

HOW WE CAN SUPPORT COMMUNITY-LED INTERVENTIONS WITH HEALTH INEQUITY DATA

SIMON REDDING

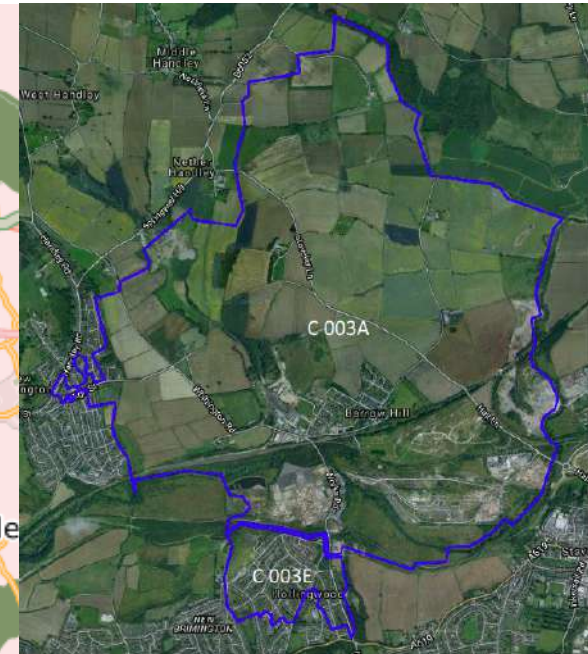
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Why Barrow Hill?

- Barrow Hill was an 1863 model village
- Industry has now closed down
- Top 8% of multiple deprivation
- Top 2% of deprivation affecting children
- Community facilities have gone
- Poor quality housing
- Poor transport
- Poor access to services & fresh food
- Perceived massive health inequity





L. CLUB

BARROW HILL MEMORIAL

510

Searching for evidence & data to drive strategy

- Started with census to understand demographics
- Then got database for multiple deprivation
- DWP data showed that lots of people were economically inactive due to illness or long term conditions
- Community Insight helped to round out the picture
- But... still no health data
- Derbyshire Observatory wasn't detailed enough
- DCC customer segmentation told us what we already knew
- Then PressRed got involved...

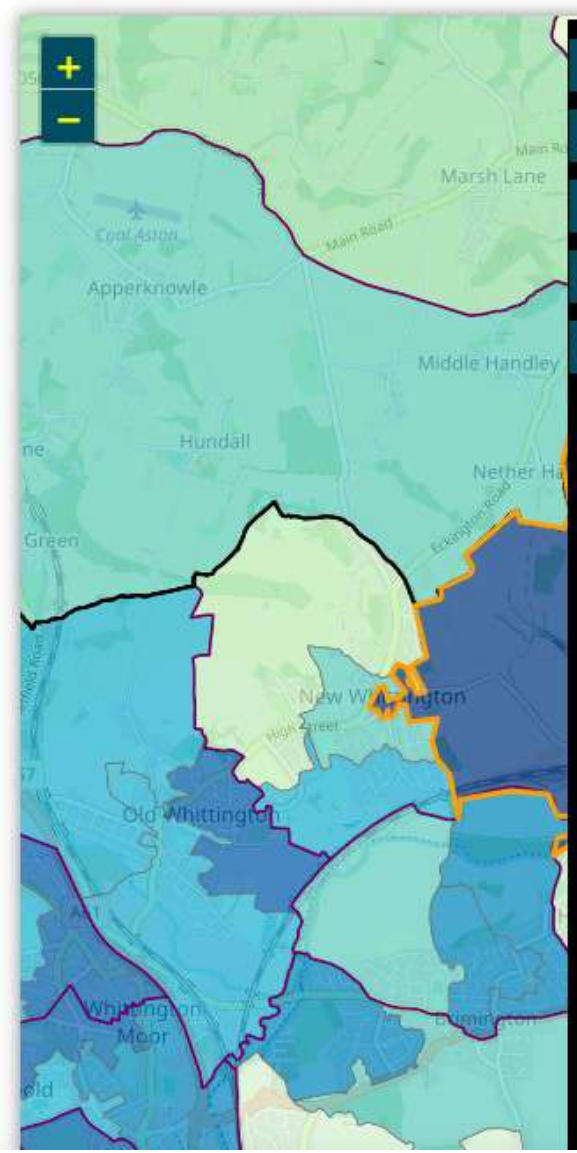
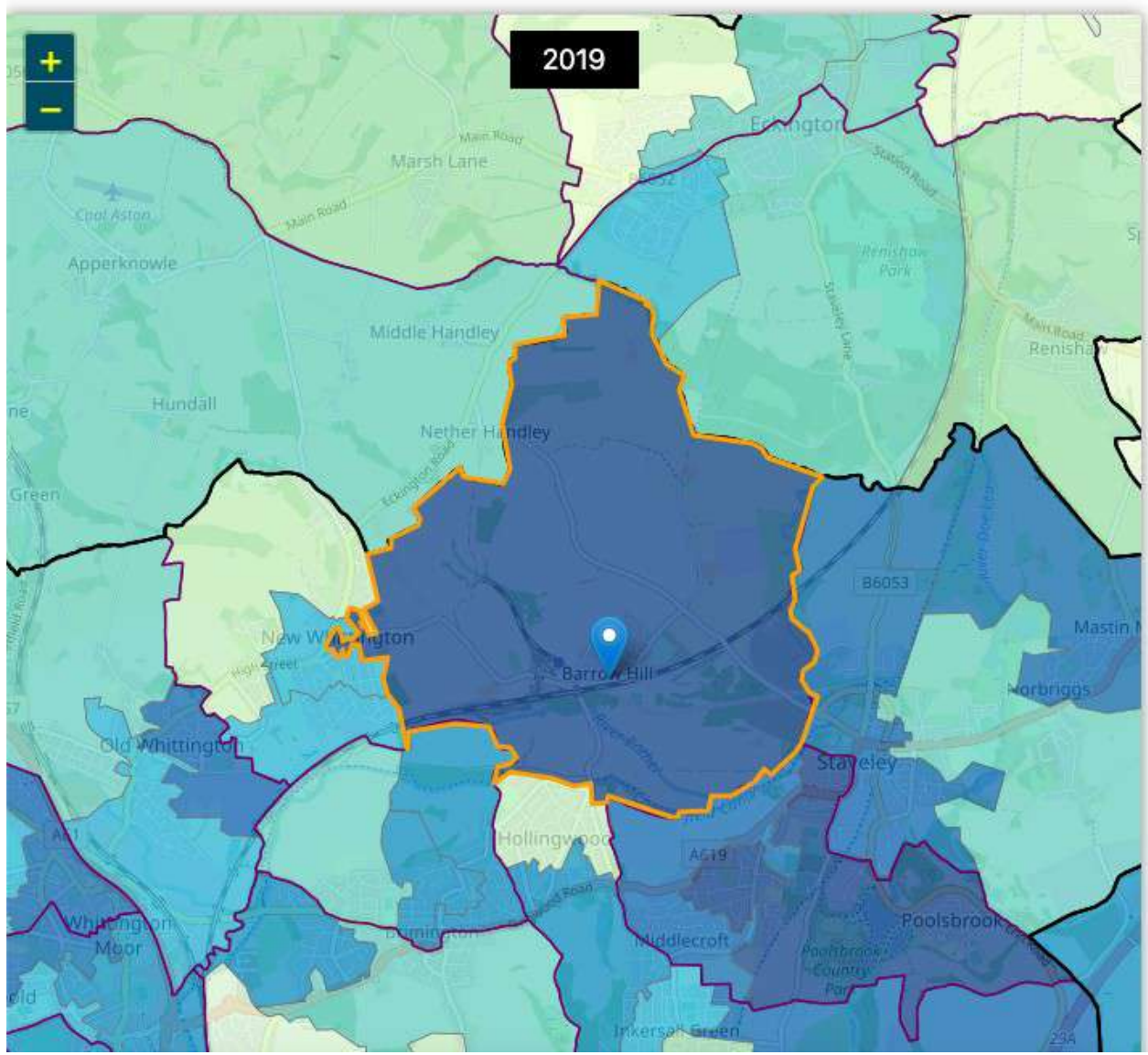
Indices of Deprivation: 2019 and 2015

