Making use of Census 2021 data in Public Health

for Oxfordshire Analyst Network meeting
20 March 2024

Margaret Melling and Alice Luker
Public Health Intelligence
Oxfordshire County Council

OXFORDSHIRE COUNTY COUNCIL

This presentation

- Census 2021 data on unpaid carers
  - Why this topic matters
  - Census questions and the importance of age standardisation
  - What does the data show?
    - How many carers
    - Who is providing unpaid care
    - Caring and health

- Using Census data in Community Insight Profiles

OXFORDSHIRE COUNTY COUNCIL

Census data on unpaid carers

Why does this topic of unpaid carers matter?

A lot of us are affected directly at some point in our lives.

- Census data shows 8% of residents of Oxfordshire are providing some level of unpaid care. Over a life-time this will be much higher – over 50% of us?

It would cost us (almost) another NHS to replace unpaid carers

There are personal costs for carers

- In Oxfordshire..
  - 43% of carers reported that their caring role had caused financial difficulties in the past 12 months
  - 1 in 5 (21%) of carers felt socially isolated
  - 1 in 5 (20%) of carers had to see their own GP because of the impact of their caring role

Annual cost of

NHS

£120bn

Value of care from unpaid carers

£100bn

Adult Social Care at a glance (nao.org.uk)
Personal Social Services Survey of Adult Carers in England - NHS Digital

OXFORDSHIRE COUNTY COUNCIL

In their own words

My caring role has made my health condition worse and has been the primary reason I can no longer work full time. As a consequence, I now struggle financially, but I do not qualify for any help.

Carers describe caring as..

- Lonely
- Responsible
- Living for someone else
- Difficult
- Tiring
- A duty
- Something you might "resent"

I feel totally on my own

I am beginning to resent my caring role

Caring is very lonely. You always put yourself last and feel guilty if you do something solely for yourself. I love my husband dearly … but I do feel very lonely and responsible for everything, sorry but it's the truth.

I feel utterly trapped and exhausted, often in tears especially when friends talk about their lovely holidays and days out. It is relentless.

Although looking after my wife through her long time illness for the past 4+ years, I have only been registered as a carer for about 6 months. I would say that you give up your own life when you have to be a carer

Caring in Oxfordshire JSNA Insight briefing 2016-17

OXFORDSHIRE COUNTY COUNCIL

Slight change in the Census question..

2011 →

Household Questionnaire
England
Office for National Statistics
2011 Census

14 Do you look after, or give any help or support to family members, friends, neighbours or others because of either:
- long-term physical or mental ill-health/disability?
- problems related to old age?

➔ Do not count anything you do as part of your paid employment

☐ No

☐ Yes, 1 - 19 hours a week

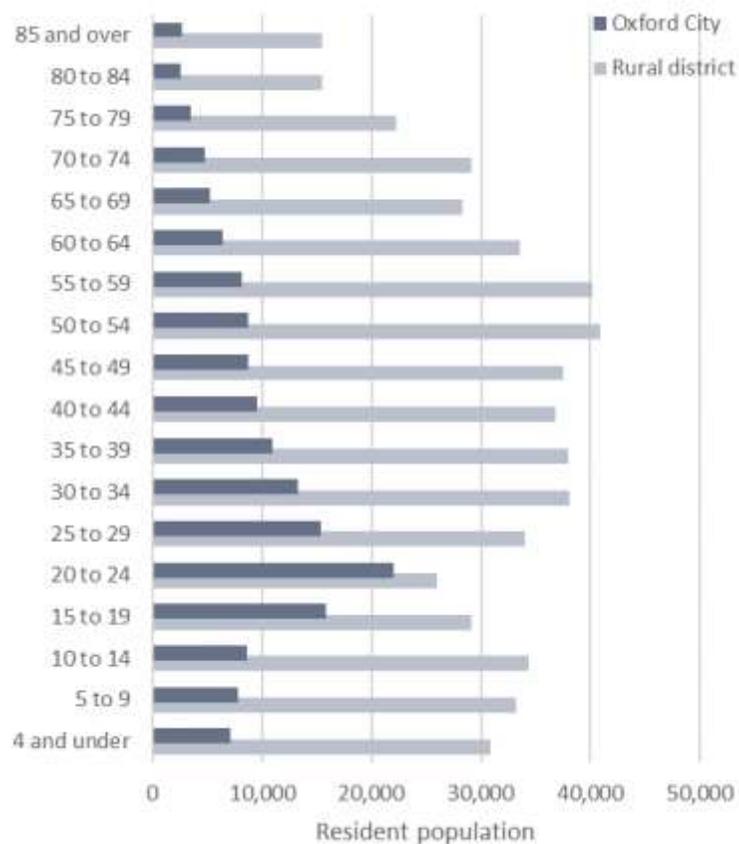☐ Yes, 20 - 49 hours a week

☐ Yes, 50 or more hours a week

census 2021

24 Do you look after, or give any help or support to, anyone because they have long-term physical or mental health conditions or illnesses, or problems related to old age?

