Public Health England

Protecting and improving the nation's health

CVD: Primary Care Intelligence Packs

CCG: NHS Kernow CCG

April 2016
Version 1.0

Contents

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

Every year in England there are around 150,000 premature deaths. A quarter of premature deaths are due to cardiovascular disease. Two thirds of premature deaths could be avoided through improved prevention, earlier detection and better treatment. High quality primary care is crucial for 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 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 and what average or below average achievers 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 AF, diabetes, kidney and 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, use of audit tools to get a better understanding of the gaps in care and outcomes, agreeing local protocols and consensus approaches, assessing training and education needs, and exploring new ways of delivering care.

Data and methods

This slide pack compares the clinical commissioning group (CCG) with CCGs in its strategic clinical network (SCN) and England. Where a CCG is in more than one SCN, it has been allocated to the SCN 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 Kernow CCG are:
NHS Somerset CCG
NHS Cumbria CCG
NHS Coastal West Sussex CCG
NHS Gloucestershire CCG
NHS Dorset CCG
NHS West Hampshire CCG
NHS Northumberland CCG
NHS East Riding of Yorkshire CCG
NHS North East Essex CCG
NHS Ipswich and East Suffolk CCG

The majority of data used in the packs are taken from the 2014/15 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 2014/15 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 (i.e. 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 – i.e. 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 …….

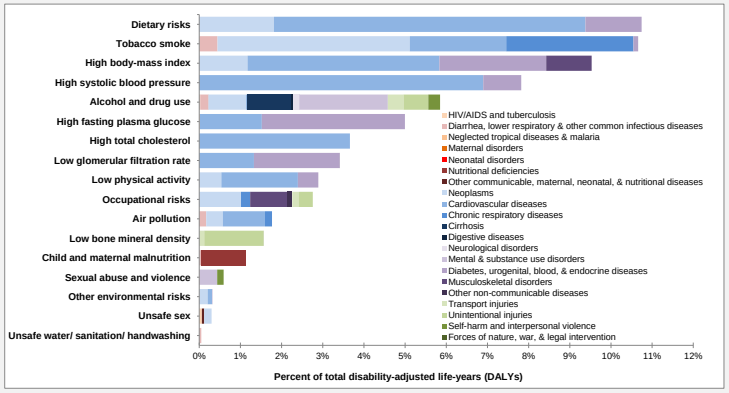
Excepting patients from indicators puts them at risk of not receiving optimal care and of having worse outcomes. It is also likely to increase health inequalities. The substantial variation seen in exception reporting for some indicators suggests that some practices are more effective than others at 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.

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 ongoing behaviour change support and medical treatment for individuals during their frequent contacts with primary care.

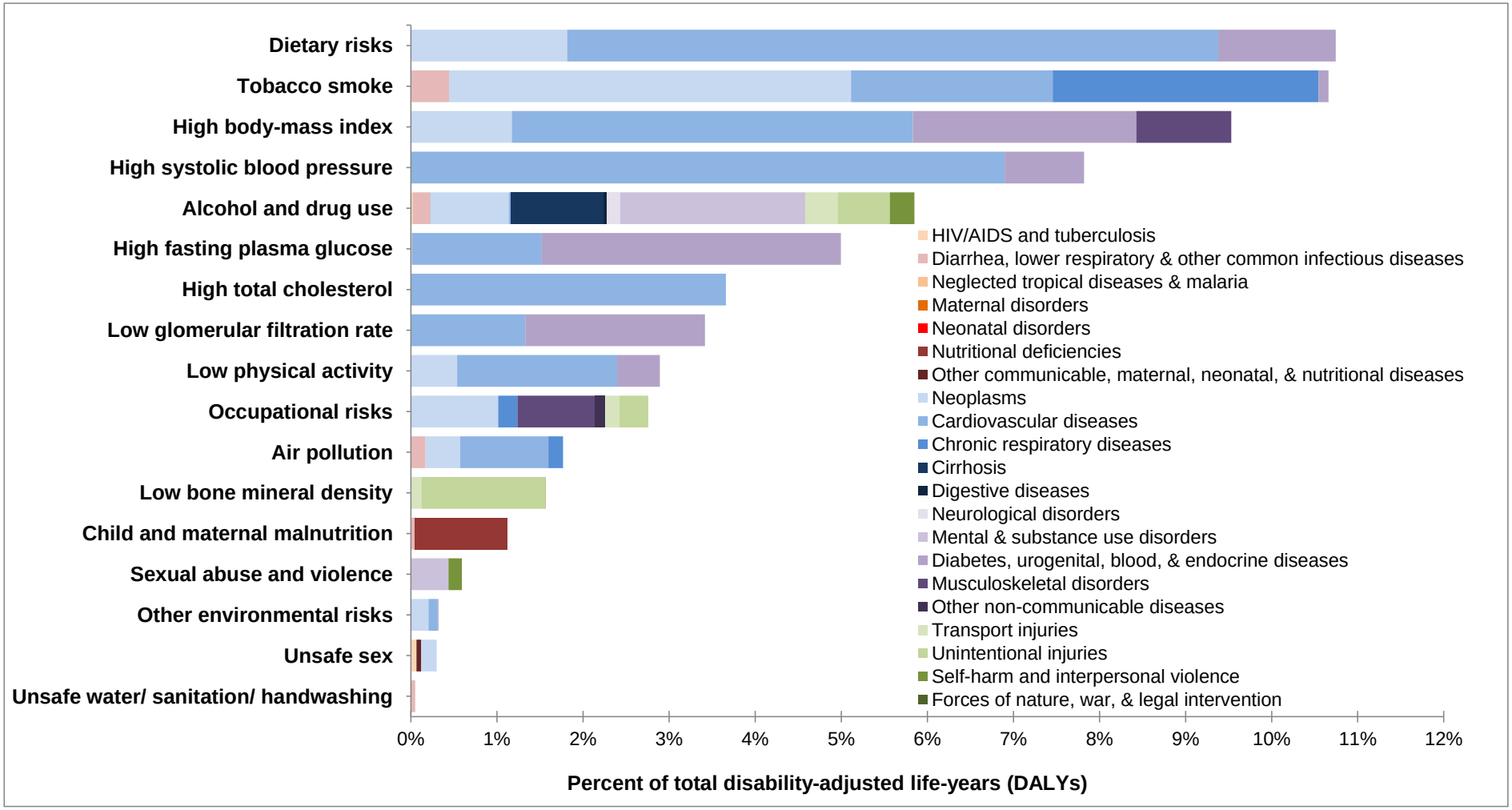
The size of the prevention problem

- 2/3 of people are obese or overweight
- 1/3 of people are physically inactive
- 20% of people smoke but this rises to over 50% in some communities
- Evidence based interventions are effective in tackling these behavioural risk factors
- Thousands of people in every CCG have undiagnosed or undertreated physiological risk factors such as hypertension, atrial fibrillation, chronic kidney disease, diabetes and non-diabetic hyperglycaemia

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 hypertension, CKD, diabetes and pre-diabetes. Modelling suggests that high uptake will lead to substantial reductions in premature mortality.

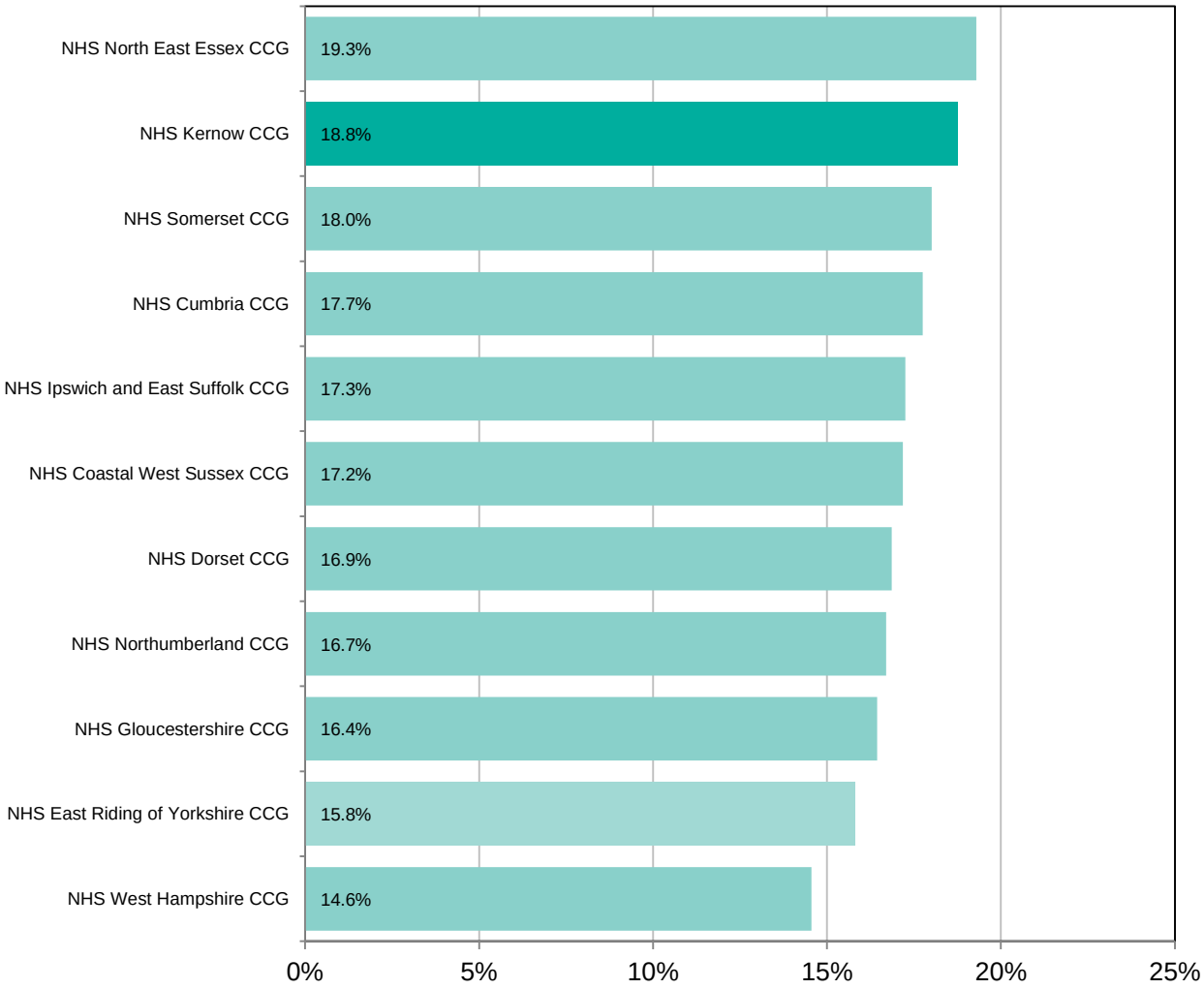
Question: What proportion of our local eligible population is receiving the NHS Health Check and how effective is their follow-up management of risk factors in primary care?

Global Burden of Disease Study 2013
Leading causes of premature death and disability in England
Expressed as a percentage of disability-adjusted life-years



Estimated smoking prevalence (QOF) by CCG

Comparison with demographically similar CCGs

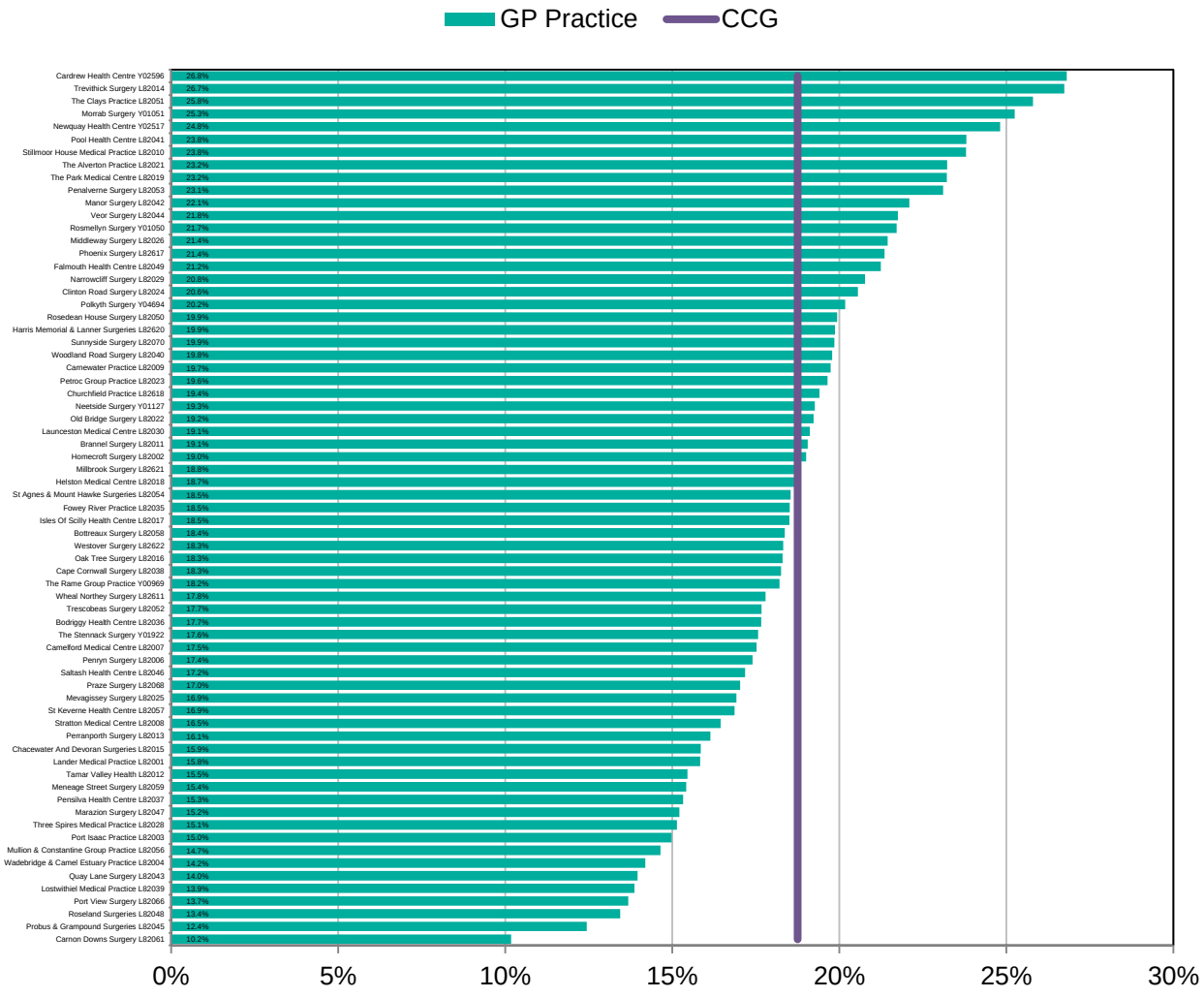


- Prevalence of 18.8% in NHS Kernow CCG

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

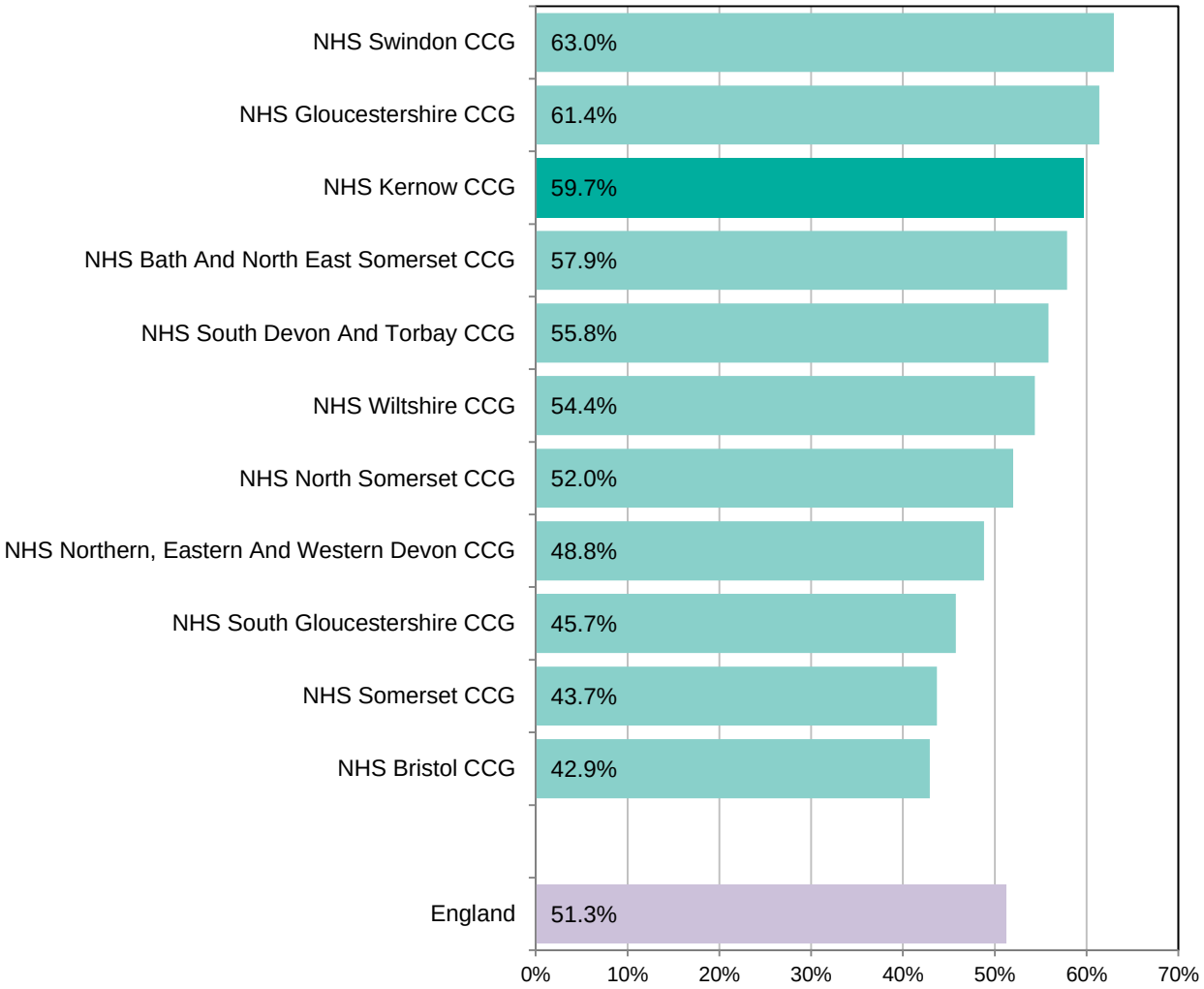


- 87,632 people who are recorded as smokers in NHS Kernow CCG
- GP practice range: 10.2% to 26.8%

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.

Successful smoking quitters at 4 weeks, 2013/14

Comparison with CCGs in the SCN

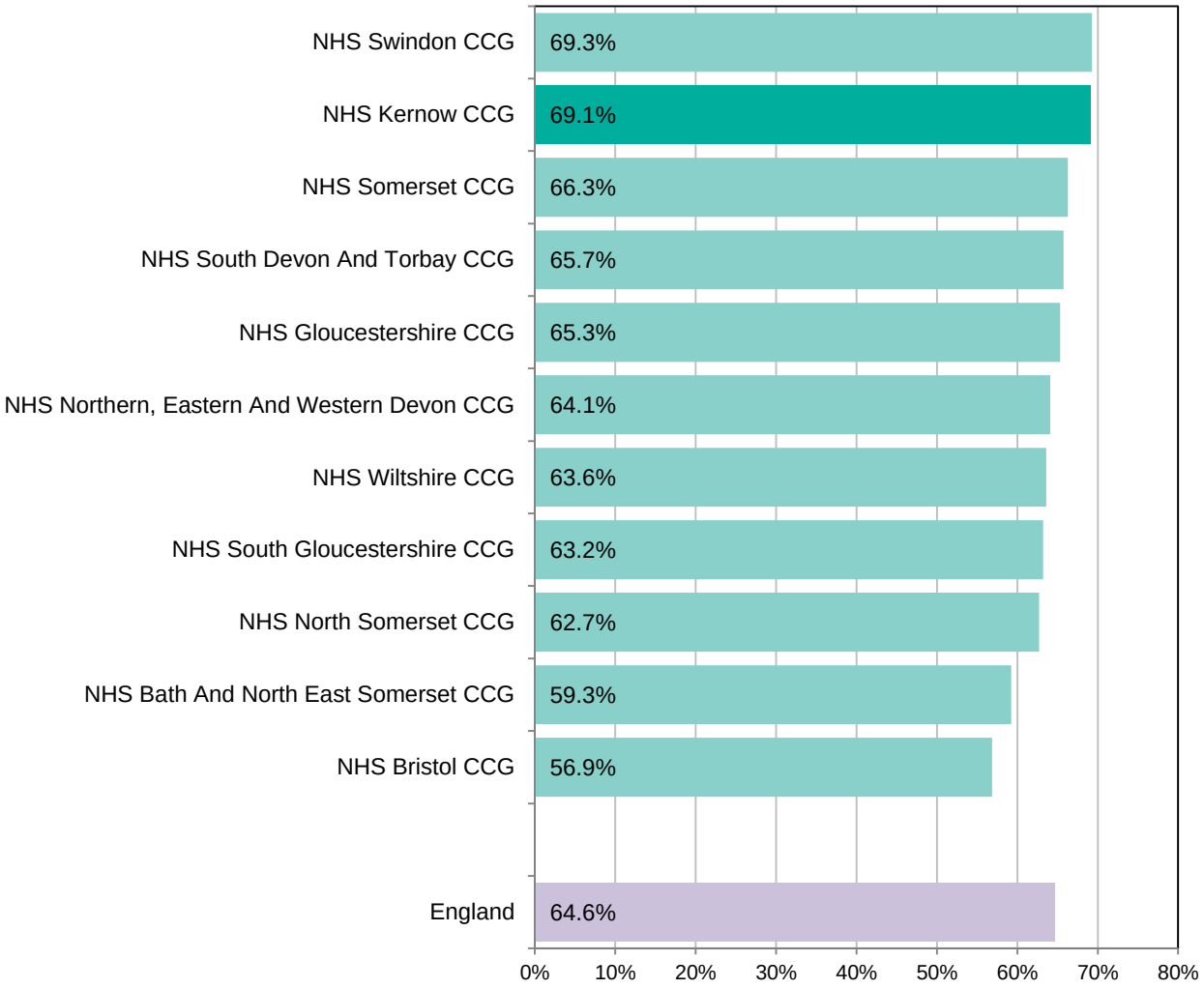


- 59.7% successful smoking quitters at 4 weeks in NHS Kernow CCG compared to 51.3% in England

Note: The local authority indicator, successful smoking quitters at 4 weeks from the Health and Social Care Information Centre, has been used as a basis for estimating CCG level smoking quitters. Where more than one local authority is contained within a CCG, the proportion of the local authority within the CCG has been allocated to the CCG and aggregated up to give CCG estimates.

Excess weight (overweight or obese) in adults, 2012-2014

Comparison with CCGs in the SCN

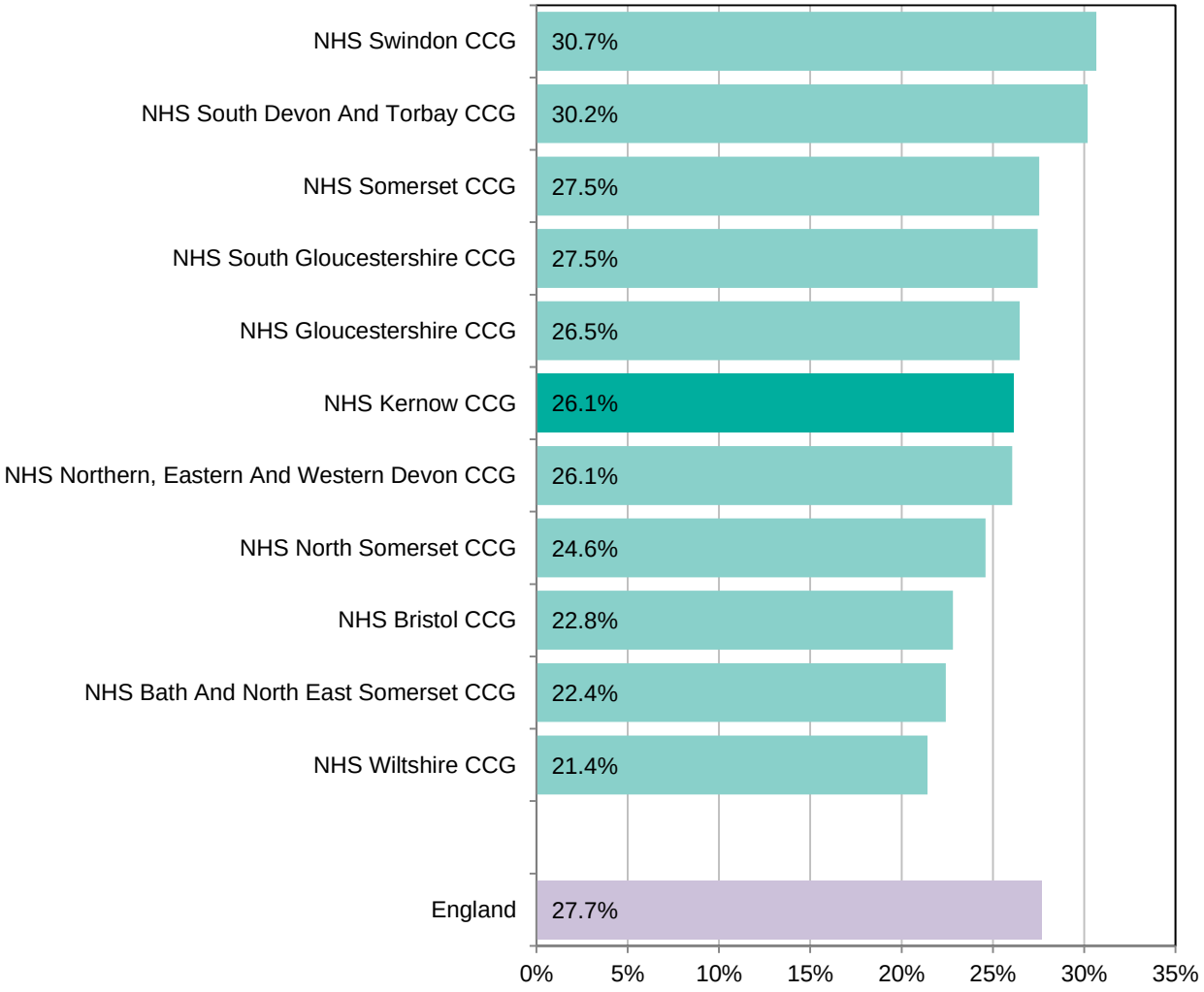


- 69.1% of adults with excess weight in NHS Kernow CCG compared to 64.6% in England

Note: Local authority prevalence estimates of excess weight from the Active People Survey, Sport England, have been used as a basis for estimating CCG level prevalence estimates of excess weight. Where more than one local authority is contained within a CCG, the proportion of the local authority within the CCG has been allocated to the CCG and aggregated up to give CCG estimates.

Percentage of inactive adults, 2014

Comparison with CCGs in the SCN



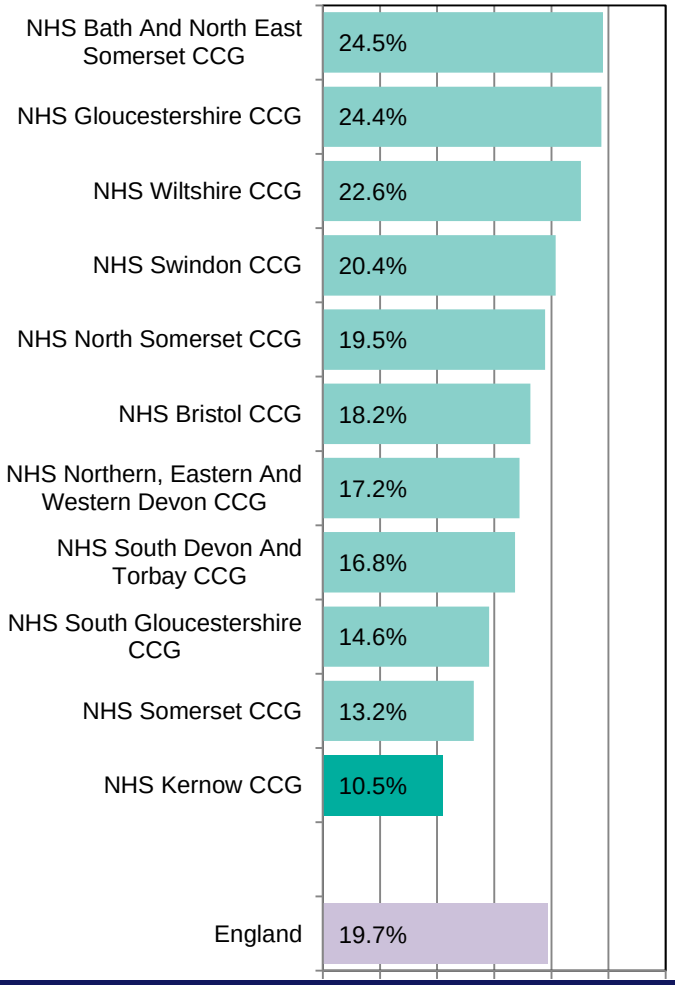
- 26.1% of adults who are inactive in NHS Kernow CCG compared to 27.7% in England

Note: Local authority percentage estimates of inactive adults from the Active People Survey, Sport England, have been used as a basis for estimating CCG level percentage estimates of inactive adults. Where more than one local authority is contained within a CCG, the proportion of the local authority within the CCG has been allocated to the CCG and aggregated up to give CCG estimates.

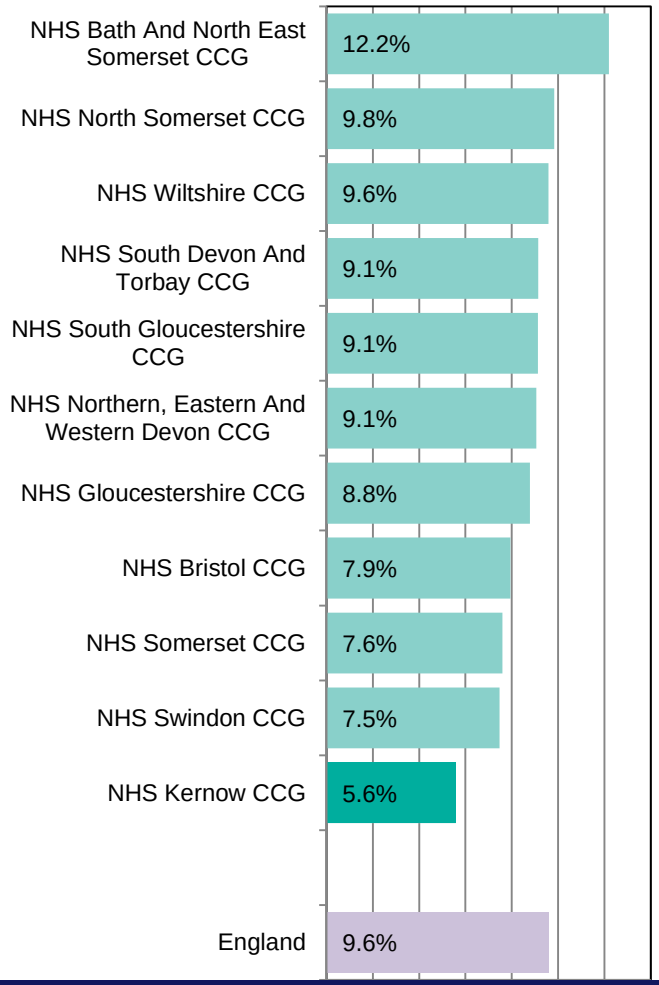
NHS Health Check offer and uptake, 2014/15

Comparison with CCGs in the SCN

% of eligible people offered a NHS Health check



% of eligible people receiving a NHS Health check



- 100% of the eligible population should be invited for a Health Check over 5 years.
- In 2014/15 10.5% of eligible people were offered a NHS Health Check in NHS Kernow CCG compared to 19.7% in England
- 5.6% of eligible people received a NHS Health Check in NHS Kernow CCG compared to 9.6% in England

Note: Local authority indicators for number of NHS Health Check offered and received have been used as a basis for estimating CCG level NHS Health Check offered and received. Where more than one local authority is contained within a CCG, the proportion of the local authority within the CCG has been allocated to the CCG and aggregated up to give CCG estimates.

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 at lowering blood pressure and at improving outcomes
- Despite this 4 out of 10 adults with hypertension, around 5 million people in England, remain undiagnosed
- And even when the condition is identified, treatment is often suboptimal, with blood pressure poorly controlled in one in three individuals

The Missing Millions

On average each CCG in England has 25,000 residents with undiagnosed hypertension – these individuals are unaware of their increased cardiovascular risk and are untreated.

What questions should we ask in our CCG?

