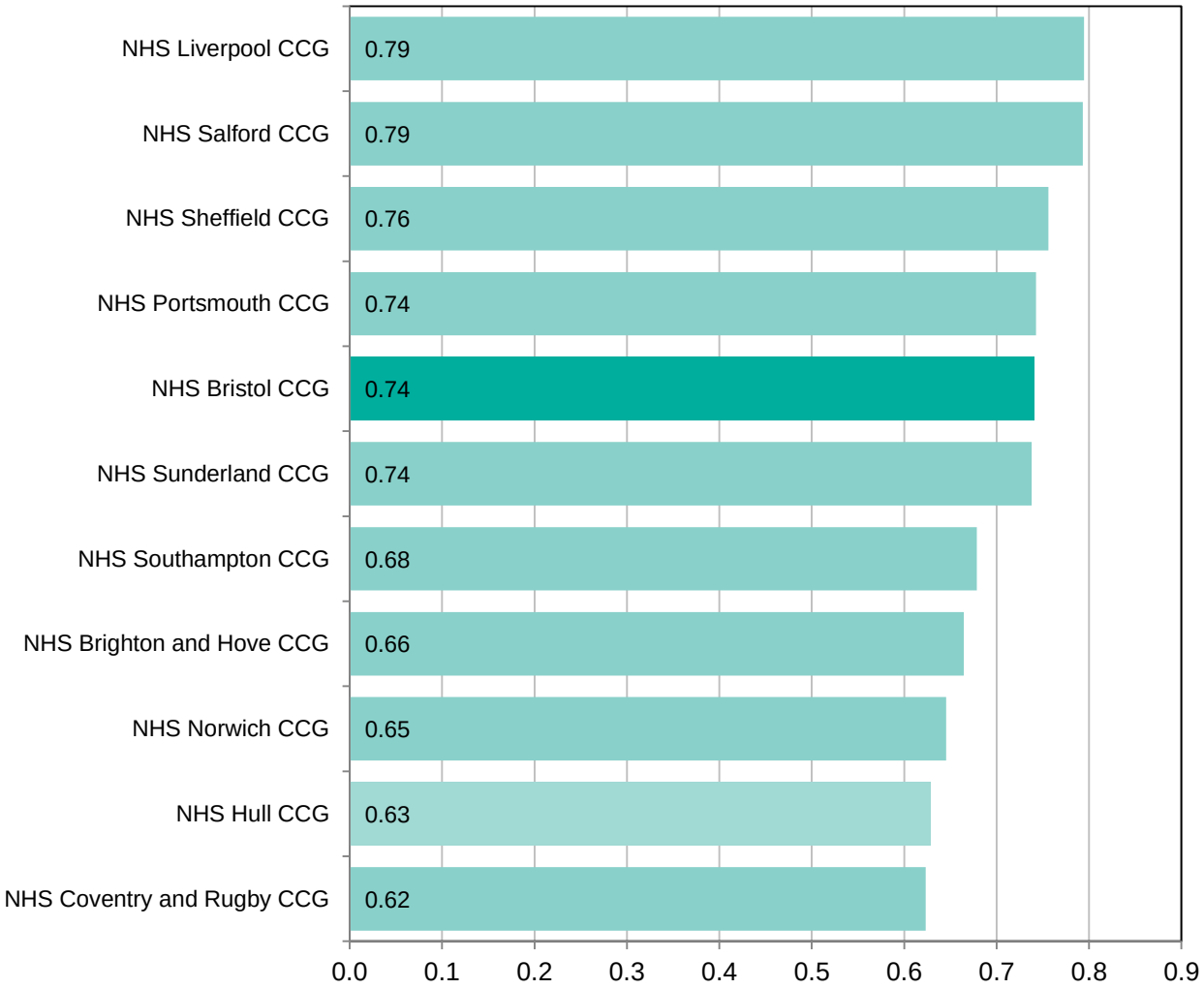


- the ratio of those diagnosed with atrial fibrillation versus those expected to have atrial fibrillation is 0.74. This compares to 0.7 for England
- this suggests that 74% of people with atrial fibrillation have been diagnosed.

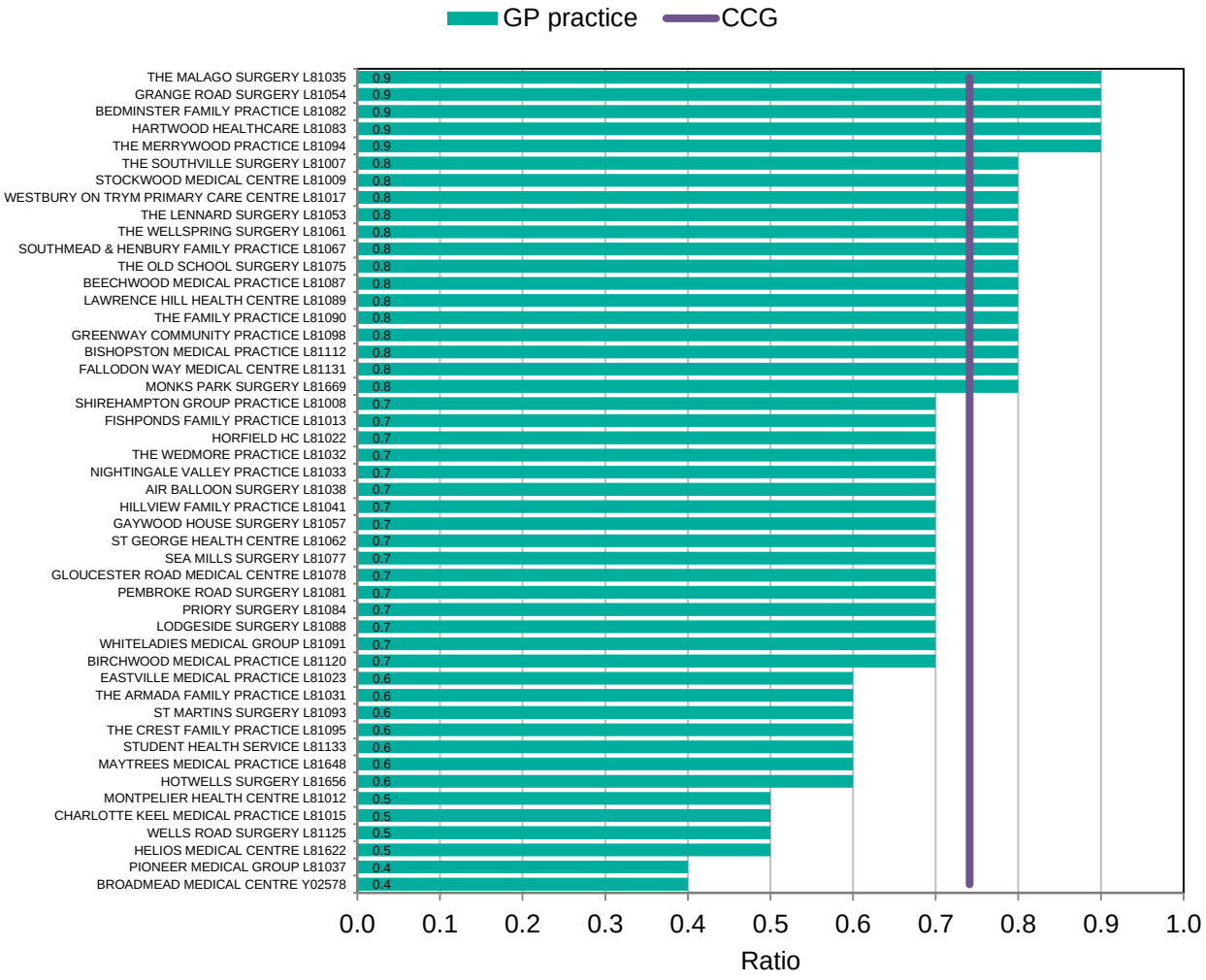
Note: This slide compares the prevalence of atrial fibrillation recorded in QOF in 2015/16 to the estimated prevalence of atrial fibrillation, taken from National Cardiovascular Intelligence Network estimates produced in 2017. The estimates were developed by applying age-sex specific prevalence rates as reported by Norberg et al (2013) to GP population estimates from NHS Digital. Estimates reported are adjusted for age and sex of the local population.

Atrial fibrillation observed prevalence compared to expected prevalence by CCG

Comparison with demographically similar CCGs



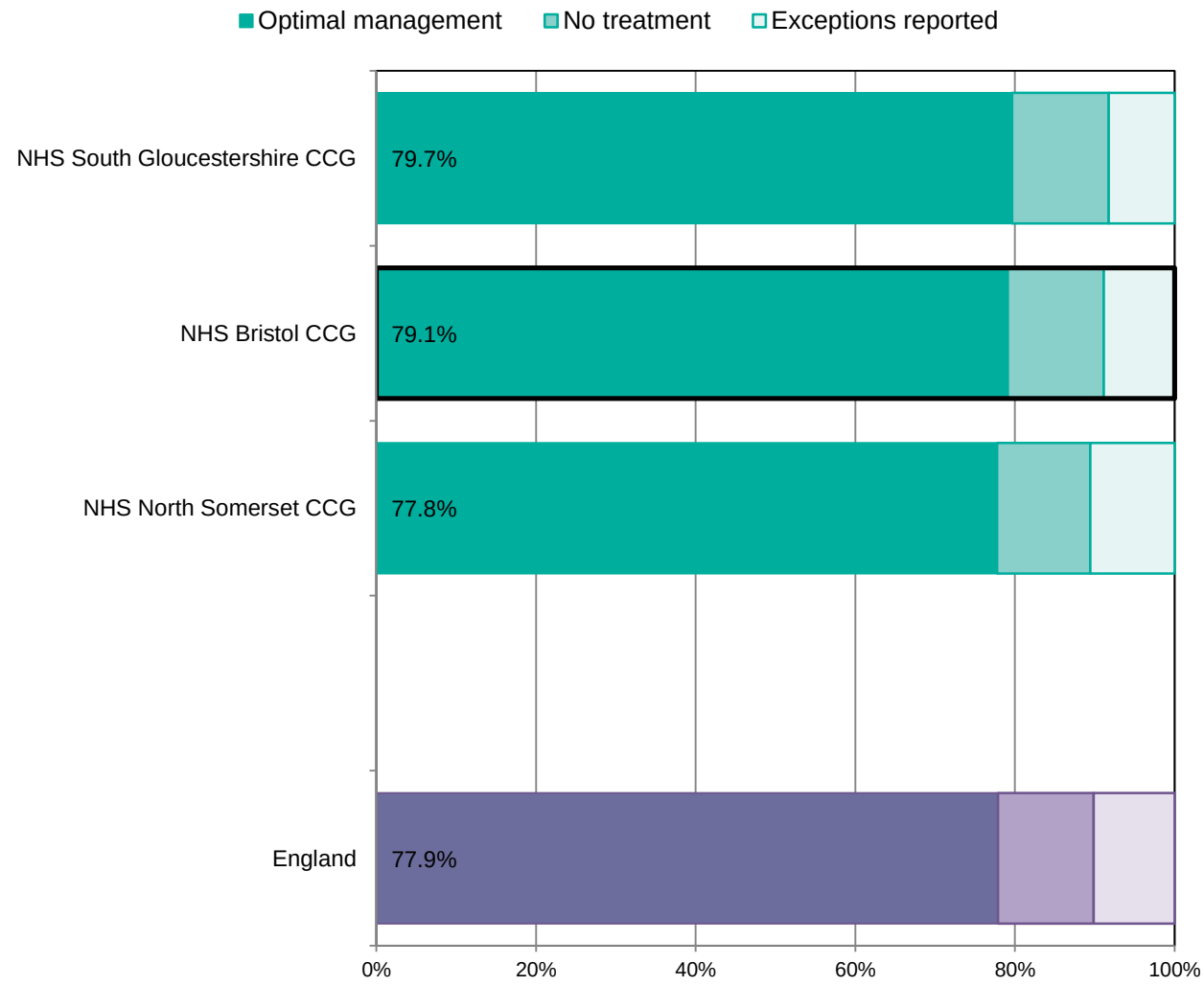
Atrial fibrillation observed prevalence compared with expected prevalence by GP practice



- it is estimated that there are 9,432 people with undiagnosed atrial fibrillation in NHS Bristol CCG
- GP practice range of observed to expected atrial fibrillation prevalence 0.4 to 0.9

In patients with AF with a CHA2DS2-VASc score of 2 or more, the percentage treated with anti-coagulation therapy by CCG

Comparison with CCGs in the STP

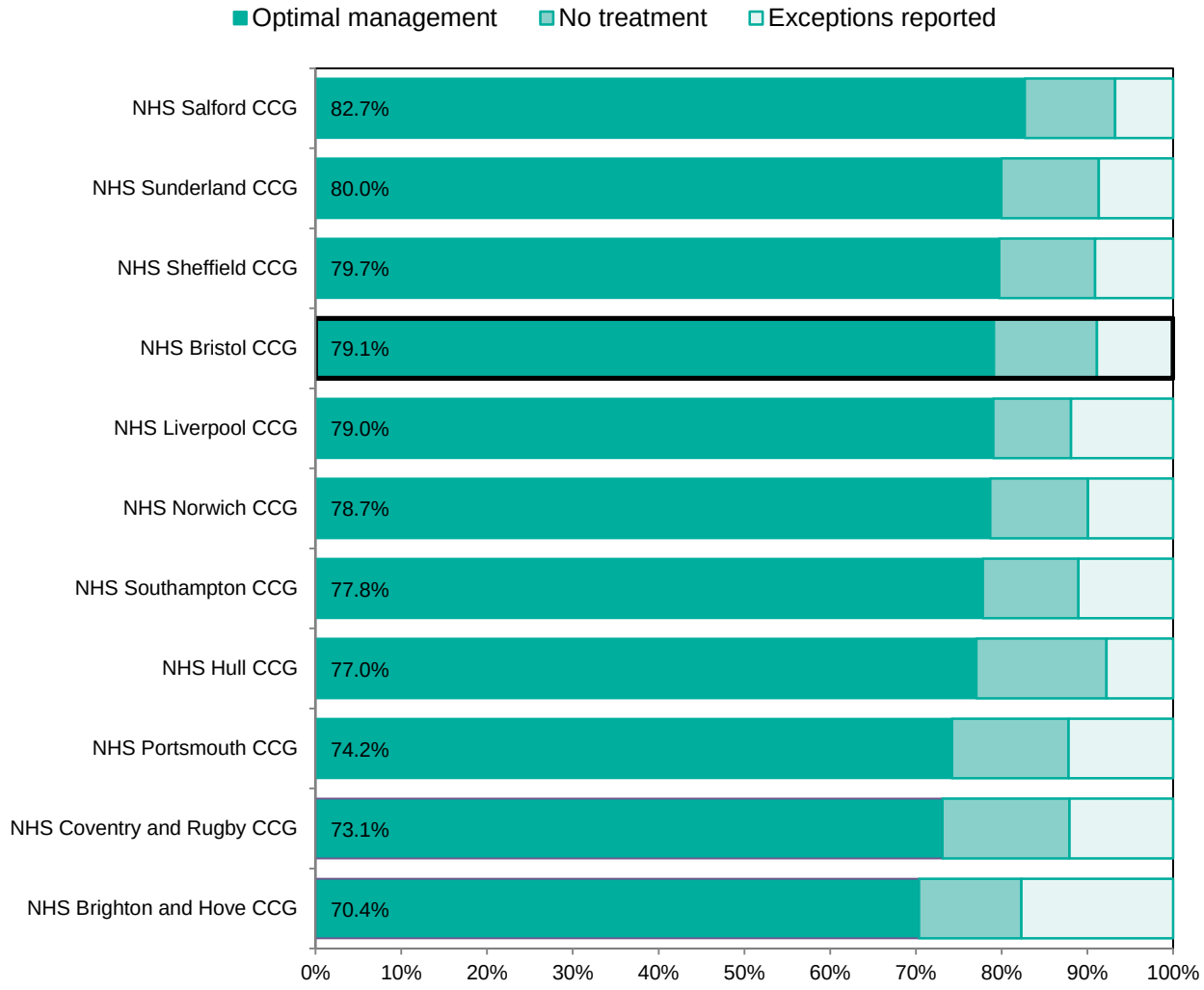


- 5,599 people with atrial fibrillation* with a CHA2DS2-VASc score >= 2 in NHS Bristol CCG
- 4,429 (79.1%) people treated with anti-coagulation therapy
- 497 (8.9%) people who are exceptions
- 673 (12%) additional people with a recorded CHA2DS2-VASc score >= 2 who are not treated

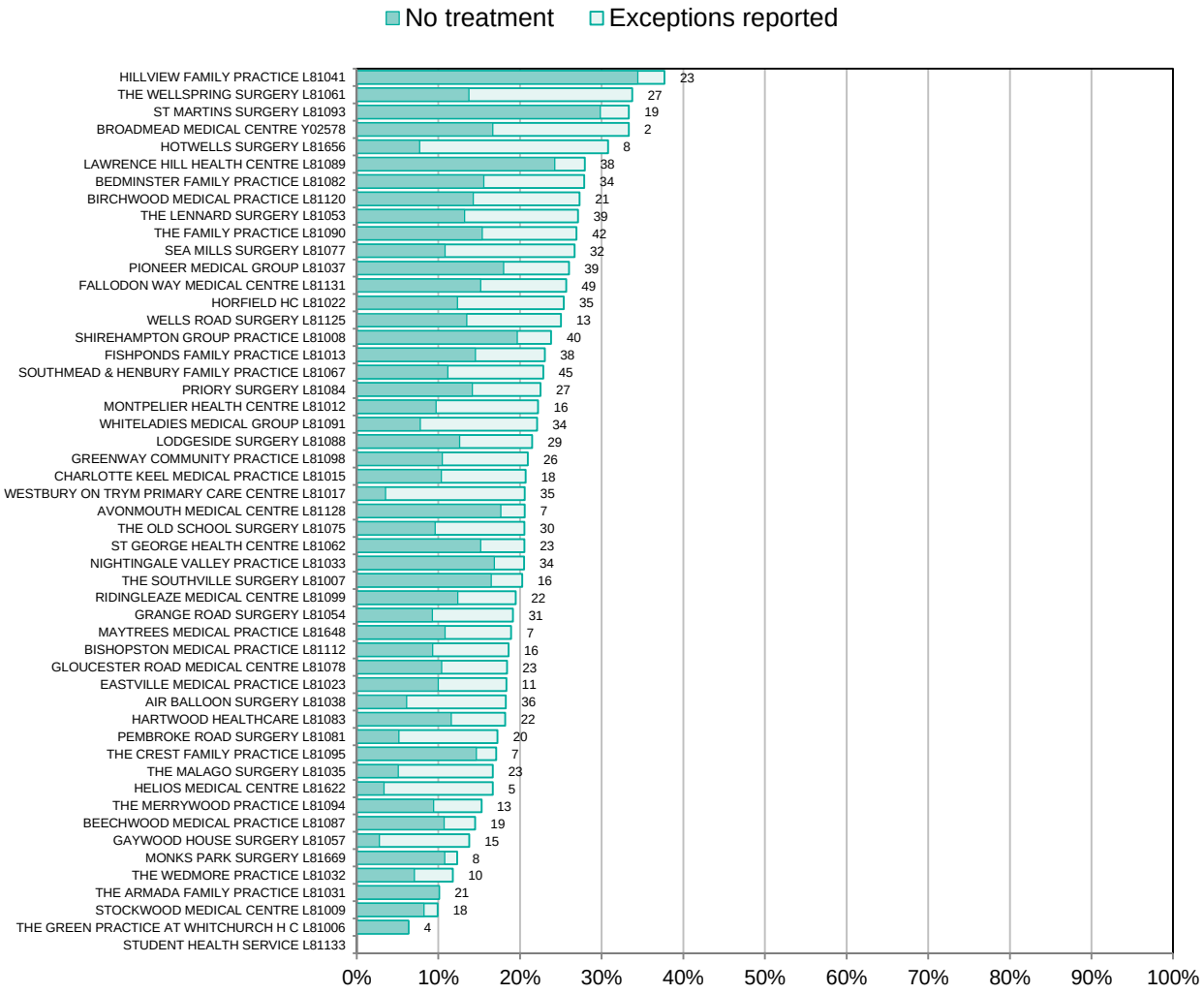
*Using the QOF clinical indicator AF007 denominator plus exceptions

In patients with AF with a CHA2DS2-VASc score of 2 or more, the percentage treated with anti-coagulation therapy by CCG

Comparison with demographically similar CCGs

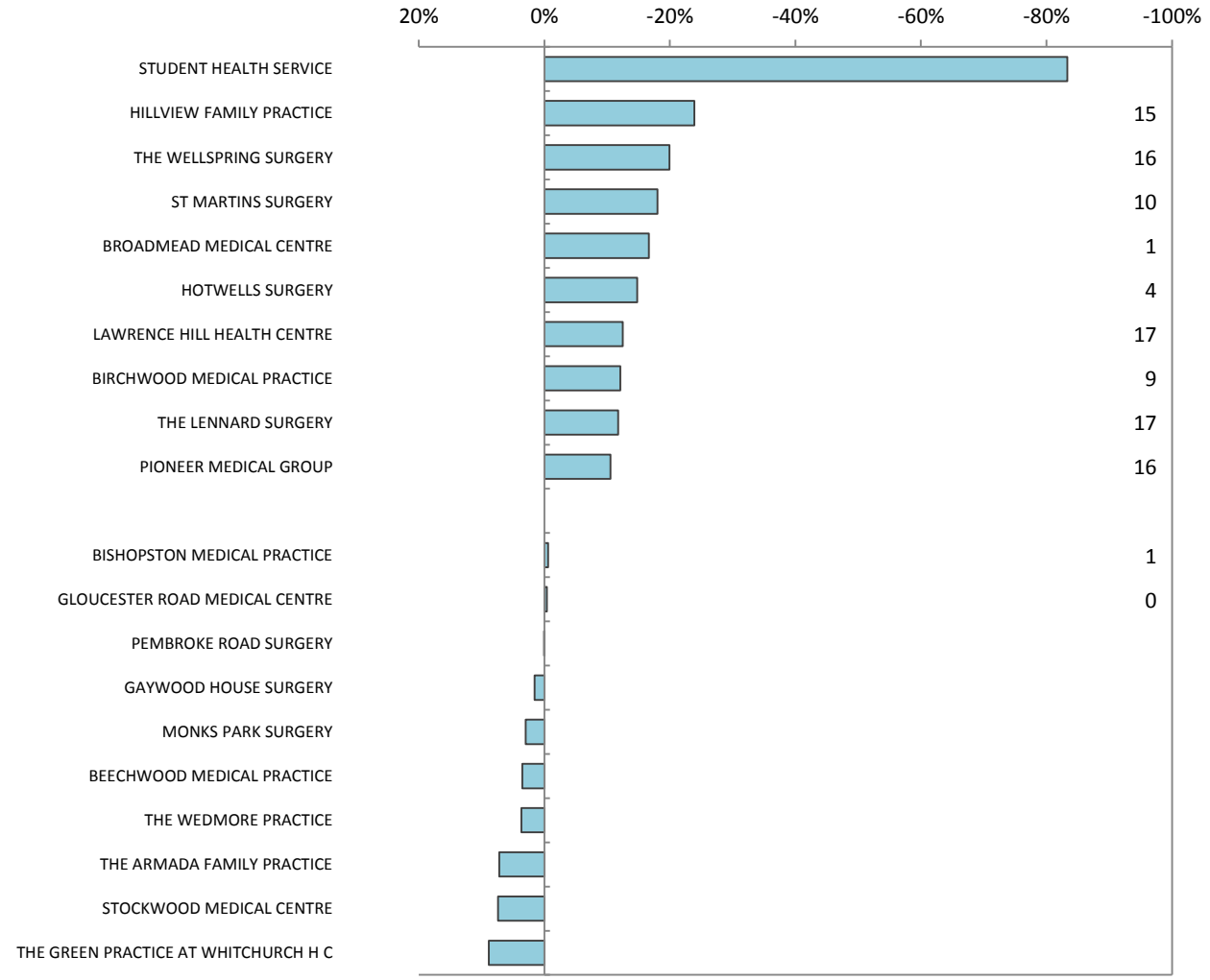


In patients with AF with a CHA2DS2-VASc score of 2 or more, the percentage treated with anti-coagulation therapy by GP practice



- in total, including exceptions, there are 1,170 people with a recorded CHA2DS2-VASc score >= 2 who are not treated
- GP practice range: 6.3% to 37.7%

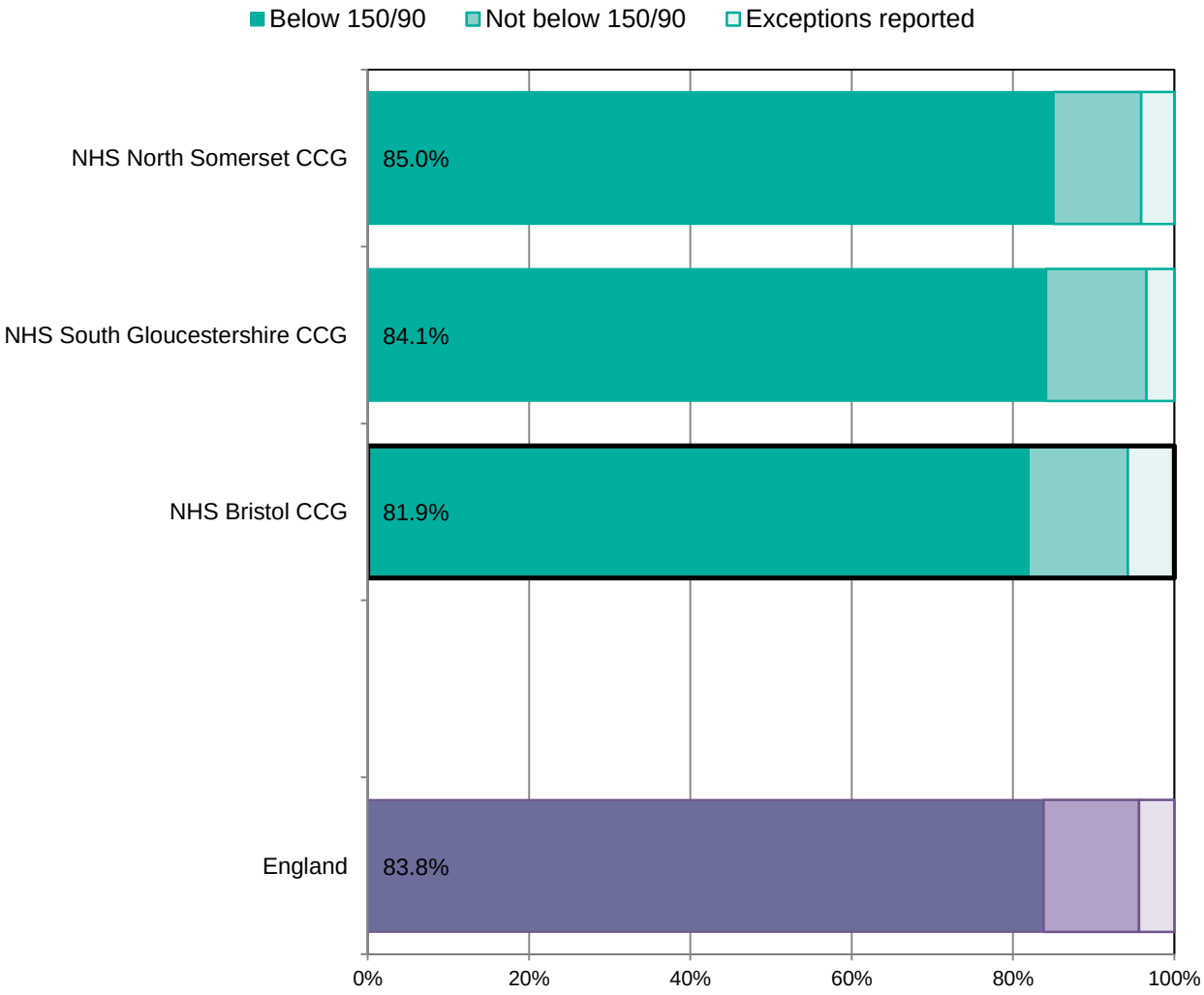
In patients with AF with a CHA2DS2-VASc score of 2 or more, the percentage treated with anti-coagulation therapy by GP practice – opportunities compared to GP cluster



- using the GP cluster method of calculating potential gains, if each practice was to achieve as well as the upper quartile of its national cluster, then an additional 291 people would be treated

Details of this methodology are available on slide 9. Click here to view them.

