Public Health England

Protecting and improving the nation's health

CVD Prevention: Supporting data for Humber, Coast and Vale

August 2018

National cardiovascular disease (CVD) prevention packs

These packs aim to provide a baseline of information for the CVD prevention project

The CVD prevention programme focuses on the three CVD risk factors, hypertension, atrial fibrillation and dyslipidaemia. Information for hypertension and atrial fibrillation only is included in this pack.

These packs have been produced in collaboration with the CVD prevention programme centre teams.

There is one pack for each sustainability and transformation partnership (STP) and they contain STP, clinical commissioning group (CCG) and practice level information.

The packs compare local diagnosis and treatment figures in relation to the national PHE CVD prevention ambitions. Practice level graphs are ordered so that practices with the largest opportunities are at the top. The packs are not an extensive resource, there are other CVD prevention resources available. PHE local knowledge and Intelligence teams can advise on alternative information sources.

Other CVD prevention resources

These packs should be used in conjunction with existing CVD prevention resources including:

'Atrial fibrillation (AF): how can we do better'
www.stroke.org.uk/about-us/for-professionals/stroke-prevention

'High blood pressure: how can we do better'
www.bhf.org.uk/healthcare-professionals/commissioning-and-services/service-innovation/bp-how-can-we-do-better

CVD primary care intelligence packs
www.gov.uk/government/collections/cardiovascular-disease-primary-care-intelligence-packs

CVD profiles (pdf profiles and fingertips)
https://fingertips.phe.org.uk/profile/cardiovascular

CVD prevalence information
www.gov.uk/guidance/cardiovascular-disease-data-and-analysis-a-guide-for-health-professionals

NHS Rightcare resources
www.england.nhs.uk/rightcare/products

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Hypertension

Hypertension ambitions

Detection:

80% of the expected number of people with hypertension are diagnosed by 2023

Treatment:

80% of the total number of people diagnosed with hypertension are treated to target as per NICE guidelines by 2023*

These ambitions are based on achievement in Canada, which is recognised as the 'best in the world' and has a similar population and hypertension prevalence to England.

*The treatment target for hypertension in the NICE guidelines is 140/90 in people aged 79 and under, and 150/90 in people aged 80 and over. For this data pack we are using the threshold of 140/90 in under 80 year olds to illustrate the progress towards the ambition. It is acknowledged that this does not include a measure of hypertension management in people aged 80 years and over.

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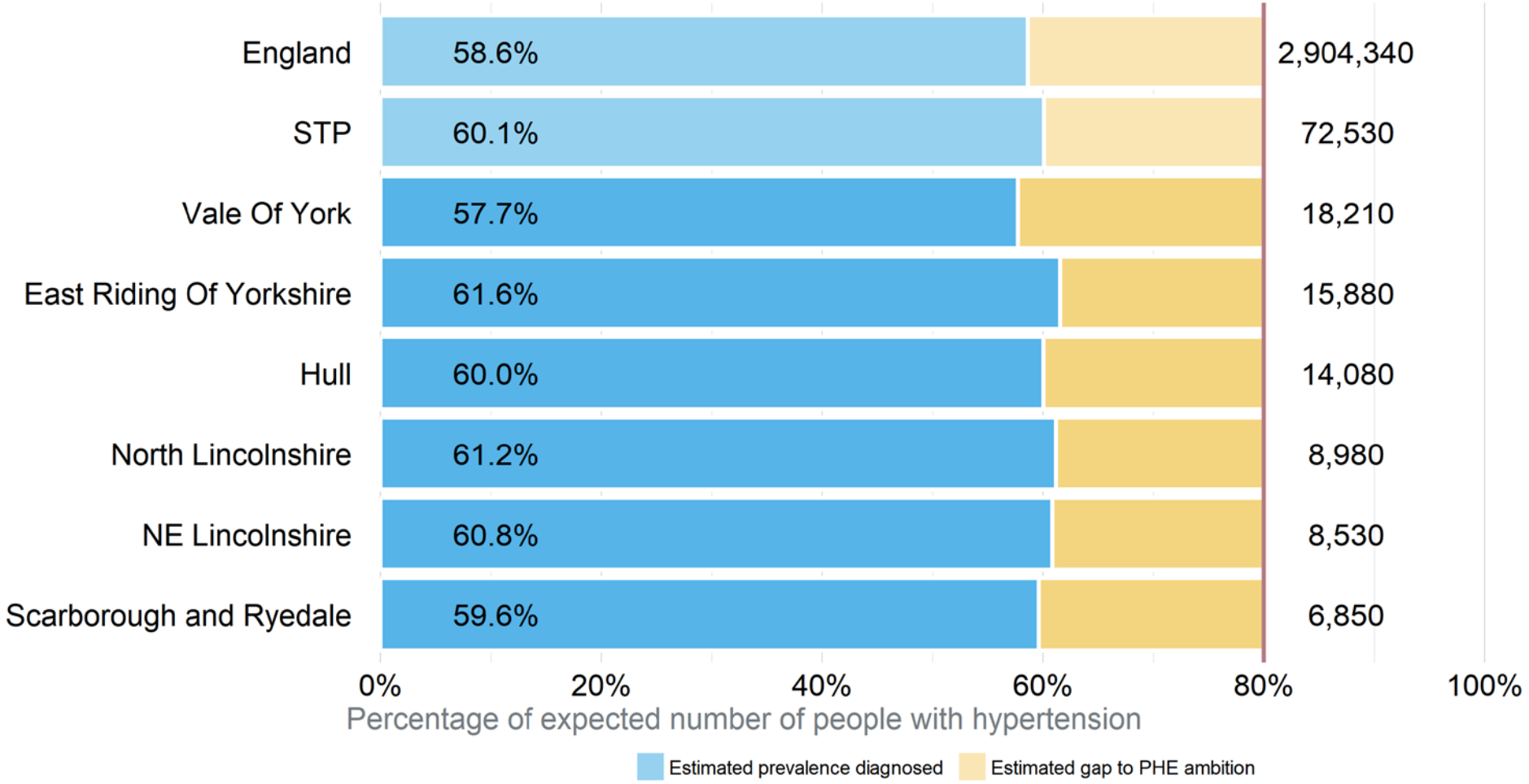
Hypertension Diagnosis

STP/CCG level

Hypertension diagnosis:

Hypertension observed prevalence compared with expected prevalence and estimated number of people with hypertension required to be diagnosed to meet the PHE ambition, CCG, STP and England, 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 10

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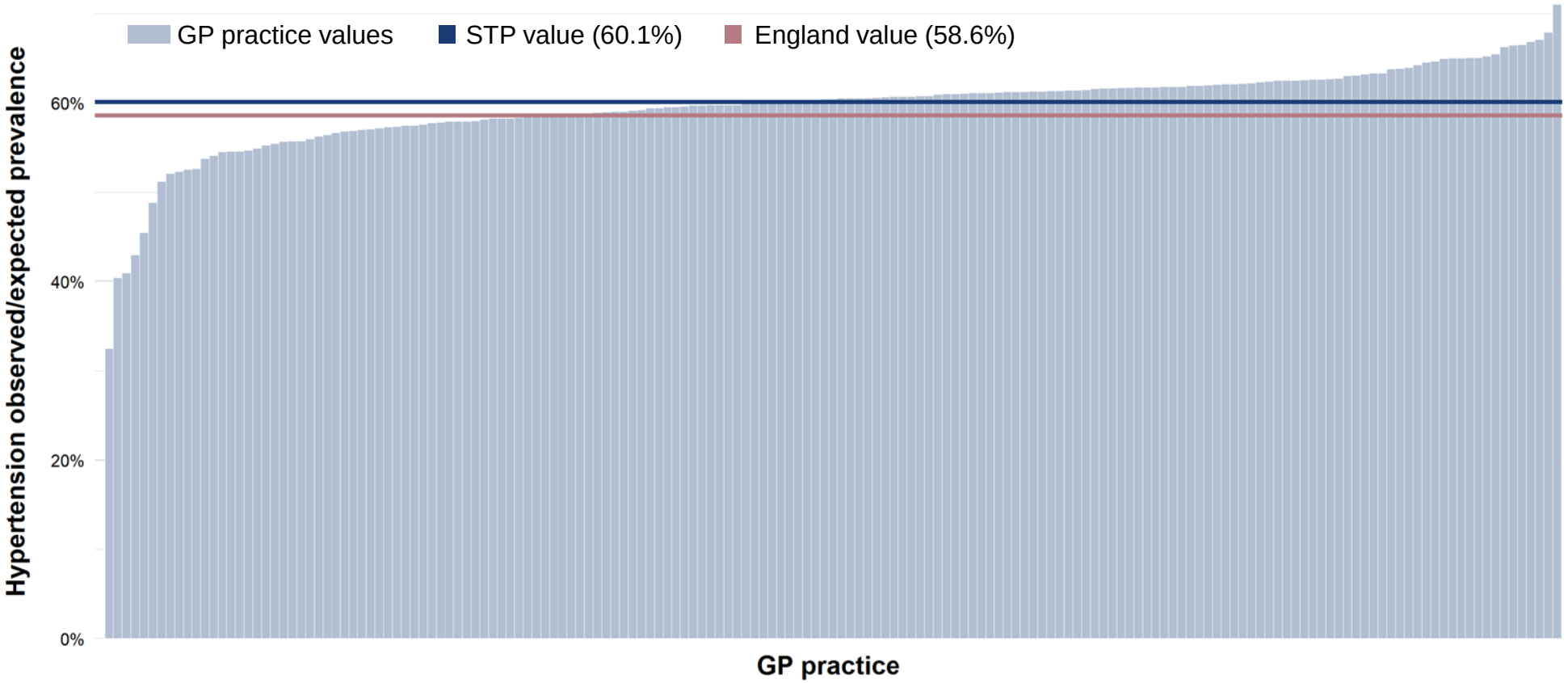
Hypertension diagnosis

GP practice level

Hypertension diagnosis:

Hypertension observed prevalence compared with expected prevalence, by GP practice, Humber, Coast and Vale STP, 2016/17

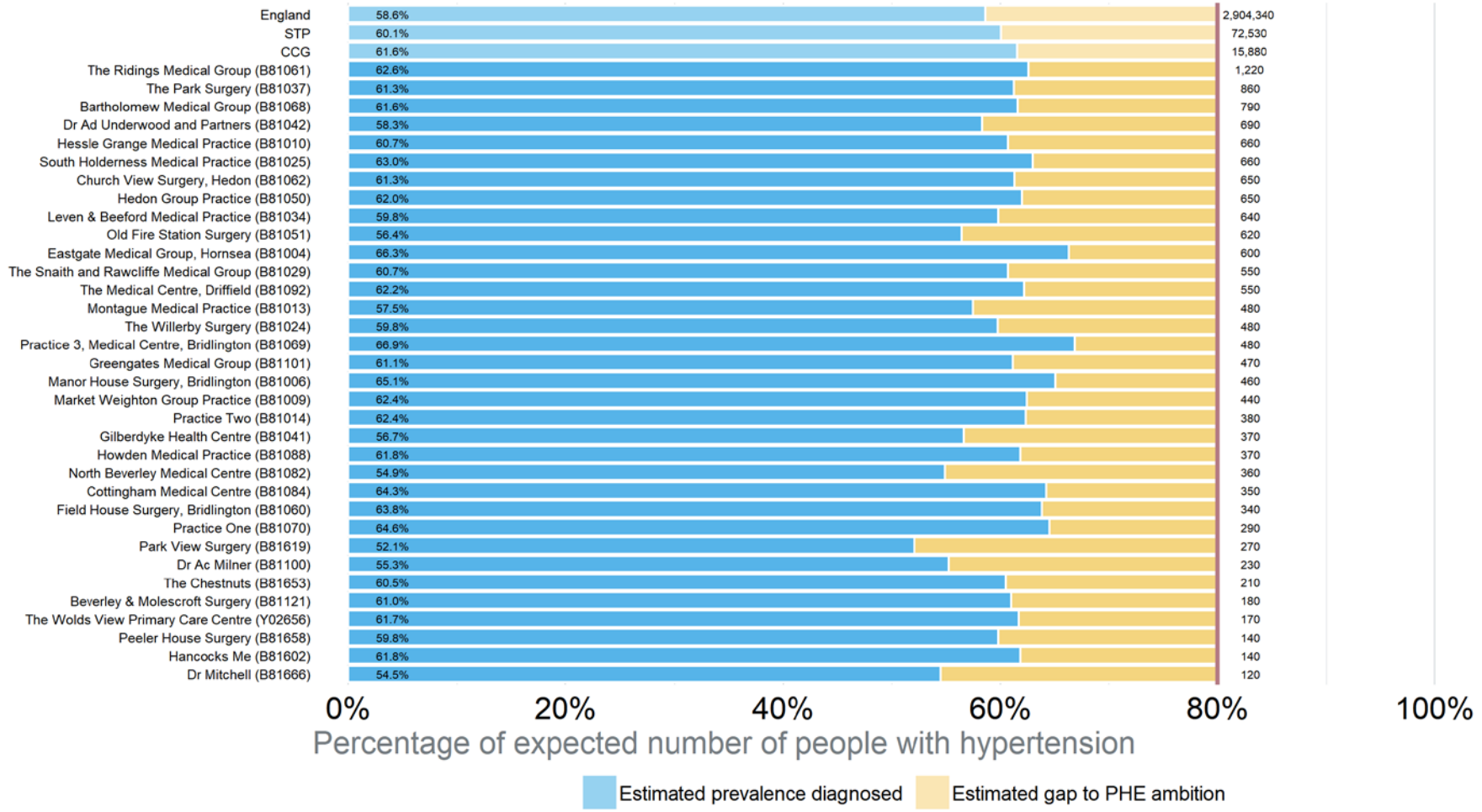


Source: Hypertension observed prevalence QOF.
Expected numbers NCVIN

STP range: 0% to 71.1%
Number of estimated people with hypertension not diagnosed = 72,530
(numbers rounded to the nearest 10)

Hypertension diagnosis:

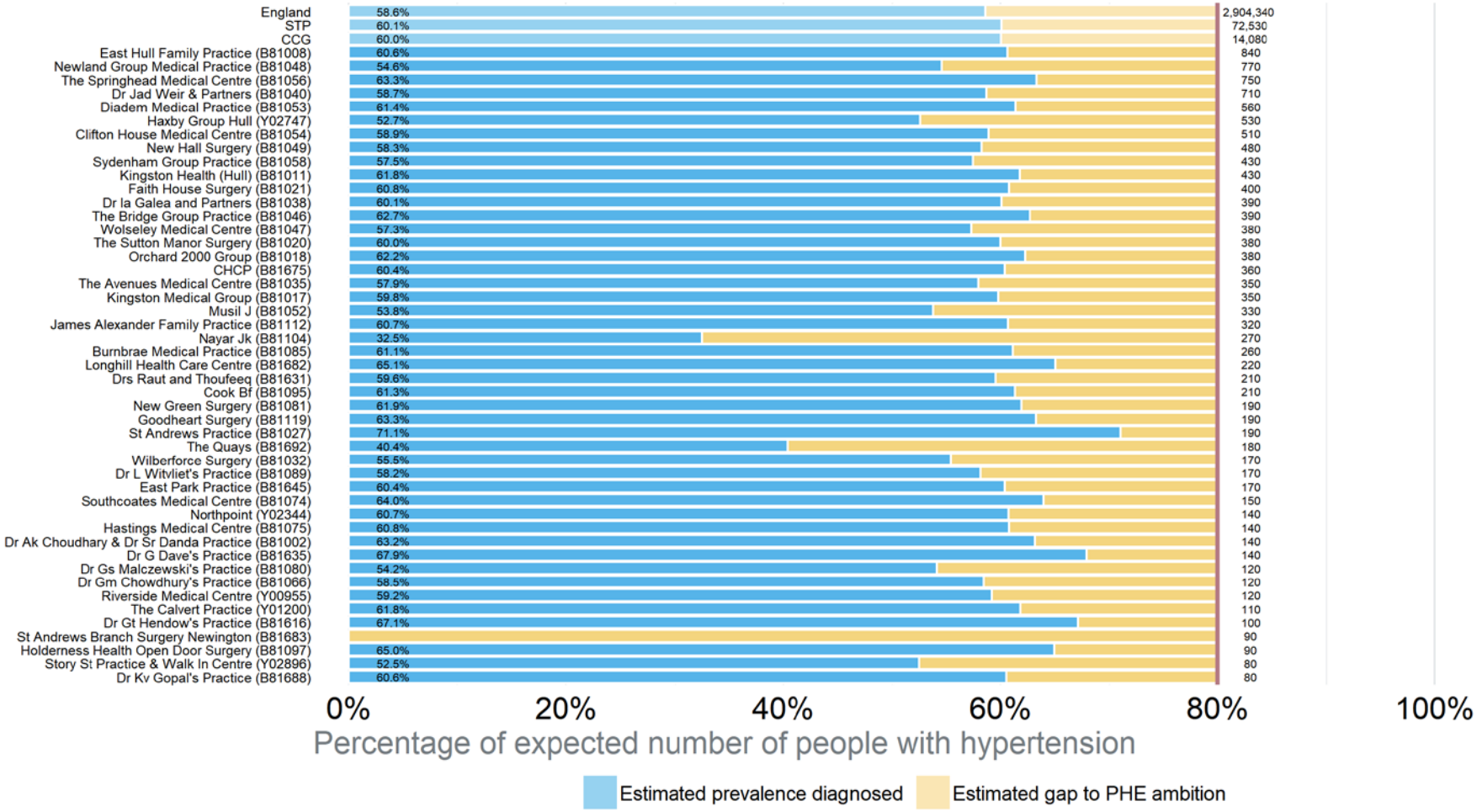
Hypertension observed prevalence compared with expected prevalence and estimated number of people with hypertension required to be diagnosed to meet the PHE ambition, by GP practice,
East Riding Of Yorkshire CCG, 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 10

Hypertension diagnosis:

