Contents

Introduction

Under the Local Government and Public Involvement in Health Act 2007 and amendments under the Health and Social Care Act 2012, Local Authorities and Clinical Commissioning Groups, through Health and Well Being Boards, have equal and joint duties to prepare Joint Strategic Needs Assessments (JSNAs). JSNAs are intended to provide an assessment of local health and social care needs both now and in the future. It is intended that the needs identified in a JSNA will inform the priorities set within Joint Health and Well Being Strategies and be the starting point for informing health and social care commissioning interventions.

The last JSNA produced in Bury was completed in November 2010. This document is intended to refresh that one; updating both the datasets it contained along with the priorities which are highlighted from the analysis. As this document is a refresh it is not intended to replicate the format of the 2010 JSNA. Principally this document will highlight health and wellbeing needs that have emerged since the previous JSNA, trends that continue to be of concern and provide analysis from datasets that have subsequently become available.

In particular the aims of the JSNA refresh are to:

- Describe the analyses of data to show the health and wellbeing status of local communities;
- Define where inequalities exist;
- Highlight key findings based on the information and evidence collected;
- Identify changes that have occurred and what these changes mean for Bury;
- Identify areas for further analysis and exploration.

Throughout the document the impact of deprivation and social inequalities upon health and wellbeing will be stressed. This analysis will focus upon how the various datasets link together and assess the potential impact they make. Protected characteristics will also be presented. There are dedicated sections on maternity (Pregnancy and Early Years) and disability. Inequalities relating to age, gender, ethnicity, religion, sexual orientation and gender identity are summarised at the end of each chapter where appropriate.

One key way in which links will be displayed will be the usage of the Department of Communities and Local Government's Index of Multiple Deprivation. This index is constructed around the concept that deprivation itself is comprised of many different aspects. These aspects are formed into domains in the index. These domains, and the indicators which are contained within them, are calculated for small areas known as Lower Super Output Areas (LSOAs). These areas allow variations in these deprivation factors to be displayed within wards highlighting areas of relative deprivation.

In addition the domain 'scores' are also consolidated to provide an overall measure of deprivation for the wards and borough as a whole.

As an example within Bury these variations show that whilst East, Moorside, Radcliffe West and Besses wards are 'most' deprived they all have LSOAs of relative affluence. In contrast Unsworth is the 7th least deprived ward by average of LSOA ranking, but yet has one of the top 10% most deprived LSOAs inside its boundaries.

In this document each domain is linked to the most relevant theme. This will be done by correlating analysis with the deprivation index where possible to illustrate links between deprivation and health outcomes.

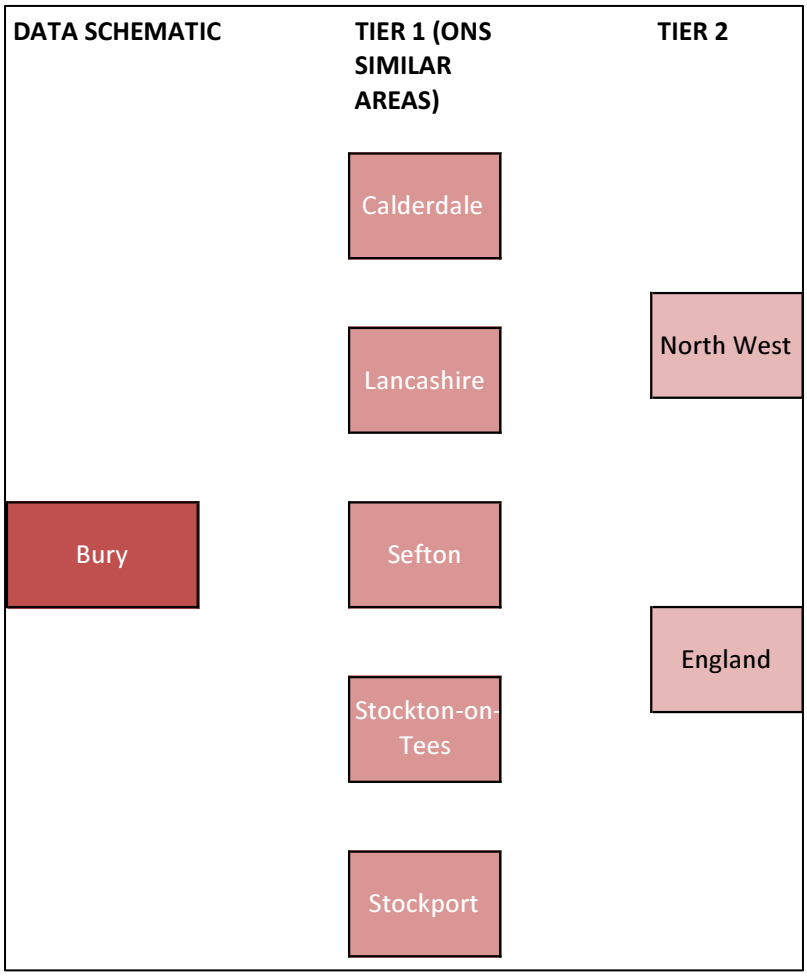
The table below also provides an overall summary position of each of Bury's electoral wards. This summary table is for the overall combined deprivation score. It also displays the minimum (least deprived) and maximum (most deprived) scores within the ward, as well as the variance (range) between these two extremities. Nationally scores vary from 0.53 to 87.80.

Ward	Number of LSOAs	Min	Max	Average	Range
East	7	25.2	57.3	40.0	32.1
Moorside	7	25.7	68.5	39.5	42.8
Radcliffe West	7	18.9	45.5	32.3	26.6
Besses	6	12.6	55.3	30.9	42.7
Redvales	7	16.3	41.5	29.0	25.2
Radcliffe East	7	21.7	40.3	28.1	18.6
St. Mary's	7	8.3	44.9	23.6	36.6
Radcliffe North	8	8.4	57.7	20.6	49.3
Holyrood	7	9.5	36.9	19.9	27.4
Sedgley	8	12.7	31.1	18.8	18.4
Unsworth	7	6.9	51.0	18.4	44.1
Elton	7	8.7	31.2	16.8	22.8
Church	7	7.2	33.6	14.3	26.4
Pilkington Park	7	6.6	24.5	12.6	17.9
Ramsbottom	8	4.3	25.7	12.5	21.4
Tottington	7	7.3	15.4	11.9	8.1
North Manor	6	2.2	17.4	9.8	15.2

The themes used within this document are based upon a life approach, showing the inequalities that exist at each stage of an individual's development, each having their own chapter. They are used as a way of grouping together similar datasets; allowing linkages between them to be analysed more easily. These themes are:

- Pregnancy and Early Years;
- Children and Young People;
- Lifestyle and the Living Environment;
- Work and Welfare;
- Vulnerability; and
- Ill Health and Mortality.

Within the report only key variations and inequalities are highlighted. This will partly be undertaken by the use of relevant GIS maps. These maps will be used to illustrate inequalities by data quintile (20% proportions of the data range). A guide map showing major settlements, road networks and ward boundaries is presented at the end of this section. The data will also be displayed, where appropriate and possible, in tables which will contain comparisons built on North West and England figures and similar areas. These similar areas are drawn from analysis compiled by the Office for National Statistics which aims to group local authorities together. The format for the comparisons is displayed below including the similar areas used. In all of these tables explanatory notes on the data they contain are provided in the footnotes.



Population Profile

According to the 2011 Census Bury's population is 185,100. This represents an increase of almost 5,000 compared with 2001. Of this population 51.1% are female, a slightly higher proportion than nationally. 20.0% of the population are under 16 and 64.0% are of working age. This population is projected to increase to nearly 200,000 by 2021. It is interesting to note that there are currently 196,017 people registered with GP practices within Bury, a substantially higher figure. This reflects the fact that many people choose to access GP services outside of their residential Local Authority.

In terms of religion, 62.7% of Bury's residents consider themselves to be Christian. There are also sizeable Muslim (6.1%) and Jewish (5.6%) communities within the Borough. Indeed Sedgley has the 7th largest Jewish population by ward nationally (4,748). Just under a quarter of residents did not indicate any religious affiliation.

In relation to the ethnic profile of the population, 89.2% classify themselves as white. The next largest ethnic group is Asian at 7.1%. Though the non-white population has increased since the last census it remains proportionally lower than nationally. There is a degree of variance in the population of each ward; these are displayed below.

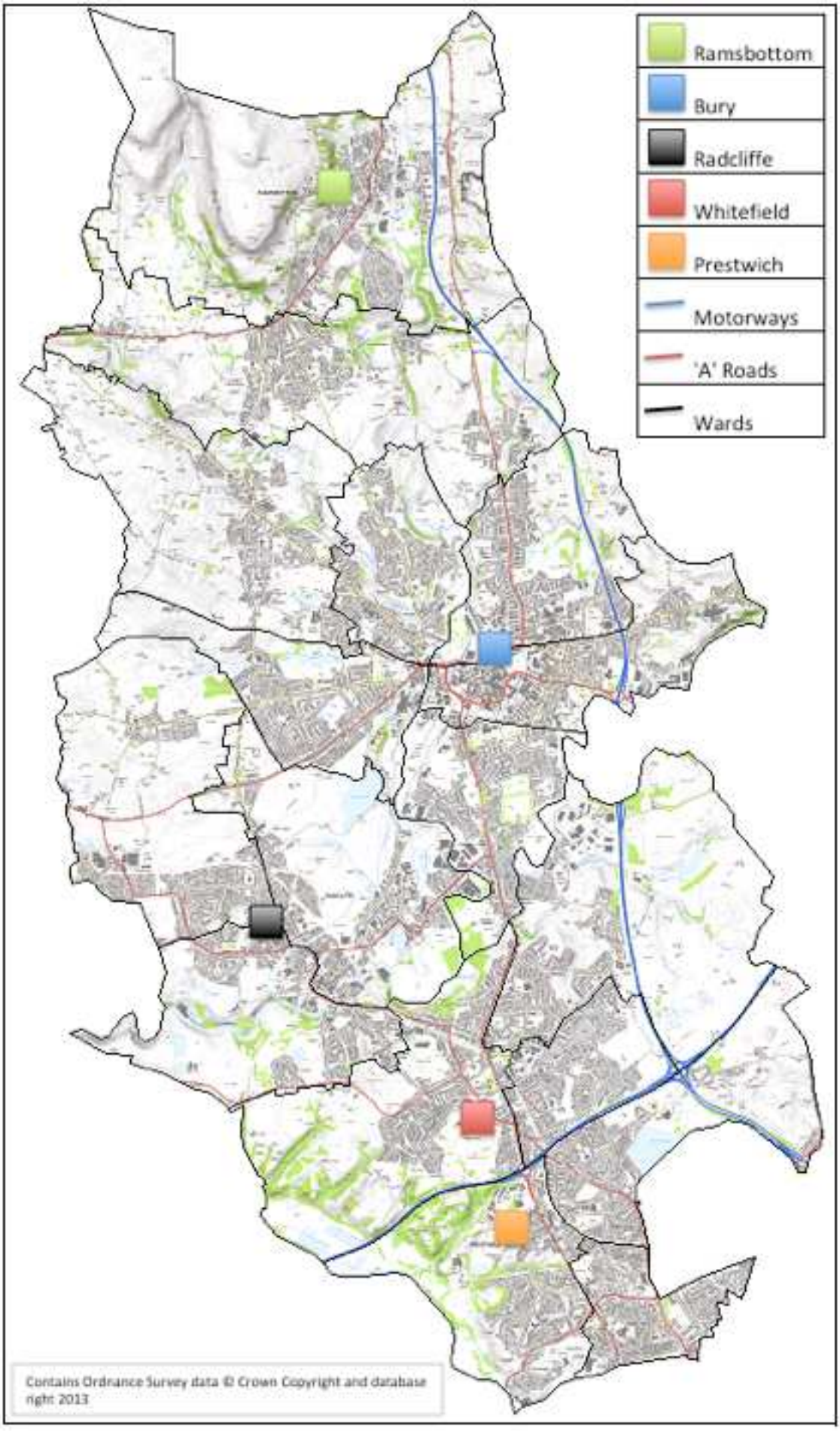
Ward Name	Total	Male	Female	White	Mixed	Asian	Black	Other
Besses	10,664	47.7%	52.3%	88.3%	3.1%	4.4%	3.4%	0.8%
Church	10,345	48.6%	51.4%	93.7%	1.2%	4.0%	0.7%	0.3%
East	10,579	49.6%	50.4%	72.4%	2.4%	22.5%	1.7%	1.0%
Elton	11,464	48.7%	51.3%	93.0%	1.8%	4.1%	0.7%	0.3%
Holyrood	11,162	49.6%	50.4%	88.6%	2.3%	6.5%	1.4%	1.2%
Moorside	11,985	49.7%	50.3%	83.1%	1.9%	12.2%	1.9%	0.9%
North Manor	9,859	48.5%	51.5%	97.7%	1.1%	0.8%	0.2%	0.1%
Pilkington Park	9,787	47.9%	52.1%	90.7%	1.5%	5.8%	0.9%	1.2%
Radcliffe East	11,301	49.4%	50.6%	92.8%	1.8%	4.2%	0.7%	0.5%
Radcliffe North	11,171	48.5%	51.5%	96.0%	1.0%	2.1%	0.7%	0.2%
Radcliffe West	11,137	48.9%	51.1%	92.7%	2.1%	3.4%	1.1%	0.6%
Ramsbottom	11,717	50.1%	49.9%	95.7%	1.5%	2.4%	0.4%	0.1%
Redvales	11,483	49.4%	50.6%	73.9%	2.1%	21.9%	1.2%	1.0%
Sedgley	12,970	49.5%	50.5%	81.9%	2.1%	12.0%	1.4%	2.5%
St Mary's	10,158	48.1%	51.9%	89.0%	2.4%	5.9%	1.9%	0.8%
Tottington	9,786	48.7%	51.3%	97.5%	1.0%	1.2%	0.2%	0.1%
Unsworth	9,492	48.6%	51.4%	92.7%	1.4%	4.8%	0.5%	0.6%
Total	**185,060**	**49.0%**	**51.0%**	**89.2%**	**1.8%**	**7.1%**	**1.1%**	**0.7%**

Sexual identity and gender orientation are not captured by the Census. However, the annual survey conducted by the Office for National Statistics indicates that 1.1% of the UK are gay or lesbian, with 0.4% bisexual and a further 0.3% classified as 'other'.[1] Applying these proportions to the Bury population would indicate that there are approximately 3332 residents who are lesbian, gay, bisexual or transgender (LGBT). By contrast,

1 Depending on the respondent's perception of their gender identity, this category could include transgender.

Government estimates from 2005 placed the proportion far higher at 6%. This would mean that there are in excess of 11,000 LGBT residents in the Borough.

Guide Map of Bury



Pregnancy and Early Years

The period ranging from conception to five years old is crucial in the establishment of the health trajectory of a child, but the factors influencing their development are necessarily outside of the child's control. Premature births/low birth weight and factors such as smoking and drinking in pregnancy can have a key role in determining whether a child will enjoy a good quality of life or even survive infancy. Indeed, the nature of the health inequalities experienced in early years are likely to result, and be reflected, in inequalities in adulthood.

Social inequalities are also fundamental considerations. In Bury, deprivation is lower than the national average, but there are still estimated to be 7000 children under 16 living in poverty (19.1% compared to 21.9% nationally).[2] With a different trajectory to their peers in less deprived neighbourhoods; these children are more likely to perform poorly in relation to wider determinants of health such as education and employment. Ultimately they will likely experience worse physical and mental health outcomes throughout their lives including disease and early mortality.[3]

Birth Rates and Mortality

Projected birth rates for Bury indicate that there will be approximately 2600 new-borns per annum over the next decade. The prospects for these children are favourable, with Bury having a high live birth rate (97.9%) and an infant mortality rate (3.0 per 1000 live births) which is lower than both the regional and national average, as well as all of the tier 1 comparators referenced in this report. The actual numbers of deaths under the age of 1 is small (22 in 2008-2010) which means that minor shifts will have a large impact upon the prevailing rate. Nevertheless, analysis of cumulative three year rolling periods shows that the infant mortality rate has fallen in every period since 2004-2006 (4.8 per 1000 live births).

Crucial to maintaining Bury's favourable position is to ensure that continued focus is given to improving the general health, education and nutrition of expectant mothers and reducing the prevalence of the associated risk factors noted above, namely smoking and drinking in pregnancy. There is also a need to focus on the father's role and behaviours, recognising not only the dangers of passive smoking on the infant, but also that his lifestyle choices will impact and influence the mother. A father's commitment to reduce alcohol intake or quit smoking can support the mother to do likewise.

Standardised child mortality rates (ages 1-17) are also better than national and regional averages. In this category the most common cause of fatality is from injury, whether intentional or accidental.

Maternity Services

Early access to maternity care, defined as before the end of the 12th week of pregnancy, is important to allow timely access to dating scans, screenings and antenatal diagnosis and thus minimise the likelihood of

2 Bury Child Health Profile (2012): % of children aged under 16 living in families in receipt of out of work benefits or tax credits where their reported income is less than 60% median income (2009)

3 D. Raphael: *Poverty in childhood and adverse health outcomes in adulthood* (2011)

poor neonatal and obstetric outcomes.[4] In Bury, the proportion of women having had their initial midwife meeting to complete an assessment of pregnancy needs, risks and choices within the 12 week timeframe increased from 57.9% in 2010/11 to 65.3% in 2011/12.[5] This is lower than the England average (70.7%) and all of the tier 1 comparator areas (range 75.7% to 81.1%).

Low Birth Weight

Low birth weight is a major factor in infant mortality and a key indicator of overall health. It is also a determinant of health through childhood and into adulthood. According to the World Health Organisation, a healthy birth weight is in excess of 2500 grams. Smoking is the greatest risk factor associated with low birth weight, with smokers twice as likely to have babies weighing less than 2500 grams than their non-smoking counterparts.[6] There is also a growing evidence base to suggest that poor maternal nutrition at conception and during pregnancy can cause low birth weight.

In terms of foetal development, low birth weight is associated with (i) death under the age of 2; (ii) cerebral palsy; (iii) hearing and sight problems; (iv) hernias and (v) other forms of hampered physical and intellectual development.[7]

In 2010 7.0% of all births were under 2500 grams, an increase of 0.8% compared with 2008. However, on a positive note this figure is below the comparative tier 2 levels, although Sefton and Stockport have lower rates amongst the tier 1 grouping.

There is, however, considerable inequality across the wards in Bury. An analysis of aggregated data relating to live births for the period 2008-2011, shows that 8.5% of births in St Mary's were below the threshold, compared with less than 5% in Church, Sedgley, Holyrood and North Manor (just 3.1%). There is a clear spatial correlation between the ward rates and the underlying deprivation – the eight most deprived wards (those with the highest mean average under the Index of Multiple Deprivation) are all within the top nine in terms of low birth weight. Ward figures are provided under the inequalities summary heading which completes this section.

Breastfeeding

As an indicator breastfeeding is simultaneously a cause and an outcome of health and social inequality. Systematic reviews have demonstrated that babies who are not breastfed are at greater risk of sudden infant death syndrome, lower respiratory tract infection, gastro-intestinal disease, childhood cancers, type 2 diabetes, coeliac disease and obesity.[8] At the same time it is also an outcome as low income families and other disadvantaged groups have been shown to have the lowest rates of breastfeeding.[9] Central government has recognised breastfeeding as a key policy area and has adopted World Health Organisation recommendations to encourage mothers to breastfeed exclusively for the first 6 months of a child's life.

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4 Department of Health: *Maternity and Early Years: Making a Good Start to Family Life* (2010)

5 95.4% delivery records had a valid coding to determine proportion cf 73.0% in England

6 J.Bull et al: *Prevention of Low Birth Weight: assessing the effectiveness of smoking cessation and nutritional interventions* (2003)

7 ONS: *Measuring National Well-Being – Children's Well-Being* (2012)

8 http://www.shef.ac.uk/scharr/sections/ph/research/breastmilk/benefitsofbreastfeeding

9 ibid

In 2011/12 68.6% of babies in Bury were breastfed after birth. This is above the regional position but is below the national average (74.0%) to a statistically significant extent. Local intelligence indicates that there is a substantial drop-off shortly after initiation (at around 10 days). By 6/8 weeks, approximately two in five babies in Bury continue to be breastfed (40.8%). This is slightly down on 2010/11 (41.6%), although higher than the 35% figure in 2009/10 reported in the previous JSNA. It is also below the national benchmark (47.2%). The comparison table does show, however, that Bury's position is average amongst the tier 1 comparator groups.

Local ward data on breastfeeding rates for the first half of 2012/13 has been collected by Pennine Care NHS Foundation Trust. Although this should only be considered as an indicative snapshot of local trends, it does show up some interesting anomalies vis-à-vis the deprivation profile. At 54.4%, East ward (considered to be the most deprived in the borough) has the fifth highest proportion of babies still being wholly or partially breastfeeding at 6/8 weeks. Conversely, both Tottington (44.0%) and Ramsbottom (42.9%) lie within the lowest quintile by data range. This ward data is presented in the inequalities summary section overleaf.

Immunisations

Infant vaccination is crucial to reducing infant mortality and the prevalence of childhood diseases. Diphtheria, tetanus, whooping cough (pertussis), hib, polio, pneumococcal, meningococcal disease (causing meningitis), measles, mumps and rubella are diseases which can cause serious illness, disability and death yet the available range of immunisations from 1-5 years are highly effective.

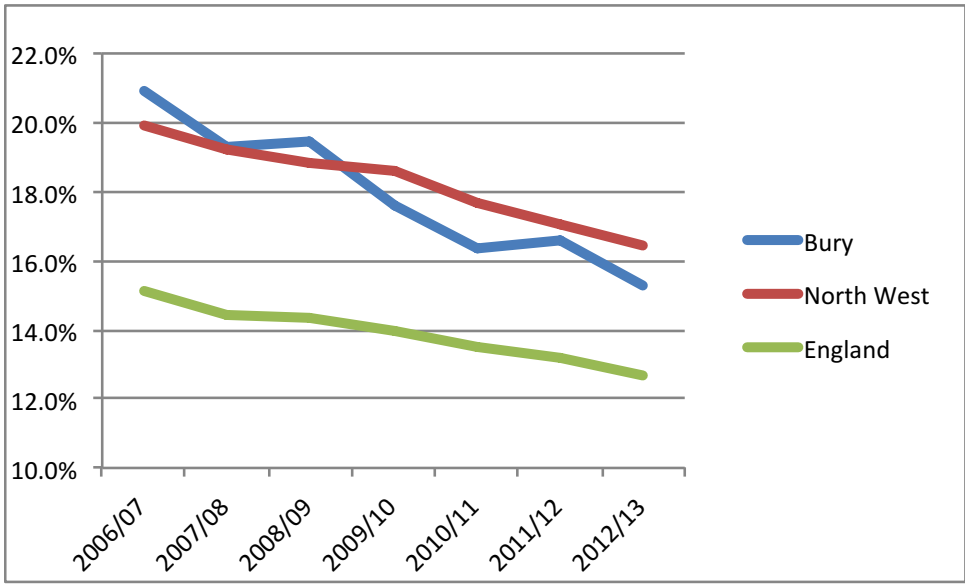
2011/12 statistics reveal that Bury's immunisation rates at ages 1 and 2 are lower than all of the tier 1 comparator group as well as the regional average. Though rates are far better by age 5, the general target based on the World Health Organisation approach is to achieve a 95% uptake rate by a child's 2nd birthday. In 2011/12 this was only achieved for the combined DTap/IPV/Hib injection (diphtheria/tetanus/polio/pertussis/Hib), as demonstrated by the table at the end of this chapter.

In contrast the previous JSNA reported that Bury's figures were similar to the tier 2 comparators.

Smoking/ Drinking in Pregnancy

Smoking and drinking during pregnancy are well documented lifestyle choices which can have seriously profound impact on health outcomes. Smoking increases the risk of birth complications and can result in either preterm delivery and/or low birth weight. In 2012/13 15.3% of mothers were smoking at the time of delivery. This is average against the comparator group (range 12.6% - 17.7%). The rate has also declined steadily since 2006/07 as the following graph demonstrates:

Percentage of Maternities Smoking at Delivery (2006-2013)



There is growing recognition of the risk of foetal alcohol spectrum disorders (FASD) consequent on mothers drinking during pregnancy. However FASD, which can manifest in learning disabilities, neurodevelopment abnormalities and facial anomalies, remains both under diagnosed and under publicised. This is also highlighted by the fact that there is no available local dataset. Research by the National Organisation on Foetal Alcohol Syndrome indicates that 1 in 100 children are born with alcohol-related disorders, equating to 24 per annum in Bury.

It should also be noted that there are risks to the foetus well below consumption at hazardous or harmful levels - including miscarriage, low birth weight and heart defects. This can make it more difficult for a mother to recognise that her moderate or low intake could still be problematic in relation to her pregnancy. The British Medical Journal suggests that brief interventions could be used to reduce alcohol consumption in pregnant women.[10]

Drug Misuse in Pregnancy

It is estimated that 1% of pregnant women are problematic drug users. Heroin is the main drug of pregnant drug users, but many use multiple drugs and alcohol. Babies exposed before birth to heroin, other opiates, cocaine and benzodiazepines can be become physically addicted to the drugs and be born with severe neonatal withdrawal symptoms ("neonatal abstinence syndrome" or "NAS"). NAS can also develop in babies whose mothers have been prescribed the heroin substitute methadone. Problem drug use is associated with low birth weight, premature birth, stillbirth and Sudden Infant Death Syndrome, but as most problem drug users are also heavy cigarette smokers, with poor nutrition and complex social circumstances, these outcomes may be due to tobacco exposure and other adverse circumstances.[11]

10 www.bestpractice.bmj.com/best-practice/monograph/1141/prevention.html

11 *Hidden Harm – Responding to the needs of children of problem drug users*. The report of an Inquiry by the Advisory Council on the Misuse of Drugs (2003); Hall J & van Teijlingen E. *A qualitative study of an integrated maternity, drugs and social care service for drug-using women. BMC Pregnancy and Childbirth* 2006, 6:19; NHS Evidence: clinical knowledge summaries. *Opioid dependence – management. Scenario: pregnant and breastfeeding*.

Inequalities Summary

Child poverty and experience of deprivation is an enduring predictor of adverse health outcomes. The IDACI index (Income Domain Affecting Children Index) is a sub domain of the Index of Multiple Deprivation and provides a potent way of illustrating the inequality of poverty. By definition, it relates to the percentage of children aged 0-15 living in income-deprived households. Families are classified as income deprived where they receive income support, income based job seekers' allowance or child tax credit with an income below 60% of the national average (median) before housing costs.

The map overleaf shows that there is a spine of child poverty stretching from Moorside and East across to Radcliffe. Besses also features prominently, whilst there are significant pockets of deprivation in Holyrood (Polefield Estate) and St Mary's (Rainsough) respectively.

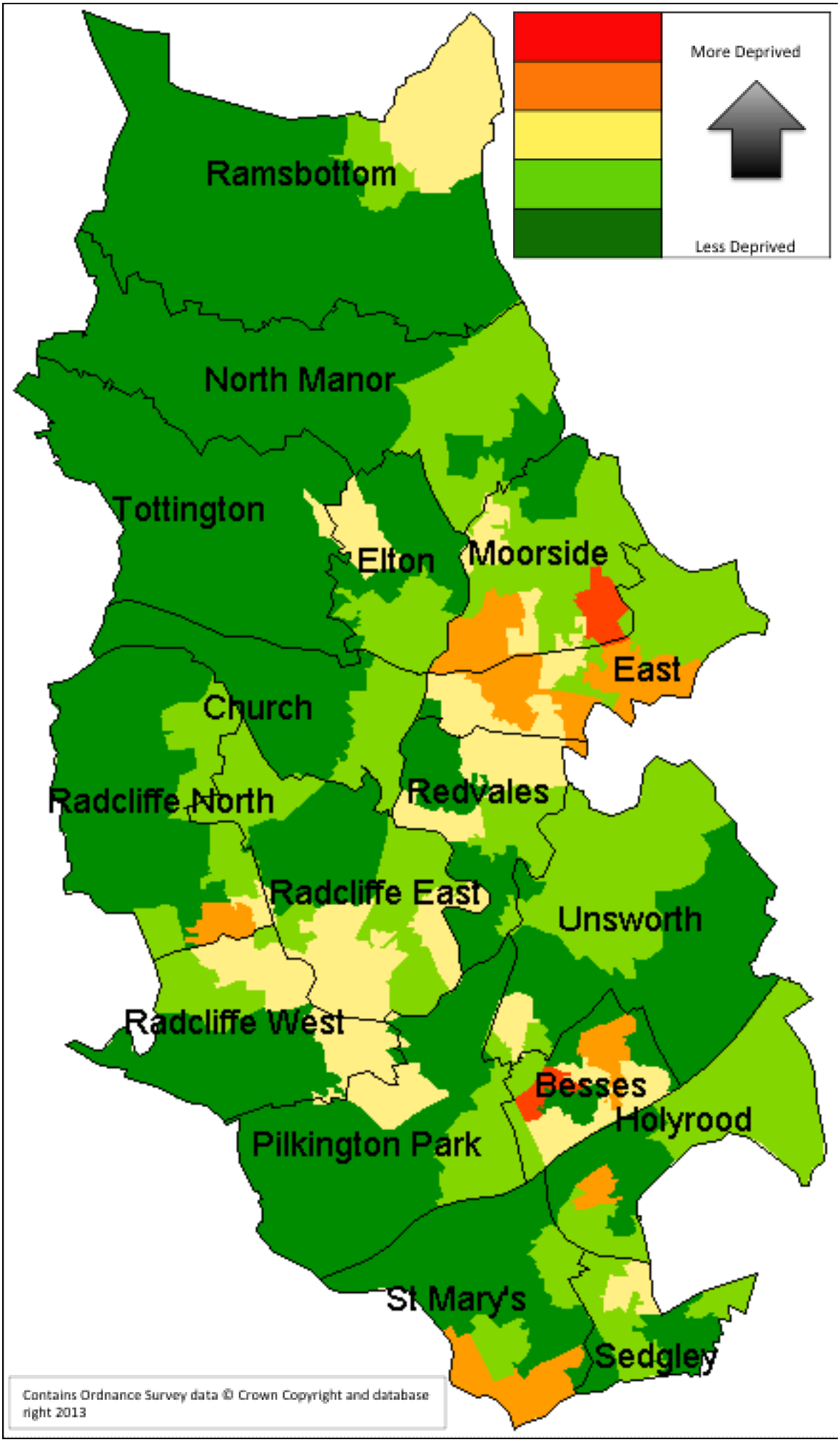
The table below aggregates the IDACI data from lower super output area to ward level and also presents the ward level data from the birth weight and breastfeeding datasets. This allows an examination of the relationship between deprivation and health factors using a colour scale.[12] It broadly demonstrates the synergy between child poverty and birth weight.