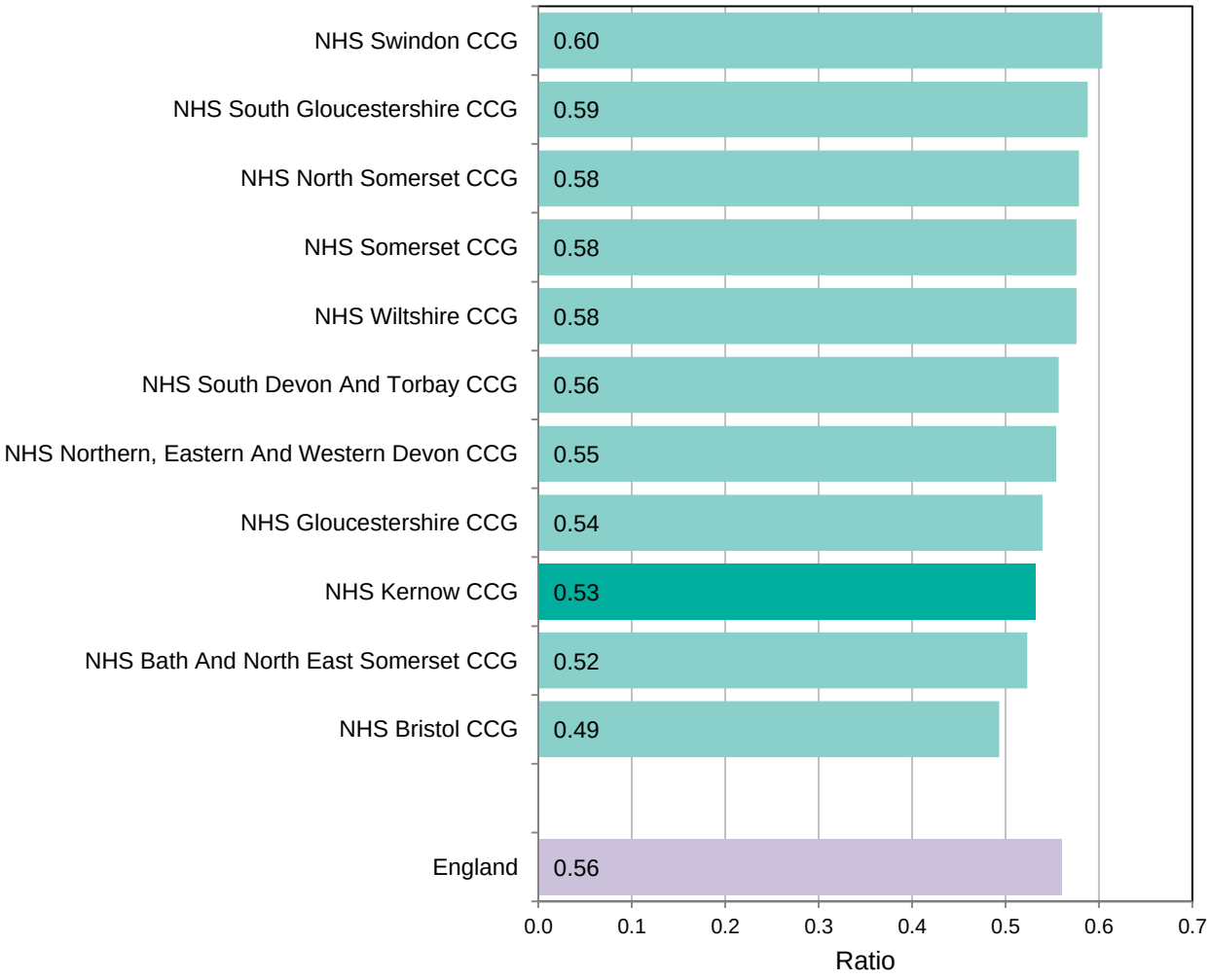
1. For each indicator how wide is the variation in achievement and exception reporting?
2. How many people would benefit if all practices performed as well as the best?
3. How can we support practices who are average or below average to perform as well as the best in:
    - Detection of hypertension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

What might help?

- Support practices in systematic audit of 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.
- Consider commissioning community pharmacists to offer blood pressure checking and support for adherence to medication

Hypertension observed prevalence compared to expected prevalence by CCG

Comparison with CCGs in the SCN

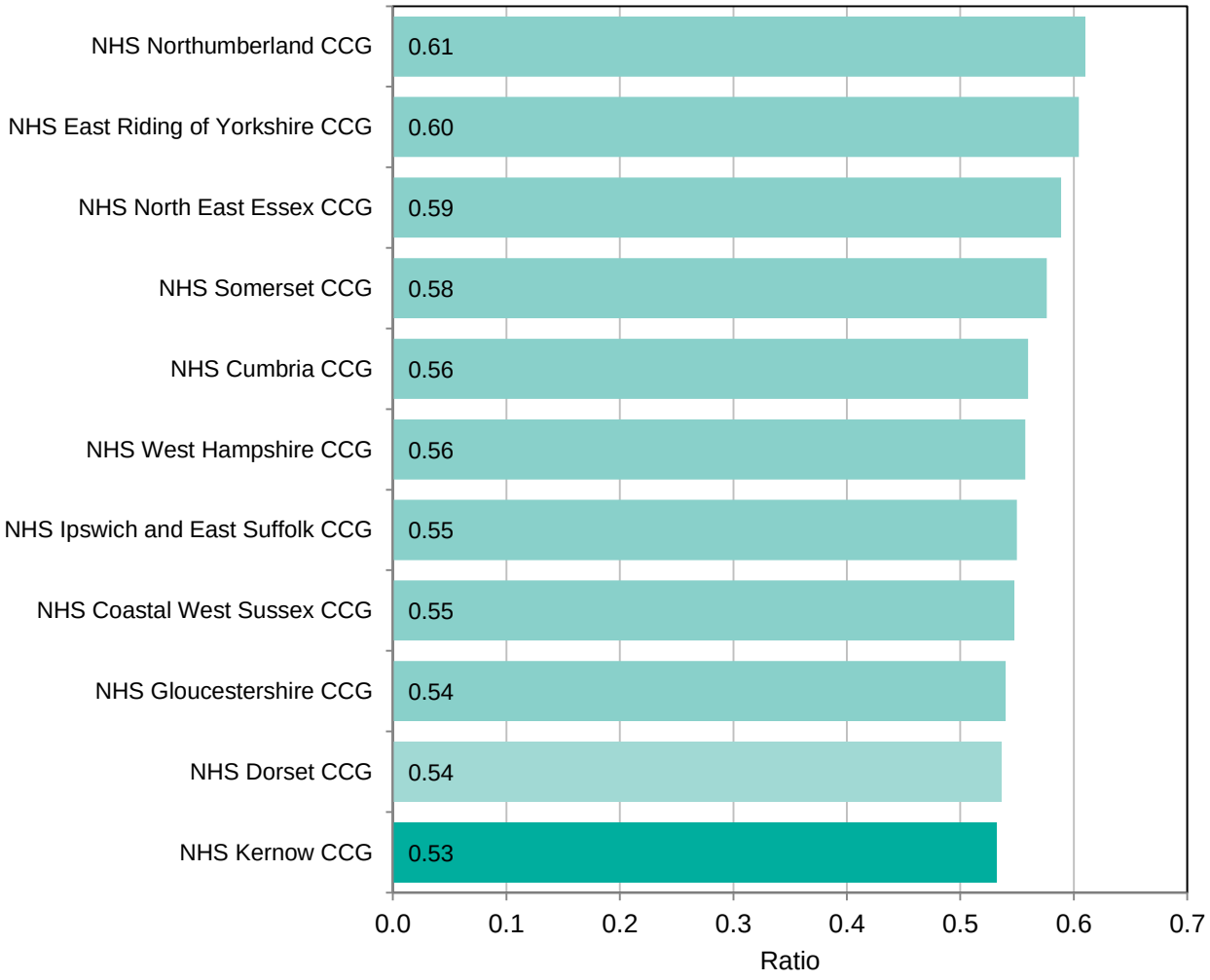


- 0.53 ratio of observed to expected hypertension prevalence in NHS Kernow CCG compared to 0.56 in England.
- This suggests that 53% of people with hypertension have been diagnosed.

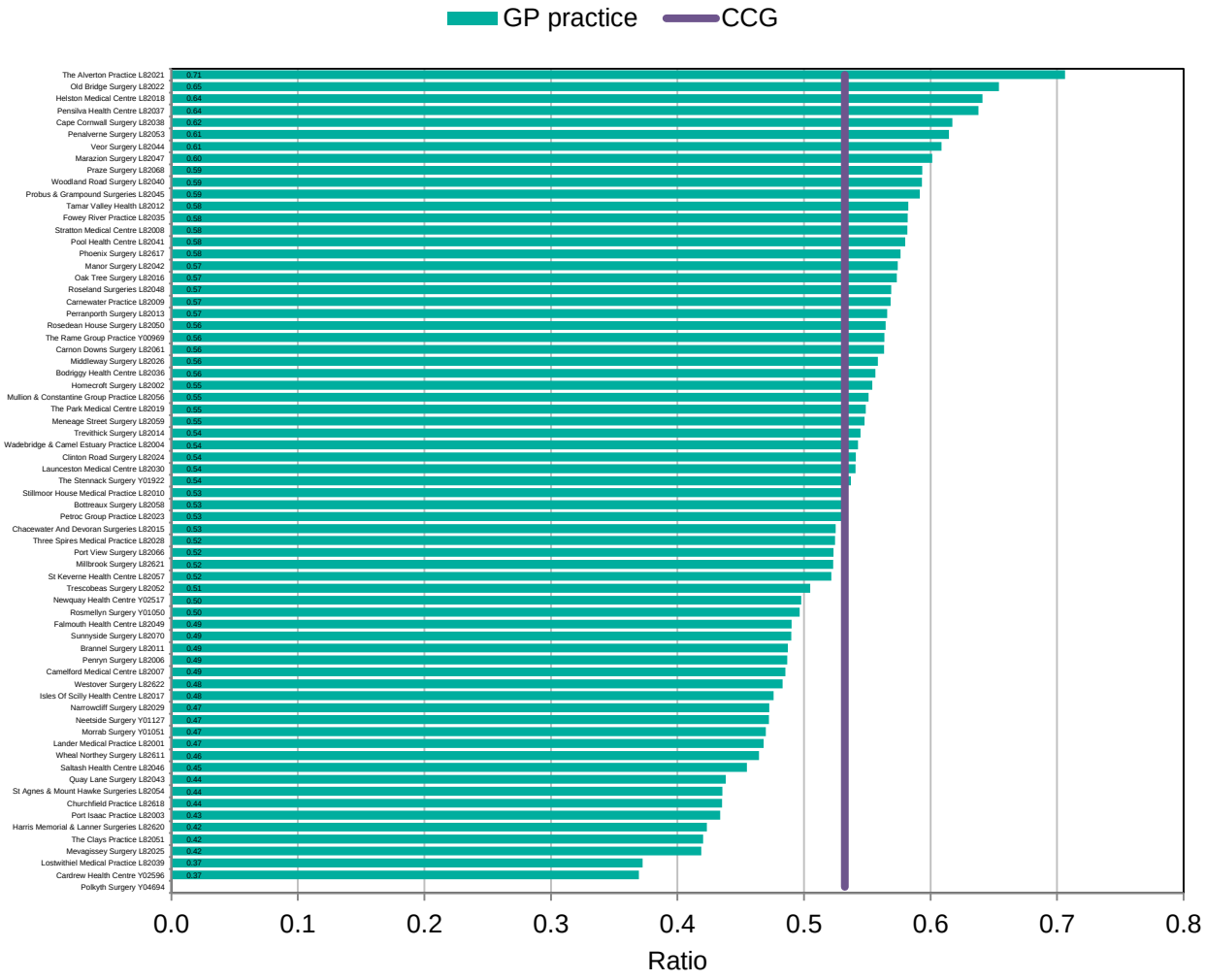
Note: This slide compares the prevalence of hypertension recorded in QOF in 2014/15 to the expected prevalence of hypertension taken from the East of England Public Health Observatory modelled estimates produced in 2011. The model was developed using data from the 2003-2004 Health Surveys for England and takes into account age, sex, ethnicity, smoking status and deprivation.

Hypertension observed prevalence compared to expected prevalence by CCG

Comparison with demographically similar CCGs



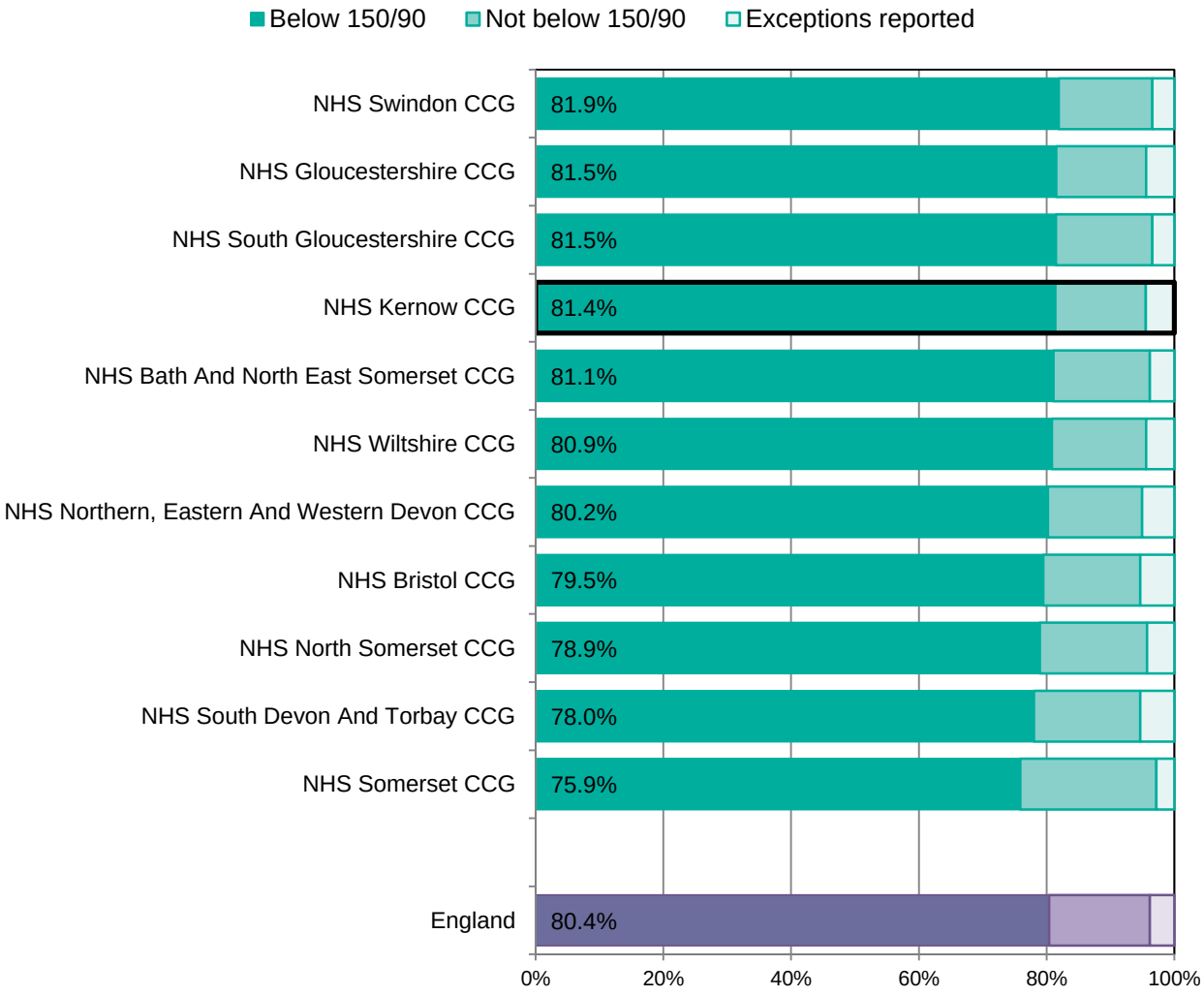
Hypertension observed prevalence compared to expected prevalence by GP practice



- It is estimated that there are 75,673 people with undiagnosed hypertension in NHS Kernow CCG
- GP practice range of observed to expected hypertension prevalence 0.37 to 0.71

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 SCN

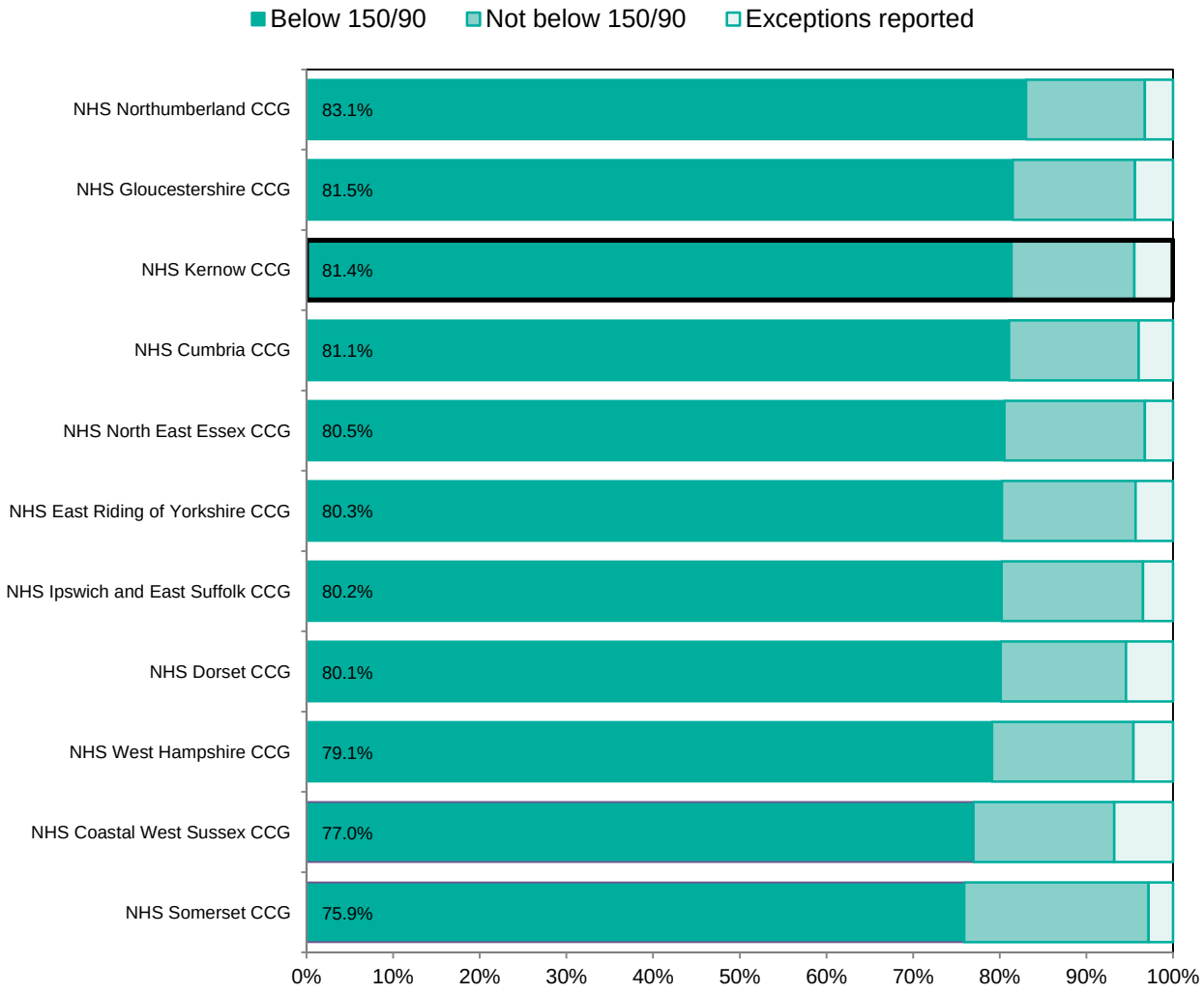


- 86,127 people with hypertension (diagnosed)* in NHS Kernow CCG
- 70,081 (81.4%) people whose blood pressure is <= 150/90
- 3,837 (4.5%) people who are excepted from optimal control
- 12,209 (14.2%) additional people whose blood pressure is not <= 150/90

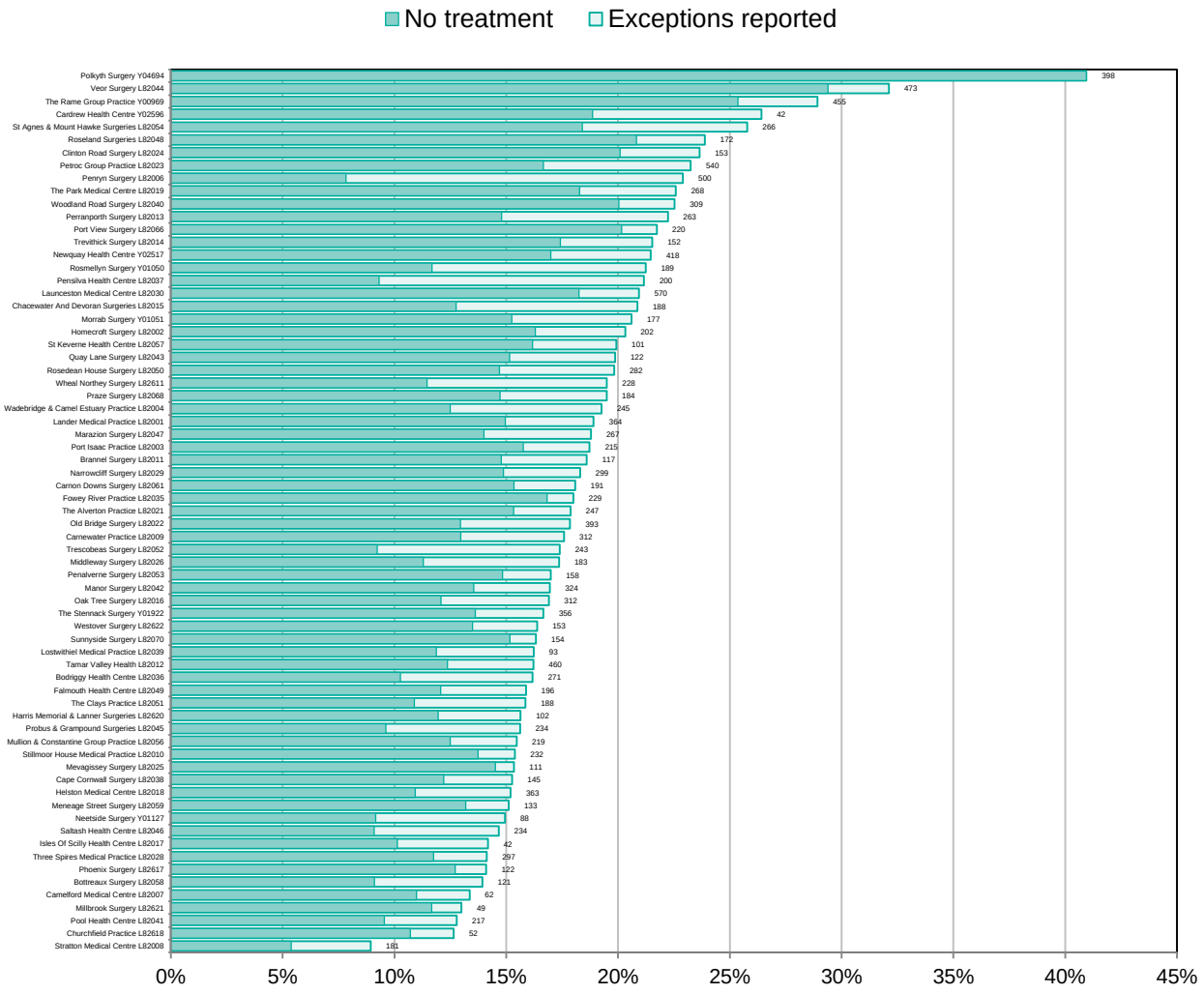
**Using QOF clinical indicator HYP006 denominator plus exceptions*

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

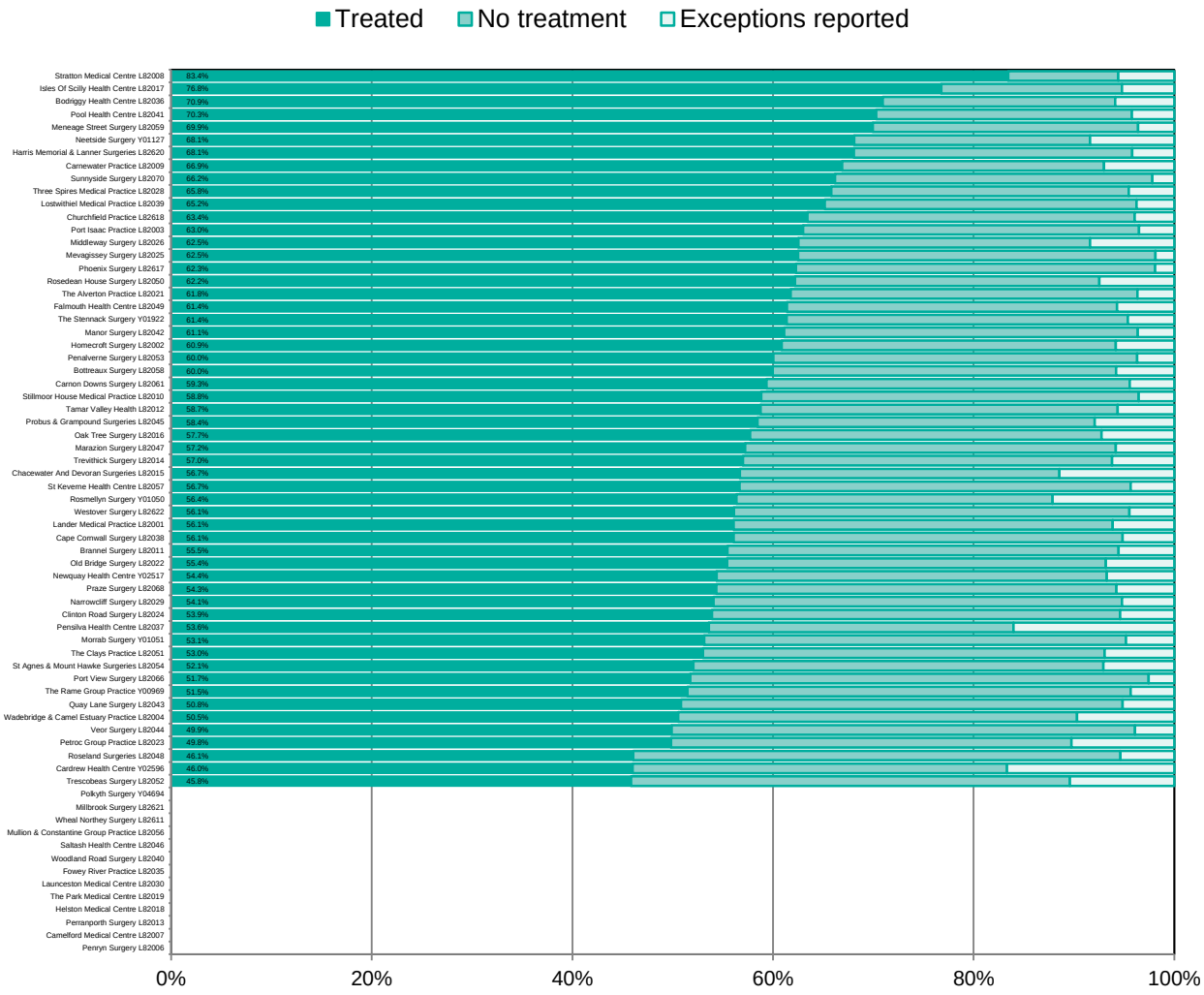


Percentage of patients with hypertension whose last blood pressure reading (measured in the preceding 12 months) is not 150/90 mmHg or less by GP practice



- In total, including exceptions, there are 16,046 people whose blood pressure is not <= 150/90
- GP practice range: 8.9% to 40.9%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 2,859 people would have their hypertension controlled

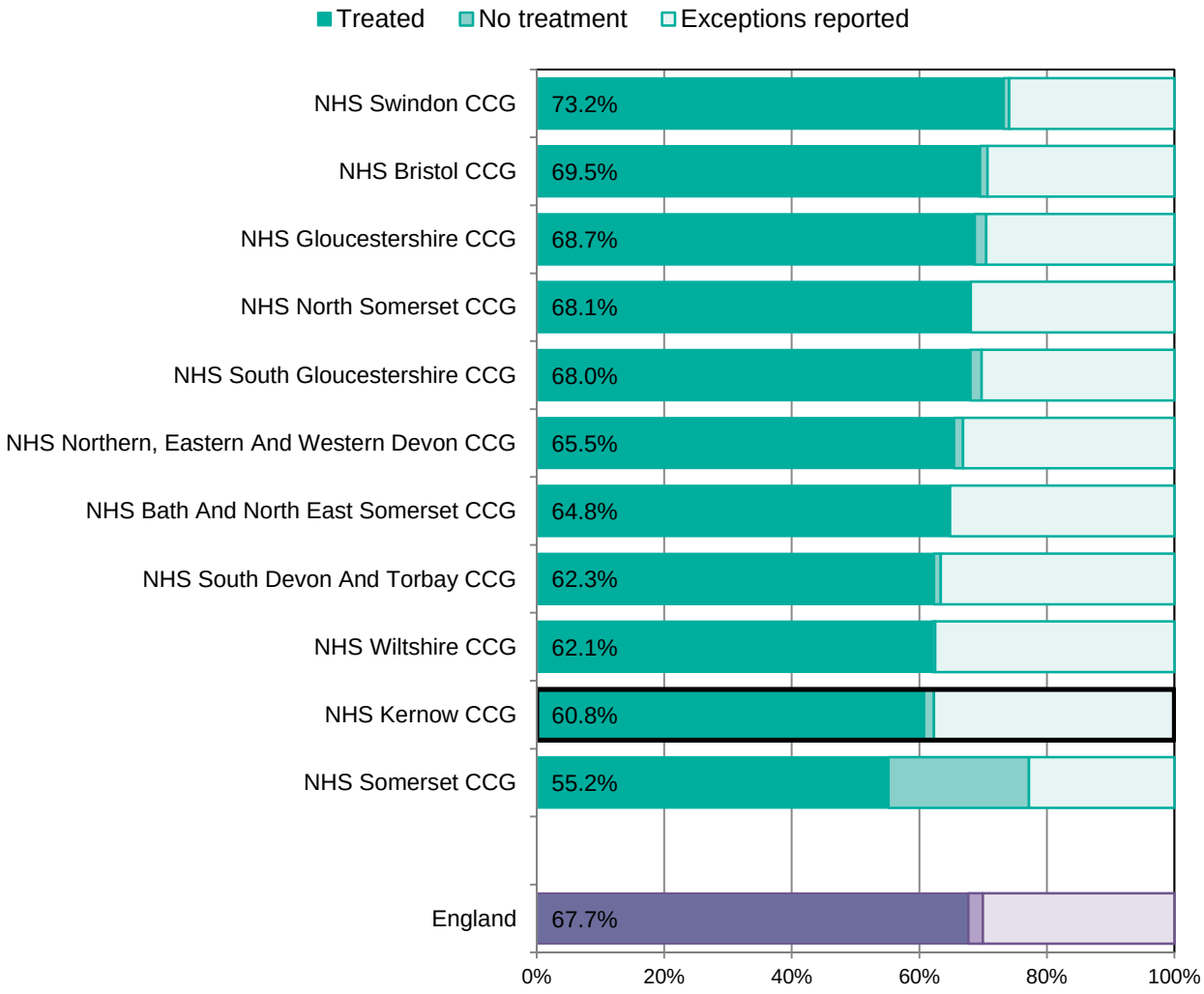
The percentage of patients aged 79 or under with hypertension in whom the last recorded blood pressure reading (measured in the preceding 9 months) is 140/90 mmHg or less by GP practice



- All practices were invited to provide retired QOF data to the HSCIC showing the number of patients with hypertension achieving the NICE recommended treatment target of 140/90 mmHg.
- In NHS Kernow CCG, 59 out of 69 (85.5%) practices agreed to provide this data.
- Across these 59 practices, there are 21,405 people whose blood pressure is not <= 140/90

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 SCN

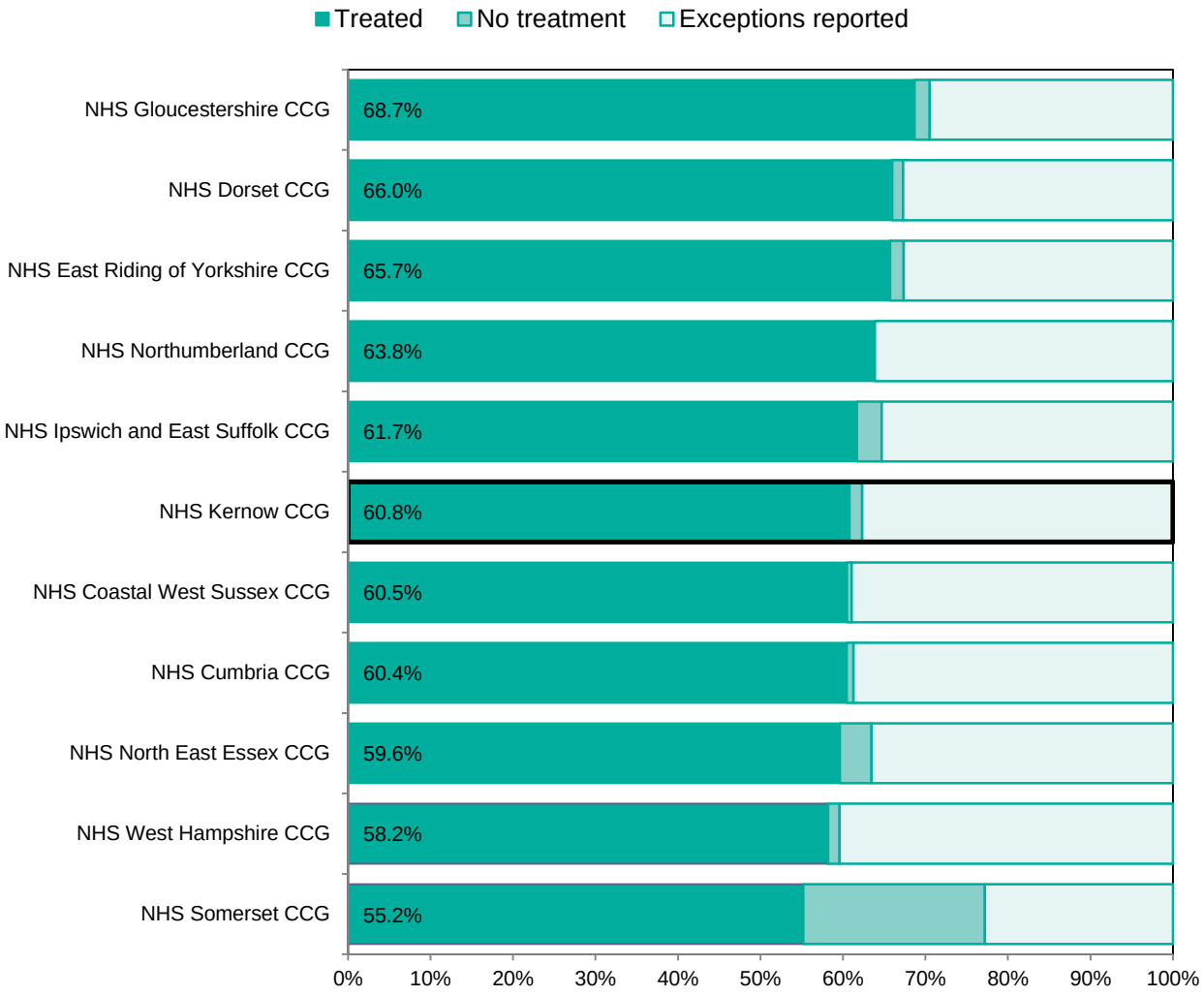


- 260 people with a new diagnosis* of hypertension with a CVD risk of 20% or higher in NHS Kernow CCG
- 158 (60.8%) people who are currently treated with statins
- 98 (37.7%) people who are exempted from treatment with statins
- 4 (1.5%) additional people who are not currently treated with statins

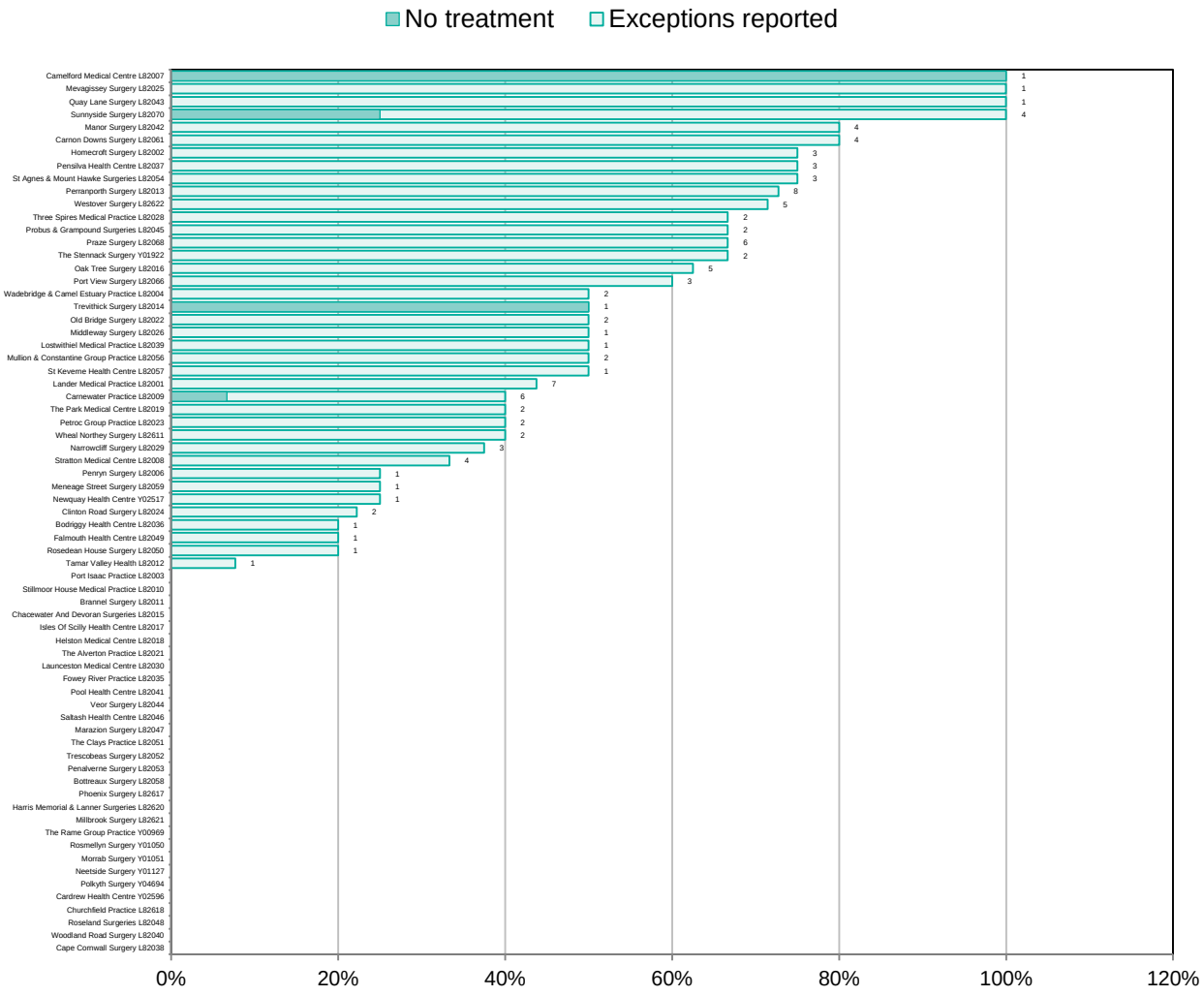
**Using the QOF clinical indicator CVD-PP001 denominator plus exceptions*

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 102 people who are not treated with statins
- GP practice range: 0.0% to 100.0%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 90 people would be treated

Stroke

Stroke Prevention

Less than half of people with known AF admitted with stroke are on anticoagulant treatment at the time of their stroke.