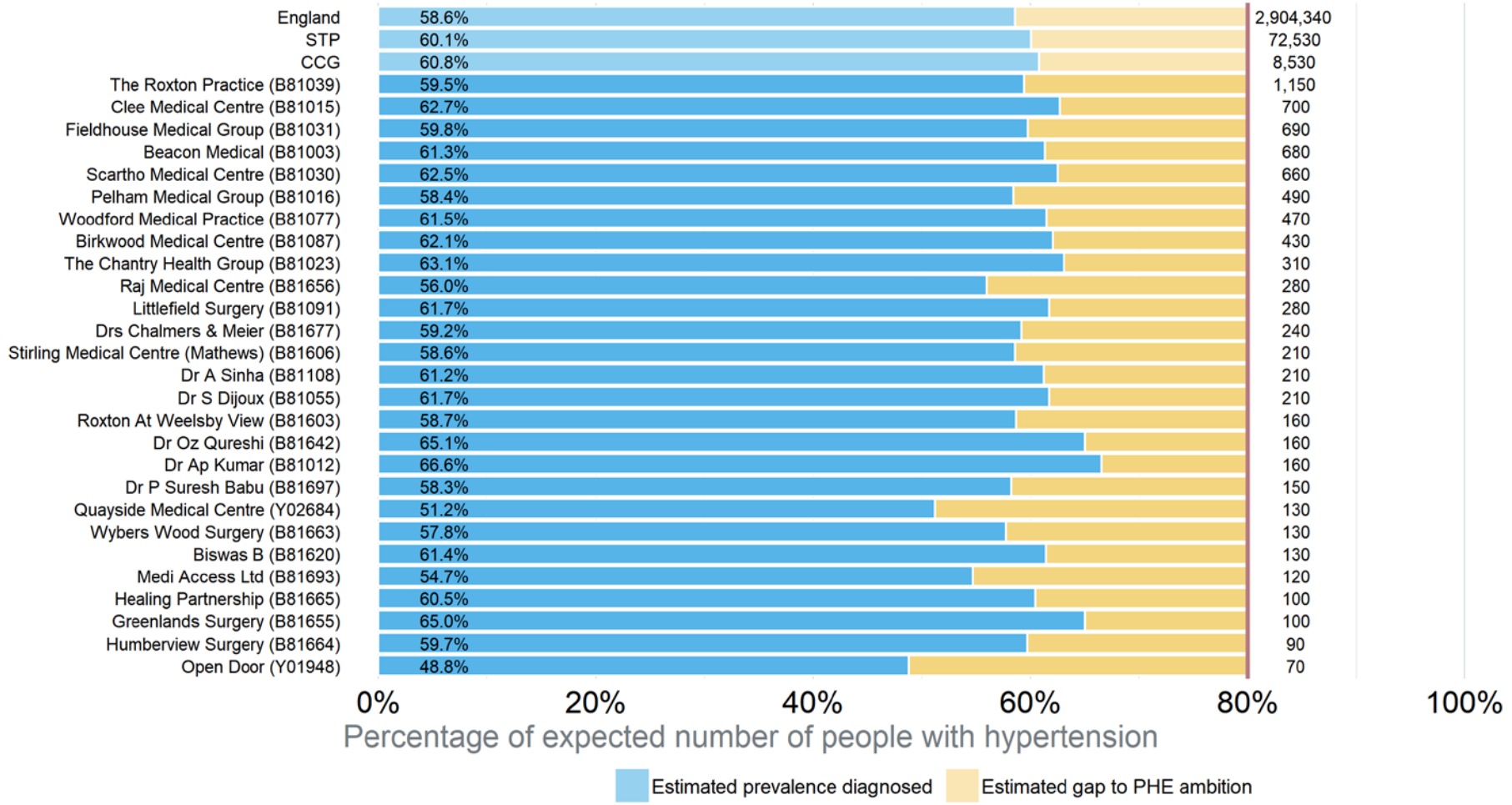
Hypertension observed prevalence compared with expected prevalence and estimated number of people with hypertension required to be diagnosed to meet the PHE ambition, by GP practice,
Hull CCG, 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 10

Hypertension diagnosis:

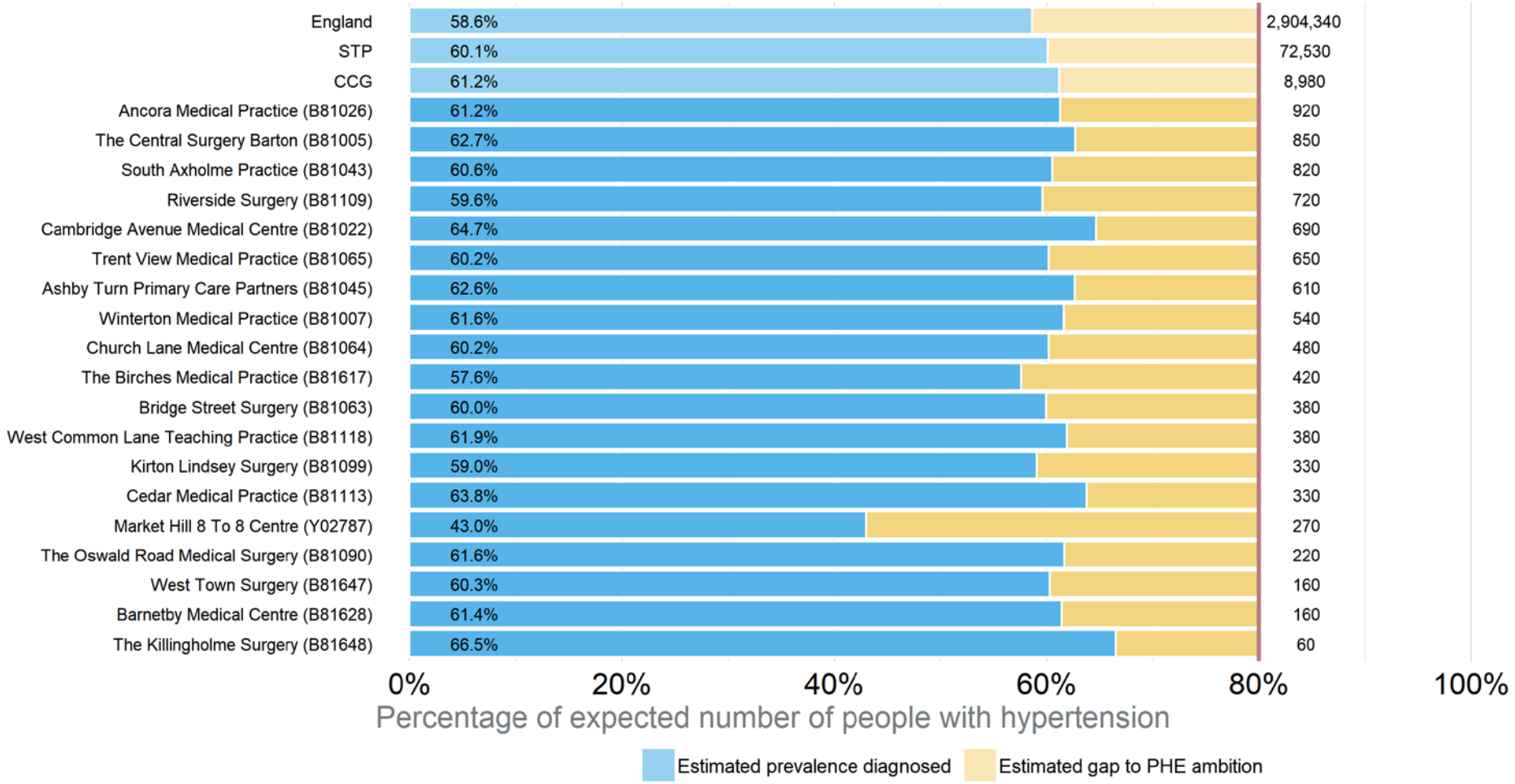
Hypertension observed prevalence compared with expected prevalence and estimated number of people with hypertension required to be diagnosed to meet the PHE ambition, by GP practice,
NE Lincolnshire CCG, 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 10

Hypertension diagnosis:

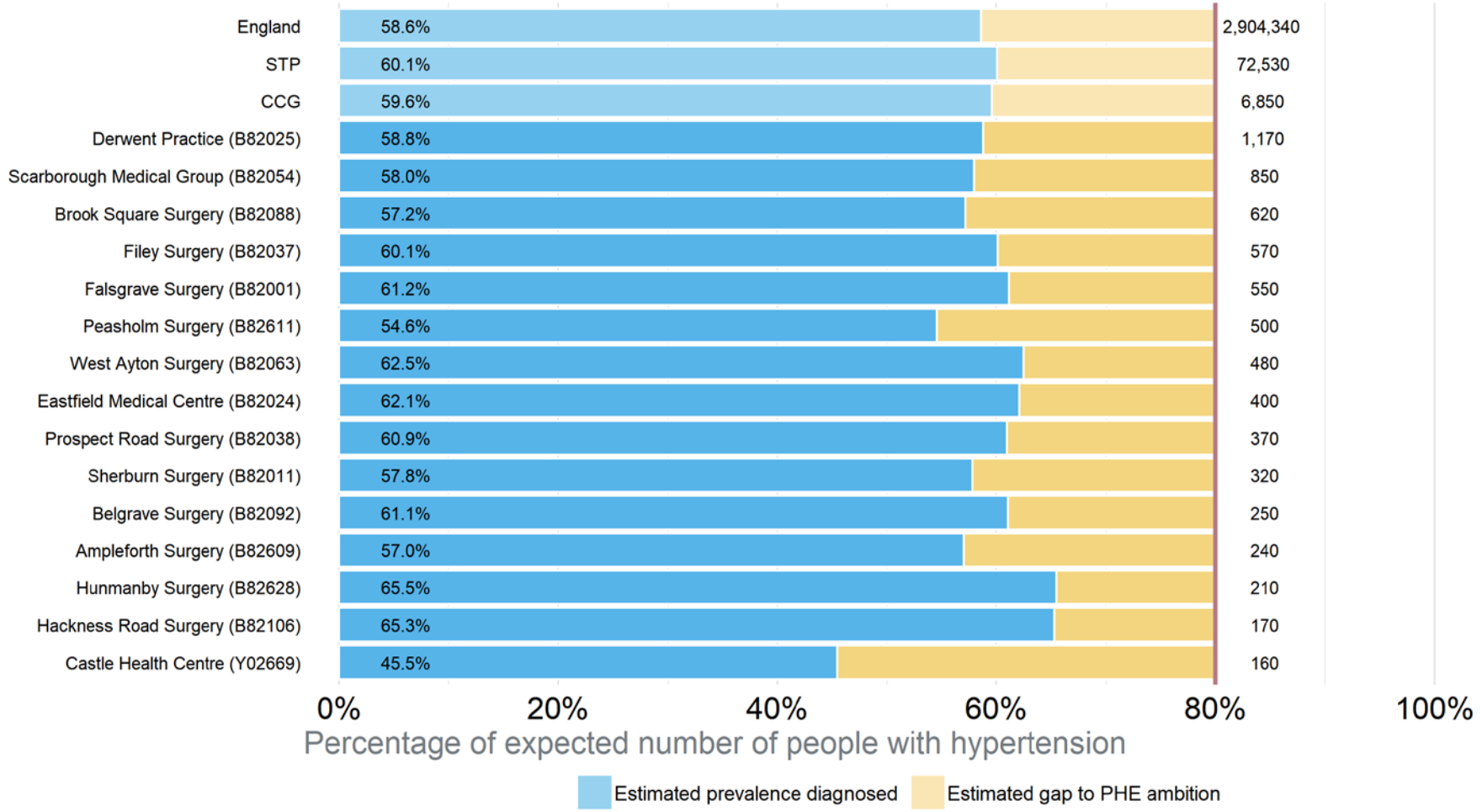
Hypertension observed prevalence compared with expected prevalence and estimated number of people with hypertension required to be diagnosed to meet the PHE ambition, by GP practice,
North Lincolnshire CCG, 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 10

Hypertension diagnosis:

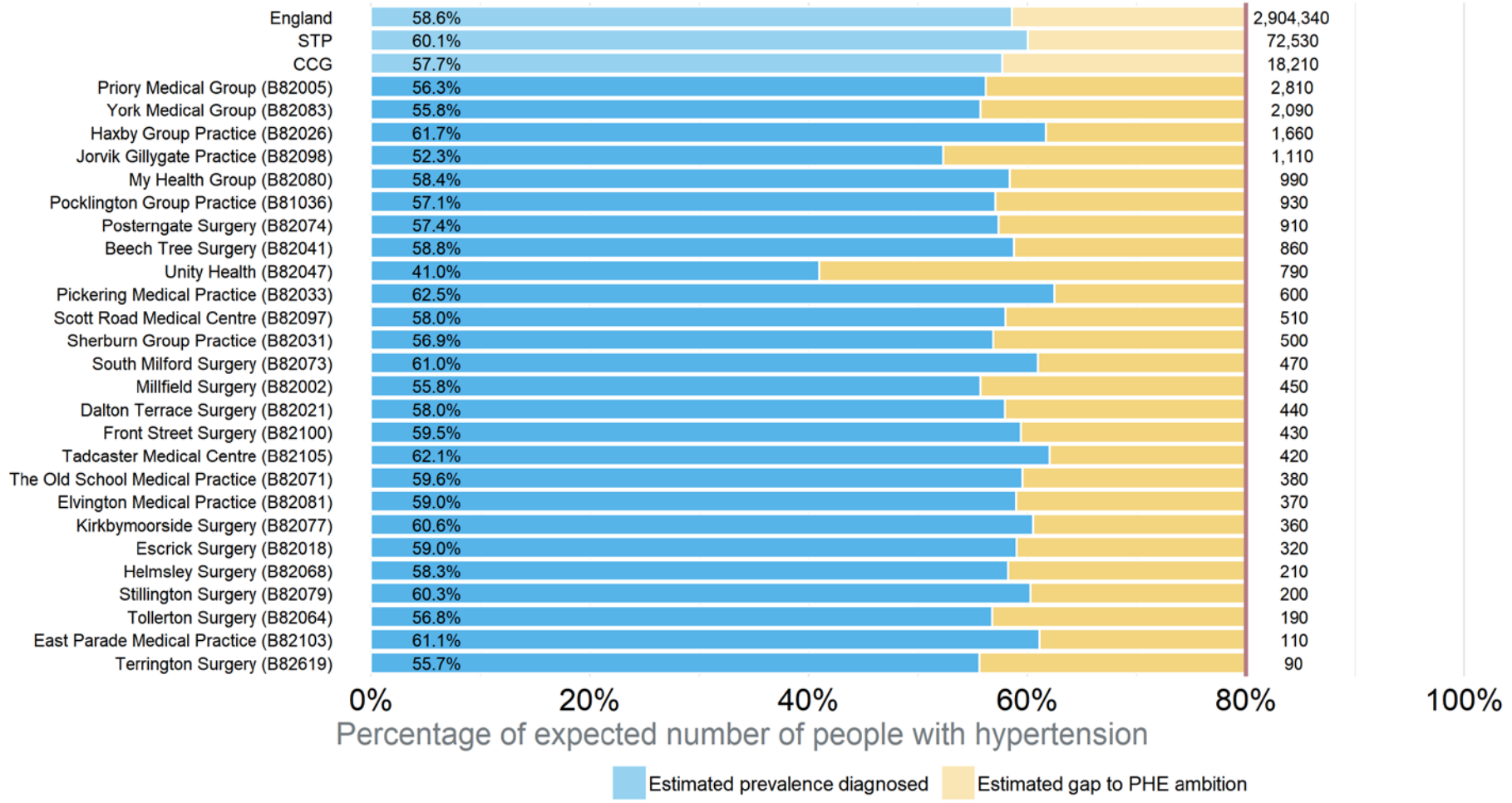
Hypertension observed prevalence compared with expected prevalence and estimated number of people with hypertension required to be diagnosed to meet the PHE ambition, by GP practice, Scarborough and Ryedale CCG, 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 10

Hypertension diagnosis:

Hypertension observed prevalence compared with expected prevalence and estimated number of people with hypertension required to be diagnosed to meet the PHE ambition, by GP practice,
Vale Of York CCG, 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 10

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Hypertension treatment

STP/CCG level

Hypertension treatment

The PHE ambition refers to treating 80% of people diagnosed with hypertension to NICE guidance. The treatment levels for under and over 80 year olds varies in the guidance (please see ambitions slide). There is currently no single published measure available to track the progress against the NICE target.

For this data pack we are using the threshold of 140/90 in under 80 year olds to illustrate the progress towards the ambition. It is acknowledged that this does not include a measure of hypertension management in people aged 80 years and older.

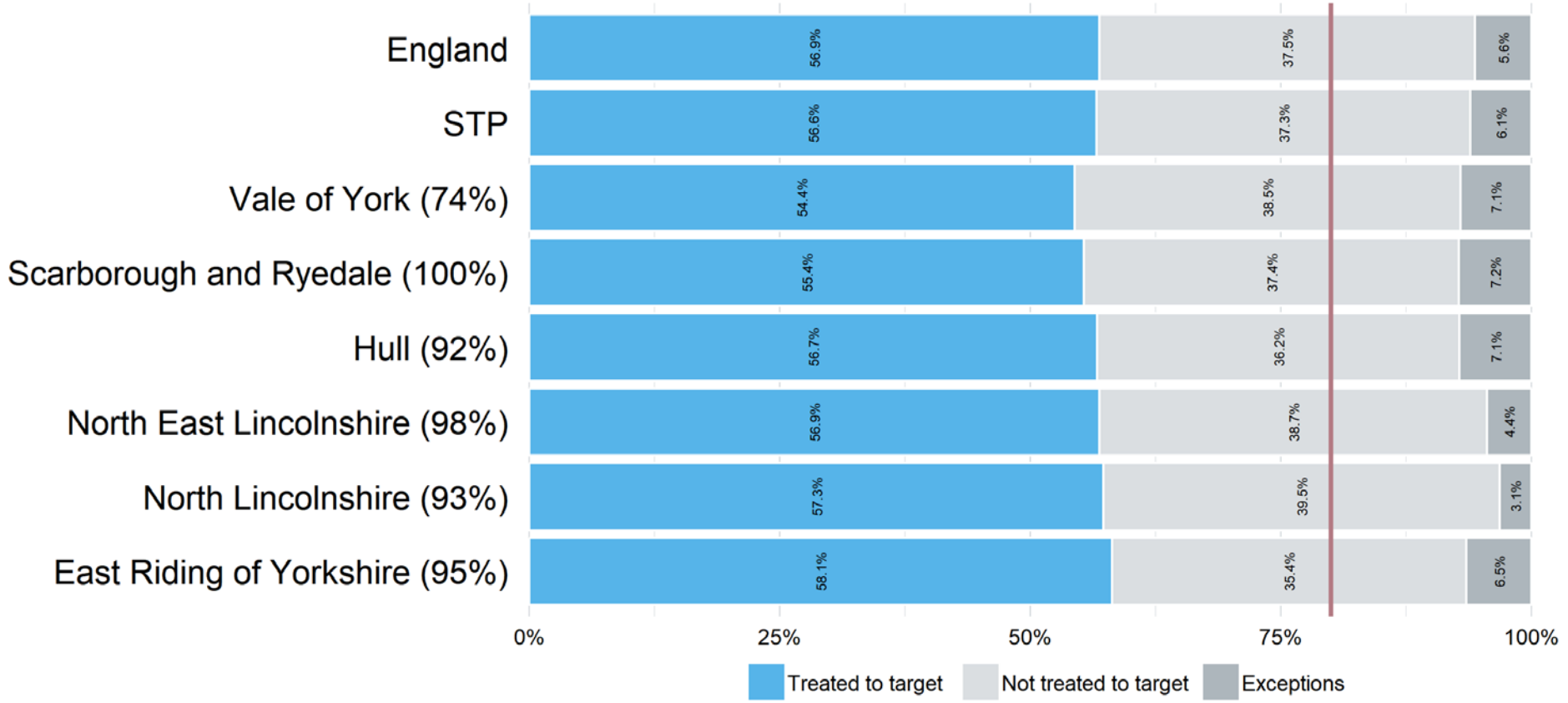
The data used is taken from the Indicators no longer in QOF (INLIQ).The definition of the indicator is 'The percentage of patients aged 79 or under with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 140/90 mmHg or less'.