Switch domain to: IMD £ 👤 📄 + 🚲 🏠 🌲 👨👩 👨👩👧

Viewing **Index of Multiple Deprivation (IMD)**

2019 map

2015 map



Neighbourhood (LSOA) data

Your selected location falls in **Chesterfield 003A** LSOA (i.e. neighbourhood). This is within **Barrow Hill and New Whittington** ward and **Chesterfield** local authority district.

In 2019, this LSOA is ranked **2,538** out of 32,844 LSOAs in England; where 1 is the most deprived LSOA. This is amongst the 10% most deprived neighbourhoods in the country. In 2015, this LSOA was ranked **2,711** out of 32,844- amongst the 10% most deprived neighbourhoods.

Chesterfield 003A is one of 69 LSOAs in Chesterfield local authority district. Using the IMD rank of average summary measure, this local authority ranked **84** in 2015 and **86** in 2019, out of 317 local authorities.

This chart shows the percentage distribution in 2019 and 2015 of LSOAs within Chesterfield, in each decile of the **Index of Multiple Deprivation (IMD)**.

| | 10% most deprived | 10% least deprived |
|------|-------------------|--------------------|
| 2019 | ~10% | ~90% |
| 2015 | ~10% | ~90% |

0 25 50 75 100
Percentage of LSOAs

| Neighbourhood (LSOA) | rank 2015 | rank 2019 |
|--------------------------|--------------|--------------|
| Chesterfield 003A | 2,711 | 2,538 |

| Barrow Hill and Hollingwood Demographic Factors | C 003A | C 003E | Chesterfield |
|---|-------------|------------|----------------|
| Population/Households | 1,465/693 | 1,788/737 | 103,788/46,796 |
| 0 – 15 & 16 – 25 year olds | 22.3%/12.3% | 23.3%/9.7% | 17.5%/11.7% |
| 26 – 34 year olds | 11.7% | 17.1% | 10.4% |
| 35 – 44 year olds | 15.3% | 17.0% | 14.1% |
| 45 – 54 year olds | 12.9% | 12.6% | 14.8% |
| 55 – 64 year olds | 11.7% | 9.1% | 12.9% |
| 65+ | 13.9% | 11.2% | 18.6% |
| Females | 51.6% | 50.2% | 51.0% |
| Day to day activities limited a little/a lot | 26.9% | 14.9% | 23% |
| People in NSSEC 5 - 8 | 60.5% | 46.4% | 45.8% |
| All lone Parents | 69 | 42 | 3,279 |
| Economically Inactive People | 38.7% | 21.7% | 32.1% |
| Households with no cars/vans | 37.5% | 16.1% | 27.1% |
| No qualifications | 36.9% | 20.2% | 27.6% |
| IMD score | 47.43 | 13.82 | 25.32 |
| Bad/very bad health | 11.7% | 4.8% | 7.6% |
| Households with Lone Adult | 55.1% | 33% | 43.3% |

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Chesterfield 003A – additional information

- Dominant NS-SeC groups are:
 - Group 5 (lower supervisory and technical) – 10.3% in LSOA compared to 8% in district
 - Group 6 (semi-routine) – 21.3%/17.7%
 - Group 7 (routine) – 19.3%/14.7%
 - Group 8 (never worked and long term unemployed) – 9.3%/5.4%
- Higher proportion of economically inactive including:
 - Lower proportion of retired (14.5%/16.9%)
 - Higher proportion of those looking after home or family (7.1%/3.8%)
 - Higher proportion of long term sick or disabled (11.7%/6.0%)
- High proportion of households with lone adults (some with children):
 - One person households, other (under 65 and not lone parents 27.3%/19.4%)
 - Lone parent households with dependent children (10.1%/7%)
- While there is a low proportion of people over the age of 65, a high proportion of them live alone (47.3%/32.8%)

Negatives of living in Barrow Hill

Isolated was a word commonly used by residents

- Lack of connectivity to other places was an issue since bus services had been changed.
- The need to get more than one bus on many journeys made them expensive and out of reach for many families
- The location of bus routes (around Barrow Hill rather than through it) made it too far for some (particularly older residents) to walk to the stop
- Secondary pupils can't stay to after-school clubs as they have to get the bus home
- £5 taxis are a cheaper way of getting to supermarket– but this adds to the weekly shopping bill. Others only shop in Barrow Hill
- Access to health services such as GP surgery or hospital is a common problem

“Closed the doctors. Now we have to go to Staveley or Inkersall and there's no bus to Inkersall.”

