Article

Socio-demographic differences in use of Improving Access to Psychological Therapies services, England: April 2017 to March 2018

Characteristics of patients treated in the Improving Access to Psychological Therapies (IAPT) services and whether patients are representative of the population with a probable Common Mental Disorder (CMD) as defined by the UK Household Longitudinal Study (UKHLS) in England. This identifies groups with lower access to IAPT to help to improve the coverage of the service.

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1. Main points

- Launched in 2008, the Improving Access to Psychological Therapies (IAPT) programme offers adults in England access to talking therapies for depression and anxiety.

- Of the 2011 Census population, 1.8% of adults received treatment through the IAPT services in 2017 to 2018, while 18.1% of the general population had a probable Common Mental Disorder (CMD).

- Among adults with probable CMD, older age groups were underrepresented in IAPT services with only 4.5% of those aged 65 and over accessing the IAPT services compared with 13.6% of those aged 18 to 24 years; the differences were found to be statistically significant. The difference was found to be statistically significant.

- The Asian ethnic group was significantly underrepresented in IAPT services, with only 6.5% of those with a probable CMD receiving treatment through the IAPT services compared with 9.7% of those from the White ethnic group.

- Being born outside of the UK was a factor associated with lower treatment rates in IAPT services for those with a probable CMD; only 6.3% of those who were born outside of the UK with a probable CMD accessed the IAPT services, compared with 9.9% of those born in the UK.

- People with a probable CMD who classed English as their first language were more likely to receive treatment through IAPT services (9.7%) than those who did not class English as their first language (6.0%).

- Only 6.4% of disabled people with a probable CMD were treated in IAPT services compared with 10.9% of non-disabled people, suggesting that disabled people are statistically significantly underrepresented in IAPT services.

2. Background and methods

Launched in 2008, the Improving Access to Psychological Therapies (IAPT) services offers adults in England access to talking therapies for depression and anxiety. Monitoring inequality in access to IAPT services is challenging. While we know how many people access IAPT services, information on how many people would benefit from accessing this service is not readily available.

To estimate the rate of access to the IAPT services among people with a probable Common Mental Disorder (CMD), we compared the estimates of IAPT services treatment rates against the prevalence of a probable CMD in the general population. IAPT services treatment rates were calculated using IAPT services data linked to the 2011 Census records. Socio-demographic characteristics for those treated in IAPT services were also obtained from the 2011 Census records. Data from the UK Household Longitudinal Survey (UKHLS) were used to estimate the proportion of people with a probable CMD. Socio-demographic characteristics of people with a probable CMD were collected from the UKHLS. More information on definitions and how these are used in our estimates can be found in the Glossary and Data sources and quality sections.

3. Representativeness of IAPT services among the population suffering with Common Mental Disorders

Logistic regression was used to calculate the probability of receiving treatment through Improving Access to Psychological Therapies (IAPT) services or having a probable Common Mental Disorder (CMD). This is broken down by socio-demographic characteristics and their sub-categories. The analysis is based on two models: an unadjusted model and a model adjusted for age, country of birth, English as a first language, ethnicity, sex, IMD (quintile), region, religious status, and disability status. The results from the logistic regression models were then used to calculate marginal means using unbalanced weights to reduce the effect of potential hidden covariance. More information on Estimated Marginal Means (EMM) can be found in the Glossary section.
Figure 1: Younger age groups were most likely to receive treatment in Improving Access to Psychological Therapies services than any other group in the general Census 2011 population

Adjusted and unadjusted proportion of people who received treatment through IAPT services relative to the general Census 2011 population broken down by socio-demographic characteristics, England, 1 April 2017 to 31 March 2018.

Notes:

1. The proportion of people who received treatment through IAPT services relative to the general population from the 2011 Census was adjusted for age, country of birth, English as a first language, ethnicity, sex, IMD (quintile), region, religious status, and disability status.