The INLIQ data is not returned by all practices and so it is not possible to produce reliable estimates of the number of people (under 80) needed to treat within the CCG to meet the PHE ambition. This is also why we have not included GP level analysis. For more details about INLIQ please see the data notes.

The QOF hypertension threshold is 150/90 which is higher and easier to achieve than the 140/90 ambition. This information is available in the appendix.

Hypertension treatment:

The percentage of patients aged 79 or under with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 140/90 mmHg or less including only practices returning INLIQ data, England, STP and CCG level, 2016/17



Note: This information comes from the NHS Digital INLIQ. Treatment data for CCGs where the population coverage is less than 60% are suppressed. The population coverage for each CCG is shown after their name (%).The ambition of 80% is shown on the graph.
For more information about this data please see further information section.

Source: INLIQ 2016/17

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Atrial fibrillation (AF)

Atrial fibrillation ambitions

Detection:

90% of the expected number of people with AF are diagnosed by 2023

Treatment:

90% of patients with AF who are known to be at high risk of a stroke to be adequately anticoagulated by 2023*

* The treatment charts and gaps to ambition are based on the number of patients recorded in QOF 16/17 as being anticoagulated. Some of these individuals may not be adequately anticoagulated. The Imperial College AF Budget Impact Model estimates this to be approximately 30% of all treated patients. This is based on an assumption of 40% of Warfarin patients having a time in therapeutic range (TTR) of less ,than 35% and an assumed proportion of NOAC patients inadequately anticoagulated of 5%. The number required to achieve the target is therefore likely to be higher than indicated. Areas may chose to focus on ensuring known patients are adequately anticoagulated in the first instance.

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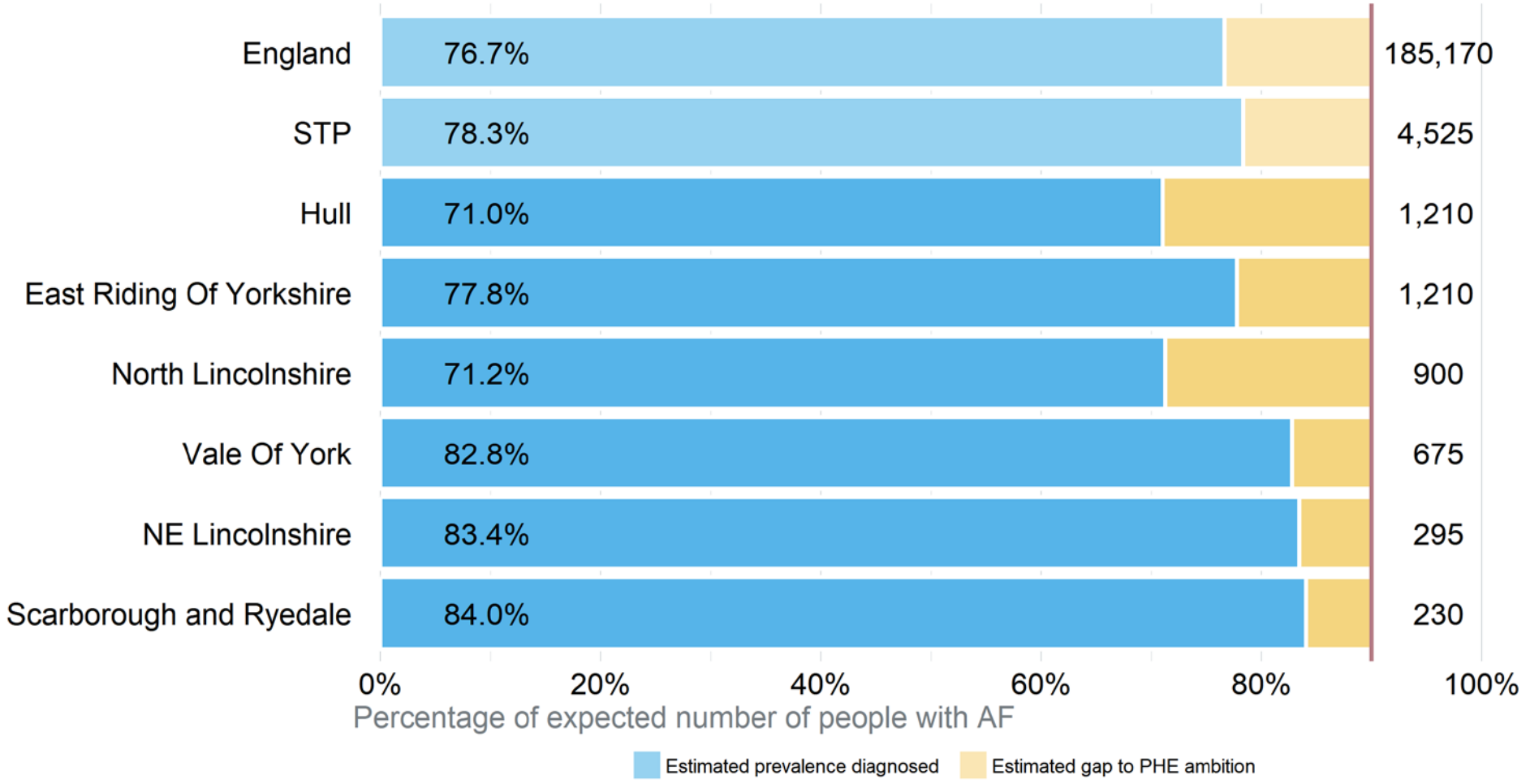
Atrial fibrillation diagnosis

STP/CCG level

Atrial fibrillation diagnosis:

AF observed prevalence compared with expected prevalence and estimated number of people with AF required to be diagnosed to meet the PHE ambition, CCG, STP and England, 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 5.

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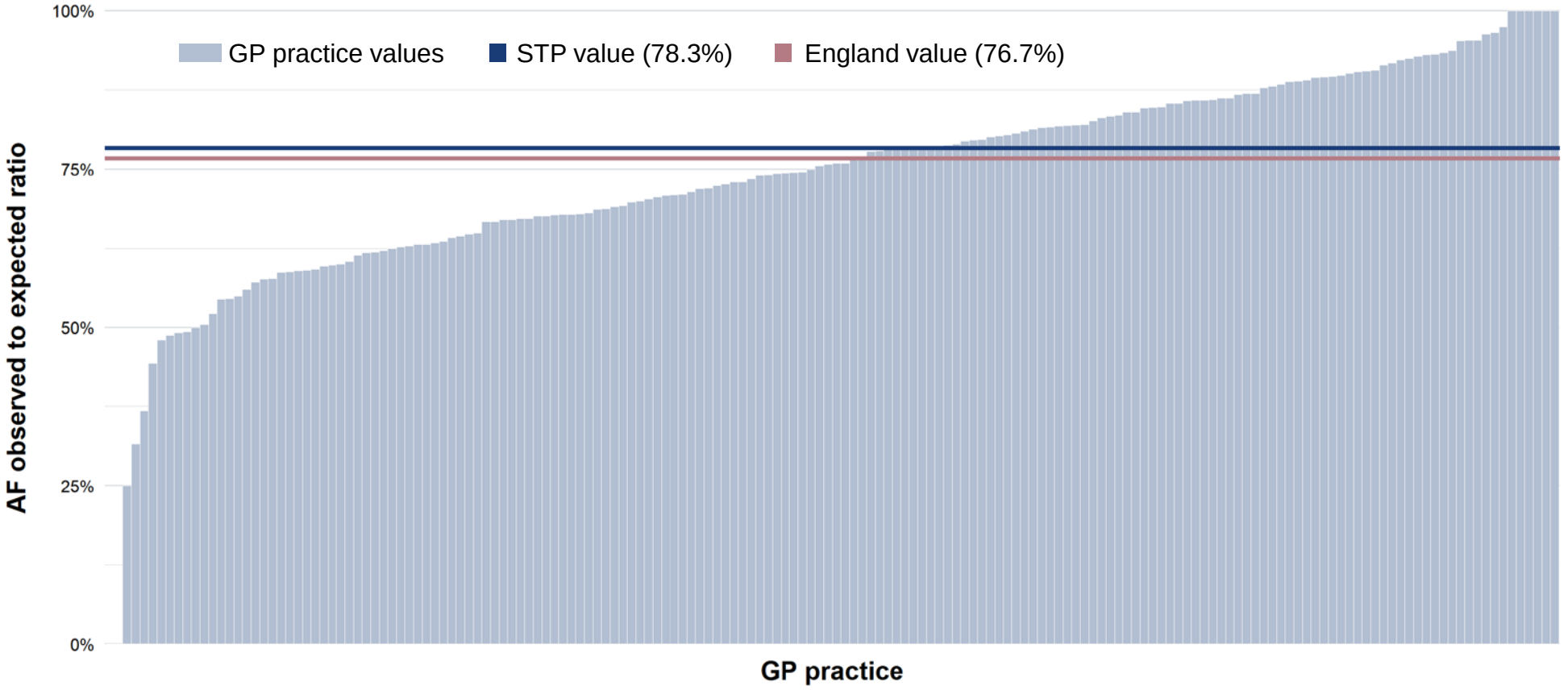
Atrial fibrillation diagnosis

GP practice variation

Atrial fibrillation diagnosis:

AF observed prevalence compared with expected prevalence, by GP practice, Humber, Coast and Vale, 2016/17

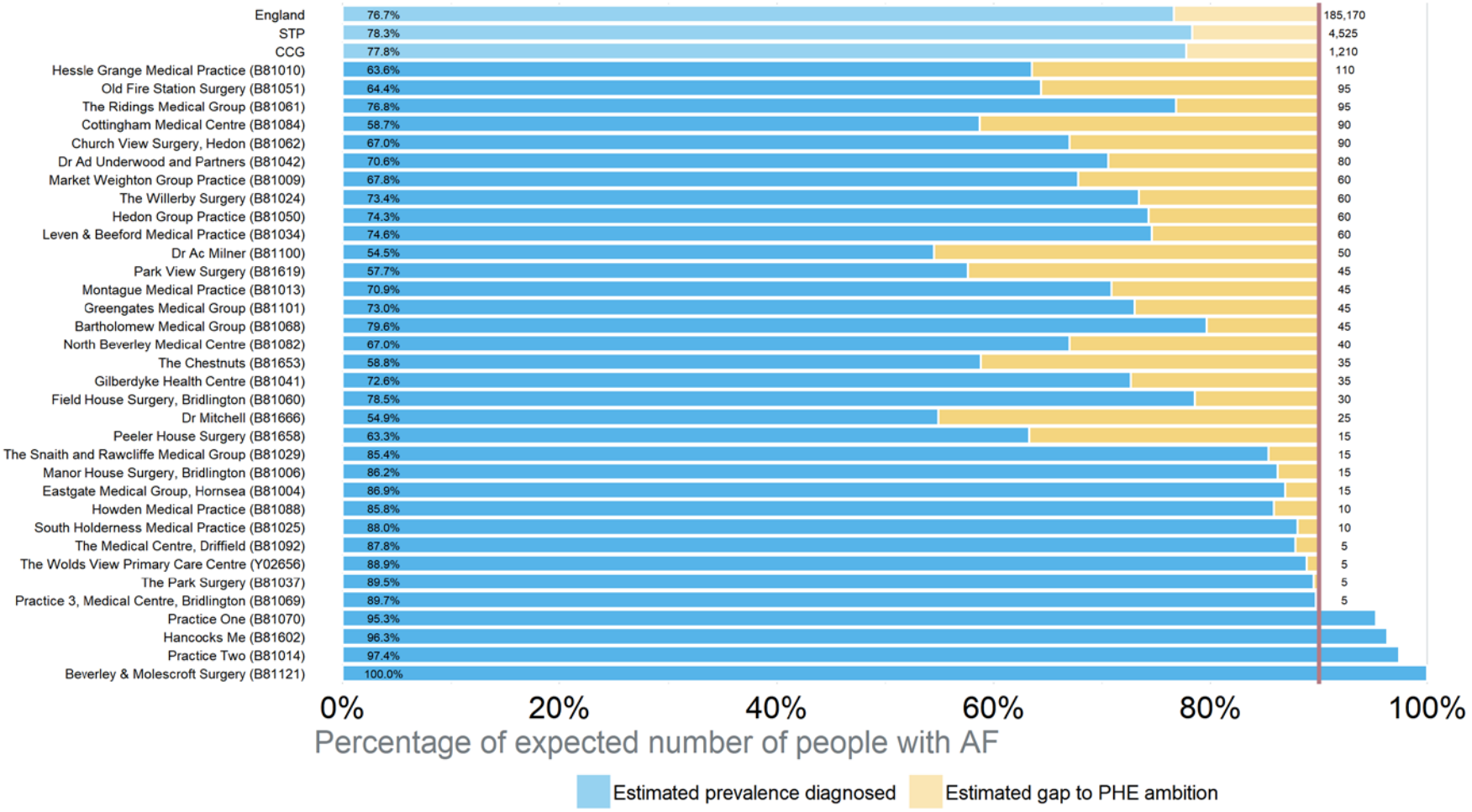


Source: QOF 2016/17 diagnosed figures.
Estimated prevalence from the NCVIN, 2017

STP range: 0% to 100%
Number of diagnosed atrial fibrillation patients not treated to target = 4,525
(numbers rounded to the nearest 5)

Atrial fibrillation diagnosis:

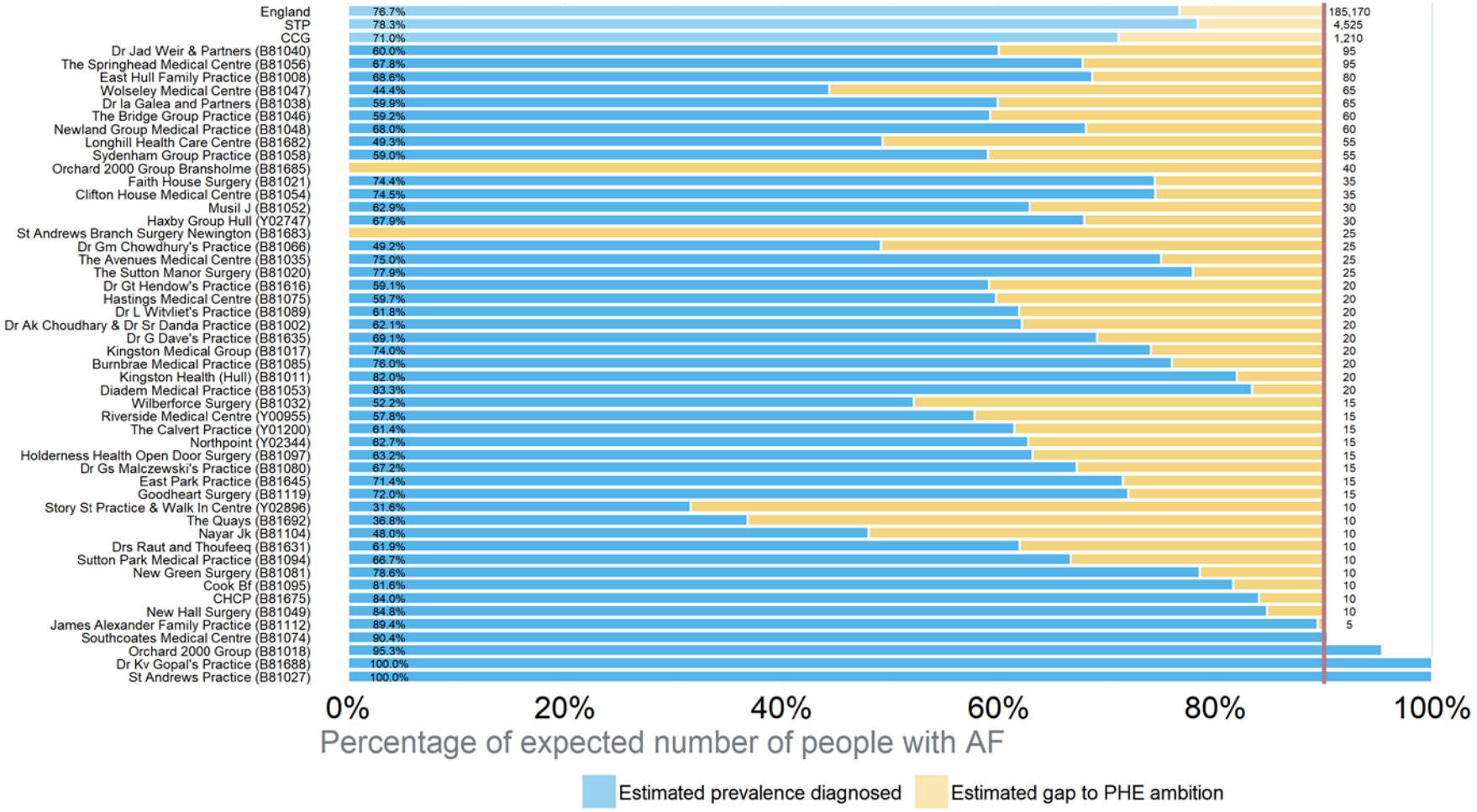
AF observed prevalence compared with expected prevalence and estimated number of people with AF required to be diagnosed to meet the PHE ambition, by GP practice,
East Riding Of Yorkshire CCG 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 5.