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 substantially reduces the risk of stroke in people with AF.

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 questions should we ask in our CCG?

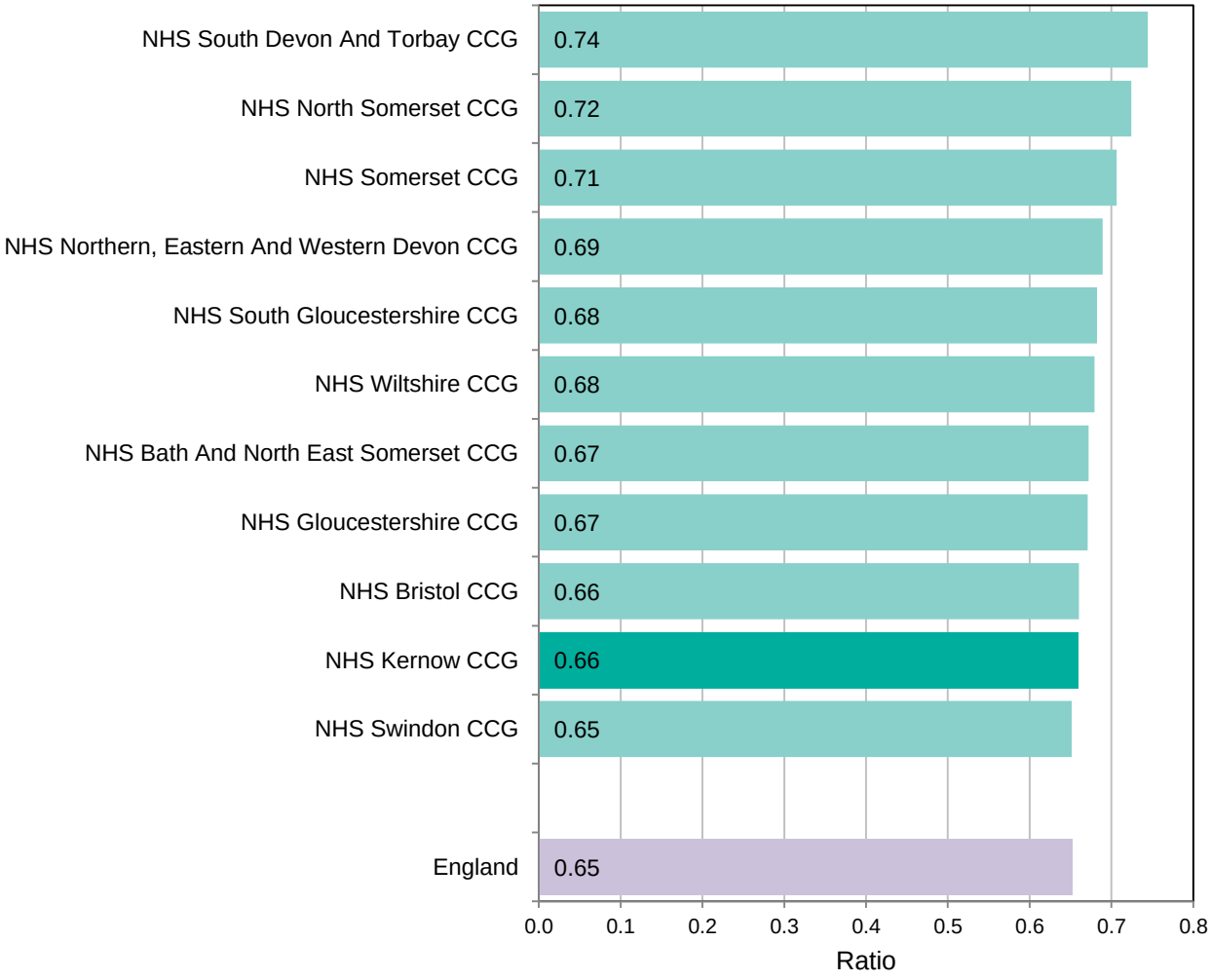
1. For each indicator how wide is the variation in achievement and exception reporting?
2. How many people would benefit if all practices performed as well as the best?
3. How can we support practices who are average and below average to perform as well as the best in:
    - Detection of atrial fibrillation
    - Stroke prevention with anticoagulation

What might help?

- Increase opportunistic pulse checking especially in the over 65s
- Roll out GRASP-AF to identify people with AF who are undertreated
- Promote use of CHADS-VASC and HASBLED
- Roll out of Warfarin Patient Safety Audit Tool to ensure optimal time in therapeutic range for people on warfarin
- Disseminate latest evidence on risk-benefit balance for anticoagulants including the newer treatments (NOACs)
- Work with practices and local authorities to maximise uptake and follow up in the NHS Health Check

Atrial fibrillation observed prevalence compared to expected prevalence by CCG

Comparison with CCGs in the SCN

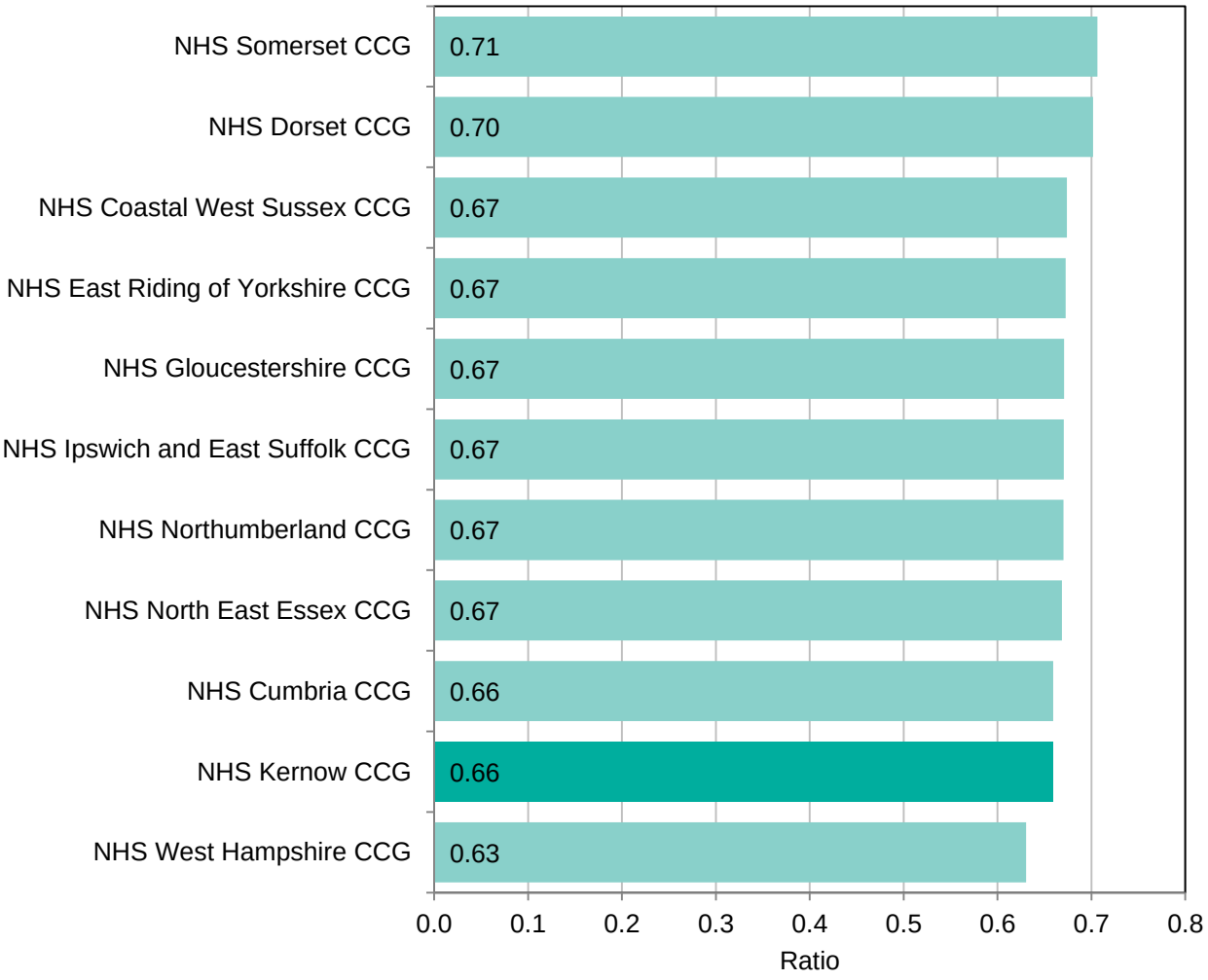


- 0.66 ratio of observed to expected atrial fibrillation prevalence in NHS Kernow CCG compared to 0.65 in England.
- This suggests that 66% of people with atrial fibrillation have been diagnosed.

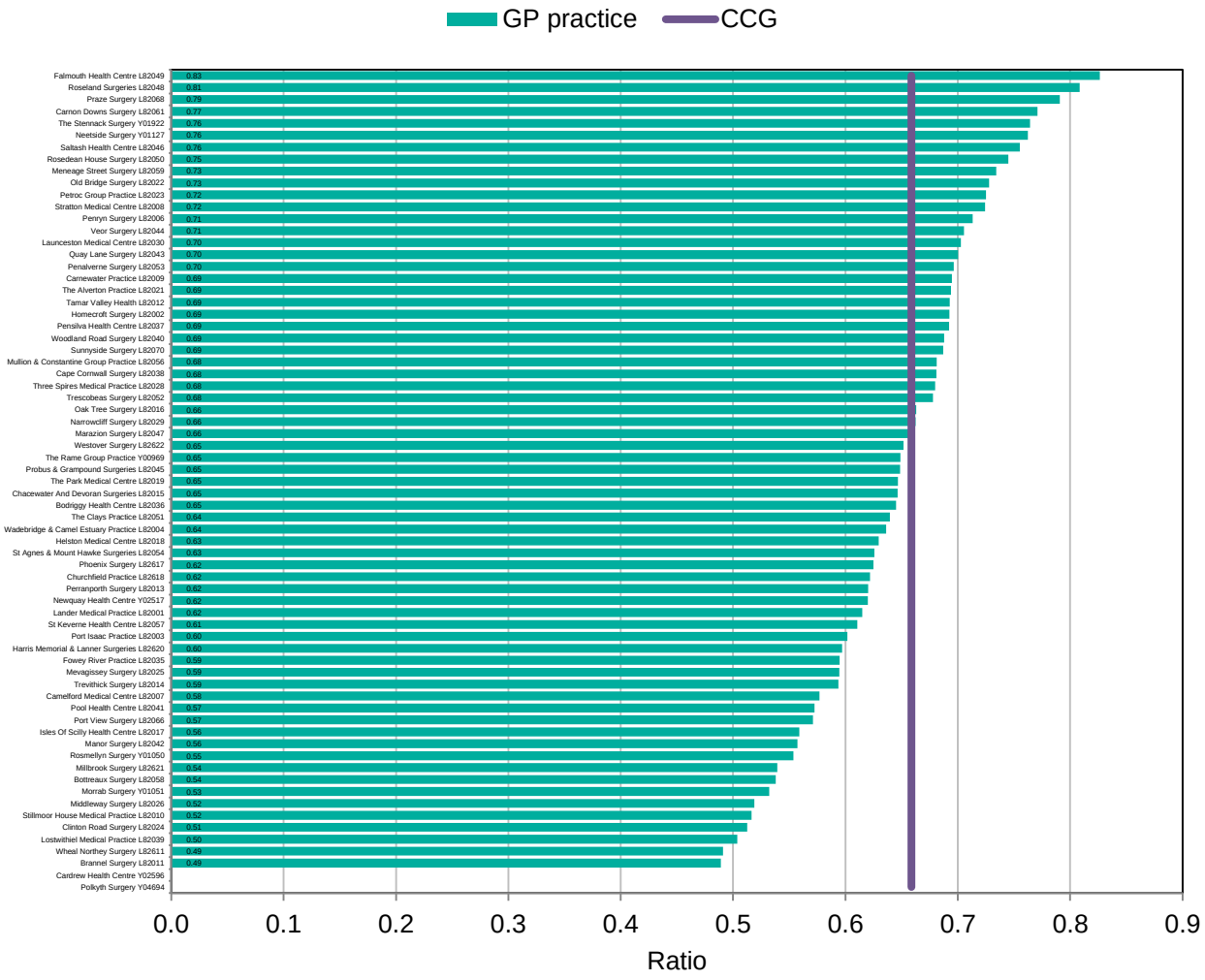
Note: This slide compares the prevalence of atrial fibrillation recorded in QOF in 2013/14 to the estimated prevalence of atrial fibrillation, taken from National Cardiovascular Intelligence Network estimates produced in 2015. The estimates were developed by applying age-sex specific prevalence rates as reported by Norberg et al (2013) to GP population estimates from the Health and Social Care Information Centre. 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



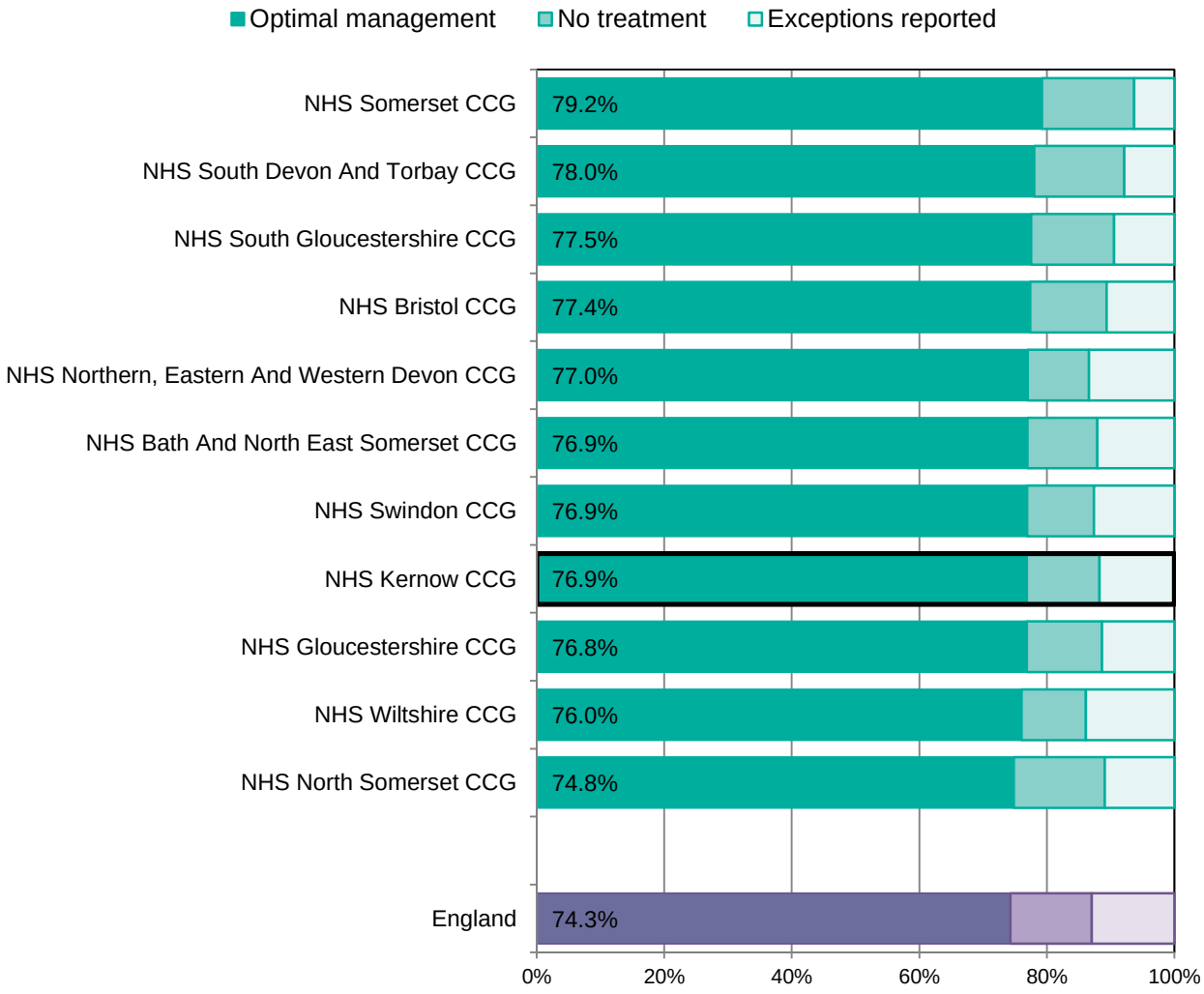
Atrial fibrillation observed prevalence compared to expected prevalence by GP practice



- It is estimated that there are 5,864 people with undiagnosed atrial fibrillation in NHS Kernow CCG
- GP practice range of observed to expected atrial fibrillation prevalence 0 to 0.83

In patients with AF with a $CHADS_2$ > 1, the percentage treated with anti-coagulation therapy by CCG

Comparison with CCGs in the SCN

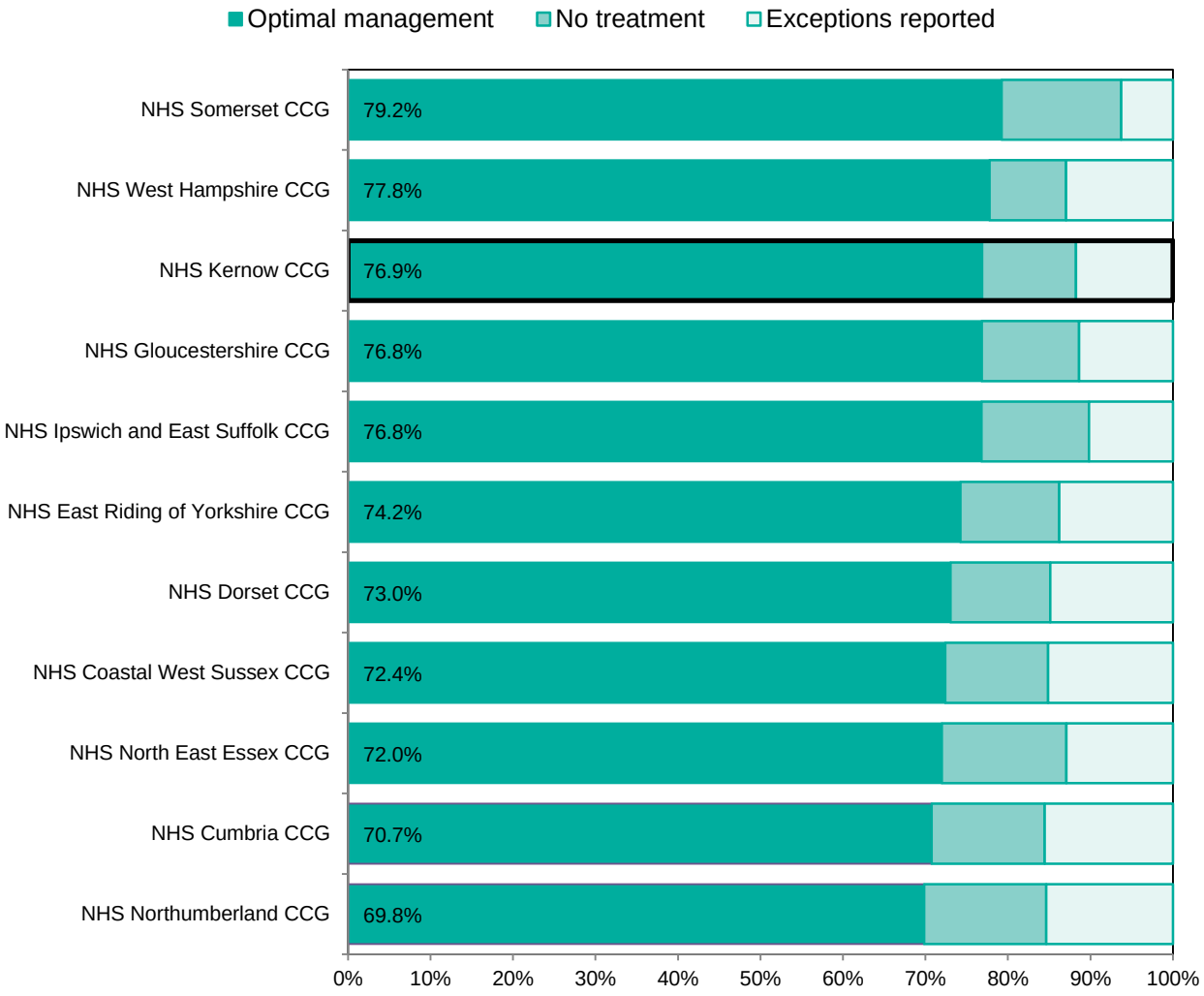


- 6,108 people with atrial fibrillation* with a CHADS2 score > 1 in NHS Kernow CCG
- 4,695 (76.9%) people treated with anti-coagulation therapy
- 718 (11.8%) people who are exceptions
- 695 (11.4%) additional people with a recorded CHADS2 score > 1 who are not treated

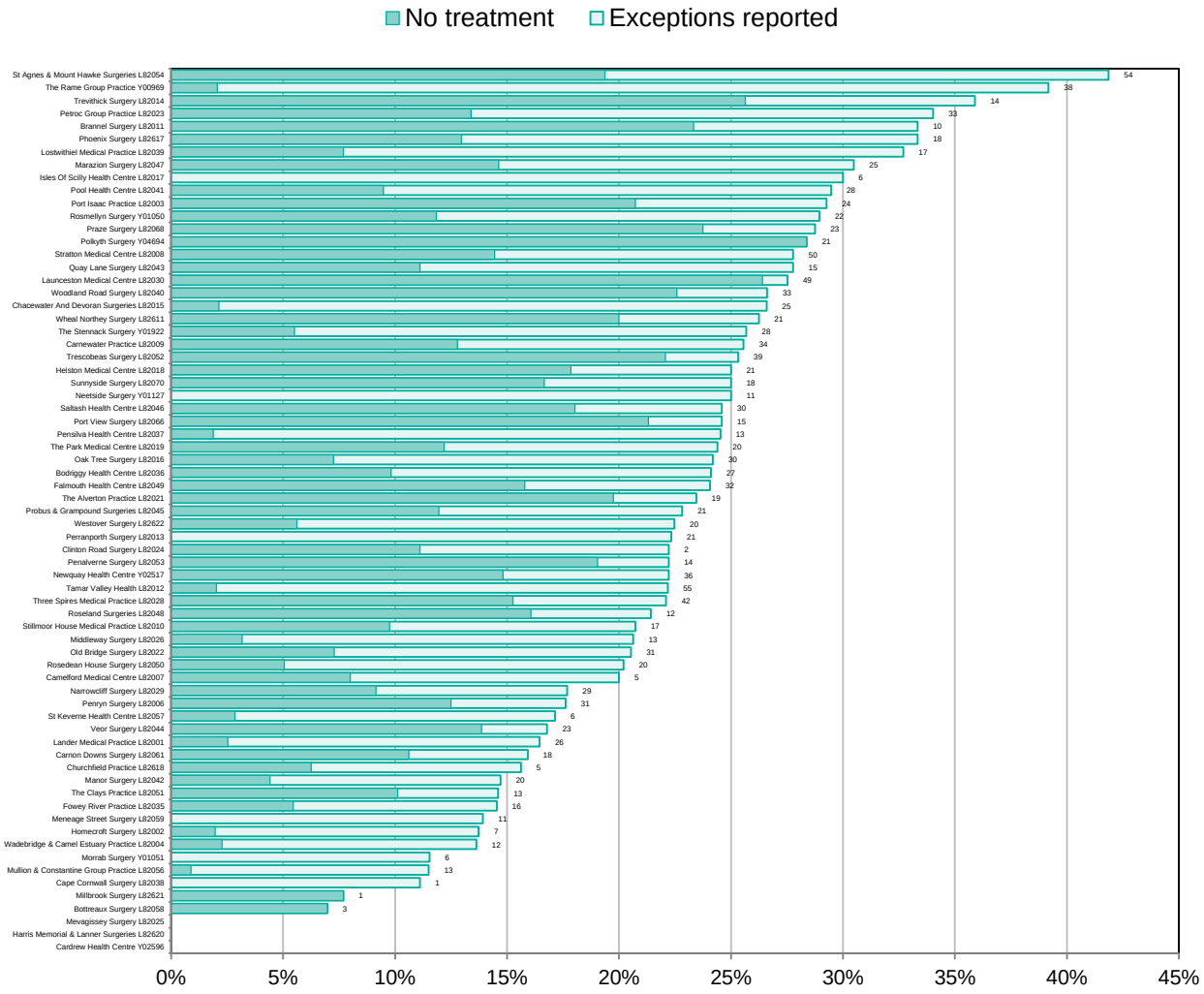
**Using the QOF clinical indicator AF004 denominator plus exceptions*

In patients with AF with a $CHADS_2$ > 1, the percentage treated with anti-coagulation therapy by CCG

Comparison with demographically similar CCGs



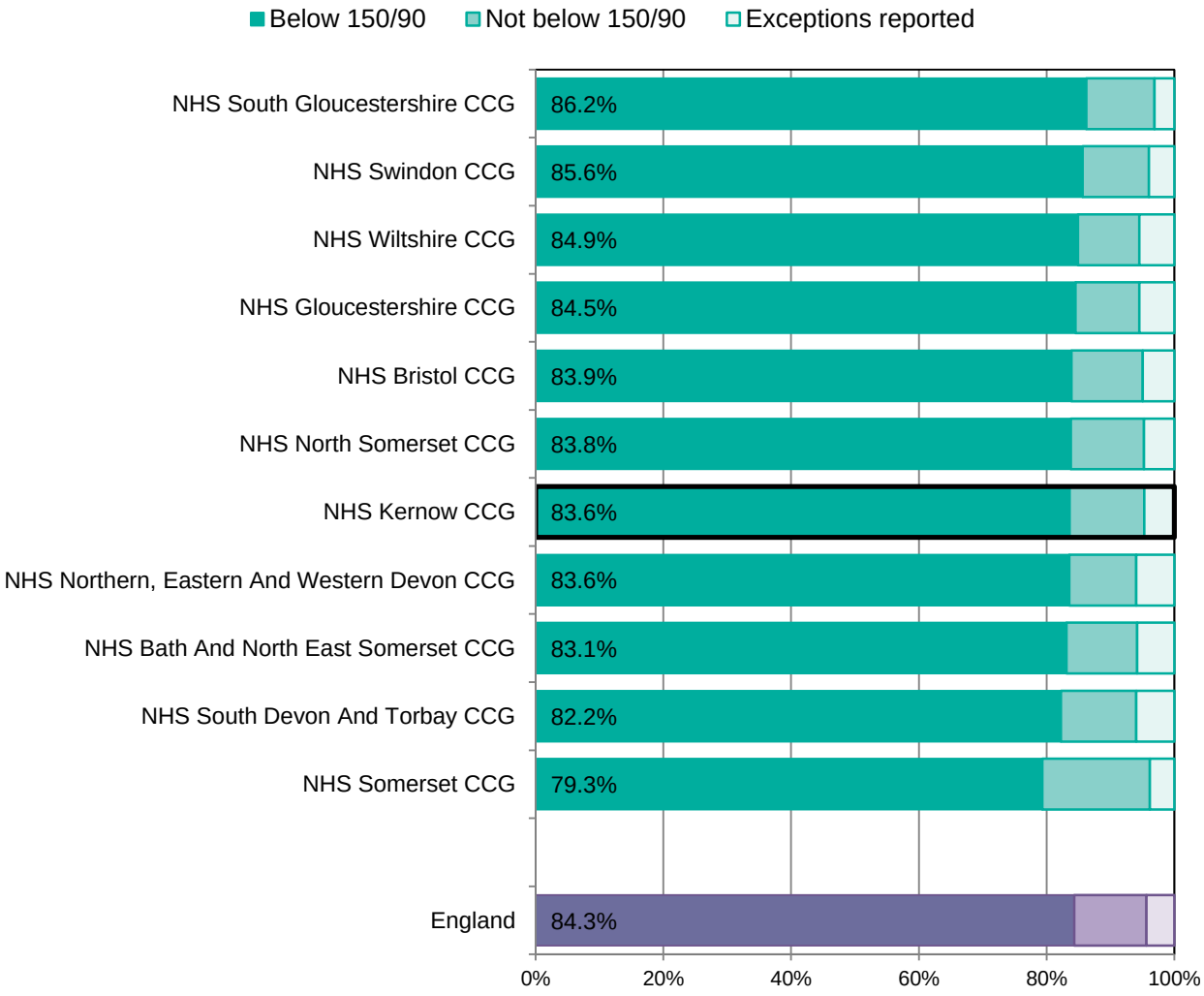
In patients with AF with a $CHADS_2$ > 1, the percentage not treated with anti-coagulation therapy by GP practice



- In total, including exceptions, there are 1,413 people with a recorded CHADS2 score > 1 who are not treated
- GP practice range: 0.0% to 41.9%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 460 people would be treated