Percentage of patients with a history of stroke whose last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less by CCG
Comparison with CCGs in the STP

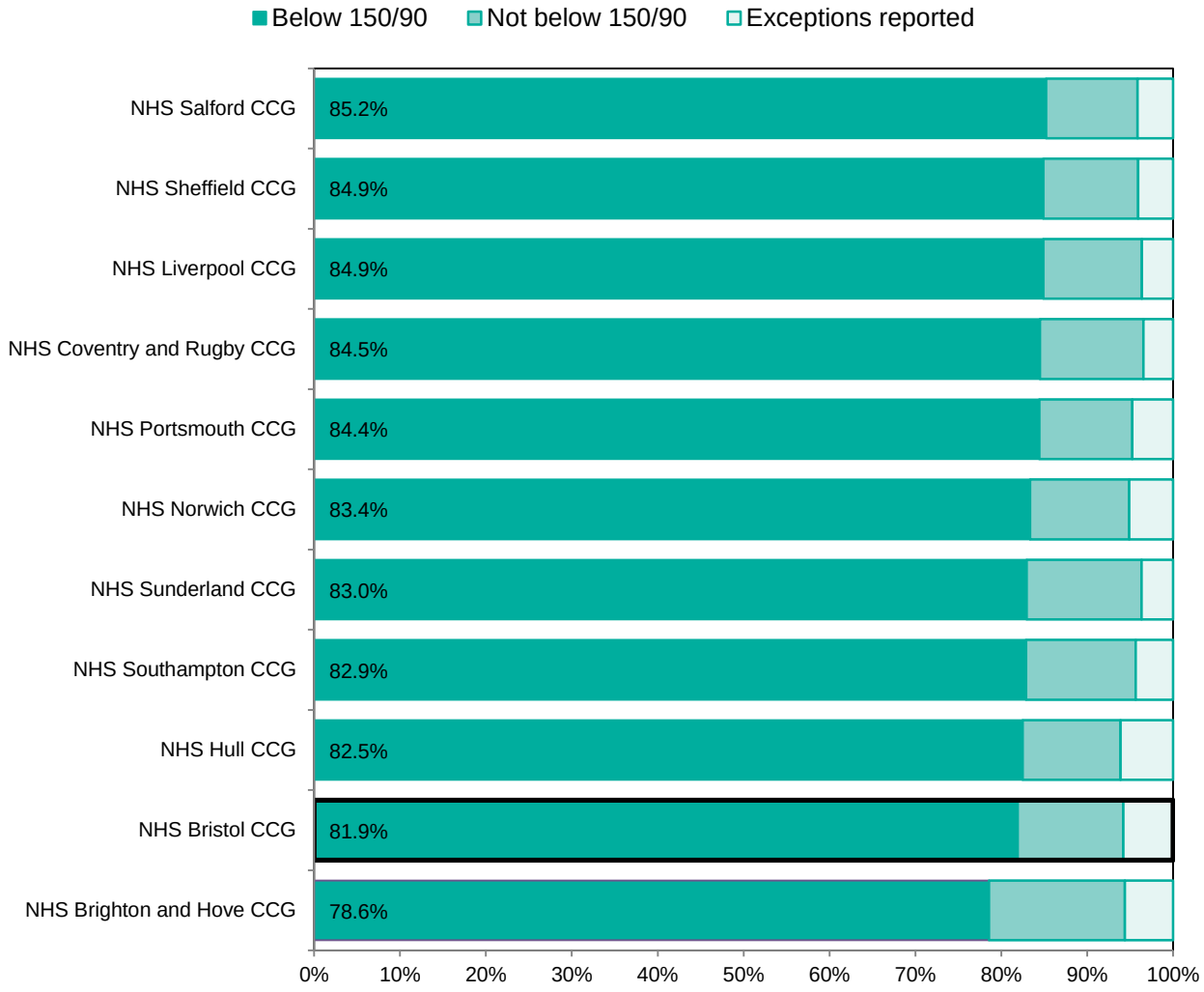


- 7,627 people with a history of stroke or TIA* in NHS Bristol CCG
- 6,248 (81.9%) people whose blood pressure is <= 150 / 90
- 440 (5.8%) people who are exceptions
- 939 (12.3%) additional people whose blood pressure is not <= 150 / 90

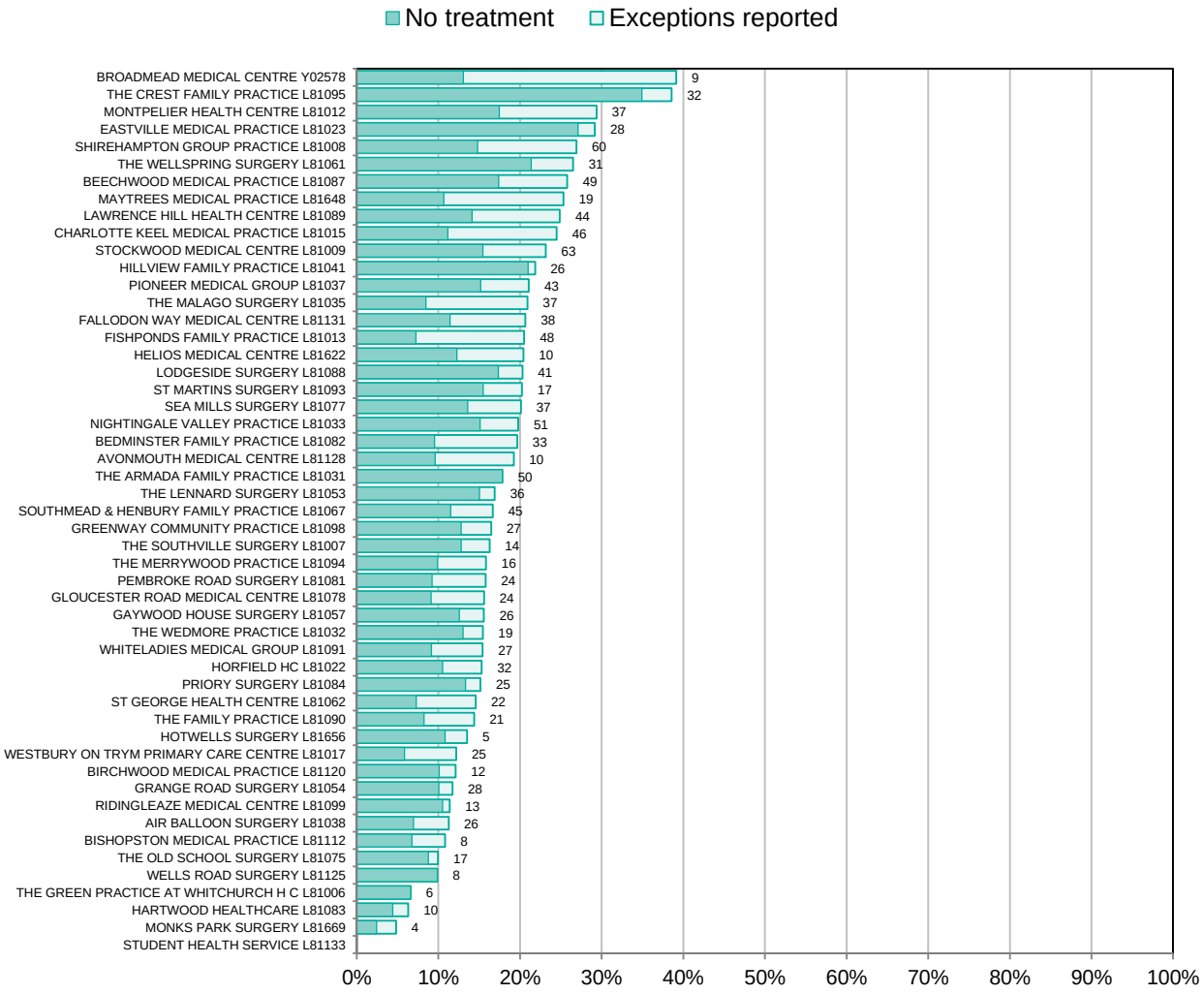
*Using the QOF clinical indicator STIA003 denominator plus exceptions

Percentage of patients with a history of stroke whose last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less by CCG

Comparison with demographically similar CCGs



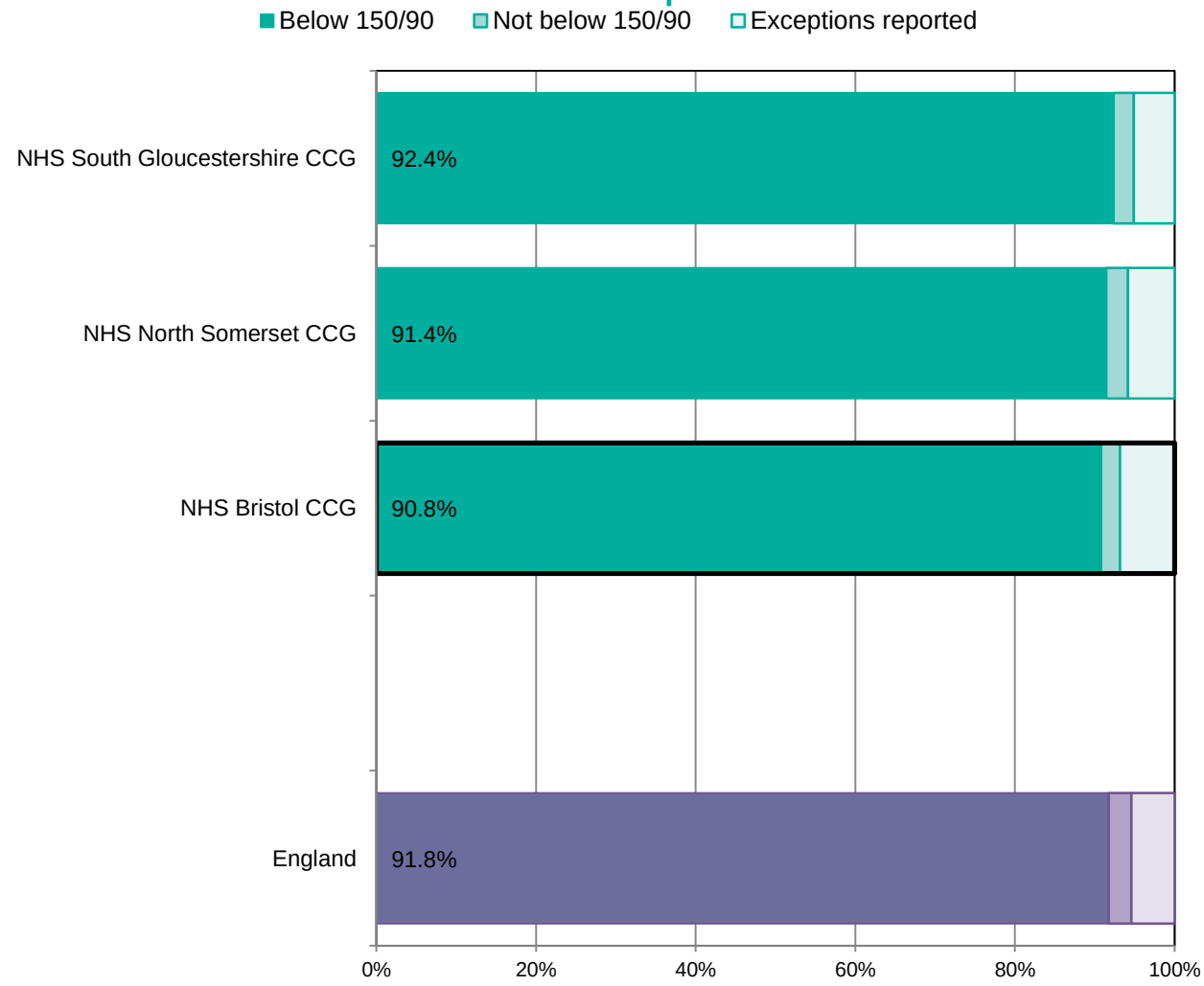
Percentage of patients with a history of stroke whose last blood pressure reading (measured in the preceding 12 months) is not 150/90 mmHg or less by GP practice



- in total, including exceptions, there are 1,379 people whose blood pressure is not <= 150 / 90
- GP practice range: 0.0% to 39.1%

Percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record in the preceding 12 months that an anti-platelet agent, or an anti-coagulant is being taken by CCG

Comparison with CCGs in the STP

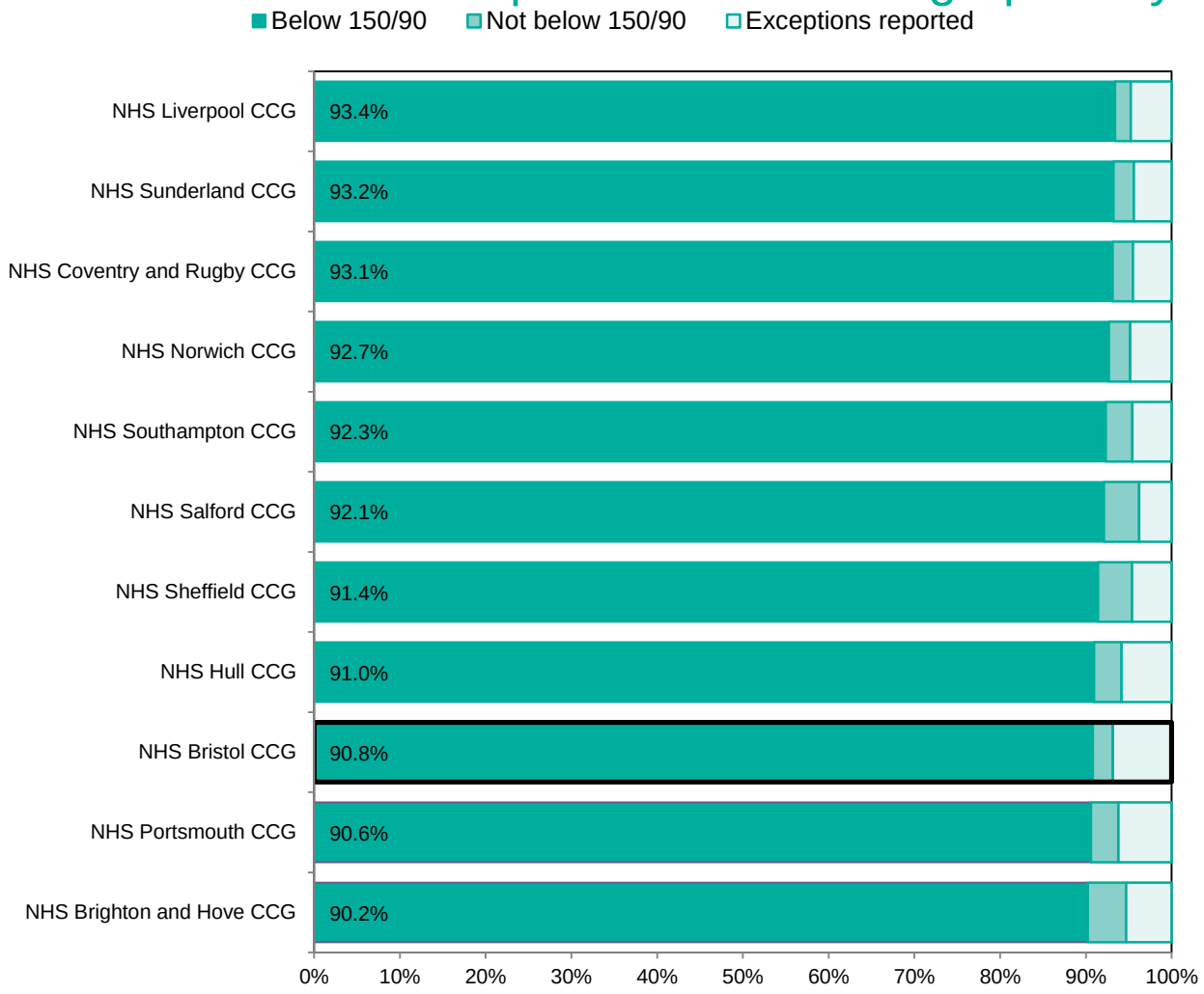


- 4,745 people with a stroke shown to be non-haemorrhagic* in NHS Bristol CCG
- 4,308 (90.8%) people who are taking an anti-platetet agent or anti-coagulant
- 325 (6.8%) people who are exceptions
- 112 (2.4%) additional people with no treatment

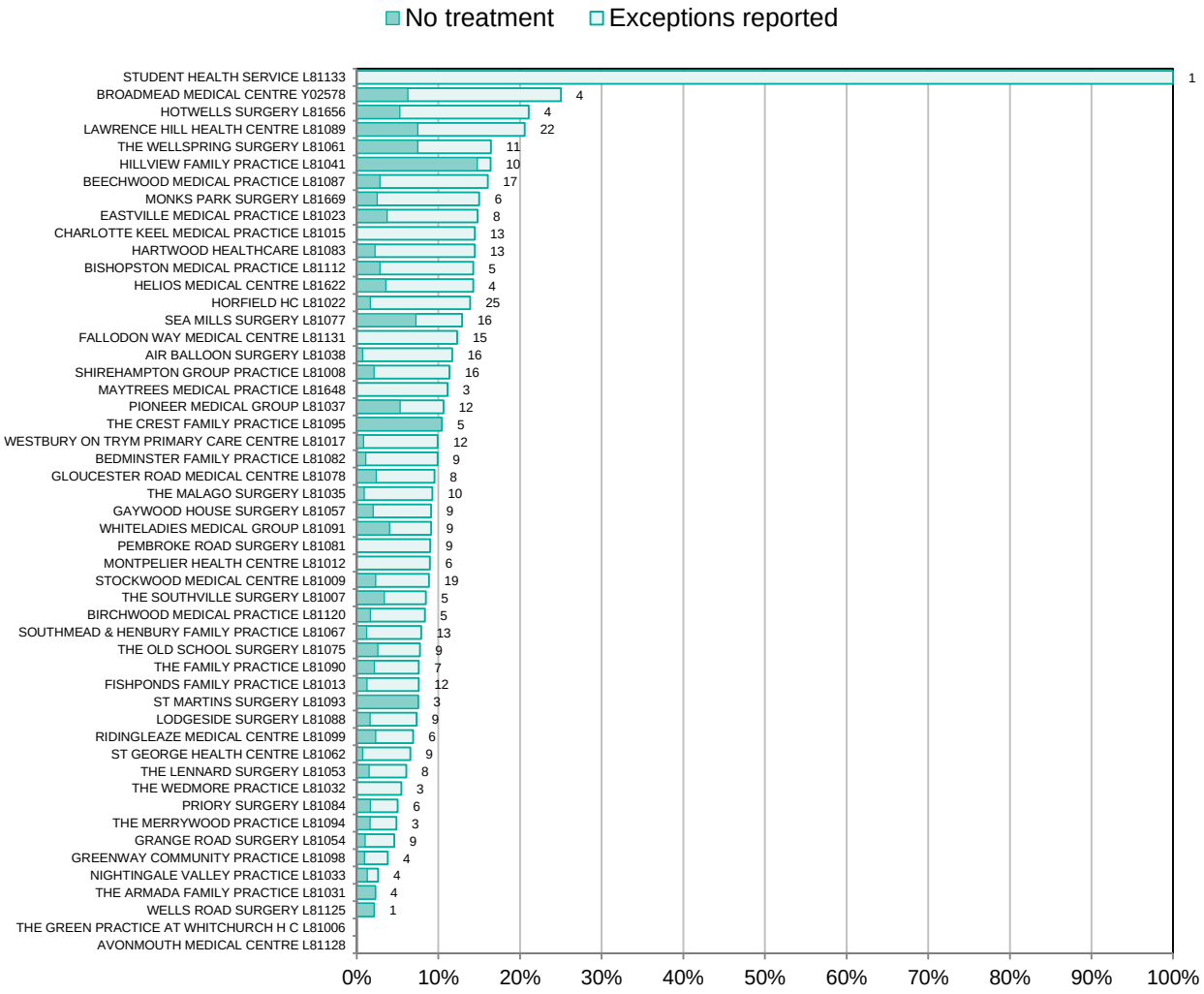
*Using the QOF clinical indicator STIA007 denominator plus exceptions

Percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record in the preceding 12 months that an anti-platelet agent, or an anti-coagulant is being taken by CCG

Comparison with demographically similar CCGs



Percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who do not have a record in the preceding 12 months that an anti-platelet agent, or an anti-coagulant is being taken by GP practice



- in total, including exceptions, there are 437 people who are not taking an anti-platelet agent or anti-coagulant
- GP practice range: 0.0% to 100.0%

Diabetes

Diabetes prevention and management

Diabetes costs the NHS £9.8 billion per year – and the prevalence is rising

Type 2 diabetes is often preventable

People at high risk of developing type 2 diabetes can be identified through the NHS Health Check, and the disease can be prevented or delayed in many through intensive behaviour change support.

Complications of diabetes are preventable

Diabetes is a major cause of premature death and disability and greatly increases the risk of heart disease and stroke, kidney failure, amputations and blindness. 80% of NHS spending on diabetes goes on managing these complications, most of which could be prevented. There are 8 essential care processes, in addition to retinal screening, that together substantially reduce complication rates. Despite this, around a half of people with diabetes do not receive all 8 care processes, and there is widespread variation between CCGs and practices in levels of achievement

Type 2 Diabetes in numbers

- diagnosed prevalence – 3.0 million
- undiagnosed diabetes – 900,000
- non-diabetic hyperglycaemia (high risk of diabetes) – 5 million

What questions should we ask in our CCG?

