

## **Cheshire and Merseyside Data analysis**



## Data analysis introduction and methods

We carried out this data analysis in to understand specific issues across the 9 local authority areas in Cheshire and Merseyside and identify target cohorts for intervention in promoting both health and work.

We have split out the analysis into the following:

- Regional analysis of health and worklessness
- Fit note analysis
- Health harming behaviours and comorbidity analysis

#### **Data limitations**

- Linking the different datasets together was often not possible. This made analysing the intersections of data difficult (e.g. investigating the employment levels of people with fit notes for mental health).
- Not all data was available at the same geographic level (e.g. fit note data for Cheshire East and Cheshire West and Chester was only available at the Cheshire level).

#### Data sources

ONS Annual Population Survey

**ONS Census 2021** 

Fit Notes Issued by GP Practices

Fingertips Public Health Outcomes Framework

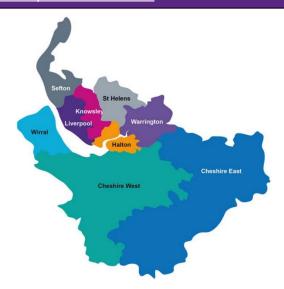
Fingertips Wider Determinants of Health

Sub ICB Locations and Local Health Boards

**Local Authority Districts** 

Indices of Multiple Deprivation 2019

CIPHA Complex Households



## Health and employment deprivation

The Health Deprivation and Disability Domain measures the risk of premature death and the impairment of quality of life through poor physical or mental health.

#### The indicators:

- Years of potential life lost
- Comparative illness and disability ratio
- Acute morbidity
- Mood and anxiety disorders

The Employment Deprivation Domain measures the proportion of the working-age population in an area involuntarily excluded from the labour market. This includes people who would like to work but are unable to do so due to unemployment, sickness or disability, or caring responsibilities.

#### The indicators:

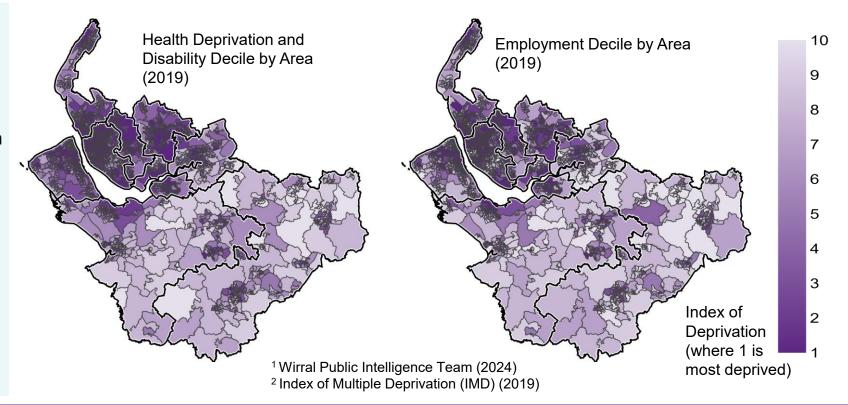
- Claimants of Jobseeker's Allowance
- Claimants of Employment and Support Allowance
- Claimants of Incapacity Benefit
- Claimants of Severe Disablement Allowance
- Claimants of Carer's Allowance
- Claimants of Universal Credit

## Health deprivation is prevalent across Cheshire and Merseyside, with significant geographic overlap with employment rates

Life expectancy in the region's most deprived areas are 12 years fewer than in its least deprived areas. High rates of health inequality also exist within local authorities themselves – in Wirral, there is a difference in average life expectancy of nearly 12 years between the wards of Birkenhead & Tranmere and West Kirby & Thurstaston.<sup>1</sup>

A third of the population in Cheshire and Merseyside live in the most deprived 20% of neighbourhoods in England. The region's average Index of Multiple Deprivation (IMD) score is 28.6, significantly higher than the national average of 19.6,<sup>2</sup> contributing to high rates of health inequality.