The birth weight prevalence in St Mary's stands out, but the IDACI average masks the fact that this ward has the sixth most deprived super output area for this sub domain within its boundaries. The relationship between deprivation and breastfeeding appears more erratic, though the limitations of a short time period dataset should be recognised.

Ward	IDACI (average)	% Low Birth Weight	% Breastfeeding
Moorside	0.34	6.5	51.6
East	0.29	6.8	54.4
Besses	0.28	6.3	41.6
Radcliffe West	0.27	6.5	51.5
Redvales	0.23	7.4	61.5
Radcliffe East	0.22	7.6	48.1
Radcliffe North	0.18	7.2	42.3
Holyrood	0.16	4.5	43.3
St. Mary's	0.16	8.5	45.0
Sedgley	0.16	4.7	63.7
Elton	0.14	5.5	58.3
Unsworth	0.12	6.1	49.0
Pilkington Park	0.10	5.3	53.8
Ramsbottom	0.09	6.6	42.9
Church	0.08	4.8	53.8
Tottington	0.06	5.5	44.0
North Manor	0.06	3.1	58.8

12 'best fit' aggregation is used, including super output areas falling wholly or mostly inside the boundaries of each ward.

Income Deprivation Affecting Children Index (IMD 2010) by Local Data Quintile (range 0.00 – 0.63)



Pregnancy and Early Years Comparison Table

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	North West		England	
Live Birth Rates (%)		1	2011	**97.9**	96.9	97.7	97.4	97.6	98.9	2	97.8	/	97.1	/ *
Infant Mortality Rate (under 1)		2	2008-10	**3.0**	7.7	N/A	5.3	4.0	4.1	1	4.9	/	4.6	/
Child Mortality Rate (1-17)		3	2009-11	**13.5**	18.9	17.6	8.2	12.2	13.8	3	15.9	/	13.7	/
Early Access Maternity Care (%)		4	2011-12	**64.3**	76.4	N/A	75.7	81.1	80.9	5	65.3	n	70.7	n
Low Birthweight (%)		5	2010	**7.0**	8.7	N/A	6.9	5.4	7.0	3=	7.2	/	7.3	/
Breastfeeding (%)	initiation	6	2011-12	**68.6**	78.0	68.1	54.1	70.1	56.9	3	62.0	/	74.0	n *
	at 6/8 weeks	7	2011-12	**40.8**	41.9	N/A	26.5	50.3	27.8	3	34.1	/	47.2	n
Immunisations by age 1 (%)	DTaP/IPV/Hib	8	2011-12	**93.7**	96.1	95.8	95.4	95.7	95.3	6	95.8	n	94.7	n
	MenC	8	2011-12	**93.0**	94.6	95.3	95.1	95.2	94.4	6	95.4	n	93.9	n
	PCV	8	2011-12	**93.3**	95.5	95.3	95.6	94.0	94.9	6	95.6	n	94.2	n
Immunisations by age 2 (%)	MMR	8	2011-12	**90.5**	92.2	92.7	93.1	93.2	90.8	6	93.4	n	91.2	n
	DTaP/IPV/Hib	8	2011-12	**96.2**	96.7	96.9	97.2	97.3	97.1	6	97.1	n	96.1	/
	MenC	8	2011-12	**94.3**	97.4	95.7	96.0	96.7	94.5	6	95.4	n	94.9	n
Immunisations by age 5 (%)	MMR	8	2011-12	**86.1**	85.6	87.5	85.3	89.1	86.6	4	87.9	n	86.0	/
	DT/IPV	8	2011-12	**97.5**	96.7	97.1	96.6	96.8	97.3	1	96.6	/	95.4	/
	DTaP/IPV (booster)	8	2011-12	**88.1**	87.5	88.3	87.7	89.6	88.0	3	89.1	n	87.4	/
	Hib	8	2011-12	**97.1**	96.3	96.7	96.2	96.5	96.8	1	95.4	/	94.9	/
Smoking in Pregnancy (%)		9	2012/13	**15.3**	12.6	N/A	15.6	12.6	17.7	3	16.4	/	12.7	n

1 % of live births in NHS hospitals (The Health and Social Care Information Centre)

2 Crude rate per 1,000 live births (Child and Maternal Health Observatory)

3 Directly standardised rate of death due to all causes, persons aged 1-17 years (Child and Maternal Health Observatory)

4 % of women with a gestation period of 12 weeks and 6 days or less at the date of completion of the full health and social care assessment (HES)

5 Number of live and still births occurring in the respective calendar year with birthweights under 2500 grams (Child and Maternal Health Observatory)

6 % of babies breastfed in the first 48 hours after delivery (Child and Maternal Health Observatory)

7 % of infants who are totally or partially breastfed (Child and Maternal Health Observatory)

8 % of children immunised (Child and Maternal Health Observatory)

9 Smoking status at time of delivery by Primary Care Trust (The Health and Social Care Information Centre)

⊙ Bury figure is better than national or regional average

■ Bury figure is worse than national or regional average

* Difference from national/regional has been tested as statistically significant

◆ Bury figure is higher than national or regional average (but no polarity - higher is not necessarily better)

❖ Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Priorities

- The proportion of pregnant women receiving access to maternity services within the 12 week timeframe is lower than all comparator areas and should be considered a priority for action.
- The geographic inequalities between rates of low birth weight babies should be an area of focus. The wards with the highest rates broadly match the deprivation profile so actions could run in parallel with other initiatives.
- Breastfeeding rates for the borough are lower than national figures, both for initiation and at 6/8 weeks. Local intelligence suggests that there is actually a considerable amount of drop-off at a very early stage (at around 10 days). This is a key issue for commissioners and requires further analysis to determine the level of decline.
- Unlike the low birth weight figures the geographic inequalities in rates for breastfeeding for wards do not match the deprivation profile. The lower figures for breastfeeding in Tottington and Ramsbottom require further trend analysis to determine whether this is a longstanding issue. Research into the reasons behind cessation would also be required to determine the necessity of enhanced service provision.
- The geographic inequalities relating to low birth weight and breastfeeding have been documented but there is a lack of local data relating to differences by age, ethnicity or religion. These inequalities should therefore be considered an issue for further analysis.
- The immunisation rates are lower than all comparator areas and should provide a focus for attention.
- The percentage of mothers smoking in pregnancy has decreased in recent years, a fact which should be welcomed. With 15.3% of mothers still smoking whilst pregnant a challenge remains to make further reductions.
- There are currently no local statistics to measure the levels of drinking in pregnancy. This could be addressed in a variety of ways such as including a specific question on the health survey, undertaking a cross-tabulation of drinking levels with whether women are pregnant from the health survey and collating pre-natal health check information.
- Given the serious risks to foetal development, local research into the prevalence of drug misuse in pregnancy should also be undertaken.

Children and Young People

School years continue to represent a crucial period in future health outcome determination. Research suggests there is a direct relationship between educational performance and health status. Prospects in the labour market are obviously enhanced, but better performing students are also more likely to adopt healthier lifestyle choices and be more engaged in civic society.[13] A US study has found that progressing to higher education reduces the risk of heart disease, diabetes as well as mortality.[14]

However, the impact of deprivation and poverty continues to loom large. Nationally, around 75% of boys from the poorest quintile reach the expected Government standard at Key Stage 2 at 11 years of age, compared with 97% in the highest quintile.[15] Young people growing up in more deprived households are also more likely to experiment with alcohol, drugs and smoking; often directly related to the presence of substance misuse within the family home – research has indicated that children with parents dependent on drugs or alcohol are seven times more likely to become addicted themselves as adults.[16]

Performance

At GCSE level Bury students have historically performed very well. In 2011-12, 62.4% achieved 5 grade A*-Cs (including English and Mathematics). This is better than the regional and national benchmarks by 4.0% and 3.8% respectively, as well as being ahead of the tier 1 comparator group with the exception of Stockport (64.5%). Whilst the performance of Asian and Black pupils has been lower than the Borough average for the last five years; (the figures in 2011-12 being 59.7% and 60.0% respectively achieving 5 grade A*-C grades) the performance of Black pupils (1.6% of the cohort) is 5.4% above the national average, and has been so for 5 of the last 6 years. Whilst the performance of Asian pupils (11% of the cohort) is below the national level, this has improved from 43.2% in 2007 and the gap with all pupils has closed steadily over that period from 9.0% to 3.6%.

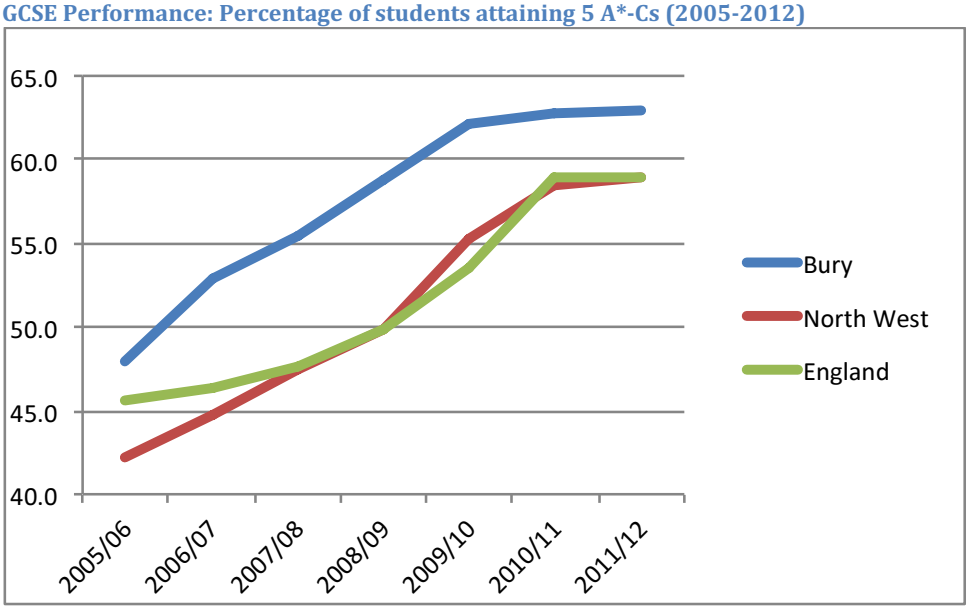
13 Stiglitz (2008)

14 D.Cutler and A. Lleras-Muney: *Education and Health: Evaluating Theories and Evidence* NBER Working Paper No. 12352 (2006)

15 Joseph Rowntree Foundation

16 Local Government Association: *Local government's new public health role* (2013)

GCSE Performance: Percentage of students attaining 5 A*-Cs (2005-2012)



Further analysis of this Key Stage 4 dataset however reveals a number of fundamental inequalities. Performance by girls (67.7%) is far better than their male counterparts (57.2%), though this 10% attainment gap is broadly in line with comparator trends. At a ward level there is a huge 29% difference between the best and worst performing areas. In 2010-11 78.38% of Ramsbottom students achieved the benchmark, compared to just 49.2% in East and 49.6% in Redvales.

Census Area Ward	5 or more A*-C (including English and Mathematics)
Ramsbottom	78.4
Holyrood	72.0
Tottington	70.2
Pilkington Park	69.2
Church	68.4
Sedgley	67.7
Radcliffe North	63.8
Elton	63.8
Besses	63.0
Radcliffe South	59.4
Unsworth	58.0
Radcliffe Central	57.7
St. Mary's	56.3
Moorside	55.3
Redvales	49.6
East	49.2

The rate in Bury for any 5 A*-C grades (i.e. not necessarily including English and Mathematics) is similar to the regional average at 83.7% in 2012, and 0.7% above national outcomes. The measure for the English Baccalaureate (EBacc) covering performance in English, Mathematics,

Science, Languages, and Humanities for Bury in 2012 was 21% compared with 16.2% nationally, and the 3rd highest in the North West.

Performance at the end of Key Stage 2 (aged 11) in 2011-12 was above the national average, and has been for the last decade. Attainment of Level 4+ English and Mathematics is at present 80%, which is 1% above the national average. 90% of children made the expected progress in English and Mathematics from Key Stage 1 to Key Stage 2 and no school in Bury was below the government's floor standards. There is no substantial difference in boys and girls performance in relation to Level 4 English and Mathematics combined (Boys 79% and Girls 80%) Though the numbers in each cohort are statistically low, there is considerable variation by ethnicity, with 57% of Black students achieving Level 4 or above, compared to 74% (Asian) and 80% (White).[17]

Once more there is large inequality at a ward level, with a 30% attainment gap across the 16 wards in 2010-11, ranging from 92.6% and 90.3% in Church and Pilkington Park respectively to just 62.5% in Radcliffe South and 63.6% in Unsworth.[18]

Census Area Ward	Level 4 (English and Mathematics)
Church	92.6
Pilkington Park	90.4
Moorside	87.6
St. Mary's	87.2
Ramsbottom	82.3
East	79.1
Tottington	78.5
Besses	78.4
Holyrood	73.5
Radcliffe North	71.6
Redvales	71.5
Elton	71.4
Sedgley	69.8
Radcliffe South	66.3
Unsworth	63.6
Radcliffe Central	62.5

The 'good level of development' measure provides a single simple measure of child development and is used within the Social Mobility strategy as one of two measures of 'school readiness'. The measure is provided both as an overall standard along with that for a range of areas of learning. This is measured at age 5 (Early Years Foundation Stage).

17 note that the number of Black pupils per annum is small (21) such that this statistic may be subject to significant annual differences. There were also 5 Gypsy and Traveller children at Key Stage 2 in 2011/12, with 100% achieving level 4 or above in English and Mathematics, a large improvement on previous years (0% English; 33.3% Mathematics in 2010/11 – just 3 students).

18 note that the wards in this dataset are CAS wards which differ slightly from the current electoral ones.

In Bury the proportion of students achieving a good level of all development is 58%, falling to just 43% for those whose first language is not English. This overall standard is actually lower than all of the tier 1 and 2 comparators and is therefore a concern as a wider determinant of health outcomes for the future. This figure has been below the national average for the each of the last four years, and is now a priority of the Public Sector Reform work which aims to improve school readiness across Bury through the implementation of an agreed assessment model. Whilst all ethnic groups apart from Chinese are lower than the national average, the difference for Black pupils is most acute. In 2011-12 only 43% of Black pupils in Bury achieved a good level of development (18% below the national comparator) though this is reflective of a statistically small cohort (1.8% of pupils in the Early Years Foundation Stage cohort)

Special Education Needs

A key aspect of an inclusive education system is to support those with special education needs (SEN) to achieve their potential for social mobility. In Bury the proportion of students with a formal SEN statement is 3.4%, which is above regional and national levels. Numbers are substantially higher for those with an SEN but no statement, [19] accounting for 18.5% of primary and 18.4% of secondary students. In terms of attainment 17% of students with a statement (15) achieved Level 4 or above at Key Stage 2 in 2011-12. A further 10.0% (9) achieved 5 A*-Cs at GCSE. This compares to 47% (196) and 22.3% (59) respectively for students with a SEN but no statement.

These results mirror the overall education profile with GCSE performance being better than most comparator areas and regional/national trends. Key Stage 2 SEN performance in Primary schools is in line with national outcomes and the attainment gap between pupils with SEN and those without SEN has fallen from 62% in 2006-07 to 49% in 2011-12. Further information on Learning Disabilities is provided in the Vulnerability chapter.

Free School Meals

Free School Meals, and the educational performance of those in receipt of this provision, are a useful mechanism for assessing the extent of child poverty and its inequitable impact on attainment.[20] It is also used to calculate the amount of the pupil premium. Bury has a lower proportion than the regional and national average for both primary and secondary schools. At GCSE, 42.8% of this cohort achieved 5 grade A*-Cs. This is well below the overall figure (62.4%) clearly demonstrating the impact of deprivation. Crucially, however, performance by this group has improved over recent years (since the last JSNA) and is far better than the corresponding figures for all of the tier 2 comparators (ranging from 24.2% to 36.1%). Performance at Key Stage 2 was below the full tier 2 group in 2011-12, however the gap between attainment of pupils receiving Free School Meals and those not eligible at Key Stage 2 is narrowing from 22% in 2010-11 to 20%.

Absences and Exclusions

School attendance is crucial for social mobility. Not only does absence impact upon performance, it also reduces the frequency of positive social interaction, impairs development and increases the likelihood of engaging in risky behaviours. It is therefore encouraging to note that in 2011-12 Bury had an absence rate below all of the tier 1 and 2 comparator groups (4.4%).

19 in receipt of School Action or School Action Plus support under the SEN Code of Practice

20 they are also more likely to have a poor diet at home

It also has the lowest rate of persistent absentees at just 3.6%. Pupils can be excluded from school either for a fixed-term period or permanently. Although those excluded permanently have to be educated elsewhere clearly being excluded from school results in having reduced access to education along with social interaction that schooling provides.

In 2011-12 there were 1,140 fixed period exclusions in Bury's schools, representing 4.1% of the school population. This figure is higher than England and the North West but is average against the tier 1 comparator areas. 50 pupils were permanently excluded from Bury's schools in the same year, equivalent to 0.2% of the school population. This figure is actually higher than any of the tier 1 or 2 comparator areas.

NEETs

The NEET cohort consists of 16-18 year olds not engaged in employment, education or training. This age band is a vital period where an individual's future prospects in the labour market are laid out. In an ever challenging economic environment, to be outside of further education or devoid of workplace skills and experience significantly increases the prospects of long-term unemployment and the associated negative health outcomes which this brings. It is also a crucial period of transition into adulthood where lifestyle traits can become embedded, such as criminality and substance misuse.

As at March 2012 there were 431 young people classified as NEET by the Department for Education. According to local Connexions statistics more than half of this NEET cohort are resident in Bury East (30%) and Radcliffe (23%). At 6.2% of the academic year cohort which covers all 16-18 year olds and those 19 year olds in Year 14, the proportion is below the North West comparator (7.3%) and similar to the national average (6.1%).

Children in Need

Bury's Children's Services undertakes a wide range of work with children and families. The local authority has a statutory responsibility to provide for the support, care and protection of children in need, as defined by the Children Act 1989. A 'child in need' is a child with a disability, or any child whose health or welfare would be significantly affected without the provision of services. The health and attainment of 'children in need' is frequently below that of the general child population, and evidence of relative disadvantage that should be the focus of remedial services.

The rate of children in need throughout 2011-12 for Bury is higher than that for most of the comparator areas, with the exception of Stockton-on-Tees. The rate of 412.7 per 10,000 children[21] is also higher than the North West (336.3) and England (325.7) averages; however more recent data shows a reduction during 2012-13 to a rate of 315.7 per 10,000 child population.

Where there is reasonable cause to suspect the child is suffering, or is likely to suffer significant harm the local authority should carry out an enquiry under section 47 of the Children Act 1989. This is sometimes referred to as a child protection enquiry and will

21 'Children in Need Census' – Department for Education

determine if the local authority needs to take steps to safeguard and promote the welfare of the child.

In 2011-12, a rate of 38.1 children per 10,000 became subject to a child protection plan[22]. This figure is lower than both the North West (42.6) and England (37.8) Averages. Whilst a low rate of child protection plans may be regarded as being 'good', a very low rate might signify that thresholds are set too high. Bury's rate of children subject to child protection plans has recently been very low, falling to only 27.2 per 10,000 child population in 2012-13 (115 child protection plans). Conversely, the rate for children in Bury subject to a child protection plan for a second or subsequent time has been markedly above all comparators for three successive years.

Outcomes for Looked After Children

'Looked After' is a collective term for children who are in the care of the local authority or who are being accommodated with the consent of their parents. Bury has a relatively stable Looked After Child population, though at 78 per 10,000 children under 18, the rate of children in care is well in excess of the national average (59.0) and above the North West average of 76 per 10,000 children. It is also higher than all other comparators with the exceptions of Calderdale (79.0) and Stockton-on-Tees (80.0). 87% of this cohort are White, with 6% from an Asian or Asian British background.

Support for this group is essential, as research has shown that there is a higher likelihood of poorer health outcomes and wider determinants of health (educational/social) outcomes. This includes higher rates of teenage pregnancy, substance misuse and criminality.[23]
Close attention is being given to compensating for observed health deficits. Bury's performance for achieving annual health and dental checks for Looked After Children is markedly better than all comparators; in 2012-13 97.2% of children received their check-ups within time.

A far higher percentage of Looked After Children have special education needs (64.4%) in Bury than the general pupil population (see above). 28% have a statement of need compared to just 3.4% across Bury as a whole. This figure is higher than the regional average (26.9%), but lower than the national comparison (29.4%). Whilst one of the best results nationally was achieved in 2009-10 for Looked After Children achieving 5 grade A*-C at GCSE including English and Mathematics (35%), in 2011-12 13.6% achieved this benchmark which is in line with national and regional trends.

However, there are more promising outcomes statistics relating to substance misuse and criminality. Just 3.1% of Looked After Children were identified as having a substance misuse problem during 2011-12, a figure which compares very favourably against the tier 1 comparators and is also below the national (4.1%) and regional (4.8%) average. Similarly the percentage convicted or subject to a final warning or reprimand (figure not actually recorded in local authority tables as lower than 5%) was below all comparators in 2011-12.

22 'Children in Need Census' – Department for Education

23 see the Royal College of Paediatrics and Child Health website at http://www.rcpch.ac.uk/LAC

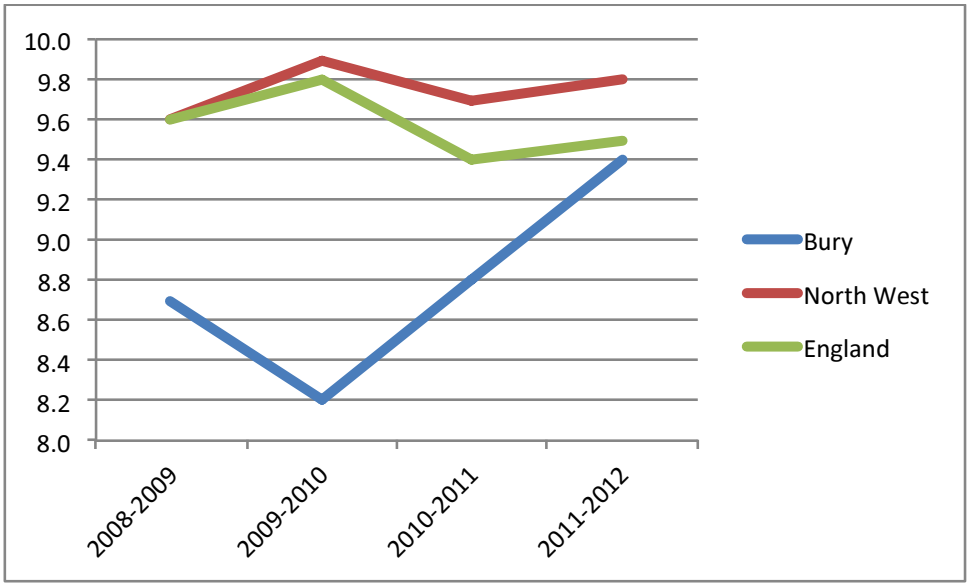
Emotional and behavioural health is a key concern for this cohort. Research has indicated that they are 5 times more likely to have a mental health disorder than all children.[24] As a method of assessing wellbeing, Strengths and Difficulties Questionnaire (SDQ) scores are required for all children aged 4-16 who have been looked after continuously for a period of 12 months or more. In 2011-12 the average score for Looked After Children in Bury was 13.4, which is average performance against the comparator returns (range 12.9 – 14.6). 30% of those assessed were considered as being of 'concern' (having a score of 17 or above). This proportion is actually lower than all comparators. Both the average score and percentage of 'concern' have declined since 2010.[25]

Obesity

Childhood obesity is a significant predicator of adverse health outcomes. It has associations with cardiovascular disease,[26] as well as factors affecting mental health such as lower self-esteem, bullying and stigmatisation.[27] Obese children are also more likely to be obese in later life, and therefore at a higher risk of heart disease, cancer and type 2 diabetes.[28]

Historically childhood obesity rates have been lower than the national and regional picture in Bury. In 2011-12 18.5% of 10-11 year olds were classified as obese, down from a four year high of 20% in 2010-11. Of real concern is the increase in the rate of obesity at age 4-5, which has increased in each of the last three years to 9.4%. The graph below demonstrates that Bury's position has now almost converged with national picture.

Percentage of Childhood Obesity at Age 4-5 (2008-2012)



24 Department for Education: "Promoting health and wellbeing" (April 2012)
http://www.education.gov.uk/childrenandyoungpeople/families/childrenincare/a0065777/promoting-health-and-wellbeing

25 In 2010 the average score was 14.3. 42% of 'concern', which was higher than the national and regional benchmarks at that stage.

26 D Freedman et al: "Cardiovascular risk factors and excess adiposity among overweight children and adolescents: the Bogalusa Heart Study." *Journal of Pediatrics* 2007;150(1):12–17

27 S Daniels et al: "Overweight in children and adolescents: pathophysiology, consequences, prevention, and treatment." *Circulation* 2005; 111; 1999–2002.

28 World Health Organisation Factsheet 311: *Obesity and overweight* (March 2013)

There is wide variation based on residency. Aggregating the two datasets together reveals that the rate is in excess of 15% in Besses, Sedgley, East and Radcliffe East, and 23% in Radcliffe West. This dataset is presented in full in the inequalities section below. Examining the relationship with deprivation, Sedgley stands out as less deprived than the other wards noted. However, an ethnicity breakdown of the datasets reveals that there is a far higher proportion of obesity amongst Black/Black British children (25%) than all other ethnic categories, including 13% of White children and 15% amongst Asian/Asian British. Sedgley has the highest proportion of Black/Black British children within the schools in the child measurement programme (12.1%).

Physical Activity

Regular exercise is a key dynamic in challenging obesity and promoting better health outcomes. It is encouraging to note therefore that, based on 2009-10 figures (presented in the comparator table at the end of this chapter), Bury has higher proportions of children participating in at least 3 hours of physical education in a typical week than any of the other tier 1 comparators for all age groups. The other key element in a successful response to obesity is dietary intervention. There are currently limited services in Bury in this regard.

Dental Care

The percentage of children with missing, decayed or filled teeth (MDF) is a recognised benchmark for oral health and a proxy measure of child health and diet. Indeed there is an increasing body of evidence linking poor oral health, particularly the development of periodontal disease (gum disease), with life threatening diseases such as heart disease and diabetes.[29] The latest available dataset is for 2008-09 and suggests that, despite being better than most of the tier 1 comparators, the proportion of children with decay experience (42.6%) is well in excess of both the regional (39.8%) and national (33.4%) average.

Visiting the dentist regularly is also important to maintaining good oral health and preventing the onset of MDF. Given the statistics above it is therefore worrying to note that by the end of 2012/13 71.1% of children in Bury had seen a dentist in the preceding two years, well below the tier 1 comparison group (range 74.2 %– 79.1%). This proportion is also down on 2011/12 (71.8%), and has fallen considerably since 2006 (80.2%), at which point Bury was better than all the comparator Primary Care Trusts. The decline may also be linked to adult dental hygiene trends, with just 55.1% of Bury's adult residents having visited a dentist in the past 24 months. Once more this figure is well below the comparator group (range 60.3% - 66.3%).

Sexual Health

A fundamental aspect of sexual health concerns teenage pregnancy, and is interlinked with many of the topics discussed throughout this section. The overall teenage conception rate has fallen markedly in Bury since 2007 – from 44.3 to 32.9 per 1000 in 2011. Current levels are average against the tier 1 comparator group, but still in excess of the national average (30.7).

Rates have been shown to be higher amongst young people in care, those performing poorly at school and those engaged in substance misuse, particularly alcohol. Indeed research indicates that approximately 12.5% of girls and 10% of boys aged 15-16 have

29 L.Bensley et al: "Associations of self-reported periodontal disease with metabolic syndrome and number of self-reported chronic conditions." *Prev Chronic Dis*. 2011; 8(3):A50.

unprotected sex following alcohol consumption. A girl who consumes alcohol has also been found to be twice as likely to have an unwanted pregnancy as her peers.[30] It is also intrinsically associated with deprivation. The highest rates for teenage conception (2009-11) are present in Radcliffe East (71 per 1000 females aged 13-18) and East (68)). By contrast rates in North Manor, Tottington, Church and Pilkington Park are below 15 per 1000 (see inequalities section below).

In 2011, the repeat abortion rate for under 19s in Bury was 17%. This was in excess of the North West average of 11%. However in 2012, the rate has decreased to 6% and is now the lowest repeat abortion rate in the North West.

The Department of Health's Public Health Outcomes Framework (2013-2016) includes an indicator on the rate of Chlamydia diagnosis in 15-24 year olds, with the aim of local areas carrying out at least 2400 diagnoses per 100,000 per annum. Modelling suggests that this level of diagnosis and associated treatment will result in falls in prevalence in future years. It is particularly pertinent to encourage detection and treatment of infection as Chlamydia is often asymptomatic but can ultimately lead to serious consequences for female reproduction including pelvic inflammatory disease, ectopic pregnancy and tubal factor infertility – as well as epididymitis for males. In 2012 the diagnosis rate in Bury was 2105.2 per 100,000 population (aged 15-24), 3rd highest amongst the comparator grouping but well below the target level of 2400.

Mental Health

There are a host of risk factors that increase the vulnerability of young people to experiencing mental health problems. These include the experience of poverty/deprivation, poor educational attendance and performance, exposure to familial violence and substance misuse, living in care and homelessness.[31] LGBT young people may be at particular risk, with research estimating that 1 in 3 homeless young people are LGBT (who often leave home due to a lack of understanding about their sexuality in the familial environment).[32] Poor diet, a lack of exercise and the use of illicit substances will also impact significantly on a young person's mental wellbeing. By contrast, good parenting can be a critical factor in building resilience.