Atrial fibrillation diagnosis:

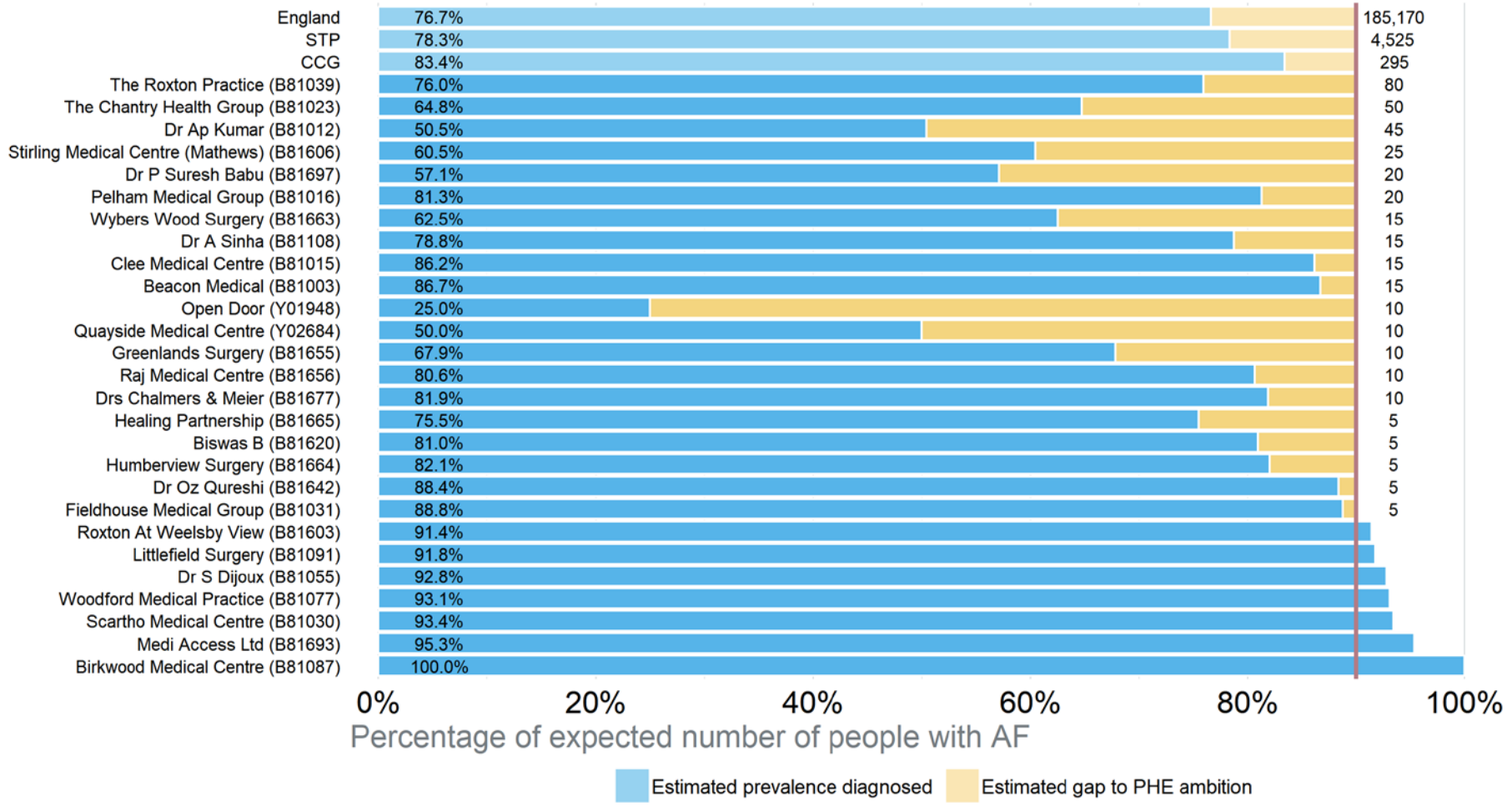
AF observed prevalence compared with expected prevalence and estimated number of people with AF required to be diagnosed to meet the PHE ambition, by GP practice,
Hull CCG 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 5.

Atrial fibrillation diagnosis:

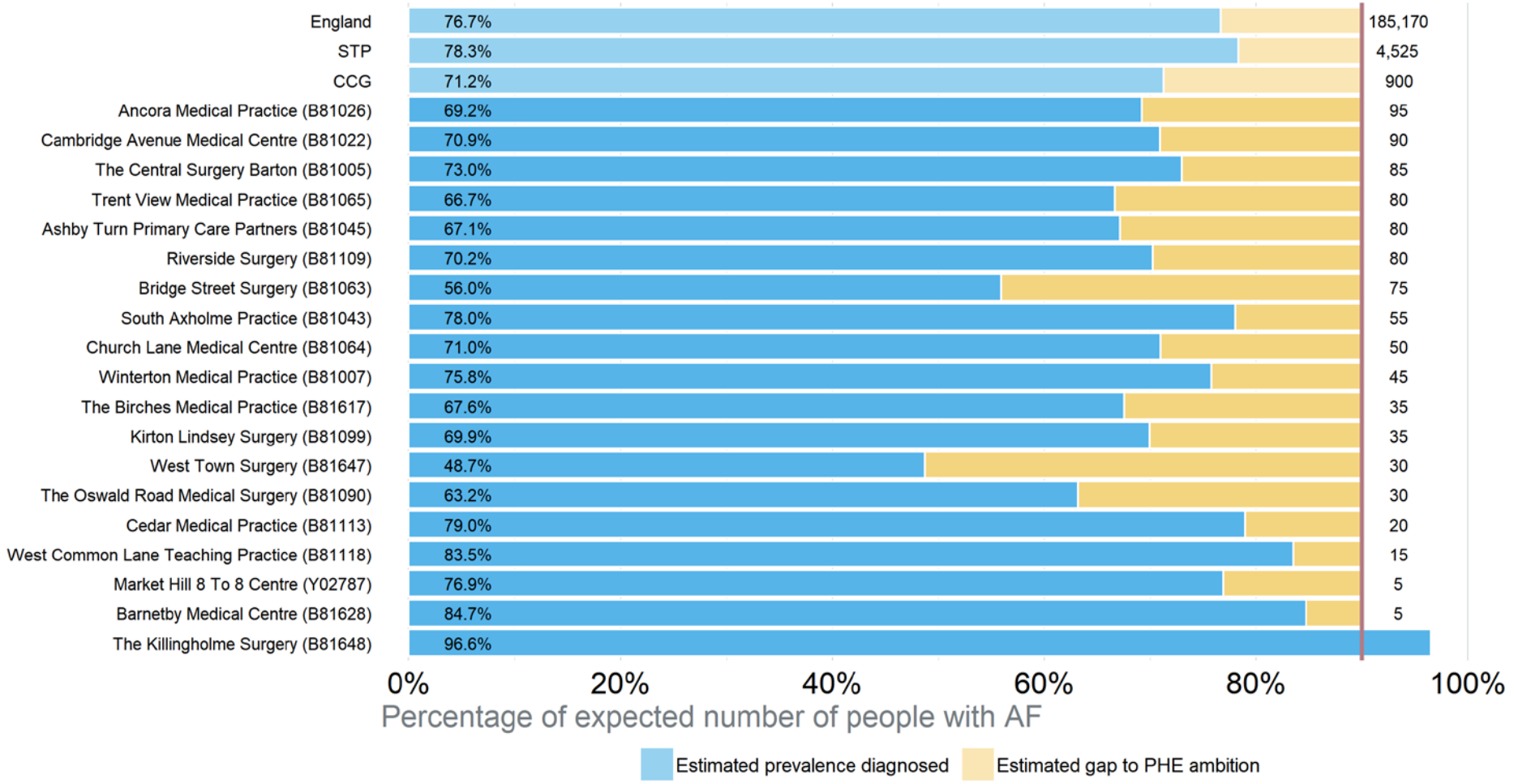
AF observed prevalence compared with expected prevalence and estimated number of people with AF required to be diagnosed to meet the PHE ambition, by GP practice,
NE Lincolnshire CCG 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 5.

Atrial fibrillation diagnosis:

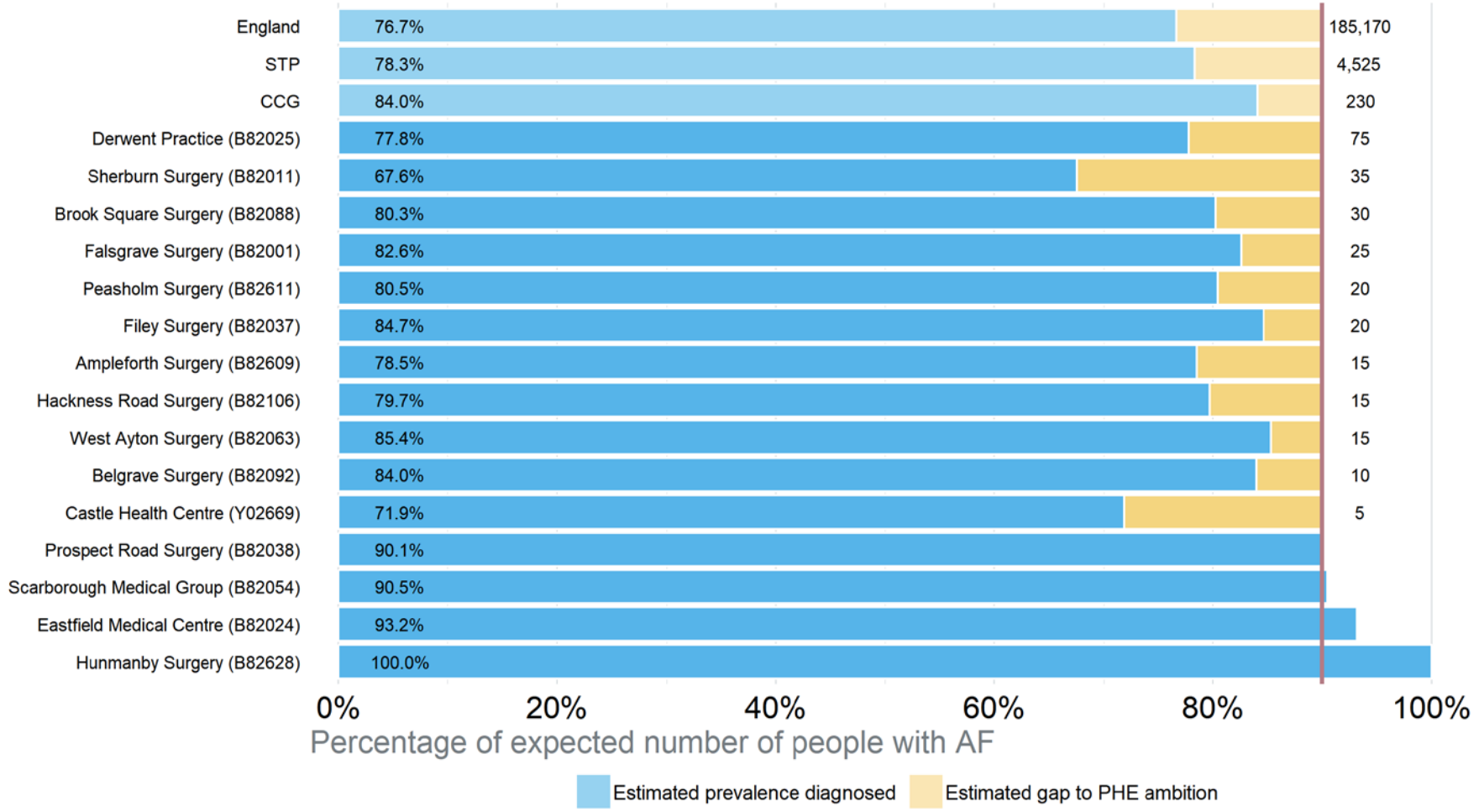
AF observed prevalence compared with expected prevalence and estimated number of people with AF required to be diagnosed to meet the PHE ambition, by GP practice,
North Lincolnshire CCG 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 5.

Atrial fibrillation diagnosis:

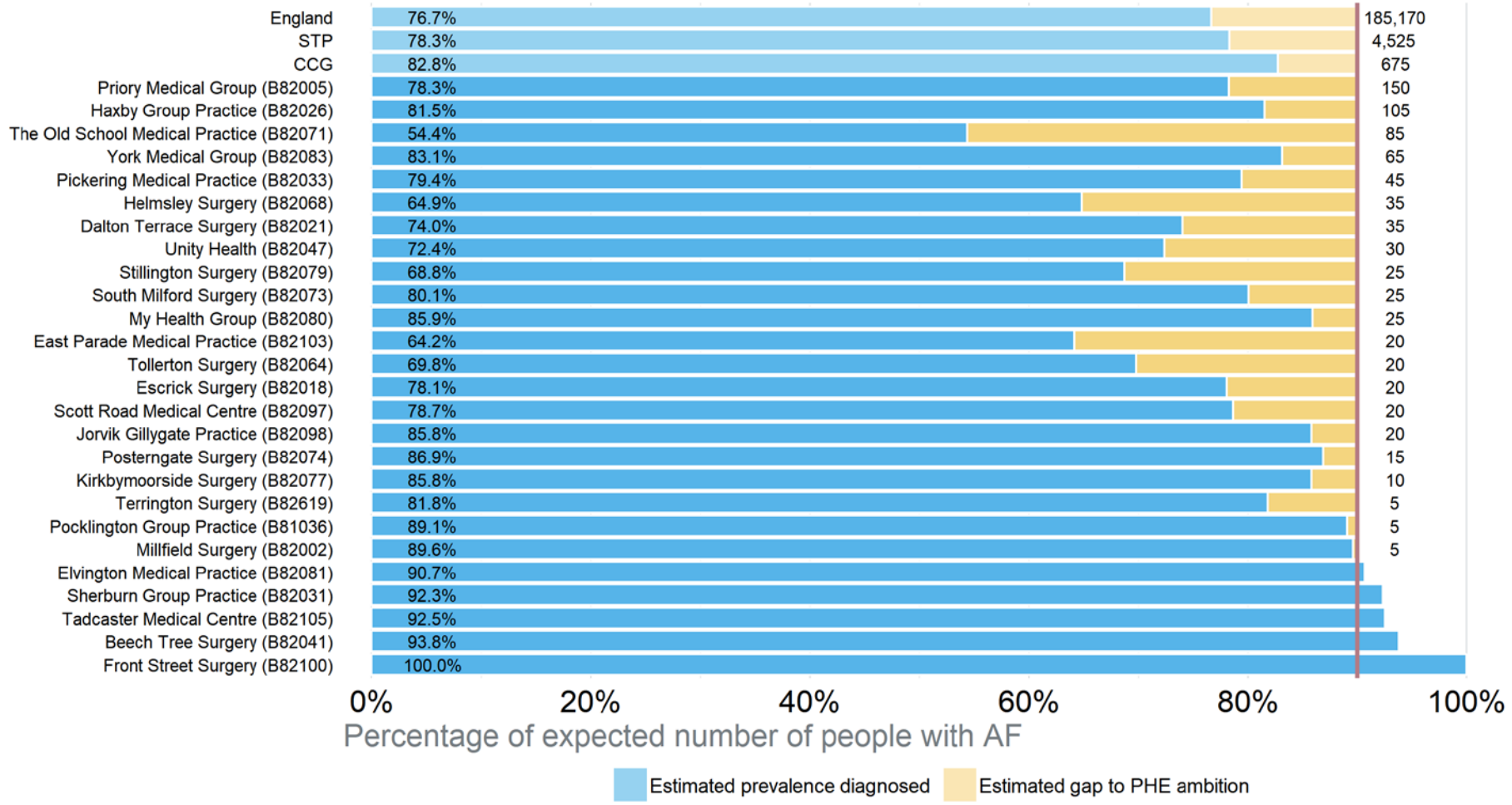
AF observed prevalence compared with expected prevalence and estimated number of people with AF required to be diagnosed to meet the PHE ambition, by GP practice,
Scarborough and Ryedale CCG 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 5.

Atrial fibrillation diagnosis:

AF observed prevalence compared with expected prevalence and estimated number of people with AF required to be diagnosed to meet the PHE ambition, by GP practice,
Vale Of York CCG 2016/17



Source: QOF 2016/17 diagnosed figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 5.

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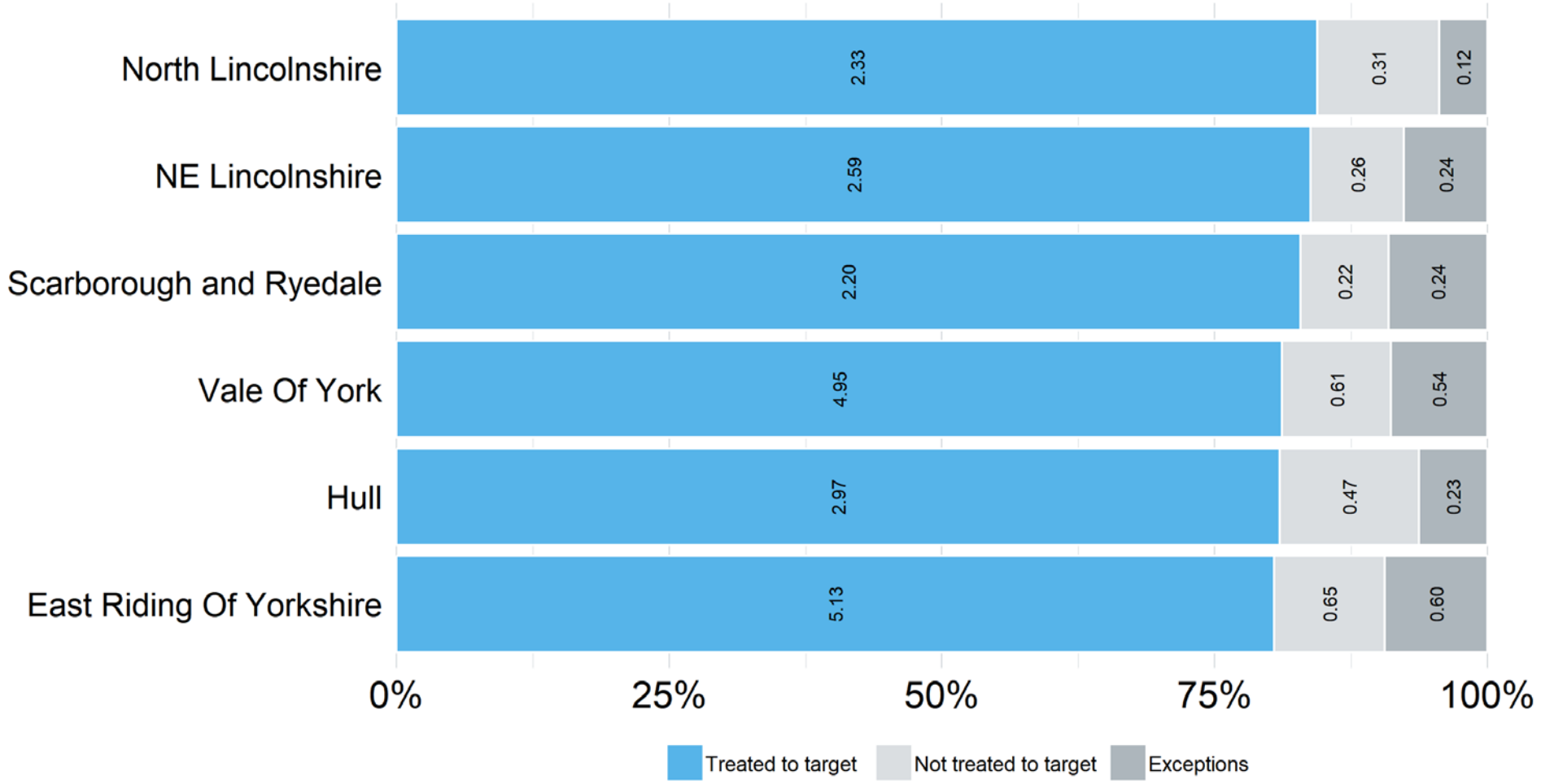
Atrial fibrillation anticoagulation

