

Mental Health Workforce in England: Regional Trends and Disparities - 2009-2023

Introduction

The ability of a health service to meet demand depends on the nature and availability of its existing workforce. Over recent years, significant attention has been paid to the development of the Mental Health Workforce in England (MHWE). Moreover, the recent Long Term Workforce Plan (NHS, 2023) and the earlier Psychological Professions Workforce Plan (NHS, 2021) build a series of ambitious goals for the development of the MHWE to 2031 and beyond.

Current workforce development plans rely significantly on the current and projected population health needs. Funding from NHSE to Integrated Care Boards (ICBs) follows a 'weighted capitation formula' (NHS England, 2021) which is based on the estimated need in a given region. Much of this spend is on staffing. However, in reality, the health workforce in a particular area is a fairly static factor and a commissioning board can only spend money on a workforce that actually exists. Understanding that reality of the available workforce is therefore important.

The period since 2009 has been characterised by a number of large-scale events which have had significant impacts on taxation and health spending; austerity, Brexit and COVID arguably most prominently. It has also been characterised by significant population growth (a 6.5% rise in population from 2011 to 2021), a fact that likely has implications both for healthcare demand and workforce supply. This growth has not been distributed uniformly over the nation (the fastest growing area, the East of England, grew 8.3% between the 2021 and 2011 census years, and the North East, the slowest growing, only grew 1.9%). It is thus important to review trends in the established MHWE and to establish whether regional variations exist in the availability of the MHWE between regions. Whilst NHSE routinely publish data on the numbers of FTE (Full Time

Equivalent) staff in the Mental Health Workforce by region, no public dataset exists which breaks these figures on a population 'per capita' basis.

We therefore present a simple and condensed breakdown of the MHWE per 100,000 people broken down by regional area. This analysis has been reached following a simple methodology using publicly available data combining data from the 2011 and 2021 censuses with data drawn from the publicly available workforce 'dashboards' published by the NHS (see Method Statement for further information).

The aim of the analysis was to:

1. Understand trends in the MHWE over the period 2009-2023 (a period for which NHS workforce data is most readily available), considering differences between regions and adjusted for population.
2. Compare the trends and availability in the MHWE with an element of the overall NHS workforce.

Method

Population Data

Estimated population rates per NHS region for each year were calculated between 2009-2023.

This was achieved by noting the Census Data from 2011 and 2021 from the ONS (2011:

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/2011censuskeystatisticsforlocalauthoritiesinenglandandwales>. Table

KS101 was used; 2021:

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationandhouseholdestimatesenglandandwalescensus2021>. Table P01

was used from this spreadsheet). 2009, 2010, the intermediate years from 2012-2020, and

2022, 2023 were calculated based on the assumption of linear population growth between 2011 and 2021.

For the purposes of comparison with the relevant NHS regions, the Census regions for East and West midlands were combined into a single 'Midlands' area. Similarly, the 'Yorkshire and the Humber' and 'North East' census areas were combined to form a 'North East and Yorkshire' area.

NHS Workforce Statistics:

NHS workforce statistics were obtained from the interactive dashboards published by NHS Digital (MHLID:

<https://app.powerbi.com/view?r=eyJrljoiZWQ4YzYzM3M2QtZmYxYS00MGJhLWFKNWMTMWFmMGVlNmZmNDBiliwidCI6IjUwZjYwNzFmLWJiZmUtNDAxYS04ODAzLTY3Mzc0OGU2MjllMiIsImMiOjE9> ; PQCS:

<https://app.powerbi.com/view?r=eyJrljoiMDU0ODdlZWMTYWE3My00NDMwLTk5ODktZTM3N2VjZDQ0NjViliwidCI6IjM3YzYzM1NGlyLTg1YjAtNDdmNS1iMjlyLTA3YjQ4ZDc3NGVlMyJ9>). Tabular data for each region was extracted using Screen Scraper software).

Analysis

No formal analysis was conducted beyond a spreadsheet utilised to combine population rates and workforce statistics to present workforce per capita data.