Prevalence estimates derived from the Child and Maternal Health Intelligence Network needs assessment online tool suggests that there will be approximately 2602 young people of school age with a mental health disorder sufficient to cause distress to the child or have a considerable impact on daily life (9.5%). A further estimate suggests that 6240 under the age of 17 (14.8%) will experience a mental health problem appropriate for a tier 1 response (2912 tier 2; 770 tier 3; 31 tier 4).[33]

Substance Misuse

Throughout this chapter it has been acknowledged that young people suffering adverse health and wider health determinant outcomes are

30 www.direct.gov.uk/en/Parents/Yourchildshealthandsafety/Youngpeopleandalcohol/DG_183848

31 British Medical Association: *Child and Adolescent Mental Health, A guide for healthcare professionals* (2006)

32 B.Roche: *Sexuality and Homelessness* Crisis (2005)

33 Tier 1: treatment for less severe mental health conditions; Tier 2: assessment and interventions for more severe or complex health care needs; Tier 3: services for children and young people with severe, complex and persistent mental health conditions; Tier 4: specialist services for those with the most serious problems

more likely to experiment with alcohol, drugs and tobacco. At the same time, regular use of substances and dependency can have significant physical and mental health implications, including depression, self-harm and hospitalisation for a range of specific conditions. Between 2008-2011 the rate of under 18 admissions to hospital for alcohol specific conditions was 73.75 per 100,000 in Bury.
This rate has fallen steadily since 2005-08 when the rate stood at 115.32. The most recent statistic is significantly better than the North West average (93.7) and most of the tier 1 comparator group.

The Young Persons' Alcohol and Tobacco Survey has been conducted in the North West every two years since 2005. Fieldwork for the latest survey took place between January and April 2013. Key findings show that the percentage of 14-17 year olds in Bury claiming that they never drink alcohol has increased from 23% in 2011 to 31% in 2013. There has also been a continuing fall in the level of regular binge drinking in Bury amongst this age group, defined in this survey as having 5 or more drinks on one occasion (31% in 2007, down to 11% in 2013). The figures for both of these measures are the same as for the North West as a whole.

The percentage of young people claiming to smoke in Bury has fallen slightly (from 21% in 2011 to 18% in 2013). This is slightly higher than the level reported for the North West as a whole (15%).

During 2011/12 there were 148 young people in treatment for substance misuse.[34] The majority were White British (91%) and male (75%), with 53% aged 16 or 17. In terms of substance use, the highest proportion (47%) presented with cannabis as their primary substance of choice, while 20% presented with primary alcohol use. A quarter (24%) reported both 'cannabis and alcohol use'. There was no reported Class A drug use among the population. The data for 2011/12 and 2010/11 show that the highest proportion of young people are in treatment between 0-12 weeks. A total of 102 young people exited treatment in 2011/12. Of these, almost half (49%) were drug free.

Substance misuse can reduce the ability of parents to provide practical and emotional care for their children. This can result in serious consequences, including neglect, abuse, educational and emotional difficulties, and the possibility of those children becoming drug and alcohol misusers themselves.

In Bury, 48% of people in treatment for drug misuse live with children (331 people) which is higher than the national rate of 33%. 52% of people in treatment for alcohol misuse live with children. These may be their own, or someone else's children. The total number of children and young people living with a substance misusing adult who is not in treatment is potentially much higher.

Offending Behaviour

Crime is a wider determinant of health outcomes. Victimisation and fear of crime can have serious consequences for both mental and physical health, and is most prevalent amongst deprived communities. The fact that young people growing up in deprived households are more likely to become offenders as a consequence of social exclusion and familial

34 Information provided by Bury Drug and Alcohol Action Team

exposure serves only to exacerbate the cycle. In 2011-12 the rate of first time entrants into the criminal justice system in Bury (aged 10-17) was 637 per 100,000. This is better than the regional and national rate to a statistically significant extent.[35]

Bury East and Radcliffe have traditionally been higher offending areas than the more affluent areas of Bury, mirroring the areas of deprivation and health inequalities. The figures in the table below represent the number of offences recorded by young offenders by postcode.

Postcode Area	Offences (2012/13)
BL8 Bury/Tottington	53
BL9 Bury East / Walmersley / Limefield / Fishpool / Hollins / Summerseat	154
M25 Whitefield	8
M24 Prestwich	35
M26 Radcliffe	99

Data provided by Greater Manchester Police indicates that, for the twelve month period from October 2010 – September 2011, 35.7% of juvenile offenders in Bury were reoffenders (with an average 2.51 offences per offender), 4.3% lower than the corresponding period in 2009/10 and also slightly below the national average (36.1%).

Young offenders are vulnerable to poor health outcomes in later life, including an elevated risk of substance dependency, hospital admissions, accidents and injuries and especially mental health disorders.[36] Indeed a report into the mental health needs of young offenders has highlighted the fact that the prevalence of mental health problems amongst young people involved with the criminal justice system ranges from 25% to a massive 81% for those in custody. This is significantly higher than the estimates relating to the mental health of the general youth population (9.5% - 14.8%, see above). Reoffending perpetuates the problem:

"Further offending and worsening mental health problems. The two are interlinked. While the offending may have been a risk factor for mental health problems in the first place, it has long been understood that mental health problems in turn go on to be a risk factor for continued offending."[37]

Trauma

Injuries to children, whether deliberate or unintentional, are a major cause of premature mortality and hospitalisation. For the period 2006-11 Bury has a lower rate of injury than all comparator areas. It also has the second lowest rate of road traffic accidents (2008-10) behind

35 YOT data for calendar year 2012 has the rate at 362 per 100,000. This is not comparable to previous dataset as the collection method has changed to utilise the Police National Computer.

36 L.Anderson et al: "Health Needs of Young Offenders" J Child Health Care (2004) 8 pp.149-164; M.Dolan et al: Health status of juvenile offenders: A survey of young offenders appearing before the juvenile courts. *Journal of Adolescence* (1999) **22,** 137-144; A.Bardone et al: "Adult physical outcomes of adolescent girls with conduct disorder, depression, and anxiety" *Journal of the American Academy of Child and Adolescent Psychiatry* (1998) **37,** 594-601.

37 Mental Health Foundation: "The Mental Health Needs of Young Offenders" (2002) Vol 3 Issue 18

Stockport, though this level is still above the national average.

Inequalities Summary

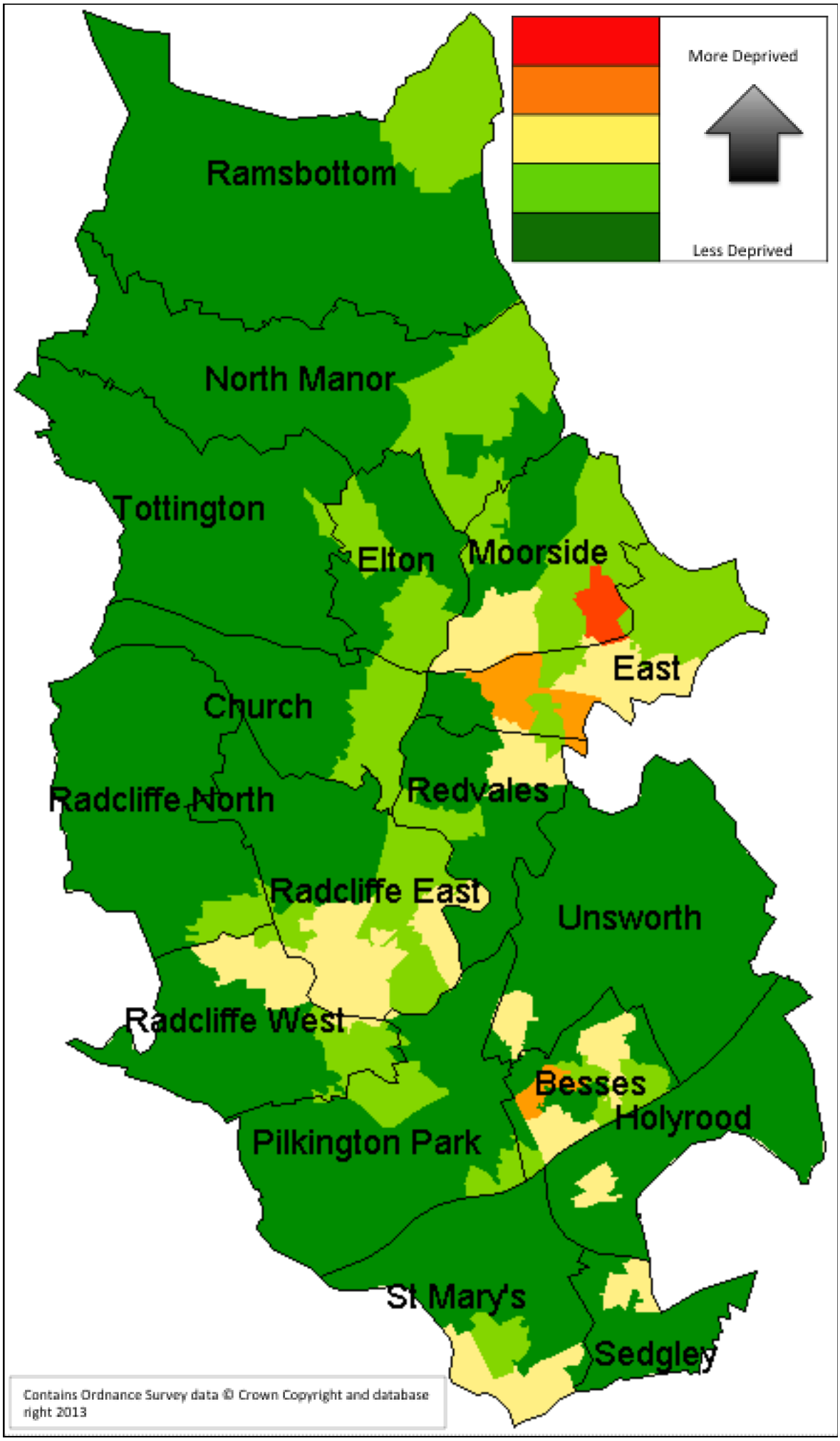
The Children and Young People sub domain of the Index of Multiple Deprivation captures local area performance in respect of school attainment and absenteeism and thus represents a good composite indicator of educational deprivation. The map overleaf demonstrates that deprivation in this context is particularly prevalent in Moorside, East, Radcliffe East and Besses. The Chesham Fold lower super output area in Moorside is extremely deprived in this context, falling within the 2% most deprived nationally (622nd out of 32,482).

In the following table the data from the sub domain is aggregated to ward level and set against the teenage conception and obesity datasets. This provides a way of examining the relationship between educational deprivation and health factors.

There is extremely high synergy between education and teenage conception, with the five worst areas for deprivation in the highest six for teenage conception. The high rate in Elton is the stand out anomaly. There is also a correlation with the obesity dataset – exceptions to the deprivation trend being the low level of childhood obesity in Moorside, and the higher rate in Sedgley which has been discussed above.

Ward	CYP (average)	Teenage Conception Rate	% Obesity
Moorside	32.83	56.0	11.4
East	31.65	68.0	16.3
Radcliffe East	27.52	71.0	16.3
Radcliffe West	27.36	59.0	23.1
Besses	26.75	39.0	18.0
Redvales	19.35	30.0	14.1
St. Mary's	14.02	28.0	10.0
Elton	13.19	64.0	13.5
Radcliffe North	11.94	38.0	12.9
Unsworth	11.19	24.0	14.1
Sedgley	9.76	29.0	17.3
Holyrood	9.53	29.0	11.3
Ramsbottom	8.11	23.0	13.6
Church	7.57	15.0	13.0
Pilkington Park	6.19	15.0	9.5
North Manor	5.77	13.0	7.3
Tottington	3.71	13.0	10.8

Children and Young People Education Sub Domain (IMD 2010) by Local Data Quintile (range 1.60 – 79.31)



The following inequalities should also be highlighted:

Protected Characteristic	Inequalities
Age	• 9.4% of children aged 4-5 are obese in Bury. By age 10-11 the rate increase to 18.5%.
Gender	• Whilst the performance of both boys and girls in Bury exceeds the national rate for the proportion achieving 5+ A*-C at GCSE, (by 3.8% and 4.5% respectively) the rate is more than 10% higher for girls compared to boys. • There is variation at Key Stage 2, with girls performing better in English but worse in Mathematics. As boys perform better in Mathematics but worse in English, these variations are levelled in the combined Level 4+ attainment figures (Boys 79% and Girls 80% in 2011-12) • The majority of young people in treatment for substance misuse in Bury are male (75%).
Ethnicity	• A higher proportion of students from a White ethnic background achieve 5+ A*-C at GCSE (63.9%), compared to 60.0% Black, 59.7% Asian and 54.0% Mixed. Rates have been lower than the average for Asian pupils in each of the last five years, though rates for Black pupils at Key Stage 4 have been well above national averages for 5 out of the last 6 years. Rates for mixed race pupils have been above national averages for 4 out of the last 6 years. • Performance by Black pupils is also lower than all pupils at earlier stages of assessment. 43% achieved a good level of development at the Early Years Foundation stage, compared to 58% across the Borough. At Key Stage 2 57% achieved Level 4 or above, much lower than their Asian (74%) and White (80%) peers. Whilst of concern, the cohort of Black pupils assessed in the Early Years Foundations stage is statistically very small (1.8% of the cohort) • There is a far higher prevalence of obesity amongst Black children (25%) than all other ethnic backgrounds. • The majority of young people in treatment for substance misuse in Bury are White British (91%).
Sexual Orientation	• National research suggests that 1 in 3 homeless young people are LGBT, thus suggesting that prevalence of mental health issues are likely to be higher.

Children and Young People Comparison Table (continued overleaf)

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	No Polarity Rank (1=highest)	North West		England	
KS2 English and Maths (%)		1	2011-12	**80.0**	82.0	81.0	82.0	83.0	80.0	5=		81.0	■	79.0	⊙
KS2 English (%)	Male	1	2011-12	**82.0**	84.0	83.0	82.0	85.0	81.0	4=		83.0	■	82.0	*
	Female	1	2011-12	**88.0**	92.0	90.0	90.0	91.0	89.0	6		90.0	■	89.0	■
KS2 Maths (%)	Male	1	2011-12	**87.0**	87.0	86.0	86.0	86.0	86.0	1=		86.0	⊙	84.0	⊙
	Female	1	2011-12	**83.0**	86.0	86.0	87.0	87.0	83.0	5=		86.0	■	84.0	■
KS4 (5+A*-C)		2	2011-12	**83.7**	86.9	84.4	86.3	82.8	83.5	4		83.8	■	81.1	⊙
KS4 (5+A*-C inc Eng&Maths) (%)		2	2011-12	**63.0**	61.1	59.9	58.5	65.0	54.3	2		58.9	⊙	59.0	⊙
	Male	2	2011-12	**58.0**	55.7	54.9	52.9	59.5	50.2	2		53.7	⊙	54.2	⊙
	Female	2	2011-12	**68.1**	65.4	64.3	63.2	69.7	58.3	2		63.3	⊙	63.6	⊙
Early Years Foundation Stage (%)		2	2011-12	**58.0**	60.0	64.0	63.0	69.0	62.0	6		62.0	■	64.0	■
Children with SEN (%)		3	2011-12	**3.4**	2.9	3.4	2.2	3.5	2.4		2=	2.8	◆	2.8	◆
	KS2 Performance	1	2011-12	**17.0**	21.0	20.0	8.0	22.0	14.0	4		19.0	■	17.0	*
	KS4 Performance	4	2011-12	**10.0**	15.4	7.7	5.4	7.4	4.0	2		7.7	⊙	8.4	⊙
Free School Meals (%)	Primary	5	2011-12	**16.4**	17.8	17.4	17.3	14.4	22.8		5	21.4	✣	19.3	✣
	Secondary	5	2011-12	**14.9**	14.3	13.8	15.4	13.5	18.4		3	18.1	✣	16.0	✣
	KS2 Performance	1	2011-12	**63.0**	67.0	66.0	65.0	65.0	64.0	6		68.0	■	66.0	■
	KS4 Performance	4	2011-12	**42.8**	35.4	30.2	30.1	36.1	24.2	1		33.9	⊙	36.4	⊙
School Absence (%)		6	2011-12	**4.4**	4.7	4.6	5.3	5.0	5.4	1		5.0	⊙	5.1	⊙
Persistent School Absence (%)		7	2011-12	**3.6**	4.6	4.3	5.9	5.2	5.6	1		5.2	⊙	5.2	⊙
Fixed Period Exclusions (%)		8	2011-12	**4.1**	4.2	3.3	2.8	4.9	4.5	3		3.9	■	4.1	■
Permanent Exclusions (%)		8	2011-12	**0.18**	0.11	0.10	0.04	0.10	0.05	6		0.07	■	0.07	■
Children in Need		9	2011-12	**412.7**	369.6	183.0	332.7	310.8	477.3		2	336.3	◆	325.7	◆
Child Protection Plans		9	2011-12	**38.1**	47.0	22.5	45.8	43.3	64.6		5	42.6	✣	37.8	◆
Children in Care		10	2012	**78.0**	79.0	54.0	73.0	49.0	80.0		3	76.0	◆	59.0	◆
Outcomes for Looked After Children	KS4 (5+A*-C)	2	2012	**13.6**	x	12.9	x	x	x	N/A		15.9	■	14.6	■
	SEN statement	3	2012	**28.0**	22.7	33.4	19.1	41.4	26.0		3	26.9	◆	29.4	✣
	Cautioned	11	2012	**<5%**	5.6	8.7	5.9	11.3	9.9	1		6.6	⊙	6.9	⊙
	Substance Misuse	12	2012	**3.1**	4.2	5.2	x	13.5	3.5	1		4.8	⊙	4.1	⊙
	SDQ score average	13	2012	**13.4**	14.6	13.1	x	14.2	13.6	2		12.9	■	13.8	⊙

1 Percentage achieving level 4 or above (Department for Education)
2 Department for Education
3 Number of pupils with statements as a percentage of all pupils (Department for Education)
4 Percentage achieving 5 A*-C at GCSE, including English and Mathematics (Department for Education)
5 Percentage of pupils eligible for free school meals in state-funded primary & secondary schools (Department for Education)
6 Percentage of sessions missed (Department for Education)
7 Percentage of persistent absentees (Department for Education)
8 Department for Education
9 Rate per 10,000 under 18 (Department for Education)
10 Rate per 10,000 under 18 (Child Health Profile 2013, Child and Maternal Health Observatory)
11 Percentage of looked after children cautioned or convicted during the year (Department for Education)
12 Percentage of looked after children identified as having a substance misuse problem (Department for Education)
13 Strengths and Difficulties Questionnaire average score (Department for Education)

⊙ Bury figure is better than national or regional average
■ Bury figure is worse than national or regional average
* Difference from national/regional has been tested as statistically significant
◆ Bury figure is higher than national or regional average (but no polarity - higher is not necessarily better)
✣ Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	No Polarity Rank (1=highest)	North West		England	
Physical Activity (%)	Year 1-2	14	2009-10	**67.0**	64.0	58.0	58.0	64.0	57.0	1		N/A		N/A	
	Year 3-6	14	2009-10	**80.0**	67.0	70.0	69.0	65.0	67.0	1		N/A		N/A	
	Year 7-9	14	2009-10	**81.0**	51.0	49.0	62.0	49.0	50.0	1		N/A		N/A	
	Year 10-11	14	2009-10	**72.0**	43.0	41.0	48.0	39.0	45.0	1		N/A		N/A	
	Year 12-13	14	2009-10	**60.0**	22.0	23.0	31.0	24.0	38.0	1		N/A		N/A	
Childhood Obesity (%)	Aged 4-5	15	2011-12	**9.4**	8.9	9.6	9.5	8.3	10.9	3		9.8	⊙	9.5	⊙
	Aged 10-11	15	2011-12	**18.5**	19.1	17.5	19.9	18.4	22.1	3		19.8	⊙	19.2	⊙
Children with MDF Teeth (%)		16	2008-09	**42.6**	44.4	N/A	38.1	44.5	44.1	2		39.8	■	33.4	■
Children seen by Dentist	Last 2 years	17	2012-13	**71.1**	77.5	N/A	75.8	74.2	79.1	5		74.7	■	69.1	⊙
Teenage Conception(%)	Aged under 18	18	2011	**32.9**	33.6	N/A	30.3	28.4	35.4	3		35.3	⊙	30.7	■
	Aged under 16	18	2009-11	**6.8**	8.4	N/A	6.1	6.6	8.1	3		8.0	⊙	6.7	■
Chlamydia Diagnosis Rate		19	2012	**2105.2**	2002.2	2226.1	1972.8	1754.7	3410.7		3	2280.3	⁘	1979.1	◆
Alcohol-related Hospital Admissions	Aged under 18	20	2010-11	**73.75**	81.22	N/A	96.8	83.64	60.36	2		93.7	⊙*	55.8	■*
First Time > Youth Justice System	Aged 10-17	21	2011-12	**637.0**	634.0	864.0	649.0	428.0	1299.0	3		905.0	⊙	876.4	⊙*
Admissions caused by Injury	Aged 0-17	22	2006-11	**1170.5**	1235.1	1454.2	1450.1	1313.8	1523.9	1		N/A		1223.1	⊙
Road Traffic Accidents		23	2008-10	**25.3**	41.5	44.3	26.4	14.8	28.7	2		31.0	⊙	23.5	■

14 Percentage who participate in at least 3 hours of HQ PE / School sport in typical week (Child and Maternal Health Observatory)

15 Child Health Profile 2013, Child and Maternal Health Observatory

16 Percentage of children with decay experience (ie: with one or more obviously decayed, missing (due to decay) and filled teeth) Child and Maternal Health Observatory

17 Children seen in past 24 months as percentage of population (Health and Social Care Information Centre)

18 Child and Maternal Health Observatory

19 Rate per 100,000 population aged 15-24 (PCT), Public Health England

20 Under 18s admitted to hospital with alcohol specific conditions: crude rate per 100000 population (2008/09-2010/11)

21 Rates of young people aged 10 -17 years receiving their first reprimand, warning or conviction per 100,000 population (Child and Maternal Health Observatory)

22 Crude rate per 100,000 popualtion aged 0-17 (SWPHO)

23 Children killed/seriously injured in road traffic accidents (rate per 100,000 children), Department for Transport

⊙ Bury figure is better than national or regional average

■ Bury figure is worse than national or regional average

* Difference from national/regional has been tested as statistically significant

◆ Bury figure is higher than national or regional average (but no polarity - higher is not necessarily better)

⁘ Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Priorities

- With the range of links between educational attainment and health outcomes later in life a number of the educational datasets for 2011-12 should be of concern. This is especially in relation to the possibility of entrenching health inequalities by restricting life chances offered by education:

    o In this regard the differential between pupils achieving 5 GCSEs at Grades A*-C between wards is of concern. The range from Ramsbottom at 78.58% of pupils to East (49.24%) and Redvales (49.59%) exemplifies this difference.
    o Attainment levels at foundation level (at age 5) are below those of the comparators.
    o The highest proportion of 16-18 year olds who are classed as NEET are also in Bury East and Radcliffe; again displaying clear inequalities across the borough.

- Given the rate of Looked After Children in Bury, and the fact that they are likely to experience a range of reduced health outcomes, it is essential that the best support is provided to enable these young people to achieve.

- The percentage of 4-5 year olds classed as obese has increased in each of the last 3 years. In addition clear inequalities in relation to obesity also exist requiring further attention. These include higher rates amongst the Black/Black British ethnic group and in the Radcliffe West and Sedgley wards. Services offering dietary intervention are also limited across Bury and could be explored further.

- Dental hygiene is a cause for concern with a high proportion of children with MDF teeth and comparatively low rates of regular dentist visits. Given the corresponding low rates amongst the adult population, further research is also required to examine the link between parent and child take up of dental services, and whether there are associated inequalities in terms of protected characteristics.

- Whilst the overall rate of teenage pregnancy has decreased across the borough stark differences between wards again exist to warrant attention. For example Radcliffe East and East wards display almost twice the rate of the borough as a whole.

- Nationally, diagnosis rates for Chlamydia are twice as high amongst 15-24 year old females than males. There is no available local data as to gender difference.

- In general there is an extremely high synergy between educational attainment and teenage conception. The five worst areas on the education deprivation ranking are also in the worst 6 wards for teenage conception. Elton ward is the additional ward not matching this pattern exactly.

- The same pattern is seen in relation to obesity; though Moorside ward has a lower than expected rate of obesity and Sedgley the reverse.

Lifestyle and the Living Environment

Physical health and the local living environment are interlinked with outcomes in later life. Poor lifestyle choices such as diet and substance misuse can have a profound impact on an individual's life trajectory, i.e. the likelihood that they will experience disease and ultimately premature mortality. Again, it is individuals experiencing higher levels of deprivation and social inequality who are most likely to be detrimentally affected. It is crucial that commissioning is focused on actions to help people to make healthy choices and live healthier lifestyles in line with the Public Health Outcomes Framework, and seek to break the cycle of deprivation accordingly.

Smoking

Smoking related mortality is entirely preventable, yet remains the largest single risk factor behind premature death in the country.[38] Between 2008-2010 there were 249.4 deaths per 100,000 population (aged 35+) in Bury. This mortality rate is significantly worse than the national average (210.6), and has also increased steadily since 2006-08 (242.4). Given this rate it is unsurprising to note that the percentage of adults smoking in Bury (22.0%) was higher in 2011/12 than all of the tier 1 comparators with the exception of Calderdale (also 22.0%). On a promising note the rate has, however, decreased from 24.4% in 2009/10.

Prevalence of smoking is far higher amongst the adult population engaged in routine or manual occupations. In 2011/12 the rate in this sub-group stood at 34.1%, higher than the comparative figures at regional (33.0%) and national (30.3%) levels. Similar to the preceding analysis the rate has decreased from 38.7% in 2009/10. Although there is no data at a local level, a combined analysis from the national Health Surveys for 2006-2008 reveals that rates are highest amongst Black Caribbean (37%), Bangladeshi (36%) and Chinese (31%) males. By contrast the highest proportion of female smokers nationally were shown to be White English (26%).[39] Stonewall surveys have also revealed higher prevalence of smoking amongst LGB residents in the North West. In 2012 27.5% of gay and bisexual men were current smokers, rising to 32.1% of lesbian and bisexual women (2008).[40]

The Bury Health Survey 2010 collected information on residents' smoking habits. Highest rates of current smokers were all found to lie within the spine of deprivation, namely East (26.3%), Radcliffe West (26.1%) and Radcliffe East (23.9%). By contrast the smoking rate in North Manor was just 12.1%. Unsurprisingly therefore a statistical association between deprivation and the smoking rate was discerned, with the odds ratio of being a current smoker far higher in the lowest two quintiles of deprivation compared with the most affluent quintile. A link to physical activity was also determined, with 24.2% of smokers

38 World Health Organisation (2008)

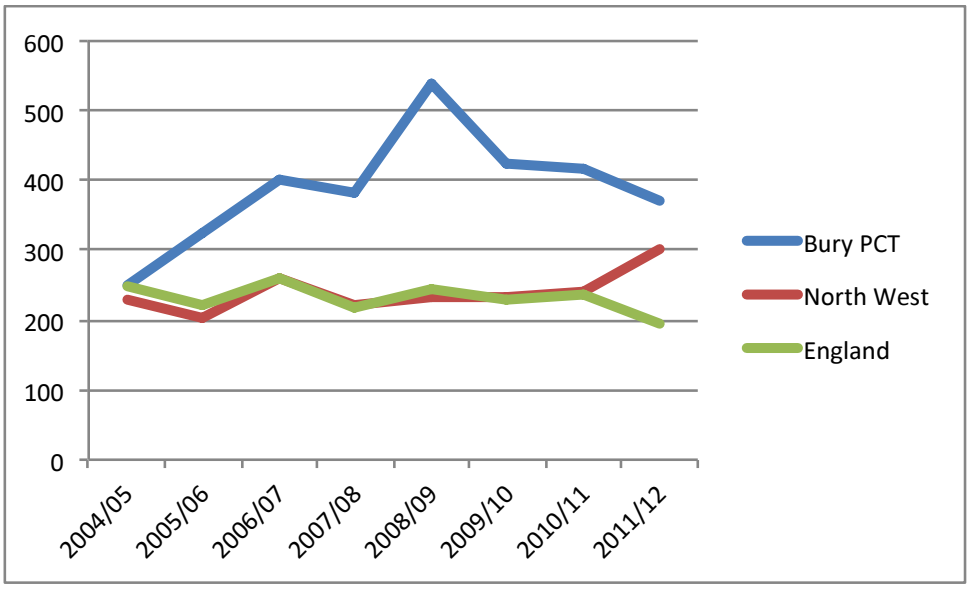
39 D.Millward and S.Karlsen: "Tobacco use among minority ethnic populations and cessation interventions" A Race Equality Foundation Briefing Paper (May 2011)

40 Stonewall: *Gay and Bisexual Men's Health Survey* (2012); Stonewall: *Prescription for Change: Lesbian and Bisexual Women's Health Check* (2008). The former survey does include Bury residents, but figures have not been included due to very small sample size (n=22)

stating that they undertook no exercise compared with 15.0% amongst the sample who had never smoked.

Smoking also has health implications for the wider family. The dangers of smoking in pregnancy have already been discussed above, but children who have parents that smoke are more likely to start smoking themselves and are also at a higher risk of developing respiratory diseases, particularly asthma. Research has highlighted the positive impact that the introduction of the smoking ban has had in this regard. Prior to its enactment, child emergency admissions for asthma were increasing by 2.2% each year; the year following the ban the rate fell by 8.9% and declined steadily in subsequent years.[41] In Bury the decline was not so immediate, peaking in 2008/09. However, the chart below shows that the rate has fallen yearly since this date to its current level (372 admissions per 100,000 population aged under 19). The present rate is still significantly worse than the national average (194) and all comparators.

