# **Levelling up dementia diagnosis:** Exploring the impact of population health factors on dementia diagnosis rates in England





#### January 2023

This research pamphlet from Future Health has been commissioned and funded by Roche Products Ltd to further the understanding of care for people with Alzheimer's disease and other forms of dementia. In developing the pamphlet Roche has shared its population health dementia diagnosis modelling with Future Health. The pamphlet was authored by Future Health and the final content is editorially independent. Roche has reviewed the content to ensure compliance with the ABPI Code of Practice.

Roche Material Number: M-GB-00009852 Date of preparation: December 2022



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## **INTRODUCTION**

#### **About Future Health**

Founded by former UK Government Special Adviser, Richard Sloggett, Future Health is a policy research centre with a mission to advance public policy thinking that improves the health and wealth of people, communities and nations.

Healthcare systems around the world are facing significant challenges of demographic, societal and technological change. The importance of prevention and the development of new technologies have long been seen as ways to transform health systems to improve patient outcomes and performance, but progress has often been slow. COVID-19 is an inflection point, demonstrating the need and opportunity of investing in and delivering more effective and efficient healthcare services in the future. In undertaking cutting edge public policy research across key areas such as prevention, technology and links between healthcare and the wider economy, Future Health is working to support such positive changes and deliver policy that improves health outcomes and tackles health inequalities.

This work, funded by Roche on dementia diagnosis forms part of Future Health's work in prevention.

#### About the Author

Richard Sloggett is the Founder and Programme Director of Future Health. He was previously a Senior Fellow at Westminster's leading think tank Policy Exchange and from 2018-19 was Special Advisor to the Secretary of State for Health and Social Care. Richard is a regular commentator in the national media on health and social care including in The Times, Telegraph, Financial Times, Economist and on Times Radio and LBC. He has been named as one of the top 100 people in UK healthcare policy by the Health Service Journal.

During his time with the Secretary of State, Richard worked across Whitehall, the NHS and local government on major policy decisions including the NHS Long Term Plan and the Prevention Green Paper. He has fifteen years' experience in public policy and healthcare, starting his career in Parliament before a successful career in public affairs where he led a team of 20 to the prestigious Communique Public Affairs Team of the Year Award.

Richard is undertaking his doctoral thesis in preventative healthcare systems at Liverpool University. He has a Masters Degree with Distinction from the University of Nottingham and a Bachelors Degree from the University of Durham.

#### About Roche, tide and Front of Mind

Roche is a pioneer in pharmaceuticals and diagnostics, focused on advancing science to improve people's lives. Roche is committed to rising to the global challenge of Alzheimer's disease through innovation and collaboration.

tide is a national involvement network for carers and former carers of people with dementia. tide believes that carers have the experience and knowledge to improve health and social care, research, and policy development throughout the UK.

Front of Mind is a joint campaign by Roche and tide (together in dementia everyday), calling for people with dementia and their carers to receive the recognition - and support - they deserve.



## **EXECUTIVE SUMMARY**

This short research pamphlet explores the impact of applying population health indicators to dementia diagnosis rates in England.

The Government has a national target of diagnosing two thirds of people with dementia in England. The current diagnosis rate is closer to 6 in 10 leaving many thousands of people with the condition without an accurate diagnosis<sup>1</sup>. A diagnosis opens up access to important support and care for patients.

Diagnosis rates are highly variable across the country<sup>2</sup>. Since July 2022 new regional Integrated Care Systems (ICSs) have become statutory organisations for planning services in their area. This research reveals a nearly 20% difference between the system with the highest diagnosis rate, South West London ICS and the lowest, Herefordshire and Worcestershire ICS. Three of the best performing ICSs are in London and five of the six ICSs with the lowest diagnosis rates are in the South West.