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 SCN

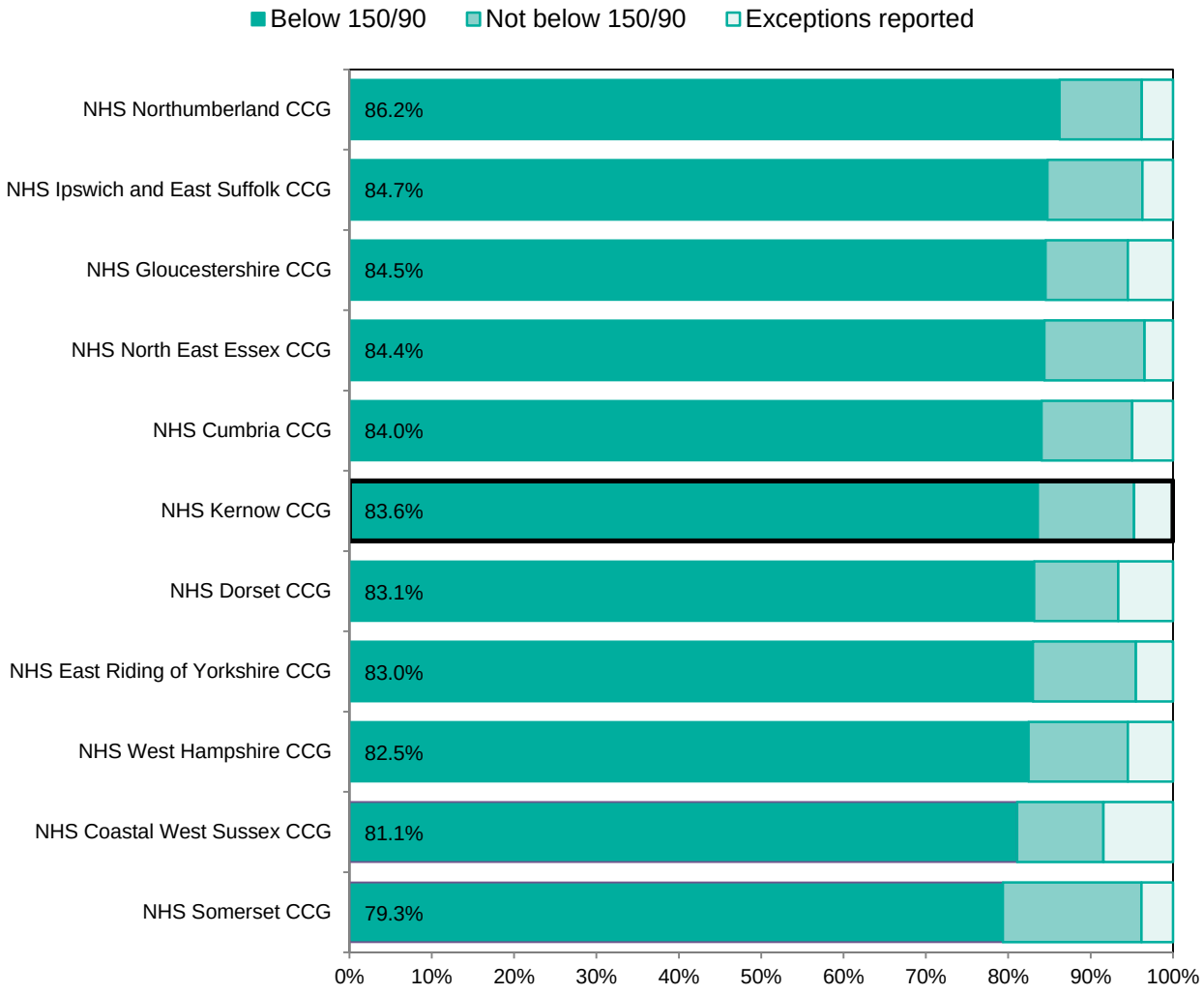


- 13,901 people with a history of stroke or TIA* in NHS Kernow CCG
- 11,621 (83.6%) people whose blood pressure is <= 150 / 90
- 655 (4.7%) people who are exceptions
- 1,625 (11.7%) additional people whose blood pressure is not <= 150 / 90

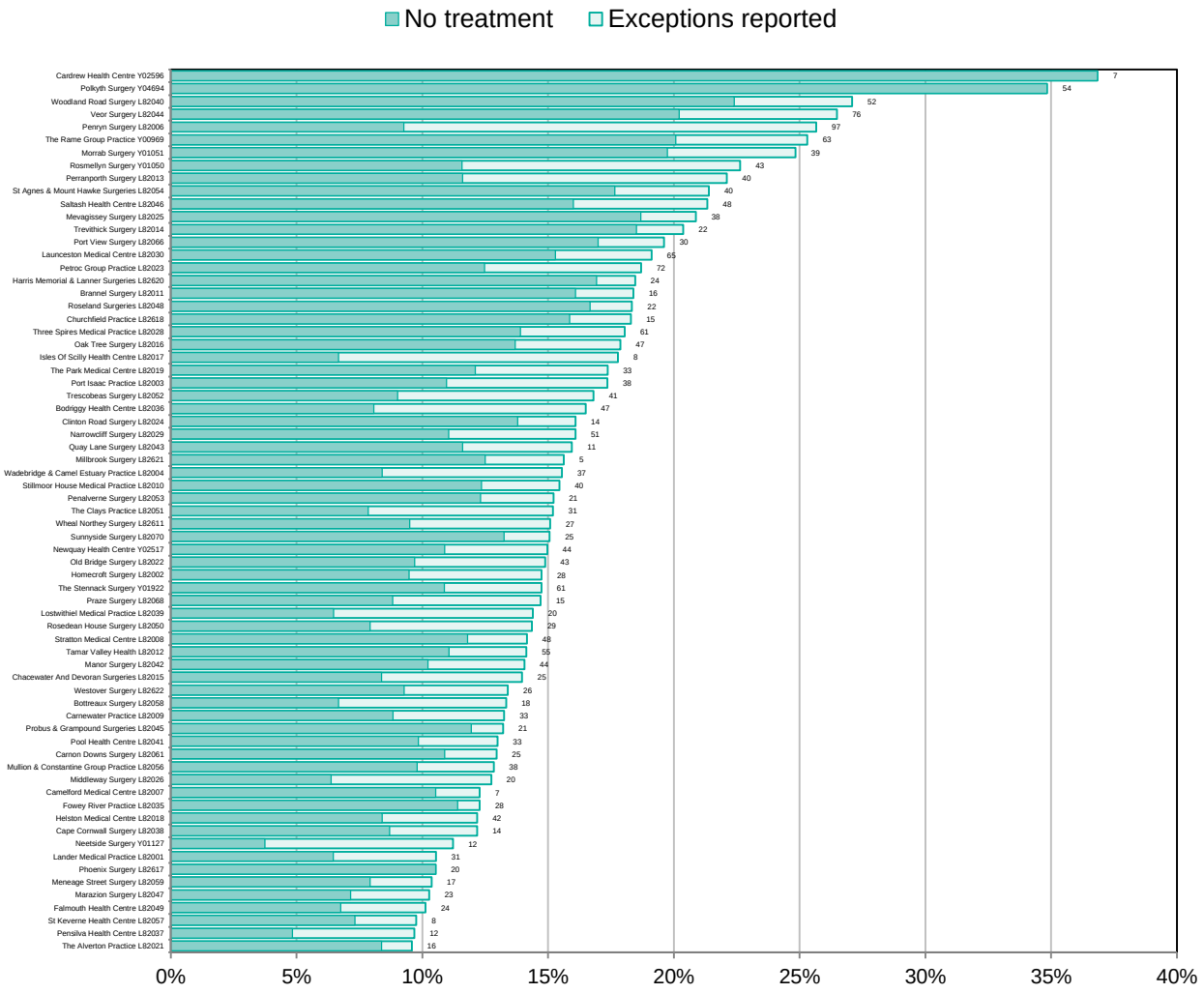
**Using the QOF clinical indicator STIA003 denominator plus exceptions*

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



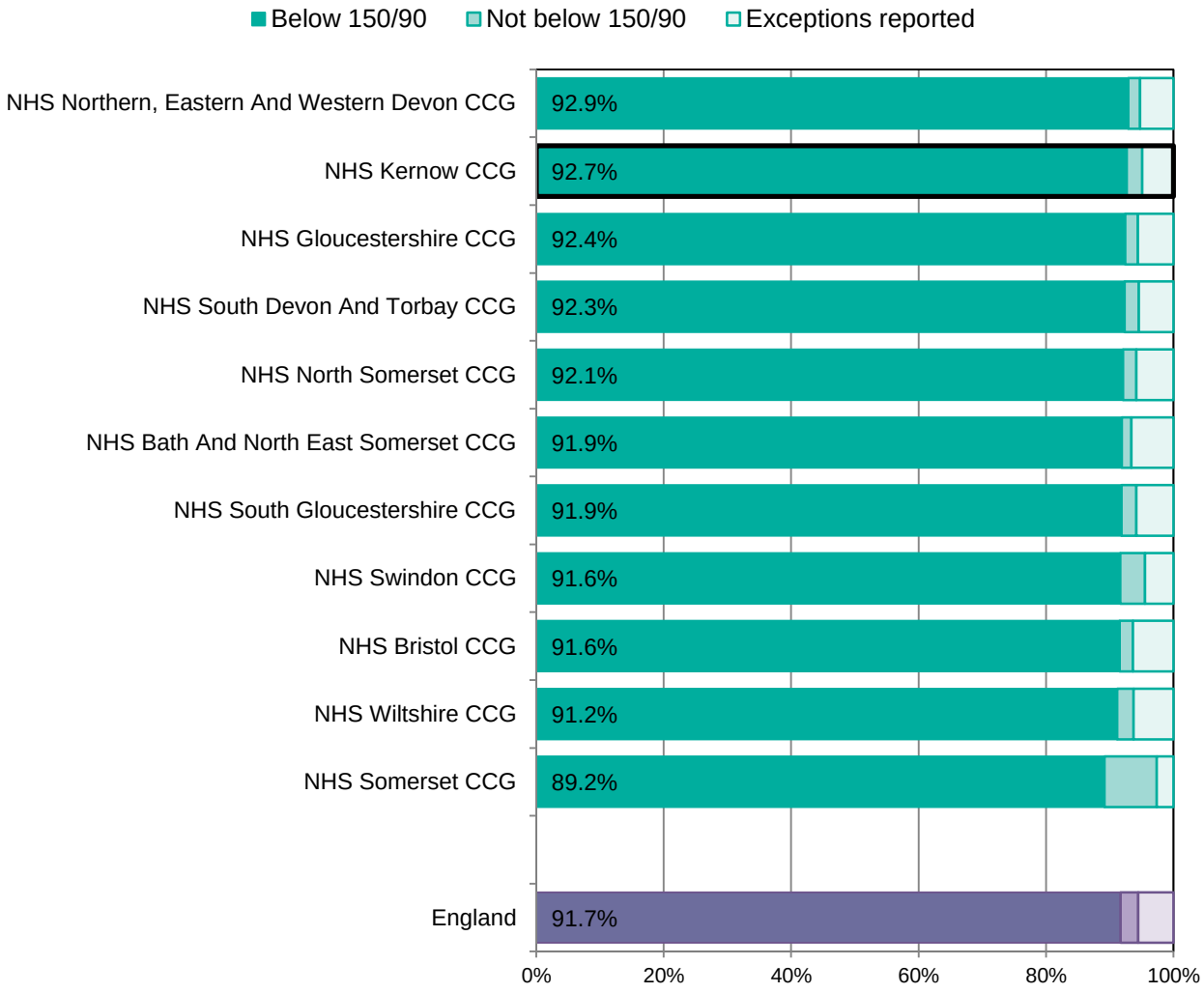
Percentage of patients with a history of stroke whose last blood pressure reading (measured in the preceding 12 months) is not 150/90 mmHg or less by GP practice



- In total, including exceptions, there are 2,280 people whose blood pressure is not <= 150 / 90
- GP practice range: 9.6% to 36.8%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 502 people would have their blood pressure controlled

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 SCN

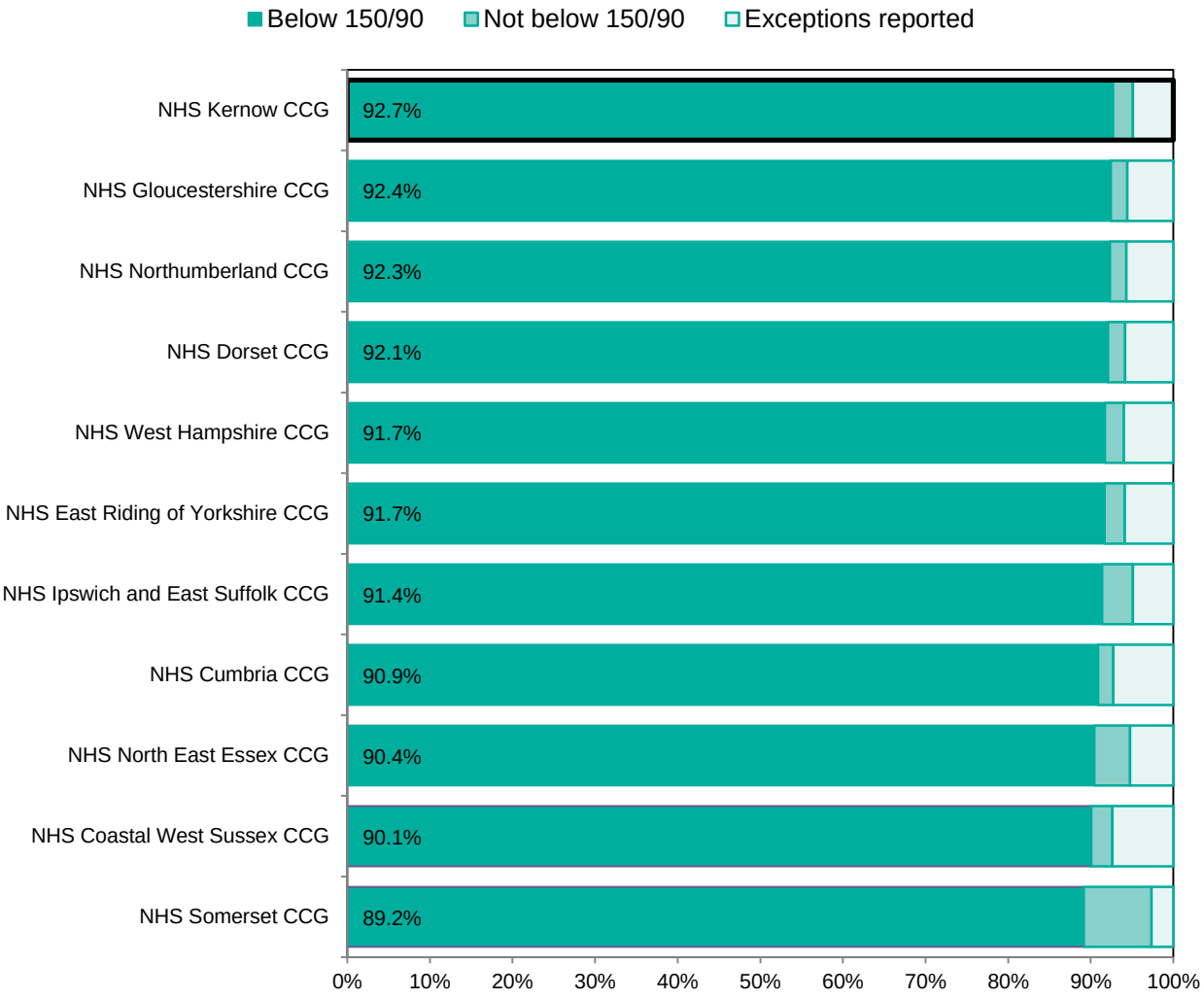


- 10,102 people with a stroke shown to be non-haemorrhagic* in NHS Kernow CCG
- 9,363 (92.7%) people who are taking an anti-platetet agent or anti-coagulant
- 495 (4.9%) people who are exceptions
- 244 (2.4%) additional people with no treatment

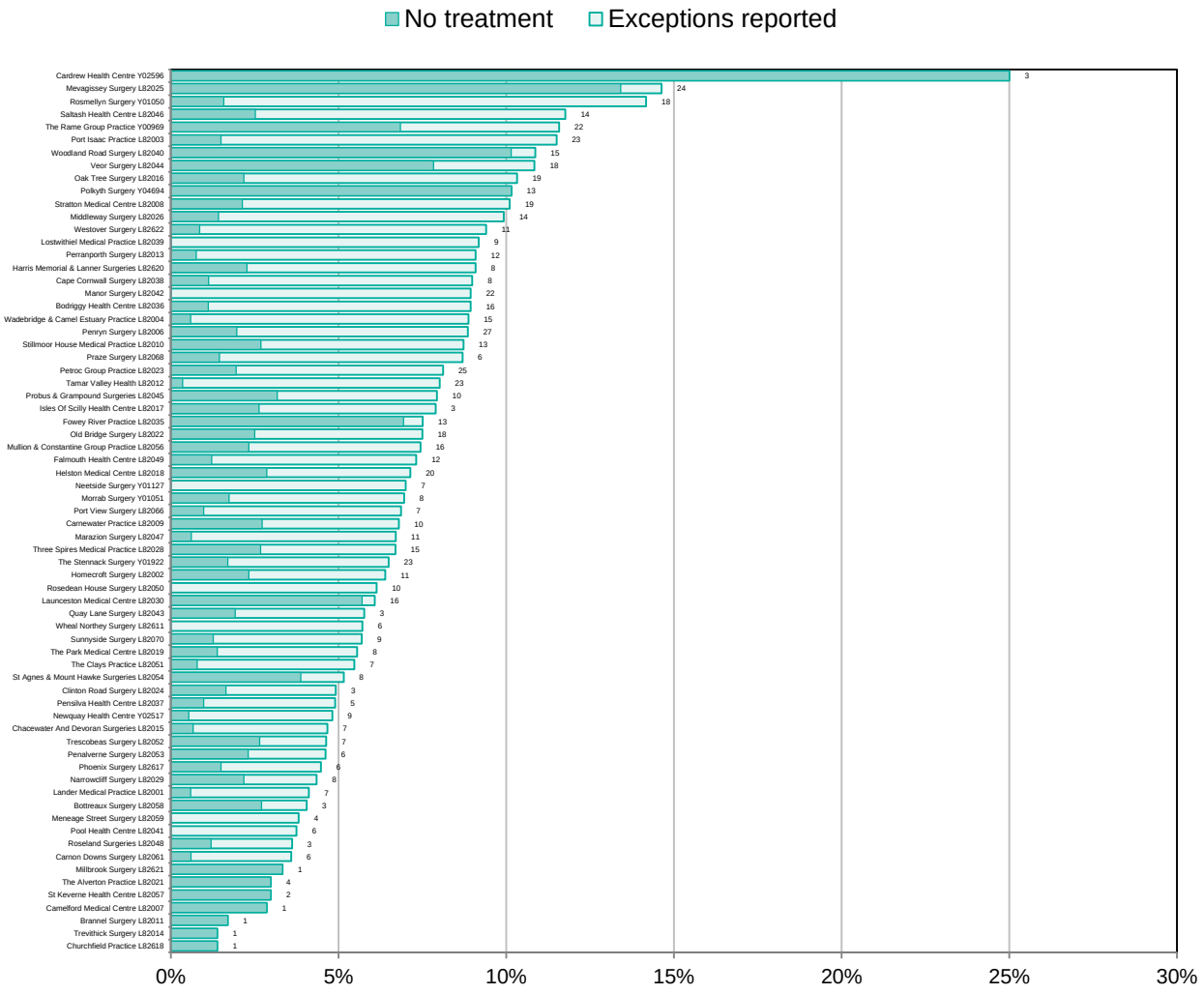
**Using the QOF clinical indicator STIA007 denominator plus exceptions*

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 739 people who are not taking an anti-platelet agent or anti-coagulant
- GP practice range: 1.4% to 25.0%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 277 people would be taking an anti-platelet agent or anti-coagulant

Diabetes

Diabetes Prevention and Management

Diabetes is estimated to cost the NHS £5.6 billion per year. It is also often preventable.

Type 2 Diabetes in numbers

- Diagnosed prevalence – 2.9 million
- Non-diabetic hyperglycaemia (high risk) – 5 million
- Data from the Health Survey for England suggests a further 2.4% of adults have undiagnosed diabetes and that approximately 30% of all diabetes is undiagnosed

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 could be prevented in 30-60% through appropriate behaviour change support.

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
   - Identification and management of Non-diabetic hyperglycaemia

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.

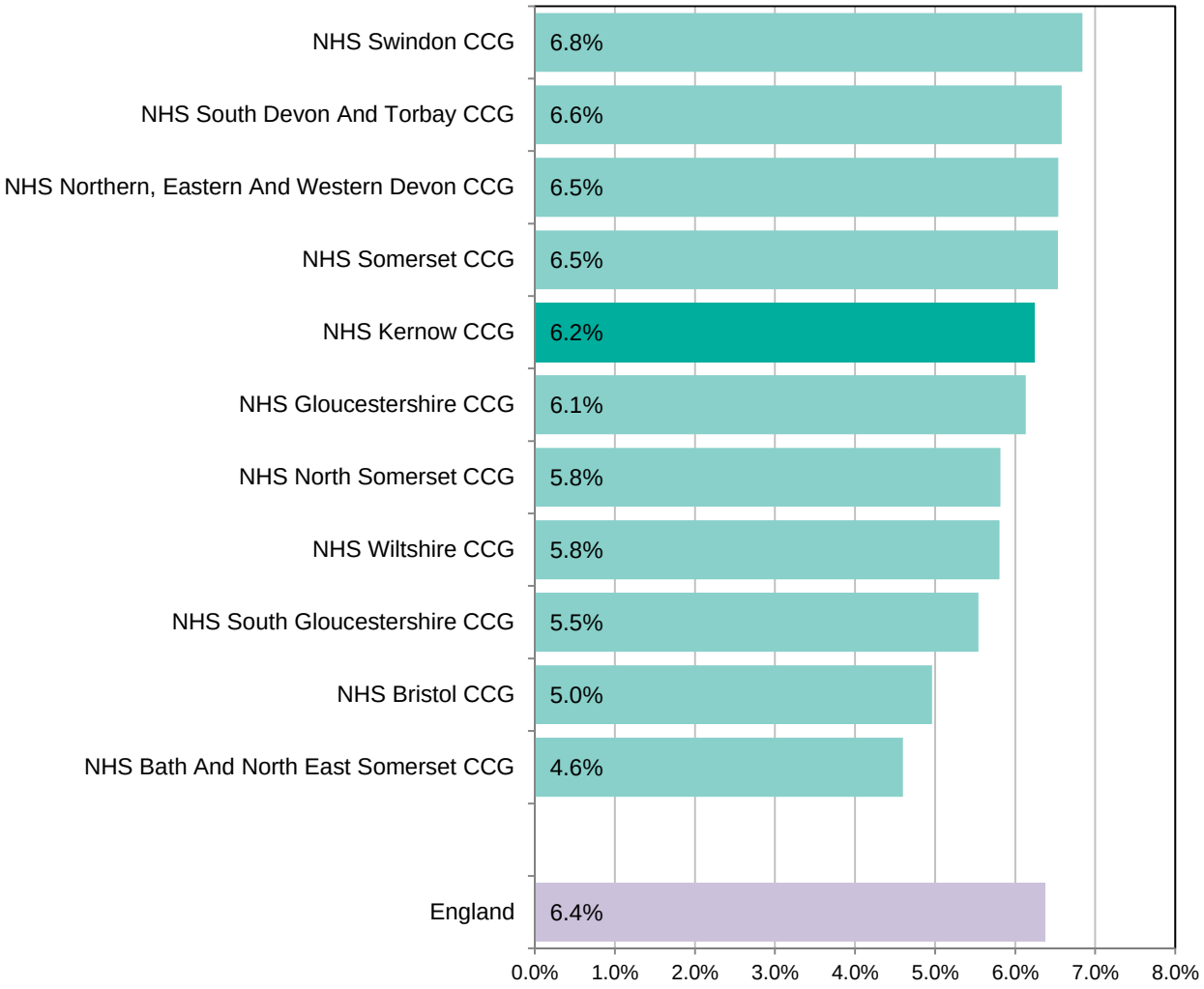
There are 8 essential care processes, in addition to retinal screening, that together substantially reduce complication rates. Despite this, around a third of people with diabetes do not receive all 8 care processes, and there is widespread variation between CCGs and practices in levels of achievement.

What might help

- Promote participation by all 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 by CCG

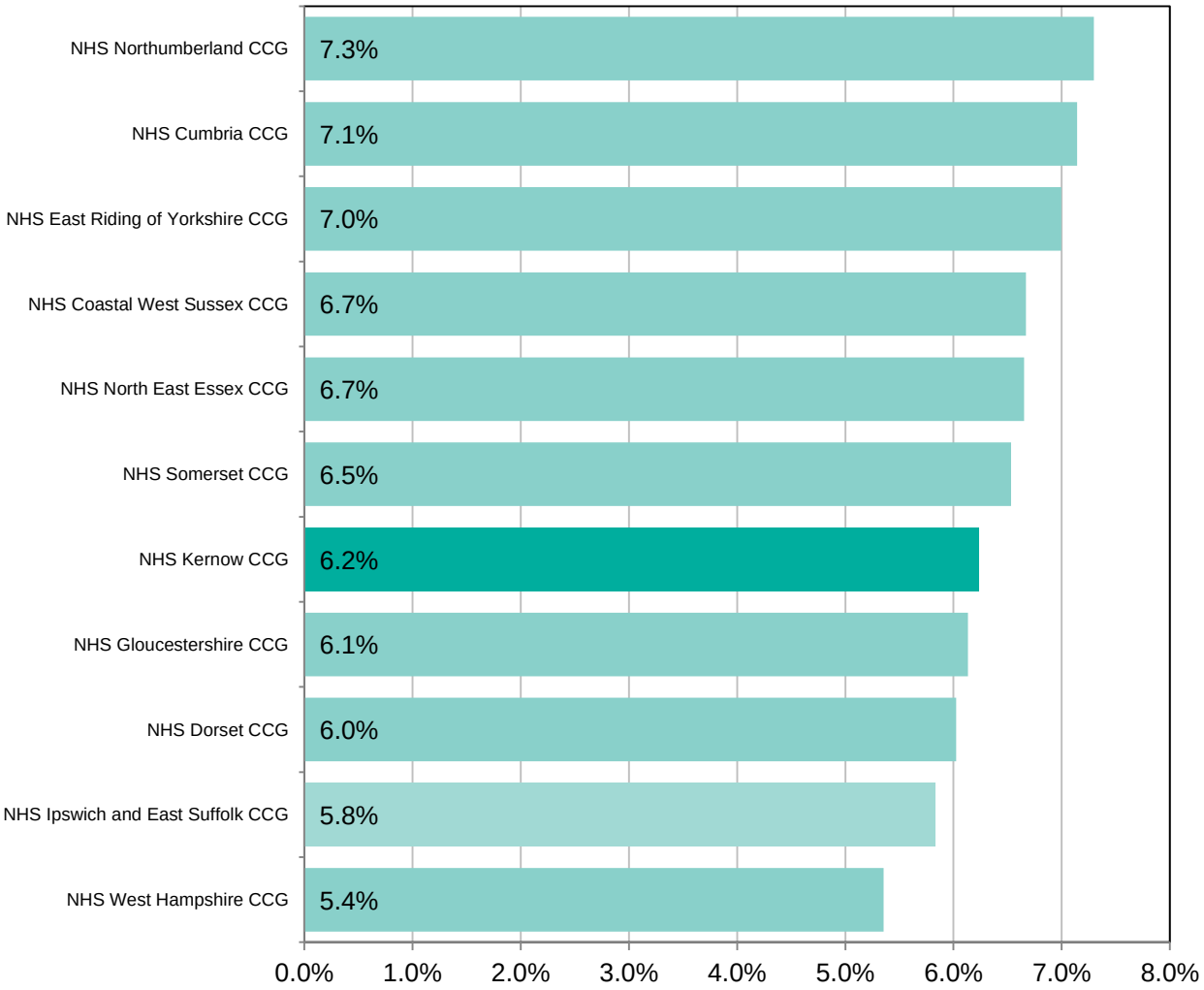
Comparison with CCGs in the SCN



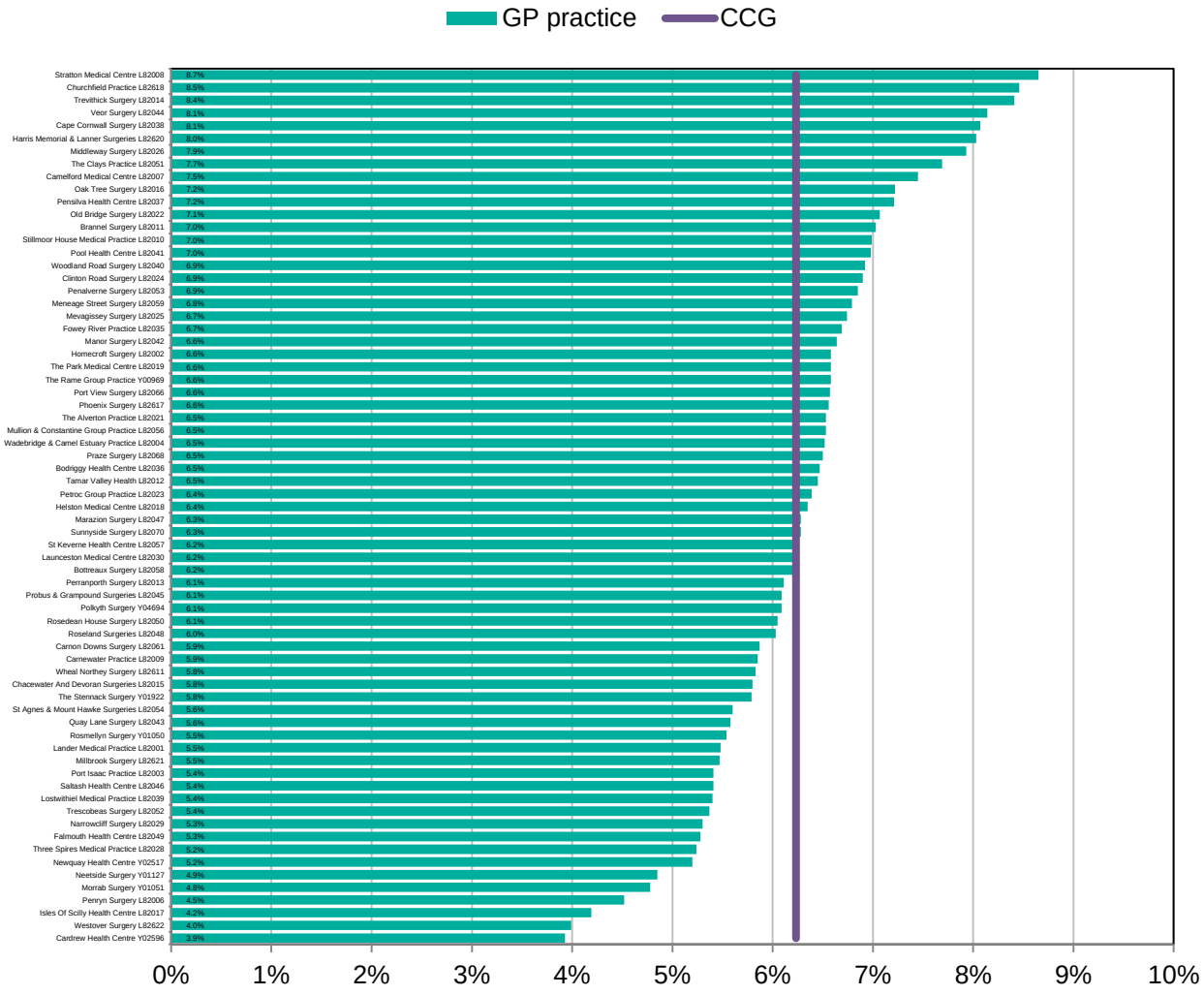
- 6.2% observed diabetes prevalence in NHS Kernow CCG, compared to 6.4% in England.

Diabetes observed prevalence by CCG

Comparison with demographically similar CCGs

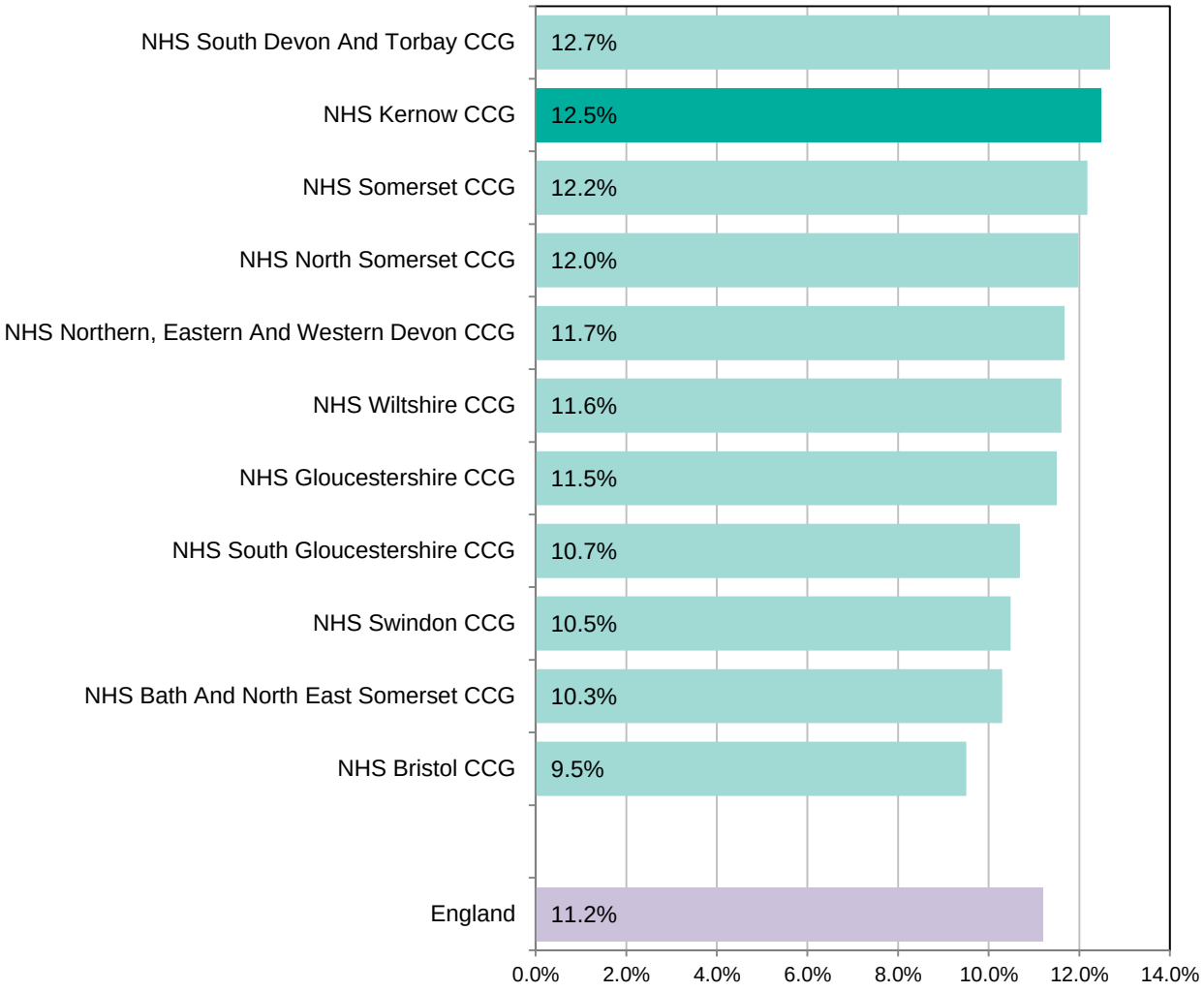


Diabetes prevalence by GP practice



- GP practice range of observed diabetes 3.9% to 8.7%

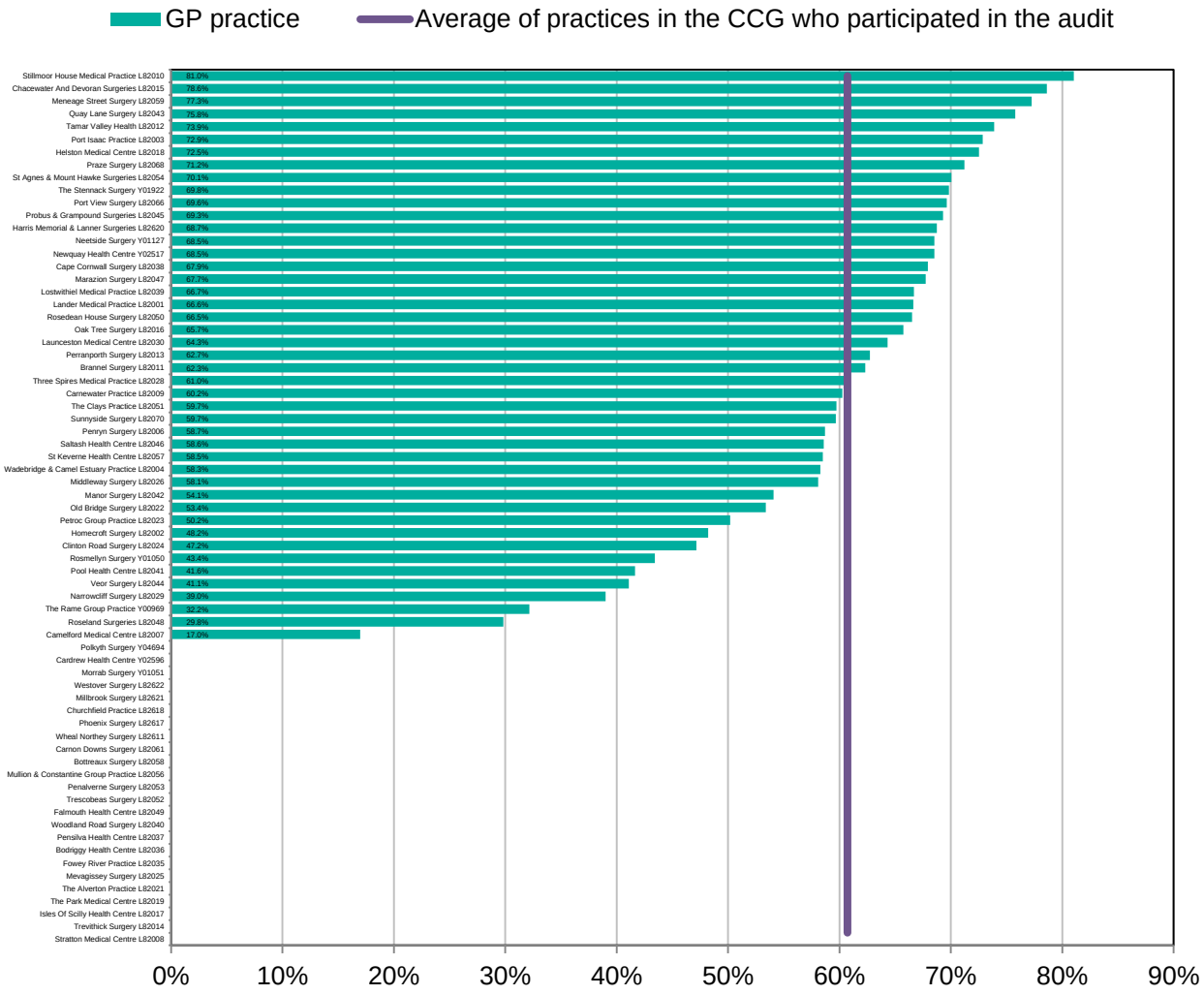
Prevalence estimates of non-diabetic hyperglycaemia



- Non-diabetic hyperglycaemia, also known as pre-diabetes or impaired glucose regulation, refers to raised blood glucose levels, but not in the diabetic range. People with non-diabetic hyperglycaemia are at increased risk of developing Type 2 diabetes.
- The estimated prevalence of non-diabetic hyperglycaemia in NHS Kernow CCG is 12.5%, compared to 11.2% in England.