Asthma Emergency Admissions for under 19s (2004-2012)[42]



Substance Misuse

Excessive alcohol consumption represents a huge challenge to Local Authorities and wider society. The cost to the NHS consequent on alcohol misuse has been estimated to be £2.7 billion per annum. In December 2010 the Coalition Government set out its approach to addressing alcohol dependence and tackling drugs, recognising that both of these are key causes of societal harm including crime, family breakdown and poverty. There is a determination nationally to break the cycle of dependence on drugs and alcohol and the wasted opportunities that result. In recognition of the complex causes and drivers associated with dependency, the government advocates that solutions should be holistic and centred around each individual with the expectation that full recovery is both possible and desirable.

41 C.Millet et al: "Hospital Admissions for Childhood Asthma After Smoke-Free Legislation in England" Paediatrics 2012-2592 (January 2013)

42 Information take from CHIMAT Disease Management Information Toolkit

On a positive note the rate of hospital admissions for alcohol-attributable (formerly NI39) and alcohol-specific conditions compares favourably with the tier 1 comparator group. Rates are also lower than the regional average for both men and women to a statistically significant extent. There has been an increase in rates for both categories since 2006, though this is in line with comparator trends. The rate of alcohol-specific admissions per 100,000 population for men (582) is twice as high as for women (288).

Research by the Association of Public Health Observatories has demonstrated the prevalence of alcohol-specific and alcohol-attributable hospital admissions increases with higher levels of deprivation.[43] At a ward level the highest rates of admissions are indeed present in more deprived areas of the Borough, ranging from 32.0 per 1000 population in Moorside and 30.1 in East, to just 12.6 in Sedgley. This dataset is examined more closely in the inequalities summary at the end of this chapter.

Of great concern, however, is the synthetic estimate of the prevalence of binge drinking (intake of more than twice the daily recommended limit) developed by the North West Public Health Observatory. This suggests that the rate in Bury is in excess of national, regional and all comparators with the exception of Stockton-on-Tees. Engaging in binge drinking is linked to accidental injury as well as the higher levels of A&E attendance observed during night time economy hours. Regular binge drinking can lead to significant health consequences, including liver damage, cancers, heart disease, diabetes and obesity. The Bury Health Survey 2010 found a significant association between BMI scores over 24.9 and drinking above sensible levels.

Data from the Bury Health Survey also shows that almost a quarter of residents (24.8%) drink alcohol on more than five days a week, increasing from 18.8% in 2002. High rates were observable here in more affluent areas such as Unsworth (36.4%) and Ramsbottom (28.1%). Whilst alcohol misuse is seen as being more common in deprived areas – and deprivation is linked to alcohol-attributable admissions (see above) and mortality – this confirms that the problem is not unique. Indeed 'affluent drinkers' are increasingly recognised as a group at a high risk of serious health problems due to non-identification at an early stage. As they are more likely to see their behaviour as sociable and desirable, they are less likely to seek treatment or advice as a result.[44]

There were 292 adults in alcohol service treatment during 2011/12. The majority were males (61%) and from a white ethnic background (98%). Over half (52%) were recorded as being a parent or guardian. 413 individuals had contact with the community alcohol service during the same period. The highest proportion were in treatment for less than 3 months (40%). Data for 2011/12 indicates that there were 14 transfers by Bury community drug and alcohol services to residential detoxification facilities, with one transfer to residential rehabilitation.

The latest estimates on drug misuse (2010/11) indicate that the number of opiate and/or crack cocaine users (OCUs) in Bury is 1,107.[45] The data highlights poly-drug use with 75%

43 L.Deacon et al: *Indications of public health in the English regions 8: alcohol.* Association of Public Health Observatories (2007)

44 Sheffield DAAT: *Affluent Drinkers Report* (2010)

45 The national prevalence estimates provide information on the number of opiate and/or crack cocaine users (OCUs), aged 15-64 years in England, by local authority. The estimates are limited to OCUs and do not provide data on the prevalence of overall drug use within the Borough.

(831) of OCUs recorded as opiate users and 54% (601) as crack cocaine users. Over a quarter (29%; n=317) of the population are recorded as injectors. The rate of OCUs per 1000 population in Bury is higher than the national average but lower than the regional average (Bury 9.24; England 8.67; North West 10.83) while the rate of injectors is lower than both the national and regional average (Bury 2.64; England 2.71; North West 3.23). Historic prevalence estimate data for Bury indicates little change in the prevalence of OCUs in the Borough. The estimated treatment penetration rate of the OCU population is 48%.

Injecting drug use and the sharing of equipment is the primary risk factor associated with the transmission of the blood borne virus Hepatitis C (HPV). National research estimates that 45% of injecting drug users are infected, but also suggests that prevalence in the North West is particularly acute (60%). Translating this second figure to Bury's drug injecting population, it can be estimated that there could be as many as 190 adults in the Borough who are chronically infected with Hepatitis C.

There were a total of 710 adults in receipt of drug treatment in Bury during 2011/12. Of these individuals 50% reported 'opiates only' as their presenting substance; a third reported 'opiates and crack'; with cannabis and cocaine use at 7% and 5% respectively. Approximately 20% of the in treatment population reported adjunctive alcohol use. The vast majority of those in treatment are White British (92%), and typically male (76%). The highest age bracket represented is 35-44 (42%).

It is significant to note that almost half of drug users (48%) and over half engaged in alcohol treatment (52%) are recorded as being parents or guardians. As noted above, children of substance misusers are 7 times more likely to become addicted themselves. The government estimate that circa 1 million children and young people are affected by problematic parental alcohol use in England.[46] Further, according to the Government's response to the Hidden Harm report, there are an estimated 250,000 and 350,000 children of drug users in the UK – equivalent to one child for every drug user.[47]

Applying the government's criteria of one child for every drug user, there are 1,107 children and young people affected by parental drug use. However, the prevalence estimates relate to individuals using heroin and/or crack only and does not include individuals who use other drugs (such as amphetamines, powder cocaine, cannabis, methadone). It is therefore an underestimate of Bury's overall drug using population and thus of the number of children and young people potentially negatively affected by parental drug misuse. In addition, the local alcohol needs assessment conducted by Alcohol Concern (2009)[48] estimated the impact of alcohol use locally, suggesting that there are 5,674 children and young people in Bury affected by problematic parental alcohol use. Combining these totals, there at least 7,672 children and young people in Bury who are adversely affected by parental substance use. This equates to approximately 18% of all children and young people in the Borough.

In terms of substance misuse in the LGBT population, research from a national survey has revealed high rates of binge drinking, with 34% of males and 29% of females reporting

46 Assessing the harms caused by alcohol to individuals and communities in Bury. Alcohol Concern. 2009

47 Government response to Hidden Harm, page 5

48 Assessing the harms caused by alcohol to individuals and communities in Bury. Alcohol Concern. 2009

binge drinking at least once a week in the last month,[49] compared to 19% of males and 15% of females in the general population. Further survey results indicate alarming rates of harmful or dependent drinking amongst the transgender population at 62%.[50] Finally, levels of drug misuse are also extremely high, with 52.9% of gay and bisexual men and 39.4% of lesbian and bisexual women having used illegal drugs in the past year.[51]

Obesity

Obesity is a significant public health issue which is associated with a higher likelihood of a range of diseases including certain cancers, type 2 diabetes, strokes and cardiovascular disease.[52] Research has also shown that obese individuals have poorer psychological health (including reduced self-esteem and social interaction) and face increased difficulties in obtaining and maintaining employment, which can further exacerbate the psychological effects.[53] It is a consequence of poor lifestyle choices such as excessive alcohol consumption, smoking, lack of exercise, and poor diet (only 15% of Bury residents eat their 5 a day[54]). Childhood obesity is also a strong predictor. In 2011-12 there were 41 finished hospital admission episodes with a primary diagnosis of obesity, equivalent to 22.0 per 100,000 population, which is a higher rate than most comparators as well as the regional average (13.0).[55]

According to QOF (Quality Outcomes Framework) statistics from GP practices for 2011-12 the crude extent of known obesity in Bury is 11.2%, but as this only includes registered and measured patients the true prevalence is likely to be considerably higher. This is confirmed by the Bury Health Survey, in which the sample prevalence was actually 18.3%, an increase of 4.3% on 2002. Almost half of the adult population were also found to be overweight according to BMI calculations. Modelled estimates from the South East Public Health Observatory for 2006-2008 indicate an expected prevalence of 22.7%, more than twice the observed rate.

There was wide variation in obesity prevalence at ward level, ranging from 28.2% in Radcliffe West to 16.1% in Elton. This dataset is considered more fully in the summary section below. Overall obesity is more common amongst females (19.0%) than males (17.4%). In Radcliffe West, more than a third of women were classified as obese (35.1%), falling to just 13.1% in Pilkington Park.

Physical Activity

A healthy and balanced diet together with regular exercise are key protective factors for many poor health outcomes, including obesity. However, the proportion of adults currently participating in moderate intensity recreation three or more times a week is lower in Bury than

49 J.Buffin et al: *Part of the Picture: lesbian, gay and bisexual people's alcohol and drug use in England (2009-2011)* (2012) pp.21-22 compared with the ONS General Lifestyle Survey (2010)

50 Scottish Transgender Alliance: *Trans Mental Health Study* (2012)

51 Stonewall: *Gay and Bisexual Men's Health Survey* (2012); Stonewall: *Prescription for Change: Lesbian and Bisexual Women's Health Check* (2008)

52 World Health Organisation (2000)

53 http://webarchive.nationalarchives.gov.uk/+/http://www.dwp.gov.uk/publications/specialist-guides/medical-conditions/a-z-of-medical-conditions/obesity/effects-obesity.shtml

54 Bury Health Survey 2010

55 These rates should be seen as indicative only due to the small numbers of finished episodes

the majority of tier 1 comparators at 22.9%.[56] The rate has increased since the first adult participation survey in 2005/06 by 2.1%, but has been subject to significant variation in the interim period. There are strong demographic variations in this dataset, with men (27.5%) far more likely than women (18.5%) to exercise regularly. People from non-white ethnic backgrounds are also less active (17.3% compared with 23.1%), whilst rates plummet for those over the age of 55 (12.2% as against 30.0% (16-34) and 27.7% (35-54)).

Sexual Health

Public Health England figures released in June 2013 demonstrated that the volume of newly diagnosed sexually transmitted infections in England rose by 5% in 2012 to 448,422 diagnoses. Almost half of these infections were chlamydia (46%), with gonorrhoea rising to 21%. This is at least partly attributable to improvements in the uptake of screening, but there will be many more cases remaining undiagnosed as a consequence of the often asymptomatic nature of sexually transmitted infection. Undiagnosed individuals run the risk of seriously adverse health outcomes, including infertility and mental health conditions such as dementia (linked to syphilis).

The diagnosed rate of chlamydia (aged 25+), gonorrhoea and herpes in Bury is below the national average. However, rates are generally higher than most tier 1 comparators, especially in the case of syphilis (although the number of recorded cases is far smaller than the other sexually transmitted infection categories).

HIV remains the most serious infection as it can ultimately advance to AIDS which is fatal. Increasingly advances in treatment have made HIV manageable, and it is thus regarded by some as being akin to other long-term conditions. Never the less increasing the uptake of HIV testing will reduce undiagnosed infection and prevent transmission and should therefore be considered an essential part of a successful sexual health strategy. In Bury the uptake rate of testing was 82% in 2012, far higher than most of the tier 1 comparators. The prevalence of diagnosed HIV in the Bury population aged 15-59 is currently 1.6 per 1,000, lower than the national average at 1.9.

It is estimated that around 30% of pregnancies are unplanned. Long-acting reversible contraception methods (LARC) provide women with greater control over their own fertility and mitigate against the risk of unplanned or unwanted pregnancies. In 2011/12 the LARC prescription rate in Bury was 63.7 per 1000 GP registered females aged 15-44. This is higher than all comparators, and above the national position by a statistically significant extent.

Air Quality & Pollution

Pollution data is collected at the Bury Roadside monitoring site located at junction 17 of the M60. Assessment of the air quality in Bury has shown that it is below the national annual mean objective for nitrogen dioxide along primary road networks. The annual average has risen from 65 μgm^{-3} in 2005 to 71 μgm^{-3} in 2011. The main local source of this pollutant is road transport and the area of predicted exceedence has been declared an Air Quality

56 The Chief Medical Officer's recommendation has now changed to 150 minutes of moderate intensity exercise each week

Management Area (AQMA) accordingly. Proactive local action to tackle pollution remains difficult as the traffic volume along the motorway is the primary cause.[57]

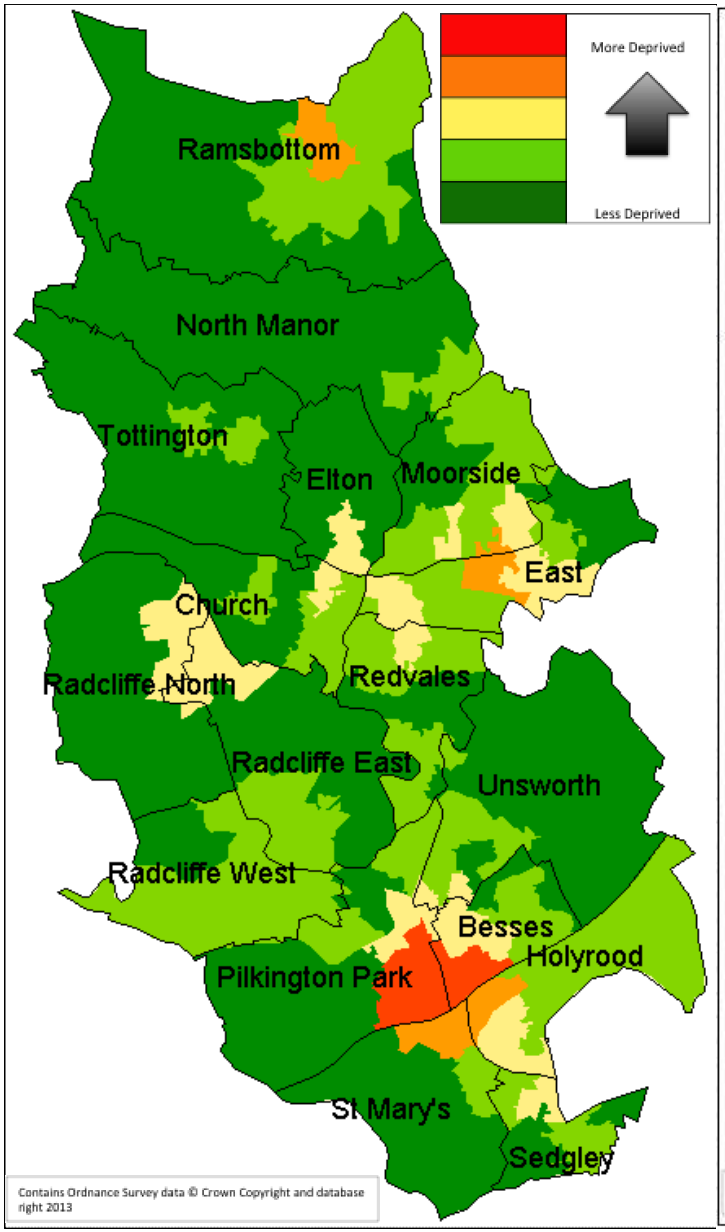
Road Traffic Accidents

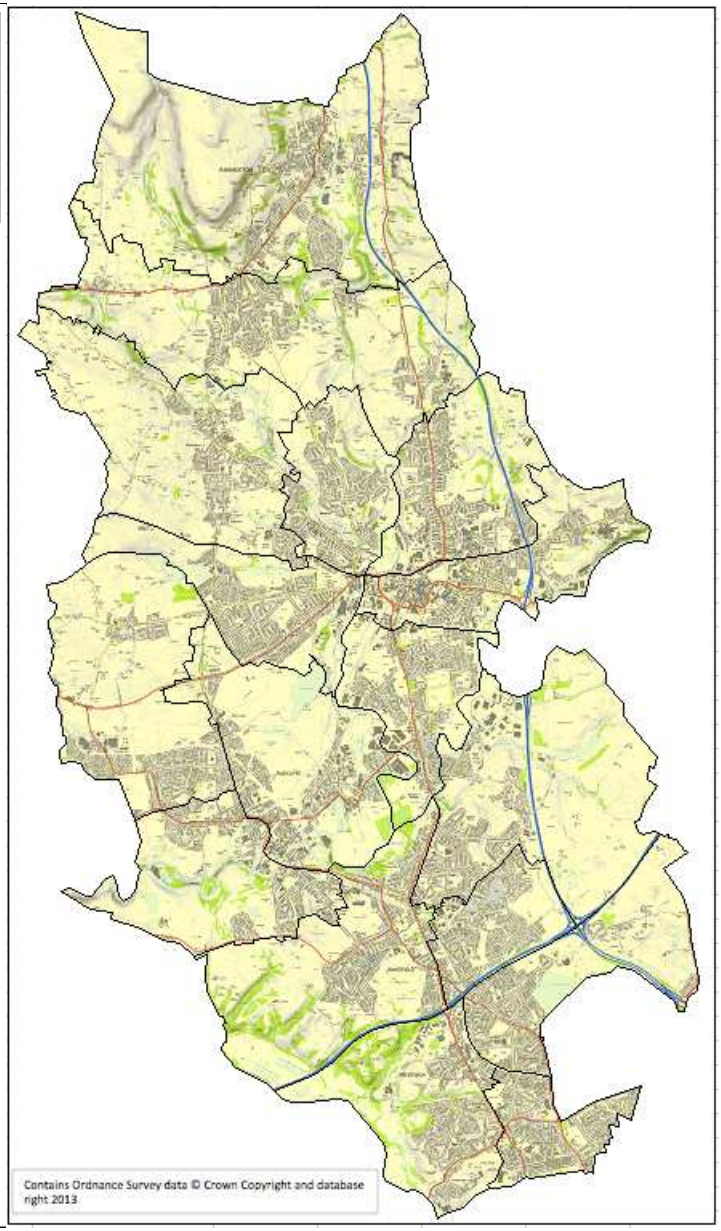
During 2008-2010 the rate of people killed or seriously injured in road traffic accidents was 31.0 per 100,000 population. Road safety in Bury is far better than the tier 2 comparators, with the corresponding rates per 100,000 being 45.0 for the North West region and 44.0 for England.

The map overleaf displays the outdoors sub domain of the Index of Multiple Deprivation which captures local data on air quality and road traffic accidents. This depicts the main 'hotspot' of environmental deprivation to be the intersection between the M60/A56 between Pilkington Park and Besses, which is the site of the monitoring station described above. The Bury New Road/Phillips Park Road lower super output area is amongst the 1% most deprived nationally for this sub-domain. There are secondary 'hotspots' by Rochdale Road to the east of Bury town centre and in north Ramsbottom.

57 The measurement of fine particles is also associated with pollution and transport. Levels in Bury (23 µgm-3) are well below the national objective in this regard (40 µgm-3).

Living Environment Outdoors Sub Domain (IMD 2010) by Local Data Quintile (range 2.65 – 88.67) and guide map of major routes





Inequalities Summary

In the following table data from the overall Index of Multiple Deprivation and the Outdoors sub domain is aggregated to ward level and set against the smoking, obesity and alcohol admissions datasets. This provides a way of examining the relationship between overall deprivation, health factors and the local environment. The heat elements of the table demonstrate the close association between deprivation and all three health datasets. The most noticeable examples which do not follow this trend is the relatively low level of smoking in Moorside, and the comparatively high rates of obesity and alcohol admissions in Sedgley and Unsworth respectively.

It should be noted that the finding relating to Sedgley mirrors the child obesity dataset discussed above, suggesting that obesity may be an issue running through familial generations. It was suggested in the child obesity section that the prevalence in Sedgley may be partly linked to the higher proportion of Black/Black British students in the measurement programme. Whilst the ward itself does not have a particularly high overall Black population, it does have the highest proportion in the Borough of Black and 'other' ethnic categories combined (4.34%). The relationship between obesity and ethnicity requires closer examination.

The Unsworth anomaly may be a reflection of the fact that despite its relative prosperity, the ward contains one particularly deprived super output area within its boundaries. Conversely it could also be recognition of the increase in 'affluent drinkers' described above – a cohort who may be entirely hidden until hospitalisation is necessary.

There is far less association with the Outdoors environmental sub domain, appropriately reflecting the fact that air quality and road traffic accidents are issues affecting all sections of society and geographies.

Ward	IMD (average)	% Smoking	% Obesity	Alcohol Admissions Rate	Outdoors (average)
East	40.01	26.3	21.4	30.1	40.46
Moorside	39.45	16.6	23.3	32.0	27.47
Radcliffe West	32.32	26.1	28.2	22.1	22.95
Besses	30.88	18.8	23.4	27.8	42.05
Redvales	29.01	17.3	23.1	23.8	26.65
Radcliffe East	28.06	23.9	23.1	26.8	18.41
St. Mary's	23.62	19.6	18.9	23.6	19.48
Radcliffe North	20.62	16.4	17.5	22.5	15.18
Holyrood	19.86	21.6	17.4	18.7	36.27
Sedgley	18.75	15.6	26.2	12.6	23.24
Unsworth	18.44	14.9	18.2	27.3	22.25
Elton	16.83	15.5	16.1	21.6	16.98
Church	14.31	15.2	17.8	23.6	23.81
Pilkington Park	12.63	17.9	18.4	19.9	40.69
Ramsbottom	12.52	18.2	17.3	18.6	23.90
Tottington	11.86	15.4	17.5	21.2	13.08
North Manor	9.97	12.1	19.3	21.2	15.25

The following inequalities should also be highlighted:

Protected Characteristic	Inequalities
Age	• More than two fifths of individuals engaged in drug treatment are aged 35-44 (42%). • Rates of physical activity for those aged over 55 are particularly low (12.2%).
Gender	• The rate of alcohol-specific admissions for men is twice as high as for women. Alcohol-attributable admissions are also far higher. • The majority of adults in alcohol and drug treatment in Bury are male (61% and 76% respectively). • Levels of obesity are slightly higher amongst females (19.0%) than males (17.4%).
Ethnicity	• National research suggests there are higher rates of smoking amongst Black Caribbean, Bangladeshi and Chinese males. • 98% of adults in alcohol treatment in Bury are from a White ethnic background, in excess of the general population proportion (89%). The percentage in drug treatment is also higher (92%). • Bury residents from non-White ethnic backgrounds have been found to be less likely to engage in regular physical activity (17.3% v 23.1%).
Sexual Orientation	• Research into the LGB population in the North West has shown higher rates of smoking than the general population. • National research suggests far higher rates of binge drinking and substance misuse than the general population. It has also been suggested that 62% of the transgender population are harmful or dependent drinkers based on survey analysis.

Lifestyle and the Living Environment Comparison Table

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	North West		England	
Smoking (%)	Aged 18+	1	2011-12	**22.0**	22.0	21.2	18.3	21.5	17.8	5=	22.1	/	20.0	n
	Routine/Manual	1	2011-12	**34.1**	30.6	35.3	28.6	41.0	24.5	4	33.0	n	30.3	n
Emergency Asthma Admissions	Under 19	2	2011-12	**372.0**	242.0	N/A	246.0	339.0	145.0	5	300.0	☹ *	194.0	n *
Smoking Mortality Rate		3	2008-10	**249.4**	251.2	N/A	241.9	218.5	251.6	3	N/A		210.6	n *
Alcohol-Attributable Admissions	Former NI39 Rate	4	2011-12	**2206.0**	2138.0	N/A	2319.0	2280.0	2462.0	2	2413	/	1974	n
	Male	4	2010-11	**1777.1**	1619.5	N/A	1847.2	1718.7	2050.5	3	1887.9	/ *	1485.3	n *
	Female	4	2010-11	**960.6**	910.7	N/A	1020.5	1050.1	1176.3	2	1095.2	/ *	845.6	n *
Alcohol-Specific Admissions	Male	4	2010-11	**582.0**	559.5	N/A	673.5	641.6	682.4	2	695.9	/ *	450.9	n *
	Female	4	2010-11	**288.2**	294.3	N/A	352.7	344.6	348.9	1	363.5	/ *	225.0	n *
Binge Drinking Estimate		5	2007-08	**25.1**	23.3	N/A	20.6	24.9	28.0	4	23.3	n	20.1	n *
Physical Activity (%)		6	2011-13	**22.9**	24.4	24.7	20.7	26.2	23.9	5	N/A		N/A	
Obesity (%)		7	2011-12	**11.2**	11.0	N/A	11.8	10.5	12.9	3	N/A		10.7	n
Obesity Admissions Rate		8	2011-12	**22.0**	12.0	N/A	23.0	4.0	76.0	3	13.0	n	22.0	
STI Diagnosis Rate	Chlamydia (25+)	9	2011-12	**125.4**	122.1	117.4	133.8	126.2	157.0	3	N/A		160	/
	Gonorrhoea	9	2011-12	**39.4**	44.1	26.6	25.2	38.1	25.0	5	N/A		45.9	/
	Herpes	9	2011-12	**57.7**	59.8	56.8	50.0	43.1	40.0	5	N/A		58.4	/
	Syphilis	9	2011-12	**9.2**	2.0	3.9	1.5	4.6	3.1	6	N/A		5.4	n
	Warts	9	2011-12	**136.4**	164.1	143.1	133.2	109.1	107.0	4	N/A		134.6	n
HIV Testing Uptake (%)		10	2012	**82.0**	67.0	73.0	71.0	75.0	87.0	2	N/A		N/A	
LARC Prescription Rate		11	2011-12	**63.7**	58.8	N/A	18.0	45.8	38.4	1	44.8	/	52.4	/ *
Road Traffic Accidents		12	2008-10	**31.0**	N/A	N/A	N/A	N/A	N/A		45.0	/	44.0	/

1 Percentage of adults aged 18 and over (Local Tobacco Control Profiles 2012/13)

2 Child and Maternal Health Observatory Disease Management Information Toolkit

3 Directly age/sex standardised rate of deaths attributable to smoking per 100,000 population for those aged 35+ (Local Tobacco Control Profiles 2012/13)

4 Rate of alcohol-related admissions per 100,000 population (Local Alcohol Profile)

5 Synthetic estimate of the percentage of the population aged 16 years (Local Alcohol Profile)

6 Percentage of the adult (age 16 and over) population in a local area who participate in sport and active recreation at moderate intensity, for at least 30 minutes on at least 12 days out of the last 4 weeks (Sport England)

7 Raw prevalence rate based on QOF disease register

8 Finished admission episodes (FAE) - first period of inpatient care (Health and Social Care Information Centre)

9 Rate per 100,000 population (Public Health England)

10 Public Health England

11 Rate per 1,000 GP registered female population aged 15-44 (Sexual Health Scorecard)

12 People killed/seriously injured in road traffic accidents (rate per 100,000 population), Department for Transport

Bury figure is better than national or regional average

Bury figure is worse than national or regional average

* Difference from national/regional has been tested as statistically significant

Bury figure is higher than national or regional average (but no polarity - higher is not necessarily better)

Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Priorities

- With the rates of smoking related deaths having increased in recent years and the prevalence of smoking being higher than almost all comparator areas maintaining action to tackle this should remain a priority.
- The wards of East, Radcliffe East and Radcliffe West having the highest rates of residents smoking should form the basis of most action.
- Further analysis is required in relation to smoking rates by ethnicity and sexual orientation to assess whether the higher rates described in national research are discernible at a local level.
- Given the levels of emergency admissions for asthma for the under 19s are higher than for the North West and England this also should be a focus for targeted action. The potential for preventing problems later in life and the possible cost savings this represents should be a spur for this activity.
- Whilst hospital admissions for alcohol attributable and specific conditions are better than comparator areas the levels of binge drinking are higher. Additionally the percentage of people drinking more than 5 days a week has increased. Both of these issues should be a focus for activity.
- The higher rates of people drinking more than 5 days a week in both Unsworth and Ramsbottom wards is worthy of further study. This is due to both these wards being amongst the least deprived in the borough.
- National research suggests extremely high rates of substance misuse amongst the LGBT community. There is no available data to measure the extent to which this pattern is reflected in Bury.
- The proportion of residents undertaking regular exercise is lower than most tier 1 comparator areas. The fact that levels for women are also lower than for men supports the need for initiatives such as the pilot Sports England National Lottery funded scheme. The lower rates for non-White residents also is worthy of further attention.
- Bury's higher rates of sexual transmitted diseases than most of the tier 1 comparator authorities should be a focus for services. This is especially pertinent when linked to priorities raised earlier in relation to young people's sexual health.
- The relationship between obesity and ethnicity requires closer examination to assess whether the relative rates amongst children and young people are mirrored in adulthood. This is particularly in relation to Sedgley ward with its higher obesity levels than perhaps would be expected from the deprivation index.
- As stated above this examination also should apply to Unsworth ward as it has higher drinking levels than its deprivation profile suggests. This either could be an issue in relation to 'affluent drinkers', related to the one output area which is deprived or a mixture of both.

Work and Welfare

Employment has the potential to help lift an individual and their family out of poverty and wider deprivation. It is also linked in research to better physical and mental health – providing regular social interaction and raising self-esteem.[58] This is confirmed by 2011 Census statistics which provides information on general health by employment category. Residents in Bury from higher professional, managerial and administrative occupations were more likely to cite being in 'very good health' or 'good health' than the rest of the population (84-87% against average 76%). By contrast, proportions amongst those who had never worked or long-term unemployed ranged from just 54% to 74%. The children of families in employment are also at a reduced risk of poor educational performance, and will have greater access to resources and services which can heighten well-being.

Bury's Economic Strategy aims to challenge poverty by enhancing employment prospects across the board. As a prime example the Rock retail regeneration development has created a significant number of jobs and attracted over £350 million in investment. According to CACI's retail footprint catchment model of over 5000 centres across the UK aimed at determining the top retail destinations, the Rock saw Bury climb 59 places to 126th.[59]

Adult Education

According to the latest annual population survey Bury's residents have a good background of educational attainment, maximising their potential for meaningful engagement with the labour market and the positive health outcomes which this will yield. 35.3% of residents of working age are qualified to NVQ level 4 and above, well in excess of the regional (30.3%) and also national benchmark (34.2%). Bury has the lowest proportion of working age residents without any qualifications amongst the tier 1 comparator group accordingly (7.3%).[60] Both of these figures have improved significantly compared with the 2008 levels reported in the previous JSNA.