Considerable geographic overlap are observed between rates of health and economic deprivation, with areas of high health deprivation corresponding with areas of low employment. The interlinked nature of these indicators provides a compelling rationale for greater cross-sector alignment between health and employment partners.



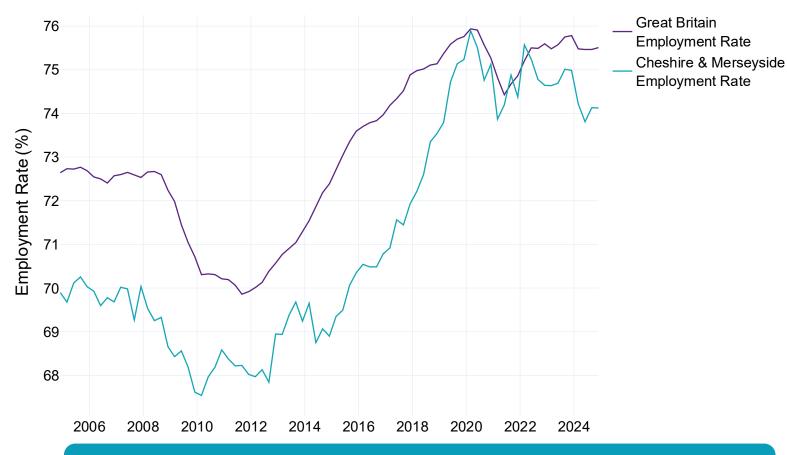
# Cheshire and Merseyside employment rates have historically been lower than the Great Britain average, but the gap was closing until COVID

- Employment rates in Cheshire and Merseyside have historically been lower than the national average.
- Between 2015 and 2020 the gap was closing before a widening again, potentially due to the impact of COVID in a region where health inequalities and socioeconomic deprivation are prevalent.

'In the last few years since COVID, there's been a significant increase in people with mental health conditions being isolated, not wanting to go back to work even if they've got the skills and ability to do so.'

**Team Leader, Council Employment Service** 

#### Employment Rate in Cheshire and Merseyside vs Great Britain

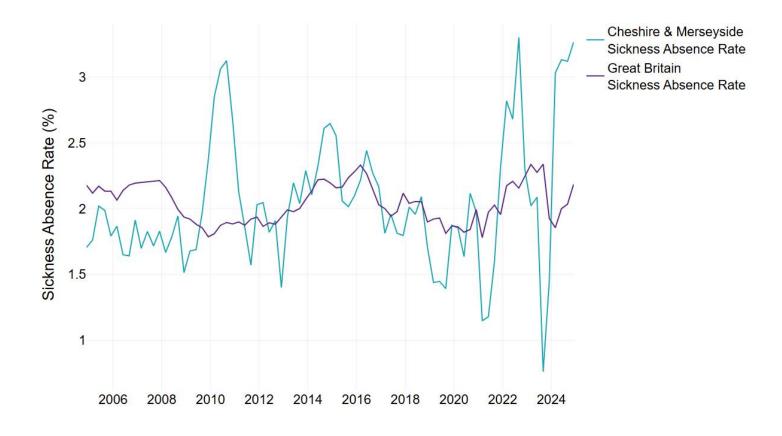


Recommendation: Investigate reasons for regional divergence from UK average employment rate in Cheshire and Merseyside since COVID

### Sickness absence rates in Cheshire and Merseyside are above the Great Britain average

- Sickness absence rates in Cheshire and Merseyside have tended to track above the Great Britain average since 2022.
- In the UK, 8.2 million working-age people now report a long-term health condition that limits their ability to work.<sup>1</sup> Many of this number are likely to have taken periods of temporary absence from work before becoming long-term sick.
- In Cheshire and Merseyside in December 2024, 11,500 people were absent from work due to temporary sickness, compared to 6,800 in December 2004. This is a key group where early intervention should focus to prevent progression to involuntary worklessness related to long-term sickness.