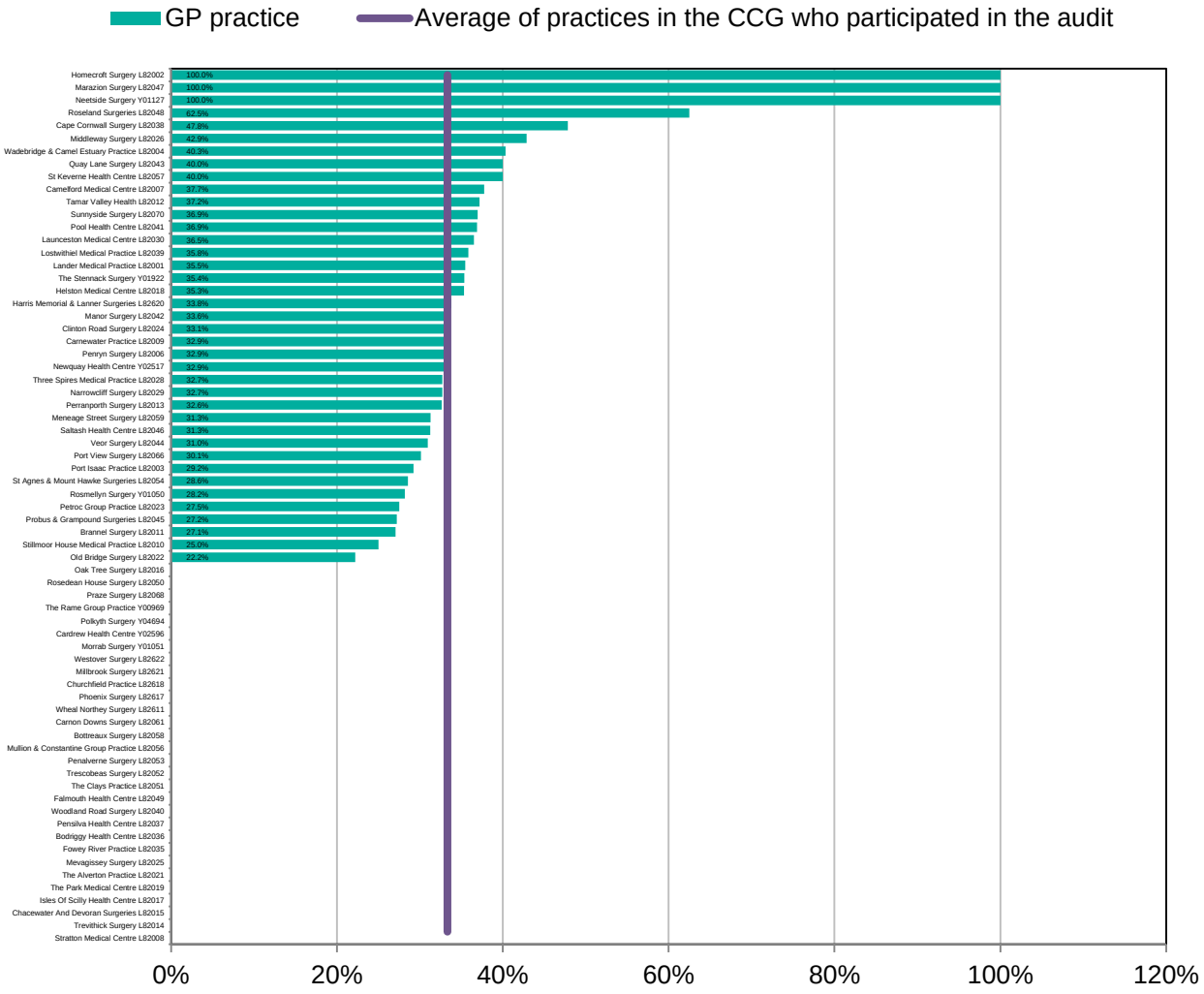
Note: Prevalence estimates of non-diabetic hyperglycaemia were developed using Health Survey for England (HSE) data. Five years of HSE data were combined, 2009- 2013. The estimates take into account the age, ethnic group and estimated body mass index of the population. These estimates were produced using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

People with diabetes who had eight care processes by GP practice, 2014/15



- Data on care processes and treatment targets are taken from the National Diabetes Audit (NDA). Overall practice participation in the 2014/15 audit was 54.9% in England. Within CCGs participation varied between 0% to 100%.
- In NHS Kernow CCG, 45 out of 64 practices (70.3%) participated in the NDA. Data is not available for the remaining practices.
- Achievement - 8 care processes: in practices who provided data via the NDA, between 17.0% and 81.0% of patients received all 8 care processes.

People with diabetes who met all 3 treatment targets by GP practice, 2014/15



- Data on care processes and treatment targets are taken from the National Diabetes Audit (NDA). Overall practice participation in the 2014/15 audit was 54.9% in England. Within CCGs participation varied between 0% to 100%.
- In NHS Kernow CCG, 45 out of 64 practices (70.3%) participated in the NDA. Data is not available for the remaining practices.
- Achievement - 3 treatment targets: in practices who provided data via the NDA, between 0.0% and 100.0% of patients achieved all 3 treatment targets.

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

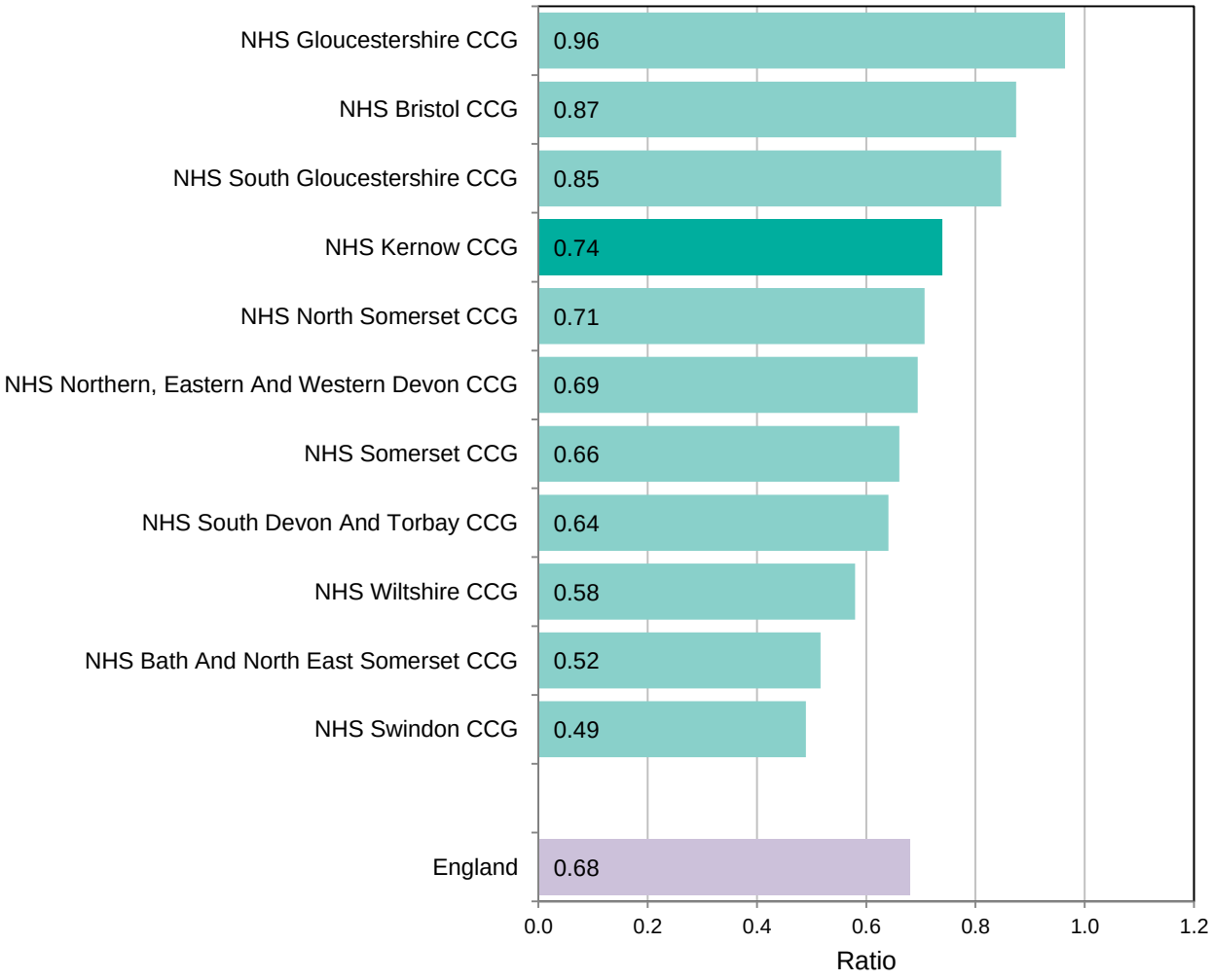
Evidence based guidance from NICE identifies CVD risk reduction, good blood pressure control and management of proteinuria as essential steps to reduce the risk of cardiovascular events and progression to kidney failure. Despite this there is often significant variation between practices in achievement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

What might help

- Promote participation by all practices in the National CKD Audit
- Obtain and benchmark practice level data from the National CKD Audit
- Promote uptake of and follow up from the NHS Health Check to aid detection and management of CKD
- Local training and education in the detection and management of CKD

Chronic kidney disease (CKD) observed prevalence (2014/15) compared to expected prevalence (2011) by CCG

Comparison with CCGs in the SCN

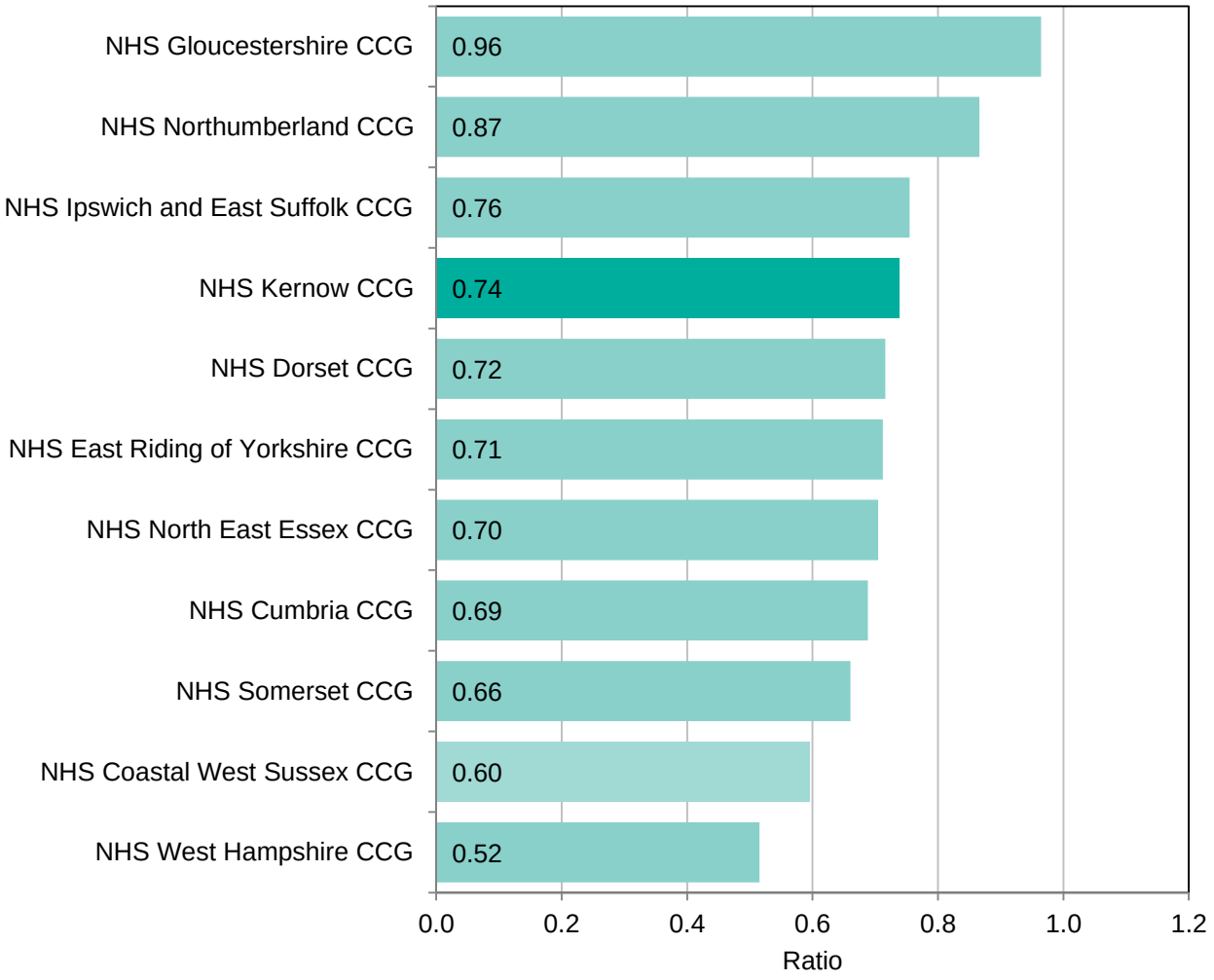


- 0.74 ratio of observed to expected CKD prevalence in NHS Kernow CCG compared to 0.68 in England.
- This suggests that 74% of people with chronic kidney disease have been diagnosed.

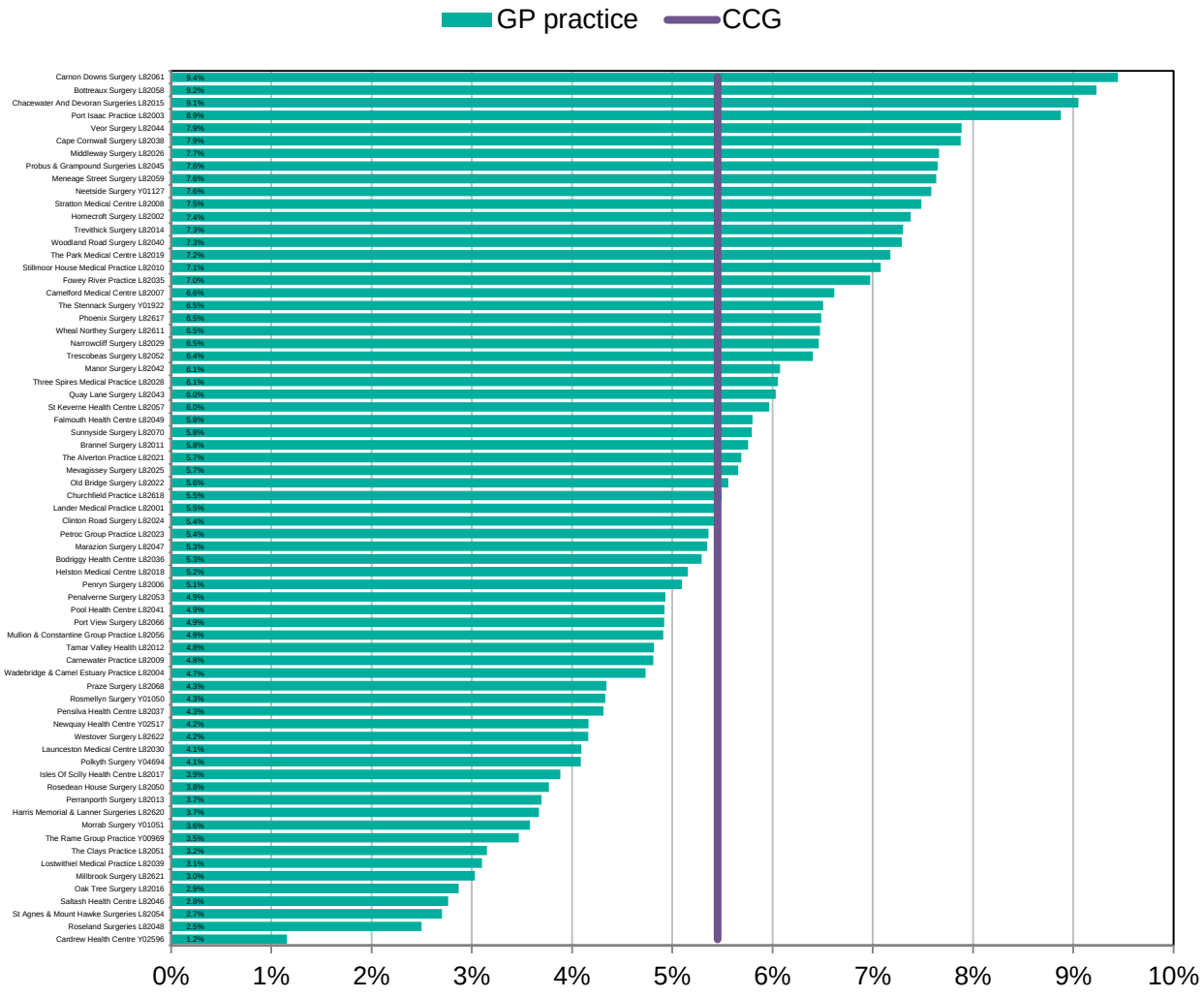
Note: This slide compares the prevalence of CKD recorded in QOF in 2014/15 to the expected prevalence of CKD produced by the University of Southampton in 2011. A small number of CCGs have a ratio greater than 1. It is unlikely that all people with CKD will be diagnosed in any CCG and therefore a ratio 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 (2014/15) compared to expected prevalence (2011) by CCG

Comparison with demographically similar CCGs



CKD prevalence by GP practice, 2014/15

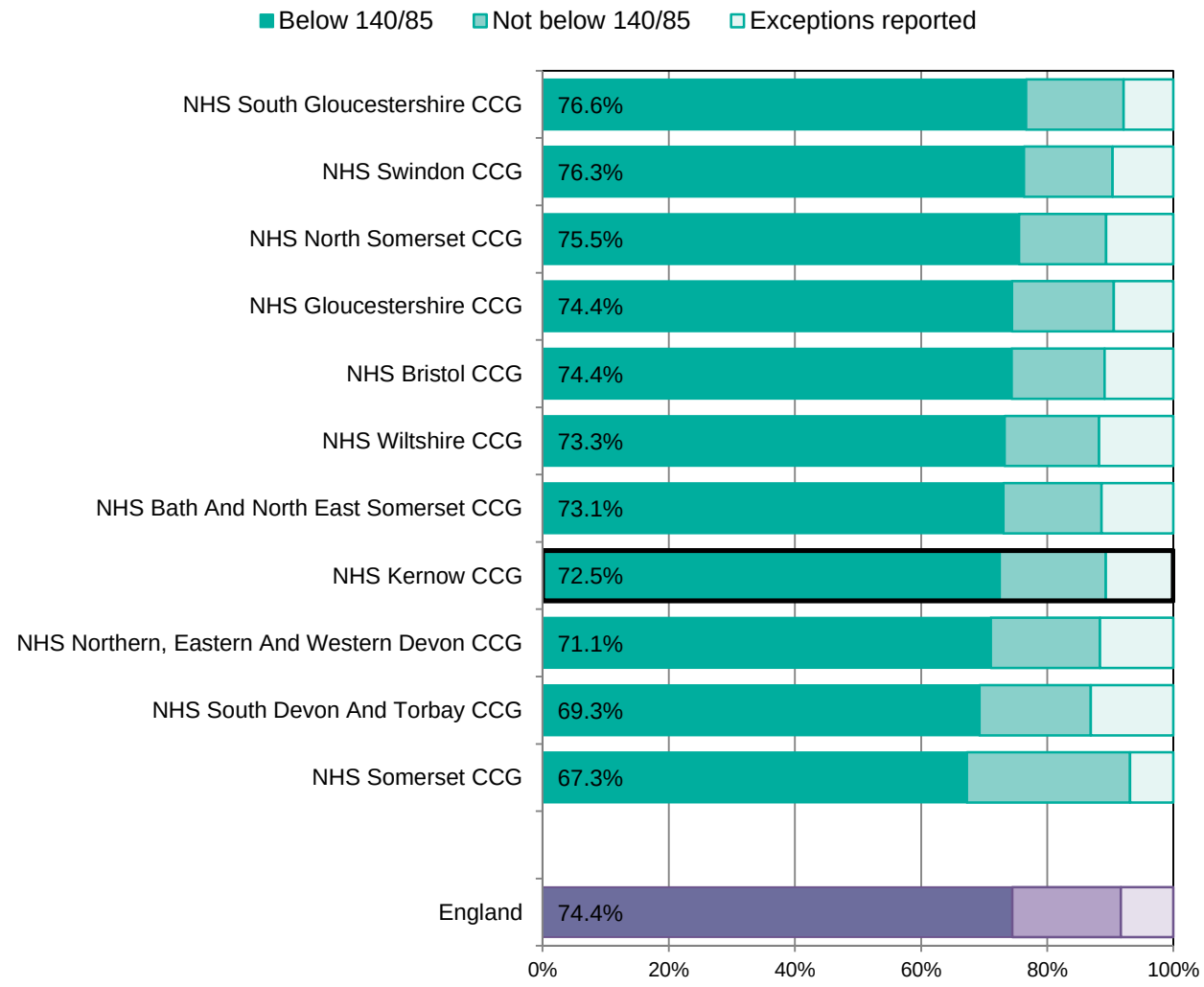


- It is estimated that there are 8,671 people with undiagnosed chronic kidney disease in NHS Kernow CCG
- GP practice range of observed CKD: 1.2% to 9.4%

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 SCN

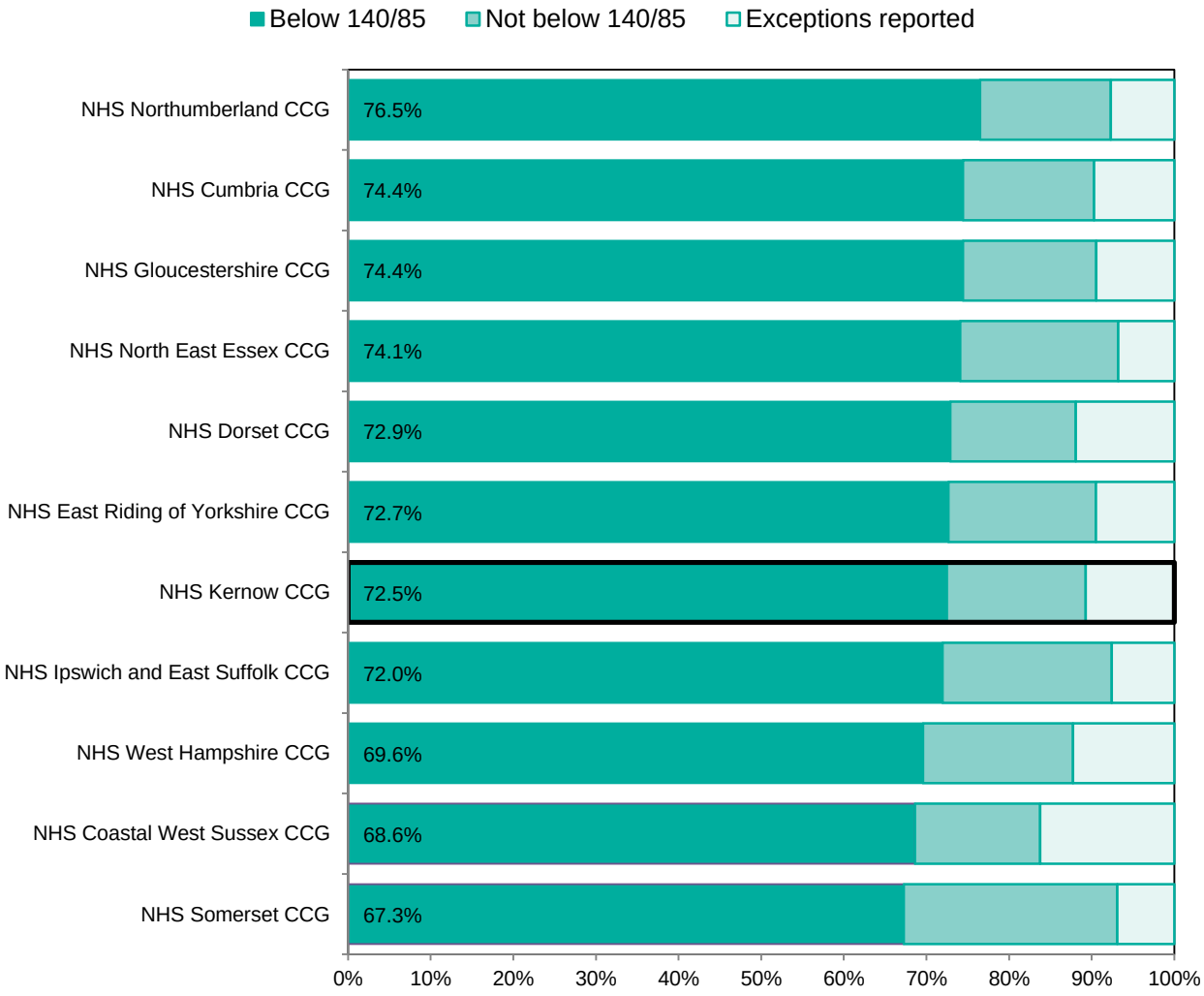


- 24,446 people with CKD (diagnosed*) in NHS Kernow CCG
- 17,721 (72.5%) people whose blood pressure is <= 140 /85
- 2,617 (10.7%) people who are exceptions
- 4,108 (16.8%) additional people whose blood pressure is not <= 140 / 85

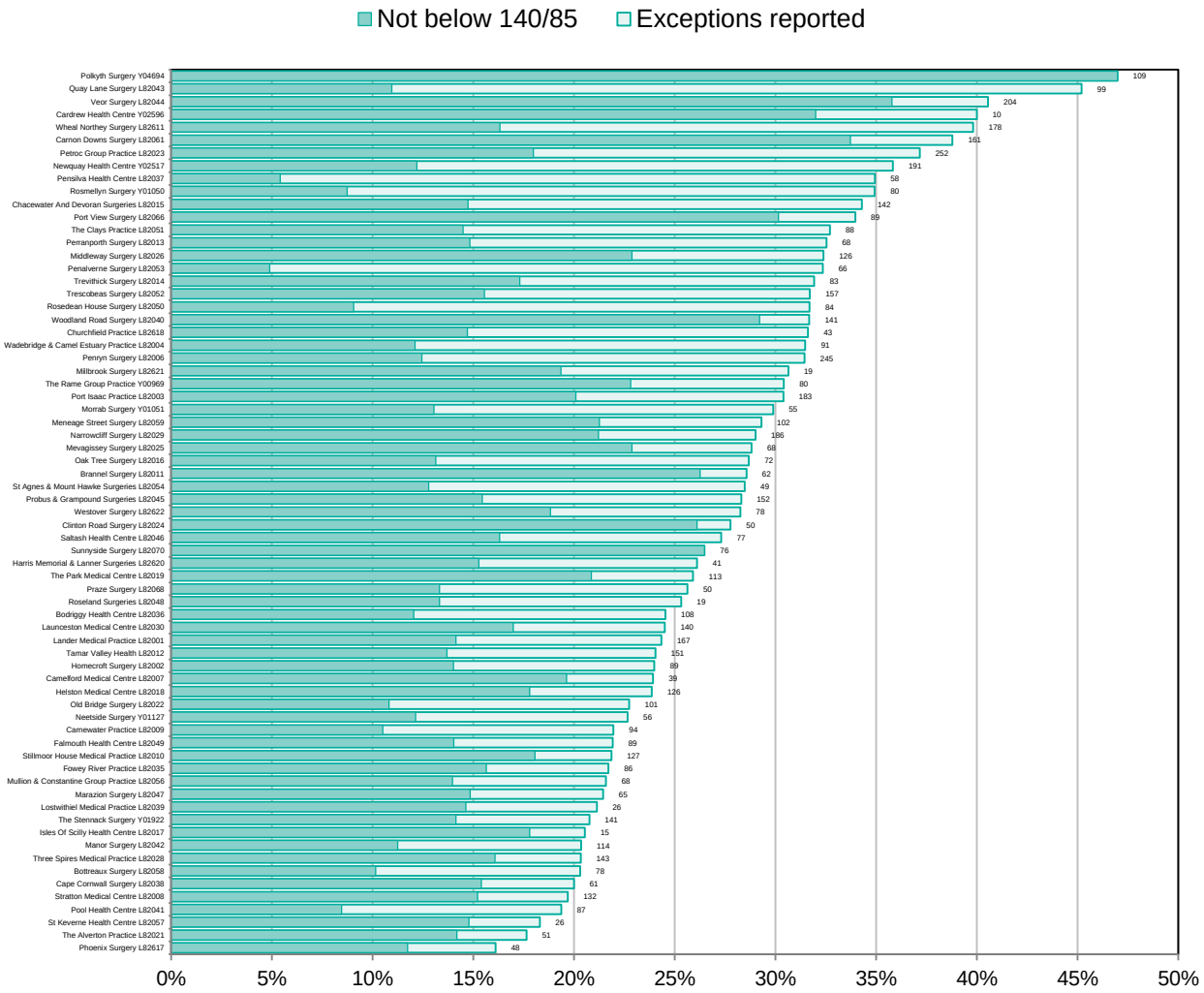
**Using the QOF clinical indicator CKD002 denominator plus exceptions*