Industry Profile

The SOC2010 system provides occupational classification details based on their skill level and content. There are 9 groupings with SOC 1-3 representing professional occupations (frequently used as a proxy indicator for graduate jobs). In Bury 43.4% of those employed fall under SOC 1-3. This is higher than the North West in general (40.5%), but is actually lower than the national average and most of the tier 1 comparator local authorities. Just 8.0% of employed residents are managers, directors or senior officials (SOC 1), a figure which has halved since the 2008 survey as reported in the last JSNA. By contrast Bury has the highest proportion in administrative and secretarial occupations (SOC 4) at 14.0%.

58 I Cole et al: *Work and worklessness in deprived neighbourhoods* (2009) Joseph Rowntree Foundation

59 http://www.caci.co.uk/616.aspx

60 these figures are markedly different from the usual qualification set derived from census statistics. This is to be preferred as it is a more current survey and focuses purely on working age.

According to the NS-SeC industry classification used in the 2011 Census, residents from a Hindu (22.1%) or Jewish (15.3%) background are far more likely to be employed in higher managerial, administrative and occupational classifications than the general population (9.5%). This falls to just 7.1% of Muslim residents. Conversely 12.9% of those identifying themselves as Christian are employed in routine occupations, far higher than the respective figures for Jewish (3.6%) and Hindu (4.1%) residents. Over a fifth of Muslims in Bury have never worked or are long-term unemployed (22.6%), almost four times the general rate (5.8%).

The industry profile will generally be reflected in average wage levels. The gross median weekly salary for full time workers resident in Bury is £496.70, which is average amongst the comparator group (range £464.60 - £517.50). Of further interest is the wide discrepancy between male and female full time earnings. Men (£510.00) earn slightly more than women (£486.40) but this gap is narrower than any of the other areas. Indeed the female wage is actually far higher than both the tier 1 and 2 groups.

With an increasingly competitive labour market and economic difficulties part time working is becoming increasingly prominent. The median part time wage is £157.90 in Bury, higher than the regional and national average.

Unemployment and Benefits

Whether as a consequence of the economic downturn, disability, illness or a lack of skills/education, unemployment reduces the prospects for upward social mobility. Analysis of current benefit statistics to focus on the nature and extent of unemployment is difficult as the benefit regime is currently going through a period of transition. Incapacity Benefit is being replaced with the new Employment and Support Allowance, but will not be fully phased in until 2014.

At the heart of these changes is the desire to tackle worklessness by reducing access to benefits for those assessed as being capable of work. Whilst moving those unemployed back into work has the potential for improving health outcomes, it will also place an additional burden on the local economy during a difficult period of global recession. Ultimately this may result in more people unemployed but with lower benefit related incomes, entrenching poverty and deprivation and placing an even greater burden upon public health and associated services. Persistent worklessness has been linked in research to housing instability, adverse health conditions and substance misuse[61] - both as a consequence and a cause.

Economic activity measured by the 2011 Census considers the extent to which the population is active in the labour market by combining those who were employed as well as those who were currently seeking work at the time of the Census. According to this method, 64.3% of residents over the age of 16 are economically active. There is wide variation by ethnicity and religion, with the proportion ranging from 72.7% for those from a Black/Black British background to 59.6% of Asian/Asian British residents. Economic activity in the Muslim community is even lower, at just 56.3%, as the following table demonstrates:

61 H.Carpenter: *Repeat Jobseekers' Allowance Spells* (2006) DWP Research Report 394

Religion	Total Economically Active	Economically Active (%)
Christian	59,657	62.1%
Buddhist	285	72.2%
Hindu	469	70.6%
Jewish	4,705	62.5%
Muslim	4,163	56.3%
Sikh	164	77.0%
Other religion	287	70.9%
No religion	59,657	62.1%
Total	95,103	64.3%

According to the most recently available benefit claimant statistics, 3.8% of the resident population aged 16-64 is currently claiming Job Seekers' Allowance (May 2013). Whilst only a snapshot picture, it should be noted that this rate has fallen from the 4.1% recorded 12 months previously. Overall the rate is average against the tier 1 comparator group, but better than the North West benchmark (4.1%). 27.22% of claimants are currently under the age of 24, revealing the magnitude of the problem young people face in terms of accessing the labour market.[62] The proportion of male claimants (5.2%) is more than twice as high as for females (2.5%).

The maps on page 45 displays the number of claimants of Job Seekers' Allowance by lower super output area – this information is not based on rates, but 100% claimant numbers. Highest concentrations are shown to be present in areas of known deprivation including Moorside (Chesham Fold and Fernhill), with other hotspots in the Radcliffe wards (Victoria Street/Civic Centre, Coronation Park, Radcliffe Boro FC/Coronation Road and St. John's/Pilkington Way Retail Park), Besses (Mersey Drive) and East (Teak Street/Craven Street). Chesham Fold and the Coronation Park area of Radcliffe are also the primary hotspots for claimants under the age of 24.

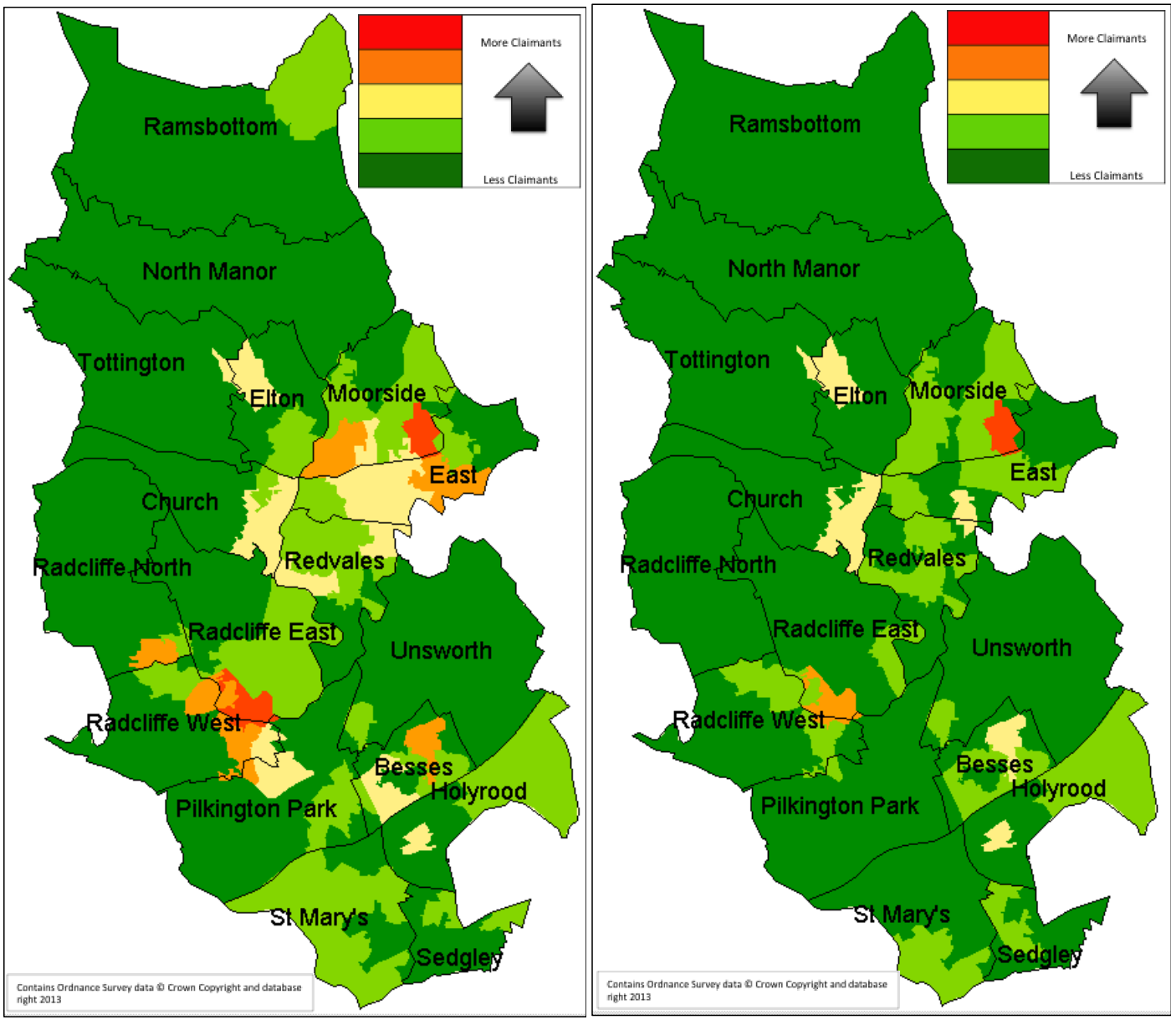
In terms of measuring unemployment, Job Seekers' Allowance rates only count those who are actively seeking work. According to 2012 annual population survey statistics, 9.7% of the working age population is actually unemployed, with a higher rate amongst women (10.8%) than men (8.7%). This is the reverse of the Job Seekers' Allowance proportions, and is a reflection of the far higher proportion of women choosing not to work due to childcare etc. Based on this dataset, Bury has a higher rate of unemployment than all of the tier 1 and 2 groups with the exception of Stockton-on-Tees (11.4%). The most alarming statistic concerns minority ethnic residents, 20.0% of whom are unemployed. Once again this is above all comparators except Stockton.

The long-term unemployment rate (over 1 year) based on the Job Seekers' Allowance dataset is currently 0.9%, and is lower than most comparator returns (range 0.7% to 2.0%). From a health outcomes perspective this is encouraging, as it is those suffering

62 this proportion is similar to the regional trend (27.17%) but well above national (25.84%)

long periods of worklessness who are most likely to suffer from poor physical and mental health. This rate is broadly similar regardless of age grouping (range 0.6% - 1.0%).

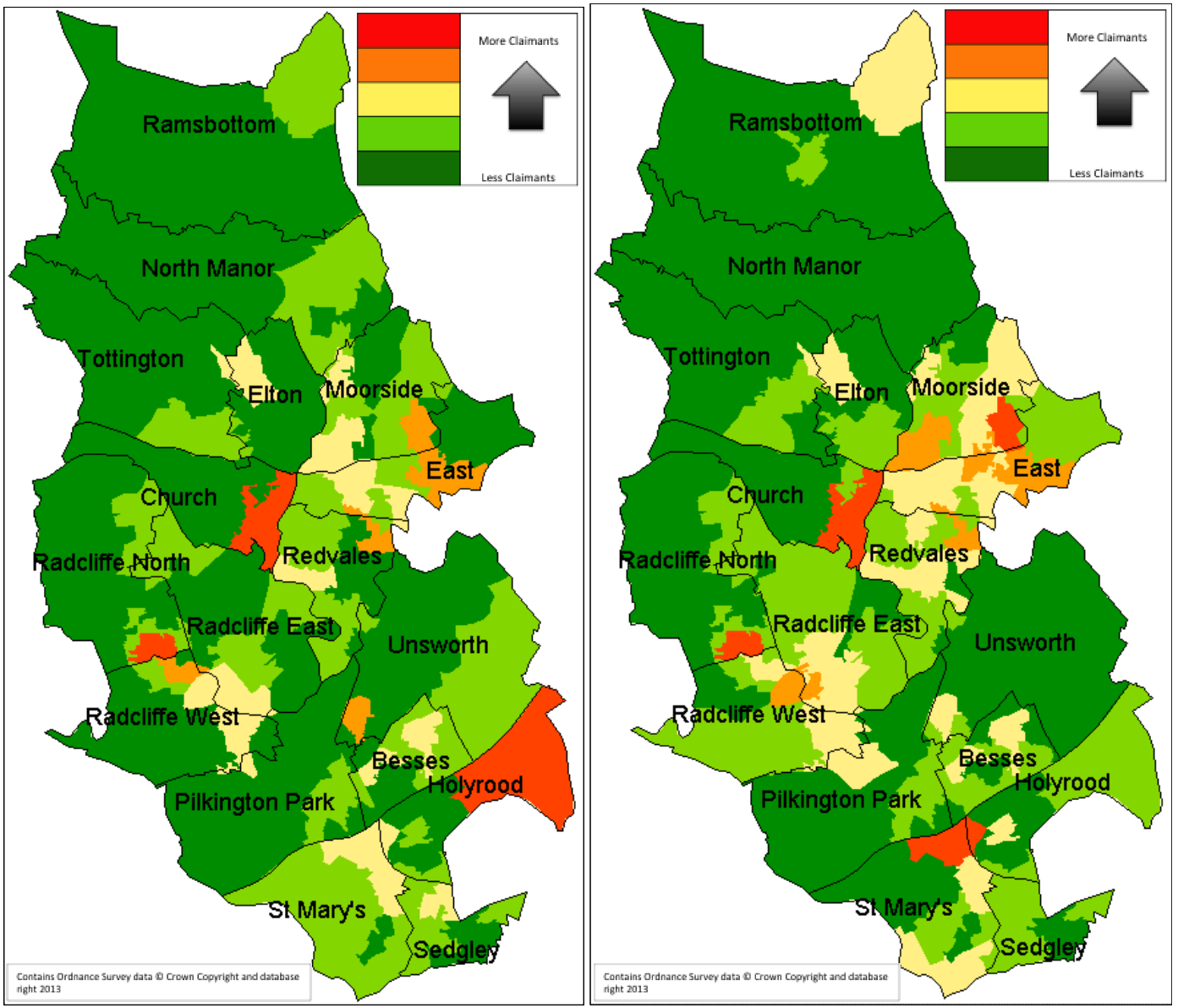
100% claimants of All Job Seekers' Allowance (Left) and 16-24 Year Old Claimants (Right) by Local Data Quintile (range from 6-137 and 0-50 respectively) at July 2013



The maps on page 47 demonstrates the current density of Incapacity Benefit/Severe Disablement Allowance and Employment and Support Allowance across the Borough (February 2013), and thus provides an indication of those local areas with the largest number of health related employment benefit claimants. Lower super output areas in Church (Daisyfield) and Radcliffe North (Radcliffe Boro FC/Coronation Road) are in the highest quintile for both datasets. Simister in Holyrood (for Incapacity Benefit), Chesham Fold in Moorside and the area around Prestwich Hospital in St Mary's (for Employment and Support Allowance) also feature prominently. Almost half of all claimants (49.6%) of Incapacity Benefit/Severe Disablement Allowance are entitled to benefit due to mental and behavioural disorders. As at February 2013 there were 2920 incapacity benefit and 910 Employment and Support Allowance claimants who had been in receipt of the benefit for at least 2 years – a combined total of 3830. The two year period is significant for the labour market: it is an often cited statistic that a person who has received incapacity benefit for more than 2 years is more likely to die or retire than obtain a new job.[63]

63 House of Commons Debate, 24 January 2006, col 1305 Back

100% claimants of Incapacity Benefit/Severe Disablement Allowance (Left) and Employment Support Allowance (Right) by Local Data Quintile (range from 5-80 and 5-165 respectively) at February 2013



Inequalities Summary

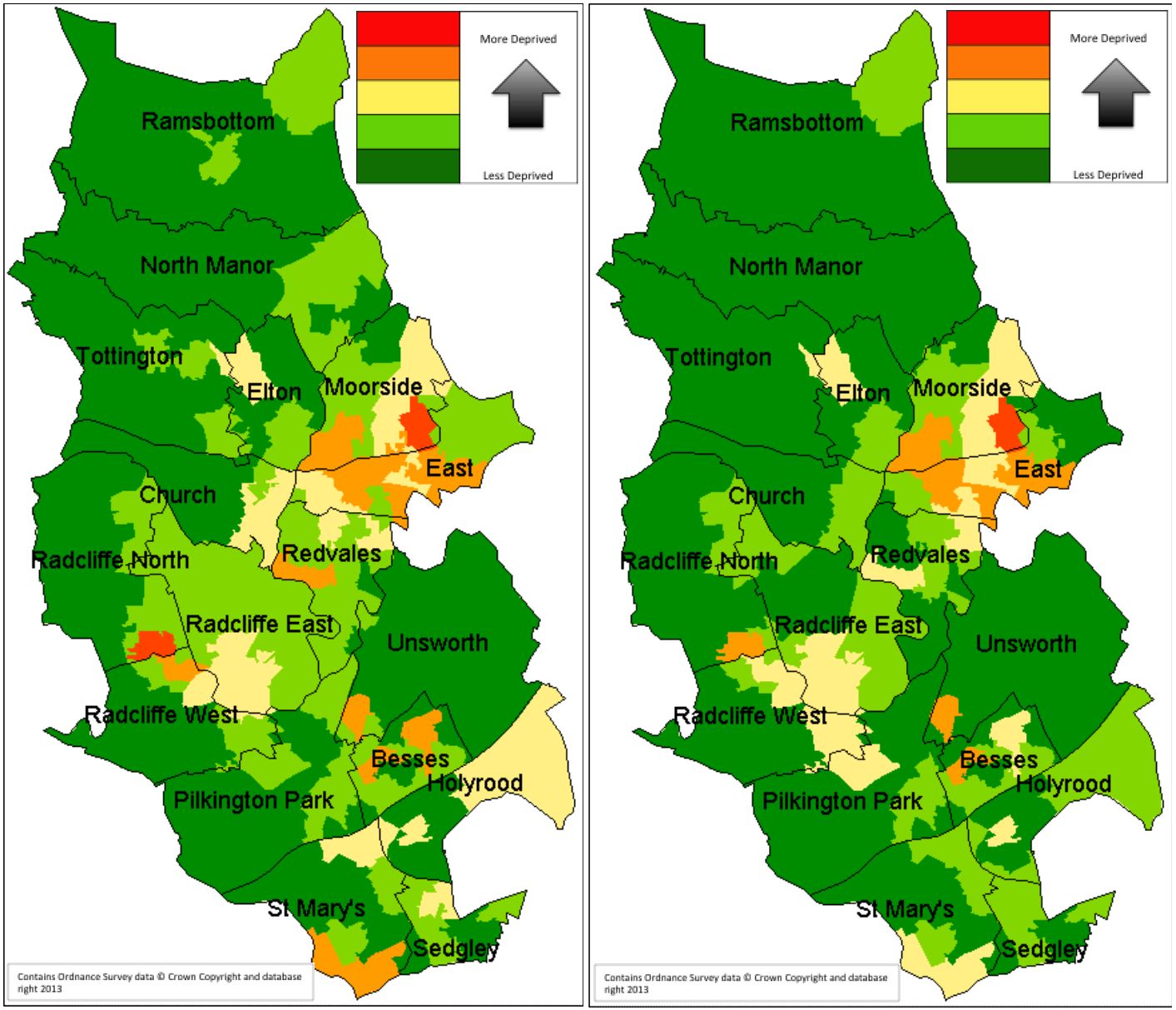
There are two domains of the Index of Multiple Deprivation particularly pertinent to work and welfare. The Employment domain captures involuntary exclusion from the labour market amongst the working age population, including Incapacity Benefit, Severe Disablement Allowance and New Deal participants not eligible for Job Seekers' Allowance. By contrast the Income domain provides a local assessment of financial deprivation, taking into account families in receipt of Income Support, Pension Credit, Child Tax Credit, Income-Based Jobseekers' Allowance and asylum seekers in receipt of subsistence or accommodation support. Asylum seekers are considered more fully in the next chapter on vulnerable communities.

The two domains are strikingly similar (see map overleaf), with the highest concentrations of deprivation at lower super output area level present in Moorside and East.

In the following table the colour grading system is used to show data from the two domains aggregated to ward level, together with the aggregated number of Job Seekers' Allowance claimants based on the 100% November 2012 small area dataset. The columns are almost identical, showing the intrinsic correlation between income and involuntary labour market exclusion. The fact that the colour grading is maintained in the Job Seekers' Allowance column illustrates that the deprivation profile provided by the Index remains wholly applicable to contemporary Bury. The very highest levels of deprivation are found in Moorside and East across the board.

Ward	Employment (average)	Income (average)	Job Seekers' Allowance (Number of Claimants)
Moorside	0.20	0.28	500
East	0.18	0.27	465
Redvales	0.15	0.21	345
Radcliffe West	0.15	0.20	420
Besses	0.15	0.22	350
St. Mary's	0.14	0.15	260
Radcliffe East	0.14	0.17	350
Radcliffe North	0.12	0.14	275
Unsworth	0.11	0.12	190
Holyrood	0.11	0.12	290
Sedgley	0.10	0.14	255
Elton	0.09	0.11	220
Church	0.09	0.09	160
Tottington	0.08	0.07	150
Ramsbottom	0.07	0.08	185
North Manor	0.07	0.06	95
Pilkington Park	0.07	0.08	160

Employment Domain (left) and Income Domain (right) (IMD 2010) by Local Data Quintile (range 0.03 – 0.36 and 0.02 – 0.56 respectively)



The following inequalities should also be highlighted:

Protected Characteristic	Inequalities
Age	• 27.2% of Job Seekers' Allowance claimants are under the age of 24, in excess of the national average (25.8%).
Gender	• Wages are higher for men than women by an average of £23.60 a week for full-time earners. However, the female wage is higher than all of the comparator areas. • Men (5.2%) are more than twice as likely to claim Job Seekers' Allowance (2.5%). However, there is actually a higher proportion of women (10.8%) than men (8.7%) who are unemployed, reflecting the far greater proportion of women choosing not to work.
Ethnicity	• There is wide variation in economic activity by ethnicity, ranging from 59.6% of Asian/Asian British to 72.7% of Black/Black British residents.
Religion	• Residents from a Hindu (22.1%) or Jewish (15.3%) background are far more likely to be employed in higher industrial classifications than the general population (9.5%), with below average rates in relation to the Muslim population (7.1%). • The Muslim community also has the lowest rates of economic activity in the Borough.

Work and Welfare Comparison Table

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	North West		England	
Adult Education (%)	NVQ4+	1	2012	**35.3**	30.8	32.7	28.0	39.0	27.6	2	30.3	/	34.2	/
	No Qualifications	2	2012	**7.3**	10.2	9.6	9.5	7.6	8.9	1	11.1	/	9.5	/
Employment by Category (%)	SOC 1-3	3	2012	**43.4**	40.6	44.7	48.7	41.2	44.0	4	40.5	/	44.2	n
Full Time Weekly Wages (gross)	All	4	2012	**496.7**	508.6	464.6	480.1	517.5	484.6	3	472.5	/	512.7	n
	Male	4	2012	**510.0**	557.2	501.0	527.2	573.9	562.4	5	509.6	/	553.3	n
	Female	4	2012	**486.4**	456.6	419.5	410.7	454.3	407.5	1	419.5	/	453.0	/
Unemployment Rate	All	5	2012	**9.7**	7.7	8.0	8.5	5.7	11.4	5	8.7	n	8.0	n
	Male	5	2012	**8.7**	8.5	9.8	10.1	5.6	13.0	3	9.8	/	8.4	n
	Female	5	2012	**10.8**	6.9	6.0	6.9	5.7	9.6	6	7.4	n	7.6	n
	Minority Ethnic	6	2011-12	**20.0**	12.3	19.4	N/A	8.1	25.3	4	14.6	n	13.6	n
Long Term Unemployment Rate		7	May-13	**0.9**	1.4	0.7	1.5	0.8	2.0	4	1.2	/	1.0	/
Incapacity Benefit/Severe Disablement Allowance	!00% claimant count	8	Feb-13	**2930**	2890	18350	5170	3530	2830					
Employment and Support Allowance	!00% claimant count	8	Feb-13	**5930**	5650	34560	9400	7500	5510					
Job Seekers Allowance Rate	All	8	May-13	**3.8**	4.9	3.0	4.6	3.2	5.6	4	4.1	/	3.6	n
	Male	8	May-13	**5.2**	3.2	4.0	6.4	4.5	7.7	4	5.6	/	4.1	n
	Female	8	May-13	**2.5**	4.9	1.9	2.8	2.0	3.4	3	4.6	/	3.6	/

1 Percentage with NVQ4+ - aged 16-64, NOMIS

2 Percentage with no qualification - aged 16-64, NOMIS

3 SOC 1 Managers, directors and senior officials; 2 Professional occupations; 3 Associate professional & technical, NOMIS

4 Median: In published reports, median earnings rather than the mean will generally be used, NOMIS

5 Unemployment rate - aged 16-64, NOMIS

6 16+ unemployment rate - ethnic minority, NOMIS

7 Proportion of resident population aged 16-64 estimates (over 12 months unemployed), NOMIS

8 Nomis

⊙ Bury figure is better than national or regional average

■ Bury figure is worse than national or regional average

* Difference from national/regional has been tested as statistically significant

◆ Bury figure is higher than national or regional average (but no polarity - higher is not necessarily better)

⁘ Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Priorities

- Those people employed in the higher Standard Occupational Classes are lower than the national average and most other tier 1 comparator areas. Indeed the proportion in SOC1 (Managers and Senior Officials) has declined markedly since 2008.
- East, Church and Radcliffe North have the highest concentrations of people on incapacity benefit. Whilst these wards are also amongst the more deprived in the borough, as incapacity benefit is clearly linked to health status these areas should be a focus for activity.
- In addition there are concentrations of claimants of Incapacity Benefit in both Holyrood and Unsworth wards which similarly should be focussed upon. The area in Unsworth ward is known to be a pocket of deprivation in an otherwise relatively affluent ward.
- Over half of those claiming incapacity benefits are for mental or behavioural disorders. Any efforts to reduce incapacity benefit figures and potentially open up work opportunities should focus on this group. In addition this is likely to have other health benefits.
- For both relevant domains from the Index of Multiple Deprivation the highest concentrations of deprivation exist in Moorside and East wards.
- There is no available dataset concerning benefits or economic activity amongst the LGBT population.

Vulnerability

Certain sections of the community are intrinsically more vulnerable to experiencing poorer physical and mental health outcomes. This includes those people with physical or learning difficulties, older people, those experiencing violence or substance misuse in the family home, and homelessness itself.

Physical Disability

Disability has far reaching consequences for the individual and wider society; including the experience of discrimination, the support demands placed on the family nucleus, and the pressures on social care ensuring that complex needs are met. In relation to discrimination 19% of disabled adults nationally experienced unfair treatment at work compared with 13% amongst the rest of the working population.[64] The Office for Disability Issues has also highlighted the fact that a far higher proportion of families including disability suffer income deprivation than average.[65]

National prevalence estimates suggest that the rate increases with age, with 6% of children, 16% of working age adults and 45% of those of retirement age having some form of disability.[66] Applying these estimates to the Bury population profile, there are approximately 2220 children and 32,235 adults in Bury affected by disability.[67] By 2021 these figures could rise to 2535 and 35,048 respectively.

Disability Living Allowance provides income support for adults and children requiring assistance with personal care or mobility. It can therefore be considered a conservative proxy measure of severe disability amongst children and adults within Bury (claimants will have had to provide evidence of disability). The estimate will become even more conservative when Disability Living Allowance is replaced by the more rigorous Personal Independence payment (it has been estimated that 25% of claimants may lose their entitlement nationally).[68] According to DWP statistics, as at February 2013 there were 1160 children (under 16) and 10,300 adult claimants.

The dataset can also be broken down to small area geography, allowing an analysis of the concentration of claimants. The map on page 54 demonstrates the current density of Disability Living Allowance across the Borough (February 2013). The highest number of claimants reside in the Radcliffe Boro FC/Coronation Road area of Radcliffe North (250). There are also high levels in the south west corner of Unsworth around Elms North (205), and parts of Church, Besses and East. The highest number of child claimants reside in Sedgley in the Kings Road area (35) and around Danesway/Ravensway (30).

64 Fair Treatment at Work Survey 2008

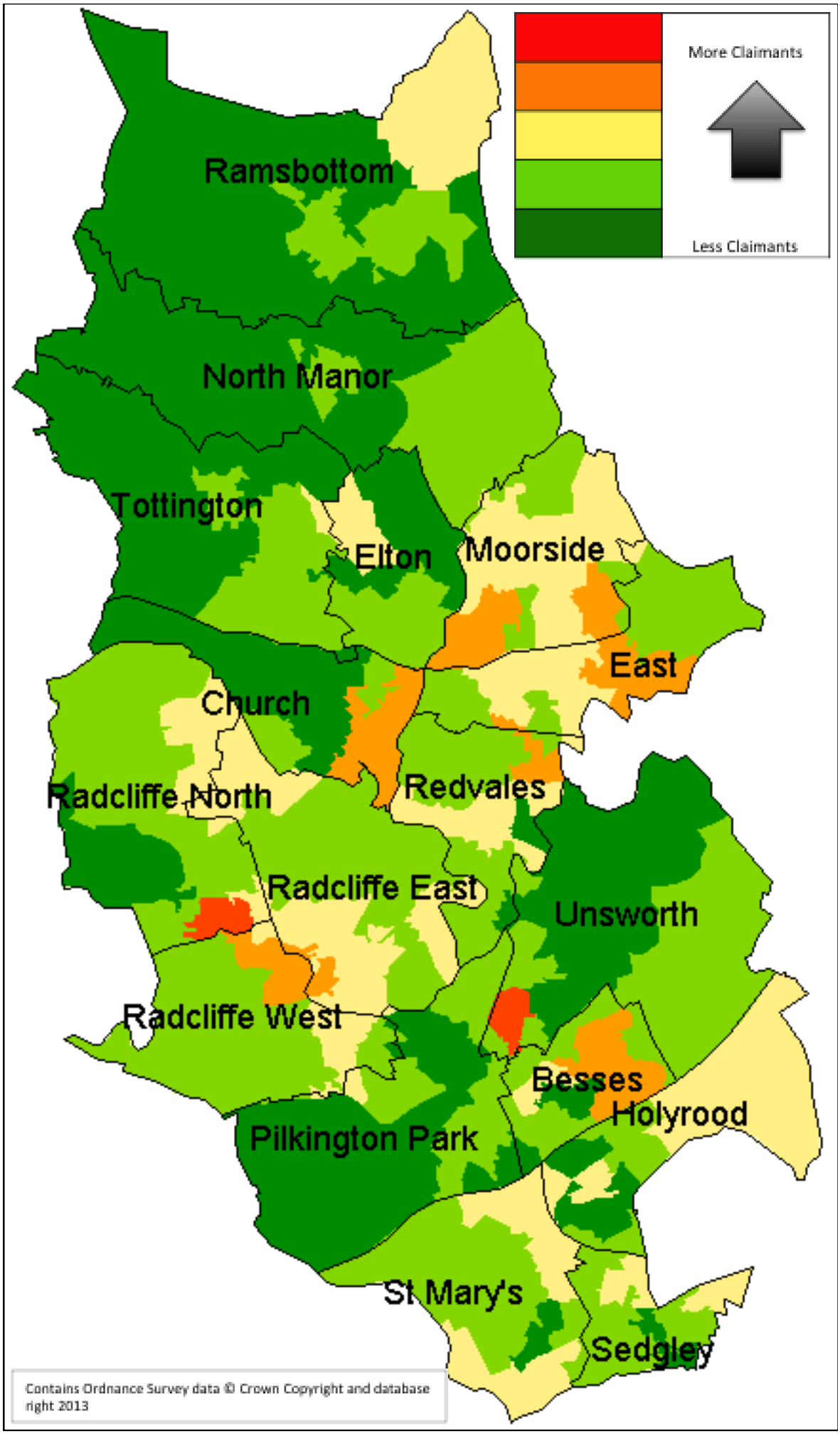
65 http://odi.dwp.gov.uk/disability-statistics-and-research/disability-facts-and-figures.php#3

66 Family Resources Survey 2010/11

67 Disability is defined under the Equality Act 2010 as having a physical or mental impairment that has a substantial and long-term negative effect on ability to do normal daily activities.