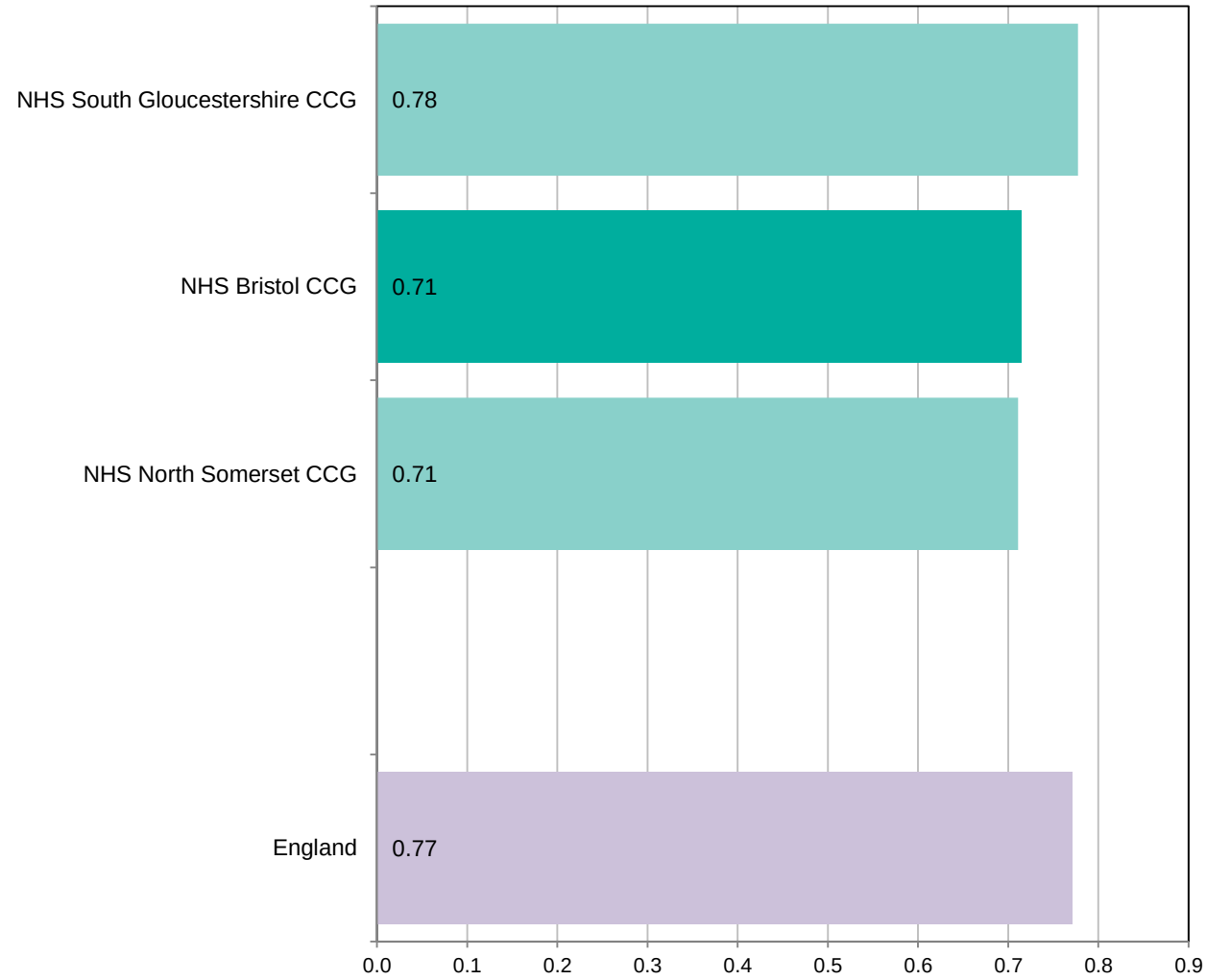
1. for each indicator how wide is the variation in achievement and exception reporting?
2. how many people would benefit if all practices performed as well as the best?
3. how can we support practices who are average and below average to perform as well as the best in:
   - detection of diabetes
   - delivery of the 8 care processes and achievement of the 3 treatment targets
   - identification and management of Non-diabetic hyperglycaemia

What might help

- ensure universal participation by practices in the National Diabetes Audit (NDA)
- benchmark practice level data from the NDA – and support practices to explore variation
- increase support for patient education and shared management
- maximise uptake of the NHS Health Check to aid detection of diabetes and Non Diabetic Hyperglycaemia
- maximise uptake of the NHS Diabetes Prevention Programme

Diabetes observed prevalence compared with expected prevalence by CCG

Comparison with CCGs in the STP

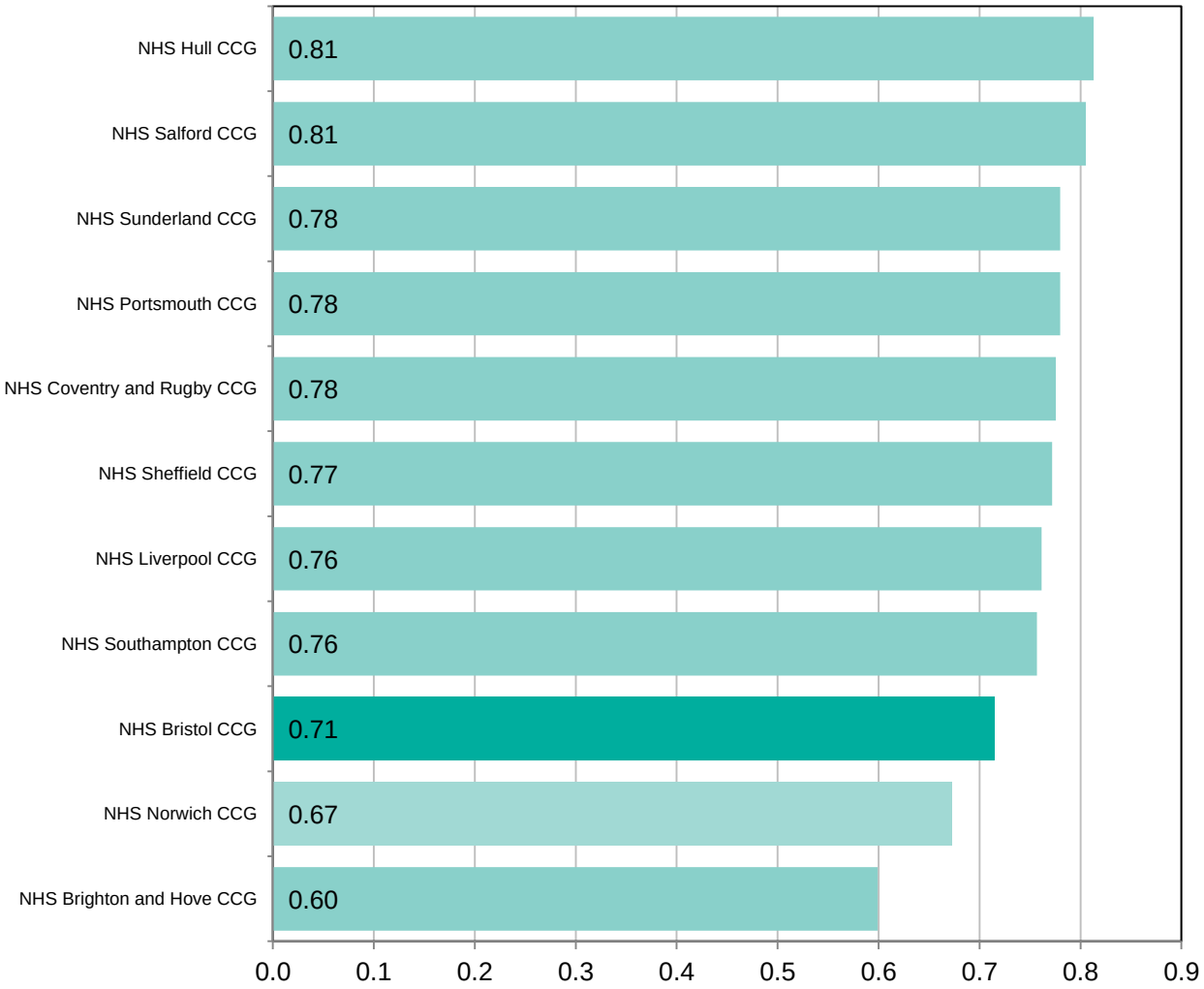


- 0.71 ratio of observed to expected diabetes prevalence in NHS Bristol CCG, compared to 0.77 in England
- this suggests 71% of people have been diagnosed

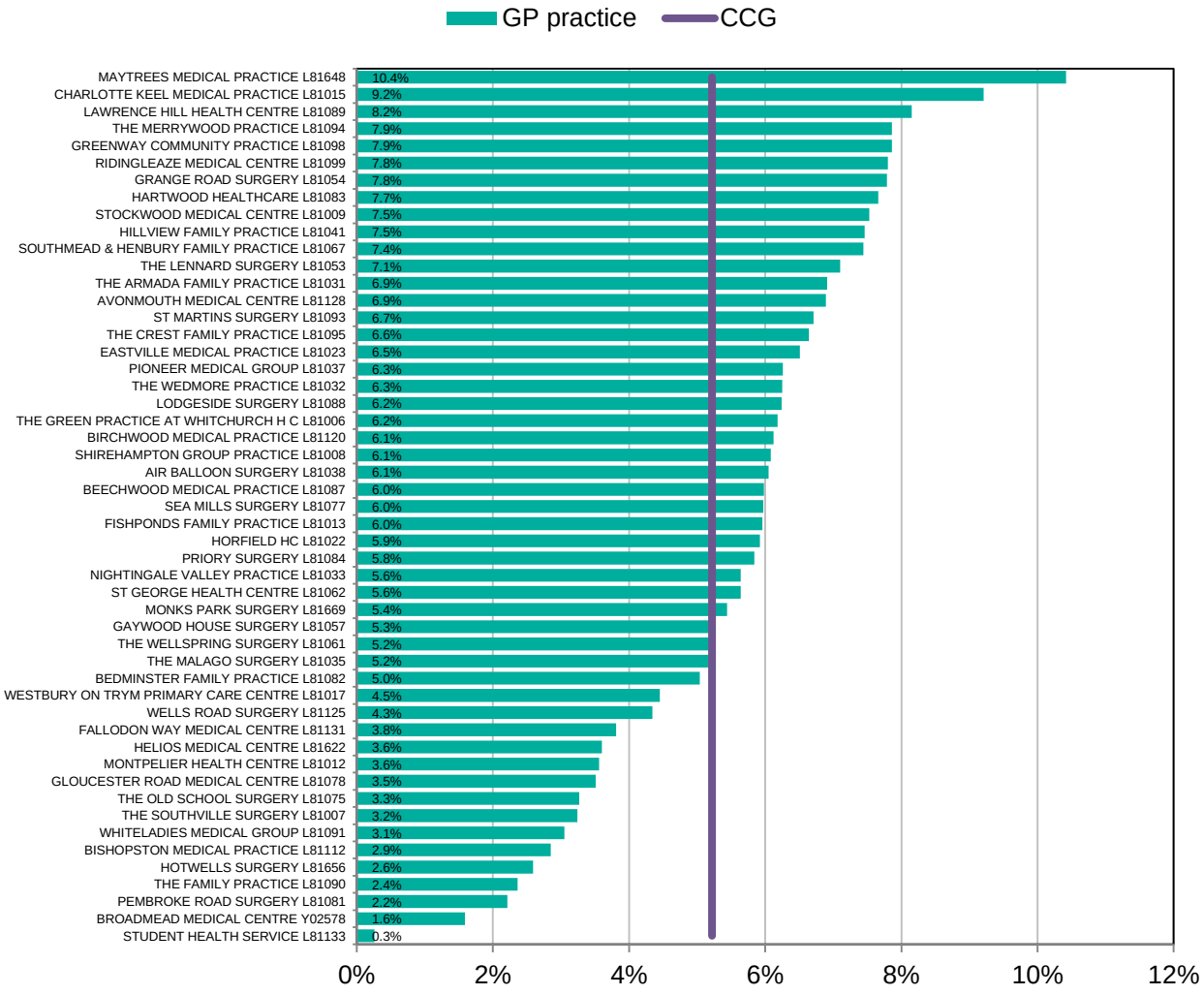
Note: This slide compares the prevalence of Diabetes recorded in QOF in 2015/16 to the expected prevalence of Diabetes in 2016 taken from the NCVIN diabetes prevalence model produced in 2015.

Diabetes observed prevalence compared with expected prevalence by CCG

Comparison with demographically similar CCGs



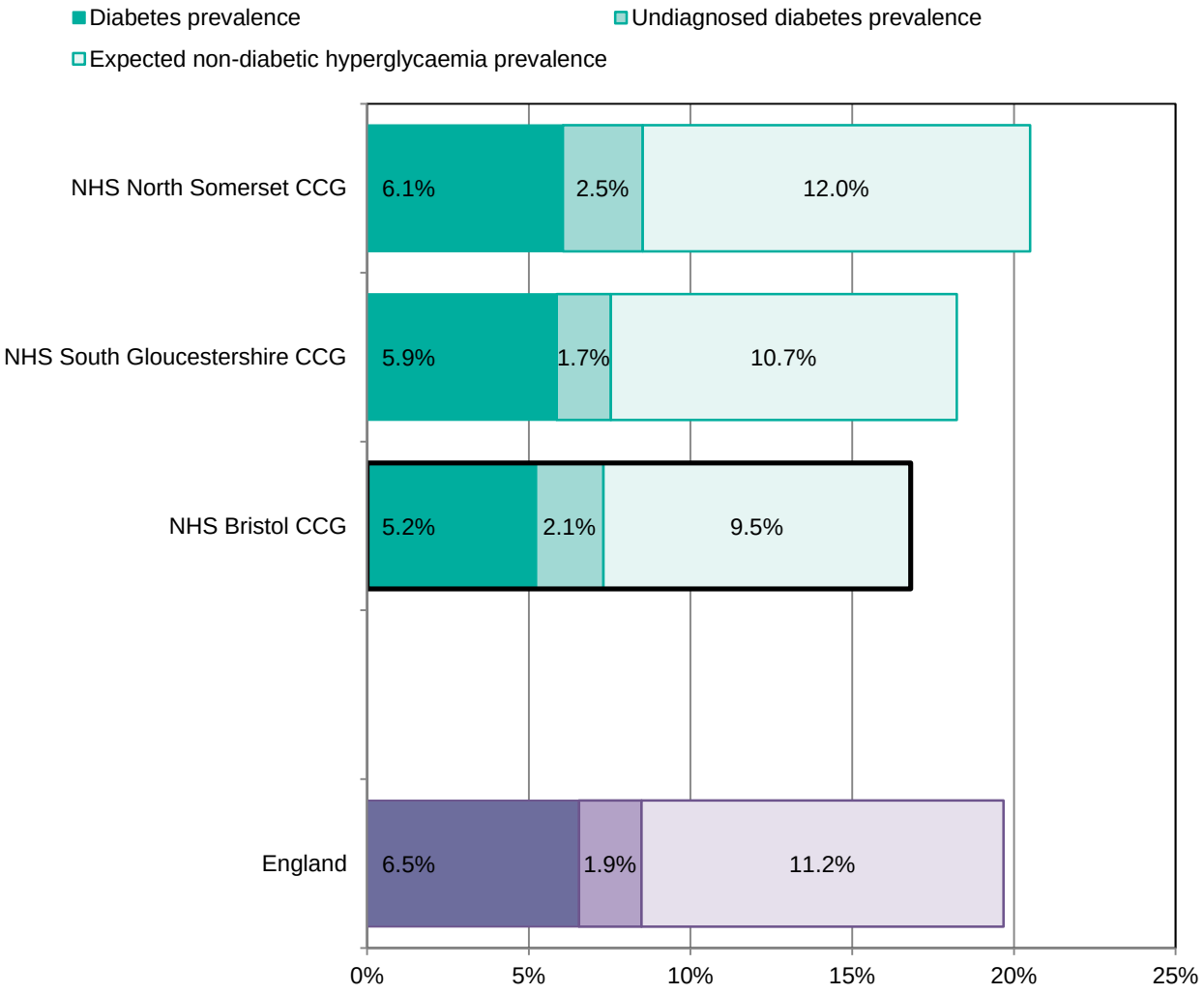
Diabetes prevalence by GP practice



- GP practice range of observed diabetes 0.3% to 10.4%
- there are an estimated 8,436 people with undiagnosed diabetes in NHS Bristol CCG

Note: The estimated number of undiagnosed people with diabetes has been calculated by multiplying the estimated prevalence rate to the 2015/16 QOF list size and subtracting the number of people on the diabetes register.

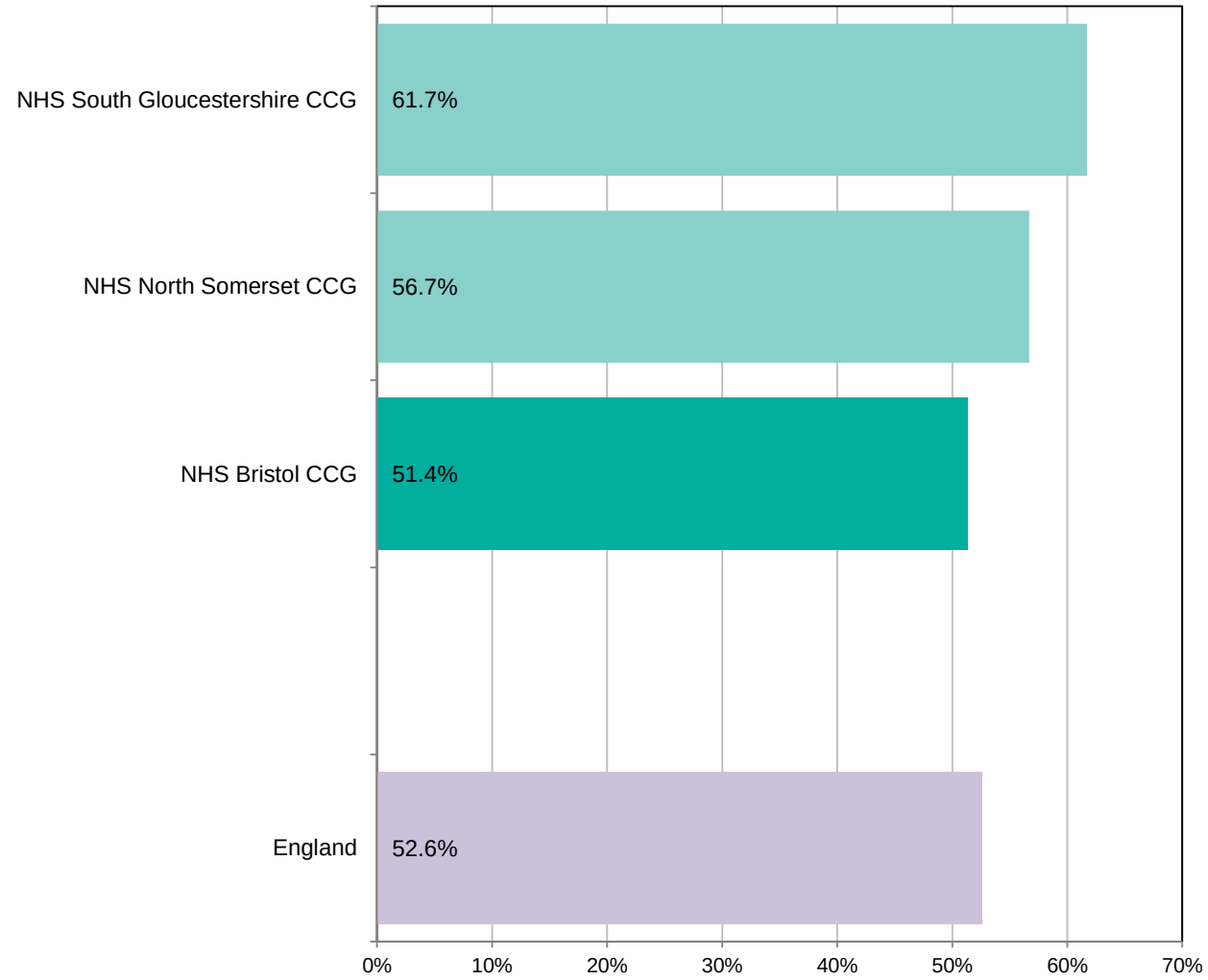
Expected total prevalence of diabetes and non-diabetic hyperglycaemia



- the estimated total prevalence of diabetes in NHS Bristol CCG is 7.3% (diagnosed and undiagnosed)
- in addition, there are an estimated 9.5% of people in NHS Bristol CCG who are at increased risk of developing diabetes (i.e. with non-diabetic hyperglycaemia)
- this means that 16.8% of the population in NHS Bristol CCG are estimated to have diabetes, or at high risk of developing of diabetes

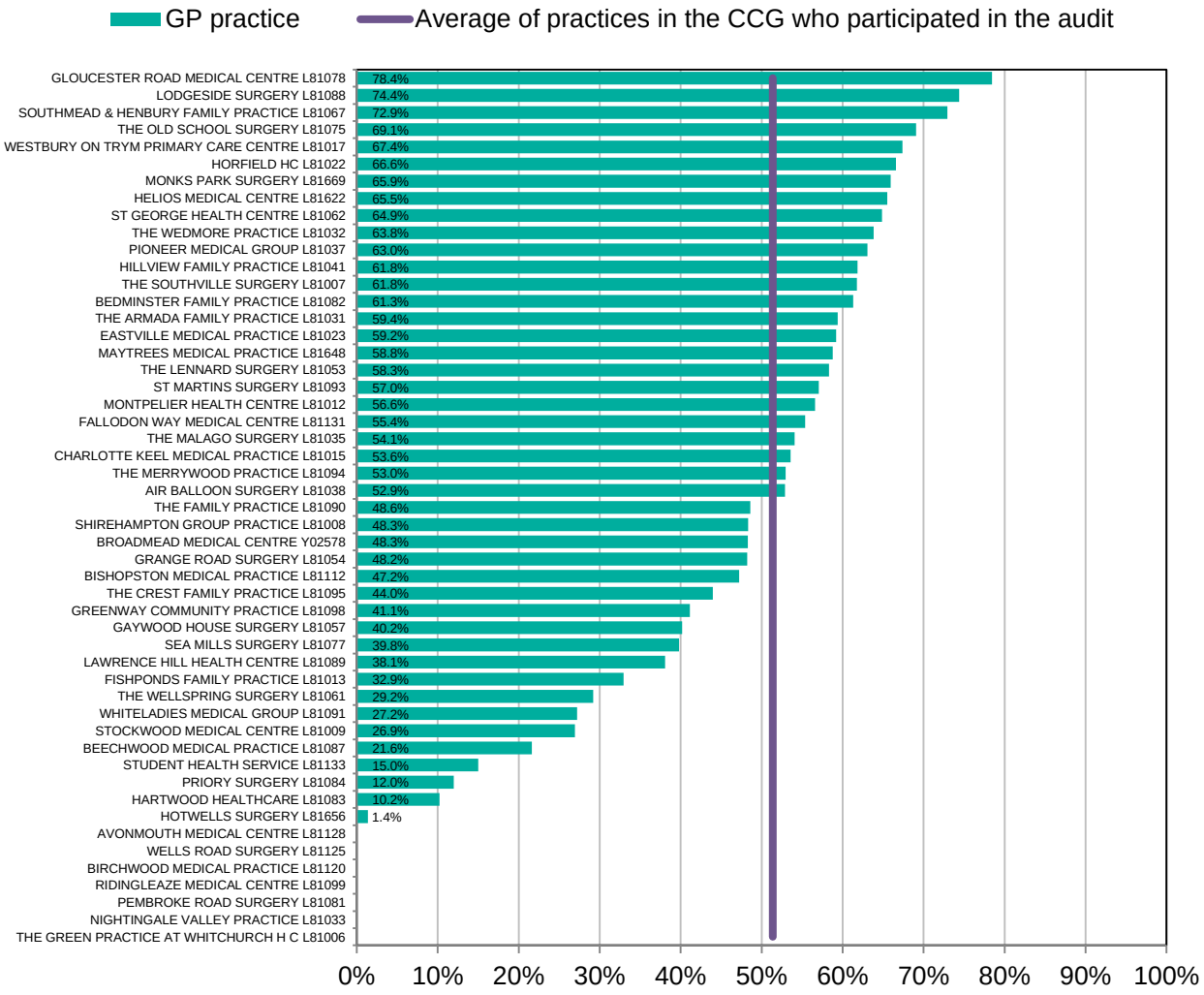
Note: Prevalence estimates of non-diabetic hyperglycaemia were developed using Health Survey for England (HSE) data. Five years of HSE data were combined, 2009- 2013. The estimates take into account the age, ethnic group and estimated body mass index of the population. These estimates were produced using the GP registered population.

People with diabetes who had eight care processes by CCG 2015/16



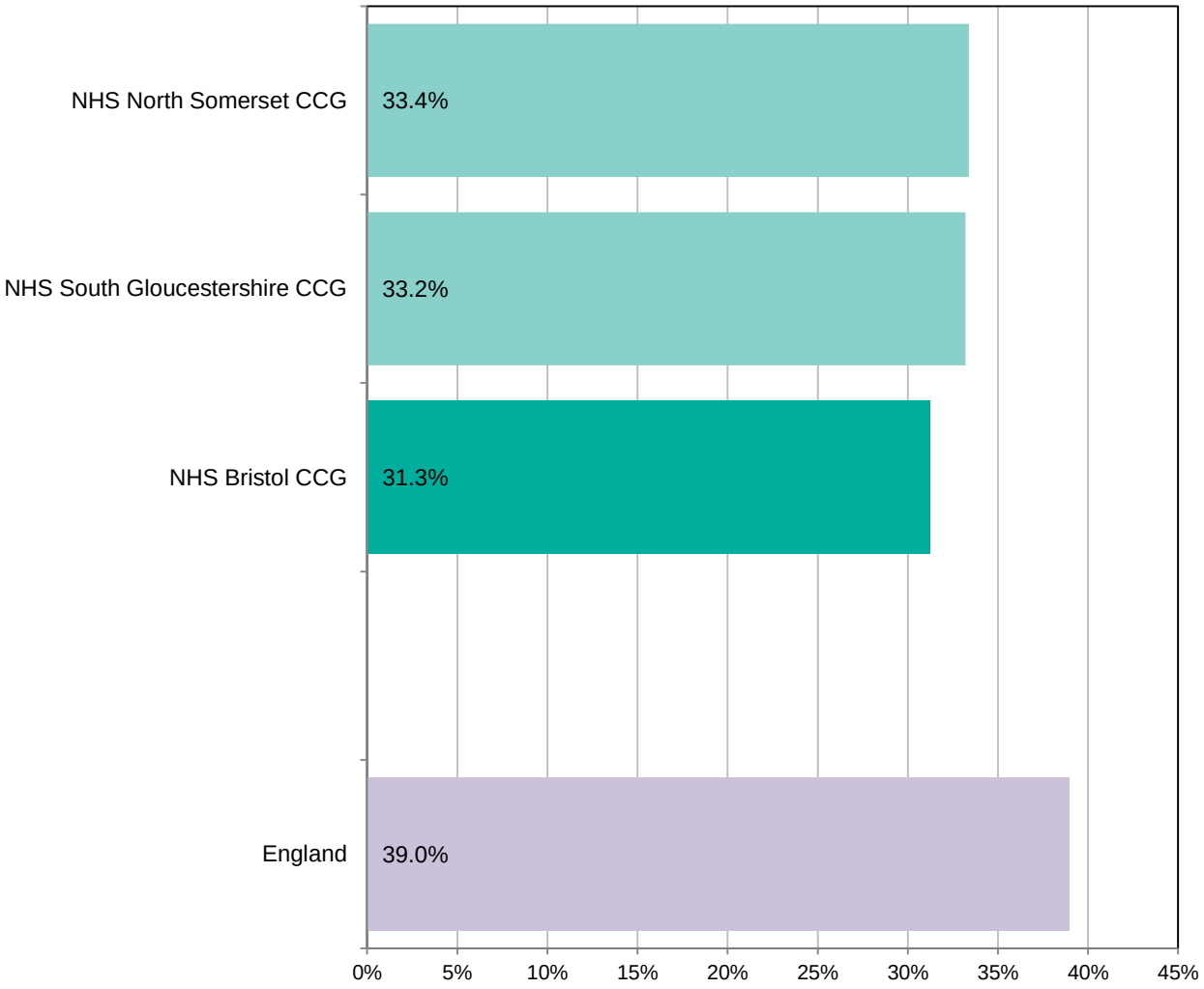
- data on care processes and treatment targets are taken from the National Diabetes Audit (NDA)
- overall practice participation in the 2015/16 audit was 81.4% in England
- in NHS Bristol CCG, 44 out of 49 practices (89.8%) participated in the NDA. Data is not available for the remaining practices
- 51.4% of people with diabetes (of practices who participated in the audit) had the eight recommended care processes in NHS Bristol CCG, compared to 52.6% in England