Atrial fibrillation treatment:

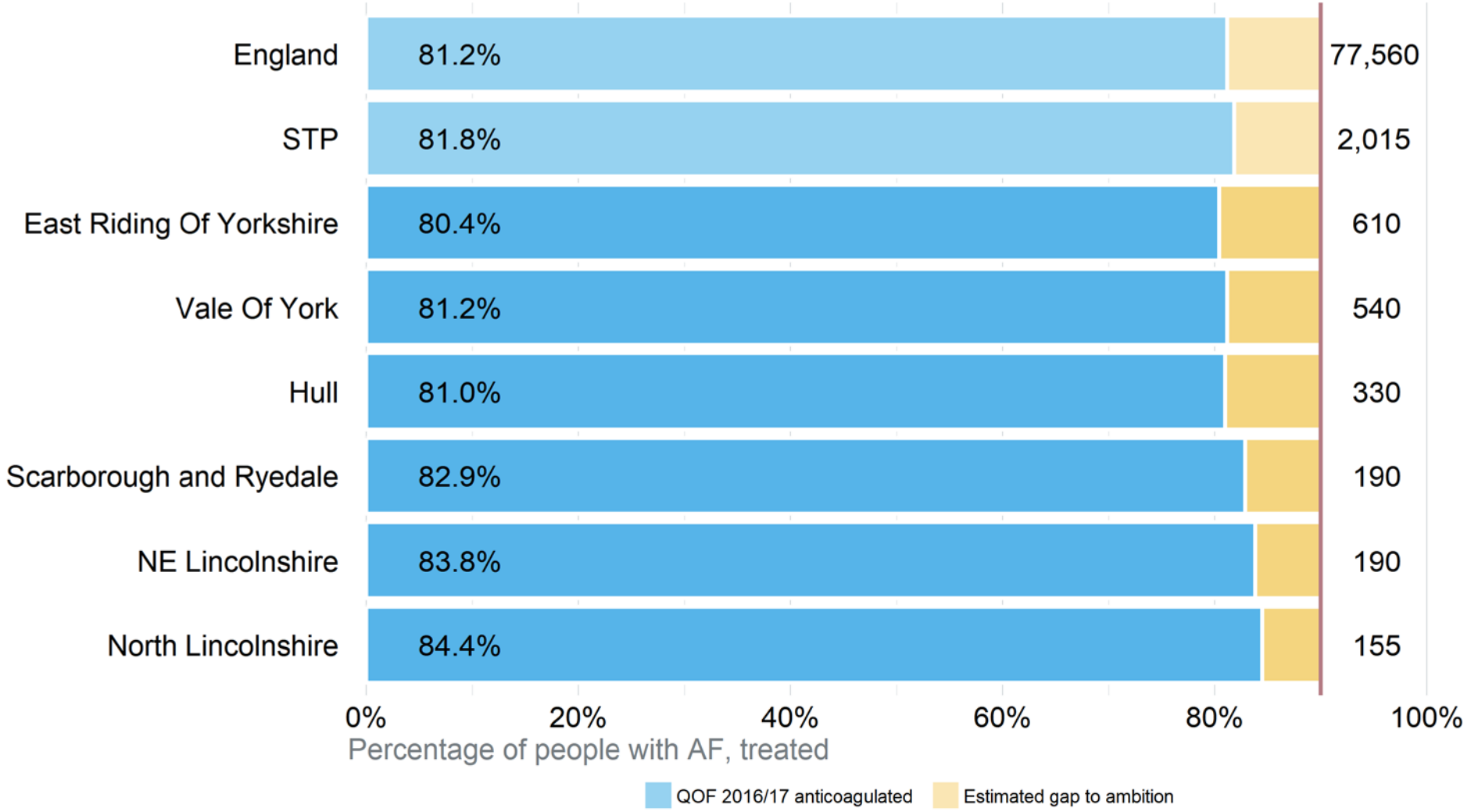
Number of people with high risk AF who are anticoagulated, not anticoagulated, and excepted from QOF, by CCG, 2016/17



Source: QOF 2016/17. Numbers in thousands.

Atrial fibrillation treatment:

Estimated number of people with high risk AF who need to be anticoagulated, to achieve the AF treatment ambition, England, STP and CCG level, 2016/17



Source: QOF 2016/17. Numbers rounded to the nearest 5.

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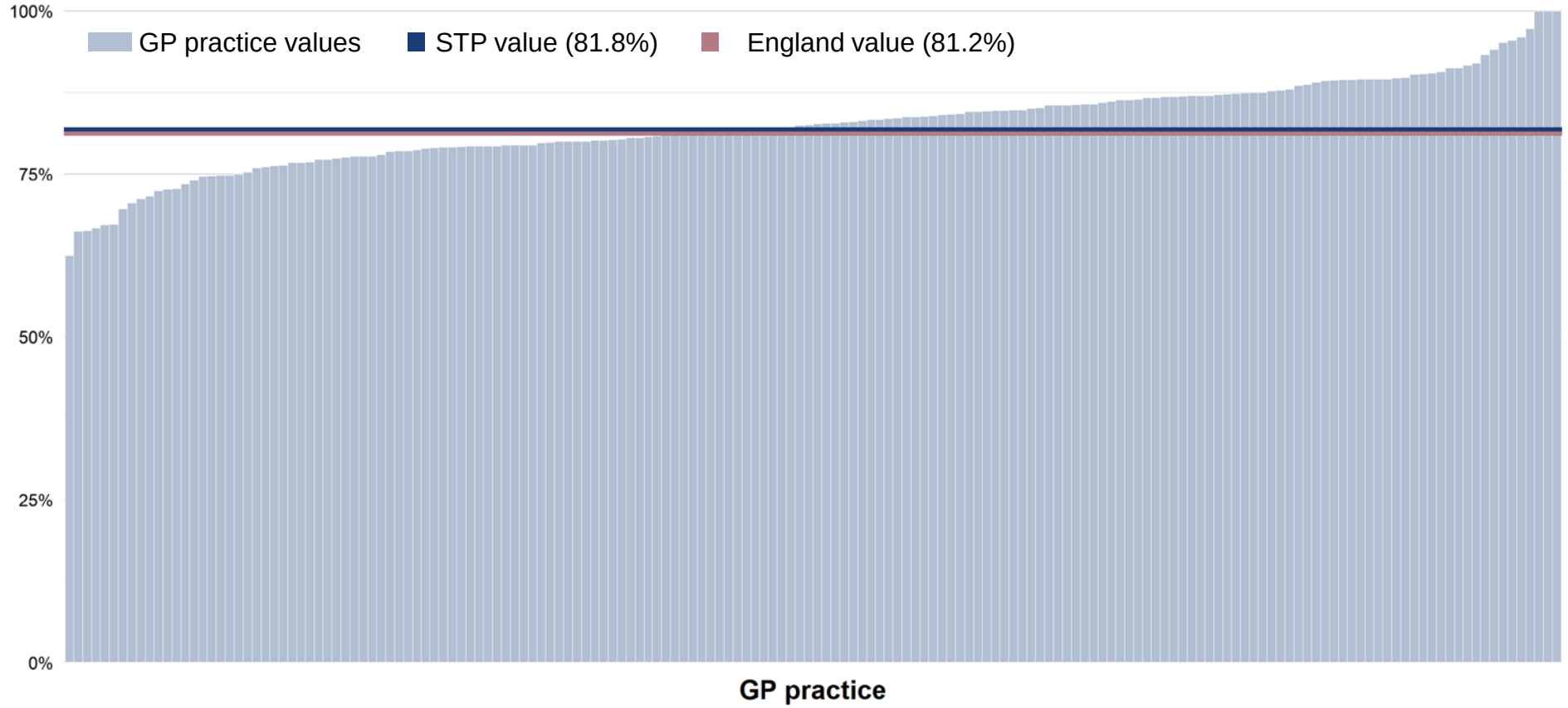
Atrial fibrillation anticoagulation

GP practice data

Anticoagulation for high risk AF patients by GP practice

The proportion of people diagnosed with high risk AF who are anticoagulated, by GP practice, Humber, Coast and Vale STP, 2016/17

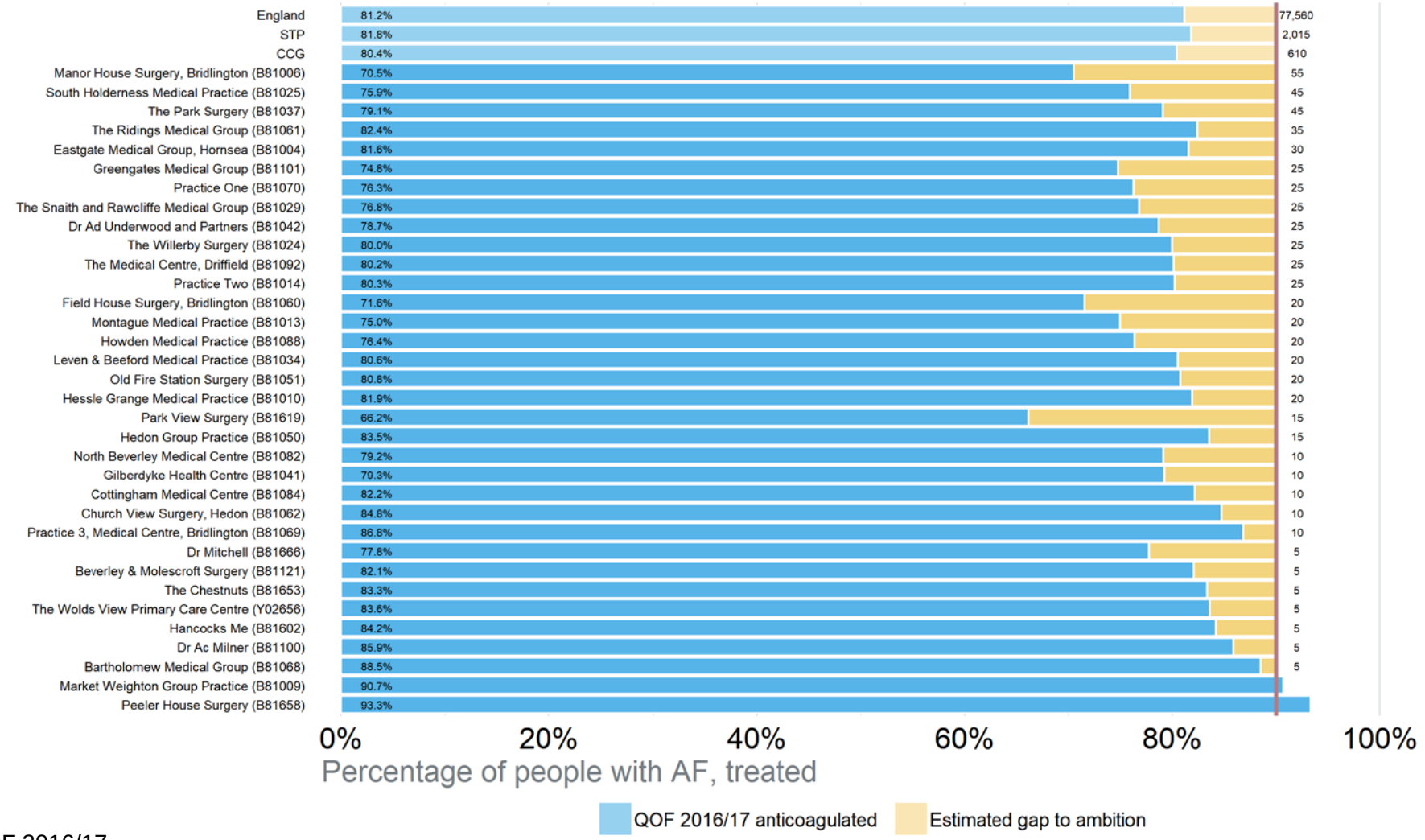


Source: QOF 2016/17

STP range: 62.5% to 100%
Number of diagnosed with high risk AF who are anticoagulated not treated to target = 2,015
(numbers rounded to the nearest 5)

Atrial fibrillation treatment:

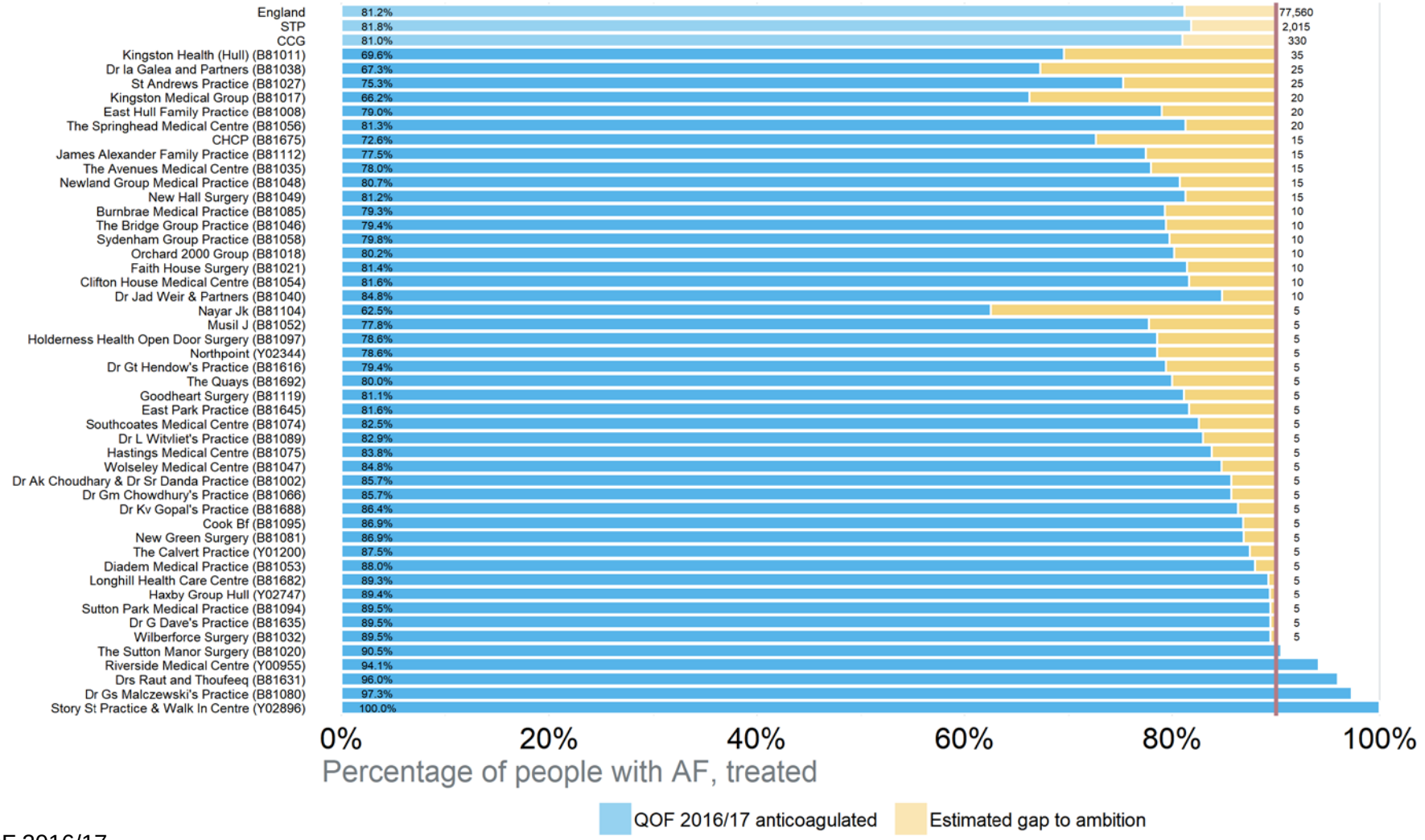
Estimated number of people with high risk AF who need to be anticoagulated, to achieve the AF treatment ambition, by GP practice, East Riding Of Yorkshire CCG 2016/17



Source: QOF 2016/17

Atrial fibrillation treatment:

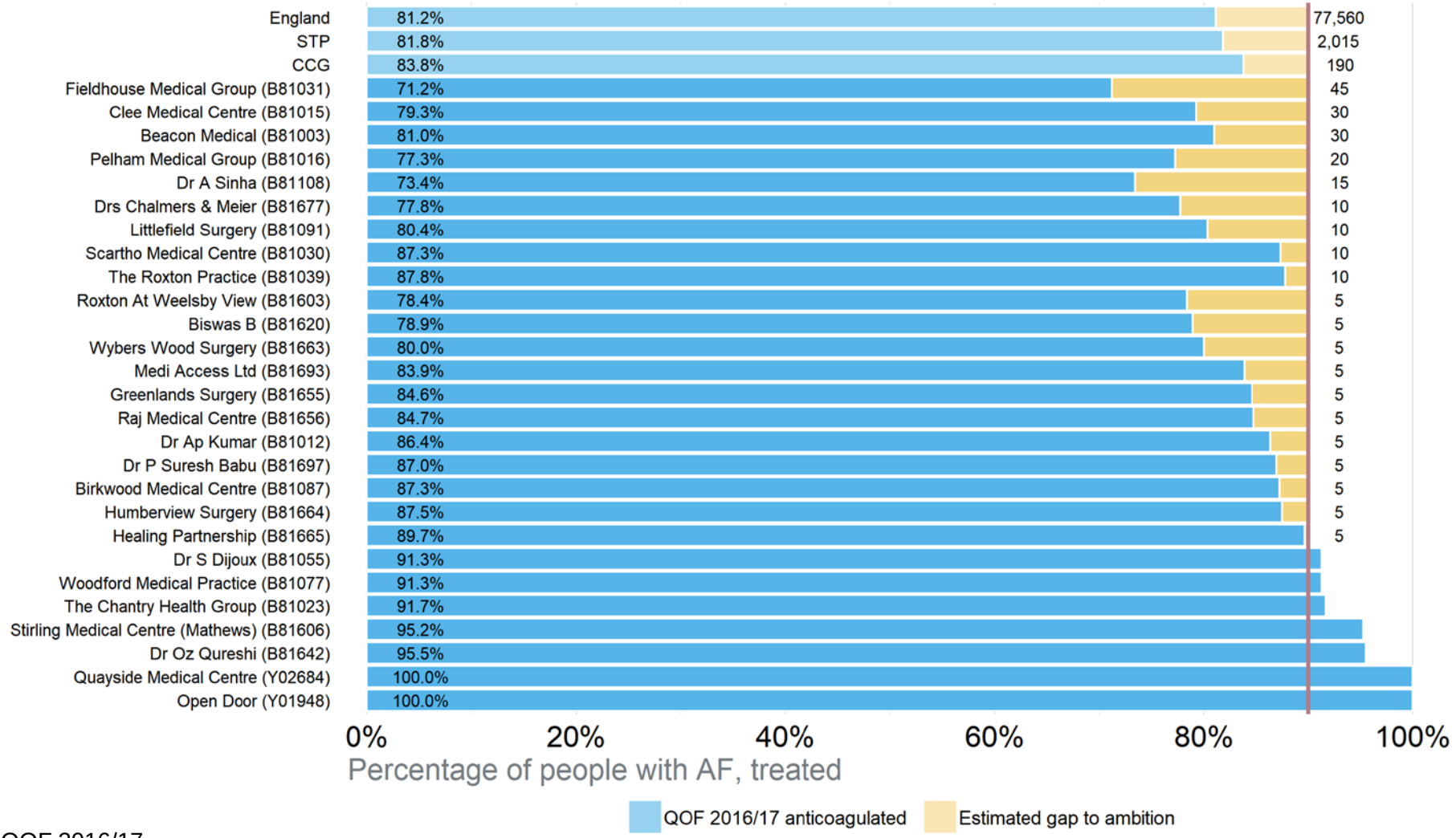
Estimated number of people with high risk AF who need to be anticoagulated, to achieve the AF treatment ambition, by GP practice, Hull CCG 2016/17