68 British Social Attitudes (2012)

100% claimants of Disability Living Allowance by Local Data Quintile (range from 20-250) at February 2013



There is a huge gap between estimated prevalence and numbers known to Adult Care Services. In 2012/13 there were 2661 registered residents over the age of 65 with a physical disability, largely involving work with people with sensory impairment or occupational therapy). 484 people under 65 received care management and occupational therapy intervention. It should be noted, however, that not all individuals with disability will be eligible for adult care support. There will also be a proportion receiving health service support and/or unpaid care from a relative or close friend (which may simply be a lifestyle choice).

Research from Stonewall suggests that there may be more of an issue in relation to LGBT accessing of social care services. Their research indicates that 19% of disabled older lesbian, gay and bisexual people did not access the services they felt they needed, twice as high as the rate in the general disabled population.[69]

With regard to sensory impairment, there were 675 residents in Bury registered as blind in 2011. The majority were over the age of 50, with 115 aged 18-49 and just 15 under 18. 45% of blind people in Bury (305) have some form of additional disability. These are presented in the table below:

Additional Disability	Number of Blind People
Physical Disability	175
Learning Disability	25
Deafness	5
Hard of Hearing	90
Mental Health Problems	10
TOTAL	**305**

Demand for major adaptations to people's homes is increasing significantly and has been generally increasing year upon year. In 2012/13, over 300 tenants and residents were referred for consideration for major adaptations; with children's cases in particular being typically high value. Funding challenges are likely to continue in managing this demand.

Learning Disability

A learning disability impacts upon a way an individual communicates and understands information, making it difficult to learn new skills and cope independently. In the majority of instances, the disability emerges at birth or in early childhood – causes include brain injury, maternal illness during pregnancy and genetic factors.

Estimates of prevalence suggest that in 2012, there are around 1.14 million people with learning disabilities in England. This includes 236,000 children and 908,000 adults aged 18+,[70] and equates to 2.15% of the population. Using this estimate, there will be in the region of 3979 individuals in Bury with learning disabilities. Research has indicated that the prevalence of learning disabilities will rise in line with population increase, although the ageing population and increased life expectancy for those with learning disabilities may see the age-specific dynamics changing over time. Based on current population projections the total figure will rise to around 4255 in 2020.

69 Stonewall: *Disability: Stonewall Health Briefing* (2012)

70 *Improving Health and Lives: Learning Disabilities Observatory: People with Learning Disabilities in England 2012*

Identification and support for this cohort is crucial to maximise the potential for intellectual development, social function and ultimately, more positive health outcomes. In 2011/12 there were 902 children with learning disabilities known to schools in Bury. The equivalent rate is far higher (29.96 per 1000) than the national average (24.53 per 1000). This figure includes pupils identified as having moderate (23.95 per 1000), severe (3.79 per 1000) and profound/multiple learning difficulties (2.23 per 1000). The identification rate is also higher than all of the tier 1 local authority comparator areas. Given the importance of identification, these figures should not be seen as negative but as an indicator of service need. By contrast, the rate of known children within the autistic spectrum (6.61 per 1000) is actually lower than all comparators with the exception of Calderdale.

The rate of identification and interaction with learning disability services drops off markedly beyond school age. Research suggests that the majority of adults simply do not engage due to multiple factors, including:

"*- a decrease in health/disability surveillance in post-education health and social care agencies;*
- the operation of eligibility criteria to ration access to specialised social care supports for adults with learning disabilities;
- the stigma associated with learning disability leading to an unwillingness for people with learning disabilities to use specialised services or self-identify as having learning disabilities;
- the less visible disabling impact of the intellectual impairments associated with learning disabilities in non-educational settings."[71]

This is borne out by the fact that there were only 751 patients on the GP Learning Disabilities Register over the age of 18 in 2011/12, equating to 0.51% of the registered population – and well below the 2.15% national prevalence estimate. Meanwhile, social care statistics show that 501 individuals are currently being supported by Adult Care Services. Over 10% of these have needs so complex that they require residential or nursing care, whilst a third are in Local Authority supported accommodation. The Learning Disabilities Observatory (Public Health England) has developed a an indicator comparing these two local authority and GP statistics, indicating that it would be beneficial for coordination and local planning if the two levels are the same or similar. For Bury there is a 23.27% difference, which is well in excess of the national level (6.16%) and all tier 1 comparator areas (range 2.08% - 20.01%).

Having a learning disability increases the likelihood of poorer health outcomes. Common health problems include: respiratory disease, coronary heart disease, mental health problems, obesity and sensory impairment. [72] More specifically, research has identified particular issues relating to lung inflammation and epilepsy. People dying of lung inflammation caused by foreign bodies or solids/liquids in the windpipe are 9 times more likely to have a learning disability; people dying of epilepsy or convulsions are almost 10 times more likely to have a learning difficulty.[73] Both of these should be considered preventable. Ultimately life expectancy remains significantly reduced, with a median age at death in Bury of 57,[74] more than 20 years lower than the population as a whole.

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71 ibid p.3

72 For more information see www.ihal.org.uk/projects/particularhealthproblems

73 Improving Health and Lives: Learning Disabilities Observatory*: How people with learning disabilities die (2010)*

74 median nationally is 56

It is therefore crucial that adults with learning disabilities receive regular GP health checks in order to identify or reduce the risk of poor health conditions. Nationally, 52.7% of eligible adults received a health check in 2011/12. By contrast, the figure in Bury was just 19.02%, which is well below the proportion across all the comparator areas.

There are more positive statistics relating to accommodation and employment. Overall 86.3% of adults aged 18-64 known to social care services with a learning disability live in settled accommodation (in their own home or with family), well in excess of the national average (73.3%). With the current governmental focus on improving health outcomes and social inclusion through employment, it is also encouraging to note that 7.8% of this cohort were in paid work in 2012/13. Again this figure is better than the national average (7.2%) and most other comparators. A further 7.2% were engaged on a voluntary basis.

Mental Health

Throughout this JSNA mental health has been continually referenced as it affects all ages and all aspects of society. Mental health issues may be pre-existing, develop with age (e.g. dementia) or be brought on by the impact of social exclusion, deprivation and the experience of adverse physical health. Risks are higher, for example, for those who are unemployed, homeless or living with long-term illness/physical disability. As noted above almost half of claimants of Incapacity Benefit/Severe Disablement Allowance receive benefit due to a mental or behavioural condition (49.6%). This figure is similar to that reported in the last JSNA. The Bury Health Survey 2010 revealed that respondents facing financial hardship were significantly more likely to have General Health Quotient (GHQ) scores indicative of depression.

Based on national modelling, the Bury Mental Health Strategy (2013-2018) states that there are likely to be in excess of 19,000 residents aged 18-64 with a mental health condition, equating to almost 17% of the population. GP practice data for 2011/12 indicates that there are 1746 registered patients in Bury with a serious mental illness (0.9%), defined as schizophrenia, bipolar affective disorder or other psychoses. There is a degree of local variation, with the prevalence ranging from 0.5% to 1.9% by GP practice. Practices with the highest recorded prevalence are located in Elton, Radcliffe East and Moorside.

Research has shown higher rates of mental health conditions amongst people from an Irish ethnic background.[75]A higher estimated prevalence of psychoses amongst the Black Caribbean population has also been frequently cited.[76] There is a lack of monitoring in relation to LGBT, but research indicates a higher prevalence of conditions amongst this population, particularly those who are transgendered.[77]

People with mental health conditions may suffer stigmatisation, discrimination and social exclusion. It is therefore crucial that services are available within communities (to promote accessibility) and that lower level services are developed to promote the early management of conditions and redress the need for more intensive support later on. Both of these elements are explicitly recognised in the current Mental Health Strategy. There

75 G.Harrison: "Ethnic minorities and the Mental Health Act" *British Journal of Psychiatry* (2002) 180: 198-199

76 M.Fitzpatrick: "Profiling mental health needs: what about your Irish patients?" *British Journal of General Practice* (October 2005)

77 H.Williams et al: *The Lesbian, Gay, Bisexual and Trans Public Health Outcomes Framework Companion Document* (2013) p.15; Scottish Transgender Alliance: *Trans Mental Health Study* (2012): 36% of those surveyed had an existing mental health condition, whilst 66% had used mental health services at some point.

also needs to be a recognition of the impact that a mental health condition can have upon the family environment, including to demands placed on those acting in a caring role (which is discussed later in this chapter).

Settled accommodation and employment are key ways of enhancing quality of life by reducing social isolation and promoting independence. In terms of Bury residents, adult Social Care Outcomes Framework provisional data for 2012/13 reveals that 50.2% of adults in contact with secondary mental health services live independently (with our without support). This figure is 9% lower than the national average. Only 2.6% of this cohort are in employment, well below the national position (7.7%) and most tier 1 local authority comparators.

Other Social Care Indicators

There are a number of other indicators that are relevant to the disability, learning disability and mental health sections above. These are captured through the Adult Social Care Outcomes Framework and are the same as (or proxies for) former National Indicators which were present in the original JSNA core dataset.

The social care quality of life indicator assesses the overarching view of users across 8 domains, including control, personal care, food, accommodation, personal care, social life, occupation and dignity. In 2012/13 the combined 'score' in Bury was 19.6, which is higher than all of the tier 1 comparator group as well as the national average (18.8).

Recent government policy has centred on the development of the personalisation agenda, enabling social care users and carers to receive self-directed support (including personal budgets) or direct payments. These allow individuals to have greater ownership of their care package, thus promoting choice, control and independence. Amongst users/carers receiving services, 38.1% were in receipt of direct payments during 2012/13 whilst 47.6% received self-directed support. The proportion receiving self-directed support is noticeably lower than all the comparator areas.[78]

Older People

Older people are particularly vulnerable to adverse health conditions. There is a significant challenge for public health and partners in this regard as population projections suggest that the numbers of elderly in Bury society is set to rise dramatically over the next decades. By 2030 the number of people aged 85 and over will rise by 3700, a staggering 97% increase.

Hospital Admissions

With old age and frailty comes an increased risk of trips, falls and fractures. A recent study has estimated that just over 12,000 people in Bury aged 60 and over fall every year: the economic and social care cost of this is in the region of £10.5 million per annum.[79] This burden will continue to soar in line with the ageing population in the absence of effective intervention.

78 2 other national indicators are NI132: Timeliness of social care assessment. Local definition data for 2012/13 suggests that the proportion receiving timely assessment has risen from 77.9% in 2011/12 to 83.6% in 2012/13; NI133 Percentage of social care packages in place 28 days after assessment. Local definition data suggests that this has increases from 74.5% in 2010/11 to 77.5% in 2012/13.

79 Bury Falls Prevention and Bone Health Strategy (2011-15)

Moreover, the effects for the individual of a fall are potentially devastating. Approximately 15% of those experiencing hip fracture in Bury (a common fall related injury) die within a month of suffering the injury, rising to 24% after four months. The corresponding national figures are lower at 10% and 20% respectively.[80] This is also borne out by the admissions rate for fractured proximal femur which reached a six year high in 2010 at 121.71 per 100,000 population, and is well in excess of all the comparator areas.

Around half of all people aged over 65 suffer from some form of arthritis. Osteoarthritis is the most common form, and can progress from stiffness of the joints through to severe pain and disability. Knees and hips are particularly at risk, as they are primary weight-bearing joints within the body, and onset can have a detrimental impact upon quality of life. Risk factors include ageing, female gender, ethnicity (most common in White ethnicity), previous joint injury and obesity. Hip and knee replacement surgery data is therefore commonly used as a proxy measure of the relative prevalence of arthritis. Encouragingly, Bury has lower rates of admission in 2011/12 than all comparator areas. In line with national trends rates are far higher amongst women (609.8 per 100,000 for hip replacement; 634.8 for knee replacement); than men (425.1 and 549.1 per 100,000 respectively).

Mental Health and Dementia

Adverse mental health should not be considered a normal aspect of ageing. However, prevalence in this age group is significant. According to estimates in the Bury Mental Health Strategy, there will be in excess of 3500 adults over 65 suffering from depression or severe depression, equating to more than 10% of the population fraction. It is suggested that this figure will be far higher for those with disabilities, physical illness or living in care settings (40%).[81]

Dementia is also a key mental health concern, with current estimates suggesting that there are 800,000 people in the UK living with dementia at an economic cost of £23 billion. Projections indicate that these numbers could double by 2040.[82] The dementia prevalence calculator tool suggests that there are currently 1328 residents with dementia in Bury living in the community, with a further 810 in residential care, a total of 2138.[83] Adult Care Services currently funds 568 individuals in residential and nursing care – whilst there will be self-funders above this number, 810 may thus be an over-estimate. Diagnosis is key to helping individuals and families cope with its symptoms, but the rate is notoriously low (around 45% nationally). According to QOF statistics there are 1147 registered patients with dementia, which, encouragingly, is above this estimate (53.6%).

Further national dementia estimates have been produced by the Alzheimer's Society, applying a varying rate by age bracket. The following table translates these proportions to the Bury population by age and ethnicity. The vast majority (1952) are indicated as being White and over the age of 65. There is estimated to be 48 dementia sufferers from non-white backgrounds.

80 ibid

81 http://www.mentalhealth.org.uk/help-information/mental-health-a-z/O/older-people/

82 https://www.gov.uk/government/policies/improving-care-for-people-with-dementia

83 A previous Bury estimate using rates from the Dementia UK (2007) report set the number at around 2073, a similar figure.

Age	Prevalence	All	White	Mixed	Asian	Black	Other
30-34yrs	0.01%	1.08	0.91	0.02	0.12	0.02	0.01
35-39yrs	0.01%	0.95	0.82	0.01	0.09	0.01	0.01
40-44yrs	0.01%	1.99	1.78	0.02	0.14	0.03	0.01
45-49yrs	0.03%	4.36	4.05	0.04	0.19	0.05	0.03
50-54yrs	0.06%	7.19	6.68	0.05	0.35	0.07	0.04
55-59yrs	0.14%	14.47	13.63	0.07	0.64	0.08	0.06
60-64yrs	0.16%	18.24	17.60	0.07	0.47	0.06	0.05
65-69yrs	1.30%	116.58	113.01	0.27	2.81	0.27	0.22
70-74yrs	2.90%	212.40	205.38	0.55	5.25	0.96	0.26
75-79yrs	5.90%	331.34	321.55	0.77	6.73	1.71	0.59
80-84yrs	12.20%	488.85	477.39	1.10	7.44	1.10	1.83
85-89yrs	20.30%	486.59	478.94	0.54	5.10	0.54	1.48
90-94yrs	28.60%	274.27	269.96	0.30	2.88	0.30	0.83
95yrs+	32.50%	87.43	86.05	0.10	0.92	0.10	0.27
TOTAL		2045.75	1997.73	3.91	33.12	5.30	5.69

Each year an increasing number of dementia sufferers are ending up in a crisis that results in hospital admission. In 2011 Bury's rate of non-elective admissions for those with a dementia diagnosis was the joint highest across Greater Manchester (5.3% of admissions (1089), compared to an average of 4.2%). This statistic is notable because in hospital the average length of stay for those with a dementia diagnosis (10.2 days) is more than twice as long as other admissions (4.9 days). This increased stay can lead to deterioration in their overall condition and possible discharge to residential care.[84]

Vaccinations

Vaccinations are also crucial to reducing adverse health outcomes in the elderly who are more vulnerable to illnesses such as bronchitis and pneumonia. Flu vaccinations can limit infection and minimise the possibility of such complications occurring. Statistics for September – November 2012 show a 67.3% uptake, average against comparator areas.

Alcohol Misuse

There is also a growing recognition concerning alcohol misuse in the older generation. There is the concern that it is less likely to be diagnosed amongst the older generation as it can be masked by other health problems or remain hidden simply due to social isolation. Depression and dementia are fundamental mental health issues associated with excessive alcohol consumption.

Social Isolation

Older people are particularly vulnerable to social isolation consequent on the loss of family and friends over time. Research has shown that isolation can have a detrimental impact upon physical and mental health, including high blood pressure and depression.[85]

84 Greater Manchester Business Intelligence Service: GM Cluster Dementia Analysis Overview 2011 (2012)

85 N.Mead et al: 'Effects of befriending on depressive symptoms and distress: systematic review and meta-analysis' *British Journal of Psychiatry* (2010)196 pp 96–100

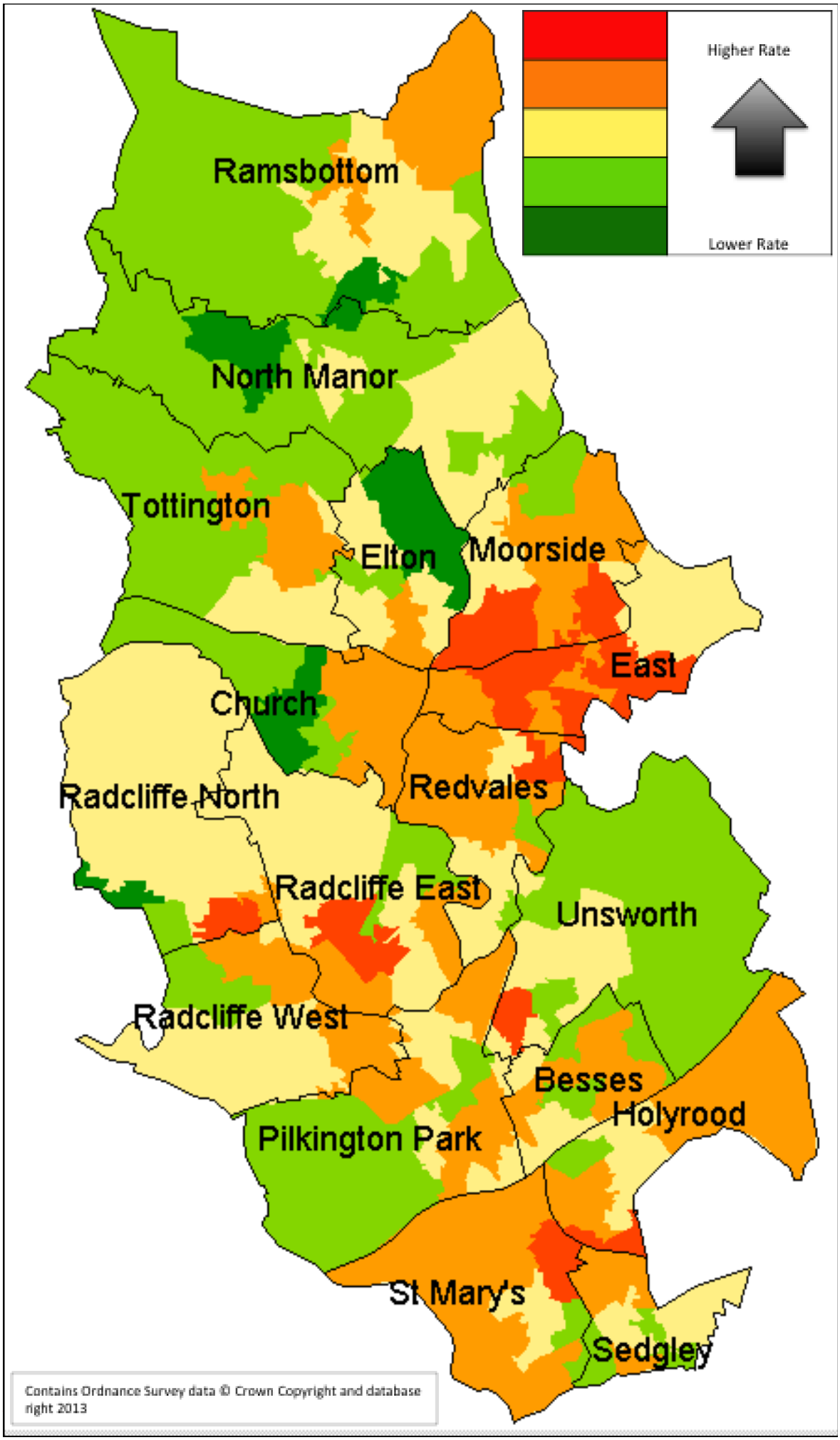
The implications of this are highlighted by the fact that, in Bury, over half of all pensioner households have just one person resident in them. The map overleaf shows that there is large variance at lower super output area level, ranging from just 29.73% around Radcliffe Moor Road (Radcliffe North) 87.84% in Cateaton St and 86.89% in Chesham Fold (both in Moorside). Though no data is available for Bury in relation to the LGBT population, there is evidence to suggest that older LGBT residents are even more likely to live alone than the general population.[86]

Poverty

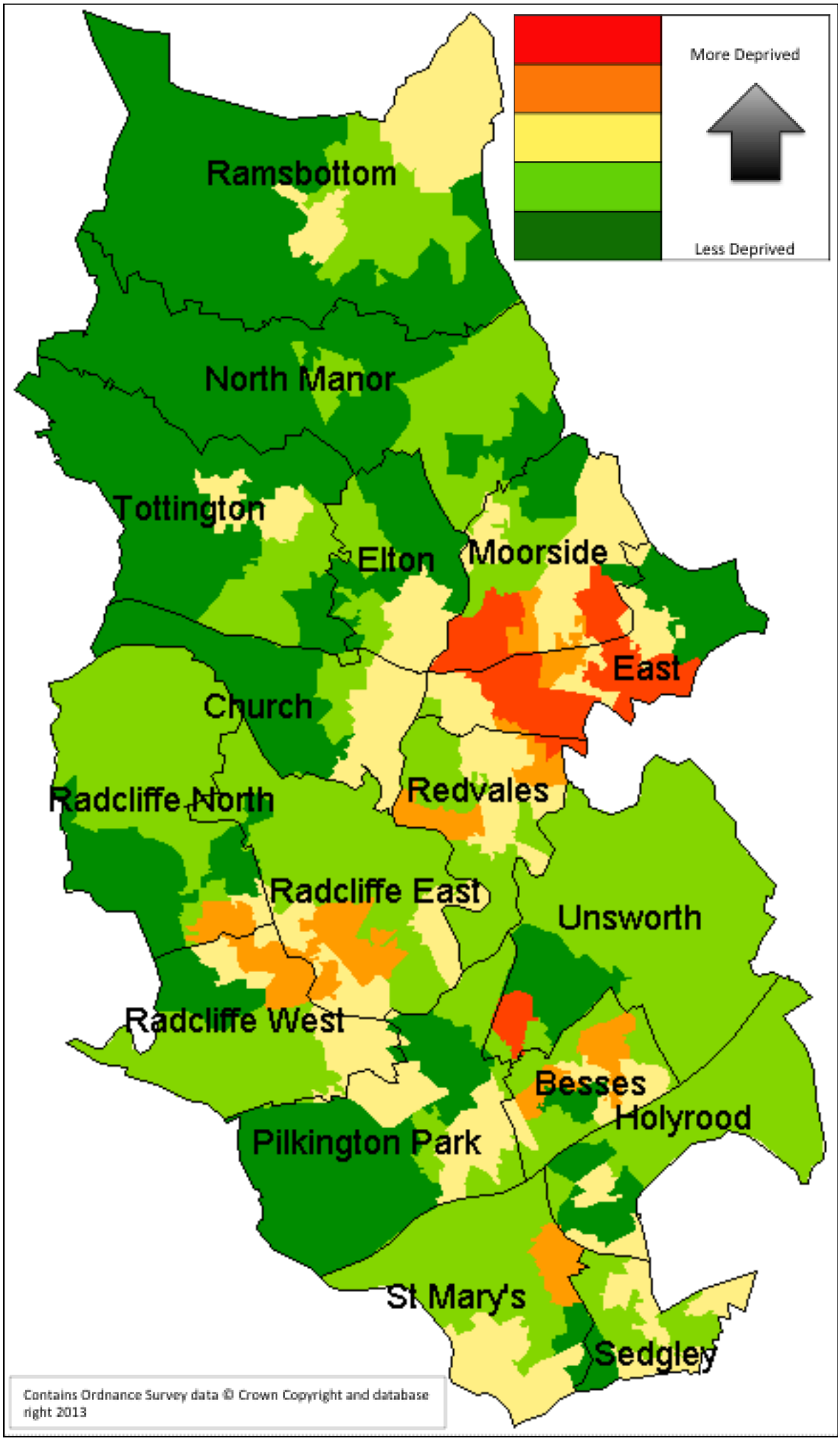
Poverty is the final aspect faced by older people which is linked to adverse health outcomes, and indeed social isolation. A further impact of the changing population profile is the ever increasing number of pensioners in Bury society, rendering income deprivation faced by older people a growing challenge for the Local Authority and partner agencies. The Older People sub domain of the Index of Multiple Deprivation comprises the percentage of the population over 60 who receive Income Support, Pension Credit or income based Job Seekers' Allowance. The map on page 63 demonstrates that the highest levels of deprivation in this regard are in Moorside (Chesham Fold) and East which has a number of deprived locations around Pimhole Street/South Cross Street, Killon Street/Ingham Street and Teak Street/Craven Street. There is also a noticeable pocket of deprivation in Unsworth (Elms North). This area of Unsworth also has a high proportion of claimants for Disability Living Allowance (see above).

86 H.Williams et al: *The Lesbian, Gay, Bisexual and Trans Public Health Outcomes Framework Companion Document* (2013)

Percentage of Single Pensioner Households by Local Data Quintile (29.7% - 87.8%)



Index of Deprivation Affecting Older People Sub Domain (IMD 2010) by Local Data Quintile (range 0.00 – 0.570)



Fuel Poverty

Whilst income levels have flat-lined in the current economic climate, the cost of food and fuel has continued to exceed inflation. This increases the propensity for fuel poverty, defined as the number of households that need to spend in excess of 10% of income on fuel in order to maintain an acceptable level of warmth. As noted above the increasing proportion of residents of pensionable age in Bury has a bearing on expendable income, and will represent a growing challenge in tackling fuel poverty in future years.

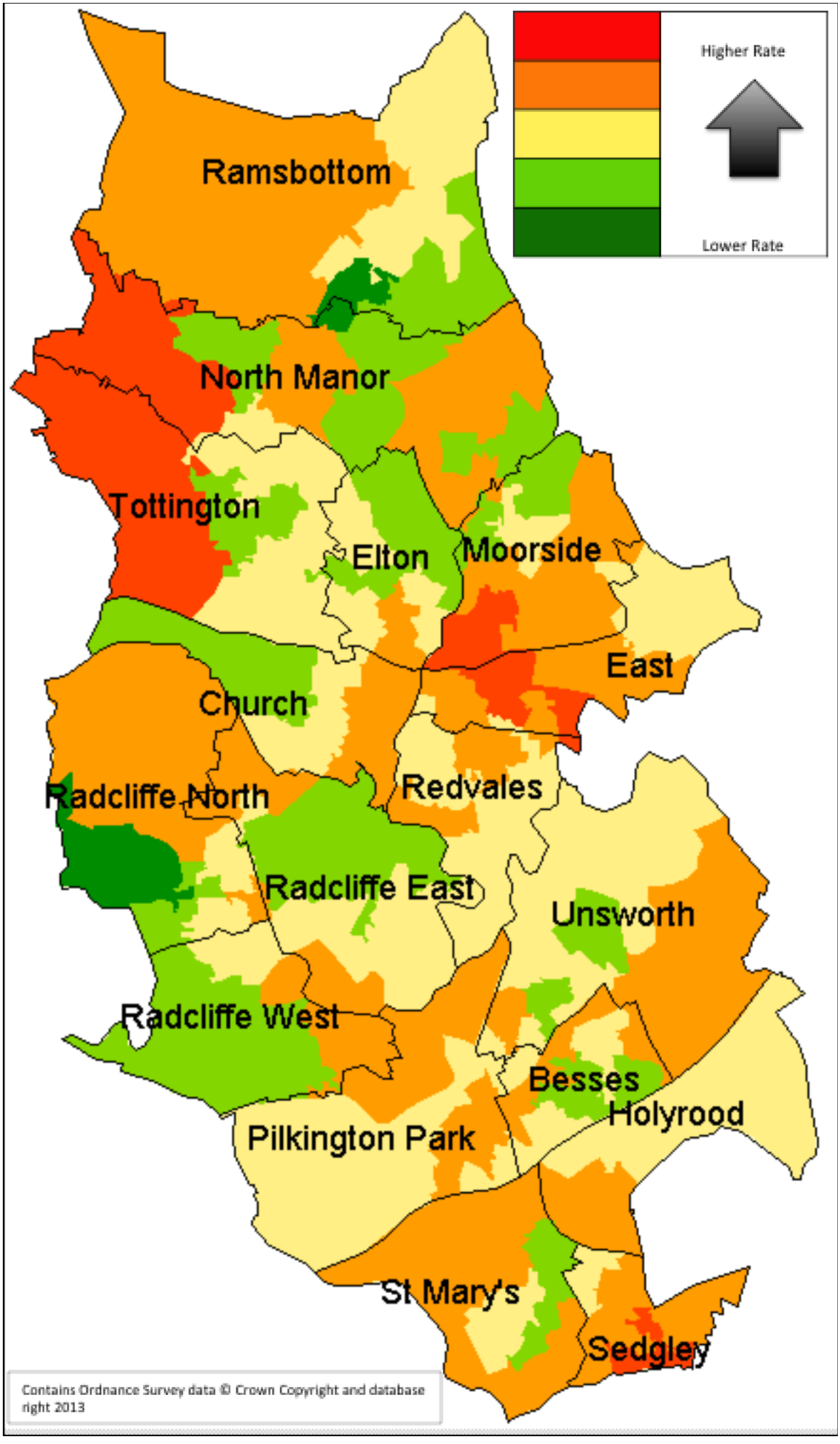
Fuel poverty has wider implications than just older people however, and will affect numerous cohorts vulnerable to income deprivation including lone parents, long-term unemployed, people with disabilities, families in which there is chronic illness and minority ethnic communities. In 2011 16.4% of households (12,882) were classified as fuel poor, down from 19.1% in 2010. Encouragingly this is lower than all the comparator areas (range 16-5% - 19.1%).