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



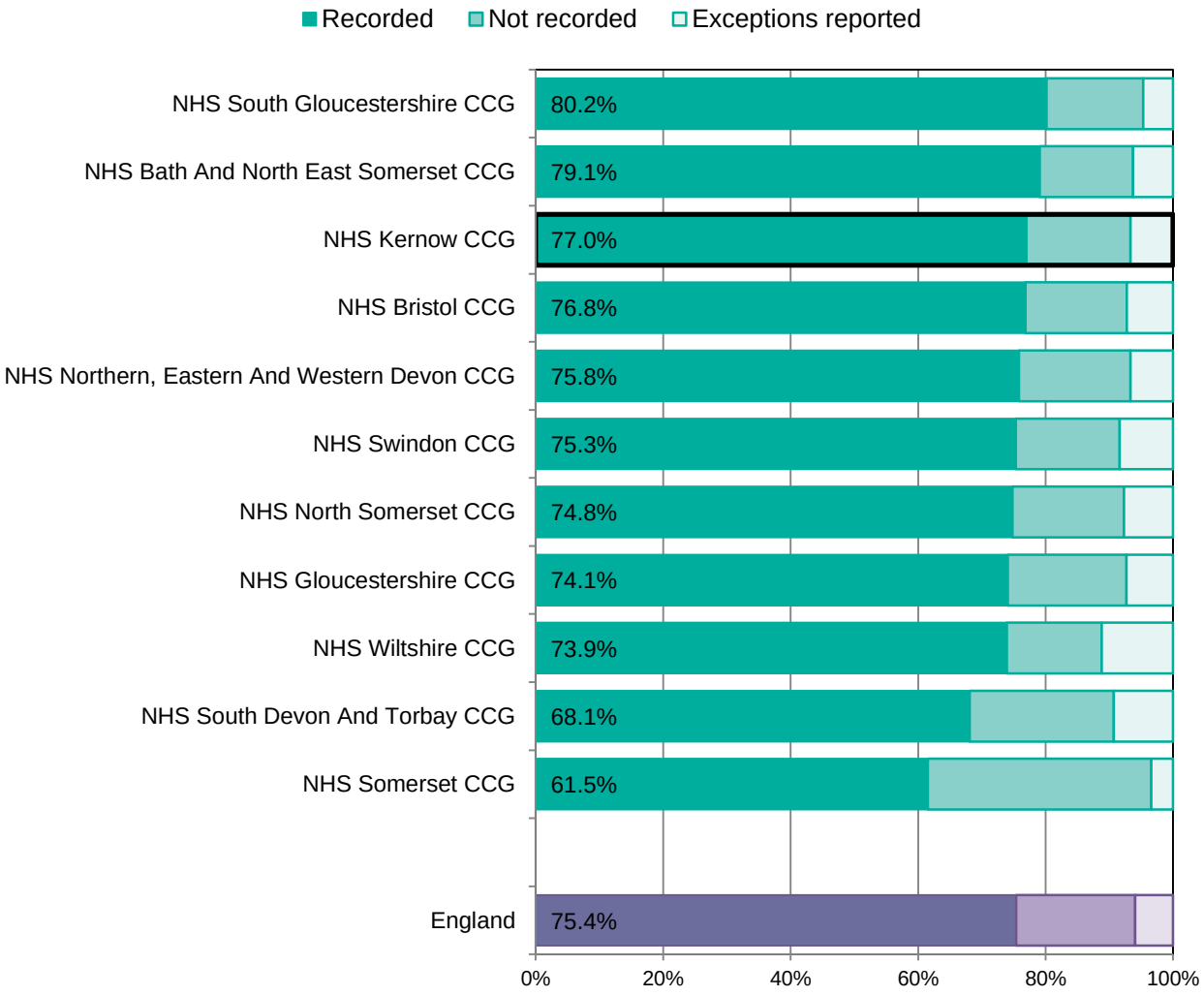
Percentage of patients on the CKD register whose last blood pressure reading (measured in the preceding 12 months) is not 140/85 mmHg or less by GP practice, 2014/15



- In total, including exceptions, there are 6,725 people whose blood pressure is not <= 140 / 85
- GP practice range: 16.1% to 47.0%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 1,229 people would have their blood pressure controlled

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 SCN

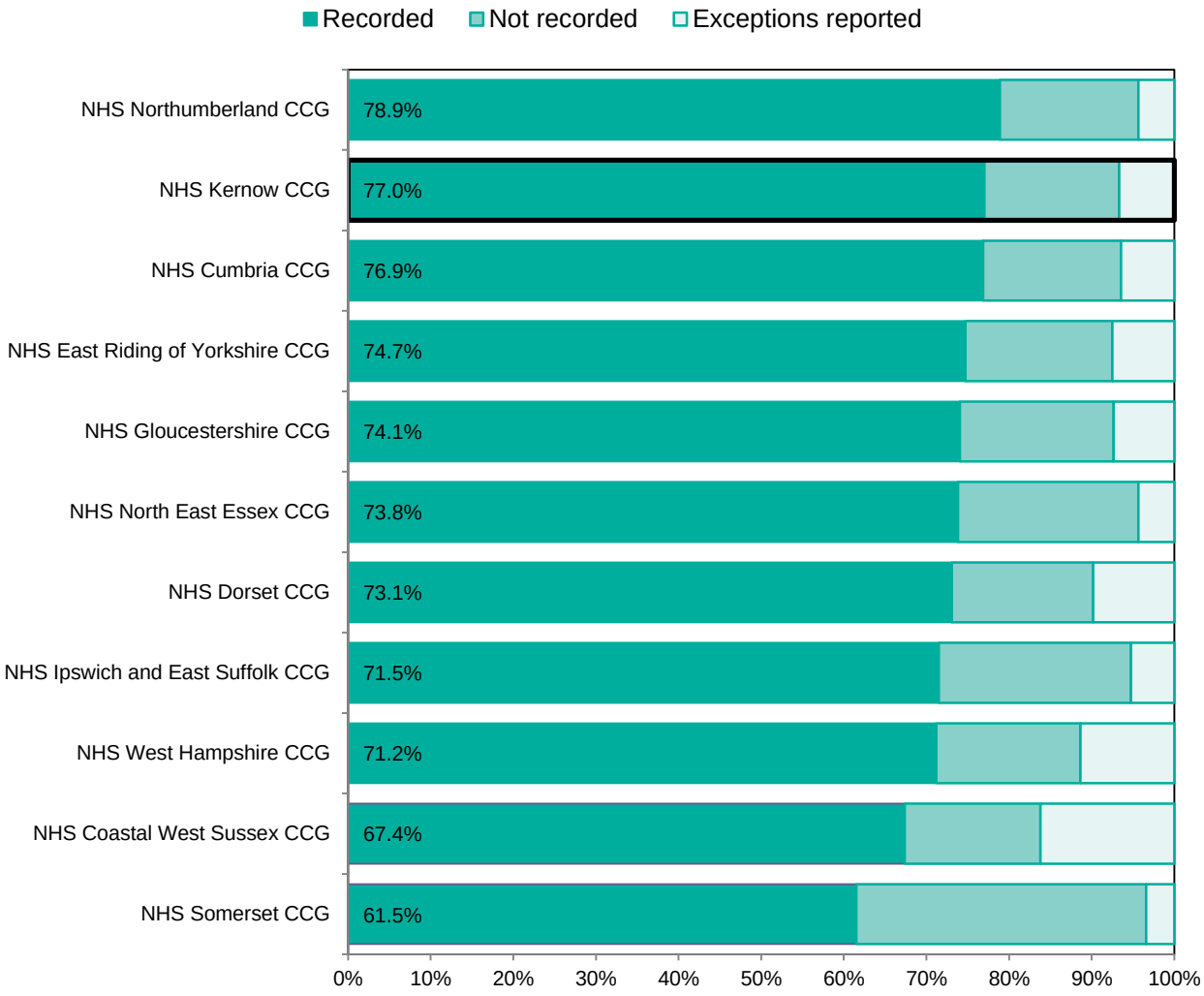


- 24,461 people with CKD (diagnosed*) in NHS Kernow CCG
- 18,836 (77%) people who have a record of urine albumin:creatinine ratio test
- 1,636 (6.7%) people who are exceptions
- 3,989 (16.3%) additional people who have no record of urine albumin:creatinine ratio test

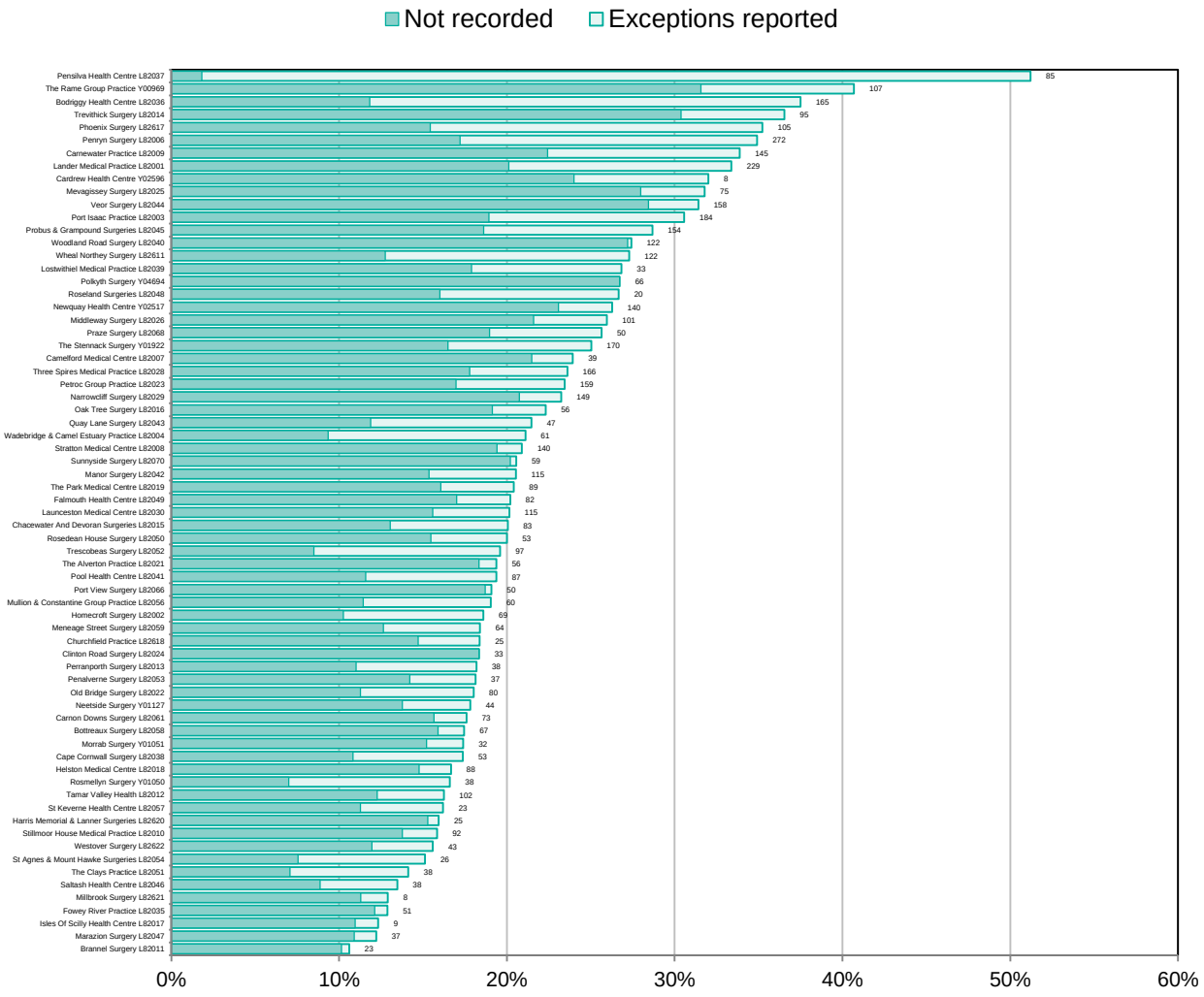
**Using the QOF clinical indicator CKD004 denominator plus exceptions*

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 5,625 people who have no record of urine albumin:creatinine ratio test
- GP practice range: 10.6% to 51.2%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 1,532 people would have their urine albumin/creatine ratio recorded

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 already has 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. Again there is good evidence that 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?

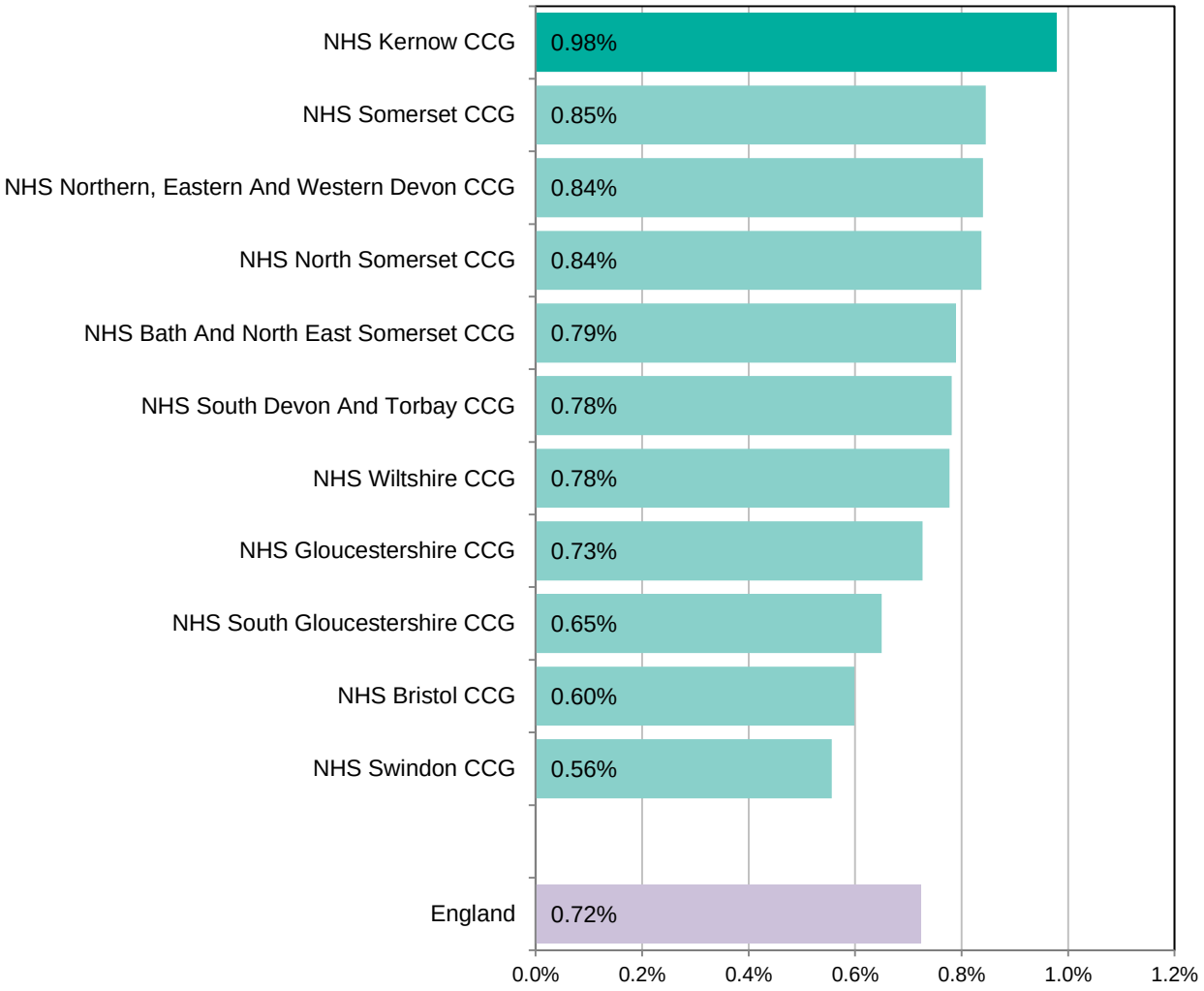
1. For each indicator how wide is the variation in achievement and exception reporting?
2. How many people would benefit if all practices performed as well as the best?
3. How can we support practices who are average and below average to perform as well as the best in:
   - More systematic delivery of 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. Education and training to support delivery of behaviour change interventions for CVD risk reduction in primary care
4. Ensure access to rapid access diagnostic clinics and specialist support for management of angina and heart failure
5. Ensure access to cardiac rehab for individuals with CHD and heart failure

Heart failure prevalence by CCG

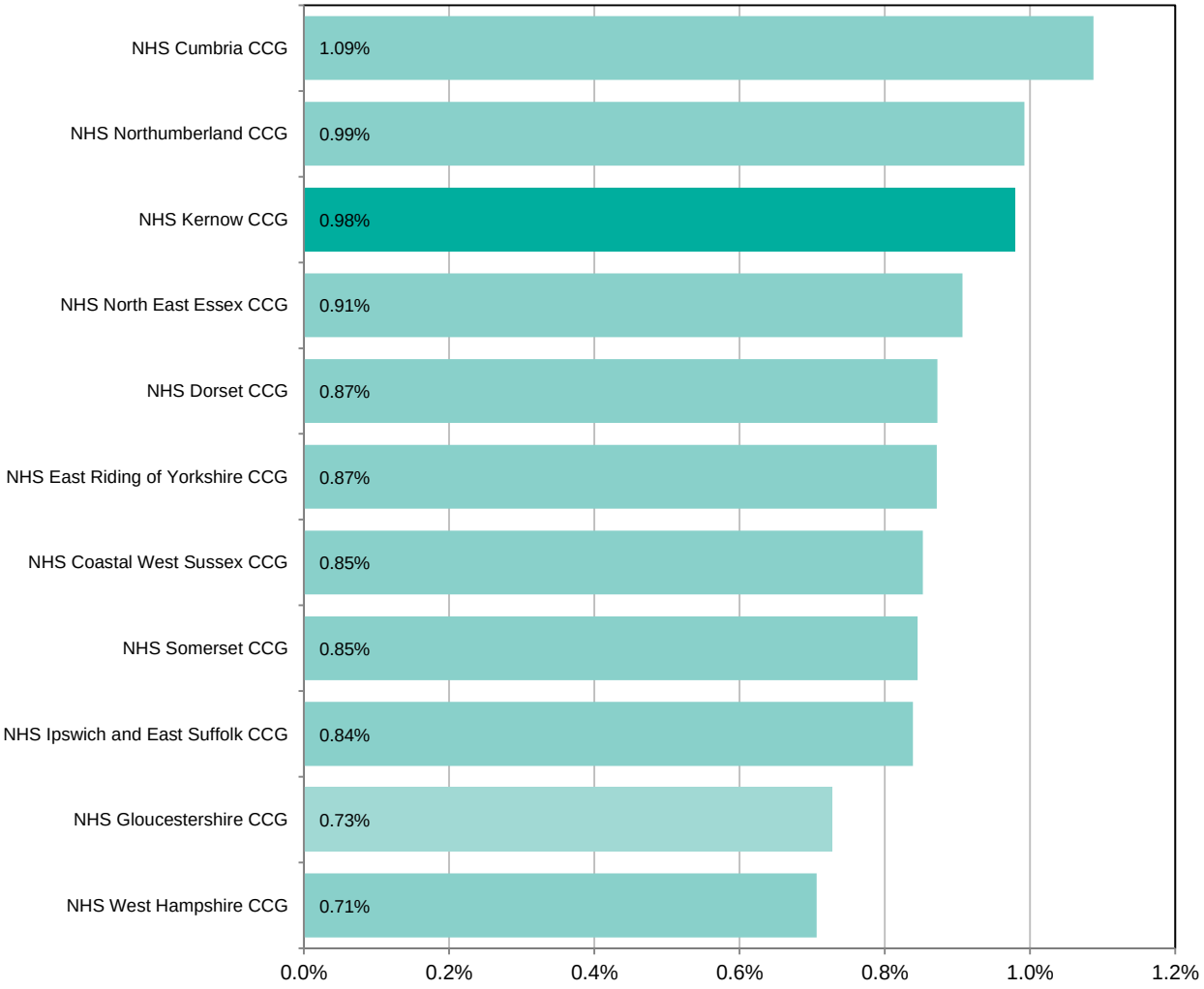
Comparison with CCGs in the SCN



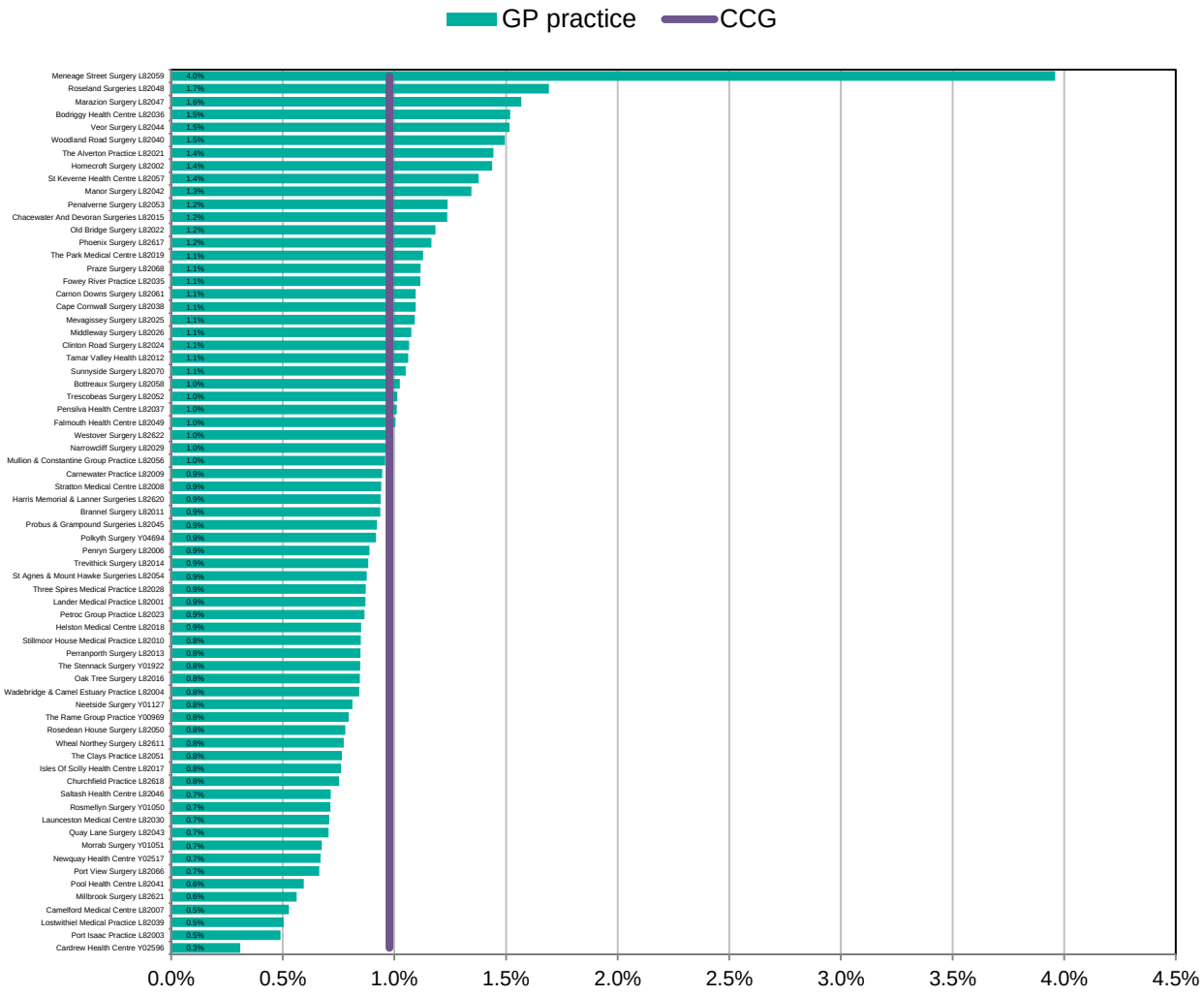
- Prevalence of 0.98% in NHS Kernow CCG compared to 0.72% in England

Heart failure prevalence by CCG

Comparison with demographically similar CCGs



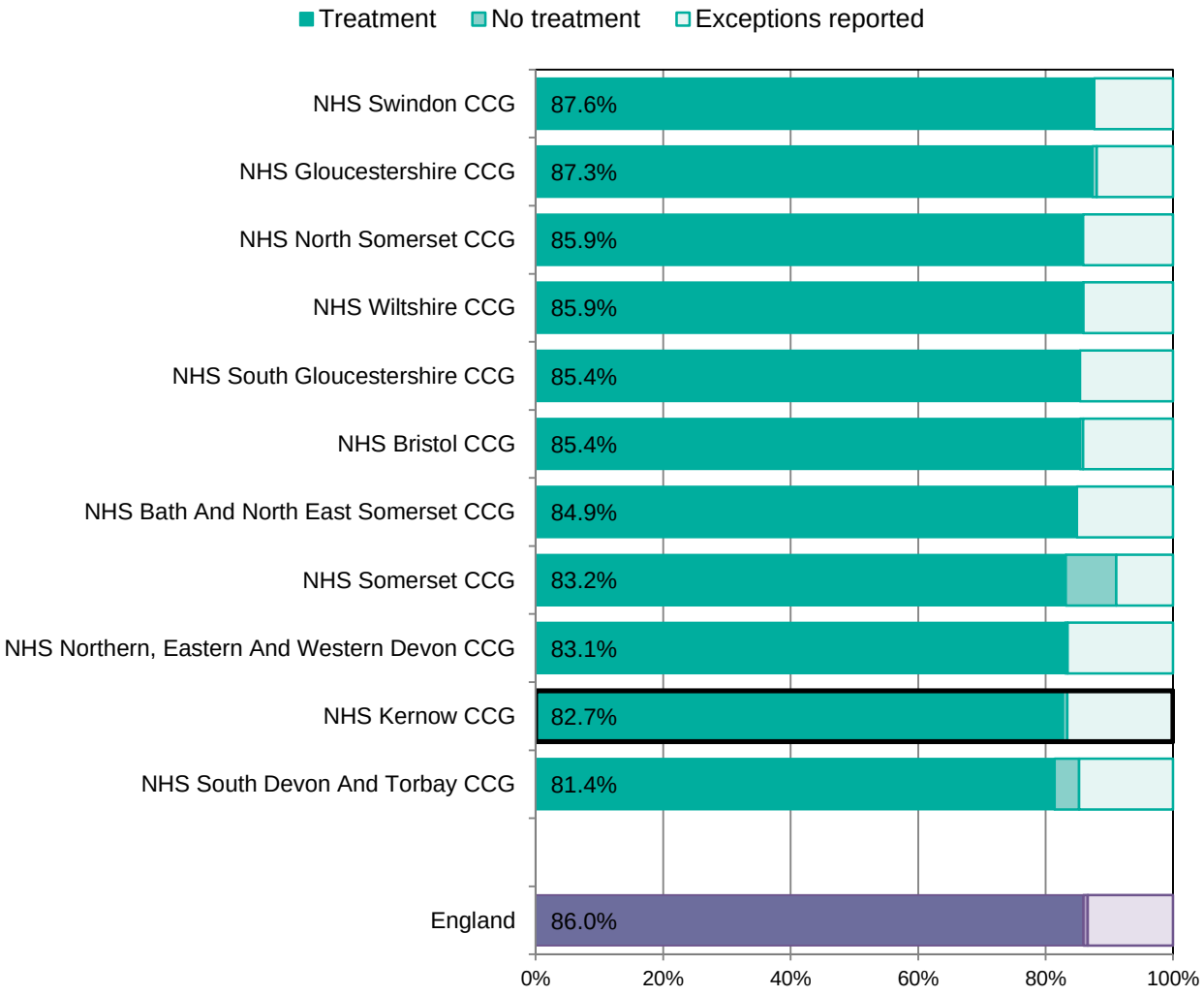
Heart failure prevalence by GP practice



- 5,412 people with diagnosed heart failure in NHS Kernow CCG
- GP practice range: 0.3% to 4.0%

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 SCN

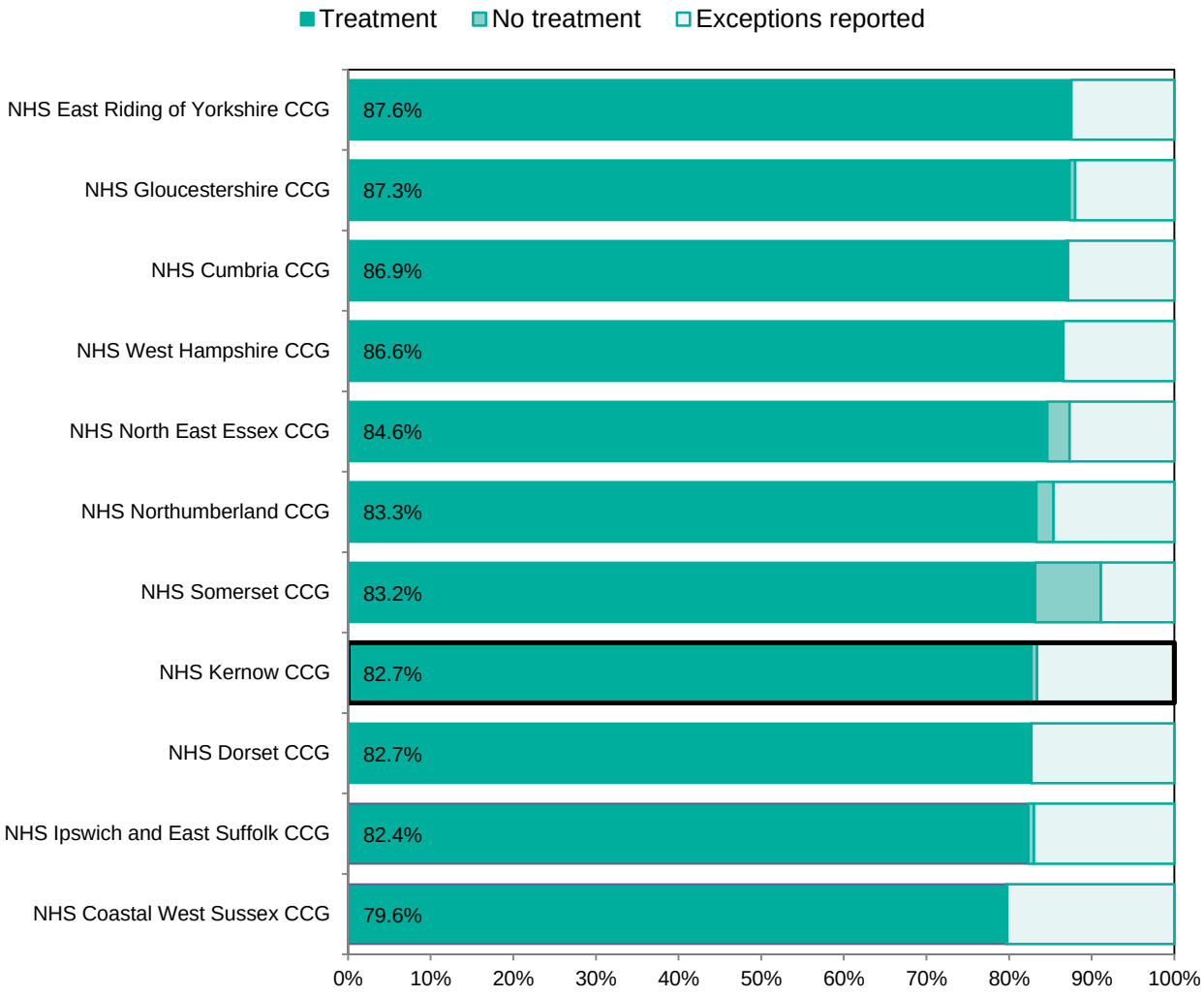


- 2,320 people with heart failure* with LVSD in NHS Kernow CCG
- 1,919 (82.7%) people treated with ACE-I or ARB
- 385 (16.6%) people who are exceptions
- 16 (0.7%) additional people who are not treated with ACE-I or ARB

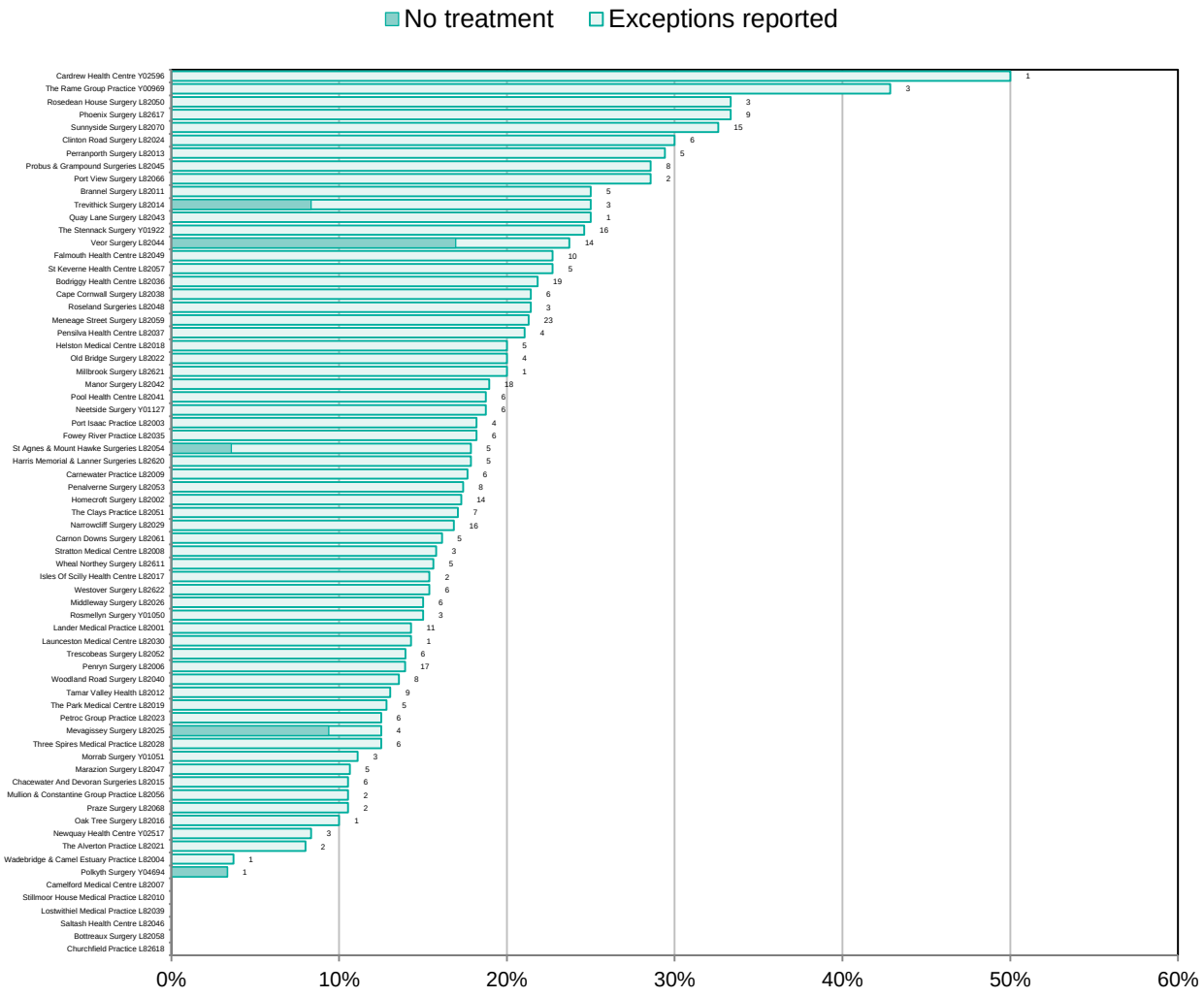
**Using the QOF clinical indicator HF003 denominator plus exceptions*