Time4u event participant

“Doctors has gone. Slow, still not many activities. The park is unsafe, the bus stop has moved next to the entrance, no lighting on the park.”

Time4u event participant

“It just seems isolated. If you just want to go out as a family, there's nout is there?”

Mums group participant

Negatives of living in Barrow Hill

A dramatic increase in anti-social behaviour has led to residents feeling *intimidated* in their own village

- Drug use was by far the most prevalent issue
- A re-housing policy was blamed for its increase. Residents felt that problem tenants were 'dumped' in the village
- It was common for residents to find needles and drug paraphernalia around the village, particularly in areas where children play
- Not knowing who you could meet on the street had become a real worry. Residents did not always feel safe to walk at night
- Reporting processes for noise, drug dealing and use, appeared to be ineffective. Residents were worried about recrimination
- A desire for vigilante behaviour was mentioned by several residents
- Alcohol users, dog mess and teenage trouble-makers.

"You can smell 'em (drugs) in us flat with all the windows and doors shut. We have us grandson at weekends – I don't want him inhaling that."

Men's group participant

"Down behind the bridge is isolating, people go there to take drugs, it's intimidating."

Time4U event participant

"That's all it is really - druggies. And they're everywhere."

Men's group participant

Annual health costs of physical inactivity - Chesterfield

Health costs of physical inactivity

| Disease category | Chesterfield |
|-------------------------------------|-------------------|
| Cancer lower GI e.g. bowel cancer | £111,660 |
| Breast Cancer | £83,938 |
| Diabetes | £293,401 |
| Coronary heart disease | £764,790 |
| Cerebrovascular disease e.g. stroke | £234,140 |
| Total Cost | £1,487,928 |

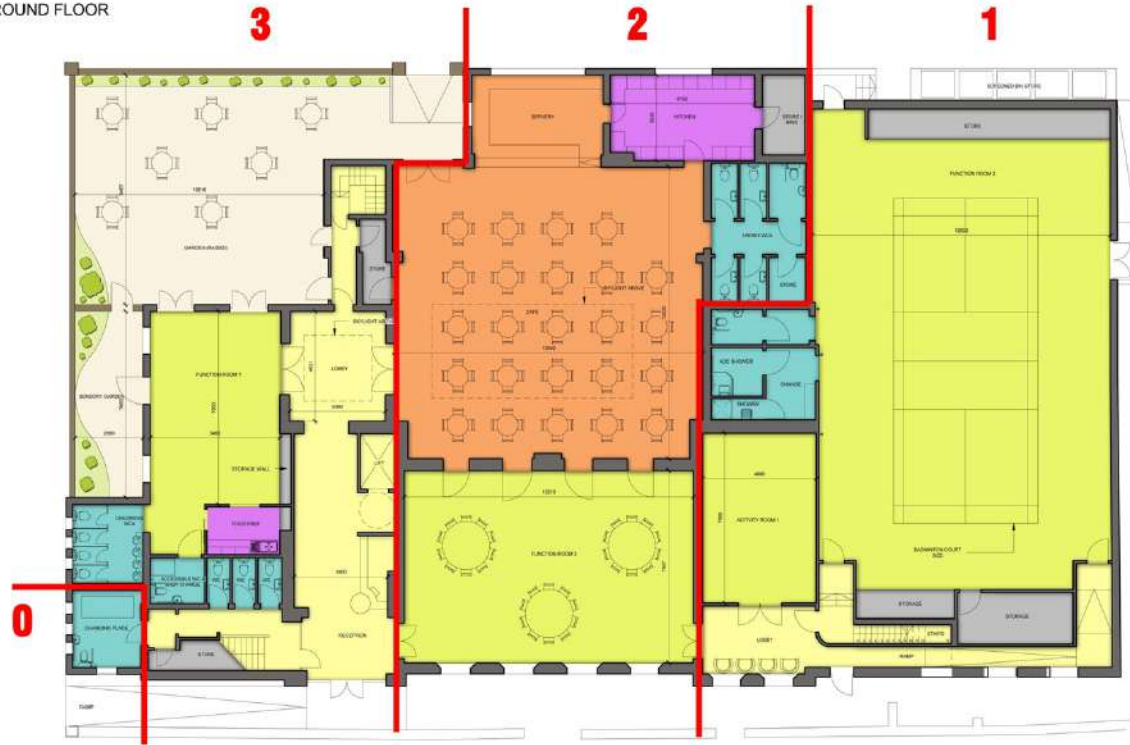
Source: Sport England commissioned data from British Heart Foundation Health Promotion Research Group for PCTs, reworked into estimates for LAs by TBR

The Big Plan...

- Integrated Community Hub, built around a community-led pub/cafe space
- Medical space, in partnership with the NHS
- SureStart style centre in partnership with the school
- Youth & physical activity centre
- Building community pride through a heritage project
- Jobs & skills zone, with office space to enable distance working & startups
- Iconic community venue to make Barrow Hill a place to be!



GROUND FLOOR



Note:
Do not scale from this drawing. It is the contractor's responsibility to check all governing dimensions and verify all dimensions on site before commencing any work or making any shop drawings. Issue drawing not from detailed measured survey. This drawing is to be read in conjunction with the structural, mechanical and electrical drawings and other relevant information and any discrepancies are to be reported to the Architect. Work and materials to be in accordance with the current Building Regulations and to comply with all relevant British Standards. This drawing is the copyright of Integreat Plus and should not be reproduced in whole or in part without their written permission. This drawing is a sketch only, subject to the relevant planning permissions and statutory requirements (including Building Regulations). The Local Building Control department should be contacted to approve the works prior to work starting on site. These drawings are concept only and therefore should not be used for construction purposes.