Local action since this date should see this figure fall further, including the Healthy Homes Project installing energy efficient measures in 285 homes, 1424 Toasty insulation installations and the distribution of 1000 winter warmth packs in 2012/13. There is, however, significant inequality at a local level as the map overleaf demonstrates, ranging from 4.9% to 25.2% in individual lower super output areas. Fernhill (Moorside) and Pimhole Road/South Cross St (East) have the highest levels. Also of particular note (as it differs markedly from general deprivation profiling) are the concentrations of fuel poverty in Sedgley (Danseway/Ravensway and Kings Road) and one area alongside west Tottington into North Manor (Turton Road) which is largely rural in constitution. It is interesting to note that the areas in Sedgley are also hotspots in relation to Disability Living Allowance child claimants.

Excess Winter Deaths

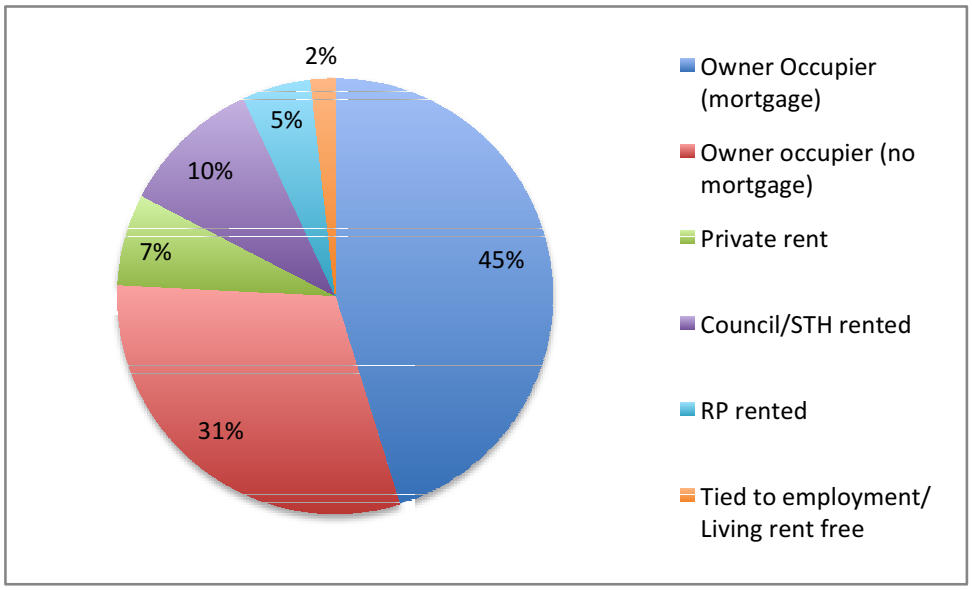
The number of excess winter deaths is linked to the previous sections, with fuel poverty, social isolation and old age clear risk factors. The ONS standard method defines the winter period as December to March, and compares the number of deaths that occurred in this winter period with the average number of deaths occurring in the preceding August to November and the following April to July. In Bury there were 20.6% more winter deaths than expected in 2010/11. This figure is higher than for England and Wales and Greater Manchester along with all tier 1 comparator areas except Sefton. It is, however, a lower figure than for each of the 3 preceding winters.

Percentage of Households in Fuel Poverty (2011) by Local Data Quintile (range 5% - 25%)



Housing and Homelessness

The pie chart below presents data from Bury's Housing Need and Demand Assessment 2011/12 and shows that three quarters of housing is privately owned, either with (45.3%) or without (30.6%) a mortgage. This statistic differs from the 2011 census, which indicated that 69.6% was privately owned, higher than the regional (64.5%) and national (63.4%) average. 10.5% of housing is currently rented from the Local Authority or Six Town Housing.



According to the census just under a quarter (23.9%) of households have no access to a car or van[87], a measure related to accessibility and social isolation. This figure is actually better than the regional and national positions (28.0% and 25.8% respectively), and also compares favourably against most of the local authorities in the tier 1 comparator group.

Housing is inextricably linked to health outcomes. Inadequate housing conditions such as overcrowding, lack of central heating and indeed fuel poverty can lead to ill health and ultimately premature mortality. The extreme of homelessness is also associated with poor mental health (including depression, self-harm and suicide), as well as the direct physical impacts of rough sleeping, inadequate diet and substance misuse.

The overcrowding rate (defined as the proportion of households where there is not enough rooms/space for the number of occupants) in Bury is 5.3%, second highest amongst the tier 1 comparator grouping, although the more recent Housing Need and Demand Assessment 2011/12 presents a lower figure of 4.4%. More positive is the fact that just 2.4% of households have no central heating, better than the corresponding national and regional averages.

A high proportion of private sector housing (21%) has serious hazards under the Housing Health and Safety Rating System (HHSRS), affecting the health, safety and wellbeing of its occupants.[88] The estimated cost to the NHS of poor private sector housing in Bury is over £5 million per annum.[89]

87 26.0% in 2001

88 BRE Stock Model Bury 2013

89 HHSRS Costs Calculator – *BRE, Chartered Institute of Environmental Health*

Over 75% of residents over retirement age are owner occupiers. At retirement, older people on low incomes face a likely struggle for 20 years or more to repair and maintain their homes.[90] Low cost work can make homes safe, secure and convenient to use and help reduce the strain on the NHS. For example £35,000 can provide help with minor repairs/adaptations for 200 older people. It costs approximately the same amount for one older person to live in a care home for a year.

Numbers accepted as being eligible, homeless and in priority need in Bury fell slightly in 2012/13 compared to the previous year (153 v 164), but current figures are well in excess of earlier periods (for example there were 97 acceptances in 2009/10). The 2012/13 figure equates to 1.96 per 1000 households, which is lower than the national average (2.37). The majority of those accepted as homeless are 25-44 (61.4%), with 27.4% aged 16-24. The family homelessness rate (defined as the number of applicant households in priority need where there are dependent children or pregnancies), however, is far higher than all tier 1 comparator Local Authorities at 1.7 per 1000 households (0.3 – 0.7 across tier 1 group).

The supply of social housing[91] and the affordability/supply of housing on the property market are factors limiting social mobility. Land Registry House Price Index data shows that the average house price in Bury in June 2013 was £108,423.58. This figure is lower than for June the previous year and is well below the national average of £162,621. It is, however, slightly higher than the North West figure of £107,703.

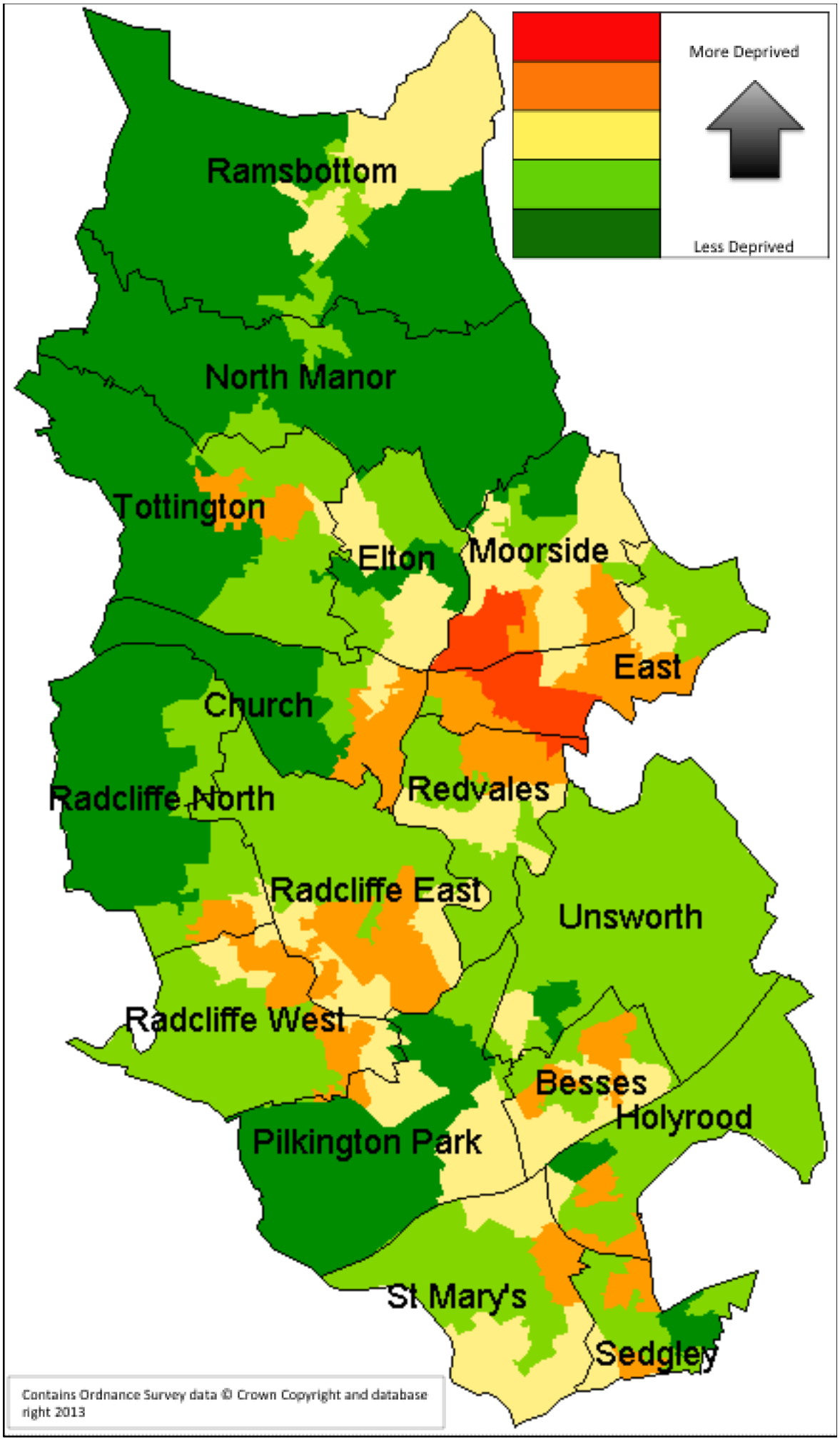
Investment is being made to mitigate the issue of supply as the Council's emerging Local Plan seeks to deliver a net additional supply of 6,800 units between 2012 and 2029. Nearly 50% of this proposed supply (3,166 units) has already been identified on sites that were either under construction or had an extant planning permission. Around 200 units of this committed supply are affordable units that have either been secured through planning policy or the National Affordable Housing Programme.

The Wider Barriers sub domain of the Index of Multiple Deprivation includes housing relating data such as overcrowding, homelessness and affordability and therefore constitutes a good summary measure of relative deprivation in this area. Highest concentrations are observed in East (Pinhole Road/South Cross Street and Killon Street/Ingham Street), Moorside (Fernhill) as well as parts of Radcliffe East and West. This is demonstrated by the map on page 68.

[90] Local Authority Private Sector Housing Services – *Delivering Housing, Health and Social Care Priorities, Helping Vulnerable People and Local Communities. Chartered Institute of Environmental Health 2011*

91 statistics reveal there are currently 3506 on the housing waiting list

Barriers to Housing Wider Barriers Sub Domain (IMD 2010) by Local Data Quintile (range 0.72 – 21.6)



Gypsies and Travellers

Gypsies and Travellers are a particularly socially excluded group in society and are susceptible to a range of inequalities relating to health, education, law enforcement and quality of accommodation. They are the most at risk health group in the UK with the lowest life expectancy and highest child mortality rate.

There is one permanent Gypsy and Traveller site at Fernhill housing approximately 59 residents on secure tenancies (17 pitches). In addition to the permanent site, it is estimated from the numbers of children known to the Traveller Education Service that there are just over 140 households living in bricks and mortar accommodation. There are no transit sites or designated stopping places in Bury. This results in a number of unauthorised encampments taking place each year.

A study carried out across Greater Manchester in 2007/8 (currently being re-commissioned) identified an increasing housing need for Gypsies and Travelling Show people. In Bury, the shortfall could be met by 2015 through the provision of 45 additional pitches for Gypsies and Travellers and 10 units for travelling show people. These pitches should be on sites in suitable locations where the occupants are able to access the range of facilities and services normally enjoyed by other members of the community.

Carers

In recent years there has been a growing recognition that issues faced by carers form an integral element of the wider social care agenda. This group is particularly vulnerable due to the demands which a caring role necessitates. Research has shown that the impact on health can be massive, particularly for older carers. 65% of those over 60 have long-term health conditions or disabilities with 68.8% citing that caring had a negative impact on their mental health.[92] They are also likely to be unaware of the support available or, in fact, that they are actually providing a caring role. Accessing support services may also be problematic due to the 24/7 nature of caring for an individual with physical or mental health needs. Under identification and unmet need are thus key components of the carer agenda.

The 2011 Census indicates that there are 19,954 individuals providing unpaid care in the Borough, an increase of 723 since the last Census. This amounts to a sizeable 10.8% of the total population. In excess of 4,700 carers provide support for more than 50 hours a week (23.7%), and are therefore engaged far in excess of the demands of full time employment, which enhances the likelihood of social isolation and adverse health outcomes.[93] Indeed those providing 50 hours a week of care are far more likely to cite being in bad or very bad health (13.4%) than those caring for 1-19 (4.1%) or 20-49 hours (8.4%). The proportion in bad or very bad health is also slightly higher for male (14.6%) than female carers (12.5%).

The Adult Social Care Outcomes Framework has an indicator relating to the overarching quality of life of carers. It is encouraging to note that the Bury 'score' was 8.6 for 2012/13, higher than the national average (8.1) and the tier 1 comparator local authorities with the exceptions of Calderdale (9.0) and Stockton-on-Tees (8.9). Carers also reported a positive

92 Princes Royal Trust: Always On Call, Always Concerned (2011)

93 A further 13.8% indicated that they offered care for between 20-49 hours per week.

experience of social care and support, with 59.5% citing being satisfied with services, a higher rate than all the comparators.
The proportion of carers varies between wards from 9.2% in Redvales to 12.1% in Radcliffe North. This relatively low level of variation aptly demonstrates that caring needs transcend geography and patterns of deprivation. Wide scale under identification is highlighted by the fact that, compared to the figures described above; only 3320 carers are registered with the Carers Services Team and the Carers Centre in Bury. The discrepancy is highlighted further with the highest number having a BL9 9 postcode (Redvales), yet this ward has the lowest proportion of carers according to the Census dataset.

Census Area Ward	% of Carers
Radcliffe North	12.1
Unsworth	12.0
Pilkington Park	12.0
Moorside	11.6
Church	11.3
Tottington	11.1
Holyrood	10.9
Besses	10.8
St. Mary's	10.7
Elton	10.7
Ramsbottom	10.5
Sedgley	10.1
Radcliffe South	10.1
East	10.0
Radcliffe Central	9.8
Redvales	9.2

The picture is complicated still further when the carer definition is broadened to encompass family members affected by substance misuse who, depending on the extent of the addiction/dependency, will have to undertake most if not all of the elements of a caring role. In terms of the impact on those in the family nucleus, it has been suggested that every substance misuser will affect a minimum of two people close to them to such an extent that they will in turn require primary healthcare.[94] For the carer the exact nature of this impact can be multi-faceted: the need to offer physical, social and financial support can have drastic consequences including: (i) fear and loss of control; (ii) anger and betrayal: (iii) guilt and responsibility; and (iv) shame and isolation.[95]

The majority of carers in Bury (where demographics are known) are White British and over the age of 55. Although the minority ethnic population in Bury is relatively small, the possibility of cultural sensitivities about accessing support services (and being seen to do so) should not be discounted – consider for example the taboo on alcohol misuse in certain communities. The profile also does not reflect the prevalence of young carers who may be almost entirely hidden from service providers. The impact on this cohort can be

94 R. Velleman and L.Templeton: "Family Interventions in Substance Misuse" in T.Peterson and A.McBride (eds): *Working with Substance Misusers: A Guide to Theory and Practice* (2002)

95 Adfam: *We Count Too: a good practice and quality standards for work with family members affected by someone else's drug use* (2005)

particularly dramatic, including poor school performance and attendance, poor diet and lifestyle, social isolation, and the associated adverse health outcomes that these characteristics will ultimately yield.

Ultimately service provision needs to recognise the fact that (i) the supportive needs or requirements of a carer will be radically different from the person cared for; and (ii) that there is no uniform 'carer' persona and each will have their own demands based on their ability and propensity to cope with the caring role. Effective service provision must therefore be appropriate to local circumstances and suitable to embrace the diverse plethora of needs which will arise.

Military Veterans

The North West provides the greatest number of civilians entering into the Armed Forces each year and represent 1/5th of the Armed Forces annual recruitment intake. Annually there are approximately 6,000 service personnel resettling in the North West accompanied by their families. It is estimated that there are 13,538 military veterans in Bury of which 5,424 are over 65.[96] Military veterans are recognised as having a range of potential health needs. These include alcohol and substance misuse, social exclusion and depression.

Asylum

Refugee and asylum seekers are another vulnerable group facing particular barriers towards healthcare and social inclusion. They are appropriately summarised in the following BMA article which acknowledges their particular vulnerability to mental health issues and barriers to accessing services. It is important to also recognise that a proportion of this group will be carrying communicable diseases requiring treatment to avoid onward transmission:

"*The barriers that asylum seekers and refused asylum seekers can face in accessing healthcare remain an issue of concern for health professionals and refugee welfare organisations alike. Because of the upheavals, family separation and traumas faced by many asylum seekers, some can have complex health problems. Refused asylum seekers in particular can often find themselves destitute and living in conditions which can have a negative impact on their physical and psychological health. Unfamiliarity with the structure of healthcare provision in the UK and any language barriers that may exist can also represent significant obstacles to engagement with NHS services.*"[97]

At the end of quarter one 2013 there were 248 asylum seekers in Bury in receipt of Section 95 support, higher than the other tier 1 comparators with the exception of Stockton-on-Tees. Quarterly figures have fluctuated between 246 and 577 since 2003 showing that this cohort is a regular vulnerable group within Bury society.

Crime

Overall crime in Bury is falling steadily per annum. The most recent data from New Economy shows that there were 9952 offences for the 12-month period running from August 2012-July 2013, compared with 10635 for the corresponding period in 2011/12. Violent offences (including domestic violence) can have the most fundamental impact upon physical and mental health. The highest concentration of violent offences causing injury is present around Bury town centre and Fernhill. The four lower super output areas which make up

96 North West Military Veterans Mental Health Mapping Project, AQuA, July 2012

97 BMA Ethics: *Access to health care for asylum seekers and refused asylum seekers – guidance for doctors* (November 2012)

this location accounted for 21% of offences between August 2010 – July 2013. These areas also feature prominently for domestic violence, although there is a far more even distribution present in this dataset. At a ward level highest incidence is observed in East (265), Moorside (219) and Radcliffe East (203). By contrast there were only 50 domestic violence recorded crimes in Pilkington Park and 51 in North Manor across the same period, as the map overleaf demonstrates.

Hate crime is a criminal offence motivated by hostility or prejudice relating to a series of protected characteristics, including ethnicity, religion, disability and sexual orientation. During the period August 2012 – July 2013 there were 180 hate crimes in Bury, a 25.9% reduction compared with the same period in 2011/12. The vast majority (162) were racially motivated, but there were also a number of crimes relating to other protected characteristics, namely: religion (17), sexual orientation (9) and disability (3). 12 crimes were noted specifically as being anti-Semitic. The high possibility of under reporting due to fear of reprisal and stigmatisation should also be acknowledged.

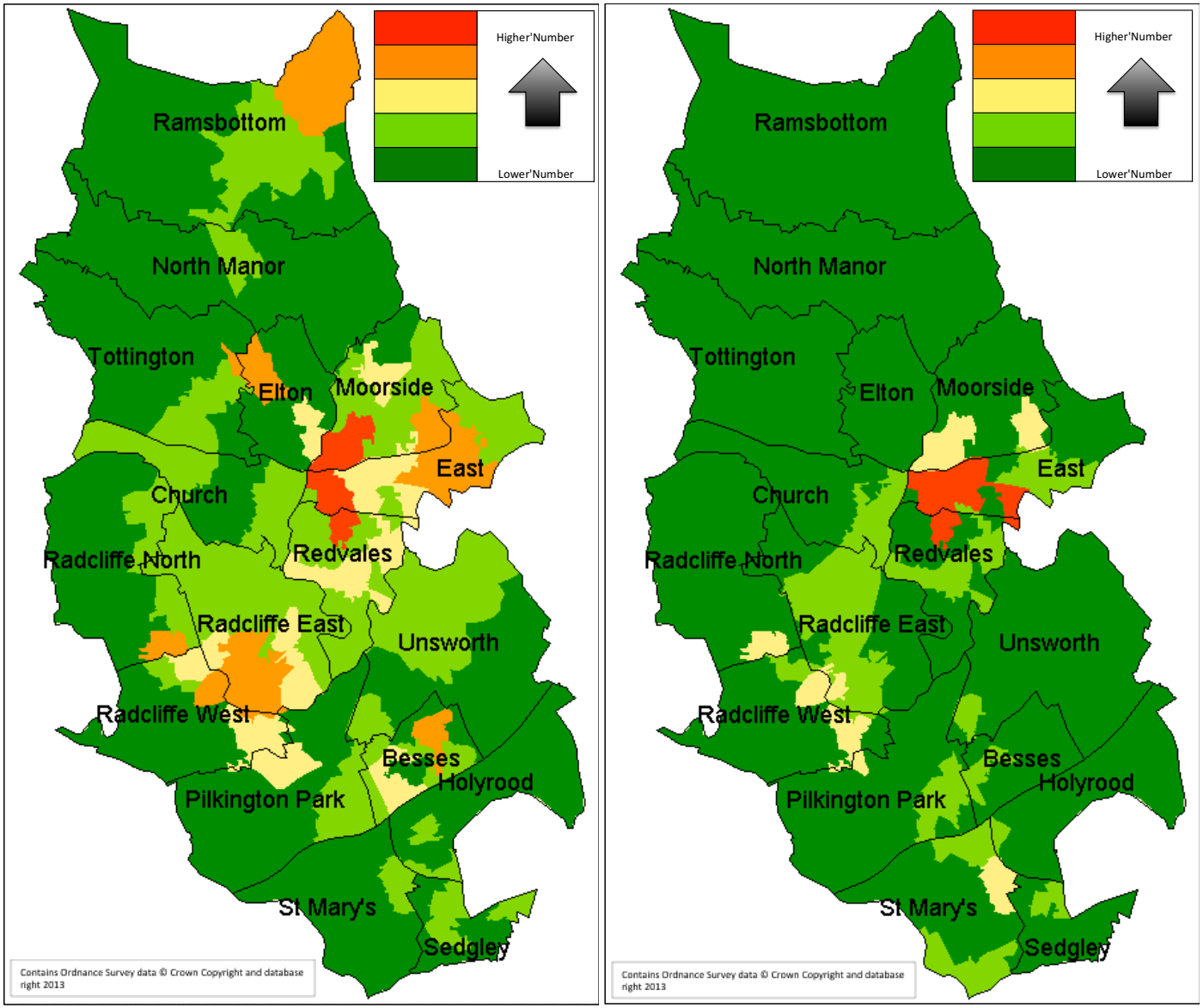
What is less well documented is the association between fear of crime and health. A research study has revealed an inverse association, with higher level of fear related to lower quality of life, mental health and physical functioning. Those more afraid were found to exercise and socialise less, and were almost twice as likely to report suffering from depression.[98] Whilst fear of crime may be rational based on actual crime rates, it is categorically more difficult to tackle perception, which means that fear can perpetuate far longer than the level of crime that is actually experienced. It is also influenced by other factors such as environmental design, environmental quality and the levels of community engagement. According to the most recent survey findings (based on a "how safe do you feel outside after dark" indicator), Holyrood residents were least inclined to cite feeling safe (66.3%), compared to 98.0% in Sedgley at the opposite end of the spectrum.[99] Given its status as the second most deprived ward in Bury, it is surprising to observe the second lowest fear of crime rate in Moorside (68.8%).

Anti-social behaviour can also impact upon mental health and general quality of life. Recorded police statistics show that incidence levels have increased by 3.5% to 8279 for the period August 2012-July 2013 as against the preceding year, though levels remain lower than for 2010/11 (8379). Focusing on small geography reveals that the highest incidence in 2012/13 occurred in the same four lower super output areas around Bury centre as for violent crime (16% of total anti-social behaviour). The next highest incidence was observable in Chesham Fold, Church Lane/Clarks Hill, Radcliffe Boro FC/Coronation Road and St. John's/Pilkington Way Retail Park (see map overleaf).

98 M.Stafford (et al): "Association between fear of crime and mental health and physical functioning" Am J Public Health (2007) 97(11): 2076-2081

99 There are limitations to this ward dataset due to wide confidence intervals for some wards and the information should thus be considered of indicative status only

Domestic Violence Crimes 2010-13 (left) and Anti Social Behaviour 2012-13 (right) by Local Data Quintile (range 1 – 60 and 6 – 420 respectively)



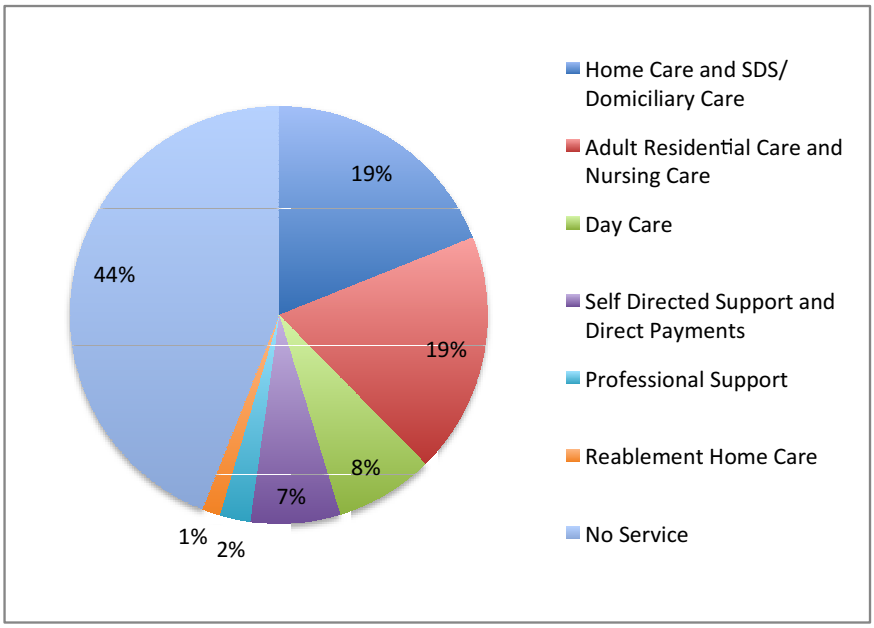
Data provided by Greater Manchester Police indicates that, for the 12 month period from October 2010 – September 2011, 26.9% of adult offenders in Bury (1579) were re-offenders (with an average 2.67 offences per offender), 2.6% higher than the corresponding period in 2009/10 and also slightly above the national average (25.6%).

Integrated Offender Management ('Spotlight' in Greater Manchester) initiates a multi-agency approach to reducing persistent offending. Research into prolific and priority offenders have shown that 0.5% of active offenders commit at least 10% of all serious crime. Generally they are young (mean age 25) with an average of 47 convictions. This cohort frequently have complex mental health and substance misuse issues which hinder their rehabilitation and resettlement efforts and impact upon the quality of life of other residents when they re-offend.[100] Focusing on their health needs is therefore a crucial component of addressing the underlying causes of criminality.

Safeguarding

Ensuring there are appropriate multi agency protection practices in place is essential to enable at risk adults and children to live free from violence, abuse, fear and exploitation. Since 2006 the number of safeguarding alerts received in Bury has risen annually to reach 754 in 2012/13. It should be noted that in only 15% of these cases were full safeguarding investigations carried out, the rest being predominantly incidents where abuse had not occurred (e.g. accidents) which could be dealt with via referral to implement appropriate prevention measures. The overall increase in numbers therefore should not necessarily be seen as indicative of higher levels of abuse, but rather of greater partner awareness to raise reports in the first instance. Three quarters of reports were created by social care (57%) and health care staff (18%), but the increase in the proportion of reports from members of the public (6%) and other sources (15%) in 2012/13 demonstrates increased awareness and social responsibility.

The following pie chart for 2012/13 demonstrates that 56% of adults had social care service support in place at the time the safeguarding alert was raised. The highest proportions were Home Care and SDS/Domiciliary Care (19%) and Adult Residential/Nursing Care (19%).



100 P. Dawson: *"The national PPO evaluation – research to inform and guide practice"* (Home Office Online Report 09/07)

Incidents of domestic violence have increased in the Borough from 3485 in 2011/12 to 3882 in 2012/13. This is to be distinguished from the domestic violence crimes dataset discussed above.[101] The Multi-Agency Risk Assessment Conference (MARAC) process consists of local partnership meetings to discuss and share information about those most at risk of serious domestic violence or death. 229 cases were raised during 2012/13, 29.3% of which were repeat cases. A high proportion (71.2%) also featured children within the at risk familial environment. At 72.9% the majority were Greater Manchester Police referrals (compared to a force wide average of 53.2%), with a further 10.0% raised from the voluntary sector. Just 2.2% came from Independent Domestic Violence Advocates as against 7.2% across the force as a whole.