People with diabetes who had eight care processes by GP practice, 2015/16



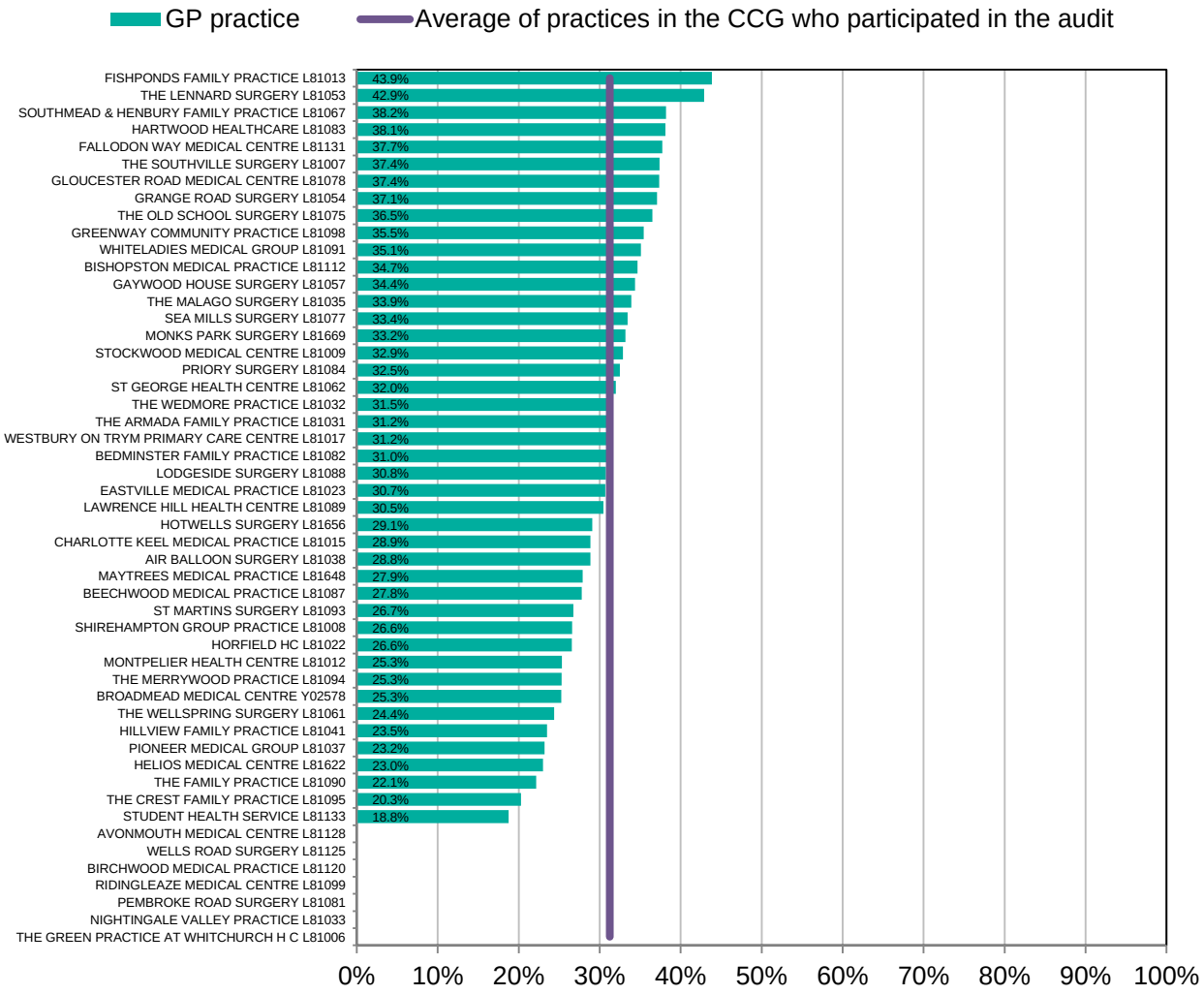
- achievement - 8 care processes: in practices who provided data via the NDA, between 1.4% and 78.4% of patients received all 8 care processes
- at least 9,416 people did not receive the eight care processes

People with diabetes who met all 3 treatment targets by CCG, 2015/16



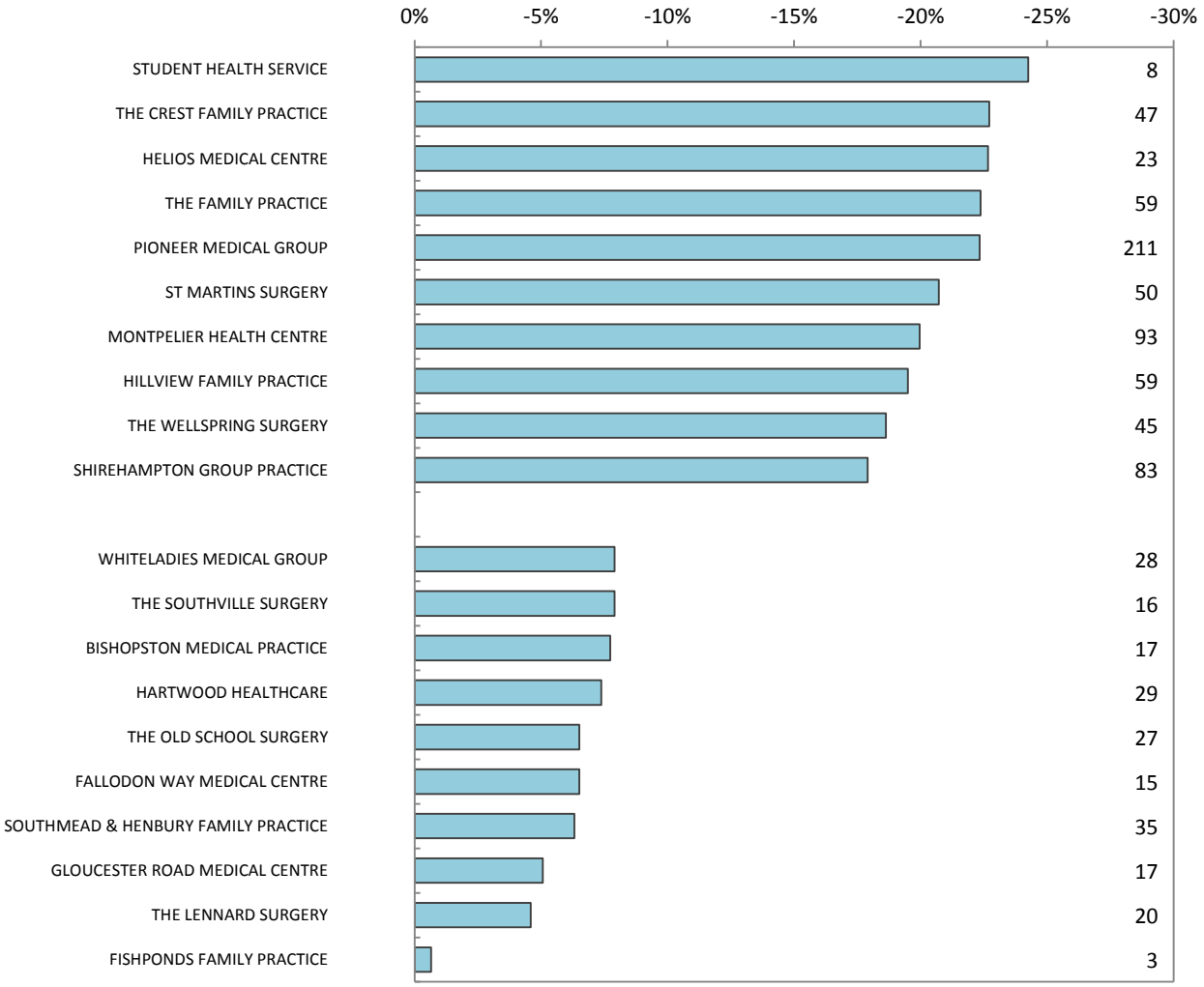
- 31.3% of people with diabetes (of practices who participated in the audit) met the three treatment targets in NHS Bristol CCG, compared to 39.0% in England

People with diabetes who met all 3 treatment targets by GP practice, 2015/16



- achievement - 3 treatment targets: in practices who provided data via the NDA, between 18.8% and 43.9% of patients achieved all 3 treatment targets
- at least 11,767 people did not meet the three treatment targets

People with diabetes who met all 3 treatment targets by GP practice, 2015/16 - opportunities compared to GP cluster



- using the GP cluster method of calculating potential gains, if each practice was to achieve as well as the upper quartile of its national cluster, then an additional 2,264 people would be treated

Details of this methodology are available on slide 9. Click here to view them.

Kidney

Management of chronic kidney disease

Chronic Kidney Disease can progress to kidney failure and it substantially increases the risk of heart attack and stroke.

Late diagnosis of CKD is common.
Around a third of people with CKD are undiagnosed. More opportunistic testing and improved uptake of the NHS Health Check will increase detection rates.

Chronic Kidney Disease (CKD) is common.

It is one of the commonest co-morbidities and affects a third of people over 75. In 2010 it was estimated to cost the NHS around £1.5bn. Average length of stay in hospital tends to be longer and outcomes are considerably worse: approximately 7,000 excess strokes and 12,000 excess heart attacks occur each year in people with CKD compared to those without.

Individuals with CKD are also at much higher risk of developing acute kidney injury when they have an intercurrent illness such as pneumonia

What questions should we ask in our CCG?

1. for each indicator how wide is the variation in achievement and exception reporting?
2. how many people would benefit if all practices performed as well as the best?
3. how can we support practices who are average and below average to perform as well as the best in:
    - detection of CKD
    - more systematic delivery of evidence based care

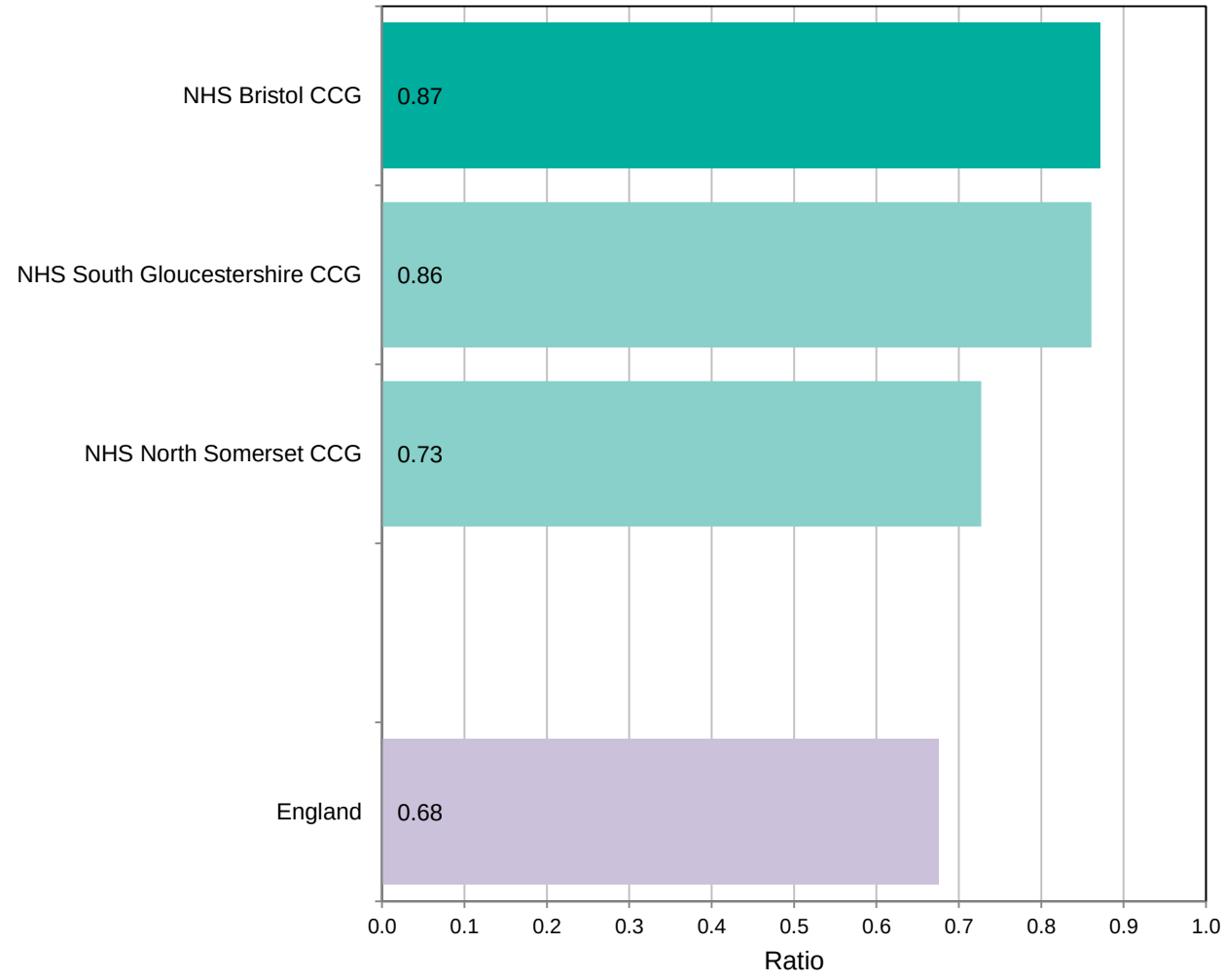
Evidence based guidance from NICE highlights CVD risk reduction, good blood pressure control and management of proteinuria as essential steps to reduce the risk of cardiovascular events and progression to kidney failure. Despite this there is often significant variation between practices in achievement and exception reporting.

What might help

- Support practices to share audit data and systematically identify gaps and opportunities for improved detection and management of CKD.
- Promote uptake of and follow up from the NHS Health Check to aid detection and management of CKD
- Offer local training and education in the detection and management of CKD

Chronic kidney disease (CKD) observed prevalence (2015/16) compared with expected prevalence (2011) by CCG

Comparison with CCGs in the STP

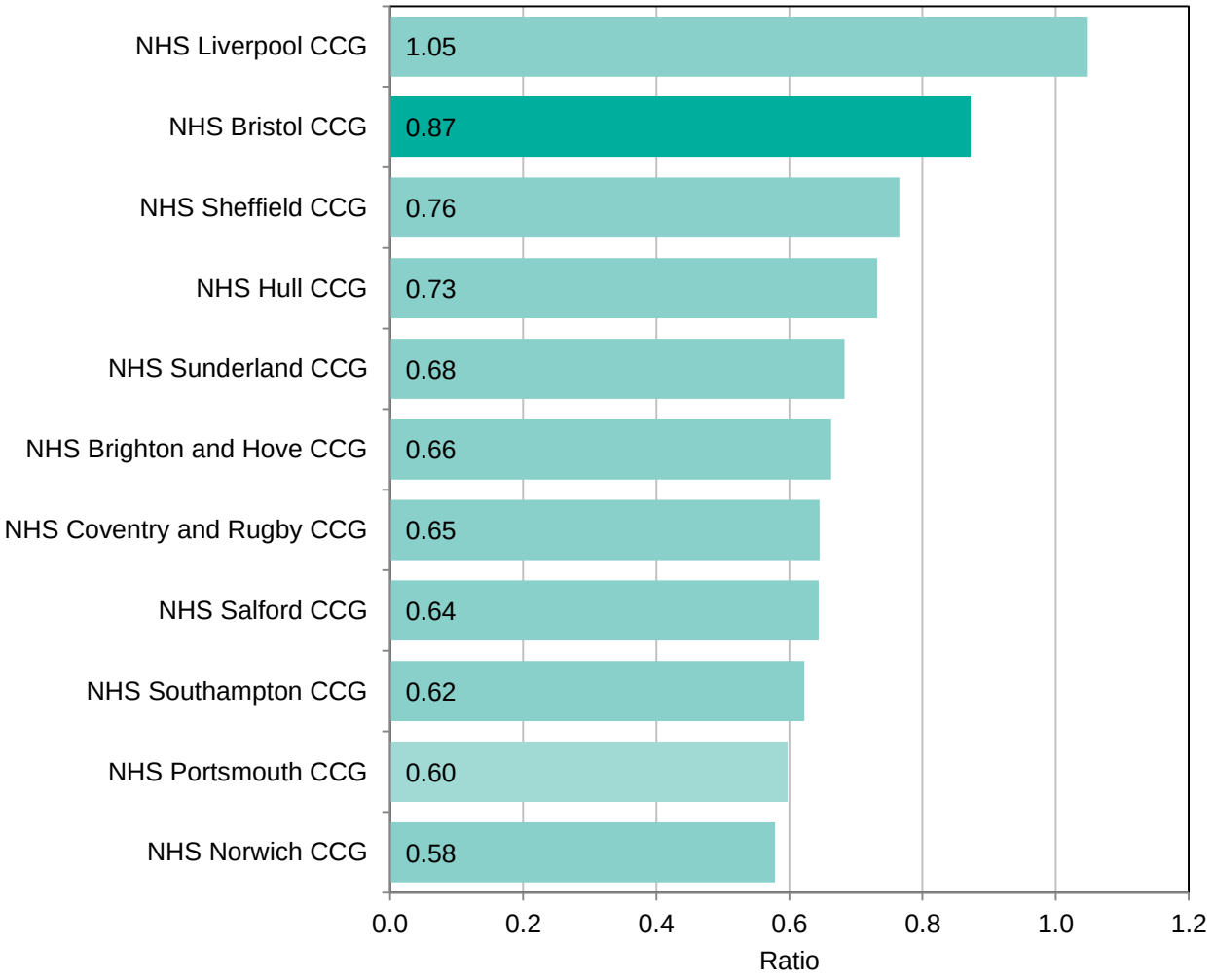


- the ratio of those diagnosed with chronic kidney disease versus those expected to have chronic kidney disease is 0.87. This compares to 0.68 for England
- this suggests that 87% of people with chronic kidney disease have been diagnosed

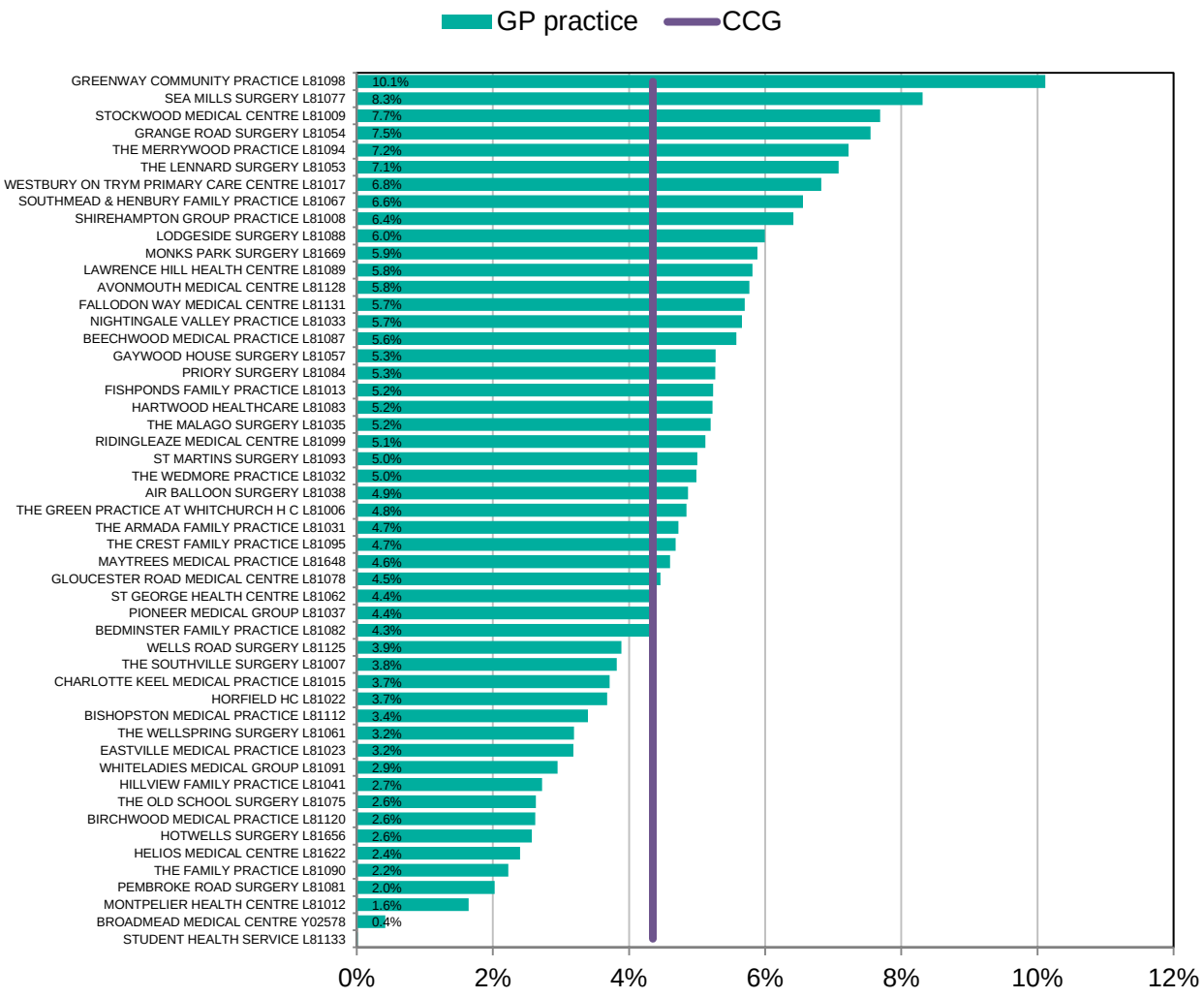
Note: This slide compares the prevalence of CKD recorded in QOF in 2015/16 to the expected prevalence of CKD produced by the University of Southampton in 2011. A small number of CCGs have a ratio greater than 1. It is unlikely that all people with CKD will be diagnosed in any CCG and therefore a ratio greater than 1 suggests that the figures are underestimating the true CKD prevalence in the area. These ratios should be taken as an indication of the comparative scale of undiagnosed CKD rather than absolute figures.

Chronic kidney disease (CKD) observed prevalence (2015/16) compared with expected prevalence (2011) by CCG

Comparison with demographically similar CCGs



CKD prevalence by GP practice, 2015/16

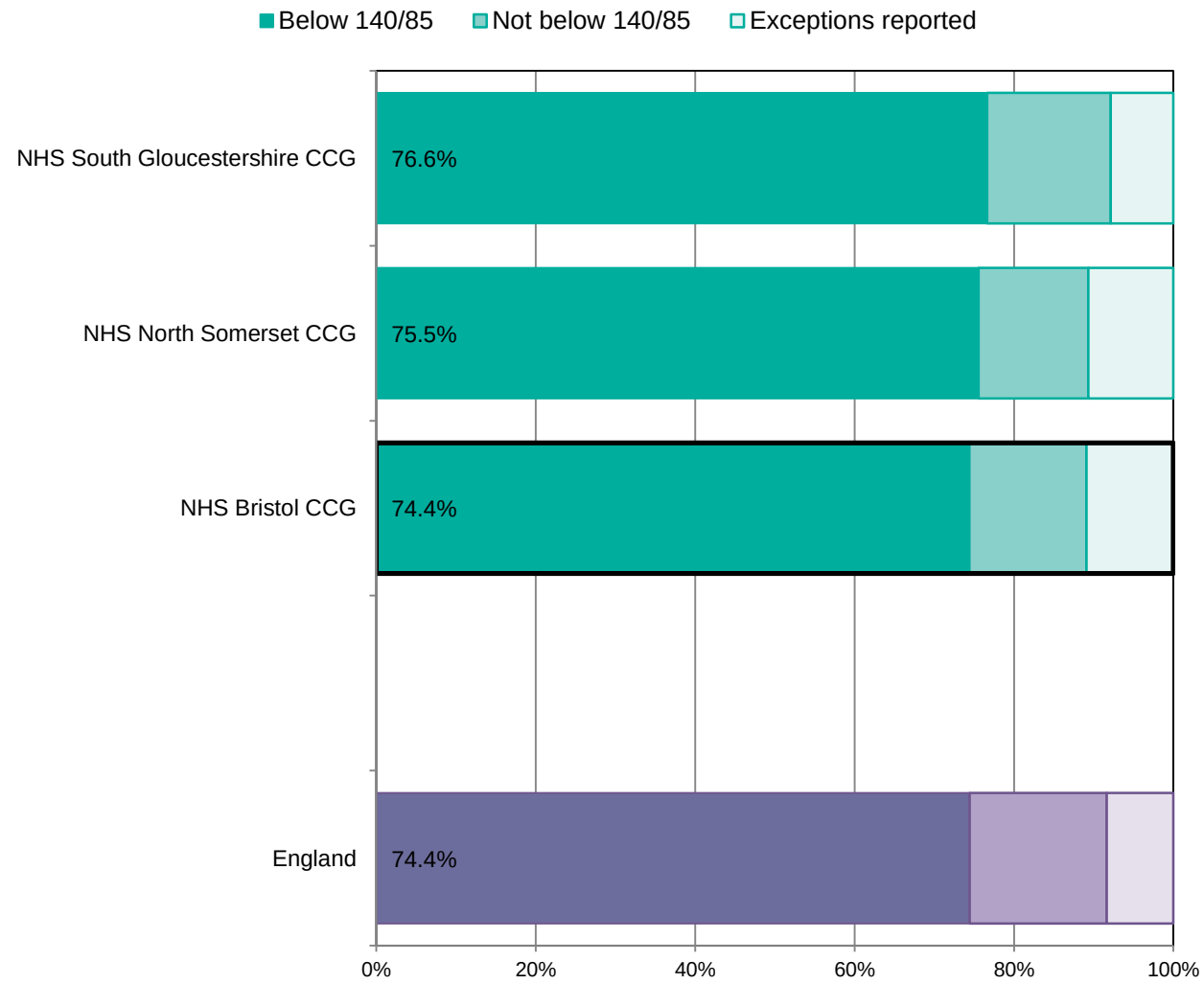


- it is estimated that there are 2,562 people with undiagnosed chronic kidney disease in NHS Bristol CCG
- GP practice range of observed CKD: 0.0% to 10.1%

Note: CCG estimates for the estimated number of people with CKD are based on applying a proportion from a resident based population estimate to a GP registered population. The characteristics of registered and resident populations may vary in some CCGs, and local interpretation is required.