➔ Exclude anything you do as part of your paid employment

☐ No

☐ Yes, 9 hours a week or less

☐ Yes, 10 to 19 hours a week

☐ Yes, 20 to 34 hours a week

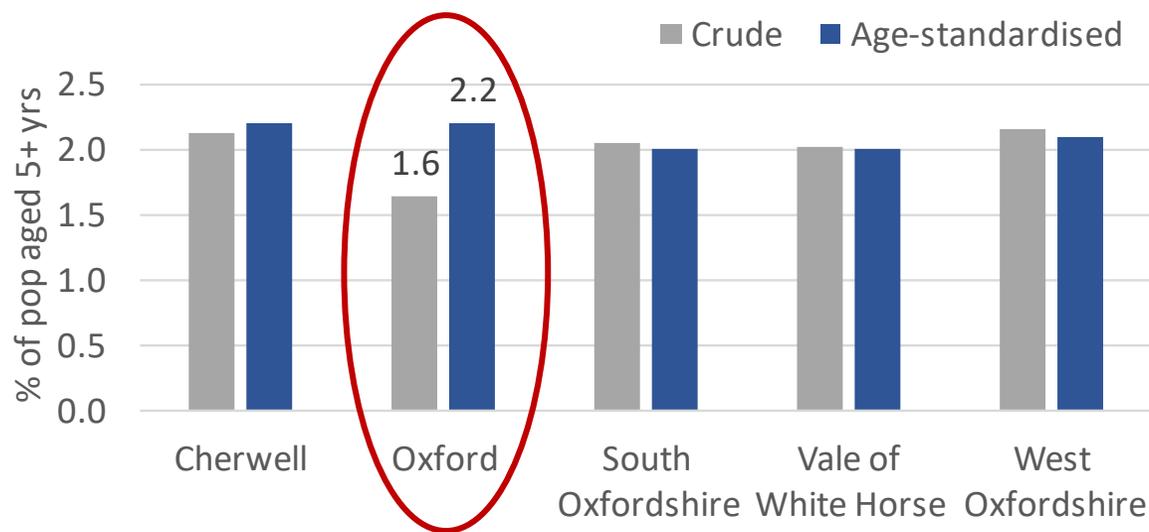☐ Yes, 35 to 49 hours a week

☐ Yes, 50 or more hours a week

Introduction of age standardised data - makes a big difference for Oxford City

Population by age 2021 Census, Oxford City vs Rural districts (Cherwell, South Oxfordshire, Vale of White Horse, West Oxfordshire)

% of people providing unpaid care for 50 or more hours per week - crude percentage vs age-standardised

ONS Census 2021, tables TS039 and TS039ASP from www.nomisweb.co.uk
Age-standardised percentages account for different age structures in populations and are more appropriate than crude percentages when drawing comparisons over time and across areas.
ONS unpaid care   ONS blog
Age-standardised data not available below district level

People providing unpaid care in Oxfordshire

Census 2021

- 52,700 residents of Oxfordshire provided (any level of) unpaid care, of which just under half **(43%, 22,800)** provided 20 or more hours per week[1]

Carer respondents to Social Care survey

- **78% of respondents** to the 2023/24 Adult Social Care carers survey were providing 20 or more hours per week[2]

Number of residents of Oxfordshire aged 5+ providing unpaid care, by age (2021)

Age	Total population	Provides any unpaid care	< 19 hrs per week	20-49 hrs per week	50+ hrs per week	20+ hours per week	% providing 20+ hours per week
Total aged 5+ years	**687,300**	**52,674**	**29,895**	**9,143**	**13,636**	**22,779**	**3.3%**
% of total providing care		*100%*	*57%*	*17%*	*26%*	*43%*	
15 years and under	92,267	983	774	106	103	209	0.2%
16-24	84,669	2,807	1,836	709	262	971	1.1%
25-34	100,796	4,701	2,374	1,245	1,082	2,327	2.3%
35-49	141,780	11,728	6,112	2,437	3,179	5,616	4.0%
50-64	137,993	19,995	13,148	2,974	3,873	6,847	5.0%
65+	129,795	12,460	5,651	1,672	5,137	6,809	5.2%

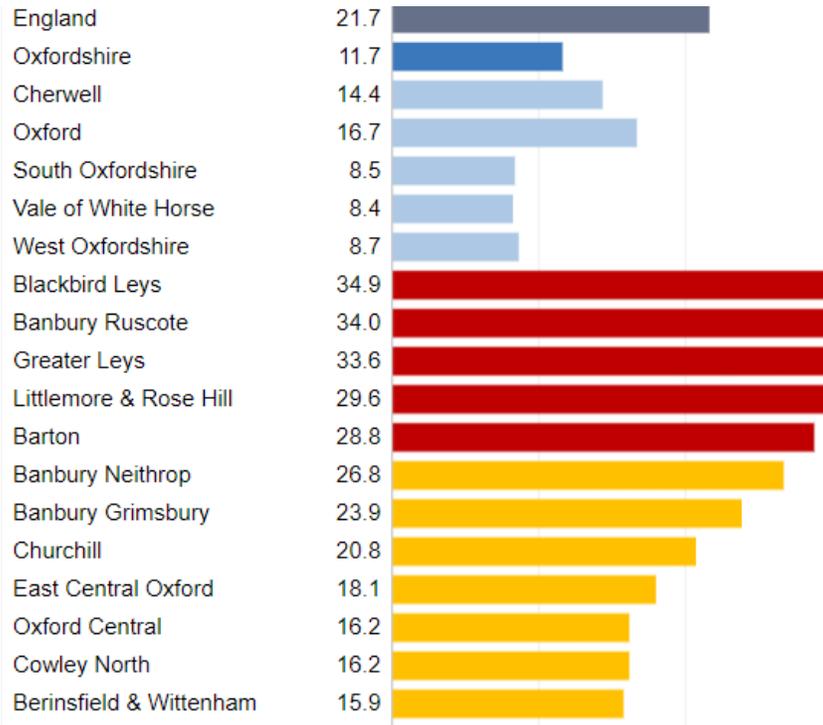▶ *following slides focus on this group providing 20+ hours*