Results

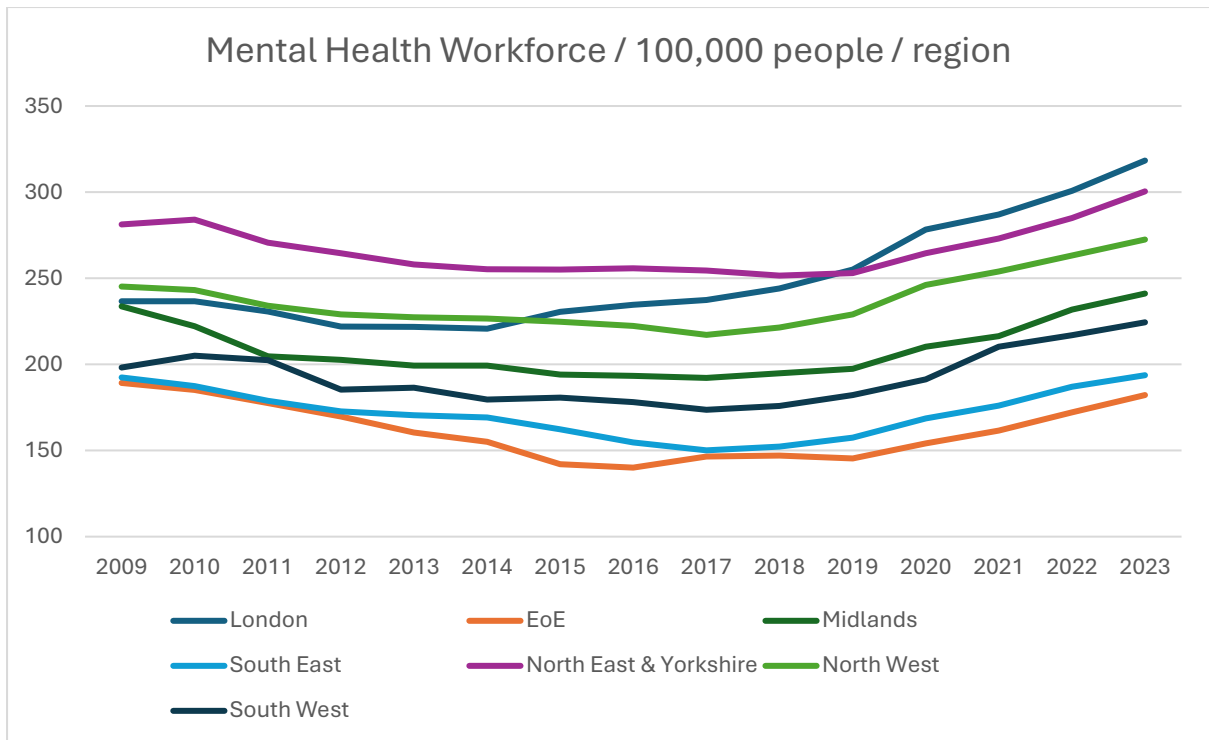
Trends and Regional Variations in the Mental Health Workforce

Table 1 and Figure 1 outline the size of the MHWE per 100,000 of population. Overall, these figures appear to reflect a decline in the MHWE during the periods of austerity (2010-2013), followed by a broad stabilisation in most regions, and then a notable increase in the overall size of the MHWE since around 2018.

Table 1: MH Workforce per 100,000 per region

	London	East of England	Midlands	South East	North East & Yorkshire	North West	South West
2009	237	189	234	192	281	245	198
2010	237	185	222	187	284	243	205
2011	231	177	205	179	271	234	202
2012	222	170	203	173	265	229	185
2013	222	160	199	171	258	227	186
2014	221	155	199	169	255	227	180
2015	230	142	194	162	255	225	181
2016	235	140	193	155	256	222	178
2017	237	146	192	150	254	217	174
2018	244	147	195	152	252	221	176
2019	255	145	197	157	253	229	182
2020	278	154	210	169	264	246	191
2021	287	161	216	176	273	254	210
2022	301	172	232	187	285	263	217
2023	318	182	241	194	300	272	224
% Change 2009-2023	35	-4	3	1	7	11	13

Figure 1: MH Workforce per 100,000 per region



Growth in the MHWE (2023 compared to 2009) appears to have occurred unevenly between regions, with London showing by far the largest growth since 2009. All other regions did show growth since 2009, but in the Midlands and South East in particular this has been marginal (i.e. only just keeping up with population growth), whereas in the East of England, the 2023 workforce is actually 4% smaller than the 2009 workforce when adjusted for population. This may be related to the fact that the East of England MHWE experienced a 26% decrease between 2009 and 2016, larger than any other region.