The dementia diagnosis rate is currently calculated by dividing the number of people diagnosed by baseline dementia prevalence. Baseline prevalence is calculated through age and sex profiling of a population, but does not take into account the wider health of the population. An updated study on dementia published in the Lancet in 2020 found that around 40% of dementia cases worldwide might be attributable to 12 potentially modifiable risk factors such as diabetes, obesity, smoking and blood pressure<sup>3</sup>. Applying these population health indicators to dementia diagnosis rates provides another mechanism to calculate the dementia diagnosis performance rate of a geography of system.

Under this model Lancashire and Cumbria ICS has the highest diagnosis performance rate (7.4%) meaning that the region is diagnosing 7.4% more people than expected when compared with the existing NHS data. By comparison North East London ICS has the lowest diagnosis performance rate, of -8.4%, meaning that the region is diagnosing 8.4% fewer people than expected on the existing NHS data. ICSs in the South West: Cornwall, Devon, Herefordshire and Worcestershire, Somerset, Dorset which were in the bottom six for recorded diagnosis all have negative diagnosis performance rates of -2.5%. At local authority level the new model provides a very different picture for a number of areas, with places such as Manchester, Kingston upon Hull and Southampton falling down the rankings, whilst others Ryedale, South Staffordshire and West Devon all increase their standing.

The model used has limitations which are set out in the paper. But with dementia prevalence increasing as a result of demographic trends, with new regional health systems coming on stream and a possible ten year dementia plan to be developed now is a good time for the Department of Health and Social Care, the NHS and

<sup>1</sup> Future Health Research, <u>Levelling up dementia diagnosis: Tackling variations in diagnosis rates in England</u>, May 2022 (Accessed November 2022)

<sup>2</sup> Future Health Research, <u>Levelling up dementia diagnosis: Tackling variations in diagnosis rates in England</u>, May 2022 (Accessed November 2022)

<sup>3</sup> The Lancet, <u>Dementia prevention, intervention, and care: 2020 report of the Lancet Commission</u>, August 2020 (Accessed November 2022)

the Office for Health Improvement and Disparities to explore ways to improve the calculation of dementia diagnosis rates using population health indicators. In doing so resources to improve dementia care can be deployed more effectively.

#### **DEMENTIA FACTS AND STATISTICS**

The Alzheimer's Society estimates that **1 in 14 people over the age** of **65** have dementia, and the condition affects **1 in 6 people over 80**<sup>4</sup>.

Projections show that **over one million people** will be living with dementia in the UK by 2025. This is estimated to rise to **almost 1.6million in 2040**<sup>5</sup>. There is also growing evidence that lifestyle choices (such as smoking and excess drinking) and pre-existing conditions such as high-blood pressure and diabetes increase the chance of an individual developing the condition<sup>6</sup>.

Within England, in 2020-2021 **430,000 people had a formal diagnosis of dementia**. However, analysis by the York Health Economics Consortium (YHEC) estimates that **750,000 people were living with the condition** in this same period – meaning **over 4 in 10 people** living with dementia did not have a diagnosis<sup>7</sup>.

The Alzheimer's Society estimates the total cost of care for people with dementia in the UK to be **around £34.7billion**<sup>8</sup>. These costs include healthcare, social care and unpaid care costs. Social care needs account for **45% of these costs (£15.7bn)**<sup>9</sup>.

With rising numbers of people living with dementia, the overall cost of care for dementia is set to rise sharply to **£94.1billion in 2040**, with social care spending in particular expected to triple to **£45.4billion by 2040**<sup>10</sup>. Of the current cost burden for social care, **60% of the cost** falls directly on families of those living with dementia **(£8.3billion per year)**, with unpaid carers (often family or friends) providing care to a value of **£13.9billion a year**<sup>11</sup>.