Percentage of patients on the CKD register whose last blood pressure reading (measured in the preceding 12 months) is 140/85 mmHg or less by CCG, 2014/15

Comparison with CCGs in the STP

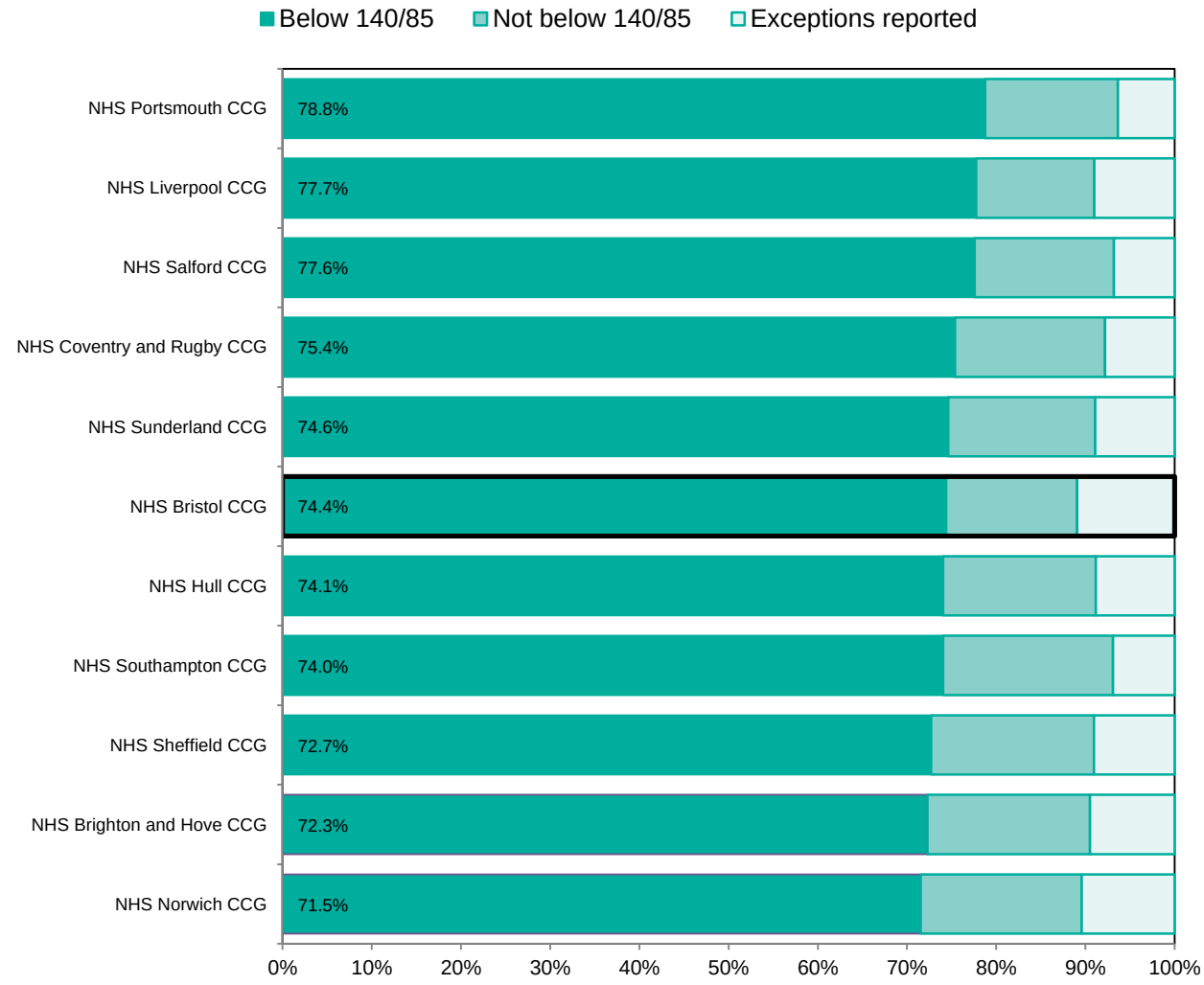


- 17,190 people with CKD (diagnosed*) in NHS Bristol CCG
- 12,787 (74.4%) people whose blood pressure is <= 140 /85
- 1,876 (10.9%) people who are exceptions
- 2,527 (14.7%) additional people whose blood pressure is not <= 140 / 85

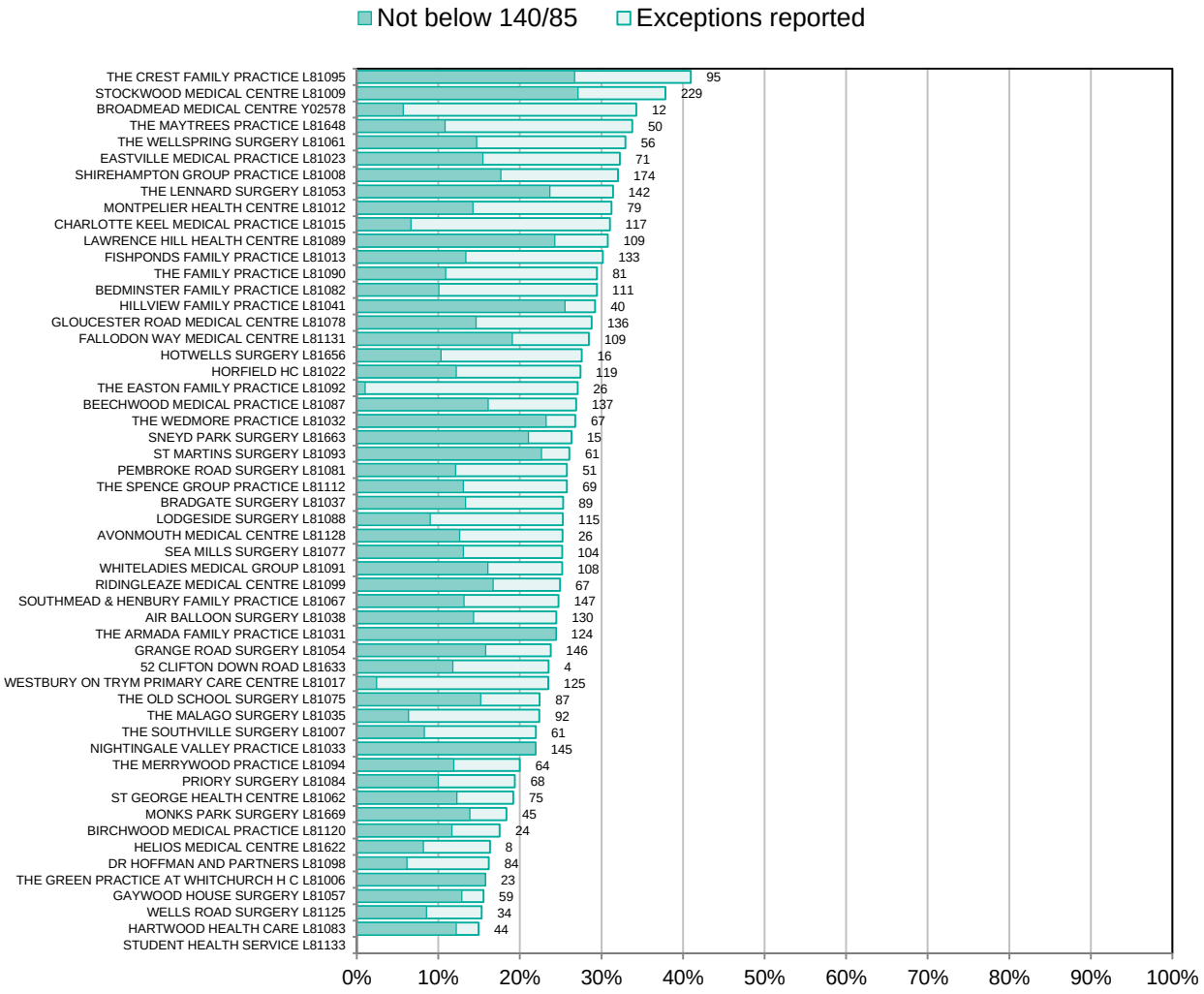
*Using the QOF clinical indicator CKD002 denominator plus exceptions. Note: as the CKD002 indicator was removed from the QOF in 15/16 this is historic data taken from the 2014/15 QOF.

Percentage of patients on the CKD register whose last blood pressure reading (measured in the preceding 12 months) is 140/85 mmHg or less by CCG, 2014/15

Comparison with demographically similar CCGs

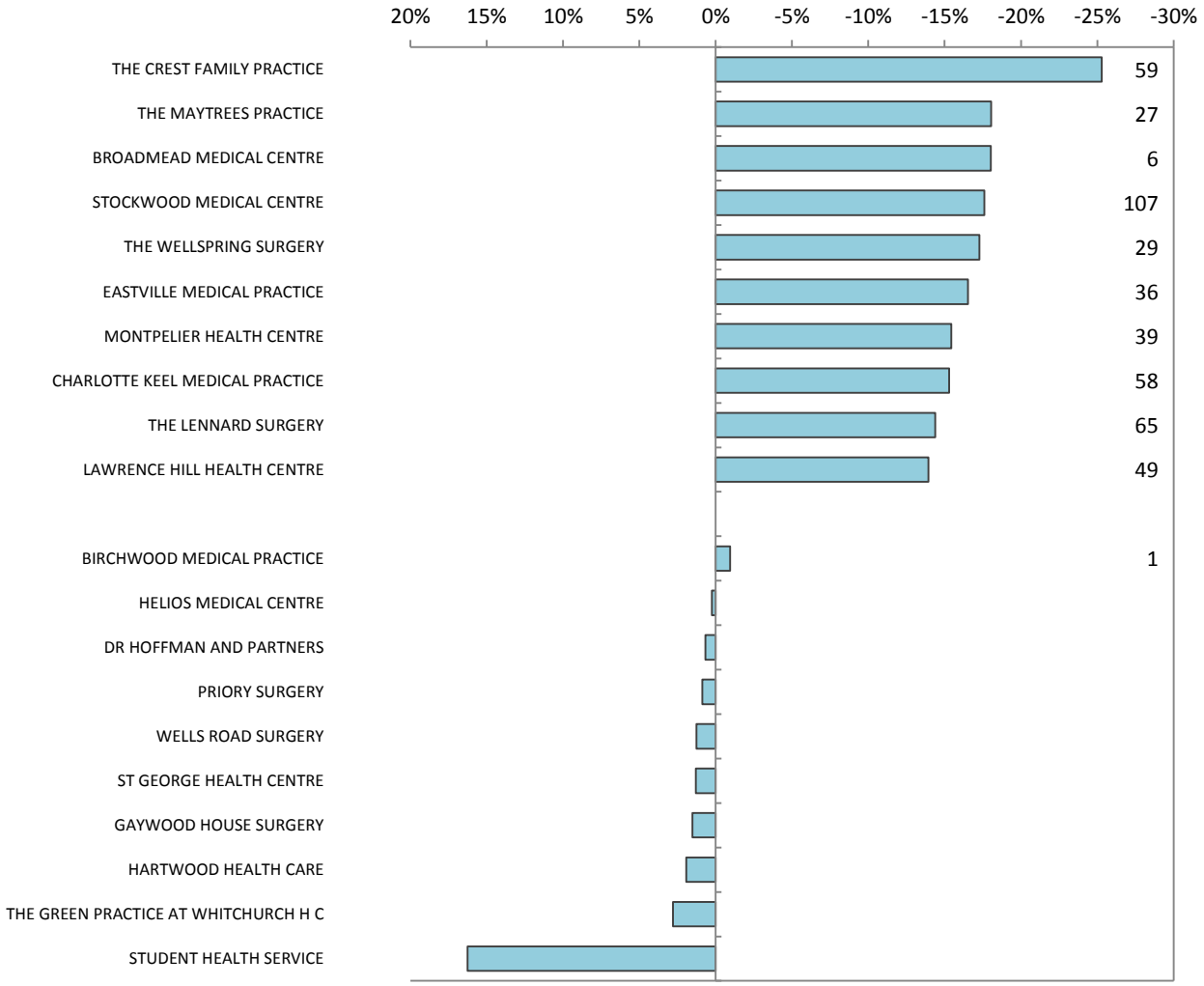


Percentage of patients on the CKD register whose last blood pressure reading (measured in the preceding 12 months) is not 140/85 mmHg or less by GP practice, 2014/15



- in total, including exceptions, there are 4,403 people whose blood pressure is not <= 140 / 85
- GP practice range: 0.0% to 40.9%

Percentage of patients on the CKD register whose last blood pressure reading (measured in the preceding 12 months) is not 140/85 mmHg or less by GP practice, 2014/15 – opportunities compared to GP cluster

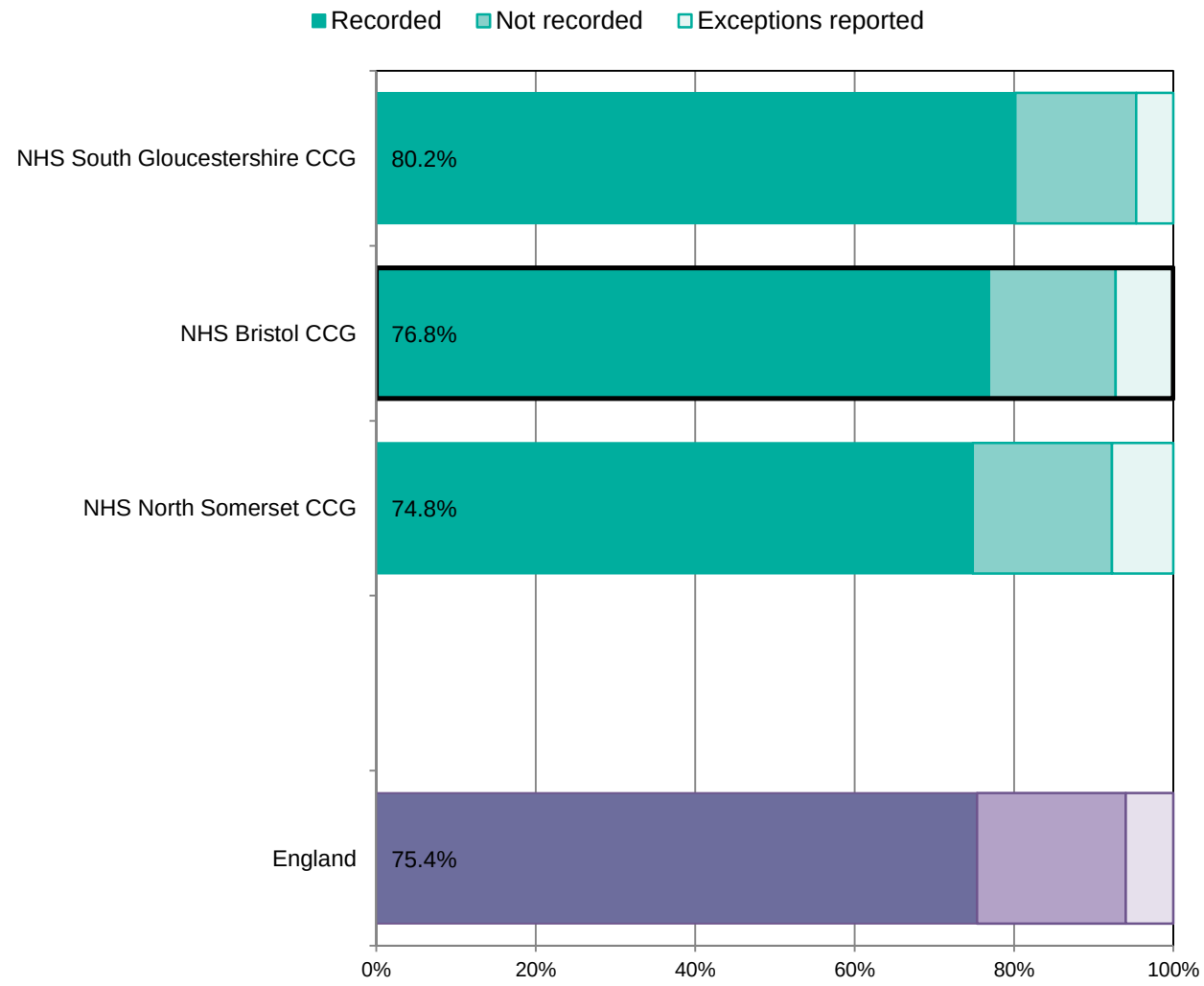


- using the GP cluster method of calculating potential gains, if each practice was to achieve as well as the upper quartile of its national cluster, then an additional 1,224 people would be treated

Details of this methodology are available on slide 9. Click here to view them.

Percentage of patients on the CKD register whose notes have a record of a urine albumin: creatinine ratio test in the preceding 12 months by CCG, 2014/15

Comparison with CCGs in the STP

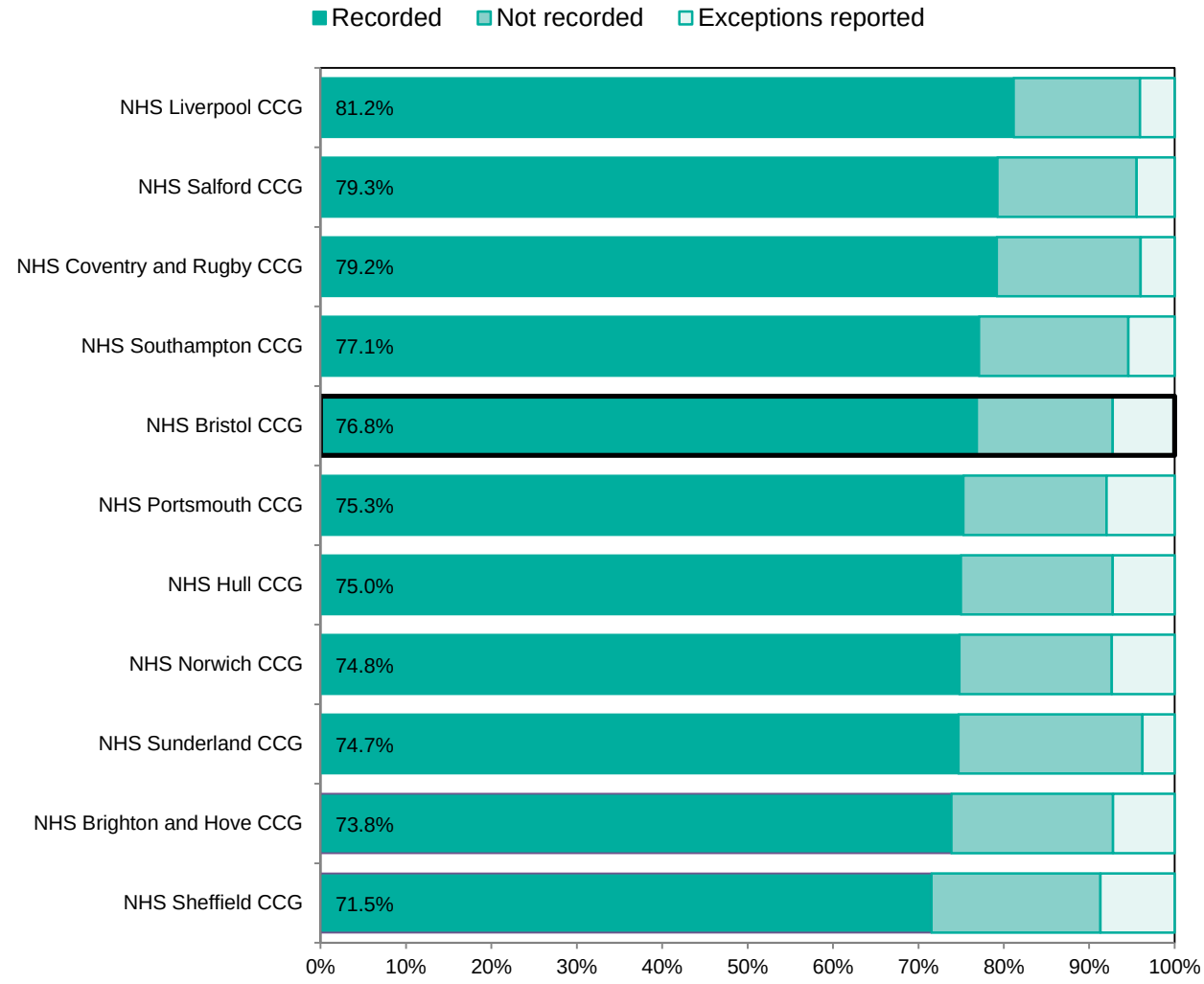


- 17,136 people with CKD (diagnosed*) in NHS Bristol CCG
- 13,169 (76.8%) people who have a record of urine albumin:creatinine ratio test
- 1,241 (7.2%) people who are exceptions
- 2,726 (15.9%) additional people who have no record of urine albumin:creatinine ratio test

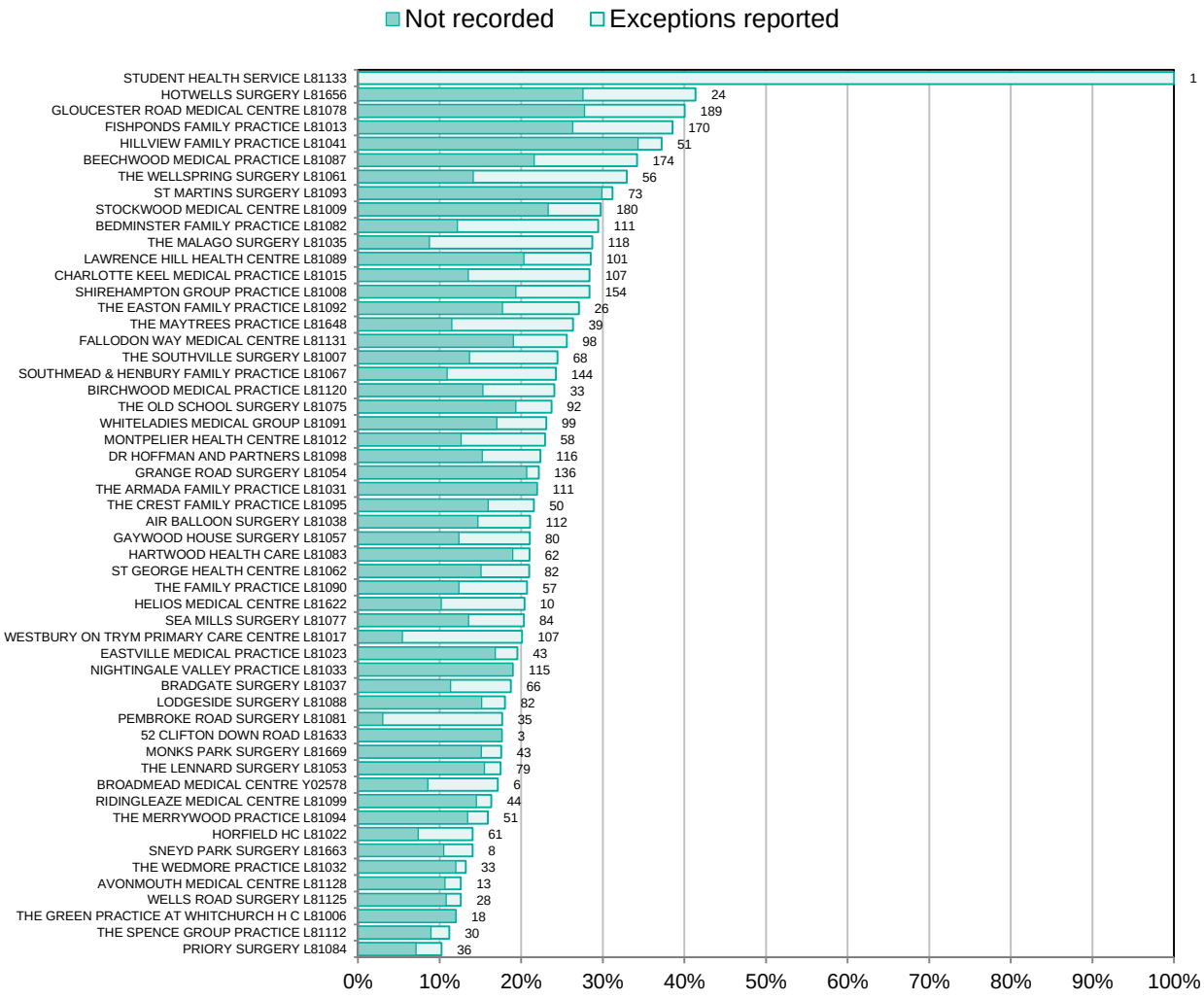
*Using the QOF clinical indicator CKD004 denominator plus exceptions. Note: as the CKD004 indicator was removed from the QOF in 15/16 this is historic data taken from the 2014/15 QOF.

Percentage of patients on the CKD register whose notes have a record of a urine albumin: creatinine ratio test in the preceding 12 months by CCG, 2014/15

Comparison with demographically similar CCGs



Percentage of patients on the CKD register whose notes do not have a record of a urine albumin: creatinine ratio test in the preceding 12 months by GP practice, 2014/15



- in total, including exceptions, there are 3,967 people who have no record of urine albumin:creatinine ratio test
- GP practice range: 10.3% to 100.0%

Heart

Management of Heart Disease

Premature death and disability in people with CHD can be reduced significantly by systematic evidence based management in primary care

Coronary Heart Disease is one of the principal causes of premature death and disability**.** The key elements of management for an individual who has already had a heart attack or angina are symptom control and secondary prevention of further cardiovascular events and premature mortality. There is robust evidence to support the use of anti-platelet treatment, statins, beta-blockers and angiotensin converting enzyme inhibitors or angiotensin receptor blockers. There is also robust evidence to support good control of blood pressure. Each of these interventions is incentivised in QOF but variation in achievement and exception reporting at practice level shows that there is often considerable potential for improving management and outcomes.

Heart failure is a common and an important complication of coronary heart disease and other conditions. Appropriate treatment including up-titration of ace inhibitors and beta blockers in heart failure due to LVSD can significantly improve symptom control and quality of life, and improve outcomes for patients. Despite this, around a quarter of people with heart failure are undetected and untreated. And amongst those who are diagnosed, there is significant variation in the quality of care.

What questions should we ask in our CCG?