2. The proportions are based on results from logistic regression. The results from logistic regression were used to calculate marginal means to minimise the effect of hidden covariance.

3. The horizontal lines on bars represent 95% confidence intervals.

Download the data .xlsx

Age and sex

In 2017 to 2018, among adults with a probable CMD, those aged 18 to 24 years were most likely to access IAPT services (13.6%). Older age groups suffering with probable CMDs were found to be underrepresented in IAPT services with only 4.5% of those aged 65 and over accessing IAPT services (Figure 2); those differences were found to be statistically significant. Adjusting for socio-demographic factors had little effect on the estimates, suggesting that age is one factor likely to influence participation in IAPT services for those with a probable CMD.

When looking at rates of CMD in the general population, the prevalence was lowest in people aged 65 years and over (13.8%). It was over 20% in all other age groups. IAPT services participation rates also portrayed a clear age gradient with treatment being greater in younger than in older age groups (Figure 1). The proportion of people who received treatment in IAPT services was greatest among people aged 18 to 24 years (3.1%) and lowest in people aged 65 and over (0.6%).

Looking at sex, men with a CMD were found to be underrepresented in IAPT services with only 8.0% of males with a probable CMD entering this service compared with 10.3% of females. The differences were found to be statistically significant. The CMD prevalence rates in the general population were higher in women (22.5%) than men (15.9%). However, elevated IAPT services treatment rates in women (2.3%), in comparison with men (1.3%), suggest that men suffering with a probable CMD are less likely to access and receive treatment for it through IAPT services.

Figure 2: Adults aged 65 years and over suffering from probable Common Mental Disorder were the most underrepresented age group in Improving Access of Psychological Therapies services

Proportion of people with a probable Common Mental Disorder (CMD) who received treatment through Improving Access of Psychological Therapies (IAPT) services, England, 1 April 2017 to 31 March 2018

Notes:
1. The ratio is calculated by comparing proportion of people with CMD as identified in UKHLS to proportion of people who received treatment through IAPT services.

2. The black horizontal lines on bars represent 95% confidence intervals.

3. The fully adjusted model looking at the proportion of people with a CMD who received treatment through IAPT services was adjusted for age, country of birth, English as a first language, ethnicity, sex, IMD (quintile), region, religious status, and disability status.

Download the data .xlsx

**Country of birth and first language status**

Among people with probable CMDs, individuals born outside of the UK were statistically significantly less likely to receive treatment through IAPT services compared with those born in the UK. Only 6.3% of those with a probable CMD who were born outside of the UK received treatment through IAPT services compared with 9.9% of those born in the UK. Our analysis found that people born in the UK were more likely to suffer with a probable CMD over those born outside of the UK (19.6% compared with 17.0%). However, those born outside of the UK were statistically significantly less likely to receive treatment in IAPT services (1.1% compared with 2.0%) (Figure 1). These trends remained similar when adjusting for other socio-demographic factors, but the difference reduced.

Results were similar when looking at people who stated that English was not their first language. Out of those who were suffering from a probable CMD, 9.7% of those who had English as their first language received treatment through IAPT services, compared to only 6.0% of those where English was not their first language, and this difference was statistically significant. The trends remained similar when adjusting for other socio-demographic factors.

**Ethnicity and religion**

The Asian ethnic group was significantly underrepresented in IAPT services; only 6.5% of people from Asian backgrounds with a probable CMD accessed IAPT (Figure 3). Individuals from White ethnic backgrounds with a probable CMD were most represented in IAPT services (9.7%), and these differences were statistically significant. This is mainly affected by lower IAPT services treatment rates among the Asian ethnic group; only 1.2% of people from an Asian background accessed IAPT services compared with 1.9% of those from White backgrounds (Figure 1).

When looking at the CMD rates in the general population, the Mixed ethnic group had the highest proportion of people with a probable CMD (30.4%). In comparison, 19.2% of people from the White ethnic group and 18.5% of people from the Asian ethnic group had a probable CMD. When adjusting for other factors, the differences reduced, but the Asian ethnic group remained significantly underrepresented in IAPT services compared with the White ethnic group.