### Sickness Absence Rate in Cheshire and Merseyside vs Great Britain



Recommendation: Investigate linked datasets to analyse the demographic and health characteristics of those off work due to sickness absence

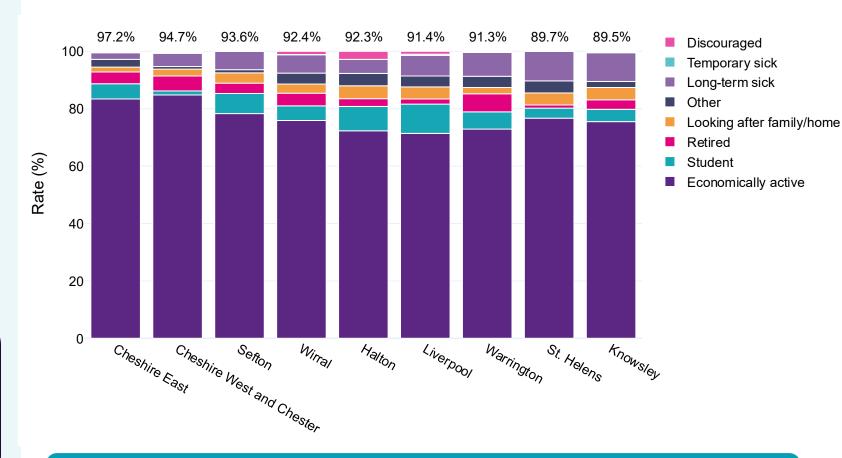
# Knowsley, St Helens and Warrington have some of the highest regional levels of long-term sick

- Warrington saw an increase in longterm sickness from 2.8% to 8.3% between 2014 and 2024.
- Cheshire East has seen a decrease in those looking after family from 6.2% (2014) to 1.7%.
- Halton and Liverpool saw the largest decreases in long-term sickness from 9.4% (2014) to 4.9% and 11.1% (2014) to 7.2%, respectively.

'The health system could be doing more to help people manage chronic health conditions, to help people manage pain control and medication, to help people with mental health challenges. Because it's all those things that are barriers to people getting employment.'

**Council Head of Inclusive Economy** 

### Economic Activity Rates (Dec 2024) in Cheshire and Merseyside

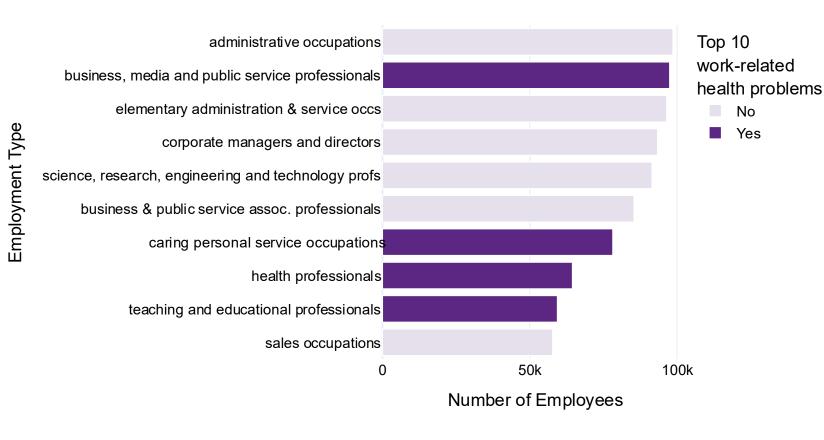


Recommendation: Investigate the reasons behind the rise in long-term sickness in Warrington, and fall in long-term sickness in Halton and Liverpool

# Four of the top 10 industries for work-related health problems are top employers in Cheshire and Merseyside

- Good work is generally good for health.
  However, there is a prevalence of work
  that in Cheshire and Merseyside where
  conditions are known to make roles less
  good for health, such are those involved
  on front-line of health and care, and in
  the teaching profession.
- According to research by the Health Foundation, <sup>1</sup> some sectors are more affected by poor employee health than others – workers in health, teaching, construction, transport and customer services report some of the highest rates of work-related health conditions.
- Nearly 40% of employees in Cheshire and Merseyside work in industries characterised by high levels of workrelated health problems.