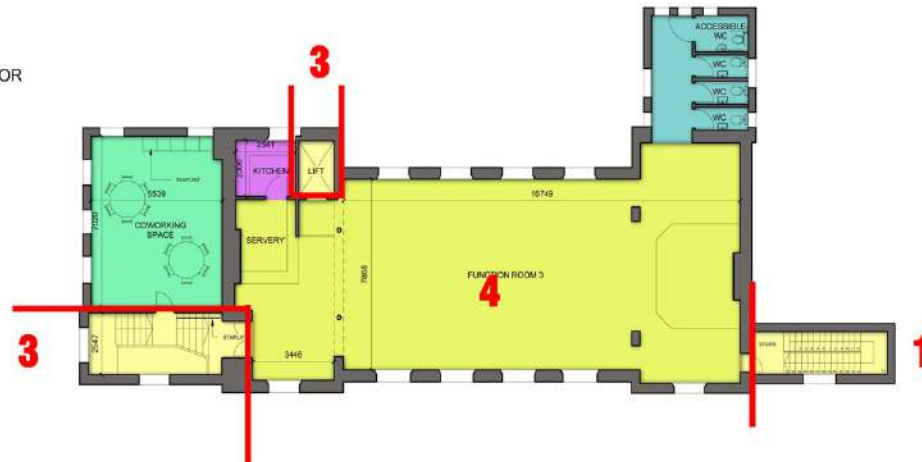
Note:
Fire detection and escape strategy to be confirmed with Building Control as part of the Building Regulations submission prior to construction starting. Fire compartments (walls, floors and ceilings) to be agreed and constructed to maintain the minimum fire resistance required both within the unit and between this and other buildings. Location of fire alarm equipment, escape signage and extinguishers to be confirmed with Building Control Officer.

**DRAFT FOR COMMENT ONLY
NOT FOR CONSTRUCTION**

PHASING CONCEPT

PHASE 0 = watertight and fabric improvements including ground floor 'changing place'

FIRST FLOOR



But... still no accurate health data
... and thus no NHS engagement!



Partners in improving local health



North of England
Commissioning Support Unit

Barrow Hill (LSOA Chesterfield 003A)

Population Segmentation

Jeff Powell Davies & Dominic Rowney



Notes

Analysis of primary care data extracted for RAIDR in April 2023. No data is available for Simmondley Medical Practice.

Focus Cohort:

Patients residing in lower super output area (LSOA) 'Chesterfield 003A' – Barrow Hill
(1,451 patients)

Comparison Cohort:

Everyone else registered to practices within Derbyshire (1,096,814 patients)



Practice Split

1,451 patients reside in the Chesterfield 003A LSOA who can be linked to a practice.

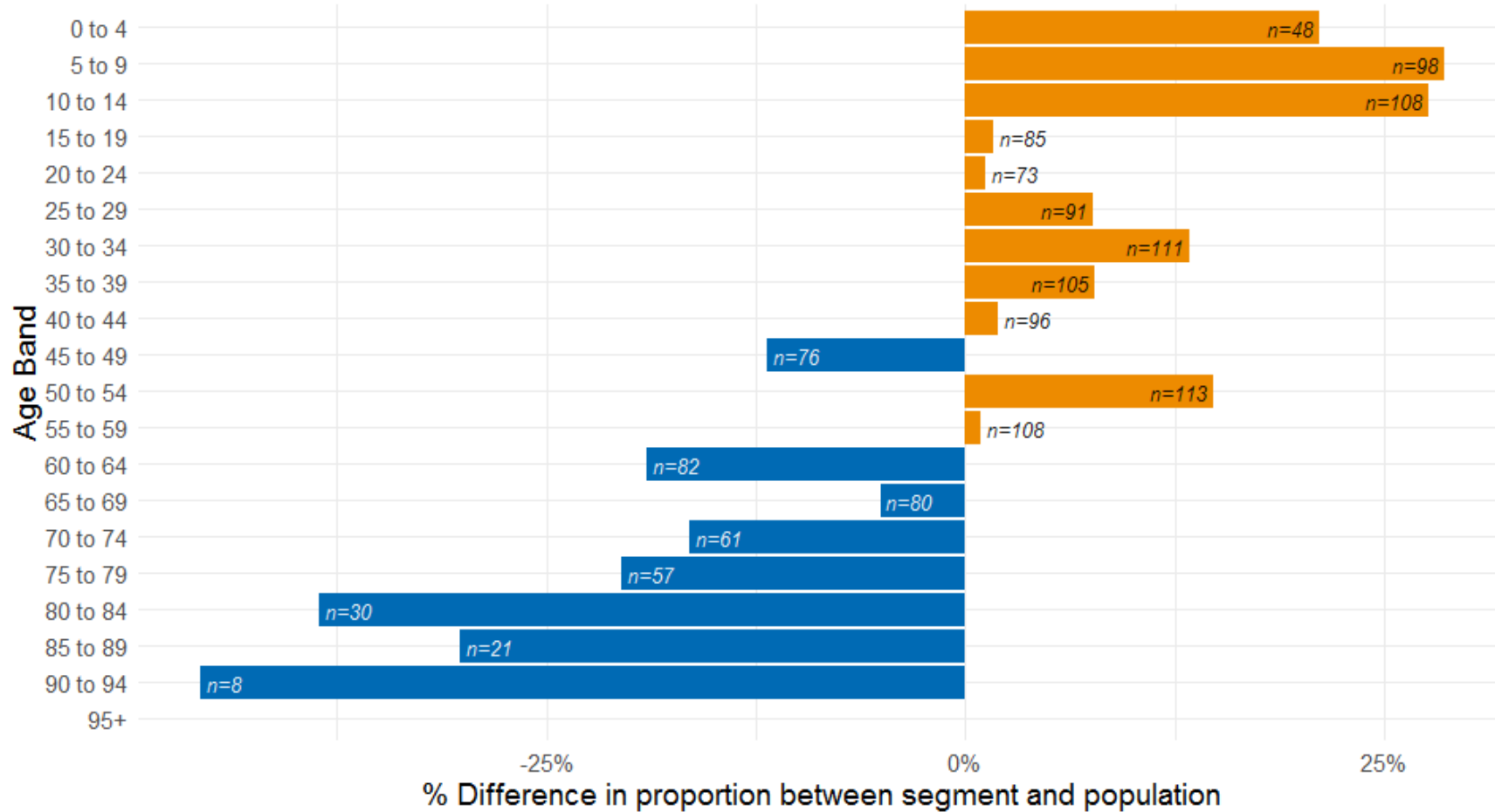
47% of these patients are registered with Royal Primary Care, with a further **10%** with Royal Primary Care West.