Source: QOF 2016/17

Atrial fibrillation treatment:

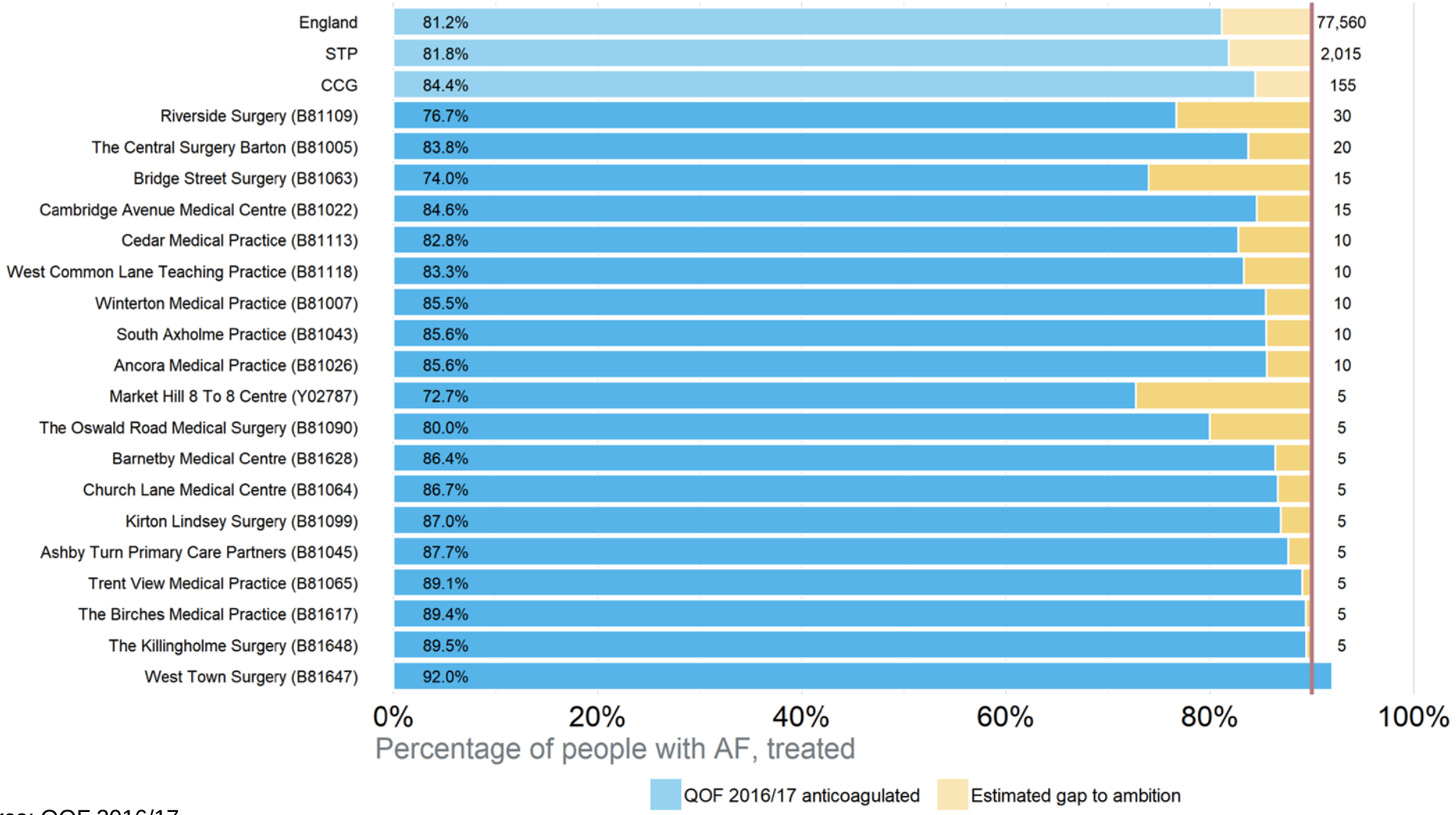
Estimated number of people with high risk AF who need to be anticoagulated, to achieve the AF treatment ambition, by GP practice, NE Lincolnshire CCG 2016/17



Source: QOF 2016/17

Atrial fibrillation treatment:

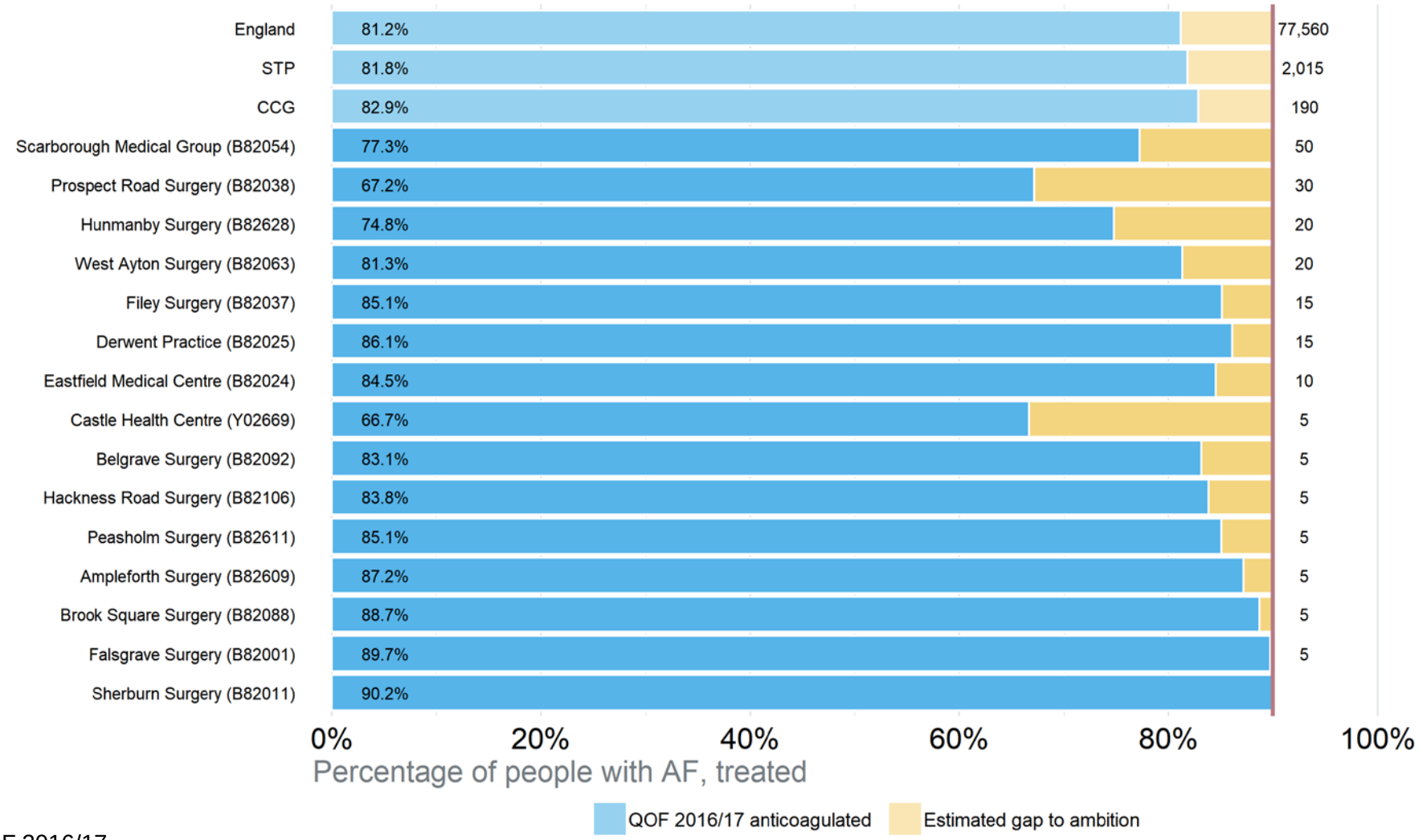
Estimated number of people with high risk AF who need to be anticoagulated, to achieve the AF treatment ambition, by GP practice, North Lincolnshire CCG 2016/17



Source: QOF 2016/17

Atrial fibrillation treatment:

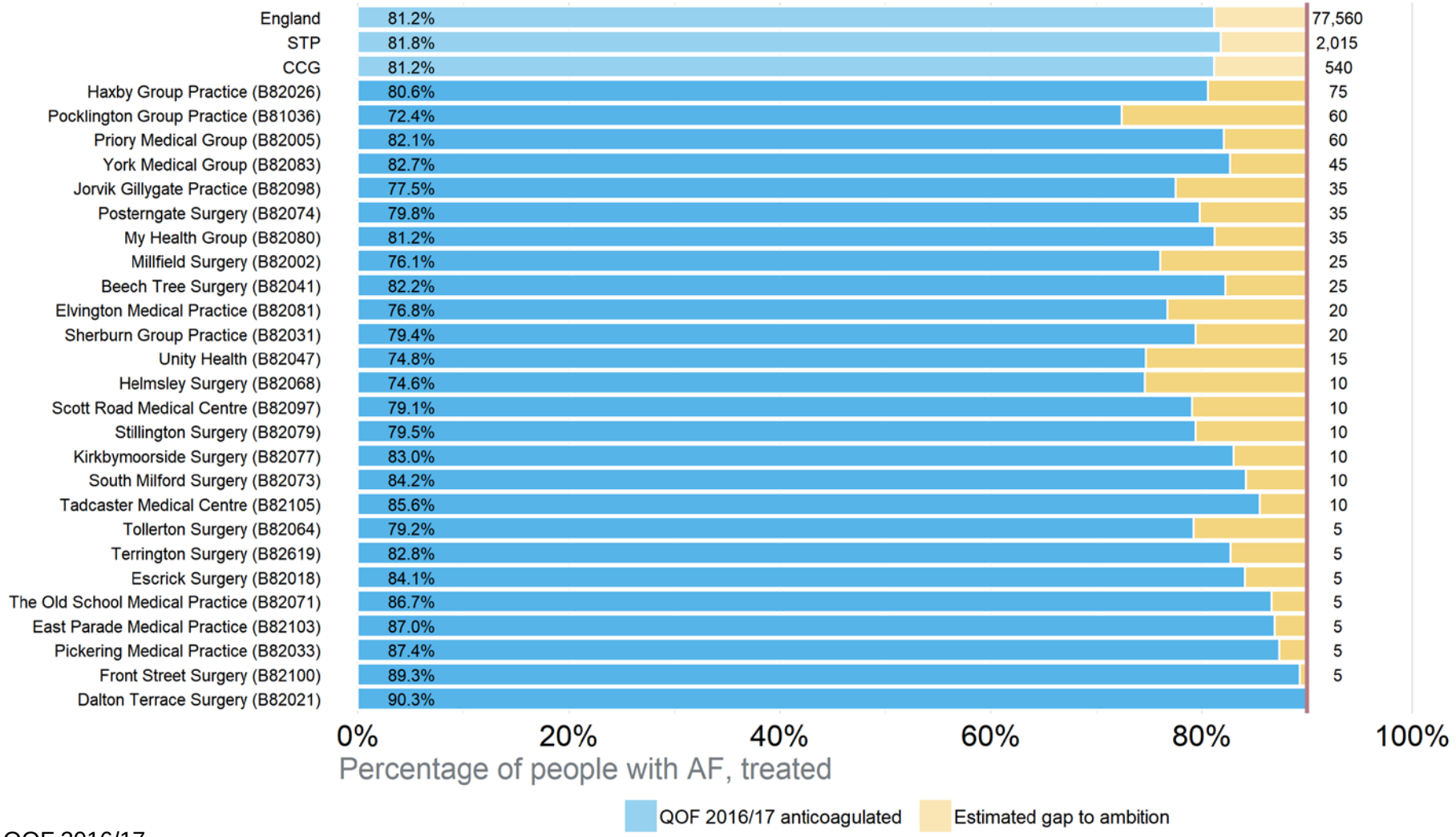
Estimated number of people with high risk AF who need to be anticoagulated, to achieve the AF treatment ambition, by GP practice, Scarborough and Ryedale CCG 2016/17



Source: QOF 2016/17

Atrial fibrillation treatment:

Estimated number of people with high risk AF who need to be anticoagulated, to achieve the AF treatment ambition, by GP practice, Vale Of York CCG 2016/17



Source: QOF 2016/17

Exception reporting for QOF indicator AF007 (high risk AF patients anticoagulated)

CCG	Highest GP practice exception rate (%)	Lowest GP practice exception rate (%)	Range across GP practices
Scarborough and Ryedale	33.3	4.2	29.1
Hull	25.0	0.0	25.0
East Riding Of Yorkshire	23.6	1.5	22.1
NE Lincolnshire	21.1	0.0	21.1
Vale Of York	18.1	0.8	17.3
North Lincolnshire	13.6	0.0	13.6

Events avoided and costs saved

The PHE CVD Return on Investment Tool currently in production at a national level should be able to provide estimates of events avoided and costs saved.

What does the ROI tool do?

The tool is based on a simulation model that will calculate the health benefits and cost savings made through changes in detection and management of people with six key high CVD risk factors: hypertension; atrial fibrillation, diabetes; non-diabetic hyperglycaemia; chronic kidney disease and high cholesterol/high QRISK score. It can be used for the whole of England, an STP, CCG or local authority area.

The user can answer two types of question with the ROI tool:

1. What happens when I improve detection or management of key CVD risk factors?

This allows users to consider the impact of changing the proportion of people detected or 'well managed' out of the people who have one or many of the six CVD risk factors above. 'Well managed' is defined in the tool as receiving all interventions that are NICE recommended for CVD prevention in people with that condition.

2. What happens when I improve usage of the key interventions for people at risk of CVD?

This allows the user to consider the impact of improving the usage of interventions in people who have identified CVD risk factors. The user also has the option to create their own intervention that might impact on the risk conditions. The tool will be available online where the user can enter impact data and then receive a report with the outcomes, including clinical events avoided, costs and cost-effectiveness over a time period of up to 20 years into the future.

Further information

If you need more advice on other sources of CVD prevention information please contact the PHE local knowledge and intelligence service.

Data notes:

All CCG and STP values have been generated by aggregating the GPs which are shown in the pack. Some GPs are missing as they do not have an expected value for hypertension or AF. Rounding has been applied to these packs at practice, CCG and STP level. This means that the published CCG and STP level QOF figures may not be exactly the same.

The hypertension treatment section of the packs uses INLIQ data. Approximately 78% of practices nationally submit this data. It is an experimental statistic, so we have only reported CCG level information.

In the appendix the QOF hypertension data had been used. The hypertension QOF treatment level is 150/90 and this differs from the PHE hypertension treatment ambition level which recommends treatment in line with the NICE guidance i.e. 140/90 for people aged under 80 and 150/90mmHg in people aged 80 and over. The QOF data is a proxy for the PHE hypertension ambition, however achieving a blood pressure target of 140/90 is more challenging than the 150/90 level, and therefore the numbers required to meet the 64% population hypertension treatment threshold are likely to be an underestimate. This 64% treatment threshold is derived from the hypertension diagnosis and the treatment ambitions combined. The ambition specifies that 80% of people need to be diagnosed and 80% of those diagnosed should be treated to target, this equates to 64% of the total number of people with hypertension (diagnosed and undiagnosed) being treated to the required blood pressure.

Hypertension prevalence estimates were created using data from QOF hypertension registers in 2016/17 and undiagnosed hypertension estimates for adults 16 years and over for 2014 and applied to the latest available GP populations. Department of Primary Care & Public Health, Imperial College London.

AF prevalence estimates are 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.