**Figure 3: Individuals from Asian ethnic backgrounds with probable Common Mental Disorder were least represented in Improving Access of Psychological Therapies services**

Proportion of people with a probable Common Mental Disorder (CMD) who received treatment through Improving Access of Psychological Therapies (IAPT) services, England, 1 April 2017 to 31 March 2018

**Notes:**
1. The ratio is calculated by comparing proportion of people with CMD as identified in UKHLS to proportion of people who received treatment through IAPT services.

2. The black horizontal lines on bars represent 95% confidence intervals.

3. The fully adjusted model looking at the proportion of people with a CMD who received treatment through IAPT services was adjusted for age, country of birth, English as a first language, ethnicity, sex, IMD (quintile), region, religious status, and disability status.

4. It should be noted that the wide confidence intervals of the "Other ethnic group" are because of a small sample size.

Download the data .xlsx

Out of those with a probable CMD, individuals with no religion were more likely to receive treatment through IAPT services than people who had a religion – 11.7% compared to 8.6% – and these differences were statistically significant. People with no religion were more likely to access IAPT services than people who had a religion – 2.3% compared with 1.7%. While having a religion was a factor affecting IAPT services treatment rates, there were no significant differences in CMD rates by religious status – 19.1% compared with 19.6% for those who had a religion and those who had no religion, respectively.

Adjusting for other socio-demographic factors did not affect the trend; those who had a religion continued to be underrepresented in IAPT services. This suggests that having a religion is a factor associated with lower treatment rates for those suffering with a probable CMD.

Disability

Only 6.4% of disabled people with a probable CMD were treated in IAPT services compared with 10.9% of non-disabled people, suggesting that disabled people are statistically significantly underrepresented in IAPT services. Individuals with a disability were found to have higher rates of probable CMDs (31.6%) compared with non-disabled individuals (16.4%). However, they were only slightly more likely (2.0%) to receive treatment through IAPT services than non-disabled individuals (1.8%) from the general population in the 2011 Census. This suggests that despite the disabled group having higher CMD rates in the general population, non-disabled individuals are more likely to access and receive treatment through IAPT services for a probable CMD. After adjustment, these differences remained, suggesting that having a disability is a factor that negatively affects access to IAPT services.

Figure 4: Disabled people with probable Common Mental Disorder were less likely to receive treatment through Improving Access to Psychological Therapies services than not disabled people

Proportion of people with a probable Common Mental Disorder (CMD) who received treatment through Improving Access of Psychological Therapies (IAPT) services, England, 1 April 2017 to 31 March 2018

Notes:

1. The ratio is calculated by comparing proportion of people with CMD as identified in UKHLS to proportion of people who received treatment through IAPT services.

2. The black horizontal lines on bars represent 95% confidence intervals.

3. The fully adjusted model looking at the proportion of people with a CMD who received treatment through IAPT services was adjusted for age, country of birth, English as a first language, ethnicity, sex, IMD (quintile), region, religious status, and disability status.
4. Socio-demographic differences in use of the IAPT service data

Socio-demographic differences in use of the Improving Access to Psychological Therapies services
Dataset | Released 17 June 2022
Proportion of individuals with a probable Common Mental Disorder receiving treatment through IAPT, broken down by socio-demographic characteristics, in England.

5. Glossary

Improving Access to Psychological Therapies (IAPT) services
Improving Access to Psychological Therapies (IAPT) services is an NHS service designed to offer psychological talking therapies to adults living in England who experience common mental health problems like stress, anxiety disorders and depression. Patients need to be registered with a GP in England to access the services, but they do not need referral from the GP to access it. IAPT services offers a variety of different treatments such as guided self-help, Cognitive Behavioural Therapy (CBT), counselling, Interpersonal Therapy (IPT), mindfulness and many more. More information on IAPT services can be found on the NHS website.