### Top 10 sub-major occupation levels in Cheshire and Merseyside



Recommendation: Review the common health problems found in industries with high rates of work-related illness

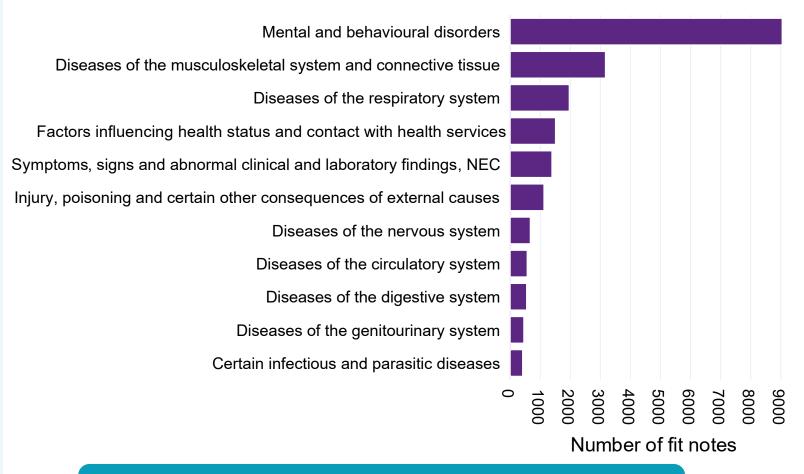
## Fit Notes Issued by GP Practices

- The Statement of Fitness for Work (the Med3 form or 'fit note') was introduced in April 2010 across England, Wales and Scotland.
- Fit notes can be used to provide medical evidence for employers or to support a claim to health-related benefits through the Department for Work and Pensions (DWP).
- A fit note is issued after the first seven days of sickness absence.
- Fit note data is publicly available aggregated to the sub ICB level and is published on a quarterly basis.
- We analysed fit note data to identify potential trends in specific fit note diagnoses in Cheshire and Merseyside.

### Fit note data shows largest drivers of worklessness are mental health, musculoskeletal and respiratory diseases

- In December 2024, there were over 9,000 fit notes for mental and behavioural disorders, which make up around 40% of fit notes.
- 14% of fit notes owed to musculoskeletal diseases.
- 9% of fit notes were issued on account of respiratory diseases.
- Nearly 18,000 fit notes contained free text, which meant no reason was provided. This high number prevents more a more in-depth analysis of fit note reasons, likely owing to variations in data standards at GP clinics across the region.

### Top 10 fit note reasons (Dec 2024) in Cheshire and Merseyside



Recommendation: Conduct a thematic analysis of free text in fit notes and fit note reason recording practices

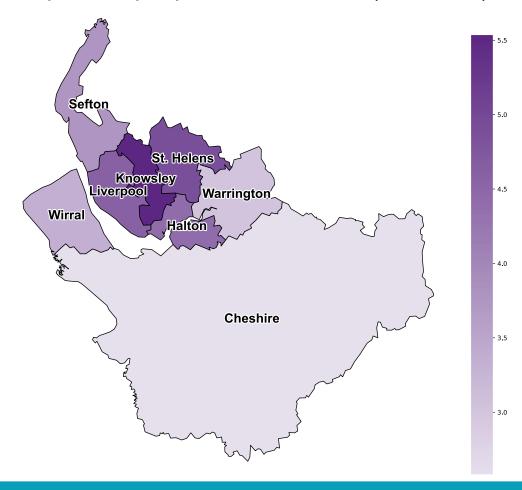
## Knowsley has the highest rates of fit notes in the region

- Knowsley is the second most deprived borough in England based on the Index of Multiple Deprivation (Liverpool is the third. One quarter of all households in Knowsley are income deprived.
- Health deprivation is also high in Knowsley, translating into high levels of health-related worklessness. 5.5 per
   100 people are absent from work with a fit note in the borough – the highest rate across Cheshire and Merseyside.