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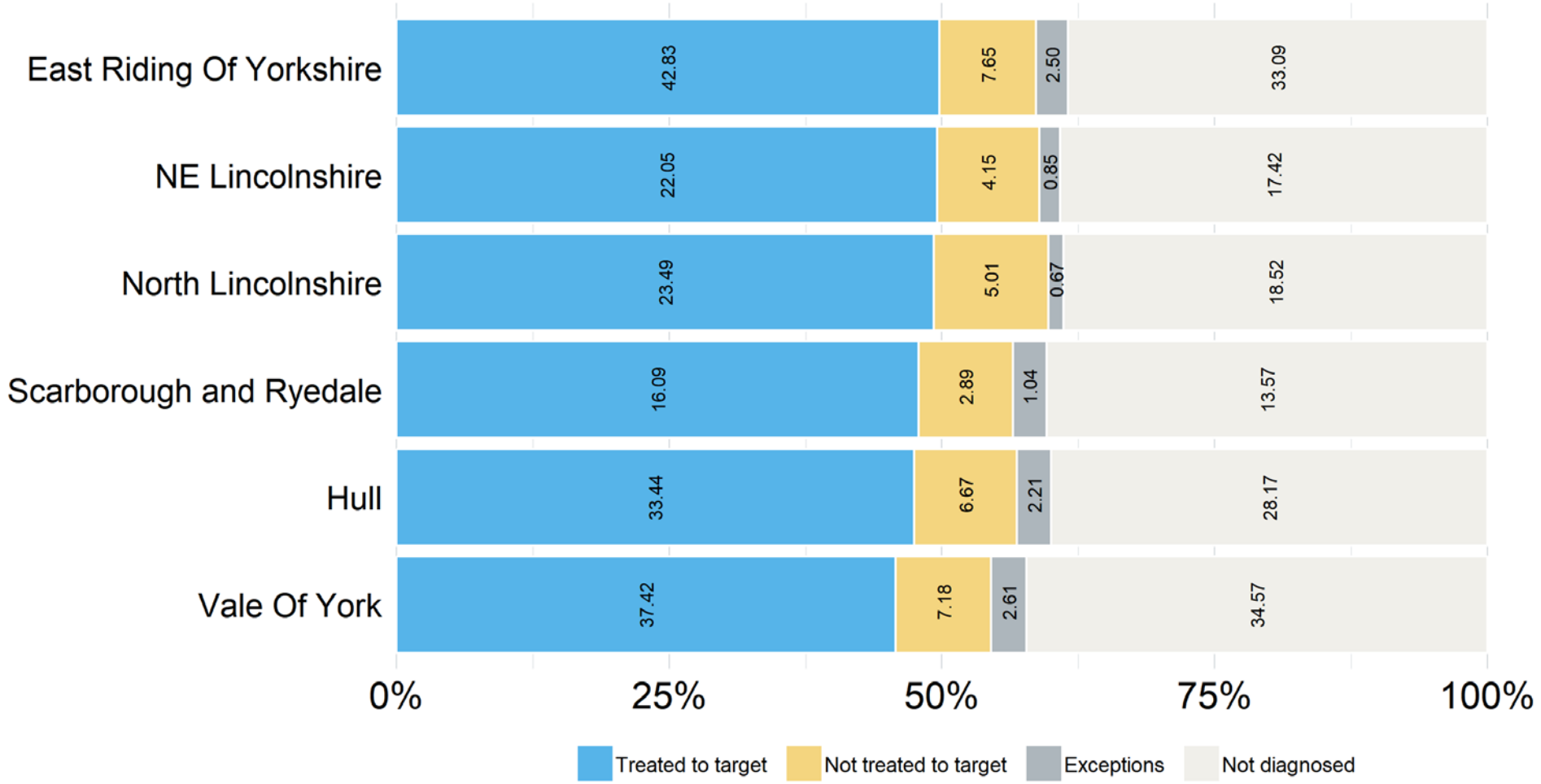
Appendix: Hypertension treatment to higher 150/90mmHg target measured by QOF

STP/CCG level

Hypertension treatment:

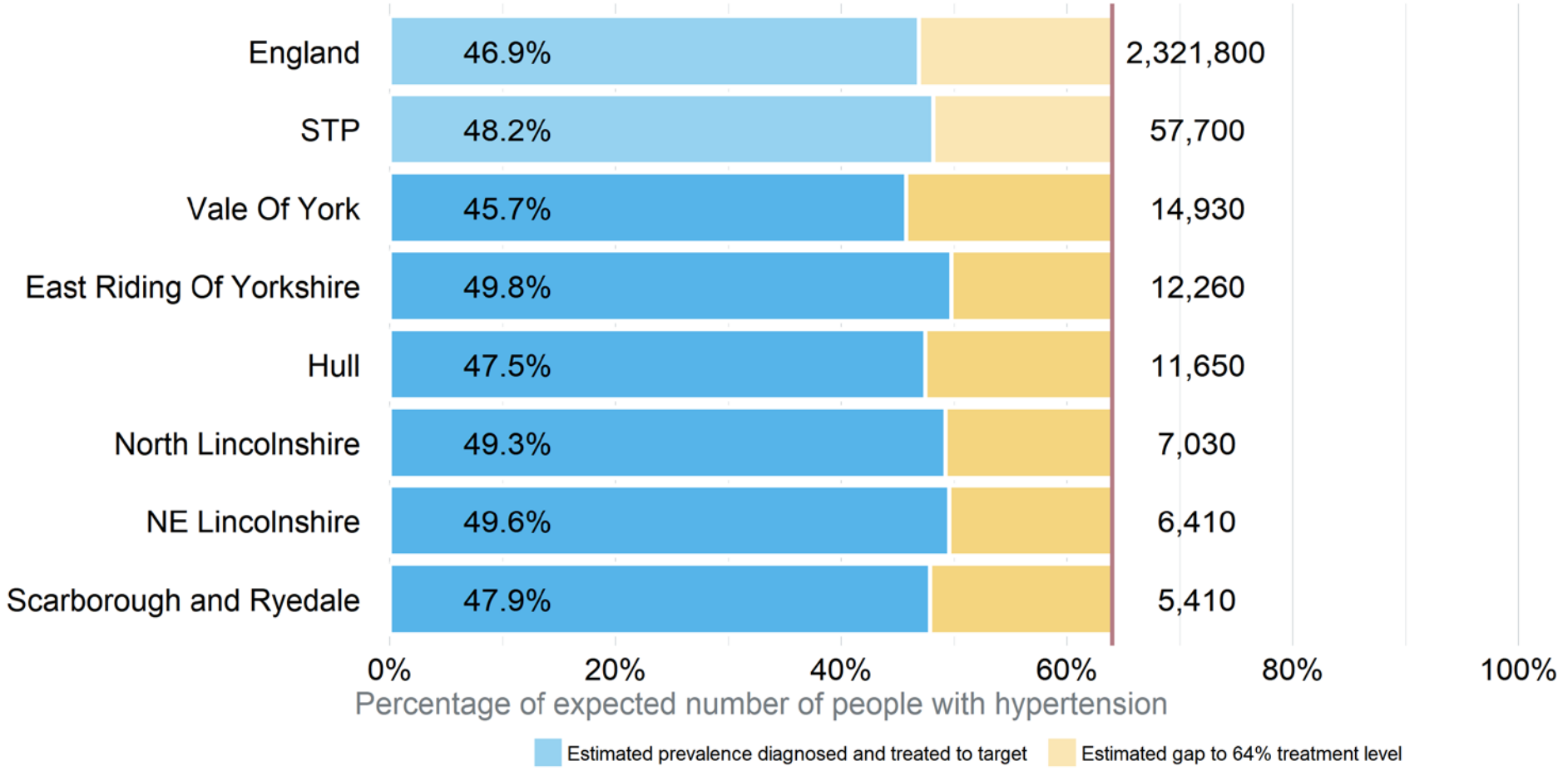
Estimated number of people with hypertension who are treated and not treated to 150/90 level, excepted from QOF and who are not diagnosed with hypertension, by CCG, 2016/17



Source: QOF 2016/17 treatment figures. Estimated prevalence from the NCVIN, 2017. Numbers in thousands.

Hypertension treatment:

Estimated number of people with hypertension who need to achieve a blood pressure of 150/90, to reach the 64% treatment level, England, STP and CCG level, 2016/17



Source: QOF 2016/17 treatment figures. Estimated prevalence from the NCVIN, 2017. Numbers rounded to the nearest 10.

NB: The estimated numbers to meet the 64% treatment level may require identifying people not currently diagnosed with hypertension as well as improving the management of those people already diagnosed. The PHE hypertension ambition relates to achieving a blood pressure of 140/90, these numbers relate to a 150/90 threshold and are likely to represent an underestimate.

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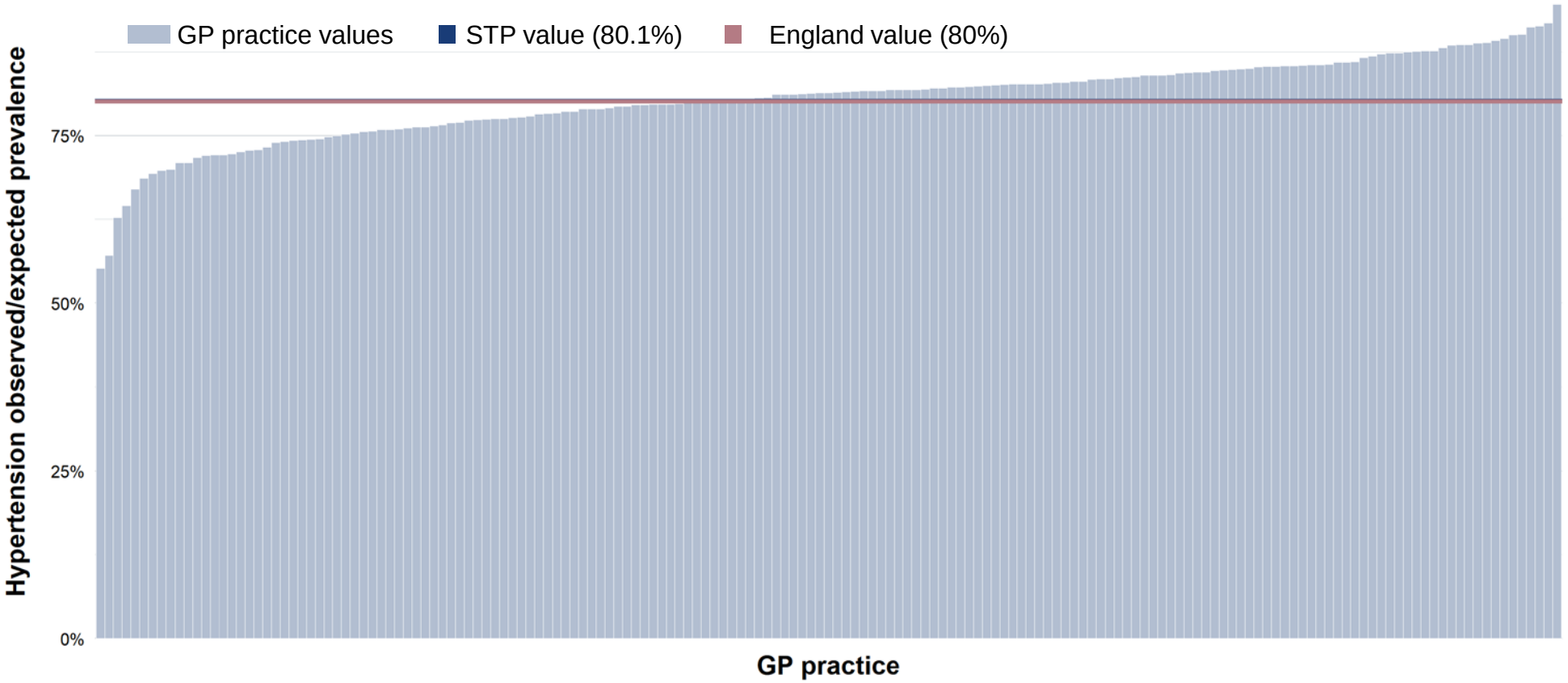
Appendix: Hypertension treatment to higher 150/90mmHg target measured by QOF

GP practice

Hypertension treatment:

The proportion of people diagnosed with hypertension who are treated to 150/90 level, by GP practice, Humber, Coast and Vale, 2016/17

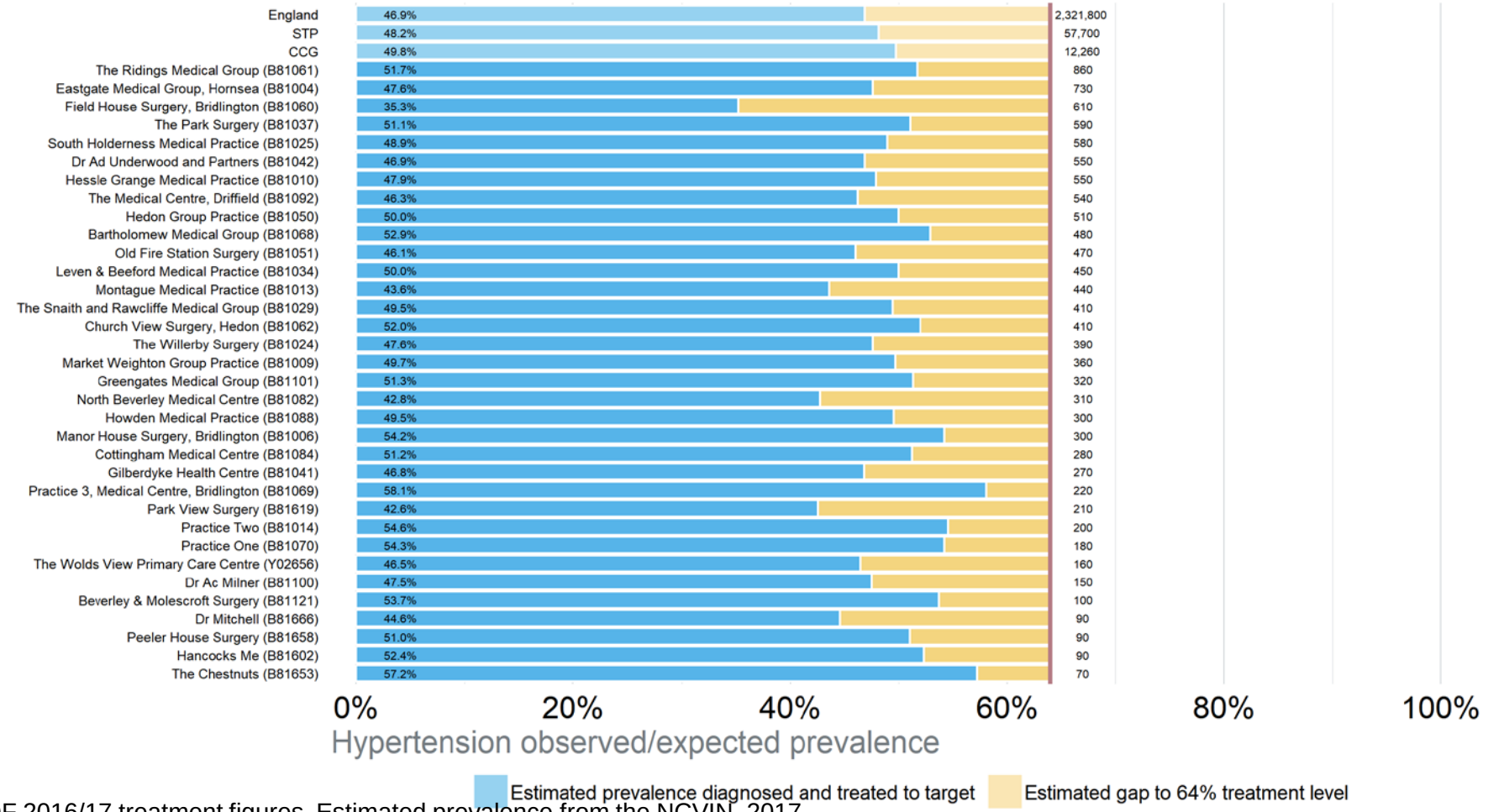


Source: QOF 2016/17 from NCVIN

STP range: 55.2% to 94.6%
Number of diagnosed hypertension patients not treated to target = 175,300
(numbers rounded to the nearest 10)

Hypertension treatment by GP:

Hypertension treatment: Estimated number of people with hypertension who need to achieve a blood pressure of 150/90, to reach the 64% treatment level, East Riding Of Yorkshire CCG, 2016/17

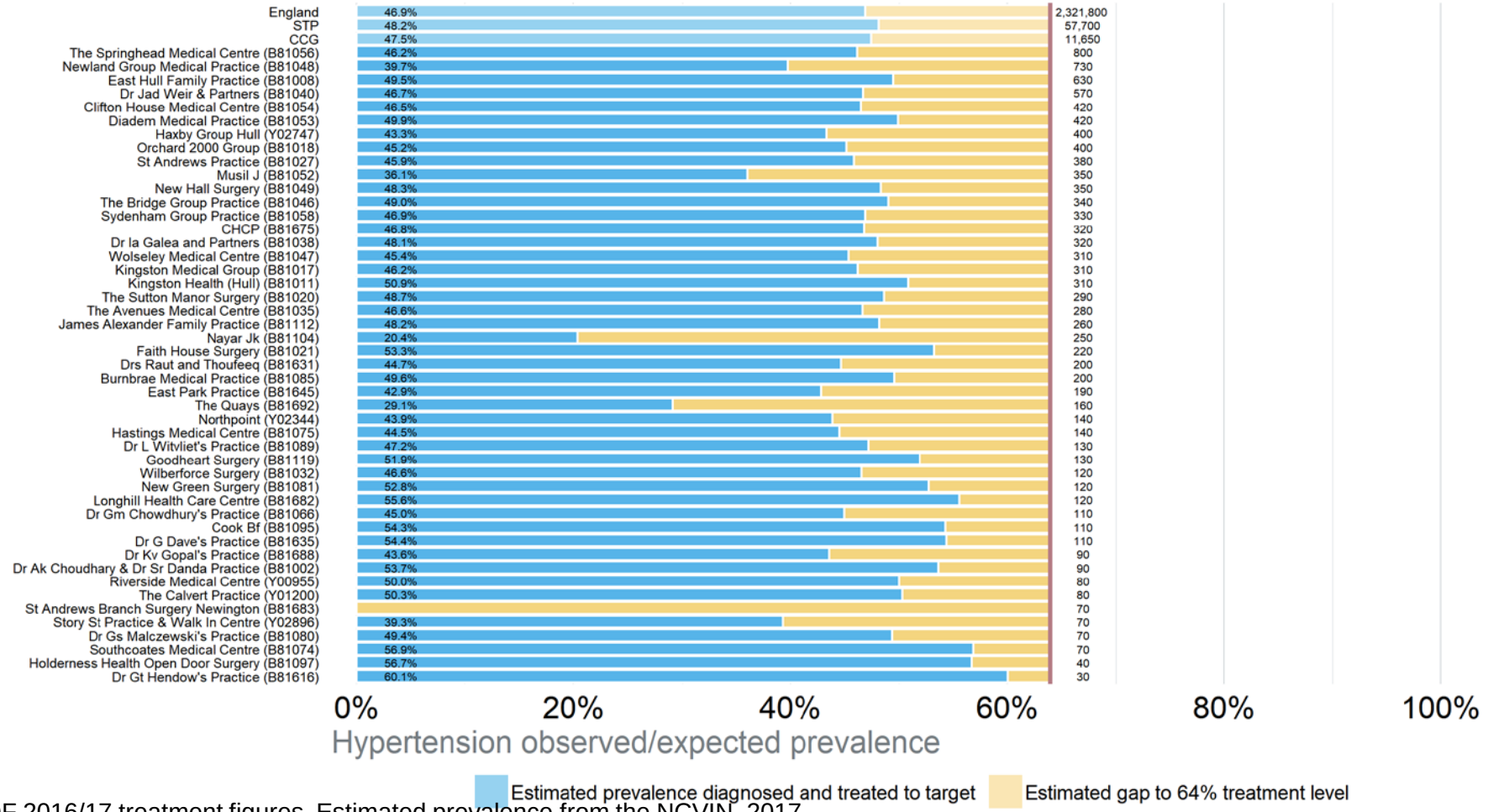


Source: QOF 2016/17 treatment figures. Estimated prevalence from the NCVIN, 2017

NB: The estimated numbers to meet the 64% treatment level may require identifying people not currently diagnosed with hypertension as well as improving the management of those people already diagnosed. The PHE hypertension ambition relates to achieving a blood pressure of 140/90, these numbers relate to a 150/90 threshold and are likely to represent an underestimate.