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



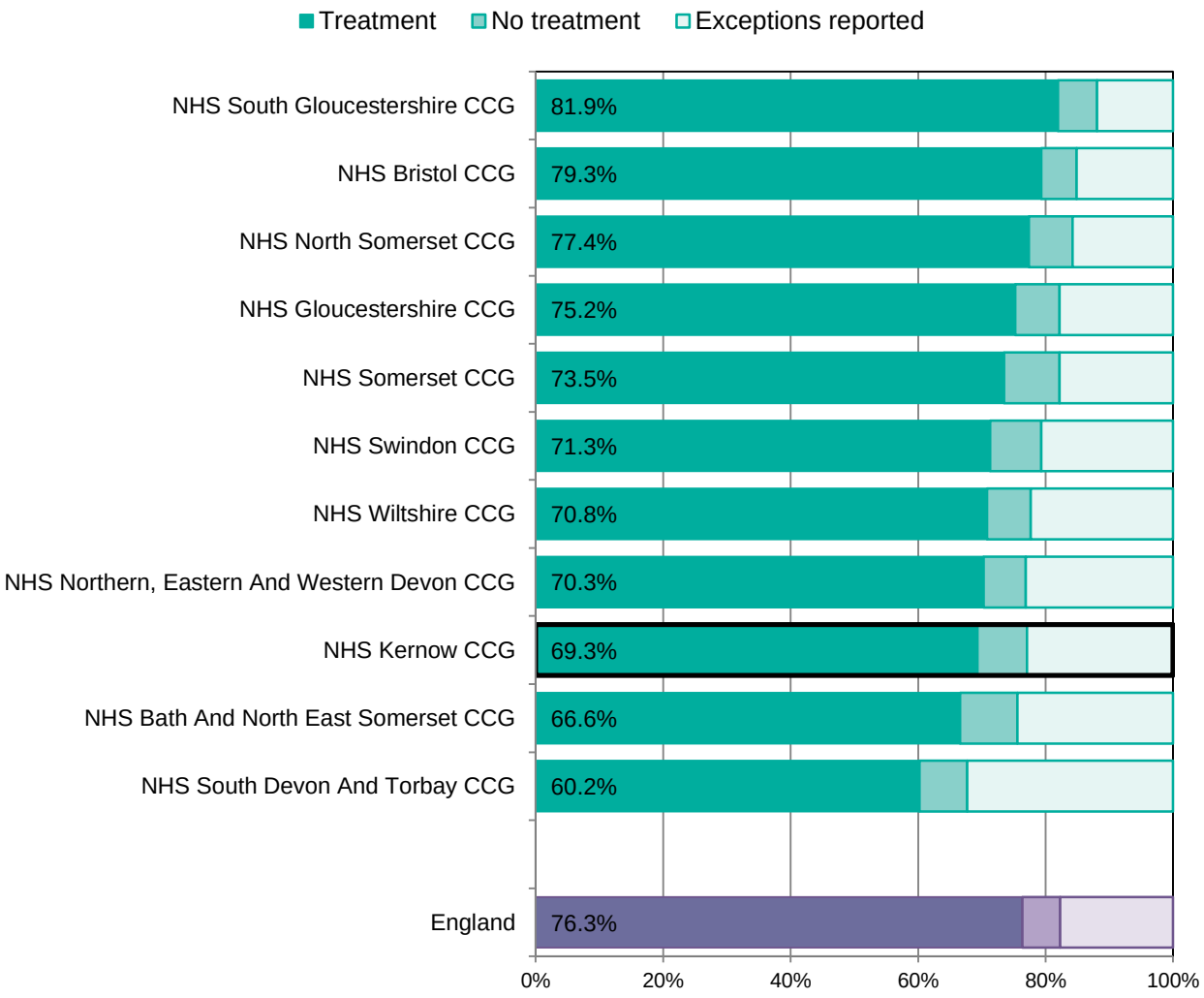
Percentage of patients with heart failure due to left ventricular systolic dysfunction (LVSD) who are not treated with ACE-I / ARB by GP practice



- In total, including exceptions, there are 401 people who are not treated with ACE-I or ARB
- GP practice range: 0.0% to 50.0%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 165 people would be treated

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 SCN

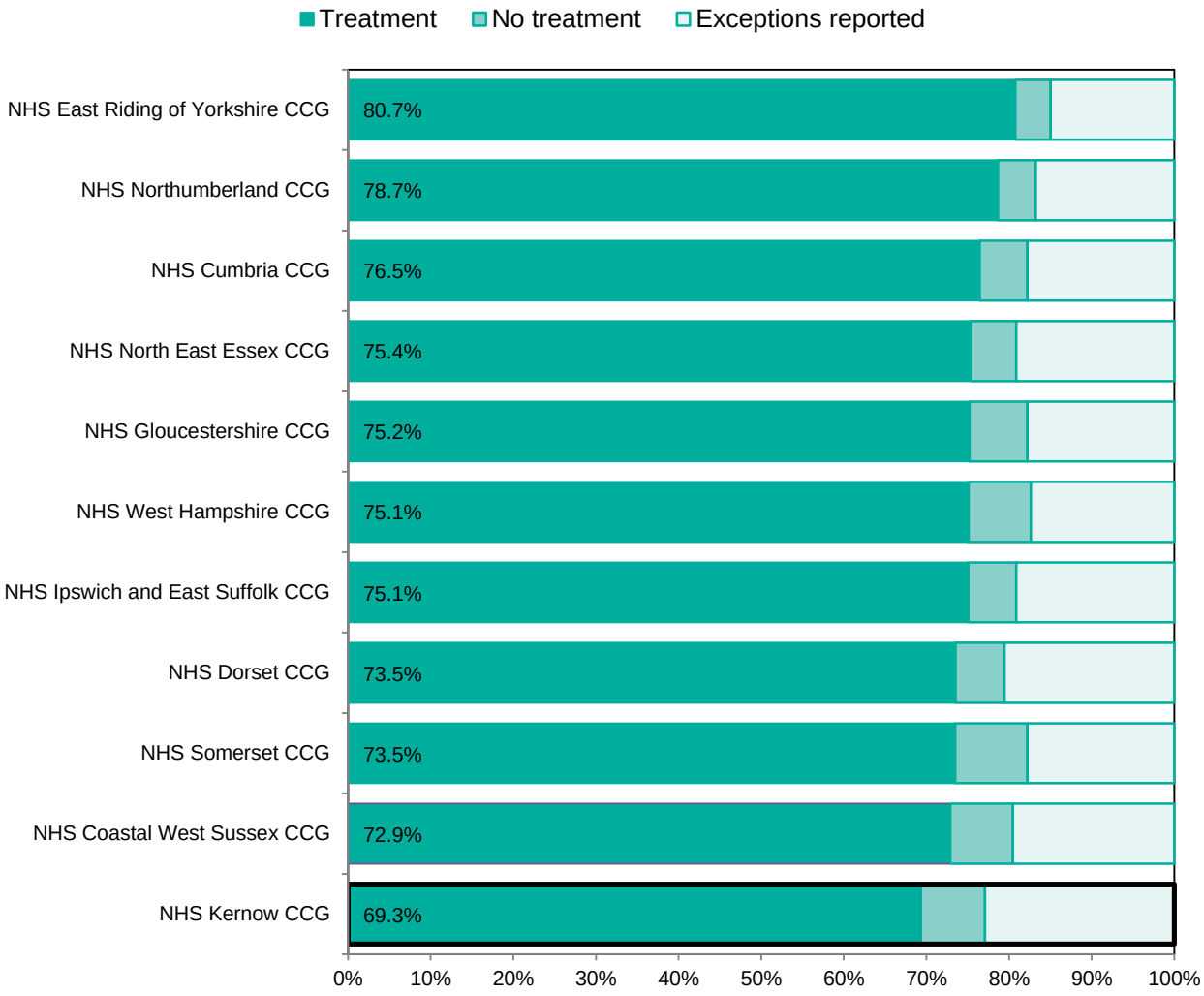


- 1,906 people with heart failure* with LVSD treated with ACE-I/ARB in NHS Kernow CCG
- 1,321 (69.3%) people treated with ACE-I/ARB and BB
- 437 (22.9%) people who are exceptions
- 148 (7.8%) additional people who are not treated with ACE-I/ARB and BB

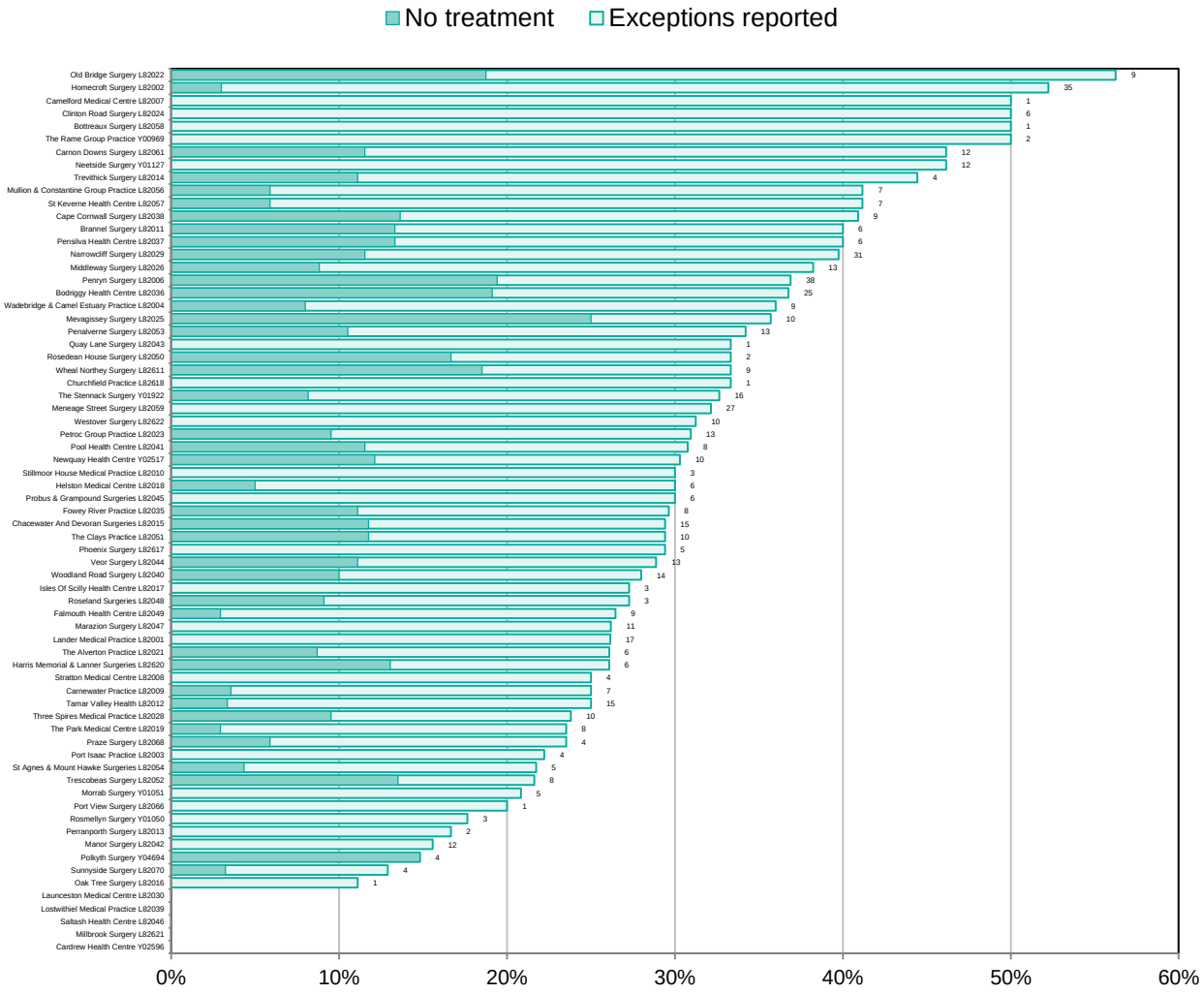
**Using the QOF clinical indicator HF004 denominator plus exceptions*

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



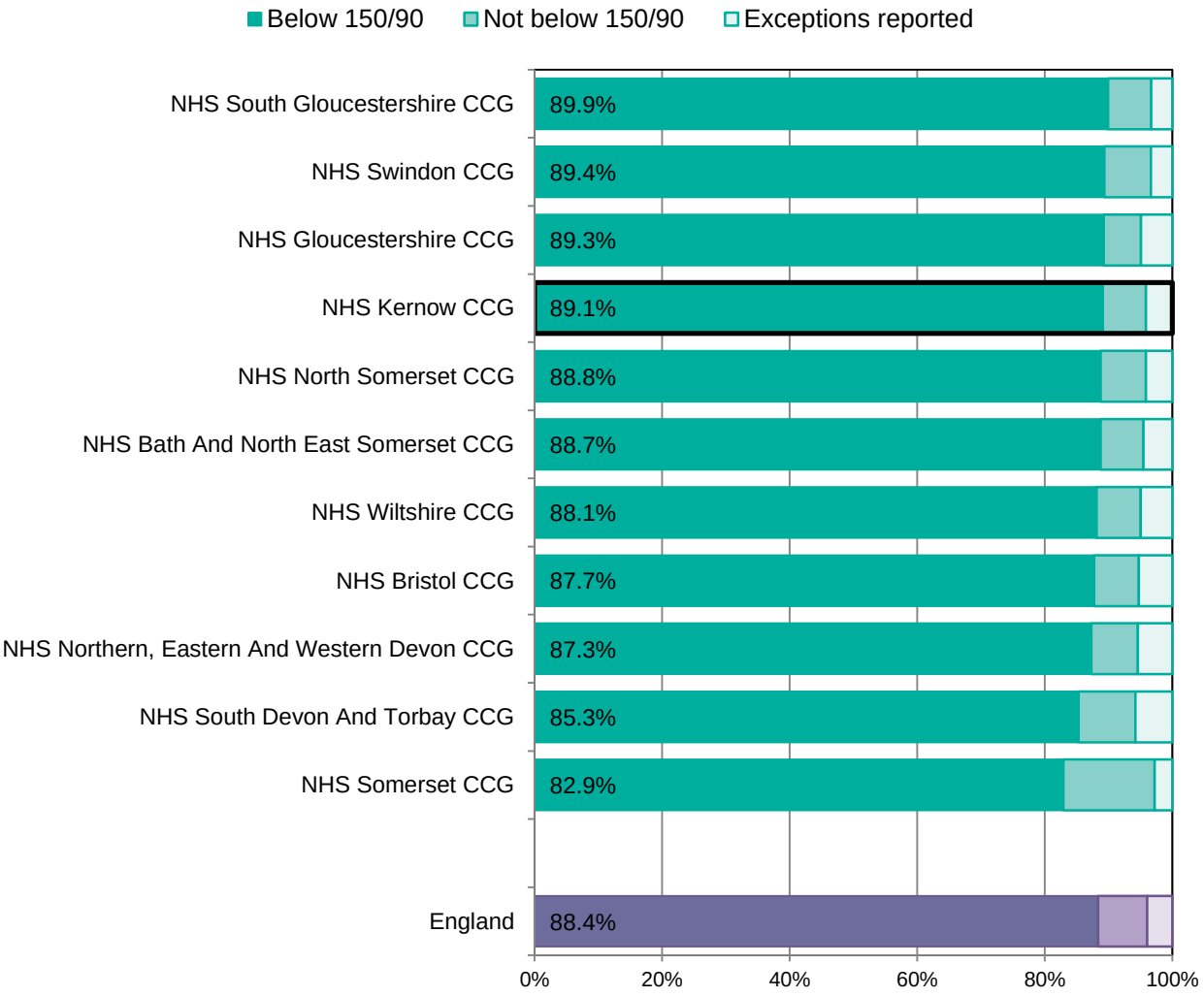
Percentage of patients with heart failure due to left ventricular systolic dysfunction (LVSD) who are not treated with ACE-I / ARB and BB by GP practice



- In total, including exceptions, there are 585 people who are not treated with ACE-I or ARB
- GP practice range: 0.0% to 56.3%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 208 people would be treated

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 SCN

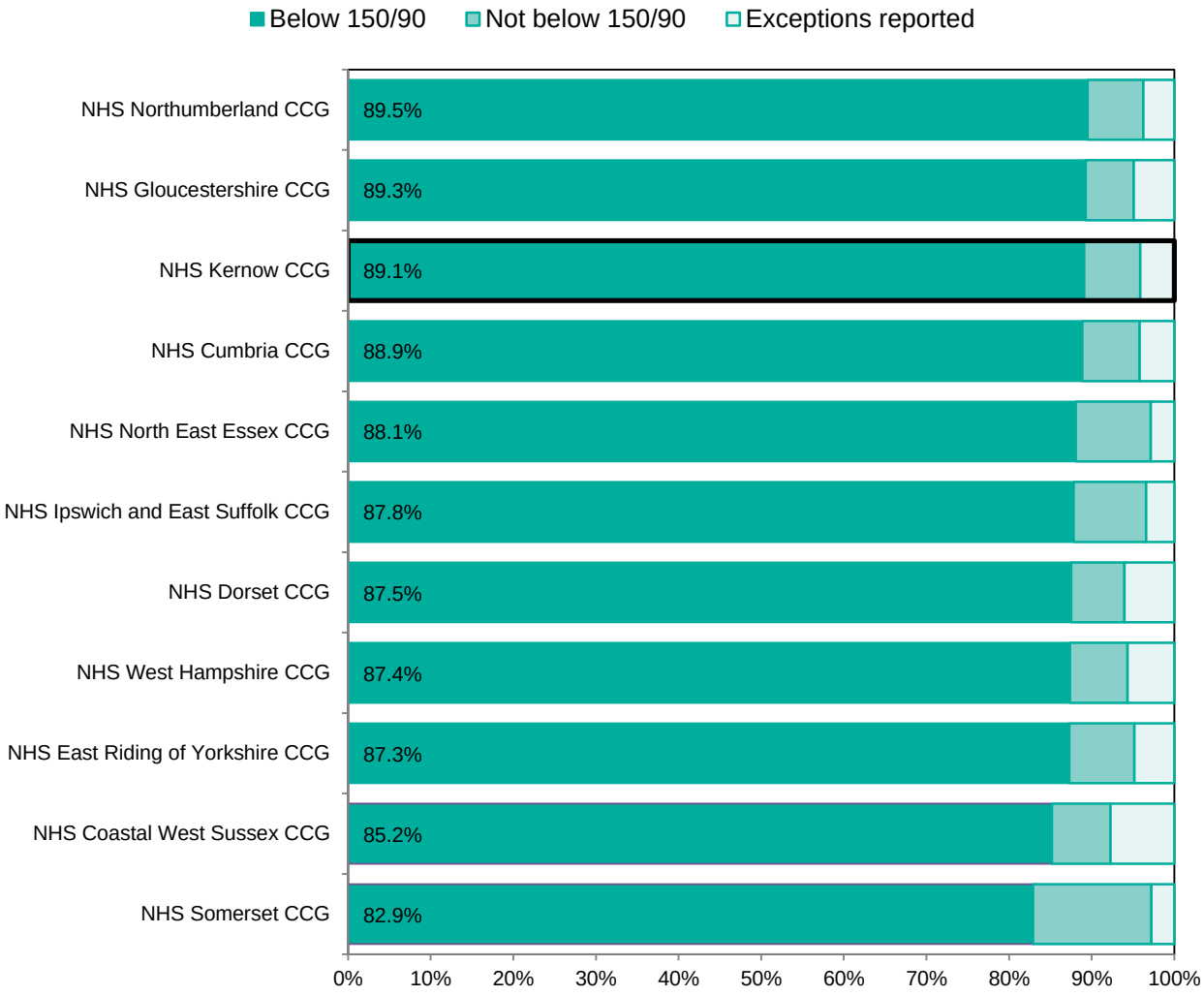


- 22,671 people with coronary heart disease* in NHS Kernow CCG
- 20,196 (89.1%) people whose blood pressure <= 150 / 90
- 938 (4.1%) people who are exceptions
- 1,537 (6.8%) additional people whose blood pressure is not <= 150 / 90

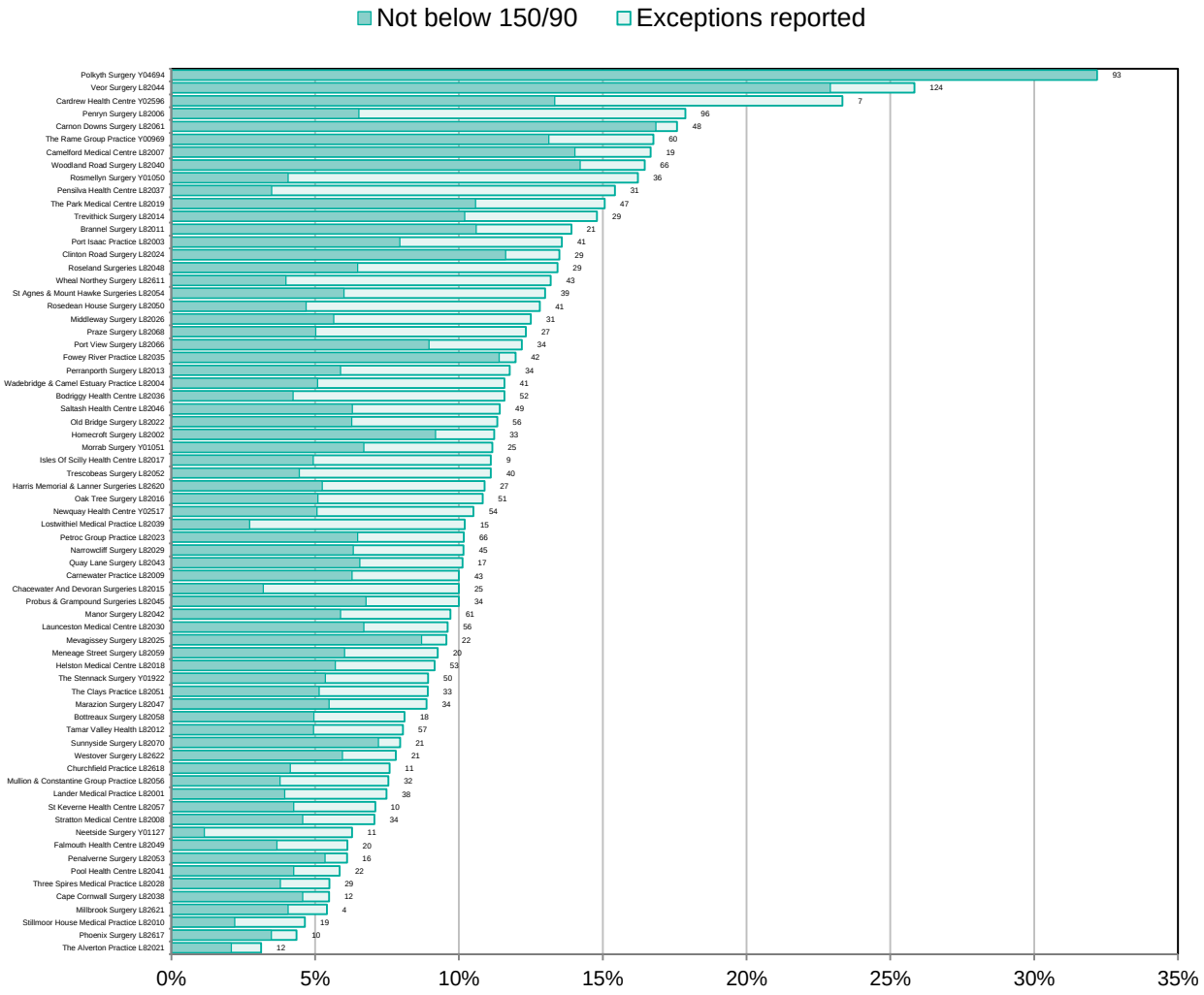
**Using the QOF clinical indicator CHD002 denominator plus exceptions*

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



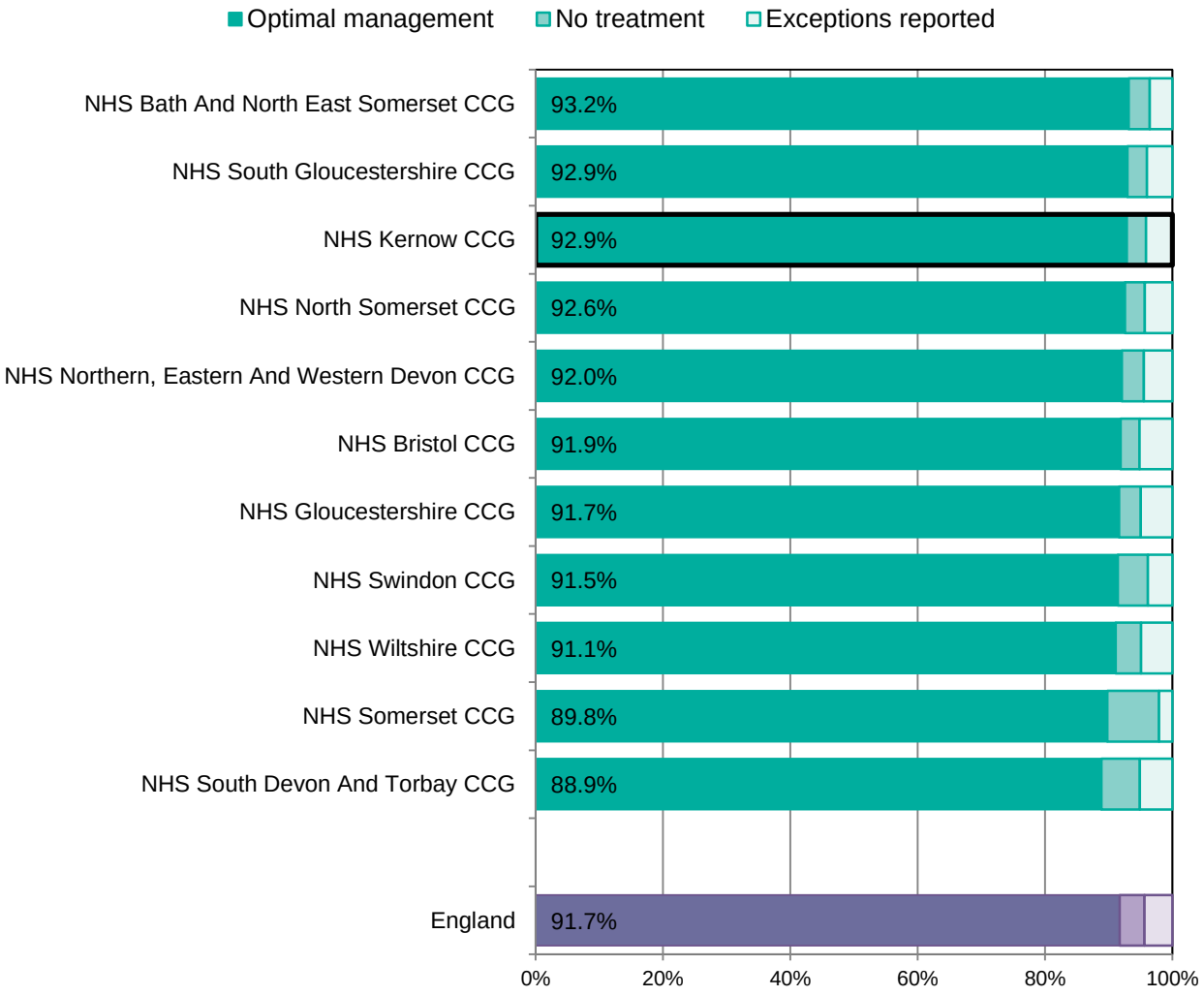
Percentage of patients with CHD whose blood pressure reading (measured in the preceding 12 months) is not 150/90 mmHg or less by GP practice



- In total, including exceptions, there are 2,475 people whose blood pressure is not <= 150 / 90
- GP practice range: 3.1% to 32.2%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 700 people would be treated

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 SCN

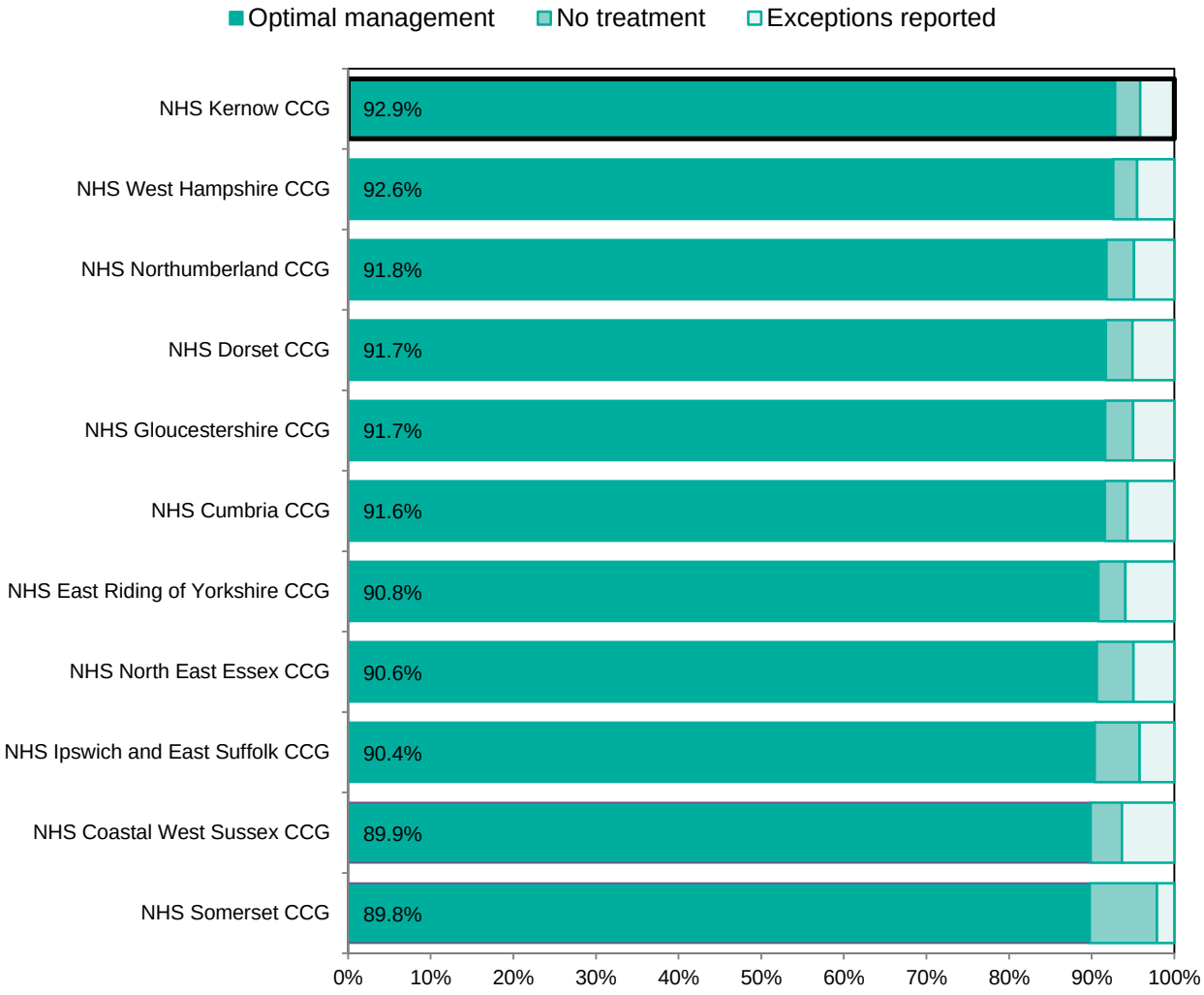


- 22,673 people with coronary heart disease* in NHS Kernow CCG
- 21,053 (92.9%) people who are taking aspirin, an alternative anti-platelet therapy, or an anti-coagulant
- 935 (4.1%) people who are exceptions
- 685 (3%) additional people who are not taking aspirin, an alternative anti-platelet therapy, or an anti-coagulant

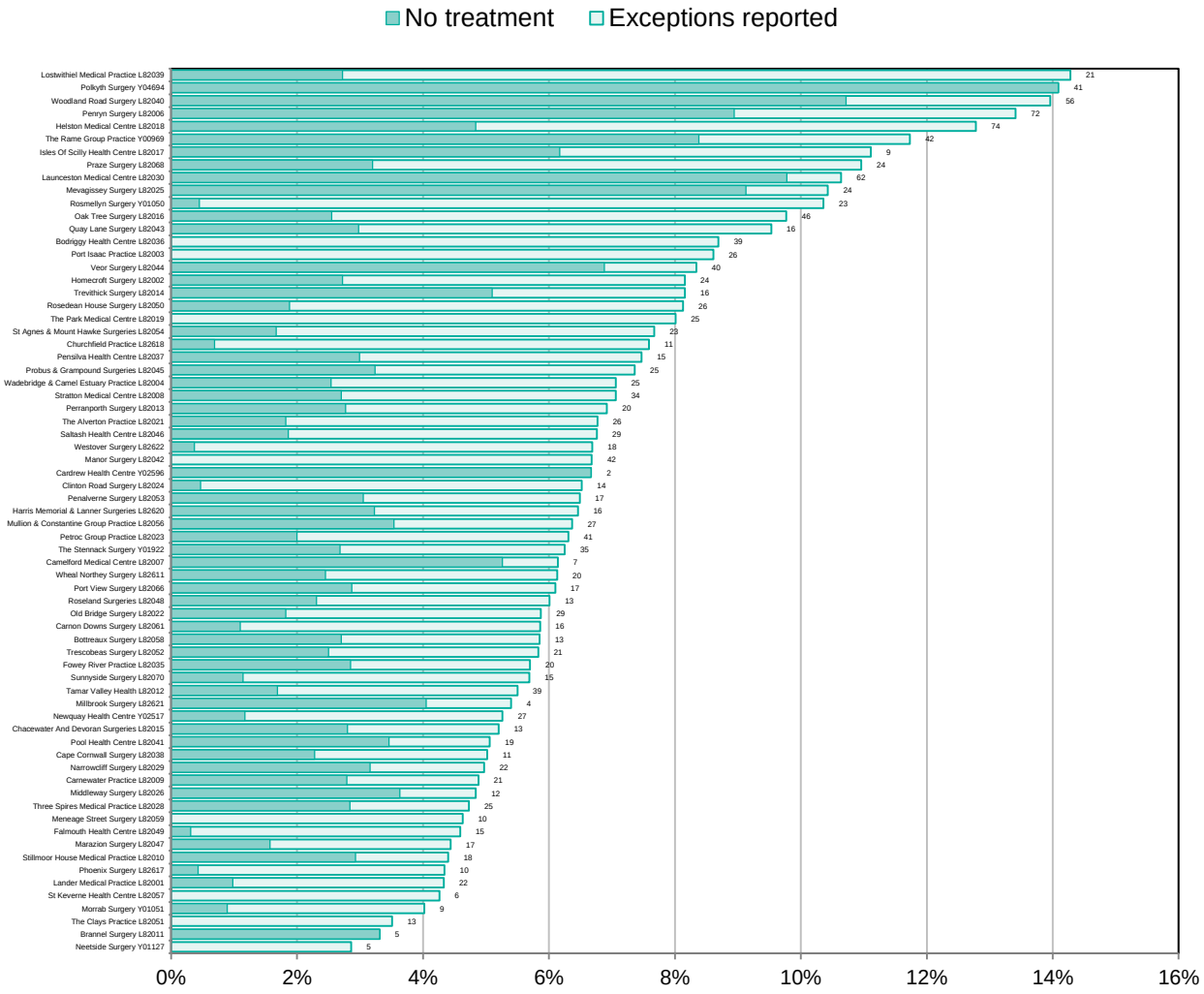
**Using the QOF clinical indicator CHD005 denominator plus exceptions*