<sup>4</sup> Alzheimer's Society, <u>What is dementia? Symptoms, causes and treatments</u>, (Accessed November 2022)

<sup>5</sup> Alzheimer's Society, How many people have dementia in the UK?, (Accessed November 2022)

<sup>6</sup> Alzheimer's Society, What can increase a person's risk of Dementia?, (Accessed November 2022)

<sup>7</sup> York Health Economics Consortium, Roche data on file, M-GB-00006845

<sup>8</sup> Alzheimer's Society, What are the costs of dementia care in the UK?, November 2019 (Accessed November 2022)

<sup>9</sup> Alzheimer's Society, What are the costs of dementia care in the UK?, November 2019 (Accessed November 2022)

<sup>10</sup> Alzheimer's Society, What are the costs of dementia care in the UK?, November 2019 (Accessed November 2022)

<sup>11</sup> Alzheimer's Society, What are the costs of dementia care in the UK?, November 2019 (Accessed November 2022)

## CHAPTER 1: DIAGNOSING DEMENTIA

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Early identification of Alzheimer's disease – the most common form of dementia – is based on measuring relevant "biomarkers", a distinctive biological indicator that may indicate the presence of the disease.

These biomarkers can be detected using analysis of cerebrospinal fluid (CSF) and positron emission tomography (PET) imaging. The presence of biomarkers alone – which in the future may be found through a blood test – can only detect those potentially at risk of developing Alzheimer's disease, and cannot be used to diagnose the condition<sup>12</sup>.

A clinical diagnosis of Alzheimer's disease can only be made after cognitive symptoms have appeared<sup>13</sup>. A timely diagnosis is important for patients and their loved ones to access the care and support they need.

Looking ahead, as new Disease Modifying Therapies (DMTs) might become available, an accurate diagnosis that includes the patient's underlying biology will be increasingly important, so patients get timely access to appropriate treatment and care.

#### Variations in dementia diagnosis rates across England

The Government has a dementia diagnosis target rate of two thirds across England<sup>14</sup>. *Levelling up dementia diagnosis* published in May 2022 found a range of diagnosis rates across Clinical Commissioning Groups (CCGs) in England of 36% between the best and worst performers. The CCG with the lowest recorded rate was 47%, with the highest recorded CCG rate, 83%<sup>15</sup>. The research highlighted variations both within and between regions.

The following sets out the latest diagnosis rates at ICS and local authority district level in England. As not everyone with dementia has a formal diagnosis, this diagnosis rate statistic compares the number of people estimated to have dementia in a given population with the number of people actually diagnosed<sup>16</sup>.

#### ICS

- The ICS with the highest diagnosis rate is South West London ICS (70.5%). Herefordshire and Worcestershire ICS has the lowest rate (51.9%)
- The average diagnosis rate is 61.6%, and there is a 18.6% difference between the system with the highest diagnosis rate (South West London ICS) and the lowest (Herefordshire and Worcestershire ICS)
- Of the six areas with the highest diagnosis rate, three are in London (South West London, 70.5%; South East London, 69%; North Central London, 68.8%)

<sup>12</sup> The Lancet, <u>Clinical diagnosis of Alzheimer's disease: recommendations of the International Working Group</u>, June 2021 (Accessed November 2022)

<sup>13</sup> BMC, <u>The Edinburgh Consensus: preparing for the advent of disease-modifying therapies for Alzheimer's disease</u>, October 2017 (Accessed November 2022)

<sup>14</sup> NHS England, New plans to improve dementia diagnosis rates, May 2013 (Accessed November 2022)

<sup>15</sup> Future Health Research <u>Levelling up dementia diagnosis: Tackling variations in diagnosis rates in England</u>, May 2022 (Accessed November 2022)

<sup>16</sup> NHS Digital, <u>Recorded Dementia Diagnoses</u>, July 2002 (Accessed November 2022)

 Of the six areas with the lowest diagnosis rates, five are in the West or South West of England (Herefordshire and Worcestershire, 51.9%; Somerset, 52.7%; Cornwall, 54.6%; Devon, 55.4%; Dorset, 55.8%)<sup>17</sup>