[1] ONS Census 2021, tables TS039 and TS039ASP from www.nomisweb.co.uk;
[2] Personal Social Services: Survey of Adult Carers 2023/24 data return, Oxfordshire County Council

A higher % of people provide unpaid care in the more deprived areas of Oxfordshire
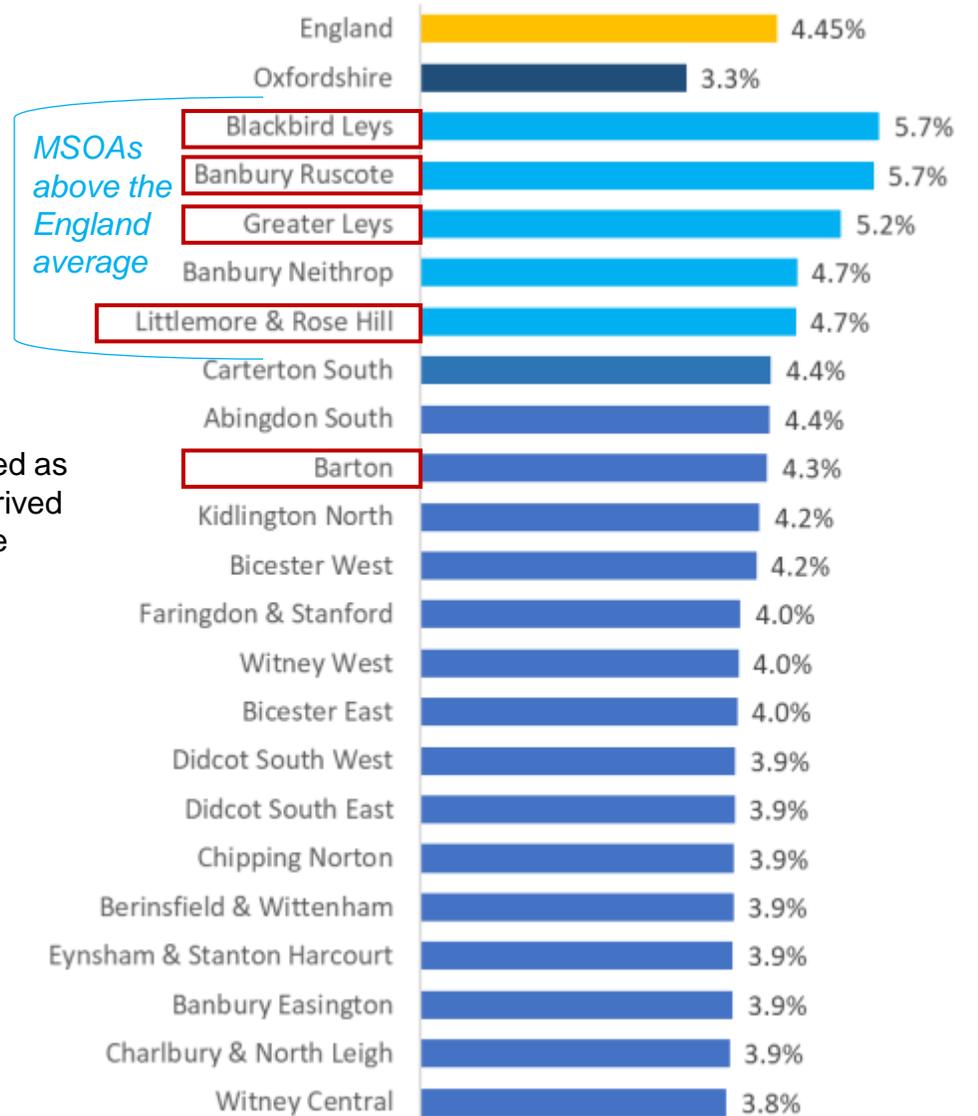
- The five MSOAs ranked as the most deprived had an average of 5.5% residents providing unpaid care for 20+ hours per week, well above the Oxfordshire average of 3.3% and above the England average of 4.5%

Overall deprivation score (IMD 2019)

Area	Score
England	21.7
Oxfordshire	11.7
Cherwell	14.4
Oxford	16.7
South Oxfordshire	8.5
Vale of White Horse	8.4
West Oxfordshire	8.7
Blackbird Leys	34.9
Banbury Ruscote	34.0
Greater Leys	33.6
Littlemore & Rose Hill	29.6
Barton	28.8
Banbury Neithrop	26.8
Banbury Grimsbury	23.9
Churchill	20.8
East Central Oxford	18.1
Oxford Central	16.2
Cowley North	16.2
Berinsfield & Wittenham	15.9