| Practice Code | Practice Name | Number of Patients in Ch.003A | PCN | PCN Total |
|---------------|--|-------------------------------|-------------------------------|-----------|
| C81012 | The Surgery at Wheatbridge | 21 | Chesterfield & Dronfield PCN | 573 |
| C81015 | Newbold Surgery | 35 | | |
| C81025 | Dronfield Medical Practice | 2 | | |
| C81044 | Whittington Moor Surgery | 169 | | |
| C81058 | The Brimington Surgery | 181 | | |
| C81070 | Oakhill Medical Practice | 1 | | |
| C81084 | Inspire Health | 45 | | |
| C81089 | Stubley Medical Centre | 10 | | |
| C81649 | Calow and Brimington Practice | 109 | | |
| C81030 | Darley Dale Medical Centre | 2 | | |
| C81101 | Lime Grove Medical Centre | 1 | | |
| C81611 | Ashover Medical Centre | 1 | | |
| C81002 | The Valleys Medical Partnership | 13 | North East Derbyshire PCN | 39 |
| C81091 | Killamarsh Medical Practice | 1 | | |
| C81662 | Barlborough Medical Practice | 25 | | |
| C81033 | Shires Healthcare | 3 | North Hardwick & Bolsover PCN | 10 |
| C81041 | Welbeck Road Surgery | 1 | | |
| C81095 | Emmett Carr Surgery | 6 | | |
| C81051 | The Park Medical Practice | 1 | Oakdale Park PCN | 1 |
| C81045 | Royal Primary Care - West (formerly Chesterfield MP) | 146 | North Derbyshire PCN | 824 |
| Y04995 | Royal Primary Care | 678 | | |



Age: Barrow Hill LSOA

Age Band: Difference from Total Population
Barrow Hill LSOA



This chart shows the **proportion of difference** in 5 year **age band** between the **overall population** and the **Barrow Hill LSOA** population.

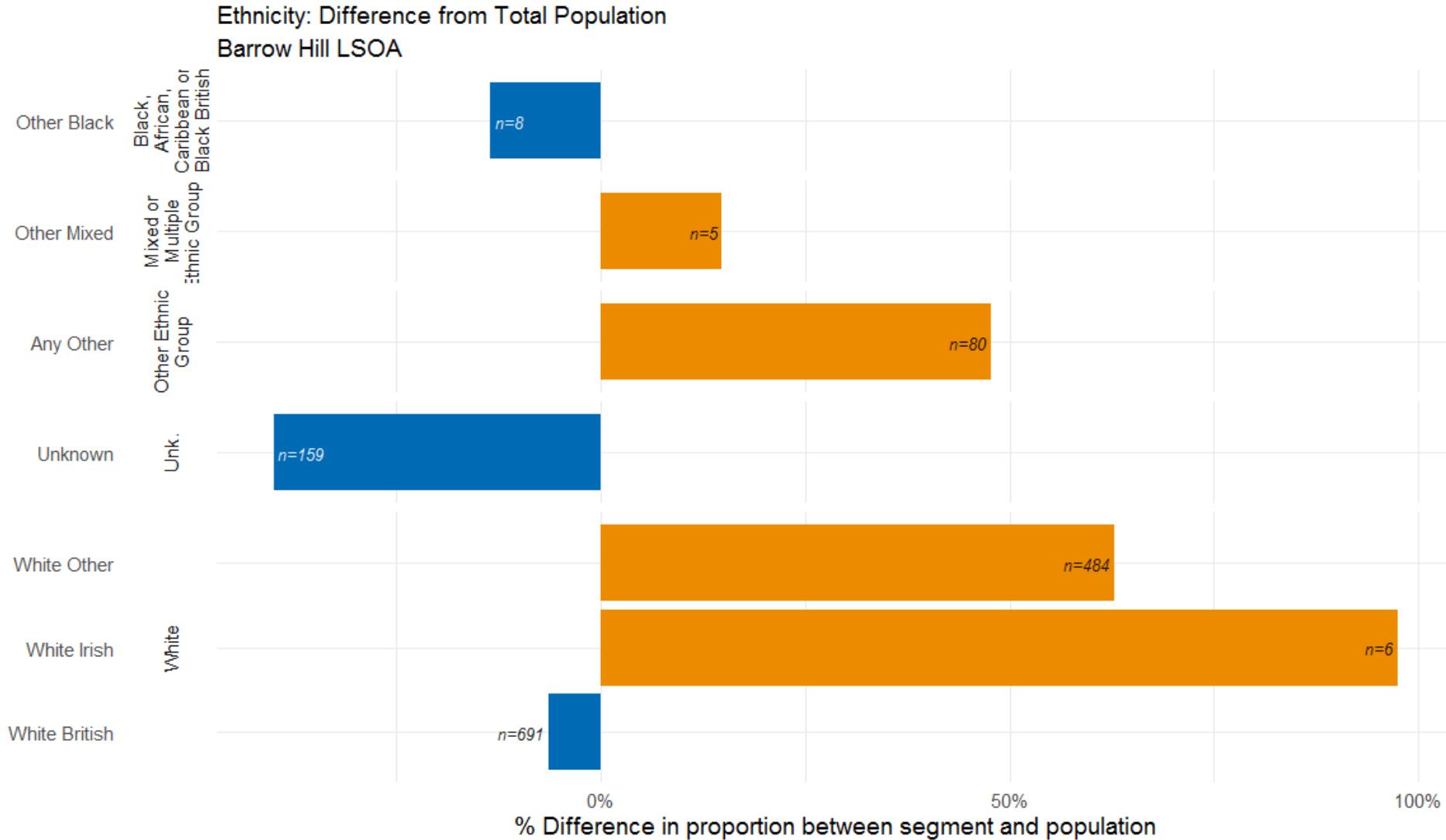
Orange bars show a higher proportion and blue bars show lower. Age bands with less than 5 people in this cohort are not shown.

Taking the 0 to 4 age group as an example:
48 residents of the Barrow Hill LSOA are aged 0 to 4. Proportionally, there are around 20% more patients in this age group in Barrow Hill than in Derbyshire as a whole.

What is this telling us?
Patients in Barrow Hill are younger than Derbyshire in general.