Reporting period
The IAPT services reporting period covers dates between 1 April 2017 to 31 March 2018.

UK Household Longitudinal Study (UKHLS)
The UK Household Longitudinal Study (UKHLS), also known as Understanding Society, is one of the largest longitudinal household panel studies in the UK. It provides longitudinal information on health, work, education, income, family, and social life. Approximately 40,000 households in the UK are included in the study at Wave 1, and each household is then visited every year to collect information on changes in household and personal circumstances. The data are collected either by trained interviewers during face-to-face interviews or by online self-completion questionnaires.

More information can be found on the Understanding Society, UKHLS website.

Common Mental Disorder (CMD)
Common Mental Disorders (CMDs) are common mental health issues that affect the emotional and psychological well-being of individuals. They can affect anyone and can include symptoms and conditions like depression, anxiety disorders, stress, Obsessive-Compulsive Disorder (OCD) or Post-traumatic Stress Disorder (PTSD). This publication uses a list of CMD conditions treated in IAPT as defined by the NHS. A full list of those conditions can be found in The Improving Access to Psychological Therapies Manual.

Confidence interval
A confidence interval gives an indication of the degree of uncertainty of an estimate, showing the precision of a sample estimate. The 95% confidence intervals are calculated so that if we repeated the study many times, 95% of the time the true unknown value would lie between the lower and upper confidence limits. A wider interval indicates more uncertainty in the estimate. For more information, see our methodology page on statistical uncertainty.
**Logistic regression**

Logistic regression with a binary outcome is a statistical model used to predict the categorical dependent variable, which has only two possible outcomes. For example, received treatment in IAPT services (1) or not received treatment in IAPT services (0). This statistical model calculates probability of the outcome using a set of given independent variables, for example, socio-demographic characteristics.

**Statistical significance**

Statistical significance is used to establish whether the difference between the two estimates reflects a true change in the population rather than being attributed to random variation in the sample. A result is said to be statistically significant if it is likely not caused by chance or the variable nature of the samples.

To establish whether the results in this analysis are statistically significant, we compare the confidence intervals between groups within each socio-demographic characteristic. If the confidence intervals do not overlap, we conclude that the difference is statistically significant.

**Estimated marginal means**

Estimated Marginal Means (EMM) are based on a model and not the data; in this instance, they are based on the results from our logistic regression. The EMM represent the average of the prediction variable (the prediction variable could be the CMD rate or the proportion of people in treatment in IAPT services) for each category, such as socio-demographic characteristic.

For example, the EMM of CMD for the sex variable in our analysis is the mean for that variable averaged across every level of the remaining variables.

This technique is beneficial as it takes into account variations that exist between other categories; in other words, it adjusts for covariates.

**Outcome measures**

For IAPT services, the outcome measure is participants who received at least one treatment within the reporting period.

For the UKHLS, the outcome is survey participants who scored four and above on the General Health Questionnaire (GHQ-12). GHQ-12 is a screening questionnaire used to measure the severity of mental health problems.

**6. Data sources and quality**

**Study population**

There were 40,012,139 adults (aged 18 to 100 years at the time of the 2011 Census) included in our overall Census 2011 population, of which 727,813 (1.8%) received at least one treatment in Improving Access to Psychological Therapies (IAPT) services. Of those, 66.3% were female and 33.7% were male. The population who received treatment was predominately White (89.3%), non-disabled (81.8%), born in the UK (90.9%), had English as their first language (95.8%), had a religion (62.4%) and lived in the most deprived area (22.7%). The mean age was 41 years.

There were 15,614 participants in the UK Household Longitudinal Survey (UKHLS) cohort, of which 18.1% had a probable Common Mental Disorder (CMD). The mean age was 51.3 years. A further breakdown of all socio-demographic characteristics can be found in the accompanying datasets.
Census 2011 and IAPT services data

Data from IAPT services were linked to Census 2011 records via the NHS number. Only participants aged 18 to 100 years have been included in this analysis. Participants who died during the reporting period or were not in England at the time of the 2011 Census have been removed.