The uneven growth in the workforce over more recent years is also illustrated in the difference between the best and least served regions. In 2009, there was a 39% difference between the best served (North East & Yorkshire) and least well served (East of England) regions. In 2023,

there is now a 54% difference between the best served (London) and least well served (East of England) regions.

Comparison with the overall NHS clinical workforce

In order to consider whether such changes are specific to the MHWE or reflect wider changes in the NHS workforce, an identical analysis was conducted on the NHS ‘PQCS’ (Professionally Qualified Clinical Staffing) workforce, i.e. the clinical healthcare workforce across the whole NHS. This data includes “all HCCHS doctors, qualified nurses and health visitors, midwives, qualified scientific, therapeutic and technical staff and qualified ambulance staff” (NHS Digital, 2023). Thus, these figures will not include Primary Care staff (i.e. those working in GP surgeries), nor will they include locum or agency staff, or those working for independent providers contracted to provide NHS services. The figures do include the relevant elements of the MHWE.

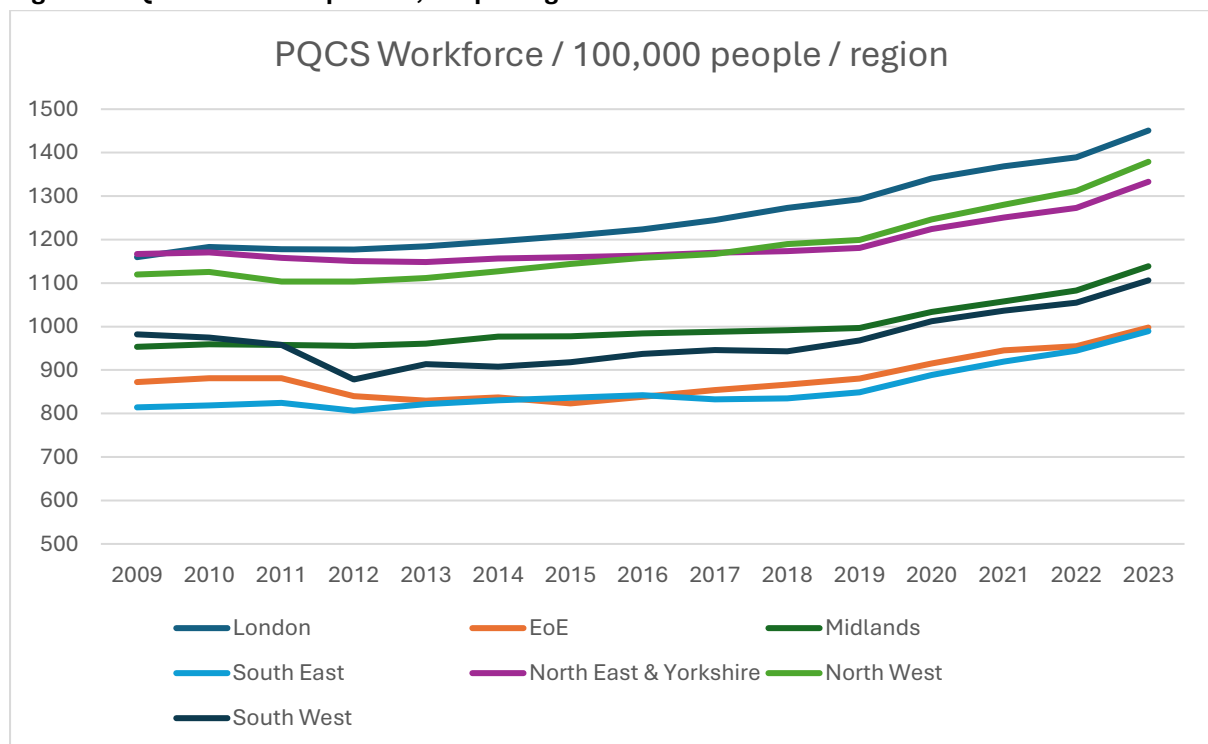
Table 2 and Figure 2 illustrate the figures for the changes in the PQCS workforce. These graphs appear to illustrate that whilst there was some decline in the 2009 PQCS workforce during the period of austerity (except for London), this was most notable in the South West (an 11% decrease between 2009 and 2012) and the East of England (a 6% decrease from 2009 to 2015). However, overall, all areas have demonstrated growth, and the smaller range of growth in the PQCS workforce overall (13% in the South West, 25% in London) does suggest that the regional differences observed are smaller than those observed in the MHWE.