MSOAs ranked as the most deprived in Oxfordshire

% of people providing unpaid care for 20+ hours per week

Area	%
England	4.45%
Oxfordshire	3.3%
Blackbird Leys	5.7%
Banbury Ruscote	5.7%
Greater Leys	5.2%
Banbury Neithrop	4.7%
Littlemore & Rose Hill	4.7%
Carterton South	4.4%
Abingdon South	4.4%
Barton	4.3%
Kidlington North	4.2%
Bicester West	4.2%
Faringdon & Stanford	4.0%
Witney West	4.0%
Bicester East	4.0%
Didcot South West	3.9%
Didcot South East	3.9%
Chipping Norton	3.9%
Berinsfield & Wittenham	3.9%
Eynsham & Stanton Harcourt	3.9%
Banbury Easington	3.9%
Charlbury & North Leigh	3.9%
Witney Central	3.8%

MSOAs above the England average
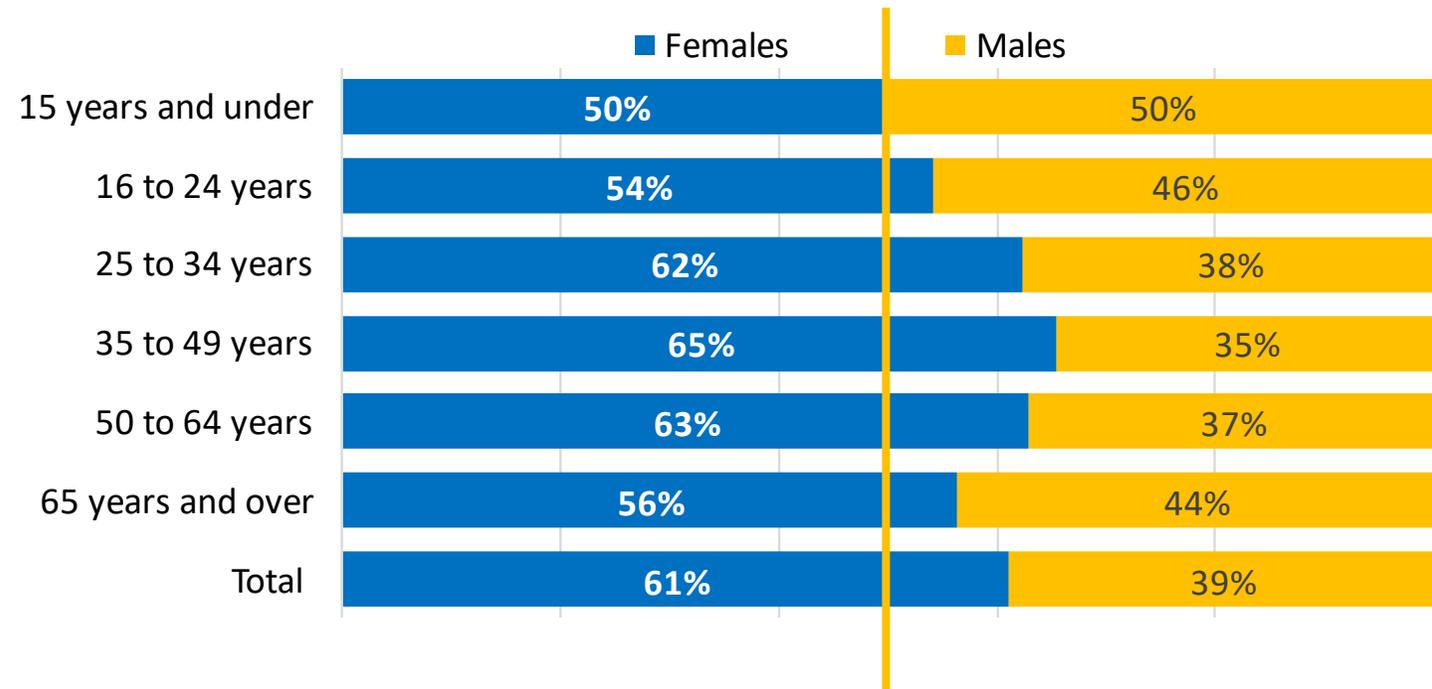
[1] IMD 2019 MHCLG
[2] ONS Census 2021, table TS039 from www.nomisweb.co.uk, percentage of all people aged 5+.