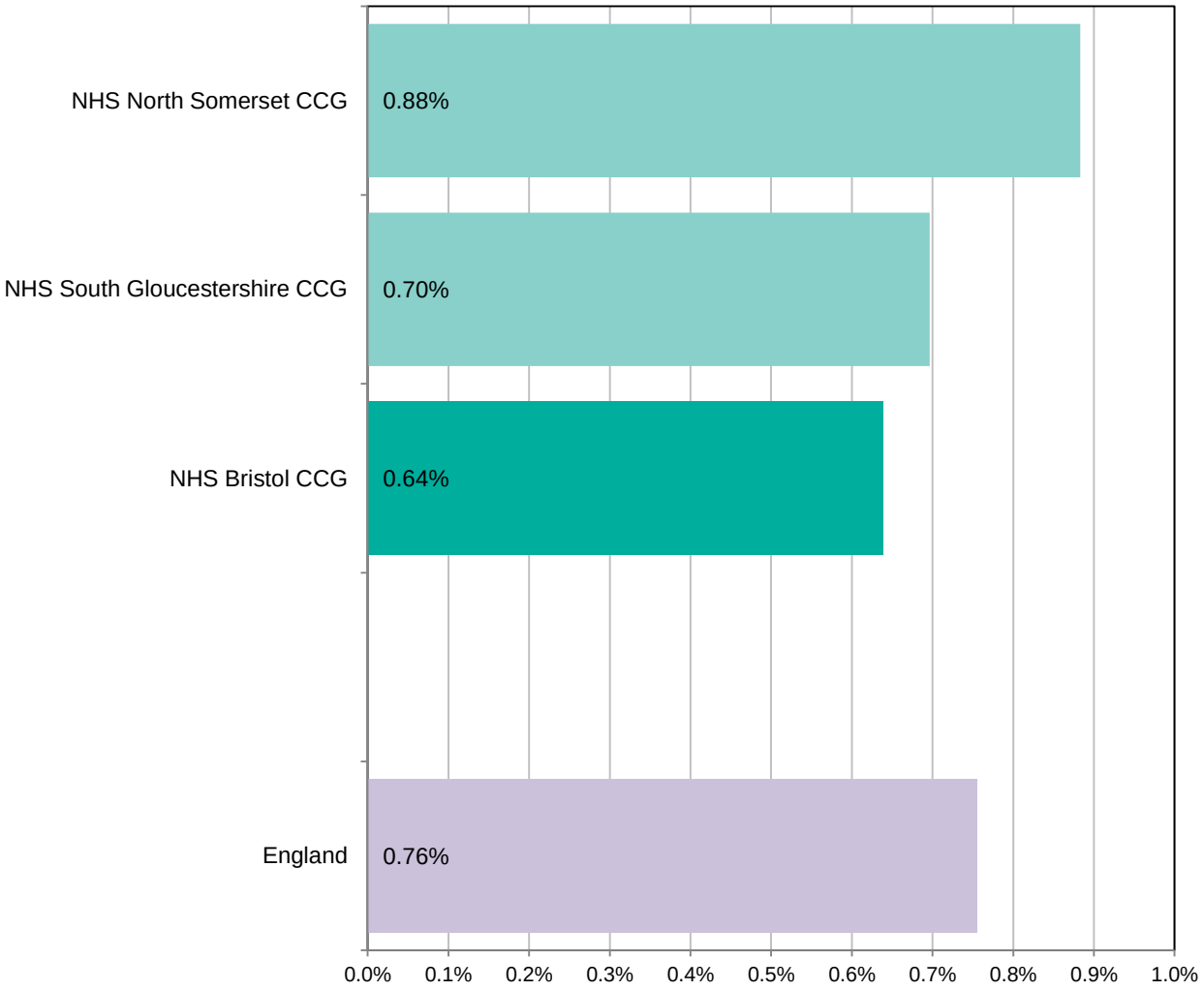
1. for each indicator how wide is the variation in achievement and exception reporting?
2. how many people would benefit if all practices performed as well as the best?
3. how can we support practices who are average and below average to perform as well as the best in:
    - more systematic delivery of evidence based care for people with CHD
    - improved detection and management of heart failure

What might help

1. roll out of GRASP-Heart Failure audit tool that identifies people with heart failure who are undiagnosed or under treated
2. education for health professionals to promote evidence based management of CHD and high quality measurement of blood pressure
3. ensure access to rapid access diagnostic clinics and specialist support for management of angina and heart failure
4. ensure access to cardiac rehab for individuals with CHD and heart failure

Heart failure prevalence by CCG

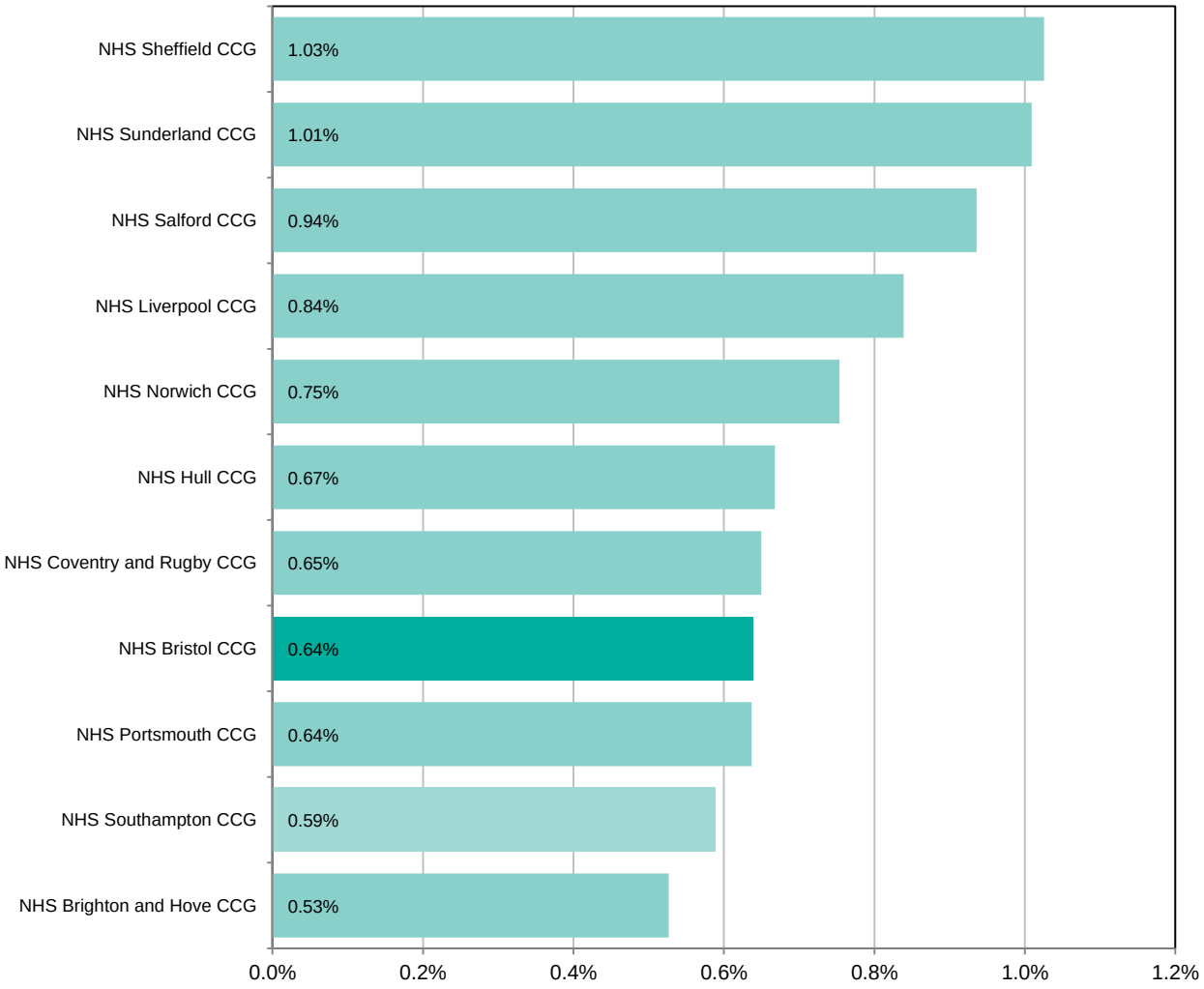
Comparison with CCGs in the STP



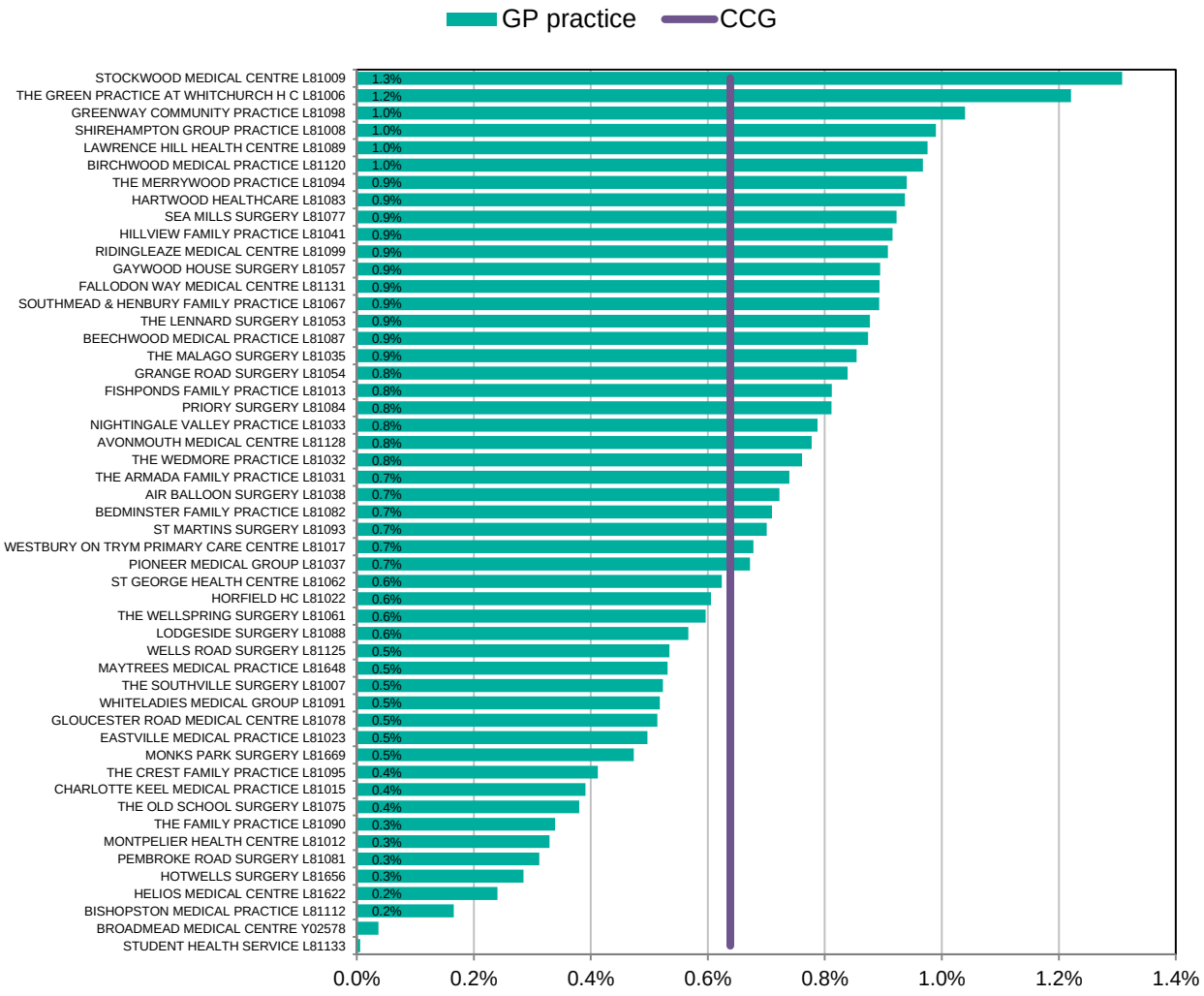
- prevalence of 0.64% in NHS Bristol CCG compared to 0.76% in England

Heart failure prevalence by CCG

Comparison with demographically similar CCGs



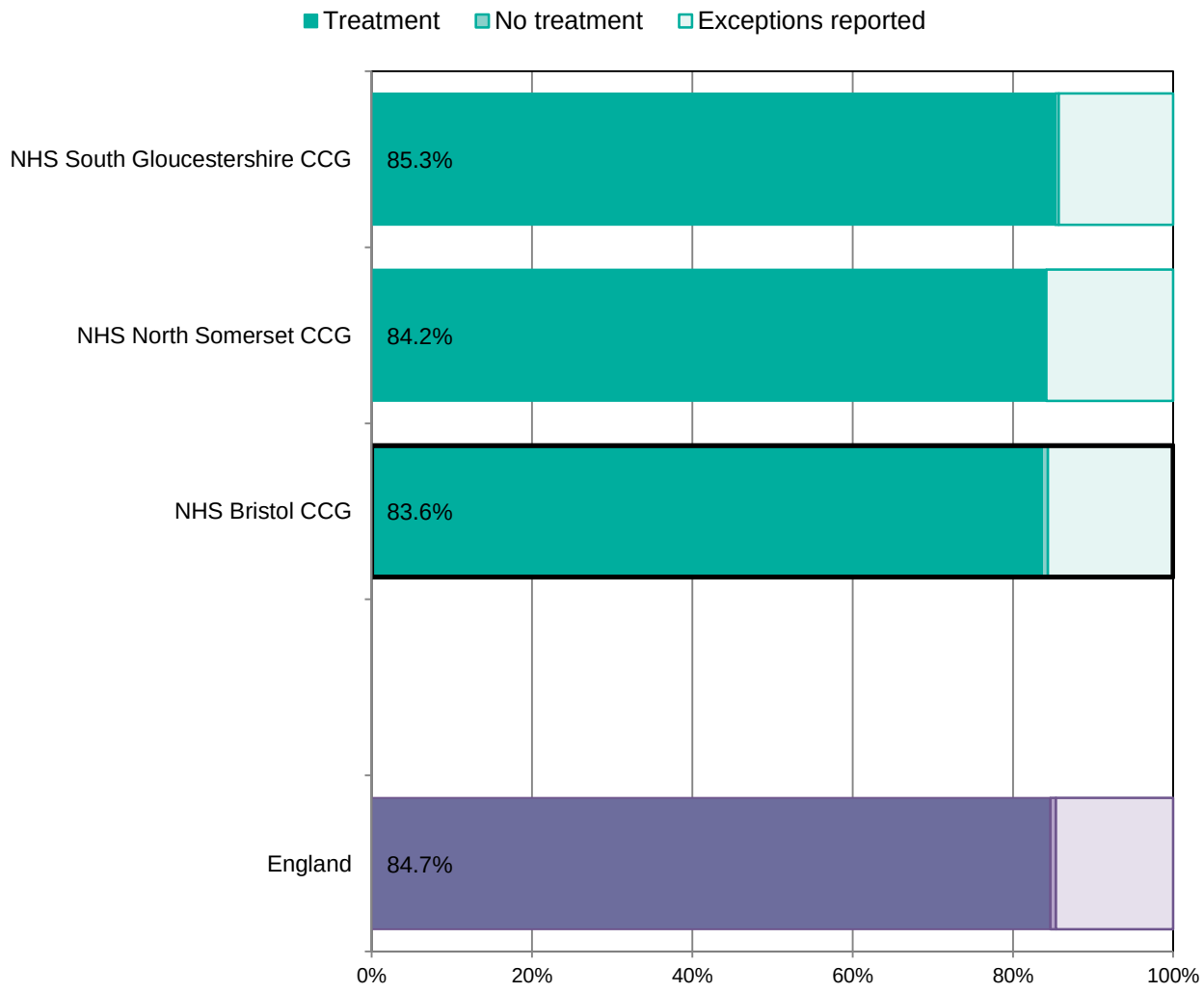
Heart failure prevalence by GP practice



- 3,176 people with diagnosed heart failure in NHS Bristol CCG
- GP practice range: 0.0% to 1.3%

Percentage of patients with heart failure due to left ventricular systolic dysfunction (LVSD) who are treated with ACE-I / ARB by CCG

Comparison with CCGs in the STP

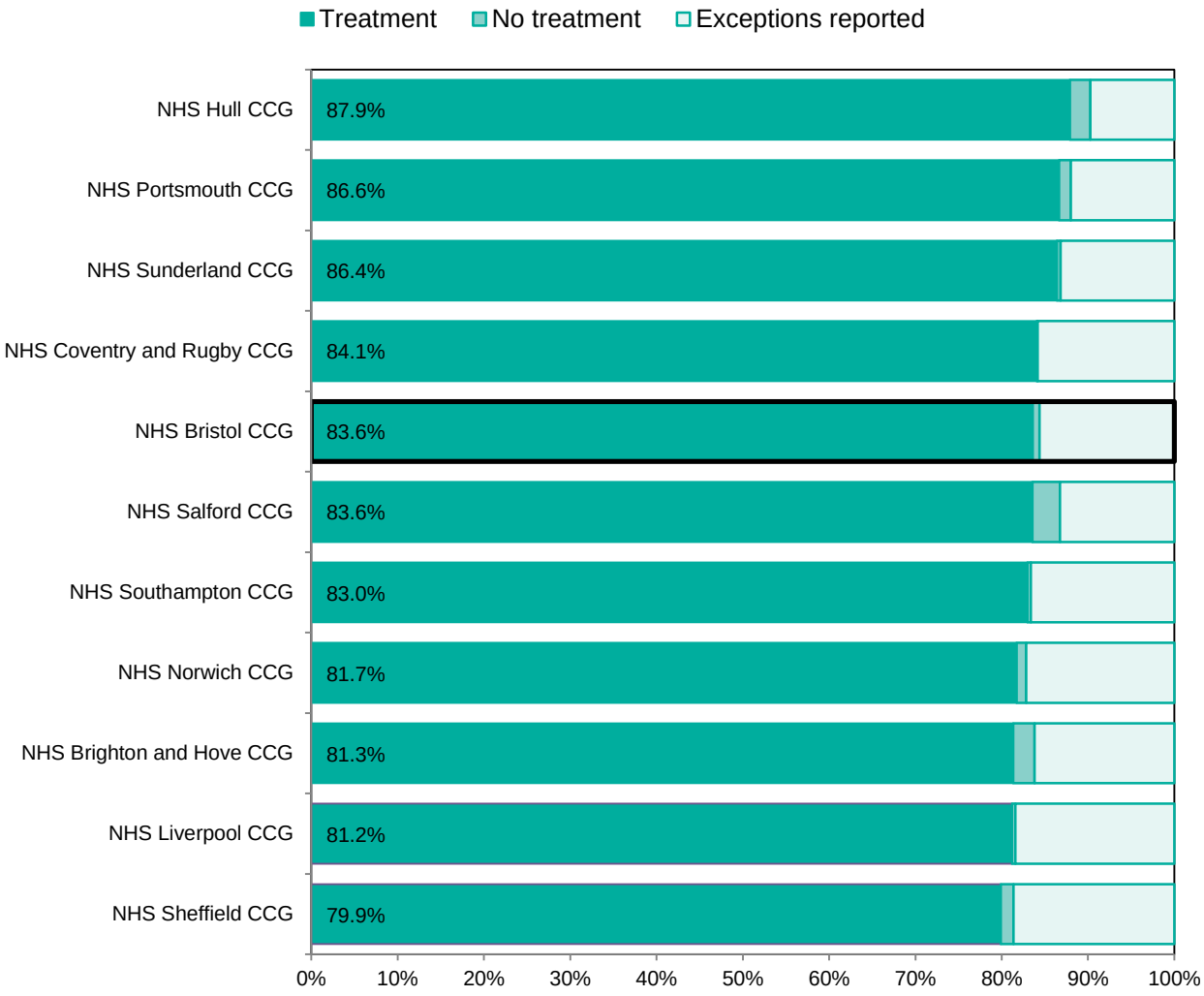


- 902 people with heart failure* with LVSD in NHS Bristol CCG
- 754 (83.6%) people treated with ACE-I or ARB
- 141 (15.6%) people who are exceptions
- 7 (0.8%) additional people who are not treated with ACE-I or ARB

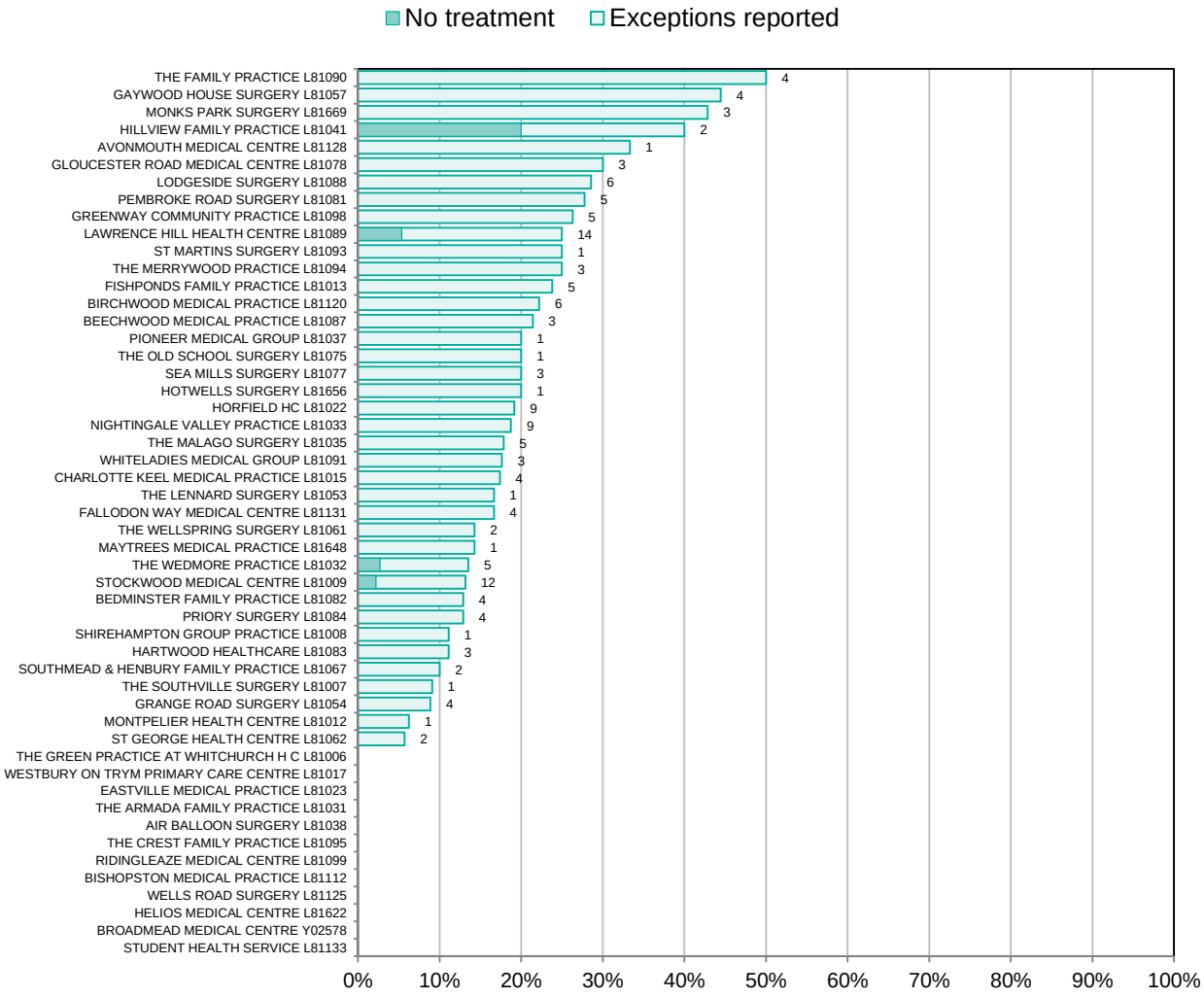
*Using the QOF clinical indicator HF003 denominator plus exceptions

Percentage of patients with heart failure due to left ventricular systolic dysfunction (LVSD) who are treated with ACE-I / ARB by CCG

Comparison with demographically similar CCGs



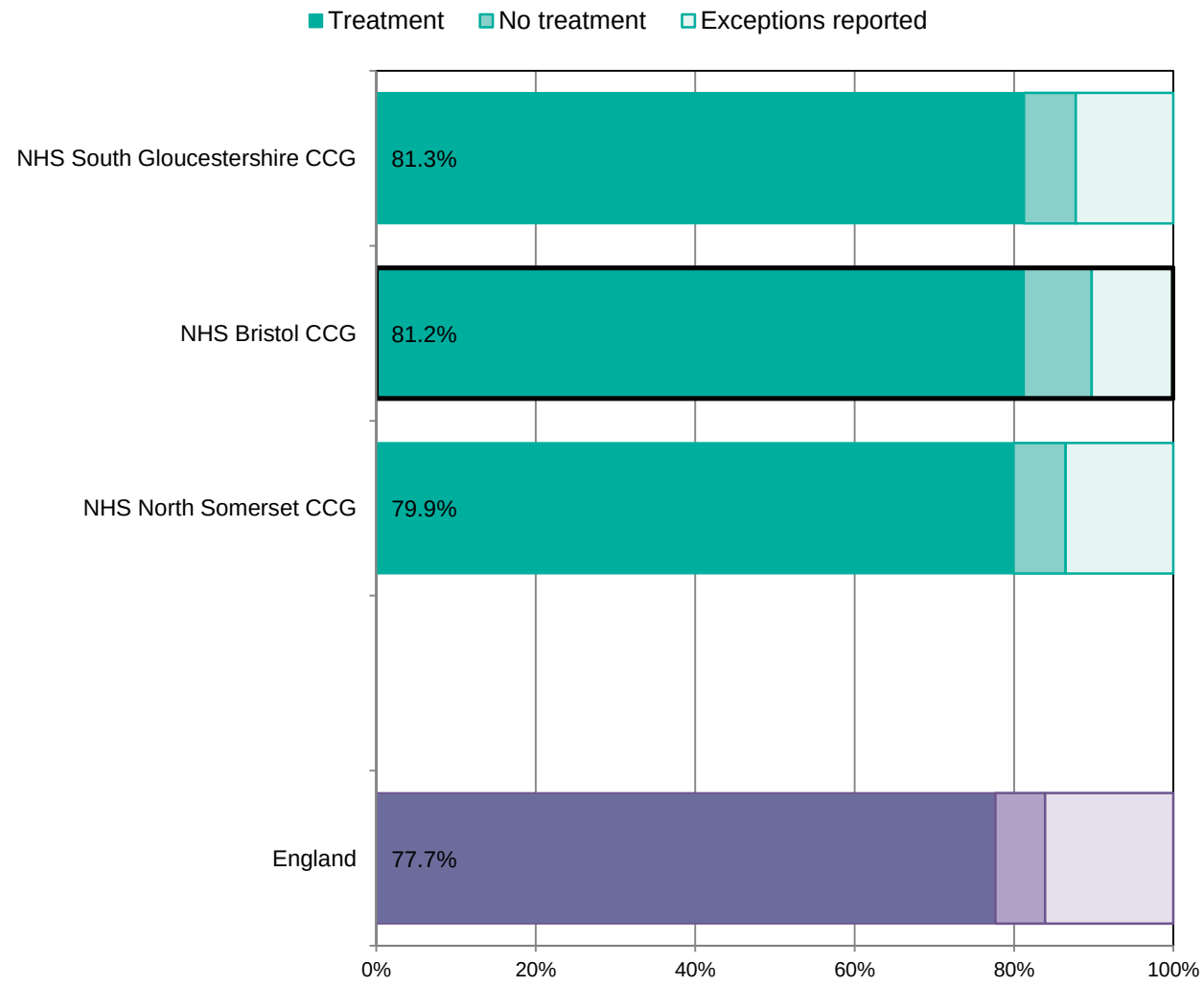
Percentage of patients with heart failure due to left ventricular systolic dysfunction (LVSD) who are not treated with ACE-I / ARB by GP practice



- in total, including exceptions, there are 148 people who are not treated with ACE-I or ARB
- GP practice range: 0.0% to 50.0%

Percentage of patients with heart failure due to left ventricular systolic dysfunction (LVSD) who are treated with ACE-I / ARB and BB by CCG