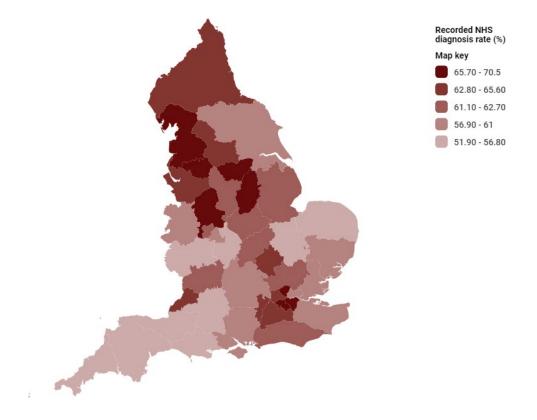


Figure 1: Map of dementia diagnosis rates by ICS

Table 1: ICSs with highest dementia diagnosis rates

ICS	Dementia diagnosis rate (%)
South West London	70.5
South Yorkshire	69.2
South East London	69
Greater Manchester	69
North Central London	68.8
Nottingham and Nottinghamshire	68.8
Lancashire and South Cumbria	68.4
Staffordshire and Stoke-on-Trent	67.3
North West London	65.6
Bristol, North Somerset and South Gloucestershire	65.6

<sup>17</sup> NHS Digital, Recorded Dementia Diagnoses, July 2002 (Accessed November 2022)

#### Table 2: ICSs with lowest dementia diagnosis rates

ICS	Dementia diagnosis rate (%)
Humber and North Yorkshire	57.6
Bath and North East Somerset, Swindon and Wiltshire	56.8
Coventry and Warwickshire	56.6
Norfolk and Waveney	56.1
Dorset	55.8
Devon	55.4
Cornwall and the Isles of Scilly	54.6
Cambridgeshire and Peterborough	54.1
Somerset	52.7
Herefordshire and Worcestershire	51.9

#### Local authority districts

- Preston has the highest dementia diagnosis rate of all local authority districts (83.3%). Islington, Lincoln, Ashfield and Camden all have diagnosis rates of above 80%. The average diagnosis rate by local authority district is 61.6%
- The seven areas with the highest diagnosis rates are all classified as 'urban'<sup>18</sup>. The top rural performing district is East Hampshire (79%). There are only two other areas, Lancaster and Epping Forest, with noted rurality in the top 30
- South Hams has the lowest diagnosis rate of any local authority district with an over 65 population of over 2000 (41.4%)<sup>19</sup>
- 14 local authority districts have diagnosis rates of below 50%. Only four of these are classified as non-rural<sup>20</sup>

<sup>18</sup> UK Government, Rural Urban Classification, August 2021 (Accessed November 2022)

<sup>19</sup> NHS Digital, <u>Recorded Dementia Diagnoses</u>, July 2022 (Accessed November 2022) The City of London has the lowest diagnosis rate of 27.8%, but an over 65 population of only 1731

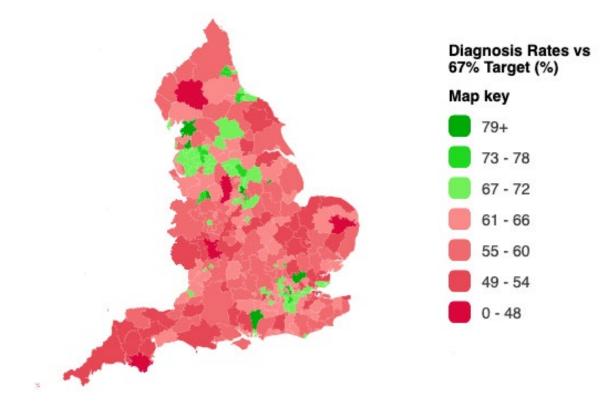
<sup>20</sup> UK Government, Rural Urban Classification, August 2021 (Accessed November 2022)

#### Table 3: Local authority districts with highest dementia diagnosis rates

Table 4: Local authority districts with lowest dementia diagnosis rates<sup>21</sup>

Local authority district	Diagnosis rate
South Hams	41.1
Eden	44.5
Derbyshire Dales	46
Wychavon	46.4
South Norfolk	47.2
Redditch	47.7
Fenland	48.5
South Cambridgeshire	48.8
Tonbridge and Malling	48.8
Worcester	48.9

21 Excludes City of London



*Figure 2: Map of dementia diagnosis rates by Local Authority District compared with national Government target of 67%*<sup>22</sup>

The prominence of red in the above map highlights the small number of areas (83) meeting the current diagnosis target of two thirds. By contrast 225 are not meeting the target<sup>23</sup>. The majority of local authorities meeting the target are in London and the North West. There are only a small number of areas across the North East, East of England, Midlands and South West that are meeting the target.