Those with at least one appointment for treatment were classed as “received treatment”. Patients who received treatment in IAPT services more than once within the reporting period were counted only once.

UKHLS data

Survey data from the UK Household Longitudinal Study (UKHLS, waves 3 to 10) were used to identify CMD rates in the general English population. Waves have been combined into financial years based on the sample month to an equivalent time to the IAPT services reporting period. Results were weighted using self-completion weights and adjusted for differences in election probabilities and non-response. All person-level socio-demographic characteristics came from the UKHLS survey data.

CMD rates were measured using the GHQ-12 scores. Individuals who scored four or above were classed as suffering with a probable CMD.

Statistical methods

Logistic regression was used to model the likelihood of receiving treatment (IAPT services) and of having a CMD (UKHLS). We ran two models: an unadjusted model and a model adjusted for age, country of birth, English as a first language, ethnicity, sex, IMD (quintile), region, religious status, and disability status. The results from the logistic regression models were used to calculate marginal means.

To estimate the proportion of individuals with a CMD who received treatment in IAPT services, we divided the rates of people who received treatment in IAPT services by the rates of probable CMDs in the general population. The results are presented as proportions (%). To obtain 95% confidence intervals, we ran a simulation with one million iterations, drawing each rate from a normal distribution with a mean equal to the estimated rate and a standard deviation equal to the standard error and calculated the ratio. The 2.5th and 97.5th percentiles of the resulting distributions were used to estimate the 95% confidence intervals.

Strengths

This study estimates how the rate of access to IAPT services in people with a probable CMD varies by socio-demographic groups. The results from this study can be used by government officials and policymakers to target specific groups and increase their representativeness in the services.

Data from Census 2011 provide high quality population-level estimates derived from a large sample. The UKHLS is also a nationally representative survey with a large sample frame, resulting in more representative findings and reduced margin of error. CMDs are often underdiagnosed in primary care services and relying purely on primary care data would fail to identify true number of people suffering from a CMD. Survey data provide better representation of CMDs in England.

Limitations

The latest IAPT services data available to the Office for National Statistics (ONS) cover the financial year 2017 to 2018; findings might not represent the current population. Similarly, socio-demographic characteristics that are based on the 2011 Census might cause some person-level information to be outdated.

The sample for the 2011 Census and the UKHLS is less representative of the immigrant and ethnic minority population. Anyone who moved to England after 2011 is not captured in the 2011 Census. Similarly, the UKHLS does not include the Immigrant and Ethnic Minority Boost (IEMB) sample.

The study does not consider other treatments for CMDs like medication, private care or GP data.
7. Related links

**Psychological Therapies, Annual report on the use of IAPT services 2019-20**
Publication | Released 30 July 2020
This publication is the annual report on the Improving Access to Psychological Therapies (IAPT) programme from 1 April 2019 to 31 March 2020, produced by NHS Digital.

**Coronavirus and GP diagnosed depression in England: 2020**
Bulletin | Released 5 May 2021
Analyses of trends in GP diagnosed depression in the adult population in England between 23 March and 31 August 2020, compared to pre-pandemic levels.

**Coronavirus and depression in adults, Great Britain: July to August 2021**
Article | Released 1 October 2021
Analysis of the proportion of the adult population of Great Britain experiencing some form of depression in summer 2021, based on the Opinions and Lifestyle Survey. Includes analysis by age, sex and other characteristics and comparisons with early 2021, 2020 and pre-pandemic estimates.

**Suicides in England and Wales: 2020 registrations**
Bulletin | Released 7 September 2021
Registered deaths in England and Wales from suicide analysed by sex, age, area of usual residence of the deceased and suicide method.