Ethnicity: Barrow Hill LSOA



This chart shows the **proportion of difference** in ethnicity between the **overall population** and the **Barrow Hill LSOA** population.

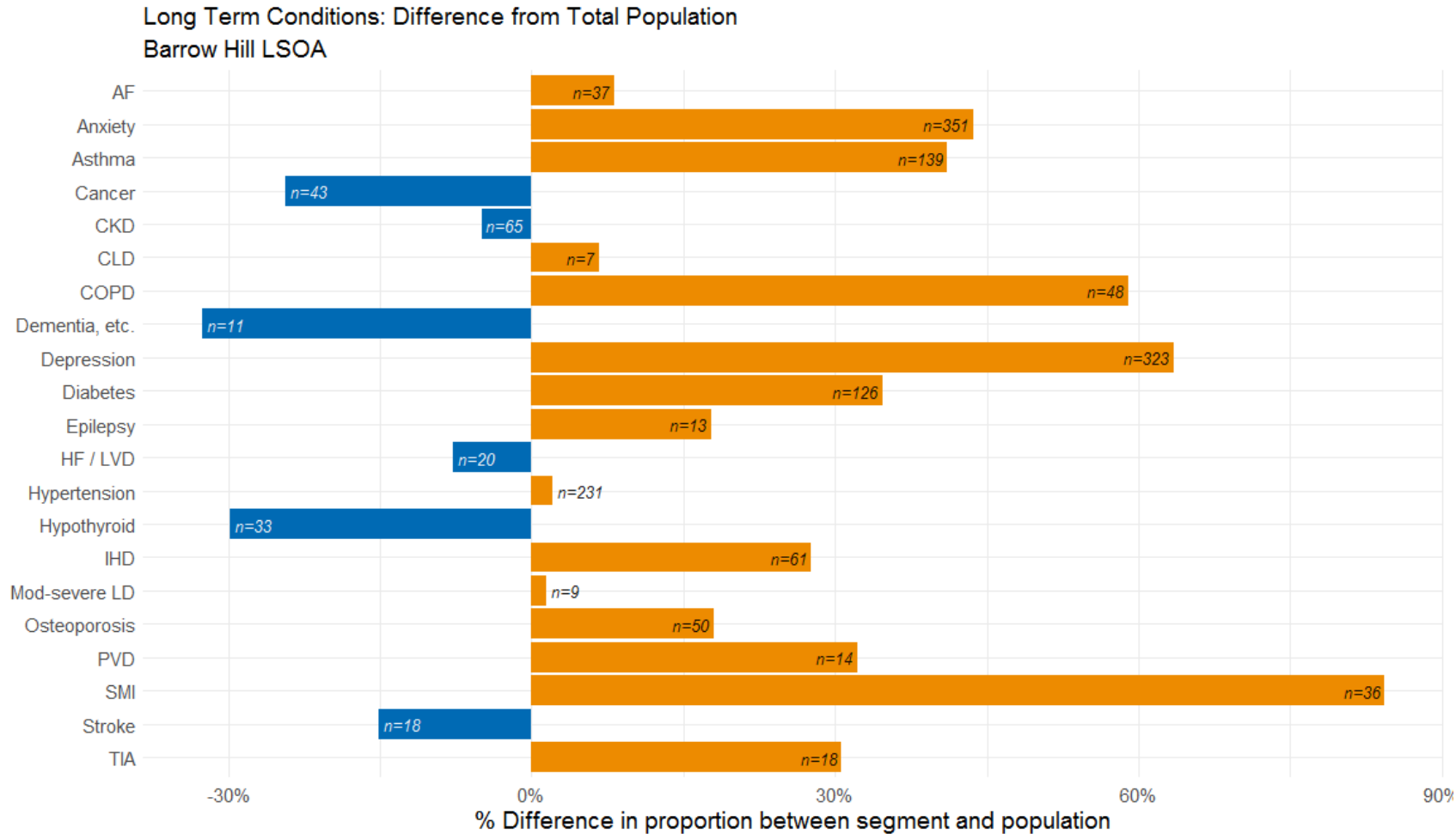
Orange bars show a higher proportion and blue bars show lower. Ethnicities with less than 5 people in this cohort are not shown.

What is this telling us?
Ethnicity recording is higher in this LSOA than within Derbyshire as a whole.

Higher rates of 'White Other' (as opposed to 'White British') within the LSOA.



Long Term Conditions: Barrow Hill LSOA



This chart shows the **proportion of difference** in specific **Long Term Conditions (LTC)** between the **overall population** and the **Barrow Hill LSOA** population.

Orange bars show a higher proportion and blue bars show lower. LTCs with less than 5 people in this cohort are not shown.

The **biggest** difference is in people with **SMI** (2.5%, n=36) which is **84% more common** in this cohort than in the overall population (1.3%).