<sup>22</sup> Target is two thirds so rounded to 67%. All local authority district rates rounded to nearest percentage.23 Excludes City of London

CHAPTER 2: THE IMPACT OF POPULATION HEALTH ON DEMENTIA DIAGNOSIS RATES The current approach to calculating the dementia diagnosis rate is the number of people diagnosed divided by baseline dementia prevalence. This baseline prevalence is calculated through age and sex profiling of a population, drawn from the Cognitive Function and Ageing Studies<sup>24</sup>.

However, this approach does not take into account wider population health circumstances. An updated study on dementia published in the Lancet in 2020 found that around 40% of dementia cases worldwide might be attributable to 12 potentially modifiable risk factors<sup>25</sup>.

The study found that there was evidence for three new risk factors for dementia – excessive alcohol consumption, head injury and air pollution – to be added to the nine risk factors which were highlighted in the 2017 Lancet Commission on dementia prevention, intervention, and care, which are:

- Less education
- Hypertension
- Hearing impairment
- Smoking
- Obesity
- Depression
- Physical inactivity
- Diabetes
- Infrequent social contact<sup>26</sup>

In 2021 Public Health England published guidance for health professionals and local authorities on reducing the prevalence of dementia<sup>27</sup>. As part of this document it noted the following conditions as high-risk pre-conditions for dementia:

- Parkinson's disease
- Stroke
- Type 2 diabetes
- High blood pressure

The guidance also notes that there is greater prevalence of dementia among black and South Asian ethnic groups.

The NICE Quality Standard on dementia includes a Quality Statement on 'Raising awareness – health promotion interventions'. This is focused on advising healthy life choices such as exercise, diet, stopping smoking and reducing alcohol consumption. It does however reference obesity, overweight and loneliness as risk factors for dementia<sup>28</sup>.

<sup>24</sup> CAFS, <u>Cognitive Function and Aging Study II</u> (Accessed November 2022)

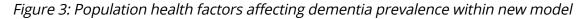
<sup>25</sup> The Lancet, <u>Dementia prevention, intervention, and care: 2020 report of the Lancet Commission</u>, August 2020 (Accessed November 2022)

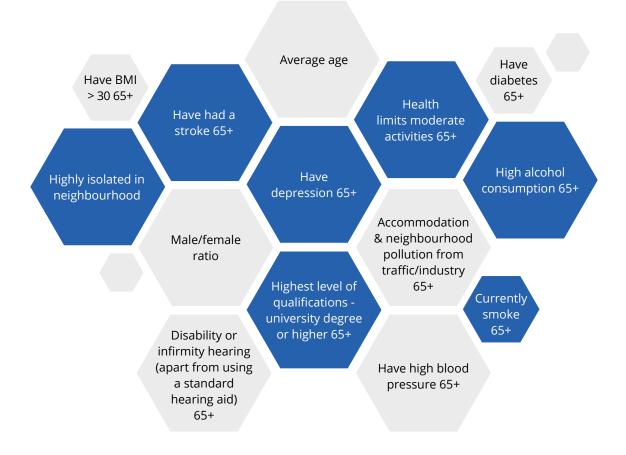
<sup>26</sup> The Lancet, <u>Dementia prevention, intervention, and care: 2020 report of the Lancet Commission</u>, August 2020 (Accessed November 2022)

<sup>27</sup> Public Health England, <u>Health matters: midlife approaches to reduce dementia risk</u>, June 2021 (Accessed November 2022)

<sup>28</sup> NICE, Dementia Quality Standard, June 2019 (Accessed November 2022)

Roche has built a model that incorporates other health indicators (based on the Lancet modifiable disease paper) to estimate dementia prevalence and diagnosis rates. The model includes taking account of a number of population health factors, summarised in the graphic below.