'I'd say when I started it was around 10% of people who would come to us would have health conditions. Now it feels more like 50%, and we see lots of young people, too. For older people, the rate is even higher.'

Head of Service, Council Employment Service

### Fit notes per 100 people for all reasons (Dec 2024)



Recommendation: Compare the number of fit notes with outcomes achieved by local authority employment support schemes available by region to support those with health-related barriers to work.

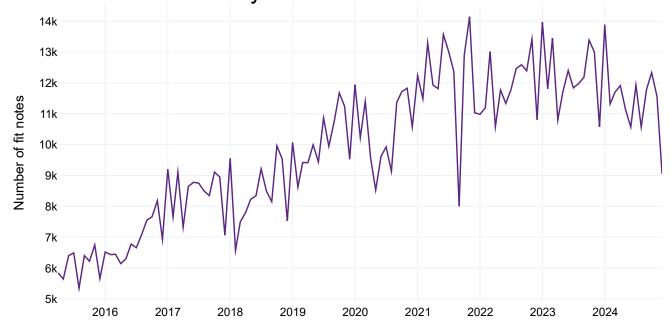
## Since 2015 fit notes for mental health and behavioural disorders have been rising

- Fit notes owing to mental health and behavioural disorders have risen from around 6,000 per month in 2015 to 11,500 in 2024.
- Financial pressures, job strain and insecurity tend to be more prevalent for people with fewer qualifications or living in more deprived areas. This is reflected in Cheshire and Merseyside, with areas with greater deprivation exhibiting higher incidence of mental health fit notes.
- The mental health of young people is impacted by longer-term cultural and environmental changes, such as social media, increased loneliness and reduced autonomy. Employment support service targeting this group should aim to address these factors.

'IPS is being expanded in our areas, but there isn't anything else bespoke or specialist for people with mental ill health, so I would say that was definitely a bit of a gap, especially for young people.'

Council Head of External Funding, Complex Worklessness & Inclusion

Fit notes for mental health and behavioural disorders in Cheshire and Merseyside

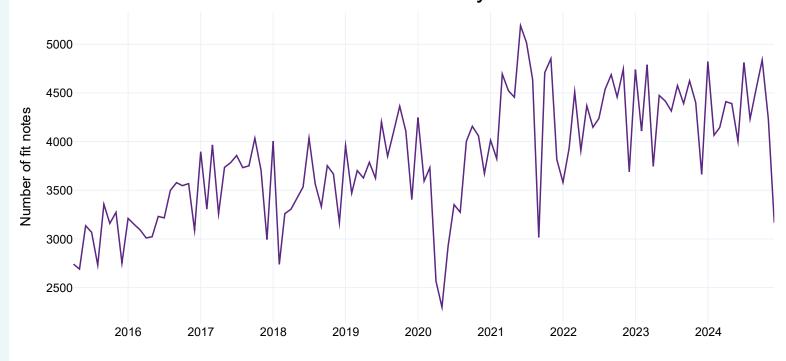


Recommendation: Investigate linked datasets to analyse the demographic characteristics of those with mental health and behavioural disorders

Since 2015, fit notes for diseases of the musculoskeletal system and connective tissue have been rising

- Fit notes for diseases of the musculoskeletal system and connective tissue have risen from around 3,000 per month in 2015 to 4,300 in 2024.
- Data from the Health Foundation <sup>1</sup>
   shows that work-related
   musculoskeletal disorders have
   decreased over time, while rates of
   work-related stress, anxiety and
   depression have risen since the mid2010s.
- Data from Cheshire and Merseyside shows the opposite trend is in evidence for musculoskeletal conditions in the region. This highlights a potential gap for employment support services specifically aimed at this group, such as the through the Work Well employment advisors in MSK services.