Hypertension treatment by GP:

Hypertension treatment: Estimated number of people with hypertension who need to achieve a blood pressure of 150/90, to reach the 64% treatment level, Hull CCG, 2016/17

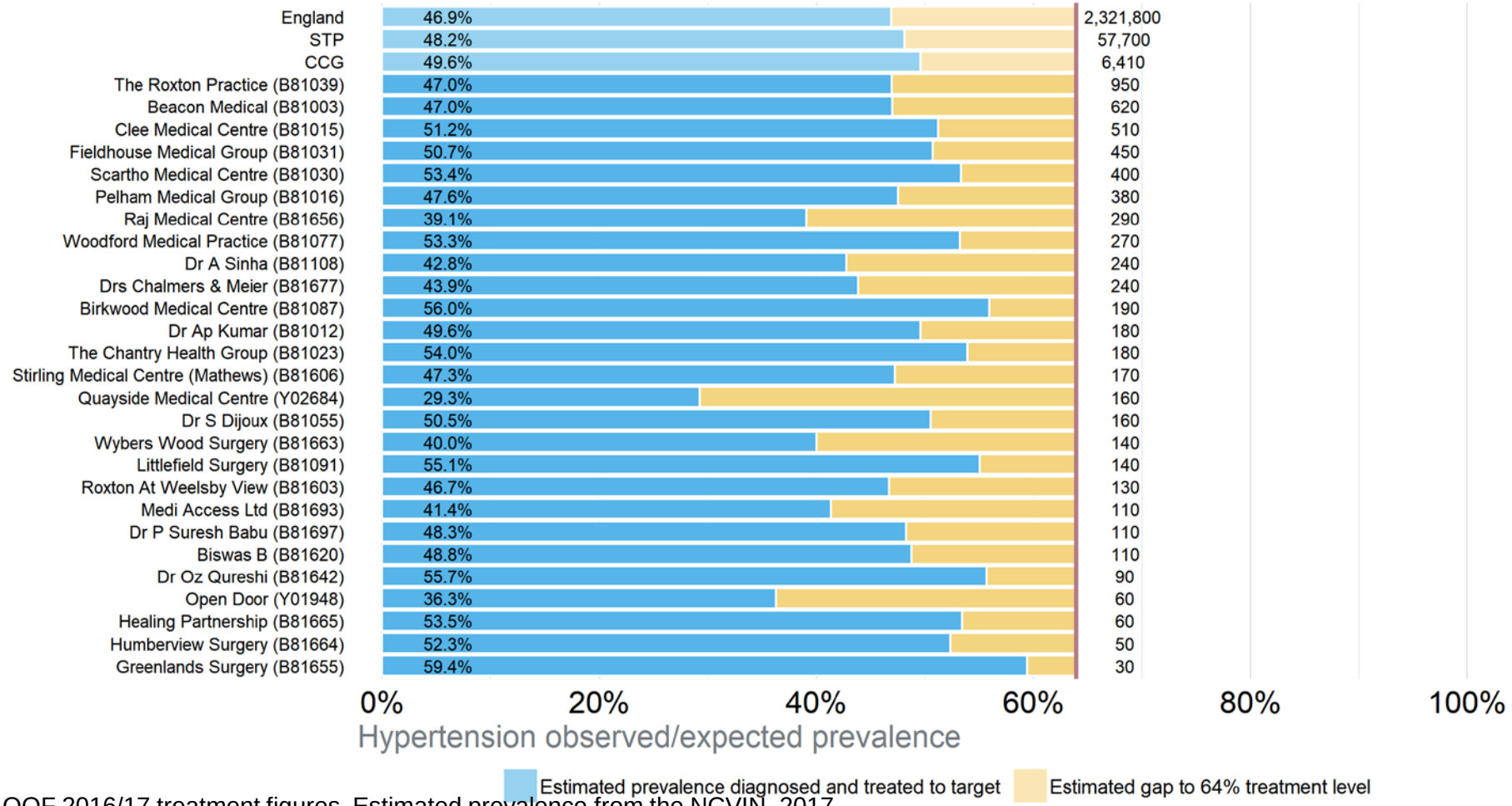


Source: QOF 2016/17 treatment figures. Estimated prevalence from the NCVIN, 2017

NB: The estimated numbers to meet the 64% treatment level may require identifying people not currently diagnosed with hypertension as well as improving the management of those people already diagnosed. The PHE hypertension ambition relates to achieving a blood pressure of 140/90, these numbers relate to a 150/90 threshold and are likely to represent an underestimate.

Hypertension treatment by GP:

Hypertension treatment: Estimated number of people with hypertension who need to achieve a blood pressure of 150/90, to reach the 64% treatment level, NE Lincolnshire CCG, 2016/17

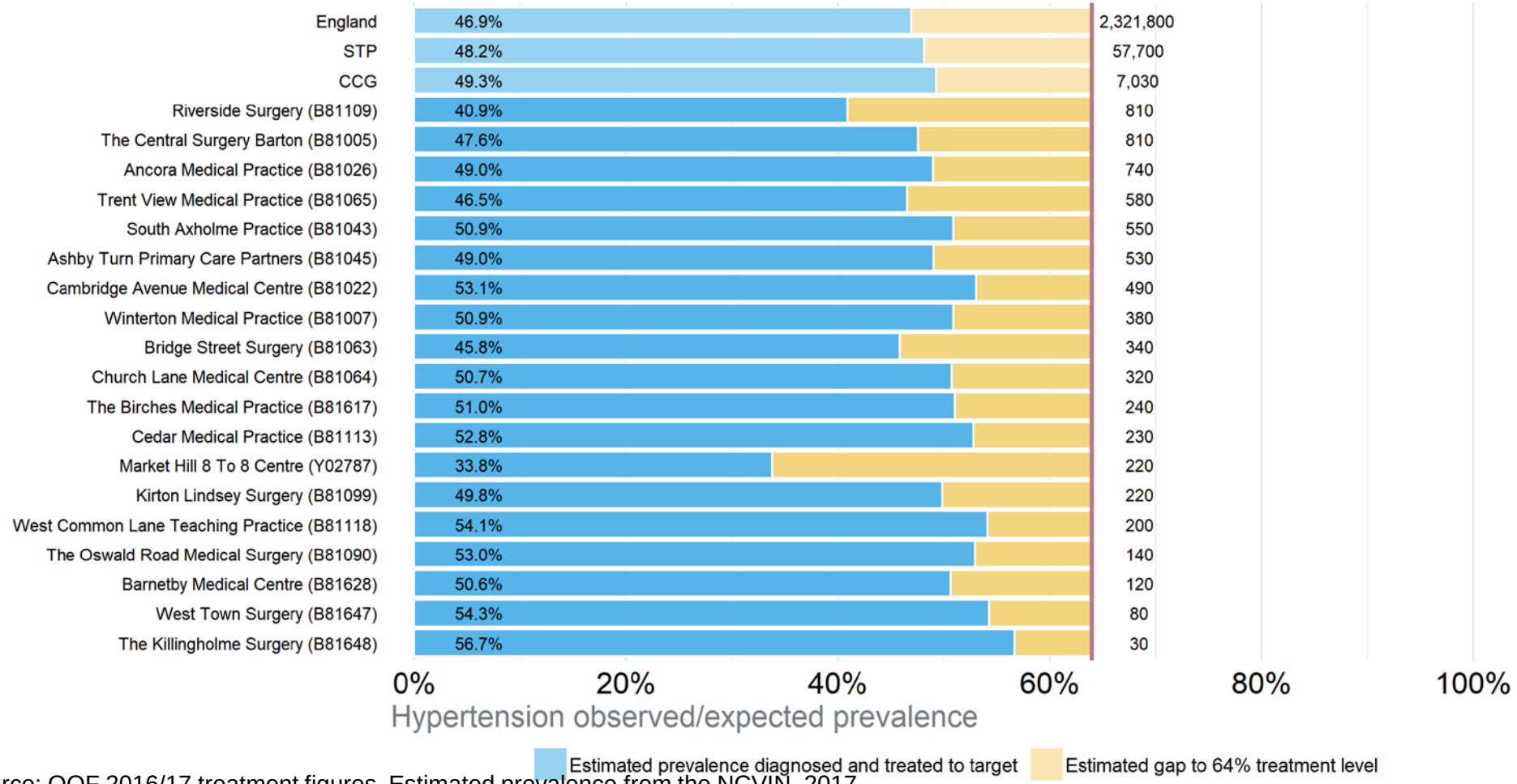


Source: QOF 2016/17 treatment figures. Estimated prevalence from the NCVIN, 2017

NB: The estimated numbers to meet the 64% treatment level may require identifying people not currently diagnosed with hypertension as well as improving the management of those people already diagnosed. The PHE hypertension ambition relates to achieving a blood pressure of 140/90, these numbers relate to a 150/90 threshold and are likely to represent an underestimate.

Hypertension treatment by GP:

Hypertension treatment: Estimated number of people with hypertension who need to achieve a blood pressure of 150/90, to reach the 64% treatment level, North Lincolnshire CCG, 2016/17

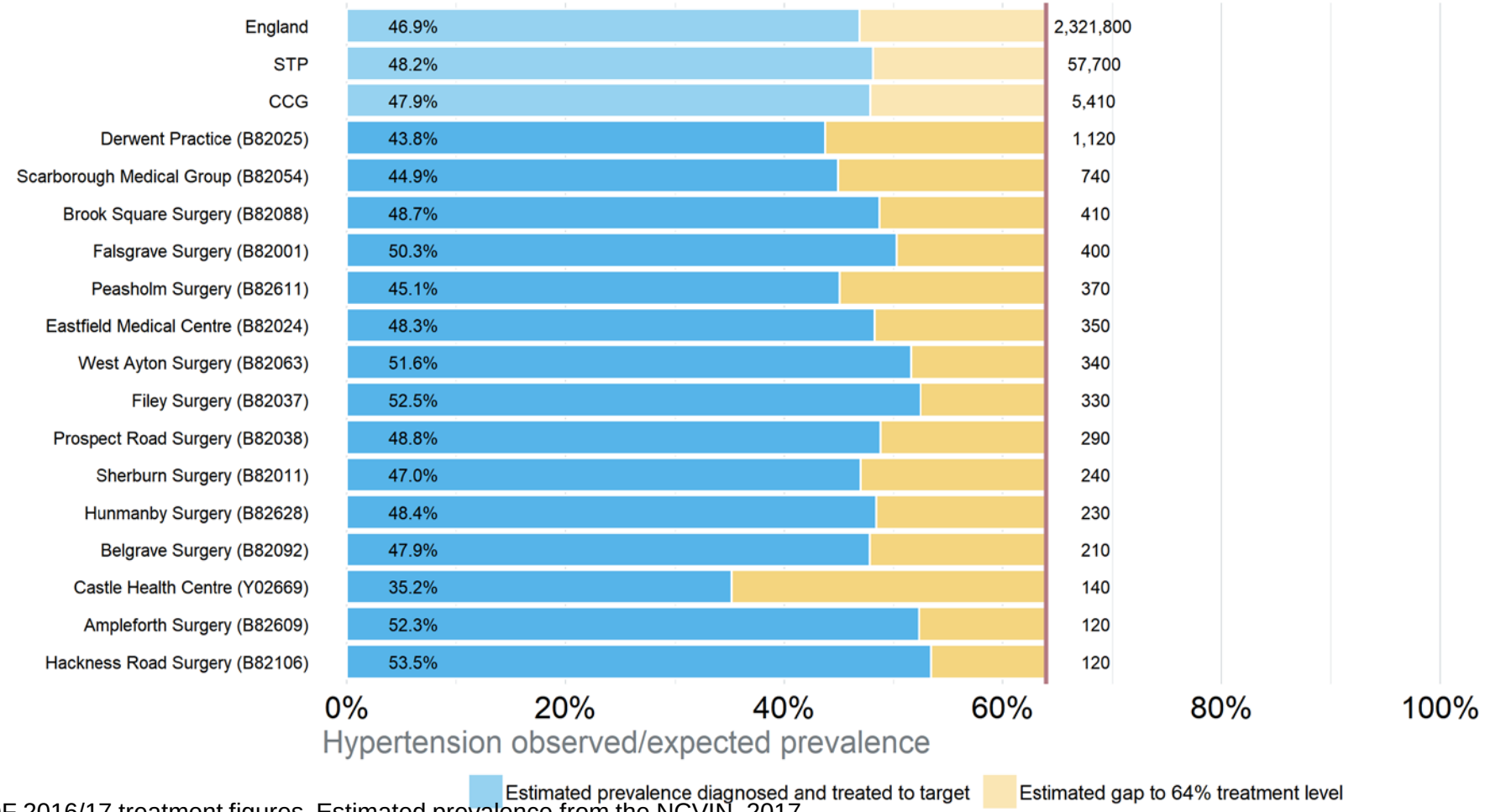


Source: QOF 2016/17 treatment figures. Estimated prevalence from the NCVIN, 2017

NB: The estimated numbers to meet the 64% treatment level may require identifying people not currently diagnosed with hypertension as well as improving the management of those people already diagnosed. The PHE hypertension ambition relates to achieving a blood pressure of 140/90, these numbers relate to a 150/90 threshold and are likely to represent an underestimate.

Hypertension treatment by GP:

Hypertension treatment: Estimated number of people with hypertension who need to achieve a blood pressure of 150/90, to reach the 64% treatment level, Scarborough and Ryedale CCG, 2016/17

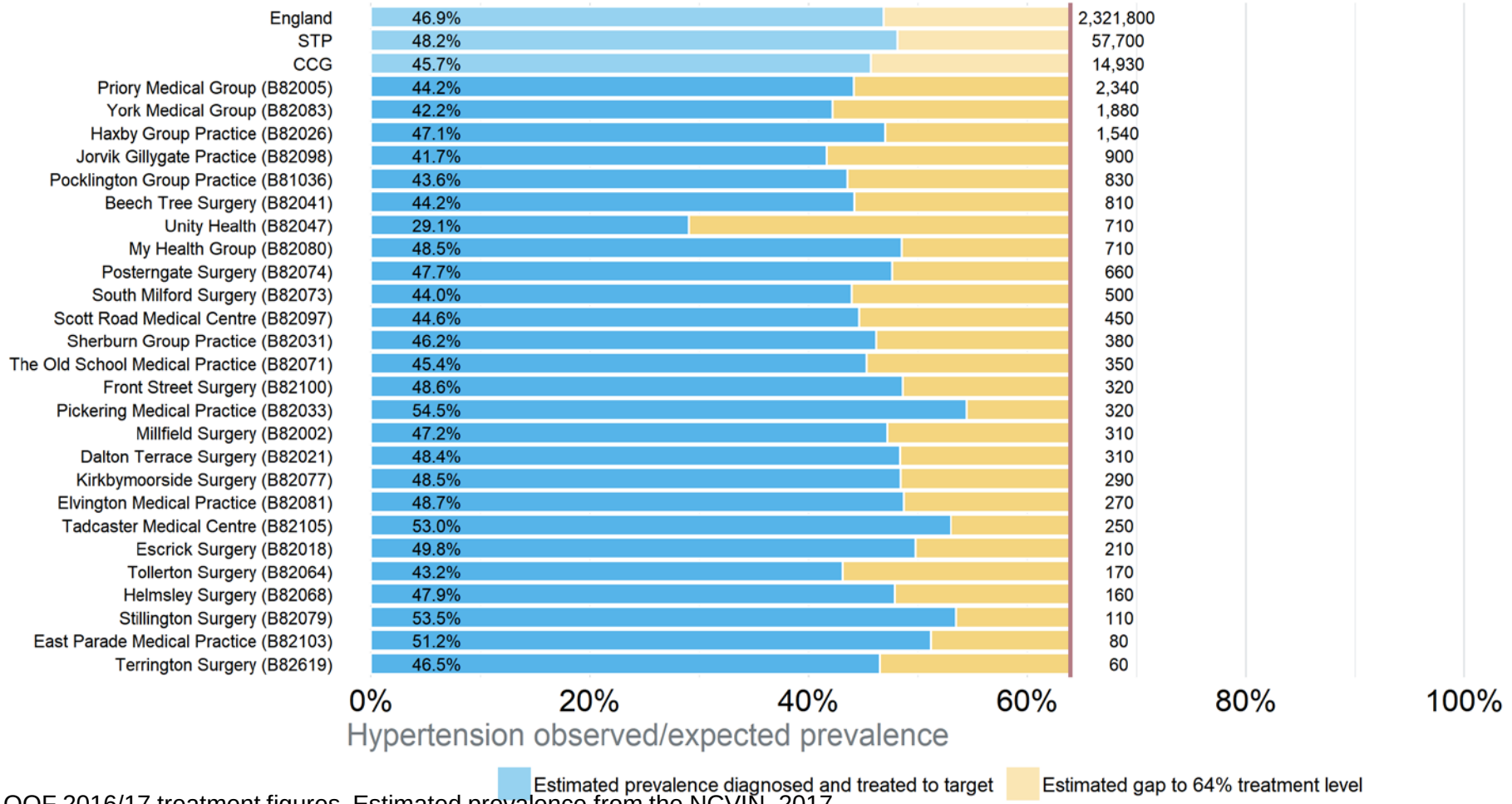


Source: QOF 2016/17 treatment figures. Estimated prevalence from the NCVIN, 2017

NB: The estimated numbers to meet the 64% treatment level may require identifying people not currently diagnosed with hypertension as well as improving the management of those people already diagnosed. The PHE hypertension ambition relates to achieving a blood pressure of 140/90, these numbers relate to a 150/90 threshold and are likely to represent an underestimate.

Hypertension treatment by GP:

Hypertension treatment: Estimated number of people with hypertension who need to achieve a blood pressure of 150/90, to reach the 64% treatment level, Vale Of York CCG, 2016/17



Source: QOF 2016/17 treatment figures. Estimated prevalence from the NCVIN, 2017

NB: The estimated numbers to meet the 64% treatment level may require identifying people not currently diagnosed with hypertension as well as improving the management of those people already diagnosed. The PHE hypertension ambition relates to achieving a blood pressure of 140/90, these numbers relate to a 150/90 threshold and are likely to represent an underestimate.