Table 2: PQCS Workforce per 100,000 per region

	London	EoE	Midlands	South East	North East & Yorkshire	North West	South West
2009	1160	872	953	814	1167	1120	982

2010	1183	881	959	818	1171	1125	975
2011	1178	881	958	824	1158	1104	958
2012	1177	840	955	807	1151	1104	878
2013	1185	830	961	822	1148	1112	913
2014	1196	837	977	830	1156	1127	907
2015	1209	823	978	836	1160	1144	918
2016	1224	838	984	842	1163	1158	937
2017	1245	854	988	832	1170	1167	946
2018	1273	867	992	835	1173	1190	943
2019	1292	881	996	849	1181	1200	968
2020	1341	915	1034	889	1224	1247	1012
2021	1368	945	1058	919	1251	1280	1036
2022	1389	955	1083	944	1273	1312	1055
2023	1451	998	1139	989	1333	1379	1106
% Change 2009-2023	25	14	19	21	14	23	13

Figure 2: PQCS Workforce per 100,000 per region



Discussion and Conclusions

Whilst the Mental Health Workforce in England has grown substantially since 2009, there appear to be notable regional differences. Overall, the size of these differences appears to be quite substantial and appears to be getting larger. The East of England and the South East regions appear particularly relatively under-served in terms of the size of the Mental Health Workforce. This may at least partly be due to the workforce not keeping up with population growth. Overall, the mental health workforce appears to be approximately 20-25% of the size of the total PQCS workforce; both elements of the workforce appear to have become larger over recent years, and the rate of increase in both parts of the workforce is similar.

It is unclear to what extent these regional differences influence the quality of healthcare provision, but it is noted that regional variations in local authority spending have been associated with an increase in 'multimorbidity' (Stokes et al, 2022). Moreover, there is some evidence that some of the regions where the workforce availability was lower (e.g. the East of England) have also had substantially higher spends on locum or agency staffing (Grigoroglou et al, 2021), suggesting possibly that a smaller extant workforce may be associated with less efficient use of healthcare spend. Mental Health Workforce development plans thus need to account for existing baselines and far more fine-grained analysis of regional disparities in the workforce is warranted; the present analysis says nothing, for instance, about any differences in professional makeup or expertise within the workforce between regions.

It is recognised that this represents a relatively crude analysis, and there are a number of factors that are important to consider in terms of the interpretation (see Limitations). However, the size of the differences between regions, general trends over time, and broad differences between the MHWE and PQCS workforce appear to be important findings.

Limitations

The following limitations are acknowledged, and must be considered alongside any of the broad conclusions from these data:

- All staff are allocated a location based on the address of their employer. This means that where services are provided in one region by a provider based in another, the workforce may be calculated against the incorrect region.
- The analysis does not account for the fact that people living on the edges of particular geographic regions may receive NHS services from a bordering geographic region; a hospital in London could well be serving people in the South East, for example. This may particularly be the case for the outskirts of London and the outlying regions (and thus may be particularly relevant for the East of England and South East areas).
- It must also be recognised that some NHS services are highly specialist and therefore provided in a centralised location. Such services may be funded by other regions. This may particularly explain to some extent a need for additional provision within London.
- The analysis does not provide any adjustment for expected differences due to population need; i.e. the 'weighted capitation' approach described earlier would mean that some differences between regions would be expected. However, the capitation formula would typically allocate *less* resource to city areas, where the population is younger, and at least in the case of London the inverse pattern is observed.
- Finally, population growth has been assumed to have occurred at the same rate throughout the 2009-2023 period, which may have had a small bearing on the population rates for the years other than 2011 and 2021.

However, many of the above limitations would be expected to be more impactful for the interpretation of broad between-region comparisons and less impactful for interpretation of changes over time.

References

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