Females more likely to be providing unpaid care

- Other than the youngest age group, females more likely than males to be carers in Oxfordshire (and England)

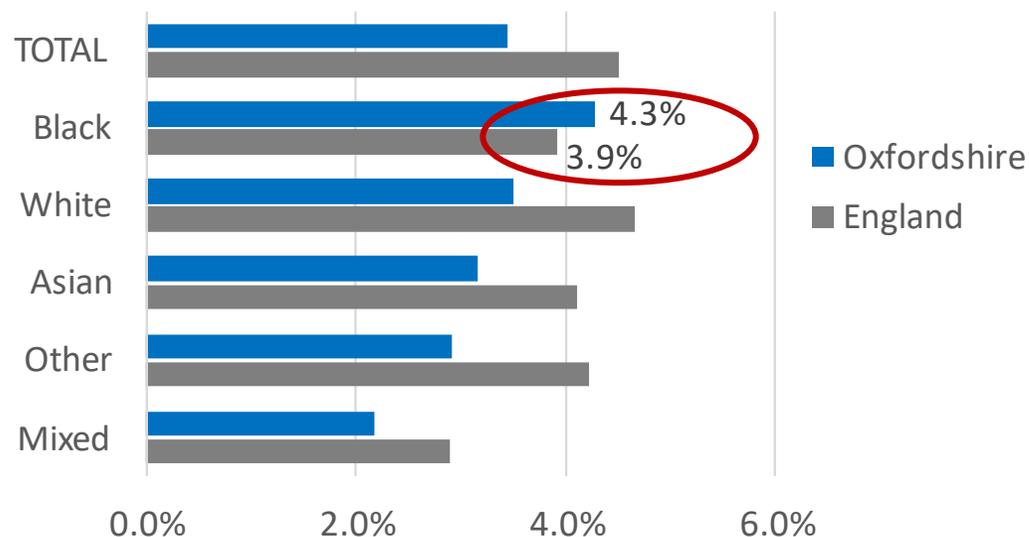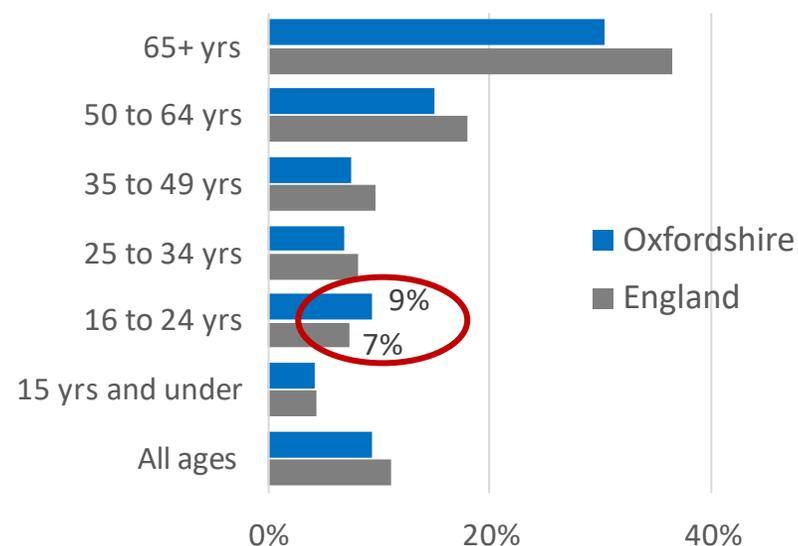**% of residents (aged 5+) providing unpaid care for 20+ hours per week by sex, Oxfordshire**

Age group	Females	Males
15 years and under	50%	50%
16 to 24 years	54%	46%
25 to 34 years	62%	38%
35 to 49 years	65%	35%
50 to 64 years	63%	37%
65 years and over	56%	44%
Total	61%	39%

OXFORDSHIRE COUNTY COUNCIL

Providing unpaid care by ethnic group

- Oxfordshire residents of a black ethnic background were more likely than other backgrounds to be providing 20 or more hours of unpaid care (564 of 13,994, 4.3%)

- This was above the proportion for England residents of a black background (3.8%)

- Overall residents from a black background in Oxfordshire are less likely to be living with a disability than in England, other than in the age group 16-24 years.

% of residents (aged 5+) in households* providing 20 or more hours per week of unpaid care, by broad ethnic group

% of residents from a Black background with disabilities, Oxfordshire and England

ONS Census 2021 from Create a custom dataset - Office for National Statistics (ons.gov.uk)
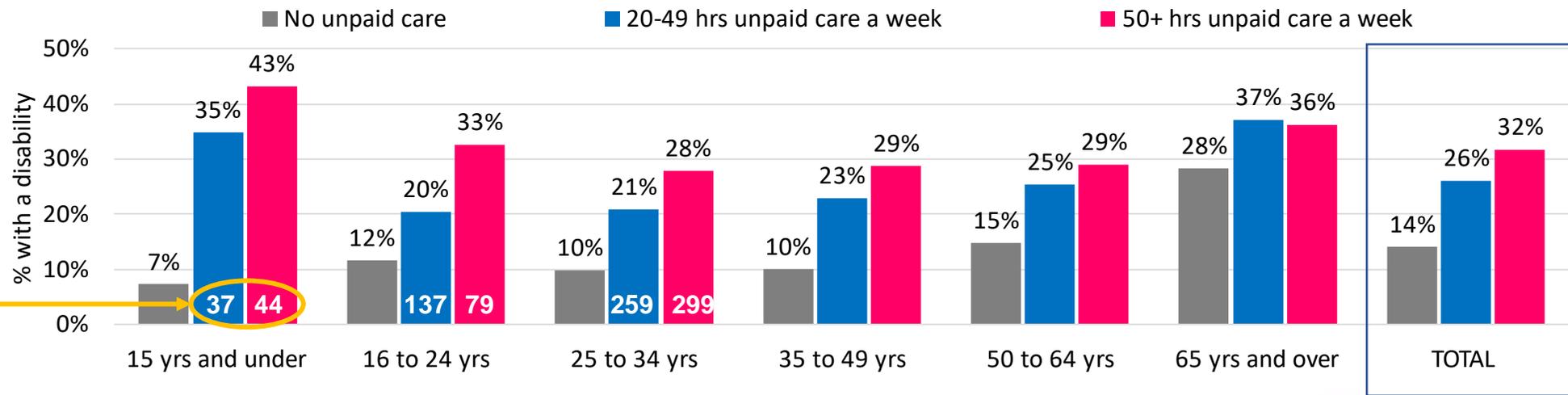*not including the population of communal establishments including student halls of residence