Fit notes for diseases of the musculoskeletal system and connective tissue in Cheshire and Merseyside



Recommendation: Investigate linked datasets to analyse the demographic characteristics of those off work due to musculoskeletal system and connective tissue disorders

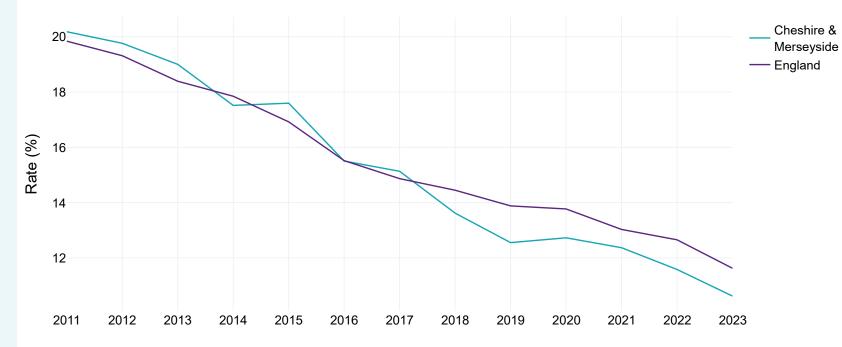
## Health harming behaviours increase the risk of chronic illness, and therefore increase the risk of comorbidity

- Health harming behaviours include smoking, alcohol use, illicit drug use, obesity, physical inactivity and poor diet. These increase the risk of chronic illness such as cardiovascular disease and cancer.
- Comorbidity refers to the simultaneous presence of two or more diseases or medical conditions in a patient. They can lead to increased disease severity, treatment challenges, reduced quality of life and increased mortality risk.
- We analysed health harming behaviours and comorbidity to identify key cohorts and areas to focus on for future analyses/interventions.

## Smoking prevalence in adults has been on a downward trend since 2011

- In 2011, smoking prevalence in Cheshire and Merseyside was 0.4% above the national average. By 2023, smoking prevalence had dropped to 1% below the national average.
- While the overall drop in smoking prevalence is positive, numbers have not dropped as quickly in more deprived areas.
- Health-harming behaviours such as smoking and alcohol consumption can be both a cause of health-related worklessness and an effect of the stress generated by unemployment and lack of opportunity.

### Smoking prevalence in adults (aged 18+) – current smokers (APS)



'We've had quite a few people who have said that they can't get jobs because of smoking – "I need to smoke every 30 mins, so I can't be in a job where I'm inside."'

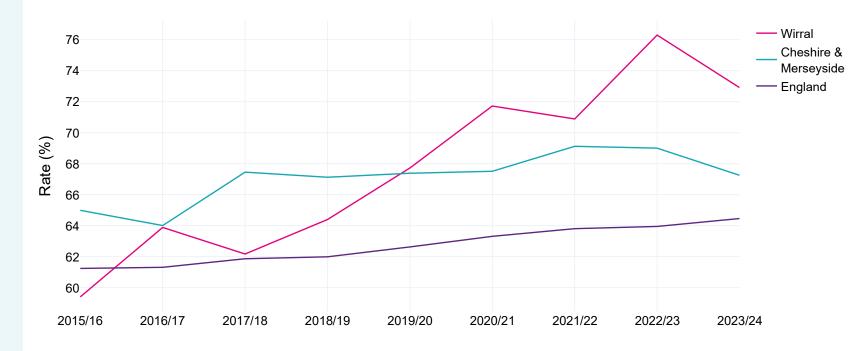
Head of Council Employment Service



# Wirral has seen a steady increase in overweight prevalence in adults since 2015/16

- Overweight prevalence in adults in Cheshire and Merseyside has been historically higher than the national average.
- Since 2015/16, rates in Wirral have changed from 2% below the national average to 9% above. Overweight is associated with diseases of the circulatory system, which is the third most prominent reason given for fit notes across Merseyside and Cheshire.
- Elevated levels of overweight and obesity are associated with increased exposure to unhealthy environmental cues, limited access to resources that support healthy choices, and the experience of chronic stress and adversity.