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



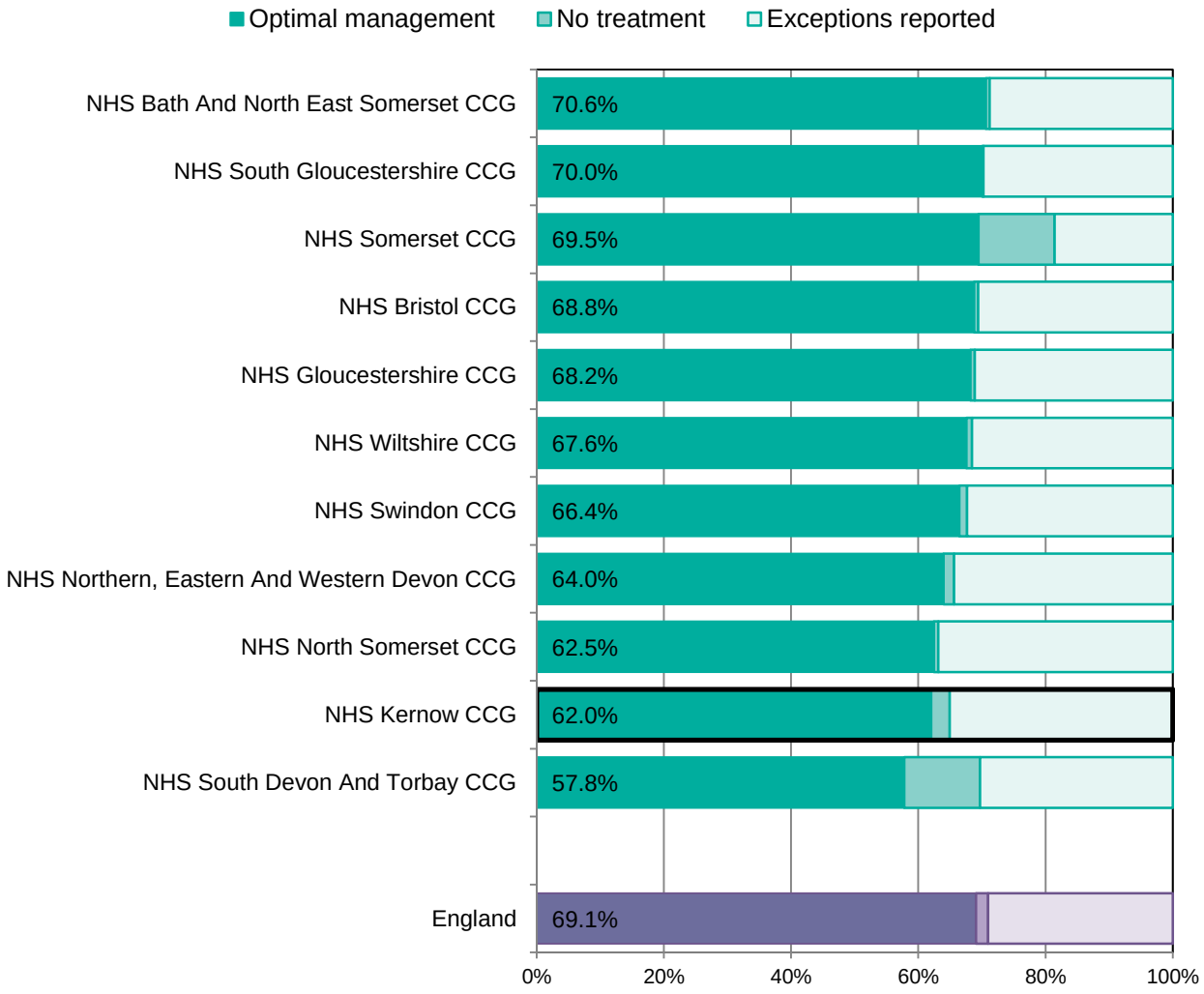
Percentage of patients with CHD without a record in the preceding 12 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken by GP practice



- In total, including exceptions, there are 1,620 people are not taking aspirin, an alternative anti-platelet therapy, or an anti-coagulant
- GP practice range: 2.9% to 14.3%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 462 people would be treated

The percentage of patients with a history of MI currently treated with an ACE-I / ARB, aspirin or an alternative anti-platelet therapy, beta-blocker and statin by CCG

Comparison with CCGs in the SCN

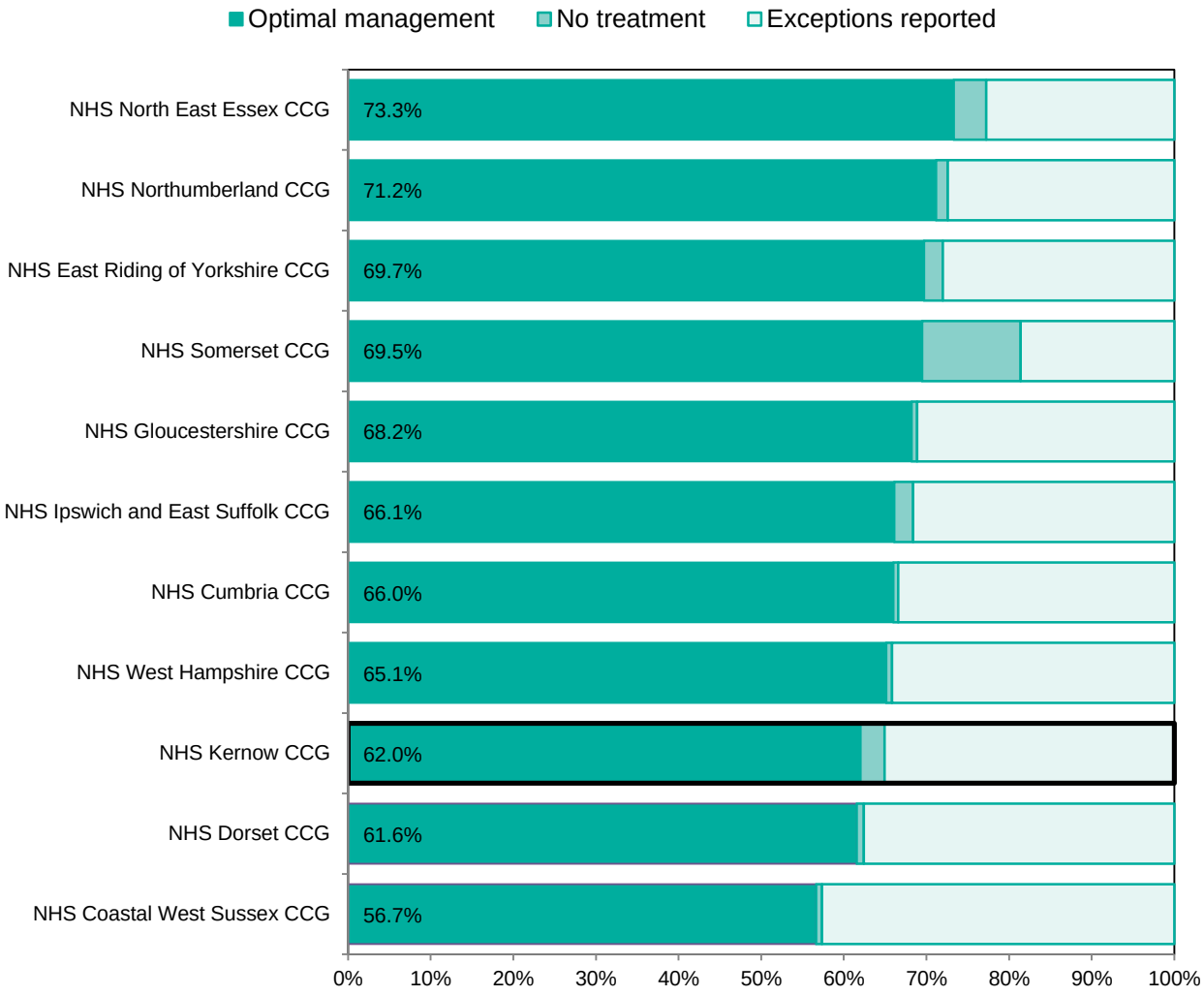


- 3,088 people with a history of myocardial infarction* in NHS Kernow CCG
- 1,915 (62%) people who are taking an ACE-I / ARB, aspirin or an alternative anti-platelet therapy, beta-blocker and statin <= 150 / 90
- 1,083 (35.1%) people who are exceptions
- 90 (2.9%) additional people who are not taking an ACE-I / ARB, aspirin or an alternative anti-platelet therapy, beta-blocker and statin

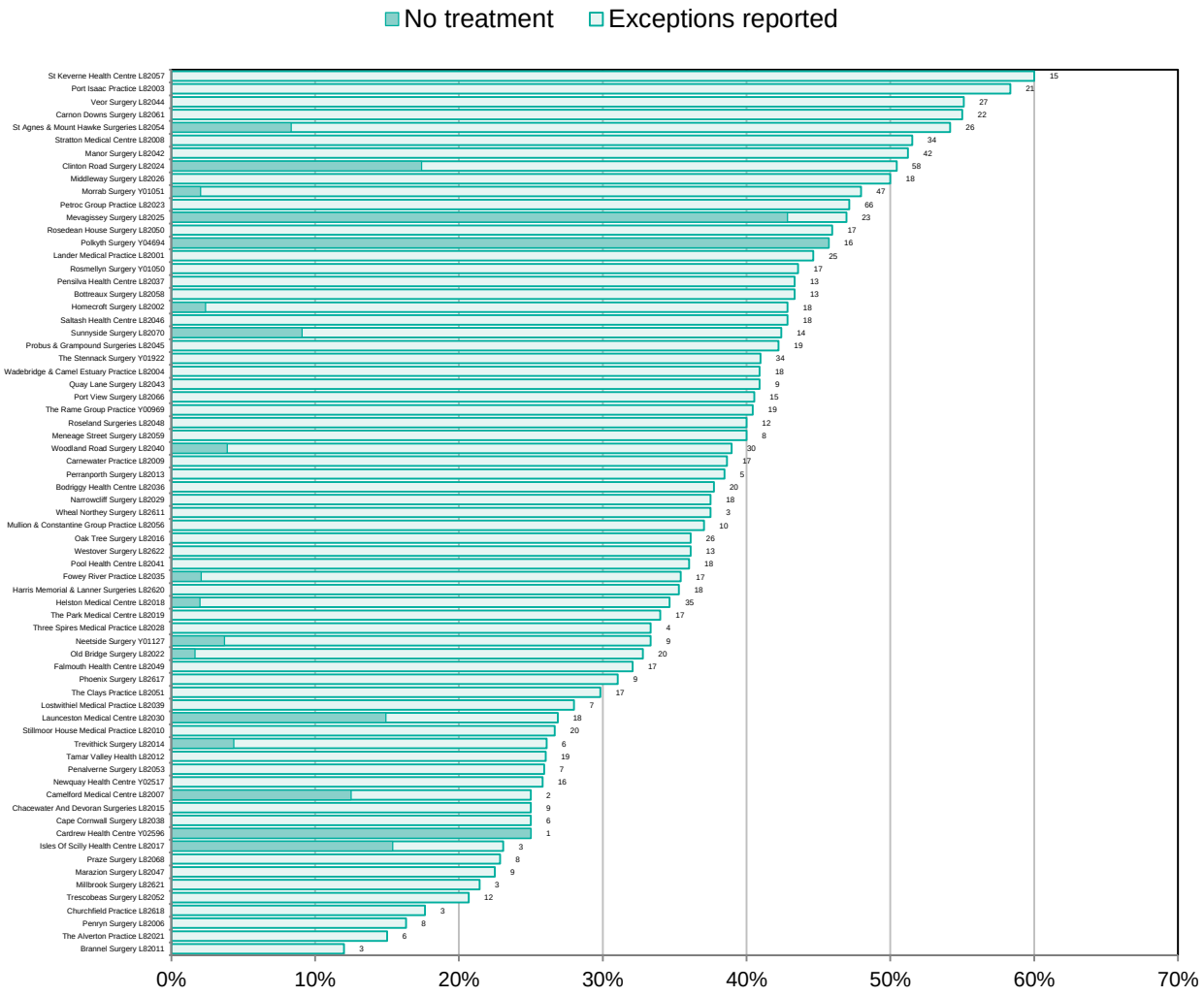
**Using the QOF clinical indicator CHD006 denominator plus exceptions*

The percentage of patients with a history of MI currently treated with an ACE-I / ARB, aspirin or an alternative anti-platelet therapy, beta-blocker and statin by CCG

Comparison with demographically similar CCGs



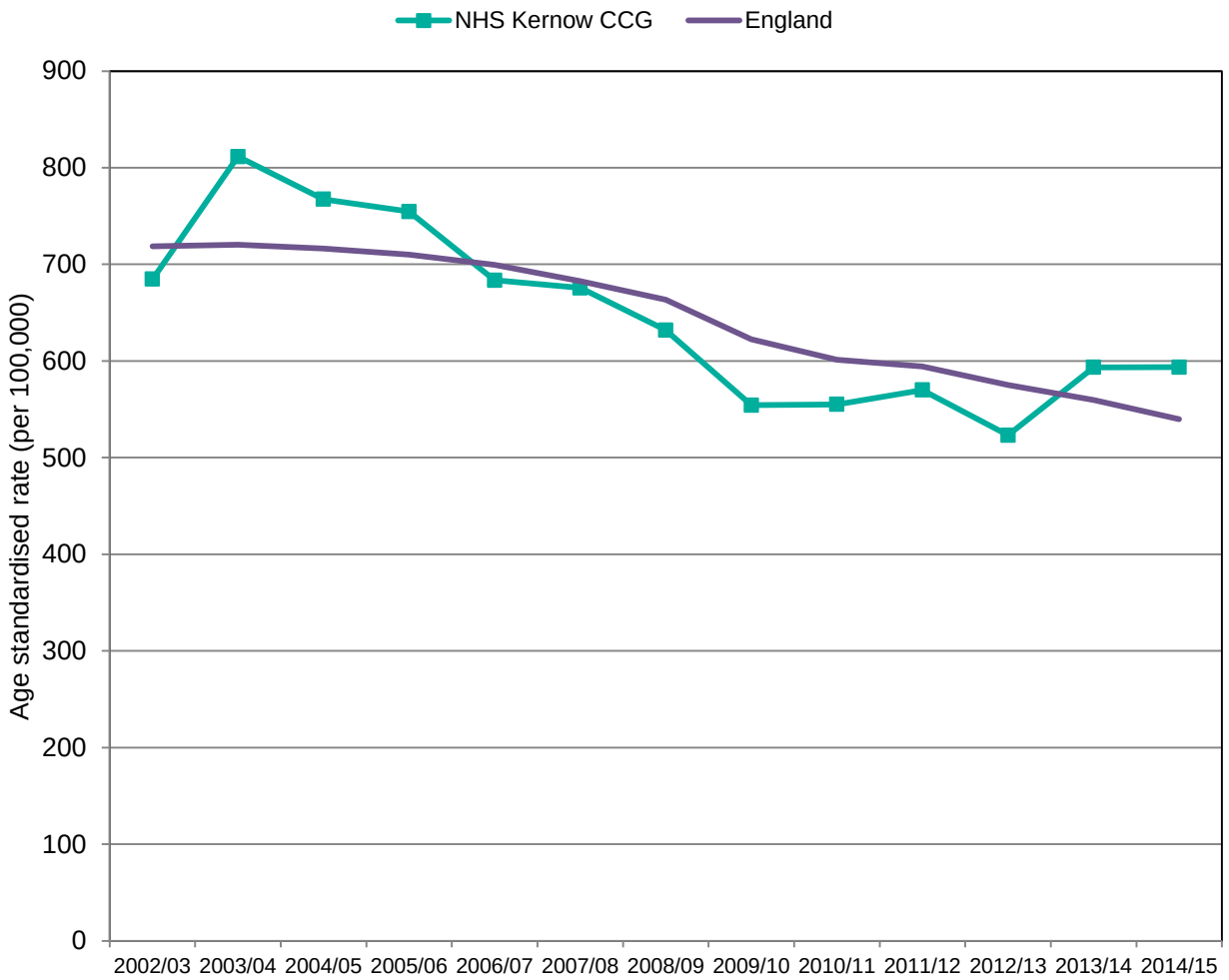
The percentage of patients with a history of MI not currently treated with an ACE-I / ARB, aspirin or an alternative anti-platelet therapy, beta-blocker and statin by GP practice



- In total, including exceptions, there are 1,173 people who are not taking an ACE-I / ARB, aspirin or an alternative anti-platelet therapy, beta-blocker and statin
- GP practice range: 12.0% to 60.0%
- If all practices were to achieve as well as the average of the best achieving practices, then an additional 325 people would be treated

Some data on outcomes for people with cardiovascular disease

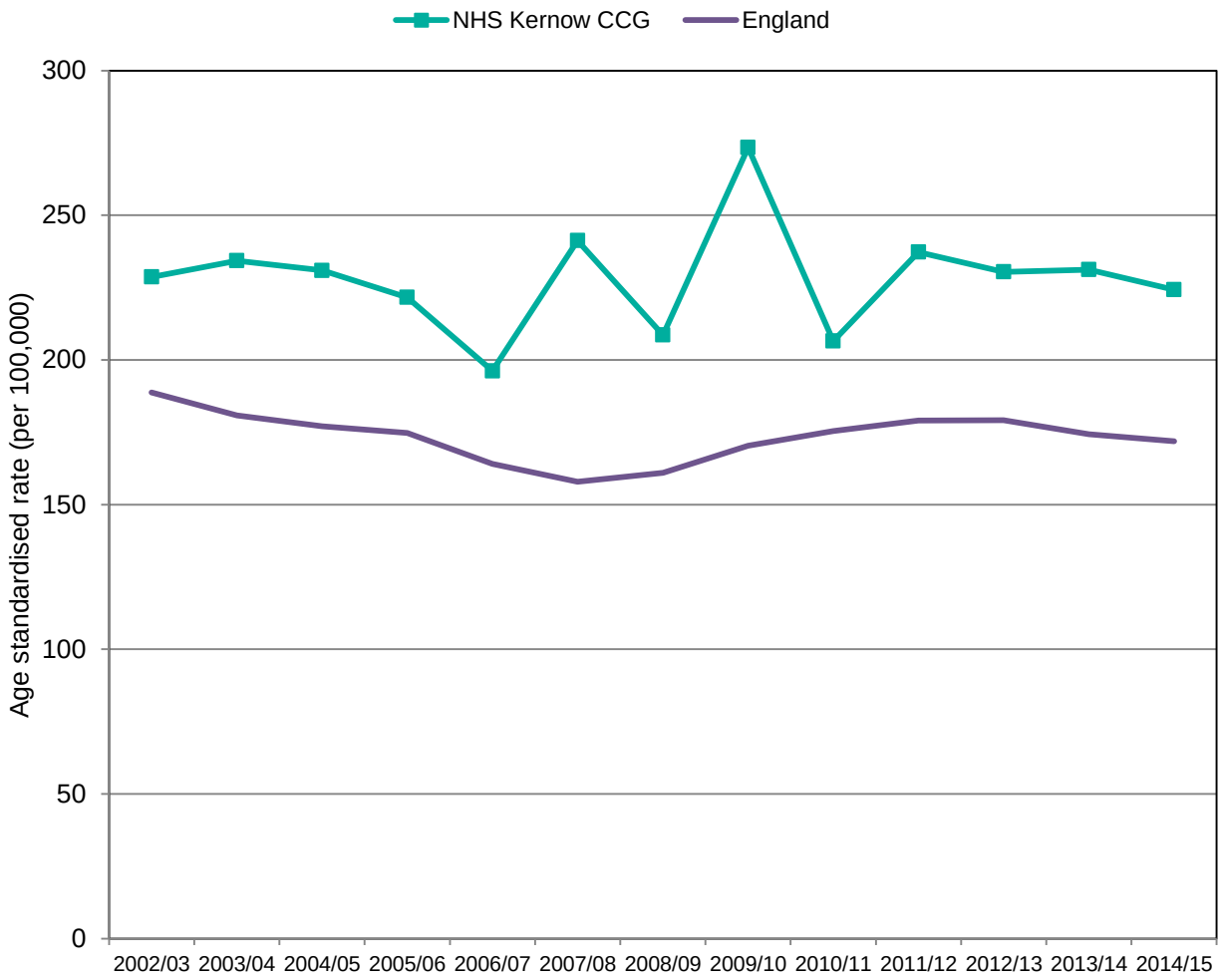
Hospital admissions for myocardial infarction for all ages 2002/03 – 2014/15



- In NHS Kernow CCG, the hospital admission rate for myocardial infarction in 2014/15 was 593.7 (3,732) compared to 539.7 for England

Source: Hospital Episode Statistics (HES), 2002/03 - 2014/15, Copyright © 2016, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved

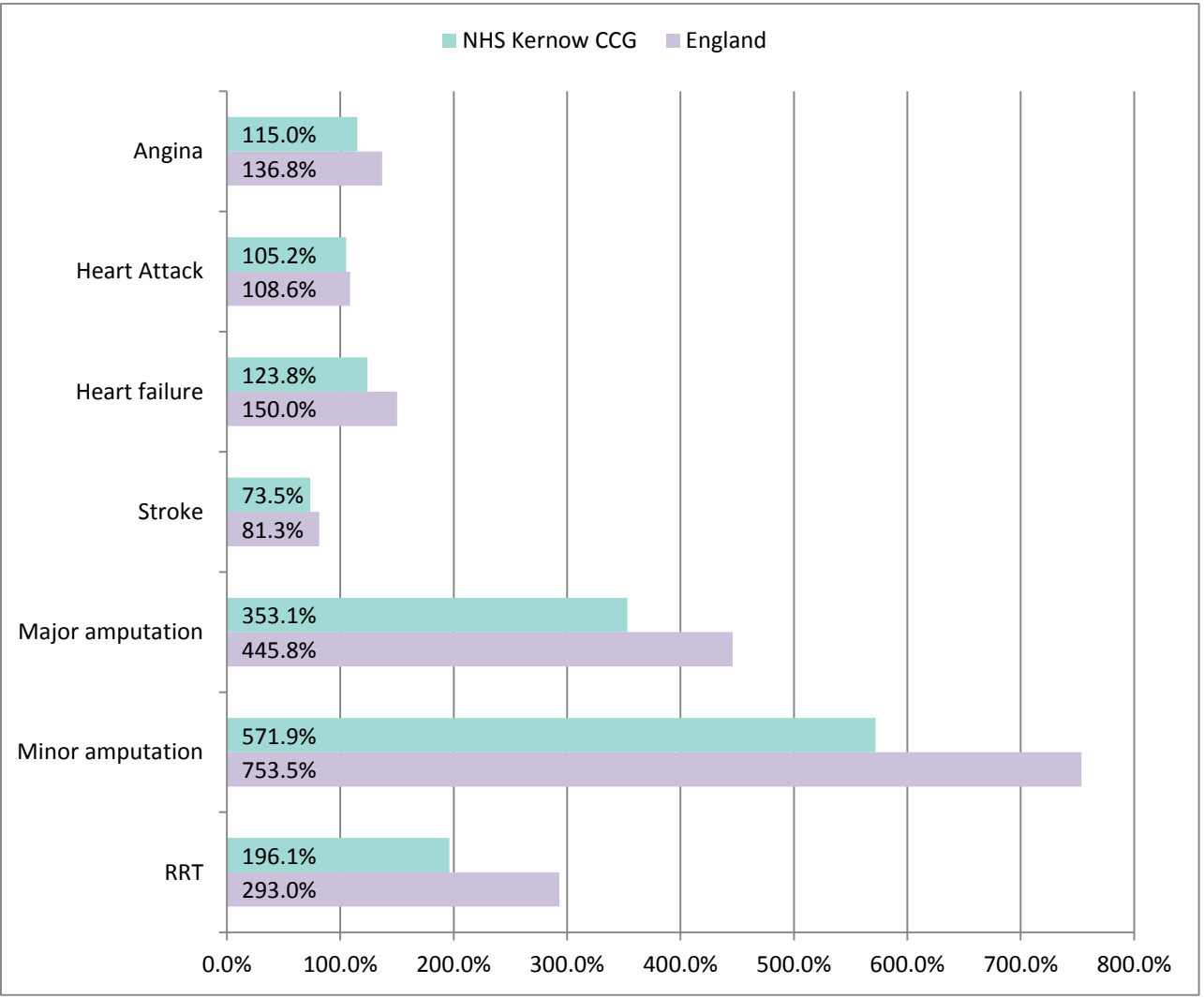
Hospital admissions for stroke for all ages 2002/03 – 2014/15



- In NHS Kernow CCG, the hospital admission rate for stroke in 2014/15 was 224.3 (1,431) compared to 171.9 for England

Source: Hospital Episode Statistics (HES), 2002/03 - 2014/15, Copyright © 2016, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved

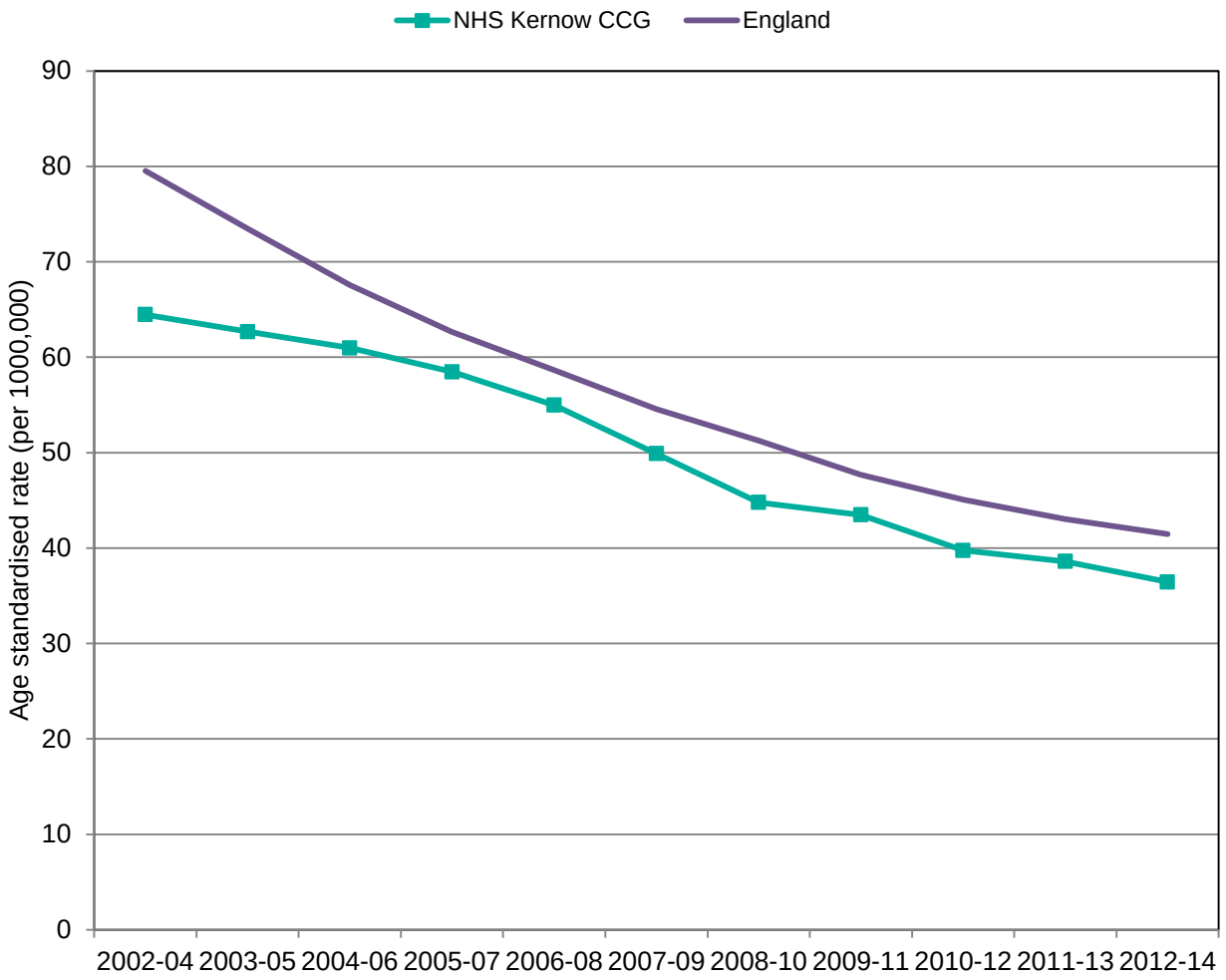
Additional risk of complications for people with diabetes, three year follow up, 2012/13



- The risk of a stroke was 73.5% higher and the risk of a heart attack was 105.2% higher compared to people without diabetes. The risk of a major amputation was 353.1% higher.

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

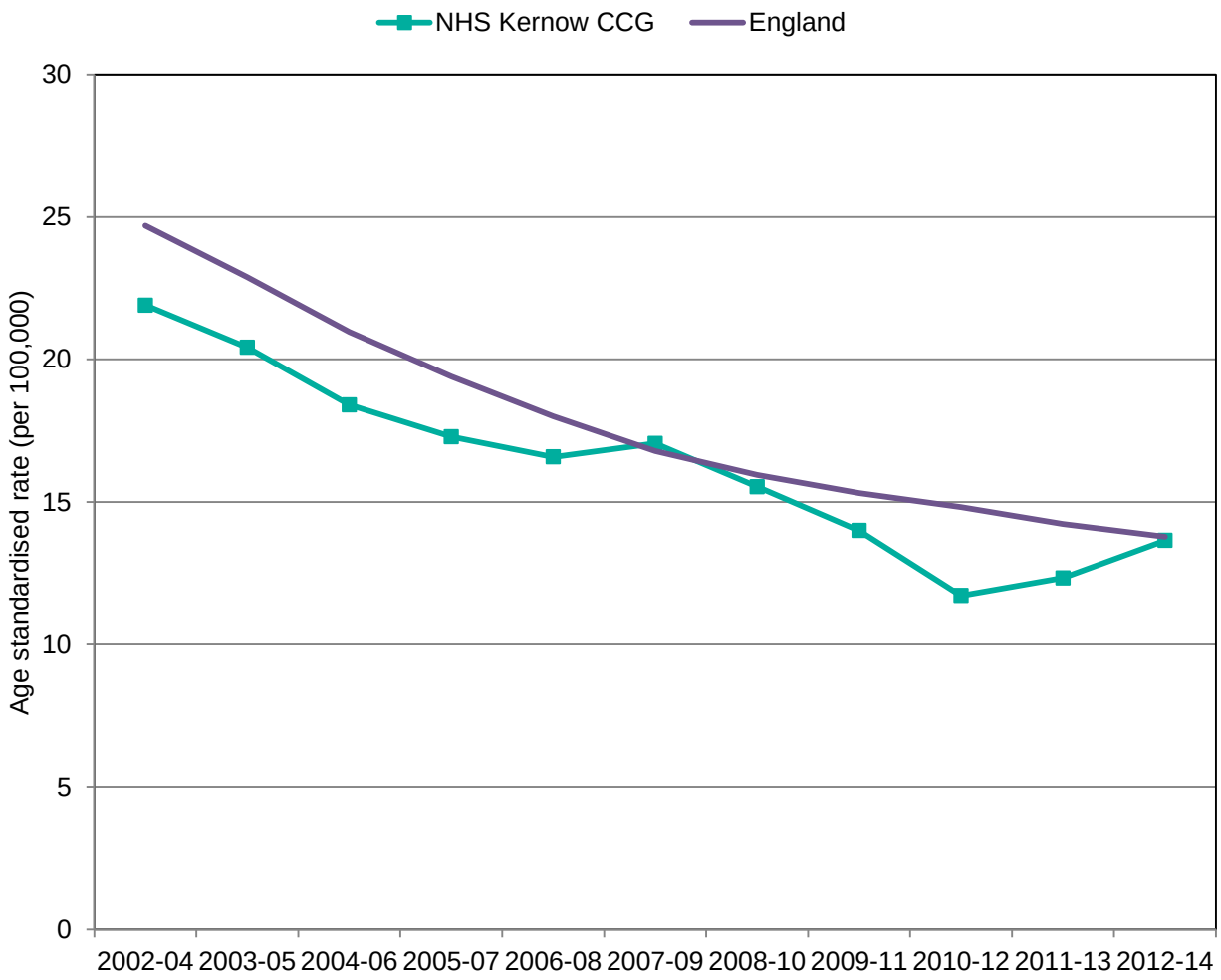
Deaths from myocardial infarction, under 75s



- In NHS Kernow CCG, the early mortality rate for myocardial infarction in 2012-14 was 36.4, compared to 41.5 for England

Source: Office for National Statistics (ONS) mortality data 2002 - 2014

Deaths from stroke, under 75s



- In NHS Kernow CCG, the early mortality rate for stroke in 2012-14 was 13.6, compared to 13.8 for England

Source: Office for National Statistics (ONS) mortality data 2002 - 2014

Appendix

Data sources

- Quality and Outcomes Framework (QOF), 2014/15, Copyright © 2016, re-used with the permission of the Health and Social Care Information Centre. All rights reserved
- Active people survey, Sport England, 2012, and 2012-2014
- East of England Public Health Observatory modelled estimates 2011
- CKD Prevalence model, G.Aitken, University of Southampton
- NHS Stop smoking services Copyright © 2014, Health and Social Care Information Centre
- NHS Health checks, 2014/15
- 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, 2012/13 and 2013/14, Copyright © 2016, re-used with the permission of the Health and Social Care Information Centre. All rights reserved
- Hospital Episode Statistics (HES), 2002/03 - 2014/15, Copyright © 2016, Re-used with the permission of The Health and Social Care Information Centre. All rights reserved
- Office for National Statistics (ONS) mortality data 2002 – 2014, Copyright © 2016, Re-used with the permission of the Office for National Statistics. All rights reserved

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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

Published March 2016