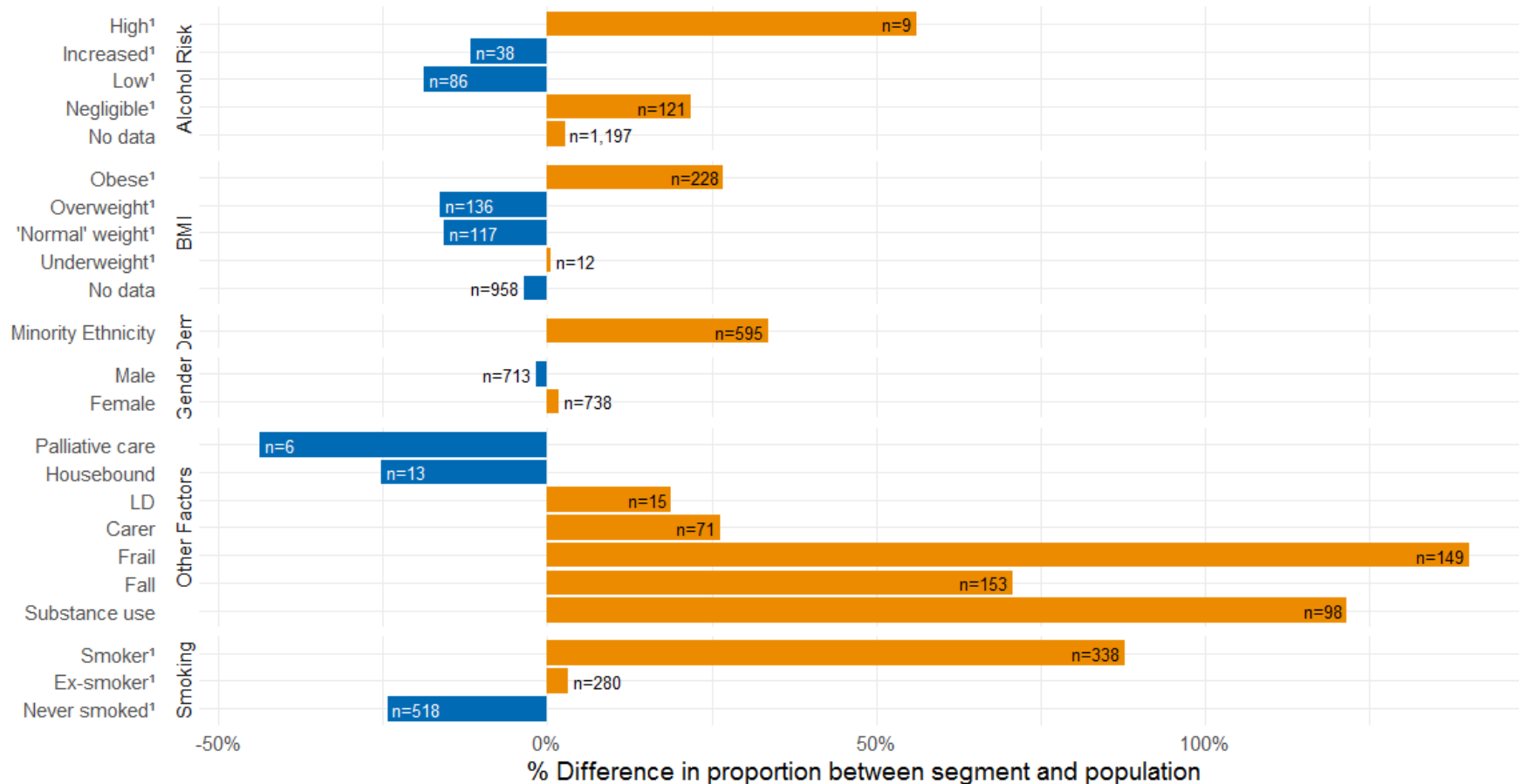
What is this telling us?

High mental health needs within the LSOA (anxiety, depression and severe mental illness)



Other: Barrow Hill LSOA

Demographic & Lifestyle: Difference from Total Population
Barrow Hill LSOA



¹Missing data excluded from denominators

This chart shows the **proportion of difference** in specific **demographic characteristics** between the **overall population** and the **Barrow Hill LSOA** population.

Orange bars show a higher proportion and blue bars show lower. Characteristics with <5 people are not shown. People without recorded data are excluded from some denominators.

The **biggest** difference is in the **Frail** characteristic (10.3%, n=149) which is **140% more common** in this cohort than in the overall population (4.3%).

What is this telling us?

The population of this LSOA is younger than Derbyshire as a whole, yet they have higher rates of frailty and falls.

People within the LSOA are more likely to display risky behaviours (high alcohol use, obesity, substance use, current smoker).