#### Overweight (including obesity) prevalence in adults



Recommendation: Investigate the rise in overweight prevalence in adults in Wirral

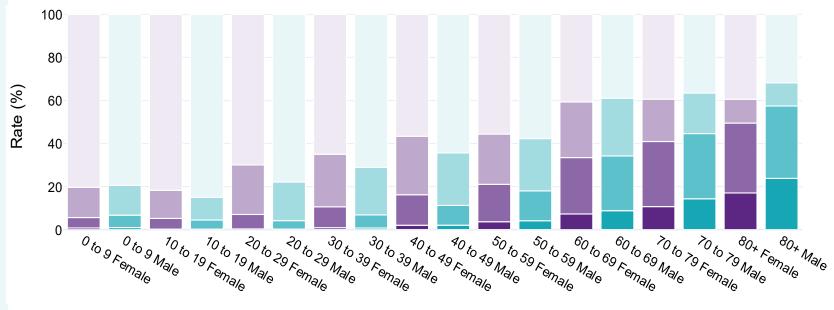
## Multimorbidity increases with age, affecting females more greatly from ages 10-59

- Multimorbidity is split into three groups:
  - Low complexity: two or more long-term conditions that are stable and do not significantly impact daily functioning.
  - Medium complexity: multiple long-term conditions that may interact with each other and affect daily living and mental wellbeing.
  - High complexity: multiple, often severe and interacting conditions that result in frequent hospital use or risk of admission.
- Multimorbidity has detrimental effect on employment, leading to reduced quality of life and work productivity, increased rates of absenteeism and presenteeism, higher likelihood of temporary or permanent leave, and decreased employability and job entry opportunities.
- Females between 20-49 in Cheshire and Merseyside exhibit higher levels of multimorbidity than males.

Multimorbidity is defined as a condition characterised by two or more long-term conditions (LTCs):\*

- a physical non-communicable disease of long duration, such as cardiovascular disease or cancer
- a mental health condition of long duration, such as a mood disorder or dementia
- an infectious disease of long duration, such as HIV or hepatitis C

## Multimorbidity rate by Age, Sex, and Need Group in Cheshire and Merseyside



Recommendation: Investigate demographic characteristics of multimorbidity in females, particularly those aged 20-49

#### Need Group (Sex)

- MultiMorbid High Complexity (Male)
- MultiMorbid Med Complexity (Male)
- MultiMorbid Low Complexity (Male)
- No Complexity (Male)
- MultiMorbid High Complexity (Female)
- MultiMorbid Med Complexity (Female)
- MultiMorbid Low Complexity (Female)
- No Complexity (Female)

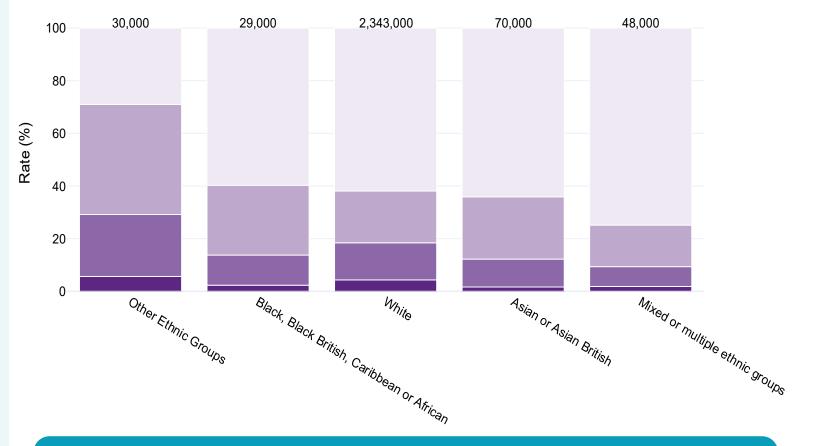
## Other Ethnic Groups have higher rates of multimorbidity compared to other ethnicities