Caring and health

- People providing unpaid care are in poorer health than those providing no unpaid care
- The gap is greatest for young carers

% of residents with a long-term health condition by age and provision of unpaid care in Oxfordshire

Legend:
- No unpaid care
- 20-49 hrs unpaid care a week
- 50+ hrs unpaid care a week

Y-axis: % with a disability

15 yrs and under: 7%, 35%, 43% (counts: 37, 44)
16 to 24 yrs: 12%, 20%, 33% (counts: 137, 79)
25 to 34 yrs: 10%, 21%, 28% (counts: 259, 299)
35 to 49 yrs: 10%, 23%, 29%
50 to 64 yrs: 15%, 25%, 29%
65 yrs and over: 28%, 37%, 36%
TOTAL: 14%, 26%, 32%

Count of people with long-term health condition providing unpaid care

ONS Census 2021 from Create a custom dataset - Office for National Statistics (ons.gov.uk)
People in households. People who assessed their day-to-day activities as limited by long-term physical or mental health conditions or illnesses are considered disabled. This definition of a disabled person meets the harmonised standard for measuring disability and is in line with the Equality Act (2010).

OXFORDSHIRE COUNTY COUNCIL

Using Census data in Community Insight Profiles

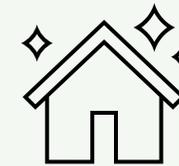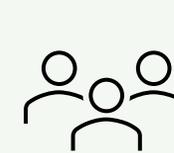# DPH Annual report highlighted 10 areas of Oxfordshire - leading to a programme of Community Insight Profiles
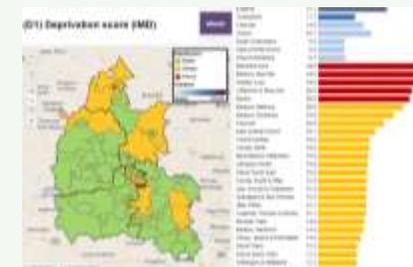

The 10 most deprived wards in Oxfordshire

1 Northfield Brook
2 Banbury Ruscote
3 Rose Hill and Iffley
4 Blackbird Leys
5 Banbury Cross and Neithrop
6 Banbury Grimsbury and Hightown
7 Carfax
8 Barton and Sandhills
9 Abingdon Caldecott
10 Littlemore

Community Insight Profiles

Community insights   **Community assets**

Community statistics

Increasing use of Census deprivation rather than IMD

- In our Public Health Intelligence team, we have been increasingly using census household deprivation data as a measure of deprivation instead of IMD

- Advantages to using Census Household Deprivation:
  - Provides more granular insight into what is happening at individual household level and therefore is able to capture deprivation hotspots in rural areas
  - Can be used as a direct measure of deprivation
  - Able to measures change over time using the 2011 Census survey
  - Data contained within the measure is more recent than the IMD (which is based on data from 2011 to 2016)
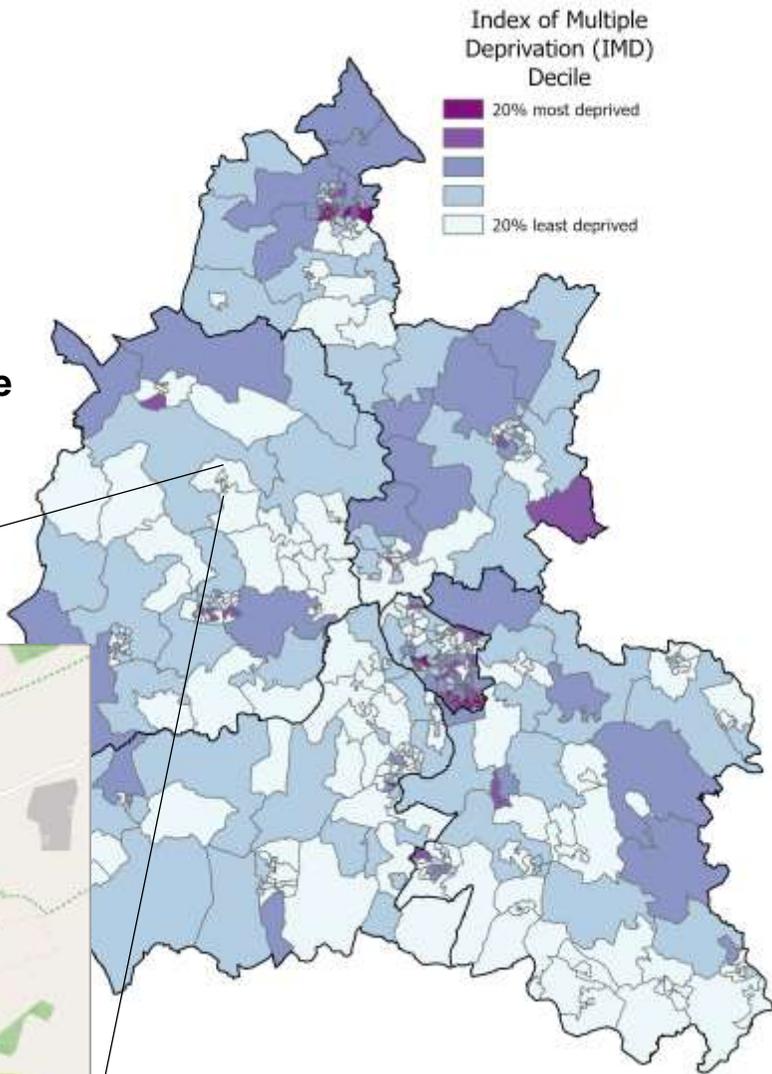
See [Household deprivation variable: Census 2021 - Office for National Statistics (ons.gov.uk)](https://ons.gov.uk)