Comparison with CCGs in the STP

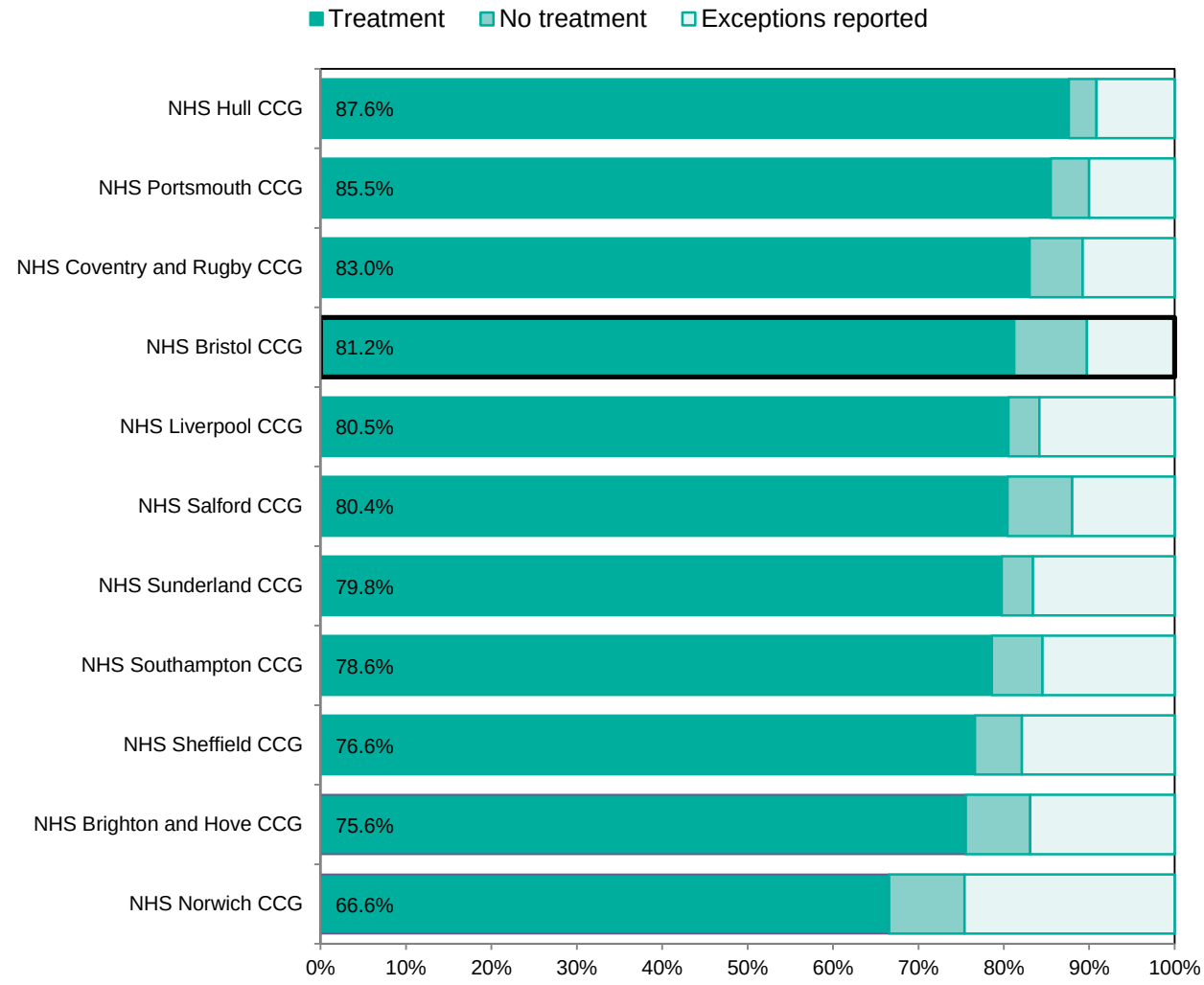


- 751 people with heart failure* with LVSD treated with ACE-I/ARB in NHS Bristol CCG
- 610 (81.2%) people treated with ACE-I/ARB and BB
- 77 (10.3%) people who are exceptions
- 64 (8.5%) additional people who are not treated with ACE-I/ARB and BB

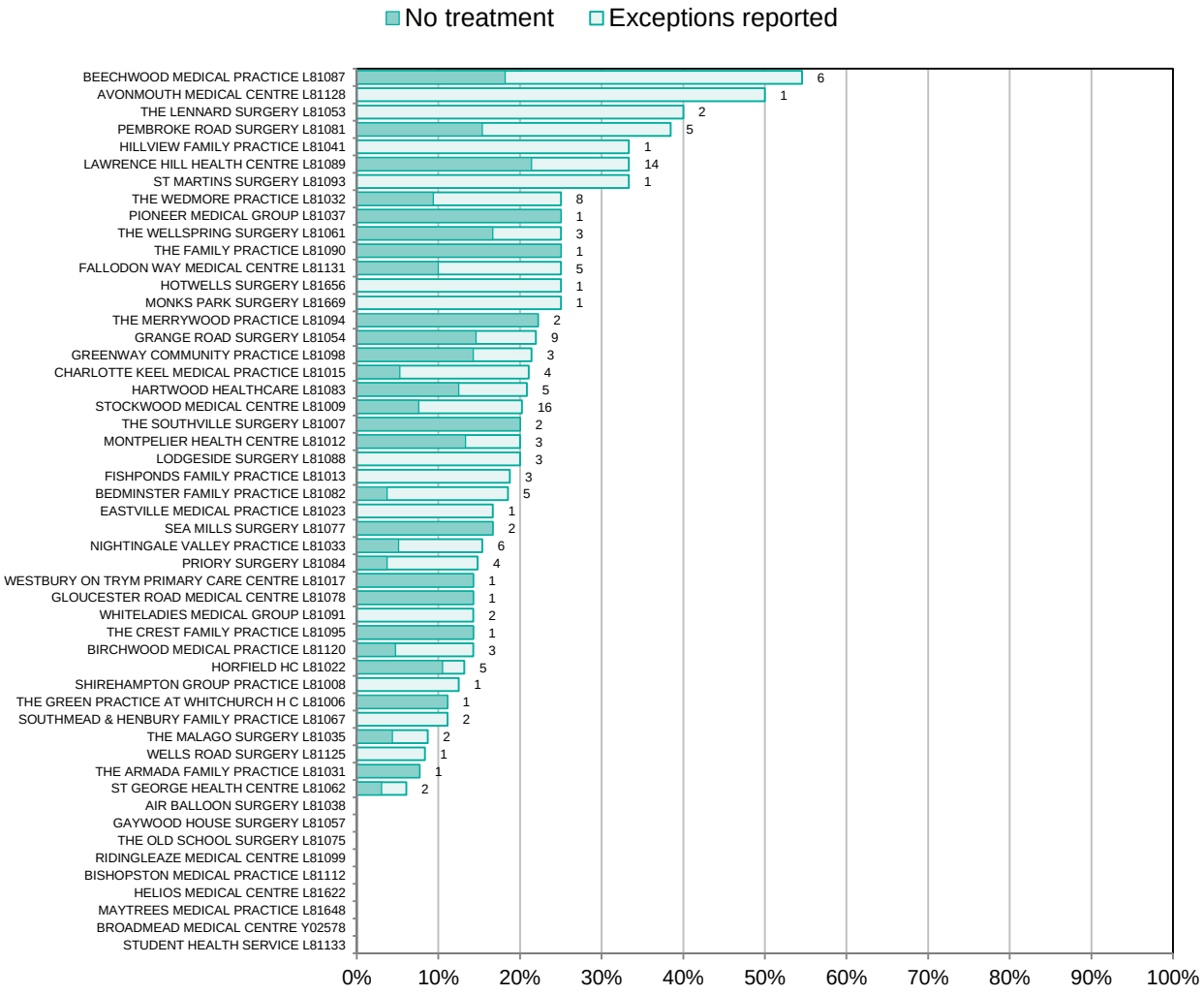
*Using the QOF clinical indicator HF004 denominator plus exceptions

Percentage of patients with heart failure due to left ventricular systolic dysfunction (LVSD) who are treated with ACE-I / ARB and BB by CCG

Comparison with demographically similar CCGs



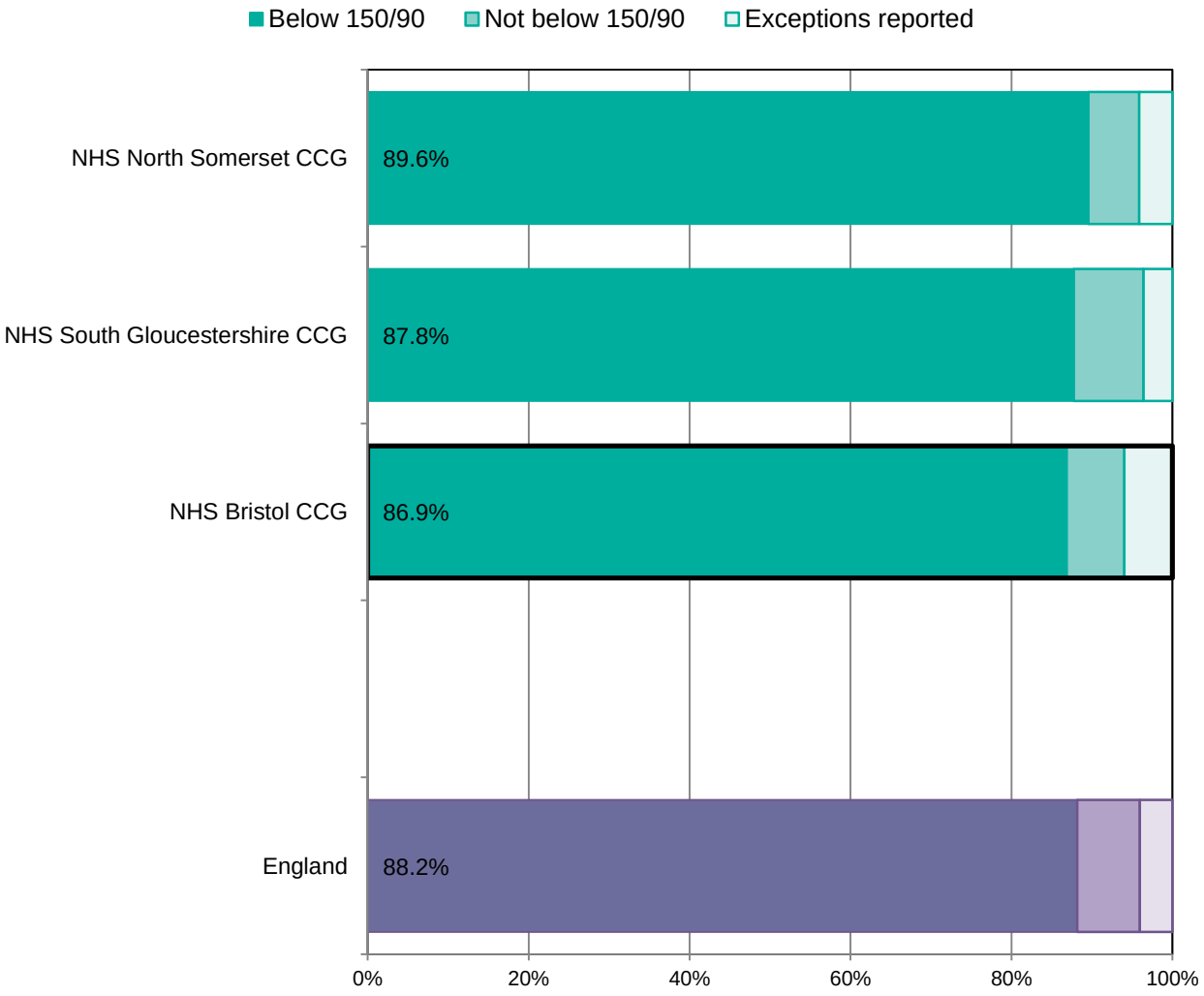
Percentage of patients with heart failure due to left ventricular systolic dysfunction (LVSD) who are not treated with ACE-I / ARB and BB by GP practice



- in total, including exceptions, there are 141 people who are not treated with ACE-I or ARB
- GP practice range: 0.0% to 54.5%

Percentage of patients with CHD whose blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less by CCG

Comparison with CCGs in the STP

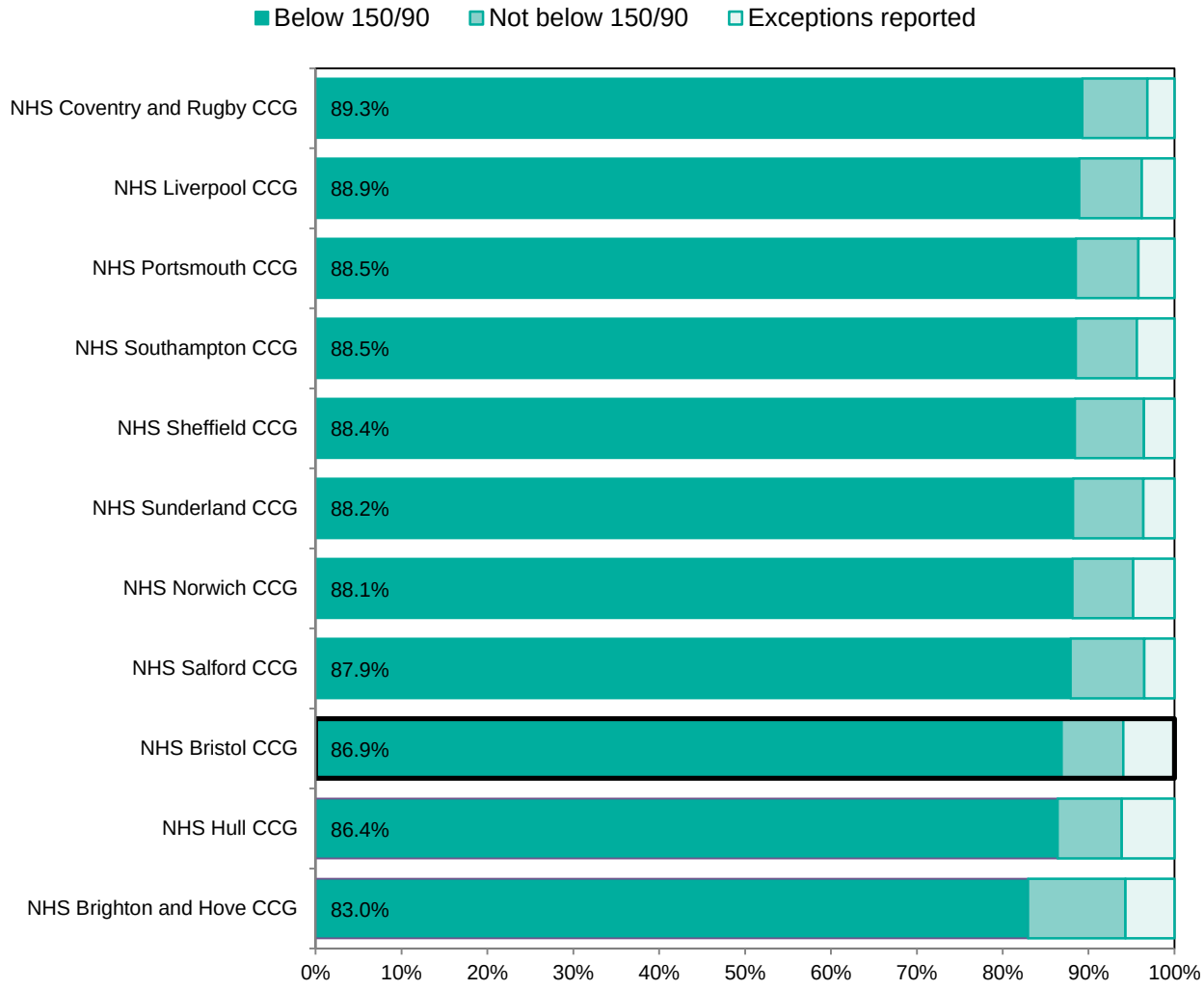


- 11,435 people with coronary heart disease* in NHS Bristol CCG
- 9,932 (86.9%) people whose blood pressure <= 150 / 90
- 681 (6%) people who are exceptions
- 822 (7.2%) additional people whose blood pressure is not <= 150 / 90

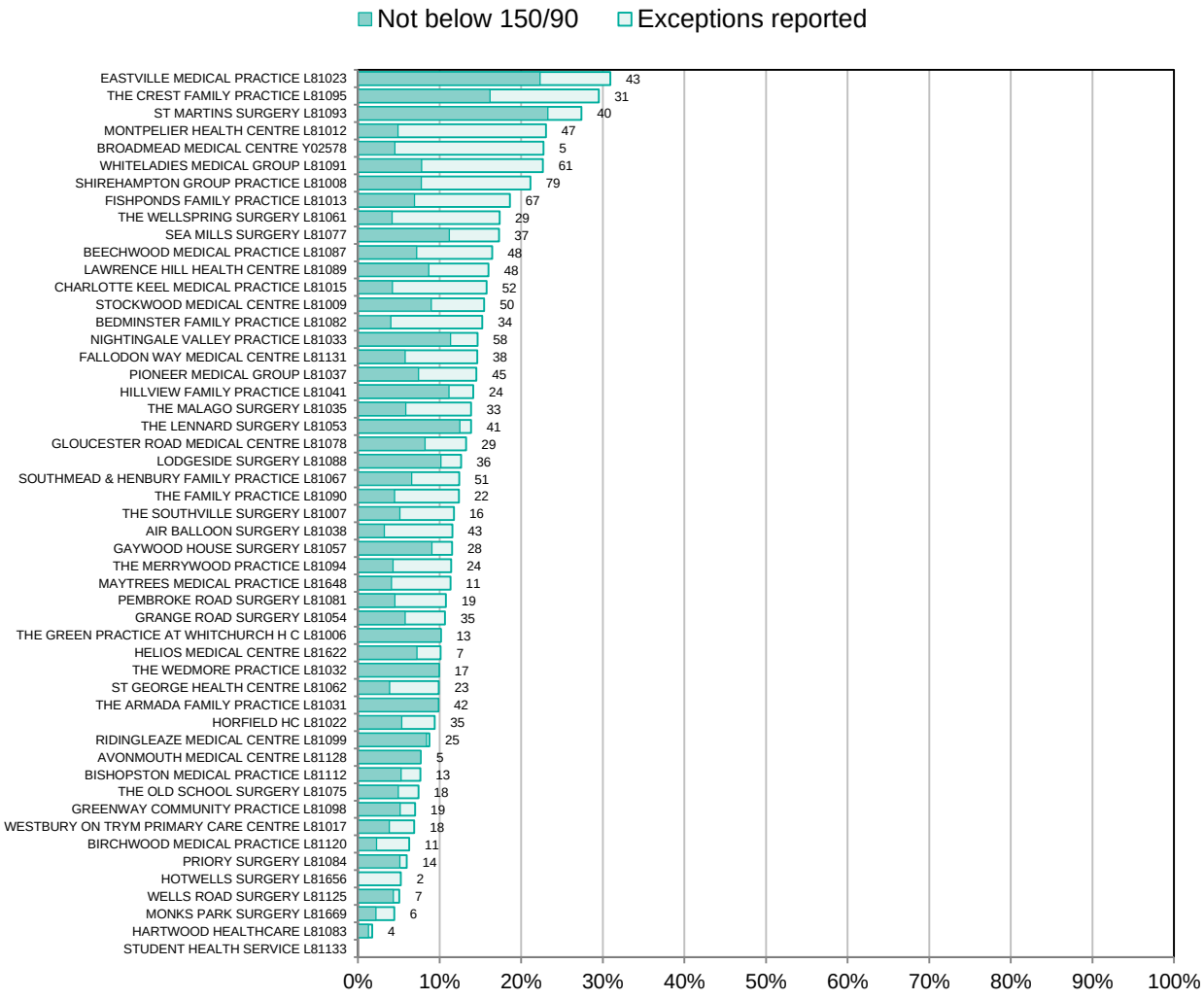
*Using the QOF clinical indicator CHD002 denominator plus exceptions

Percentage of patients with CHD whose blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less by CCG

Comparison with demographically similar CCGs

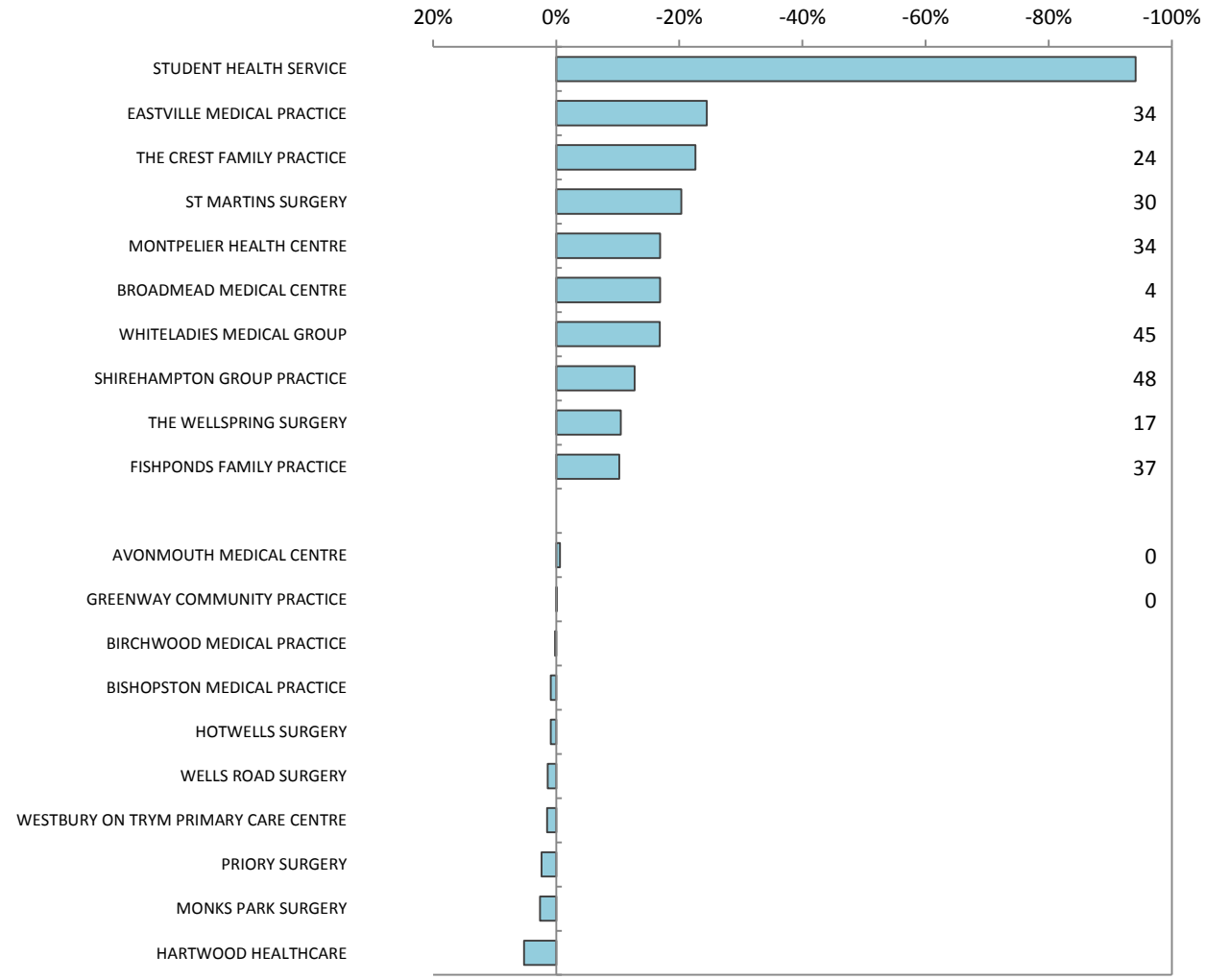


Percentage of patients with CHD whose blood pressure reading (measured in the preceding 12 months) is not 150/90 mmHg or less by GP practice



- in total, including exceptions, there are 1,503 people whose blood pressure is not <= 150 / 90
- GP practice range: 1.7% to 30.9%

Percentage of patients with CHD whose blood pressure reading (measured in the preceding 12 months) is not 150/90 mmHg or less by GP practice – opportunities compared to GP cluster

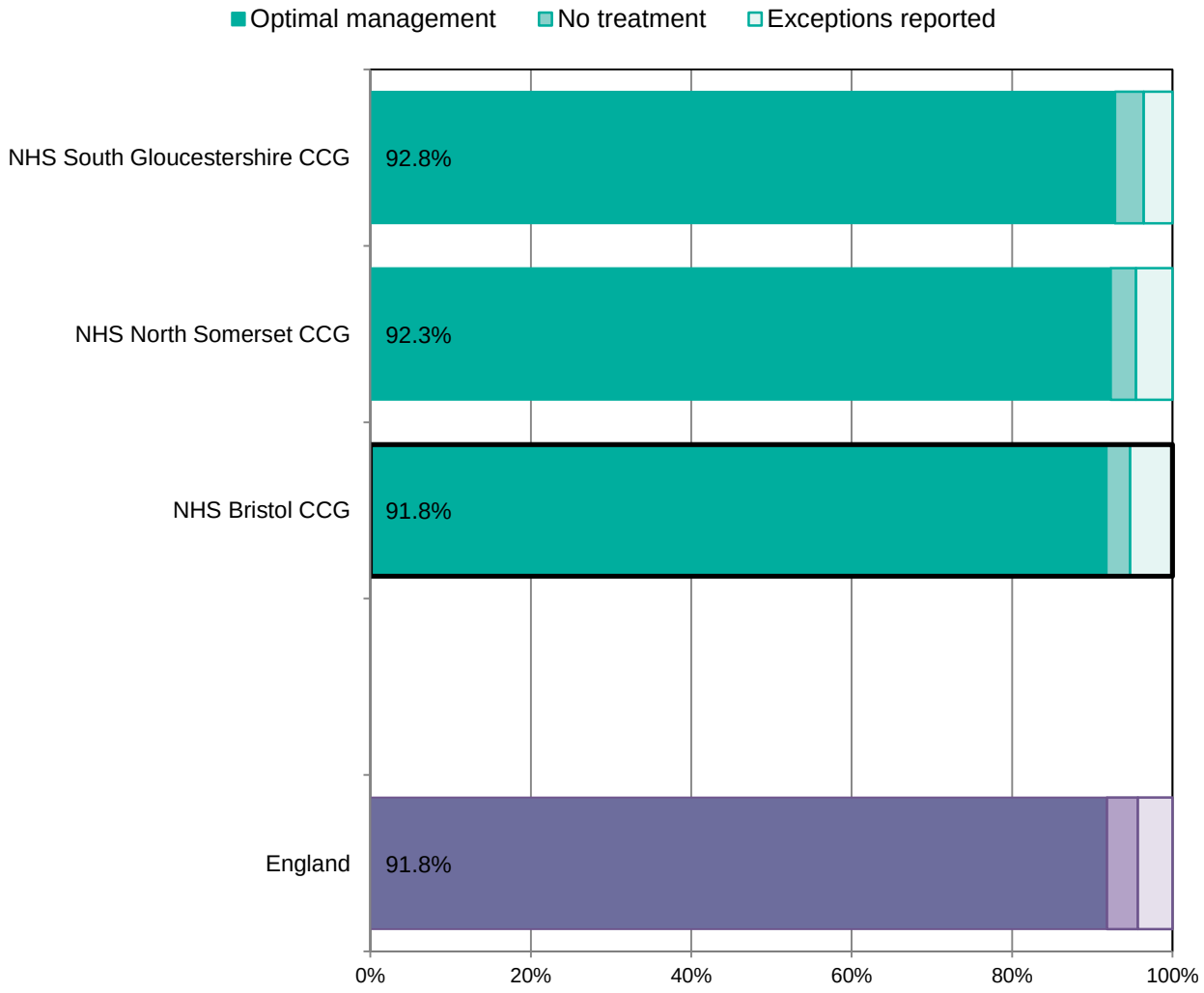


- using the GP cluster method of calculating potential gains, if each practice was to achieve as well as the upper quartile of its national cluster, then an additional 664 people would be treated

Details of this methodology are available on slide 9. Click here to view them.