- 'Other Ethnic Groups' have the highest combined rate of need related to all forms of multimorbidity, while 'White' and 'Asian or Asian British' groups show relatively lower rates.
- Although the 'White' ethnic group has the largest population size (2.34 million), the relatively smaller 'Other Ethnic Groups' category has disproportionately higher rates in the high and medium complexity segments, suggesting greater levels of need or challenge.
- Ethnically minoritised groups are known to experience greater health inequalities, while there are also experience higher rates of certain health conditions, including cardiovascular disease, diabetes, and disability, among some ethnic minority groups.

## Multimorbidity rate by Ethnicity and Need group in Cheshire and Merseyside



- MultiMorbid High Complexity
- MultiMorbid Med Complexity
   MultiMorbid Low Complexity
- No Complexity



Recommendation: Investigate reasons for higher multimorbidity rates among Other Ethnic Groups and whether employment rates are lower in among this group

## Summary of data analysis recommendations

Page	Recommendation			
5	Investigate reasons for divergence from UK average employment rate in Cheshire and Merseyside since COVID			
6	Investigate linked datasets to analyse the demographic and health characteristics of those off work due to sickness absence			
7	Investigate the reasons behind the rise in long-term sickness in Warrington, and fall in long-term sickness in Halton and Liverpool			
8	Review the common health problems found in industries with high rates of work-related illness			
10	Conduct a thematic analysis of free text in fit notes and fit note reason recording practices			
11	Compare the number of fit notes with outcomes achieved by local authority employment support schemes available by region to support those with health-related barriers to work.			
12	Investigate linked datasets to analyse the demographic characteristics of those with mental health and behavioural disorders			
13	Investigate linked datasets to analyse the demographic characteristics of those off work due to musculoskeletal system and connective tissue disorders			
16	Investigate the rise in overweight prevalence in adults in Wirral			
17	Investigate demographic characteristics of multimorbidity in females, particularly those aged 20-49			
18	Investigate reasons for higher multimorbidity rates among Other Ethnic Groups and whether employment rates are lower in among this group			

## Greater data integration between work and health would drive better understanding and action

Impact	Outcomes Measure	Ideas	Corporate Alignment	Partnership Assets
Focus on outcomes, driven by increased data integration among the stakeholders at the local and regional levels, allowing for a better understanding of who needs more support, what kind of support, and where they are.	A joined-up approach to work and health where data and outcomes on what works are shared across the partnership  Linked NHS and DWP data to support strategic commissioning objectives and prevention	Data linkage and sharing programme of work (drawing on our work in NW London and Mersey Care linking children's data).  Development of an outcomes framework for core employment and health service	All Together Fairer theme: 'Strengthen the role and impact of ill health prevention'  Data into Action programme – already looking at some of the hypotheses	CIPHA (DWP linked data – John White)  OPSI  Civic Data Cooperative and 'Greater Data'

## Conclusion

- With further time and resource, future analysis led by the Health and Work Partnership could explore linking datasets to enable deeper insights into specific cohorts and key issue areas across the region. This would support more confident, targeted interventions based on robust evidence.
- A particular focus could be on linking data from the Department for Work and Pensions and the NHS. This would unlock critical insights at the intersection of health and employment—such as understanding mental health conditions among 18–24-year-olds, assessing their skills, and mapping local labour market opportunities to inform targeted training and support interventions.