The dimensions of deprivation used to classify households are indicators based on four selected household characteristics:
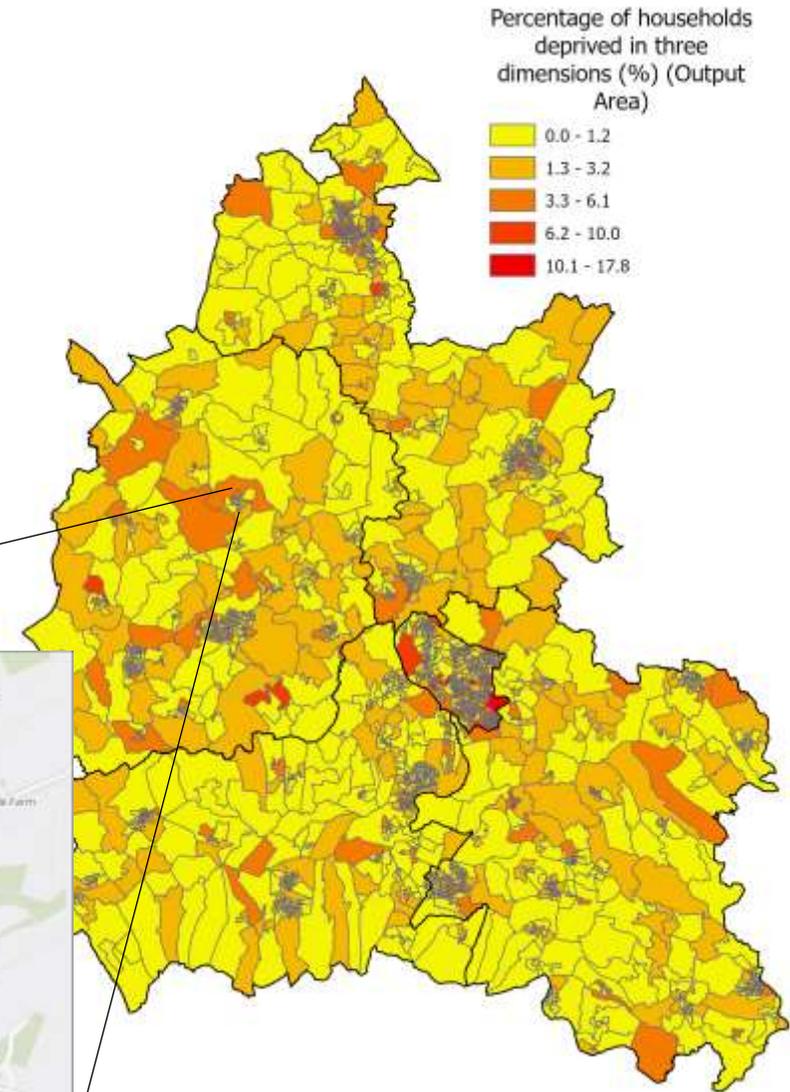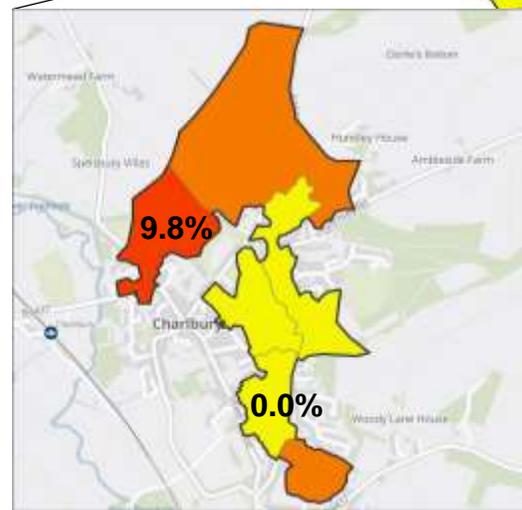
- Education - A household is classified as deprived in the education dimension if no one has at least level 2 education and no one aged 16 to 18 years is a full-time student.
- Employment - A household is classified as deprived in the employment dimension if any member, not a full-time student, is either unemployed or economically inactive due to long-term sickness or disability.
- Health - A household is classified as deprived in the health dimension if any person in the household has general health that is bad or very bad or is identified as disabled.
- Housing - A household is classified as deprived in the housing dimension if the household's accommodation is either overcrowded, in a shared dwelling, or has no central heating.