Percentage of patients with CHD with a record in the preceding 12 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken by CCG

Comparison with CCGs in the STP

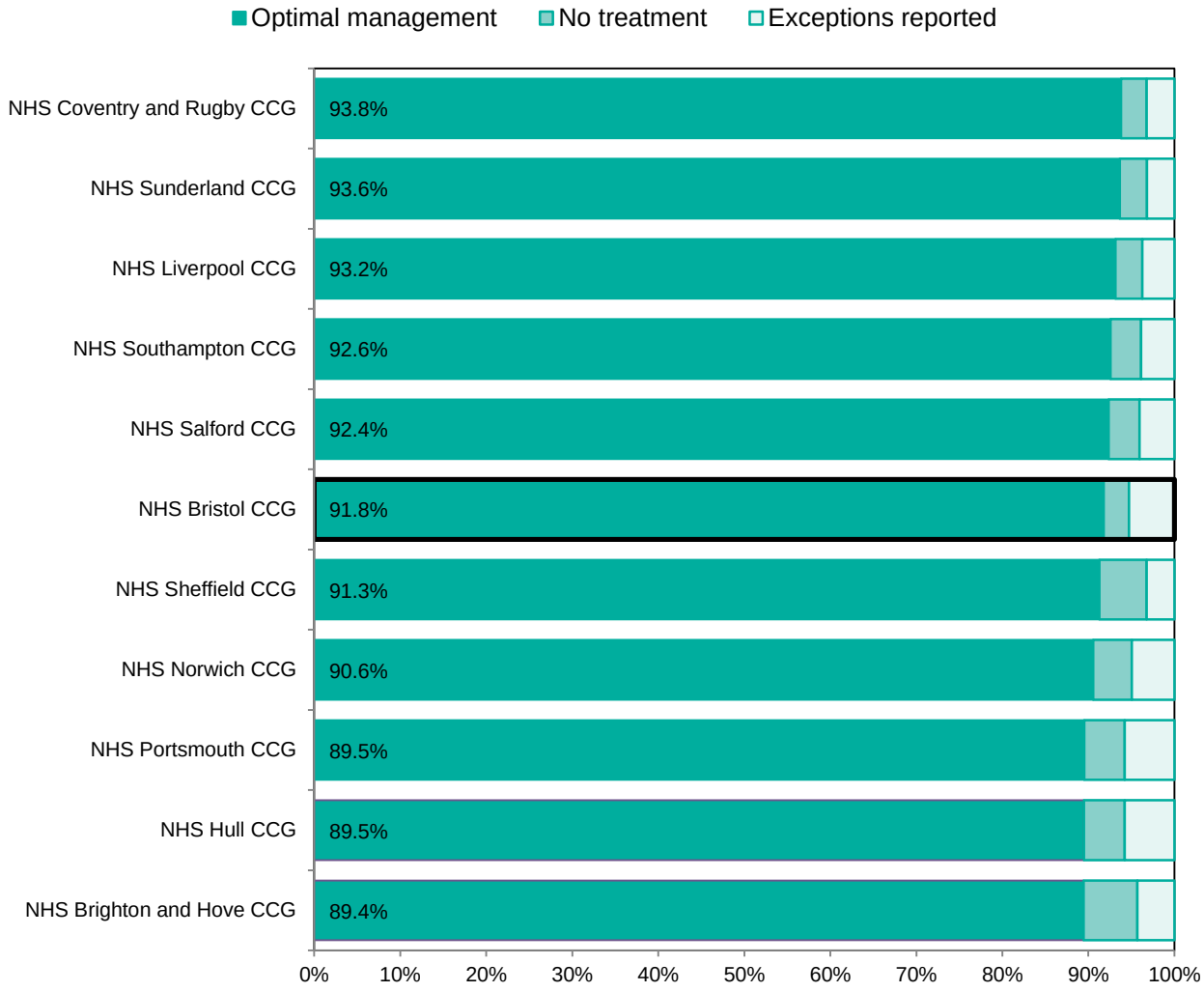


- 11,441 people with coronary heart disease* in NHS Bristol CCG
- 10,499 (91.8%) people who are taking aspirin, an alternative anti-platelet therapy, or an anti-coagulant
- 605 (5.3%) people who are exceptions
- 337 (2.9%) additional people who are not taking aspirin, an alternative anti-platelet therapy, or an anti-coagulant

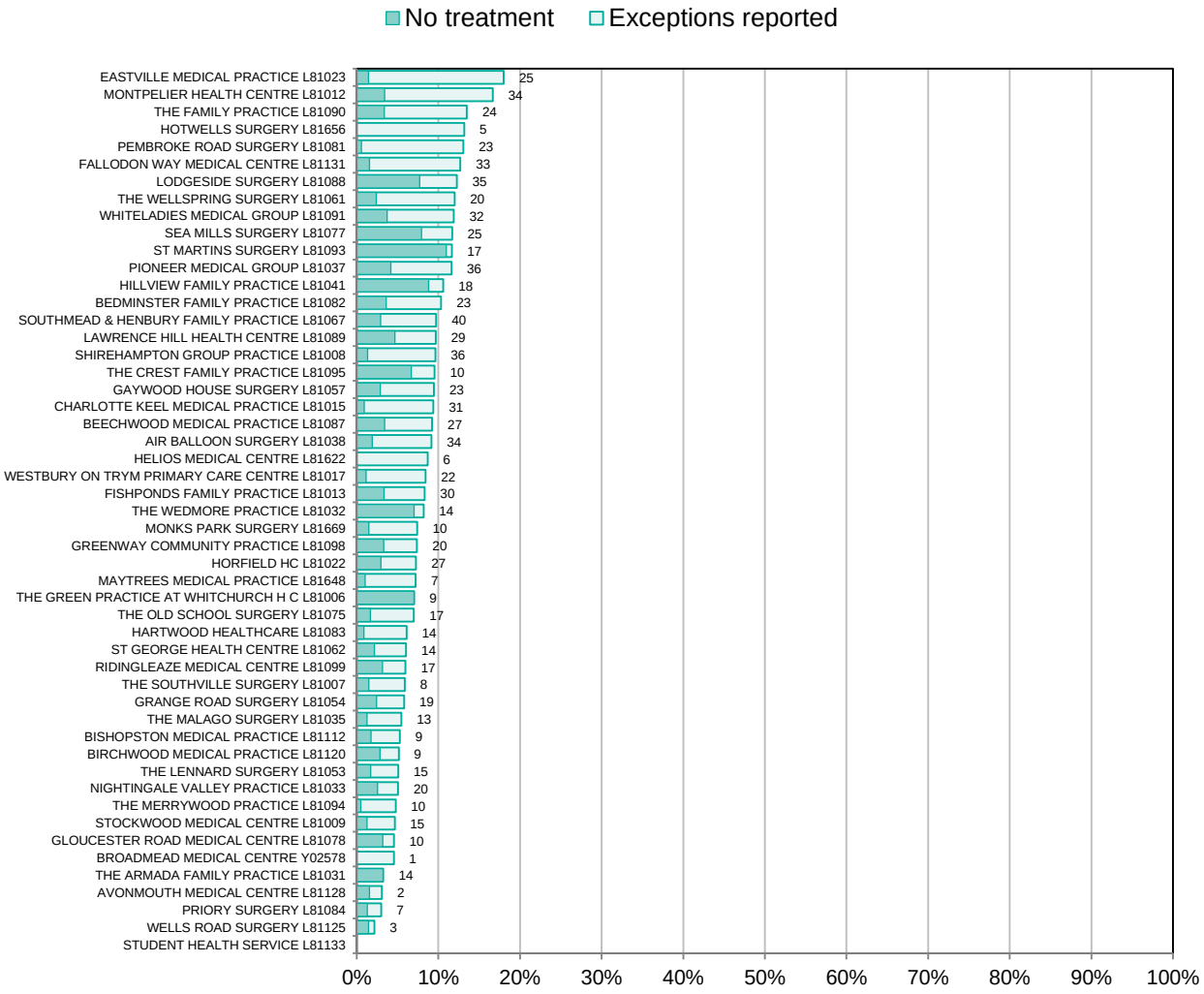
*Using the QOF clinical indicator CHD005 denominator plus exceptions

Percentage of patients with CHD with a record in the preceding 12 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken by CCG

Comparison with demographically similar CCGs



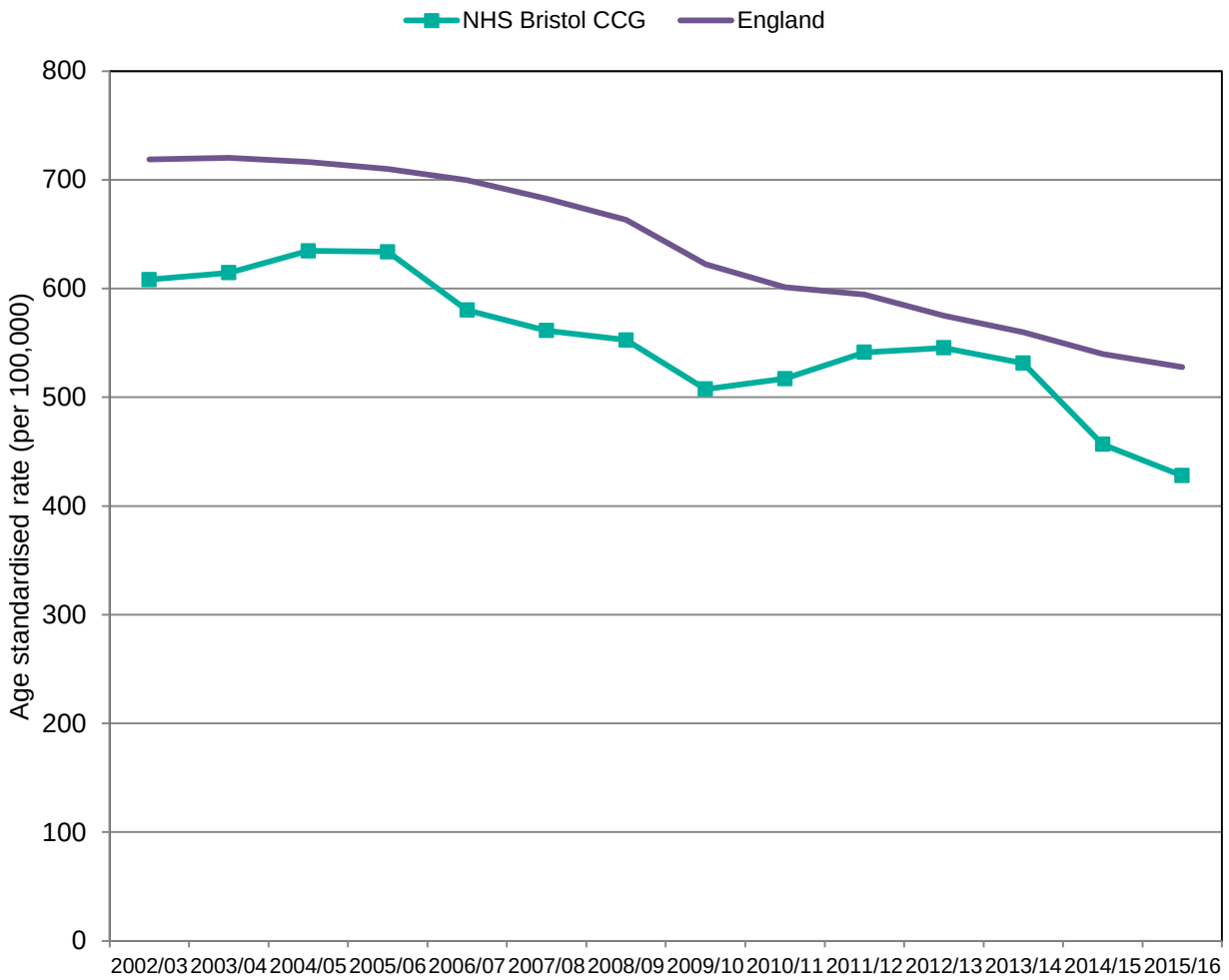
Percentage of patients with CHD without a record in the preceding 12 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken by GP practice



- in total, including exceptions, there are 942 people are not taking aspirin, an alternative anti-platelet therapy, or an anti-coagulant
- GP practice range: 2.2% to 18.0%

Some data on outcomes for people with cardiovascular disease

Hospital admissions for coronary heart disease for all ages 2002/03 – 2015/16



- in NHS Bristol CCG, the hospital admission rate for coronary heart disease in 2015/16 was 427.9 (1,349) compared to 527.9 for England

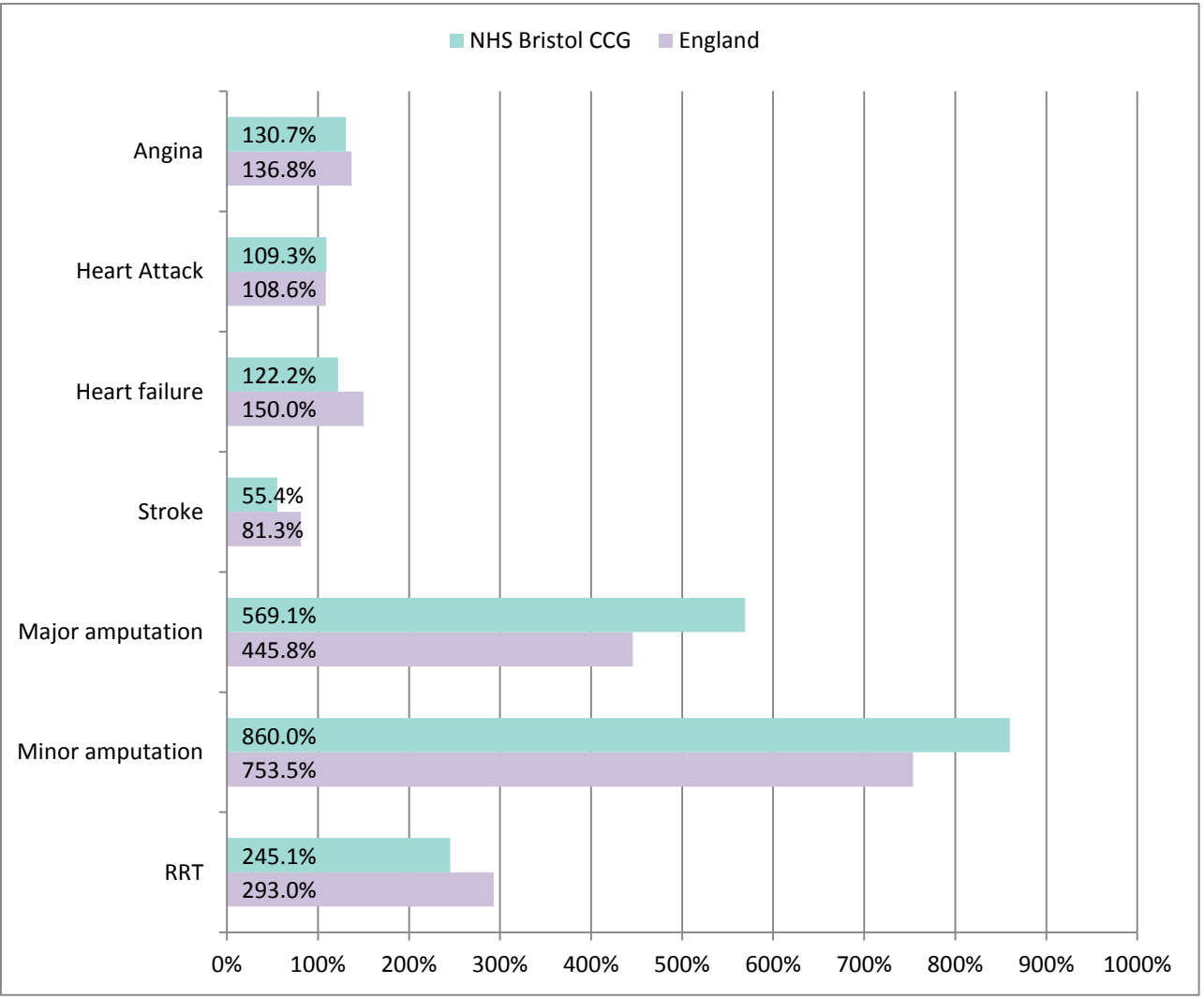
Source: Hospital Episode Statistics (HES), 2002/03 - 2015/16, Copyright © 2017, Re-used with the permission of NHS Digital. All rights reserved

Hospital admissions for stroke for all ages 2002/03 – 2015/16

- in NHS Bristol CCG, the hospital admission rate for stroke in 2015/16 was 146.4 (468) compared to 172.8 for England

Source: Hospital Episode Statistics (HES), 2002/03 - 2015/16, Copyright © 2017, Re-used with the permission of NHS Digital. All rights reserved

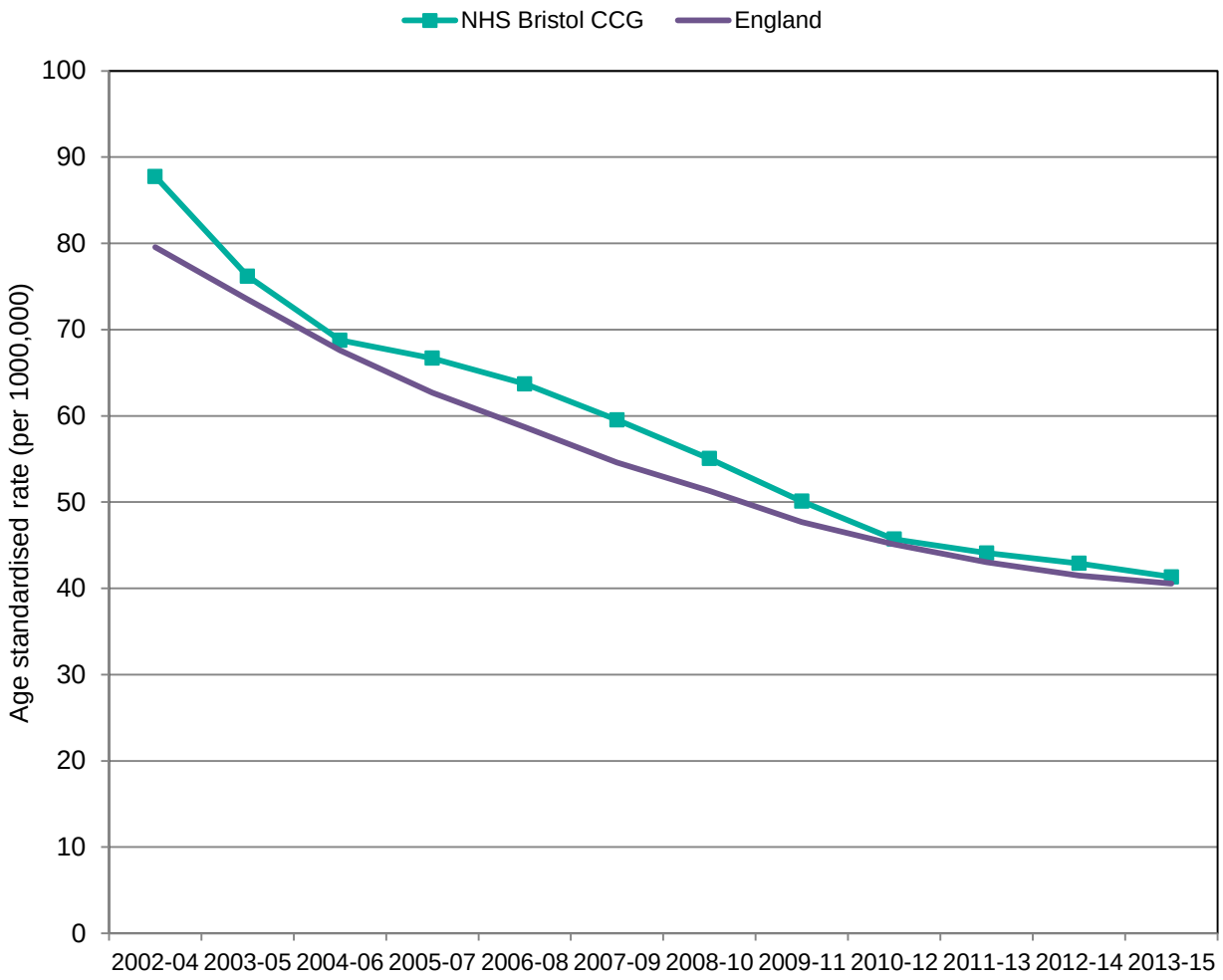
Additional risk of complications for people with diabetes, three year follow up, 2013/14



- The risk of a stroke was 55.4% higher and the risk of a heart attack was 109.3% higher compared to people without diabetes. The risk of a major amputation was 569.1% higher.

Note: This slide uses data from the National Diabetes Audit (NDA)

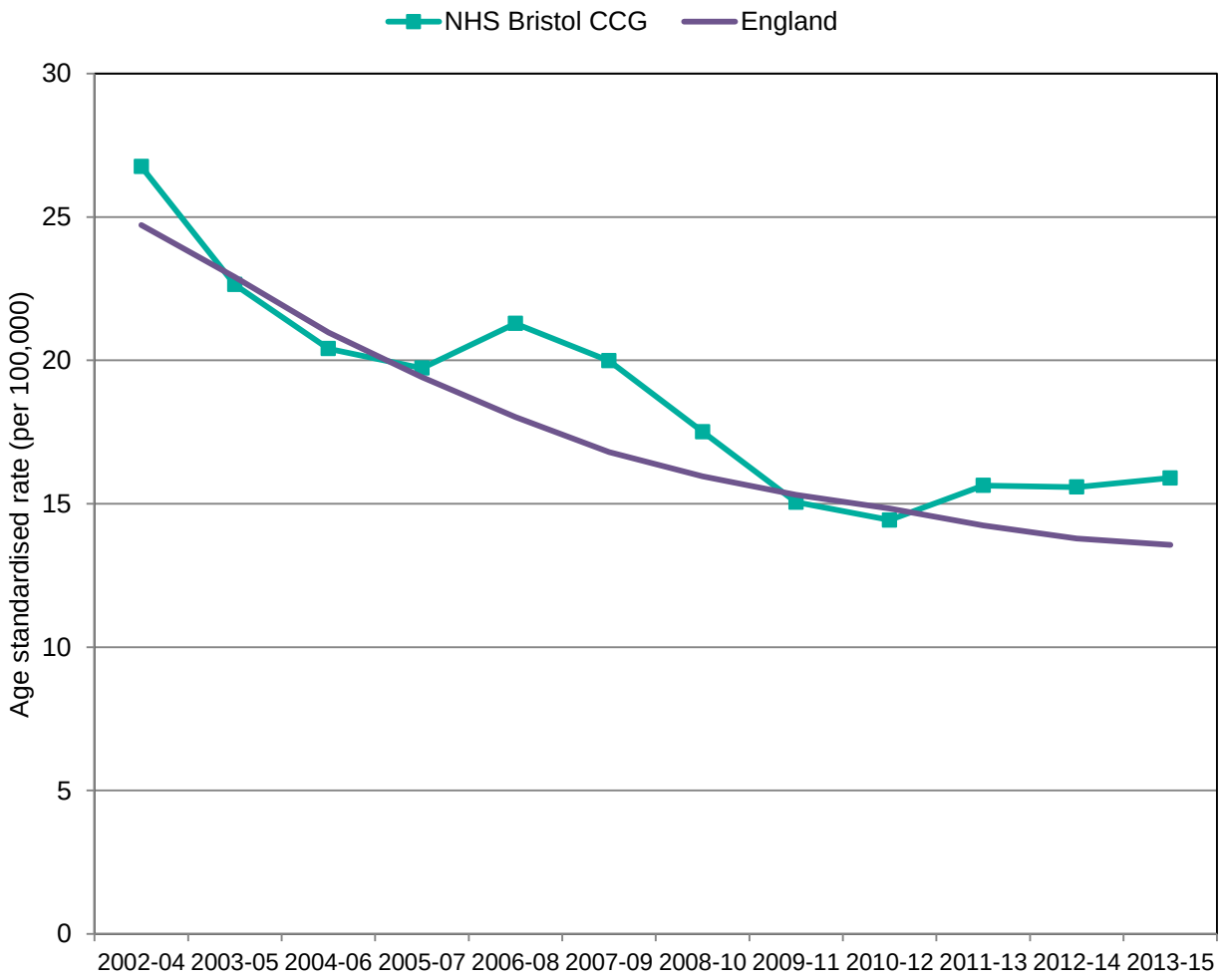
Deaths from coronary heart disease, under 75s



- in NHS Bristol CCG, the early mortality rate for coronary heart disease in 2013-15 was 41.3, compared to 40.6 for England

Source: Office for National Statistics (ONS) mortality data 2002 - 2015

Deaths from stroke, under 75s



- in NHS Bristol CCG, the early mortality rate for stroke in 2013-15 was 15.9, compared to 13.6 for England

Source: Office for National Statistics (ONS) mortality data 2002 - 2015

Appendix

Data sources

- Quality and Outcomes Framework (QOF), 2015/16, Copyright © 2016, re-used with the permission of NHS Digital. All rights reserved
- Non-diabetic hyperglycaemia prevalence estimates, NCVIN, PHE: https://www.gov.uk/government/publications/nhs-diabetes-prevention-programme-non-diabetic-hyperglycaemia
- Diabetes prevalence estimates, NCVIN, PHE: https://www.gov.uk/government/publications/diabetes-prevalence-estimates-for-local-populations
- CKD Prevalence model, G.Aitken, University of Southampton , 2014 https://www.gov.uk/government/publications/ckd-prevalence-estimates-for-local-and-regional-populations
- Hypertension prevalence estimates for local CCG populations. Created using data from: QOF hypertension registers 2014/15 and; Undiagnosed hypertension estimates for adults 16 years and older. 2014. Department of Primary Care & Public Health, Imperial College London https://www.gov.uk/government/publications/hypertension-prevalence-estimates-for-local-populations
- NHS Stop smoking services Copyright © 2014, NHS Digital
- Norberg J, Bäckström S , Jansson J-H, Johansson L. Estimating the prevalence of atrial fibrillation in a general population using validated electronic health data. Clin Epidemiol 2013 ; 5 475 – 81.
- National Diabetes Audit, 2013/14 and 2015/16, Copyright © 2016, re-used with the permission of NHS Digital. All rights reserved
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About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

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