The model measures the impact of these population health factors on the dementia diagnosis rate at local authority level.

Once the impact is estimated, it is possible to calculate a reference diagnosis rate for a given population.

The current recorded diagnosis rate is then compared with this reference diagnosis rate. The difference – referred to as the 'diagnosis performance rate' – after rate indicates how a region is performing compared to regions with similar population characteristics. A higher performance score suggests a better dementia detection rate by the healthcare system.

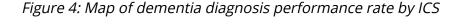
For the purposes of this research Roche shared their model with Future Health. Our analysis from the model reveals the following findings at both ICS and local authority district level.

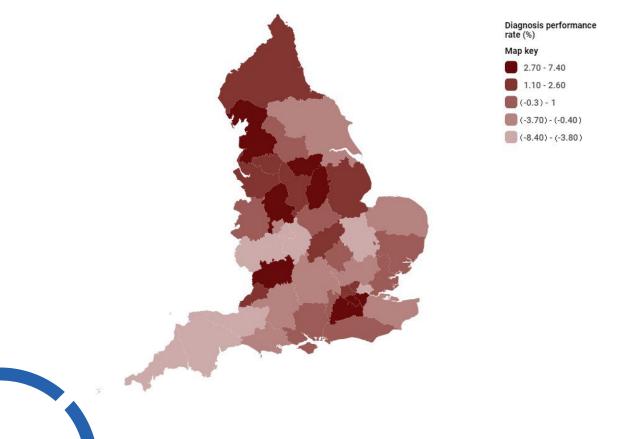
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#### ICS

- Lancashire and Cumbria ICS has the highest diagnosis performance rate (7.4%) meaning that the region is diagnosing 7.4% more people than expected on the existing NHS data. The only other ICS above 6% is Staffordshire and Stoke on Trent
- North East London ICS has the lowest diagnosis performance rate (-8.4%) meaning that the region is diagnosing 8.4% fewer people than expected on the existing NHS data. Cambridgeshire and Peterborough ICS (-7.0%) and Birmingham and Solihull ICS (-6.3%) both have diagnosis performance rates of below -6%
- Cornwall, Devon, Herefordshire and Worcestershire, Somerset, Dorset which were in the bottom six for recorded diagnosis all have negative diagnosis performance rates of -2.5%
- The application of the model leads to changes in how areas perform. North East London ICS drops 14 places (out of 42) and West Yorkshire ICS falls 13 from their position in the recorded diagnosis rate rankings. By comparison Gloucestershire ICS and Shropshire ICS both move up 11 places.

As set out in Figure 4 below the North West and London have a number of ICSs with high diagnosis performance rates. Parts of the West Midlands, East of England and South West have a number of ICSs with lower diagnosis performance rates.





#### Table 5: ICSs with highest diagnosis performance rates

ICS	Dementia diagnosis performance rate (%)
Lancashire and South Cumbria	7.4
Staffordshire and Stoke-on-Trent	6.5
South West London	5.8
Nottingham and Nottinghamshire	5.2
Surrey Heartlands	3.4
Gloucestershire	3.2
South Yorkshire	2.8
South East London	2.7
North Central London	2.6
Greater Manchester	2.5

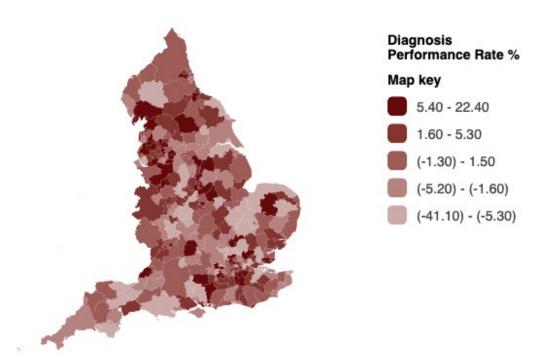
### Table 6: ICSs with lowest diagnosis performance rates