**Charlbury
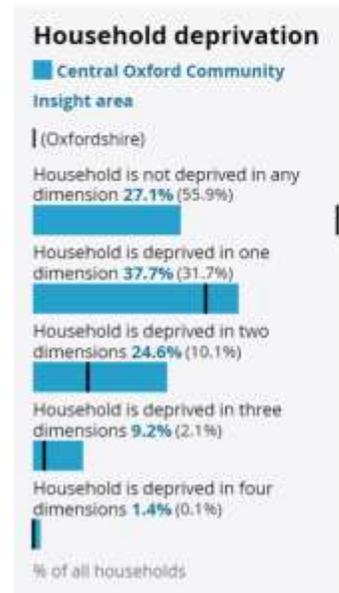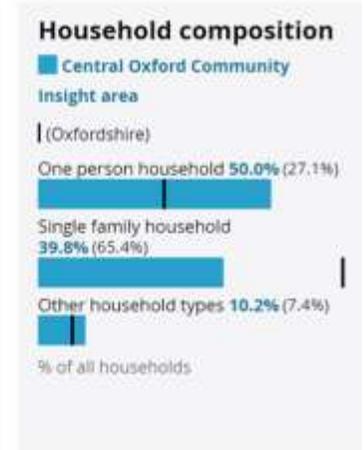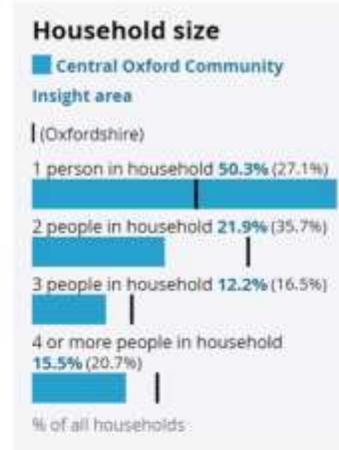LSOA West Oxfordshire 005B
Overall IMD Score: 9
Rank 26,735**

Index of Multiple Deprivation (IMD) Decile
- 20% most deprived
- 20% least deprived

**Charlbury
LSOA West Oxfordshire 005B
Households deprived in three dimensions = 2.8%
- variation between each Output Area**

Percentage of households deprived in three dimensions (%) (Output Area)
- 0.0 - 1.2
- 1.3 - 3.2
- 3.3 - 6.1
- 6.2 - 10.0
- 10.1 - 17.8

9.8%

0.0%

MHCLG English Indices of Deprivation
ONS Census 2021, table TS011 from www.nomisweb.co.uk;

ONS Census – Tenure and Social Housing

- Housing is one of the **wider determinants of health** and tenure is strongly related to levels of **poverty and living standards**.

- People living in social housing tend to be more disadvantaged than those in other tenures.

- Using the percentage of socially rented households to identify areas of need using mapping and comparing levels to district and County averages.

Annex – unpaid care data by district

People providing 20+ hours of unpaid care by age and district

People who provide 20+ hours of unpaid care as % of all usual residents aged 5 and over

	Cherwell	Oxford	South Oxfordshire	Vale of White Horse	West Oxfordshire	Oxfordshire	England
Total	3.6%	2.9%	3.2%	3.4%	3.5%	3.3%	4.4%
Aged 15 years and under	0.2%	**0.3%**	0.2%	0.2%	0.2%	0.2%	0.3%
Aged 16 to 24 years	**1.6%**	0.8%	1.1%	1.3%	**1.6%**	1.1%	1.8%
Aged 25 to 34 years	2.5%	2.0%	2.2%	2.5%	**2.7%**	2.3%	3.3%
Aged 35 to 49 years	4.0%	**4.4%**	3.4%	4.0%	4.1%	4.0%	5.3%
Aged 50 to 64 years	5.2%	**5.7%**	4.5%	4.8%	4.7%	5.0%	6.7%
Aged 65 years and over	**5.5%**	5.3%	5.2%	5.1%	5.1%	5.2%	6.5%

Highlighting highest % by age group

People who provide 20+ hours of unpaid care (count)

	Cherwell	Oxford	South Oxfordshire	Vale of White Horse	West Oxfordshire	Oxfordshire	England
Total	5,393	4,528	4,577	4,451	3,832	22,779	2,374,540
Aged 15 years and under	46	47	45	37	33	209	20,861
Aged 16 to 24 years	225	292	141	159	155	971	108,925
Aged 25 to 34 years	571	565	384	442	365	2,327	254,920
Aged 35 to 49 years	1,346	1,281	1,007	1,101	881	5,616	578,551
Aged 50 to 64 years	1,669	1,333	1,398	1,316	1,132	6,847	736,321
Aged 65 years and over	1,536	1,010	1,602	1,396	1,266	6,809	674,962