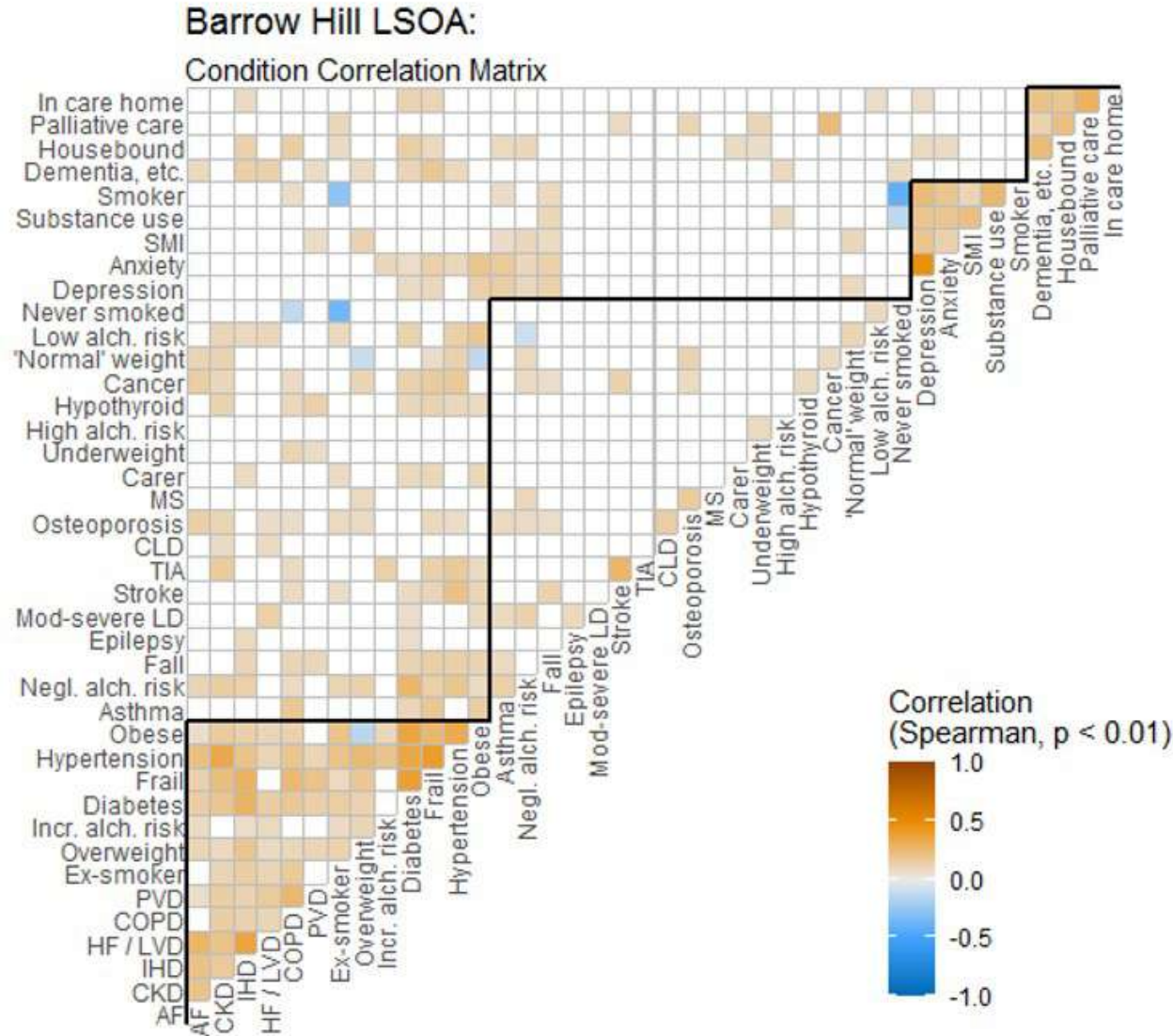


Correlation Plot

- These matrices show **correlations** between primary care demographics.
 - Orange for positive correlation, blue for negative.
 - Non-significant correlations are removed, (*Spearman's Rank* $p > 0.01$)
- The black boxes show clusters of similar correlations.
- Correlation does not imply causation.
- These charts can show which conditions or demographics:
 - are frequently found together.
 - do not occur together commonly.



Correlation Plot: Barrow Hill LSOA



This matrix shows **correlations** between traits of **Barrow Hill LSOA**. Darker colours mean a stronger correlation: orange for positive, and blue for negative. Non-significant correlations are removed.

Correlation does not imply causation.

The **black boxes** are **clusters** of correlations, e.g. Dementia, etc., Housebound, Palliative care, and In care home show similar patterns.

What is this telling us?

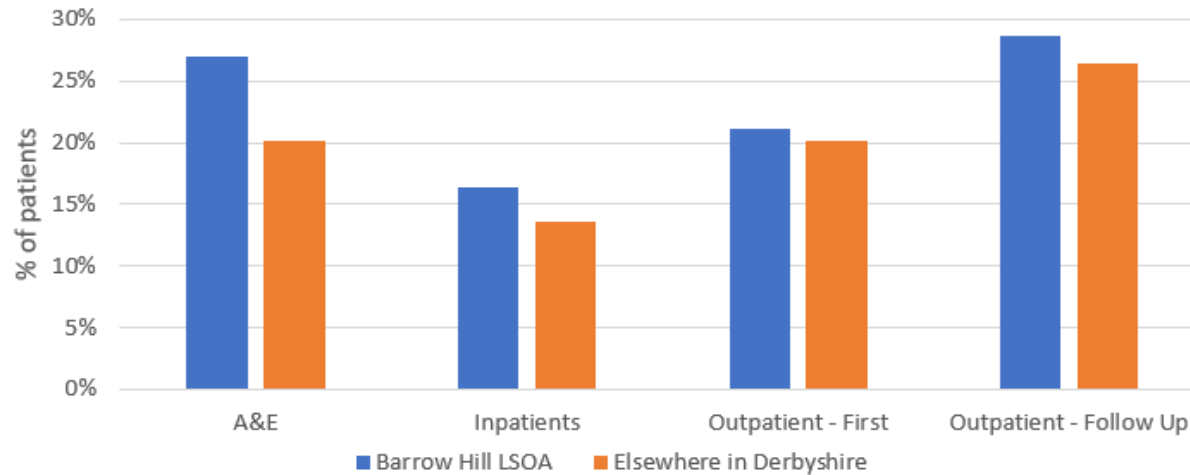
There is a high correlation between depression, anxiety, SMI, substance use and being a current smoker - patients with one mental health condition are likely to have others and they are likely to display risky behaviours.

Diabetes, frailty, hypertension and obesity are highly correlated.

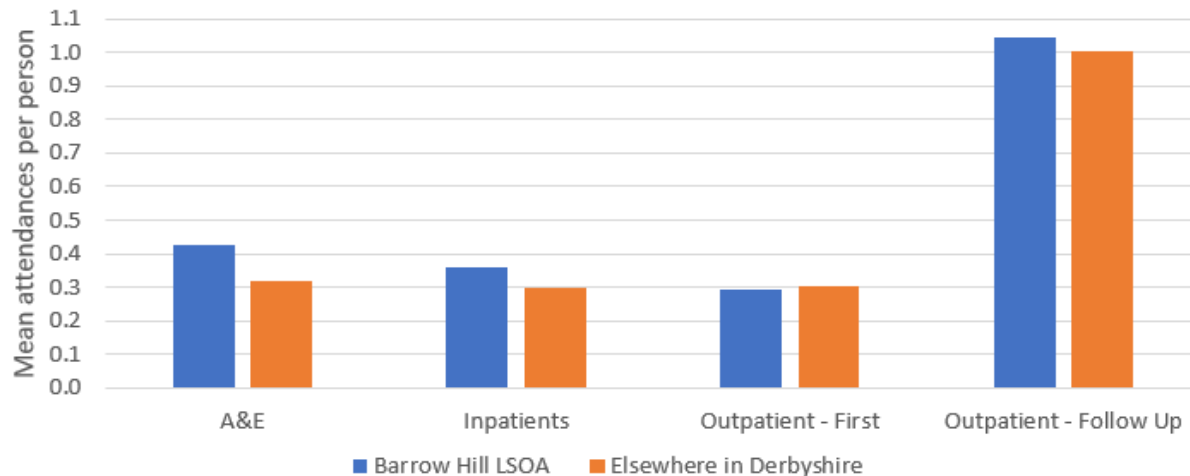


Secondary Care Activity

Proportion of patients with at least one attendance in 2022



Mean number of attendances in 2022



These charts look at secondary care activity for patients residing in the Barrow Hill LSOA and the rest of Derbyshire between January and December 2022.

What is this telling us?

- > Patients in Barrow Hill were more likely to have had contact with secondary care services during 2022 than those living elsewhere in Derbyshire.
- > Over a quarter of patients in the LSOA visited A&E at least once, compared to a fifth of patients in the wider area.

Next Steps

- We are now agreeing the detailed specification and services for Barrow Hill
- Attempting to use the same data approach at Hurst Farm in Matlock
- Focus in Matlock is around community services & peer support groups
- Community Pantry (Farmer's Larder) with integrated support services
- Strong focus on Green Social Prescribing
- Community-led regeneration company with woodland, garden & affordable housing

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