ICS	Dementia diagnosis performance rate
North East London	-8.4
Cambridgeshire and Peterborough	-7.0
Birmingham and Solihull	-6.3
Coventry and Warwickshire	-5.5
Somerset	-4.4
Herefordshire and Worcestershire	-3.9
Devon	-3.8
Cornwall and the Isles of Scilly	-3.8
Bath and North East Somerset, Swindon and Wiltshire	-3.2
Kent and Medway integrated care board	-3.1

#### Local authority districts

- East Hampshire has the highest diagnosis performance rate (22.4%) of any local authority district. Epping Forest is the only other area with a rate of over 20%
- City of London has the lowest diagnosis performance rate (-41.1%). The top four areas with the lowest diagnosis performance rate are in London (Harlow, Newham, Barking and Dagenham)
- The application of the model leads to some significant changes in perceived performance. For example Manchester is ranked 30th for its recorded dementia diagnosis rate (71.7%), but falls 204 places when compared against an expected dementia diagnosis rate of 76% (dementia diagnosis performance rate -4.3%)
- 18 areas experience a drop in ranking of over 100 places from their diagnosis rate to diagnosis performance rate. All of these areas are classified as urban and seven are in London. Of these Barking and Dagenham has the lowest diagnosis performance score of -17.7% (diagnosis rate 58.2% vs diagnosis performance rate 75.9%)

Figure 5: Map of dementia diagnosis performance rate by Local Authority District



London, the South East and North West have a number of local authorities with higher diagnosis performance rates. By contrast the South West and East of England include a number of local authorities with lower diagnosis performance rates.

#### **Model limitations**

**1) Impact of the model on prevalence and diagnosis rate** – The NHS dementia diagnosis rate is influenced by actual prevalence and the detection rate by the healthcare system. The model developed by Roche uses dementia risk factors identified by the Lancet paper to explain the variation among regions due to prevalence differences. The unexplained variation is then attributed to the detection rate of the healthcare system. Therefore the main assumption of the model is that the risk factors impact mainly the prevalence and not the detection of dementia.

However, in reality some factors may impact both prevalence and detection rates. For example, a higher education level might reduce the dementia risk but also increase the detection rate due to better socio-economic status and access to healthcare.

**2)** Results of the model are dependent on the selection of risk factors – The selection is based on the risk factors in the Lancet paper and the availability of those as identifiable metrics. Using a different selection of risk factors in the model would likely change the model result and the calculated percentages. To address this, further iterations of the model could include a sensitivity analysis to show how model choice would impact the model result<sup>29</sup>.

**3)** At a population level, most of the risk factors are highly correlated – It is therefore difficult to estimate the impact of an individual risk factor on the diagnosis rate. The model does not accurately answer how much a single risk factor impacts the prevalence of dementia. However this limitation does not impact this model's use case as the model looks at the impact of risk factors combined (to deliver an estimated diagnosis rate for each geographic area) not risk factors individually.

29 For example how the scores would change if the education level was not included in the model

CHAPTER 3: ASSESSING THE IMPACT OF THE NEW MODEL ON DEMENTIA DIAGNOSIS RATES The new model leads to some significant changes in how different geographic areas are viewed with regards to their dementia diagnosis performance. The following are the local authority districts that see the biggest falls in ranking when their current dementia diagnosis rate ranking is compared with their diagnosis performance rate ranking.

Table 7: Largest negative change in local authority ranking from dementia
diagnosis rate to predicted diagnosis rate

Local authority district	Change in local authority ranking from dementia diagnosis rate to diagnosis performance rate (/309)
Manchester	-204
Greenwich	-162
Kingston upon Hull, City of	-145
Exeter	-137
Tower Hamlets	-135
Oxford	-133
Bristol, City of	-131
Liverpool	-127
Waltham Forest	-123
Southampton	-119

Analysing these local authorities reveals some important insights into how the model may affect dementia diagnosis rates. For example:

- Manchester is in the top five local authorities for rates of diabetes, stroke, blood pressure and for health limiting people in undertaking moderate activities.<sup>30</sup> Once these factors are combined through the model, its predicted diagnosis rate is 76%, 4.3% higher than the 71.7% currently recorded by the NHS
- Kingston Upon Hull has high rates of alcohol consumption, obesity and blood pressure against the national average. Once these factors are combined through the model, its predicted diagnosis rate is 70.2%, 5.7% higher than the 64.5% currently recorded by the NHS
- Southampton has higher than average rates of disability and infirmity, alcohol consumption and depression. Once these factors are combined through the model its predicted diagnosis rate is 68.6%, 5% higher than the 63.6% currently recorded by the NHS

<sup>30</sup> UK Government, <u>UK Chief Medical Officers' Physical Activity Guidelines</u>, September 2019 (Accessed November 2022)

By comparison the following highlights areas of greatest ranking improvement when comparing current diagnosis rates with diagnosis performance rates calculated through the model.

Table 8: Largest positive change in local authority ranking from dementia diagnosis rate to predicted diagnosis rate

Local authority district	Change in local authority ranking from dementia diagnosis rate to diagnosis performance rate (/309)
Ryedale	140
Babergh	127
Melton	124
South Staffordshire	122
Torridge	117
Herefordshire, County of	116
West Devon	112
New Forest	102
Richmondshire	102
Maldon	101

Ryedale in North Yorkshire records the highest positive change in ranking between its NHS diagnosis rate (53.9%) and the model rate, 52.2% a 1.7% positive difference. Ryedale has lower than average rates across a series of indicators including alcohol consumption, obesity, smoking, pollution, rates of diabetes and stroke.

South Staffordshire records below average rates across most of the population health indicators in the model except high blood pressure and its male/female ratio. It records a 5% positive difference between its current diagnosis rate and the predicted model rate.

West Devon records one of the lowest local authority levels of health limiting the uptake of moderate activities and below average levels on most other indicators, except for a slightly above average level of isolation for its population. West Devon records a 0.5% positive difference between its current diagnosis rate and the predicted model rate.

### **Conclusion and recommendations**

Dementia prevalence is not equally distributed across the country and there is a wide variation in the levels of diagnosis between different geographic areas.

The application of population health indicators through the model in this paper reveals new data to assess how areas might be performing.

Areas that may appear to be performing well – when compared against the Government national target of two thirds – may have further room for improvement when these population health indicators are applied locally. This is particularly the case where there are notable population health inequalities and where health outcomes are below the national average.

Likewise, there may be areas performing below the Government target who once this model is applied are in fact diagnosing a higher proportion of their local population than would be expected.

The development of more accurate assessments of dementia diagnosis rates, along these lines, will enable scarce resources to be deployed in a more targeted and effective way. This will both enhance accountability for performance and improve care for patients.

In setting new national targets on dementia diagnosis rates as part of a new tenyear dementia plan, the Department of Health and Social Care, the NHS, and the Office for Health Improvement and Disparities, should explore methods for improving the calculation of dementia diagnosis rates using population health indicators. The model used here is designed to aid discussions on this rather than being seen as a definitive approach for adoption.

Future Health's previous report *Levelling up dementia diagnosis* set out a series of other recommendations for Government, the NHS and local authorities to improve dementia services and care<sup>31</sup>.

These included introducing incentives for diagnosis improvements in primary care, launching new public health campaigns, better medical education and training and unlocking the power of dementia data to improve services.

The recommendations are summarised in the graphic below.

Dementia is one of the public's top healthcare priorities and with demographic change and rates rising now is a good time to set out a new path for service transformation and improvement that can get more patients the care and support they need<sup>32</sup>.

<sup>31</sup> Future Health Research <u>Levelling up dementia diagnosis: Tackling variations in diagnosis rates in England</u>, May 2022 (Accessed November 2022)

<sup>32</sup> Alzheimer's Research UK, <u>UK adults differ from NHS England boss on health priorities</u>, July 2018 (Accessed on November 2022)

#### Figure 6: Policy recommendations for a new dementia strateg