The table below shows the proportion of cases involving certain protected characteristics which are monitored within the national MARAC performance reports. This shows that more than 1 in 10 cases (27) involved an individual from a Black or Minority Ethnic background; there were also 2 LGBT[102] cases in 2012/13 but none where a victim had a disability.

Cases	Bury (%)	GMP (%)	UK (%)
BME	11.8	11.9	13.4
LGBT	0.9	0.9	0.7
Disability	0.0	2.1	3.2
Male Victim	3.5	2.9	4.0

101 Whilst a report may be received of an incident, it is only after an investigation has taken place that it is determined whether a recordable crime has taken place. For example, officers may respond to a call of a domestic incident taking place and upon arrival they may ascertain that the incident involved an argument between partners where physical violence did not occur. The officers would still investigate the circumstances and conduct a risk assessment around the incident but a crime would not be reported as the circumstances did not meet the Home Office criteria of a recordable crime

102 Lesbian, Gay, Bisexual or Transgender

Inequalities Summary

In the following table data from the Wider Barriers and Older People sub domains of the Index of Multiple Deprivation are aggregated to ward level, and set beside aggregated fuel poverty data and the fear of crime dataset. The two deprivation indices are shown to be almost identical, with the 8 most deprived wards in terms of housing need the same in relation to older people income poverty.

There are also similarities with the fuel poverty dataset. East and Moorside are both in the top 3 for fuel poverty. However, there are higher rates than expected observed in Sedgley and Pilkington Park. Conversely Radcliffe East is shown to have the second lowest rate across the Borough. Fear of Crime shows a higher level of deviation from the rest, although generally lower levels of fear are present in the least deprived wards.

Ward	Wider Barriers (average)	IDAOPI (average)	Fear of Crime %	Fuel Poverty (% average)
East	14.86	0.37	78.0	19.1
Moorside	13.13	0.34	68.8	18.5
Radcliffe West	11.85	0.26	75.5	16.7
Radcliffe East	11.70	0.24	81.8	14.5
Redvales	11.56	0.28	76.1	17.5
Besses	10.15	0.24	74.2	15.3
Sedgley	9.56	0.22	98.0	19.9
St. Mary's	9.36	0.22	77.4	16.2
Holyrood	9.06	0.16	66.3	17.5
Elton	8.24	0.16	82.7	15.4
Tottington	7.25	0.14	77.9	14.7
Ramsbottom	7.00	0.14	80.2	15.7
Radcliffe North	6.86	0.18	92.0	14.2
Unsworth	6.52	0.18	78.6	14.8
Church	6.42	0.13	94.1	15.9
Pilkington Park	4.88	0.13	80.0	17.5
North Manor	2.24	0.09	95.9	15.8

The following inequalities should also be highlighted:

Protected Characteristic	Inequalities
Age	• National prevalence rates of disability suggest that rates increase with age (6% children; 16% working age population; 45% retirement age). • Modelled estimates of dementia prevalence indicate that rates increase sharply in 5 year bands above the age of 65, meaning that in Bury there is likely to be around 2000 people over 65 suffering from dementia. • Older people are particularly vulnerable to social isolation. In Bury 61.0% of residents over the age of 65 live alone. • The majority of carers in Bury (where age is recorded) are over the age of 55. According to national evidence, fulfilling a caring role has a higher affect upon older residents, with 65% of carers over 60 having long-term health conditions or disabilities and 68% citing a negative impact upon their mental health.
Gender	• Admission rates for hip and knee replacements are far higher for women than men. • Two thirds of unpaid carers known to carer services in Bury are female. According to census data the proportion is slightly lower (58%), which may mean men are less willing to access support. • Male carers are more likely to cite being in 'bad or very bad health' (14.6%) than females (12.5%). • 3.5% of MARAC cases involved a male victim, lower than the national comparator (4.0%).
Ethnicity	• National research has highlighted a higher prevalence of mental health conditions for people from an Irish background, and a higher rate of psychoses in the Black Caribbean population. • 11.8% of MARAC cases involved an individual from a Black or Minority Ethnic background, lower than the national proportion (13.4%).
Sexual Orientation	• National research suggests that older disabled LGBT individuals are less likely to access to access the social care services they needed than the general disabled population. • National research also indicates a higher prevalence of mental health conditions amongst the LGBT population, particularly those who are transgendered. • National evidence suggests that older LGBT residents are even more likely to live alone than the general population. • 0.9% of MARAC cases involved an LGBT individual, higher than the UK percentage (0.7%).

Vulnerability Comparison Table (continued overleaf)

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	No Polarity Rank (1=highest)	North West		England	
Learning Disabilities (%)		1	2011-12	**0.51**	0.52	0.47	0.57	0.42	0.38		3	0.48	◆	0.45	✜
Children with Learning Disability Known to Schools Rate		2	2011-12	**30.0**	22.5	21.9	24.5	22.7	29.3		1	23.2	◆	24.5	◆
Children with Autistic Spectrum Known to Schools Rate		3	2011-12	**6.6**	6.1	7.8	9.5	8.9	10.9		5	7.4	✜	8.2	✜
Comparison of Learning Disability Prevalence Estimates	Local Authority/ QOF	4	2011-12	**23.3**	2.1	3.4	16.4	3.0	20.0		1	3.1	◆	6.2	◆
Learning Disability GP Health Checks (%)		5	2011-12	**19.0**	70.6	56.7	39.4	39.1	30.6	6		53.8	■	52.7	■
Learning Disability living in Settled Accomodation (%)		6	2012-13	**86.3**	85.2	86.6	82.5	87.8	67.9	3		N/A		73.3	⊙
Learning Disability in Paid Employment (%)		7	2012-13	**7.8**	7.9	4.7	2.0	12.3	3.3	3		N/A		7.2	⊙
Secondary Mental Health/Living Independently (%)		8	2012-13	**50.2**	60.5	4.7	56.1	66.5	32.9	4		N/A		59.3	■
Secondary Mental Health /Paid Employment (%)		9	2012-13	**2.6**	8.0	2.0	3.2	7.4	4.8	5		N/A		7.7	■
Social Care Quality of Life		10	2012-13	**19.6**	18.7	19.0	19.2	18.9	18.4	1		N/A		18.8	⊙
Self-Directed Support (%)		11	2012-13	**47.6**	93.9	69.0	56.8	84.6	N/A		5	N/A		55.6	✜
Direct Payments (%)		12	2012-13	**38.1**	20.6	10.7	12.4	18.6	N/A		1	N/A		16.4	◆

1 Prevalence of patients on learning disabilities register (18+), QOF
2 Rate per 1000 pupils (Improving Health and Lives Learning Disabilties Observatory)
3 Rate per 1000 pupils (Improving Health and Lives Learning Disabilties Observatory)
4 Improving Health and Lives Learning Disabilties Observatory
5 Proportion of eligible adults having a health check (Improving Health and Lives Learning Disabilties Observatory)
6 ASCOF 2012-13 indicator 1G
7 ASCOF 2012-13 indicator 1E
8 ASCOF 2012-13 indicator 1H
9 ASCOF 2012-13 indicator 1F
10 ASCOF 2012-13 indicator 1A
11 ASCOF 2012-13 indicator 1C(i)
12 ASCOF 2012-13 indicator 1C(ii)

⊙ Bury figure is better than national or regional average
■ Bury figure is worse than national or regional average
* Difference from national/regional has been tested as statistically significant
◆ Bury figure is higher than national or regional average (but no polarity - higher is not necessarily better)
✜ Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	No Polarity Rank (1=highest)	North West		England	
Admissions with Fractured Proximal Femur		[13]	2010	**121.7**	89.8	104.8	108.3	97.1	98.2	6		108.7	■	100.1	■
Admissions for Hip Replacement	Over 65	[14]	2011-12	**432.3**	508.2	533.8	488.2	456.7	497.2	1		495.2	⊙	517.5	⊙
Admissions for Knee Replacement	Over 65	[15]	2011-12	**477.7**	633.5	621.8	613.6	586.8	673.8	1		557.1	⊙	591.9	⊙
Flu Vaccination Uptake (%)	Over 65	[16]	Nov-12	**67.3**	67.9	N/A	72.3	76.2	69.0	4		N/A		69.4	■
Fuel Poverty (%)		[17]	2011	**16.4**	18.8	18.4	19.1	16.5	16.8	1		17.6	⊙	N/A	
Excess Winter Deaths (%)		[18]	2010/11	**20.6**	18.3	N/A	21.0	10.5	15.7	4		15.6	■	17.0	■
No Access to Car or Van (%)		[19]	2011	**23.9**	27.3	22.9	28.5	22.0	25.9	3		28.0	⊙	25.8	⊙
Overcrowding (%)		[19]	2011	**5.3**	6.5	4.6	4.8	4.8	4.5	5		6.2	⊙	8.7	⊙
No Central Heating (%)		[19]	2011	**2.4**	5.5	3.6	3.4	2.3	1.2	3		3.1	⊙	2.7	⊙
Family Homelessness Rate		[20]	2011-12	**1.7**	0.3	0.6	0.3	0.6	0.7	6		1.7	•	0.9	■
Provision of Unpaid Care (%)		[21]	2011	**10.8**	10.5	11.4	12.6	11.3	10.4		4	11.1	⁘	10.2	◆
Carer Reported Quality of Life		[22]	2012-13	**8.6**	9.0	7.9	8.1	8.4	8.9	3		N/A		8.1	⊙
Carer Reported Service Satisfaction (%)		[23]	2012-13	**59.5**	41.7	41.8	46.4	52.0	45.8	1		N/A		42.7	⊙
Asylum Seekers		[24]	Q1 2013	**248**	160	N/A	0	68	506		2	4888		18505	

[13] Indirectly age and sex standardised rate per 100,000 (The Health and Social Care Information Centre)
[14] Directly age and sex standardised rate per 100,000 (West Midlands Public Health Observatory Older People Atlas)
[15] Directly age and sex standardised rate per 100,000 (West Midlands Public Health Observatory Older People Atlas)
[16] Data on GP registered patients - 1st Sept - 30th Nov 20123
[17] Department of Energy and Climate Change
[18] Office for National Statistics
[19] 2011 census
[20] Rate per 1000 households (Child and Maternal Health Observatory)
[21] 2011 census
[22] ASCOF 2012-13 indicator 1D
[23] ASCOF 2012-13 indicator 3B
[24] Number of asylum seekers in receipt of Section 95 support

⊙ Bury figure is better than national or regional average
■ Bury figure is worse than national or regional average
* Difference from national/regional has been tested as statistically significant
◆ Bury figure is higher than national or regional average (but no polarity - higher is not necessarily better)
⁘ Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Priorities

- Prevalence estimates suggest that there may be high levels of unmet need in relation to individuals with physical and learning difficulties. Processes of identification and the accessibility of service provision should be reviewed to maximise the potential for engagement.
- National research suggests that older LGBT residents are more likely to live alone than the general population and, if disabled, are less likely to access the social care services they need. There is no available data at a local level and these potential inequalities should therefore be subjected to further analysis.
- Only 19% of eligible adults with learning disabilities received a GP health check in Bury in 2012/13. This is well below all comparators and requires further investigation given that people with learning disabilities are more likely to experience poor health outcomes.
- There is little information available relating to the correlation of mental health, deprivation and other risk factors and this is a clear area for further research. QOF data does indicate that the GP practices with the highest recorded rates are located in Elton, Moorside and Radcliffe East but this does not necessarily reflect patient residency nor should the dataset be taken as a robust indicator of overarching prevalence. The Mental Health Needs Index (MINI2000) does provide information on predicted prevalence by small area geography, but is derived from data relating to 1998. Analysis should also include ethnicity as studies have shown prevalence rates vary.
- Generally, further research is required in relation to the vulnerable groups discussed in this section in order to build more comprehensive demographic profiles and examine the links with deprivation, risk taking behaviours and health outcomes.
- The admissions to hospital for fractured proximal femur at 121.7 is the highest of all comparator areas. This proxy measure for vulnerability of older people should act as a spur to developing further service packages for this age group. In particular this is pertinent given the projected increase in the older population.
- Research has identified the issue of alcohol misuse amongst older people remaining unidentified by being masked by other health concerns or simply by social isolation (three fifths of pensioners in Bury live alone). There is no local data on this subject and further analysis is required.
- The estimate of the number of people in the Borough with dementia has changed upwards since the last JSNA and is forecast to continue to do so. A continued focus upon identifying and supporting these individuals and their families should be provided.
- Encouraging the take-up of the flu vaccination with the potential for prevention of illness should remain a priority.
- The rate of family homelessness is on a par with that for the North West but higher than all other comparator areas. Given the potential for a range of health problems as a result of this situation a focus on this problem should continue.
- There are an estimated 13,538 military veterans in Bury. Local research is necessary to examine the nature and extent of their health needs. Regional

research suggests that this is likely to include substance misuse, social exclusion and depression.

- The numbers of asylum seekers whilst at the low end of recent figures is still higher than any other tier 1 area apart from Stockton-on-Tees. There will continue to be the need to respond to the health needs of this group and the resultant potential need to tailor services to their specific requirements.
- The increase in the numbers of those providing unpaid care since the last Census should act as a focus for provision of carers' services. The underrepresentation of people reporting as carers to the carers' service is of concern as is the lower numbers from certain demographics, including minority ethnic communities and young people. Young carers are a particularly hidden and vulnerable group and further research into the health and support needs of this group is required.
- The stark differences in fear of crime across the wards is worthy of attention not least due to the links between fear of crime and a range of illnesses and conditions. In this regard the fact that 66.3% of people in Holyrood report themselves feeling safe is of most concern.
- For the older people sub domain of the Index of Multiple Deprivation Moorside and East wards display the highest concentrations. Once again the one super output area in Unsworth ward also displays a higher deprivation figure.
- The highest percentage of households in fuel poverty are in Tottington, Moorside and East wards along with parts of Sedgley wards. The figures for Tottington and Sedgley wards are of note given their otherwise lower levels of deprivation.
- The highest figures for the wider barriers to housing sub domain are found in Moorside and East wards, and could be a focus for activity if this is also borne out by other housing datasets.

Ill Health and Mortality

The preceding analysis has shown the synergy between deprivation, determinant of health and negative health outcomes throughout the life cycle. In particular, it is likely to present itself in disease and early mortality. In the UK residents of the most affluent areas are expected to live 16 years longer than those in the most deprived. The gap in Bury is not so quite so exaggerated, but nevertheless there is still considerable variation. According to 2009-11 data, men in Pilkington Park (82.0) are expected to live seven years longer than their counterparts in East (75.4) and St Mary's (75.3). Life expectancy for women is highest at 88.7 years in Sedgley, compared to just 77.4 and 78.1 years in East and Moorside respectively. Full ward information is presented in the inequalities summary at the end of this chapter.

Early Intervention (Screening)

Early intervention with cancers significantly enhances the prospects for successful treatment. Routine screening is the mechanism through which detection takes place, with programme effectiveness determined by the level of coverage within an area. For breast cancer, women aged 47-73 are invited to regular screening (every three years) under a national programme. In 2011/12 the percentage aged 53-64 screened in Bury within the last three years was 77.6%. It is encouraging to note that this rate is higher than the regional and national averages, as well as all tier 1 comparators with the exception of Stockton-on-Tees (78.7%). It is also well in excess of the national target (70%). The rate has, however, fallen slightly in comparison with 2010/11 (78.2%), continuing a trend from the last JSNA.

Cervical screening detects cell changes that can lead to the onset of cancer. Early detection of such changes and subsequent treatment can prevent 75% of associated cancers from developing. Women between the ages of 25-64 should be screened at least every five years. The target screening rate is 80%, with the hypothesis that achieving this rate could reduce death rates by 95% in the long-term.

In Bury this figure was achieved in 2011/12 with 80.3% coverage, the same figure as in 2010/11, albeit slightly lower than the figure reported in the last JSNA. Once again this performance is better than national and regional trends. Regional survey results indicate that the rate may be lower amongst lesbian and bisexual women, with 75.9% 25-64 year olds having had a test in the past five years in 2008 (compared to 81.3% of the eligible population in Bury at this time).[103]

GP practice information, however, shows that there is significant local variation in patient screening rates by practice, ranging from 48.5% to 83.7% for breast screening and 64.9% to 89.8% for cervical screening. Raising performance levels to a common standard regardless of location would see overall rates improve still further, vastly improving the health outcomes for the female population of Bury.

103 Stonewall: *Prescription for Change: Lesbian and Bisexual Women's Health Check* (2008)

12 to 13 year old girls are offered the HPV (human papilloma virus) vaccination as part of the NHS childhood vaccination programme. The vaccine protects against cervical cancer and is given to girls in year eight at schools in England consisting of three injections over a period of 12 months. Research has shown that the HPV vaccine provides effective protection for at least eight years after completion of the three-dose course. It is not known yet how long protection will last beyond this time. Current uptake for the vaccination programme in Bury stands at 88.7% which is lower than the other tier 1 comparator areas with the exception of Calderdale. This level is markedly higher than the 70.8% figure reported in the last JSNA.

Disease Prevalence

Limiting long-term illnesses are those conditions which can be controlled by medication but cannot be cured by currently available treatments. Prominent diseases in this category include asthma, coronary heart disease (CHD), chronic obstructive pulmonary disease (COPD) and diabetes. These illnesses can have significantly detrimental impact upon quality of life, causing disability and death. However, high quality individual case management for those suffering from limiting long-term illnesses can help to preserve better health, promote independence and ultimately reduce the rate of premature mortality associated with disease. The GP Patient Survey for 2012/13 reveals that 64% of patients in Bury with a long-term health condition feel that they have had enough support from local services in the last six months to help them manage their condition, on a par with the national average.

According to the 2011 Census, 18.8% of the Bury population reported having a long-term illness (in excess of 34,000), similar to the 19.0% reported ten years earlier. There is variation by religious background, with residents from Sikh (10.6%), Muslim (12.9%) and Hindu (14.3%) less likely to report having a condition compared with the general population. The rate rises to 21.1% amongst those with a Christian background. This is broadly in line with national trends. Hindu (3.7%), Sikh (4.7%), Muslim (4.8%) and Jewish (4.8%) residents were also less likely to cite having 'bad or very bad' general health than the general population (5.9%).

Reported prevalence increases with age. Less than 5% of 0-15 year olds have a limiting long-term illness, rising to 50% for 65-84 year olds and 73% for those over 85. There is also considerable variation at ward level, ranging from 15.6% in Sedgley and Ramsbottom to 22.8% in East and 21.6% in Moorside. Research has suggested the prevalence of long-term illness is more closely correlated with social deprivation than mortality.[104]

104 N.Payne and C.Saul: "What common disorders do those reporting limiting long-term illness experience, and what is their survival and health utilization experience?" Journal of Public Health Medicine (2000) 22 pp.324-329

Census Area Ward	% of Limiting Long-Term Illness
East	22.8
Moorside	21.6
Besses	20.7
Radcliffe North	20.7
St. Mary's	20.6
Pilkington Park	19.8
Church	19.8
Redvales	19.8
Radcliffe Central	19.8
Radcliffe South	18.0
Holyrood	17.8
Unsworth	16.9
Tottington	16.8
Elton	16.8
Ramsbottom	15.6
Sedgley	15.6

The prevalence of each of these diseases is now considered. Data is drawn from the QOF (Quality and Outcomes Framework). This is a limited dataset in that the rates presented are crude, and have not therefore been adjusted for population structure which means that comparing the prevalence with other areas should only be considered as indicative data. Further, the statistics only include patients registered with GPs, and GPs can exclude individuals from the calculation without penalty – for example, where patients fail to attend a review. The exception rate nationally ranges from 2.2% to 7.5%. 5.9% of patients in Bury were excluded in 2010/11. Due to the limitations of the dataset the observed rates are set against expected prevalence models so that an indication of the relative level of diagnosis can be ascertained. The models used are population structure adjusted, but it should be noted that they are for the population aged 16 and over rather than the whole population.

Asthma

Asthma is a common long-term condition affecting the lungs. It is estimated that 5.4 million people in the UK are currently receiving treatment, with more than 20% being children. People can lead symptom free lives with appropriate care management, including avoidance of potential triggers such as pollen. However, there are still approximately 1000 deaths each year due to asthma – it is suggested that 70% could be prevented via suitable early interventions.[105]

There are 12,056 registered patients with Asthma in Bury, equating to a prevalence rate of 6.4% (2011/12). However, prevalence modelling suggests that there is under-diagnosis, with an expected prevalence of 9.2% or 17,335 patients. The extent of under-

105 Department of Health: *Outcomes strategy for chronic obstructive pulmonary disease and asthma in England* (2011)

diagnosis can be represented via an observed:expected ratio, with 1.0 indicating 100% diagnosis. The ratio in Bury for asthma is 0.70.

Coronary Heart Disease (CHD)

CHD is a subset of cardiovascular disease and is the most common cause of mortality in the UK (15% of all deaths). Fundamental to preventing and managing the symptoms of CHD are positive lifestyle choices including good diet, regular exercise and abstinence from smoking and excessive alcohol consumption.

The observed prevalence rate for CHD in 2011/12 in Bury is 3.7% (7030 of GP registered patients). 2011 modelling estimates suggest that there will be in the region of 9216 adults over the age of 16 in Bury with CHD, a prevalence rate of 6.3%. The observed:expected ratio is 0.59. The observed prevalence is lower than all comparators, but the expected prevalence is actually the 2nd highest amongst the tier 1 local authority grouping – indicative of higher under-diagnosis.

In the following table the 2011 modelling of expected prevalence is broken down by gender, age and ethnicity. There is a higher expected prevalence amongst males than females, and also a far higher prevalence amongst people from a White ethnic background. The expected prevalence soars above the age of 65.

	Expected Number with CHD (16+)	**Prevalence %**		**Expected Number with CHD (16+)**	**Prevalence %**
Males	5364	7.61	White	8882	6.61
Females	3853	5.12	Mixed	19	1.27
16-44	335	0.49	Black	34	1.91
45-64	3056	6.38	Asian	263	3.91
65-74	2735	17.44	Other	18	1.40
75+	3090	23.54			

Chronic Obstructive Pulmonary Disease (COPD)

COPD is an umbrella term covering a range of conditions such as chronic bronchitis and emphysema. It leads to a restriction of the lungs, making emergency treatment complicated and expensive. The onset of the disease may be industrial (e.g. exposure to pollution) but the primary cause is smoking. According to the Healthcare Commission (2006) there are around 3 million people in the UK with COPD, yet it remains undiagnosed for as many as two thirds of them, significantly increasing the risk of premature mortality for this group.[106] COPD can be stabilised through pulmonary rehabilitation: a combination of medication and healthy lifestyle. Stopping smoking is fundamental to this process. It is therefore concerning to note that in Bury 18.8% of registered patients with a long-term illness continue to smoke, in excess of the national average (17.5%).[107]

106 Healthcare Commission: *Clearing the air: a national study of chronic obstructive pulmonary disease* (2006)

107 South East Public Health Observatory: Cardiovascular Disease Profile (2012). Data is from QOF for 2010/11.

According to the QOF dataset the current prevalence is 1.9% for 2011/12 (3570 GP registered patients). Following the Healthcare Commission model the actual prevalence may be substantially higher. This is borne out by 2011 modelling estimates which place the figure at 7228, equivalent to a prevalence rate of 5.0% amongst the 16+ population. The observed:expected ratio is 0.38, indicating that the majority of sufferers remain undiagnosed. The level of under-diagnosis appears to be higher than the tier 1 comparator group, with Bury returning the 2nd lowest observed prevalence but 2nd highest expected rate.

The table below shows expected prevalence modelling by age, gender and ethnicity. The pattern is similar to CHD, with a far higher prevalence over the age of 65, and also higher expected levels amongst males and people from a White ethnic background.

	Expected Number with COPD (16+)	**Prevalence %**		**Expected Number with COPD (16+)**	**Prevalence %**
Males	4131	5.86	White (inc. Mixed and Other)	6976	5.09
Females	3097	4.12			
16-44	1158	1.68			
45-64	2737	5.72	Black	77	4.31
65-74	1765	11.26	Asian	175	2.61
75+	1567	11.94			

There is no existing model to consider prevalence amongst the LGBT population. However, given the far higher rates of substance misuse and smoking reported, it is reasonable to assume high prevalence and ultimately mortality rates in relation to cardiovascular, respiratory and liver disease.

Diabetes

Type 1 diabetes is typically diagnosed in childhood. By contrast, the likelihood of developing type 2 diabetes increases after the age of 45. The primary risk factor for type 2 diabetes is obesity, but it is also associated with alcohol and deprivation more generally. Those residing in the worst quintile nationally are 56% more likely to have diabetes than their affluent counterparts.[108] It is a common condition, with 5.7% of the registered population aged 17+ known to have diabetes (8454 patients). Again, modelled estimates indicate under-diagnosis, with an estimated prevalence of 7.3% in 2012 (10,674). It should be noted that this figure is based on the 16+ population. The number is predicted to rise to 12,175 (8.1%) by 2020 and 14,043 (8.9%) by 2030.

Cancer

Cancers are not by definition limiting long-term illnesses as they are treatable, particularly via early diagnosis and intervention. However, around one in three people

108 Yorkshire and Humber Public Health Observatory: Diabetes Community Health Profile (2012)

will develop a cancer at some point during the life cycle. The most common cancers are breast, lung, bowel and prostate. These account for around 50% of new diagnoses each year. Developing cancer is inextricably linked to lifestyle, most notably poor diet, lack of physical activity, being overweight, smoking and excessive alcohol consumption. Estimates from the World Cancer Research Fund suggest that a sizeable proportion would be preventable, purely via positive lifestyle changes:[109]

Type of Cancer	% Preventable through Lifestyle Changes
Breast	42
Lung	33
Bowel	47
Prostate	20

According to the QOF dataset the incidence of all cancers in Bury is 1.68% (2011/12). This is better than all the local authority comparators and the regional and national averages. Standardised registration ratios are to be preferred, however, as these ensure that the population profile is taken into account. This dataset, albeit less contemporary, paints a very different picture, with a higher incidence of all cancers (including the four main cancer types individually) than most of the comparators (2008-10). In particular, incidence of lung and prostate cancer is observed to be statistically worse than the national benchmark. This data is all presented in the table at the end of the chapter.

Local variation at middle super output area is available for the prevalence of cancer from 2005-09. This is displayed in the map overleaf, and demonstrates that the cancer profile departs from the corridor of deprivation seen in association with a large number of datasets in this needs assessment. Rather, the highest rates are all in the south of the Borough, including Radcliffe West, Radcliffe East, Redvales, Unsworth, Besses, Holyrood and Sedgley.

Hypertension

Hypertension, or high blood pressure, is a major risk factor behind cardiovascular diseases, particularly where it remains unidentified or uncontrolled. Diagnosis is therefore key to reducing morbidity and mortality. 25,506 of the registered GP population (13.5%) in Bury have been diagnosed with hypertension. 2011 modelling estimates indicate that the exact figure will be substantially higher, with an expected number of 46,178 adults over the age of 16, a prevalence rate of 31.7%. The observed:expected ratio is 0.43, meaning that only two fifths of cases of hypertension have been identified. Both the observed and expected levels compare favourably with the tier 1 local authority comparator group, though the expected prevalence is above both the national and regional estimate.

The following table again demonstrates higher expected prevalence amongst males and those with White ethnicity. The rate climbs steeply after the age of 45, with 40.9% of

109 http://www.wcrf-uk.org/research/cancer_statistics/preventability_estimates.php

those aged 45-64 predicted to have high blood pressure, rising to 65.9% for 65-74 and 72.5% above the age of 75.

	Expected Number with Hypertension (16+)	Prevalence %		Expected Number with Hypertension (16+)	Prevalence %
Males	23200	32.93	White	43827	32.62
Females	22979	30.56	Mixed	221	14.84
16-44	6753	9.79	Black	510	28.55
45-64	19564	40.86	Asian	1376	20.47
65-74	10341	65.94	Other	244	18.84
75+	9520	72.52			

Tuberculosis

Tuberculosis is a serious bacterial infection which can however be cured through early identification and proper treatment. National Institute for Health and Clinical Excellence (NICE) guidelines suggest that areas with an incidence of 40 per 100,000 or greater should be considered as high rates. Between 2010-12 there were just 19 case reports of tuberculosis in Bury, equivalent to 10.3 per 100,000 population. National statistics for 2012 reveal that the rate is higher amongst males (16.3 per 100,000) than females (11.5 per 100,000). The most at risk age bracket is 25-29, with the rate climbing to 30.5 per 100,000.

Cardiovascular Disease Admissions

Admissions related to cardiovascular disease can be considered as a proxy measure for incidence. The comparison table at the end of this chapter shows that the rate of admission for myocardial infarction or heart attack (2006-11) and revascularisation (2011-12) is lower than the national average, and also compares favourably against the local authority comparators. By contrast the emergency admission rate for strokes is higher than all the comparators with the exceptions of Stockport and Stockton-on-Tees.

Research from the South East Public Health Observatory reveals a correlation between admission rates and deprivation quintiles, with those residing in the 20% worst deprived parts of Bury far more likely to be admitted than the best 20%, as the following table demonstrates:

Admission	Most Deprived Quintile Rate per 100,000	Least Deprived Quintile Rate per 100,000
Coronary Heart Disease	341.9	157.0
Stroke	163.0	67.1
Revascularisation	191.7	106.0

Mortality Rates

Premature mortality rates are a crucial measure of health need, as they reflect not only the incidence of specific types of disease but also the relative success of prevention and early intervention initiatives. Under 75 is generally considered as the defining point for premature death. For most datasets mortality statistics are available for the period 2006-10, with the exceptions of All Cancers (2009-11), Diabetes (2008-10), Cardiovascular Disease (2011) and Respiratory Disease (2011).

In comparison with the tier 1 comparator group, there are particularly high ratios in respect of Diabetes, Circulatory Disease, Coronary Heart Disease and Strokes. By contrast mortality from cancer is lower than most of the comparator grouping (though still higher than the national position). Mortality from all causes for those under 65 is also better than all tier 1 comparators with the exception of Stockton-on-Tees.

Local middle super output area data is available for two of the diseases with particularly high rates in Bury: Circulatory Disease and Coronary Heart Disease. The maps on page 91 are almost identical, and see the prominence of the corridor running through Moorside, East, Redvales, Radcliffe East and into Radcliffe West.

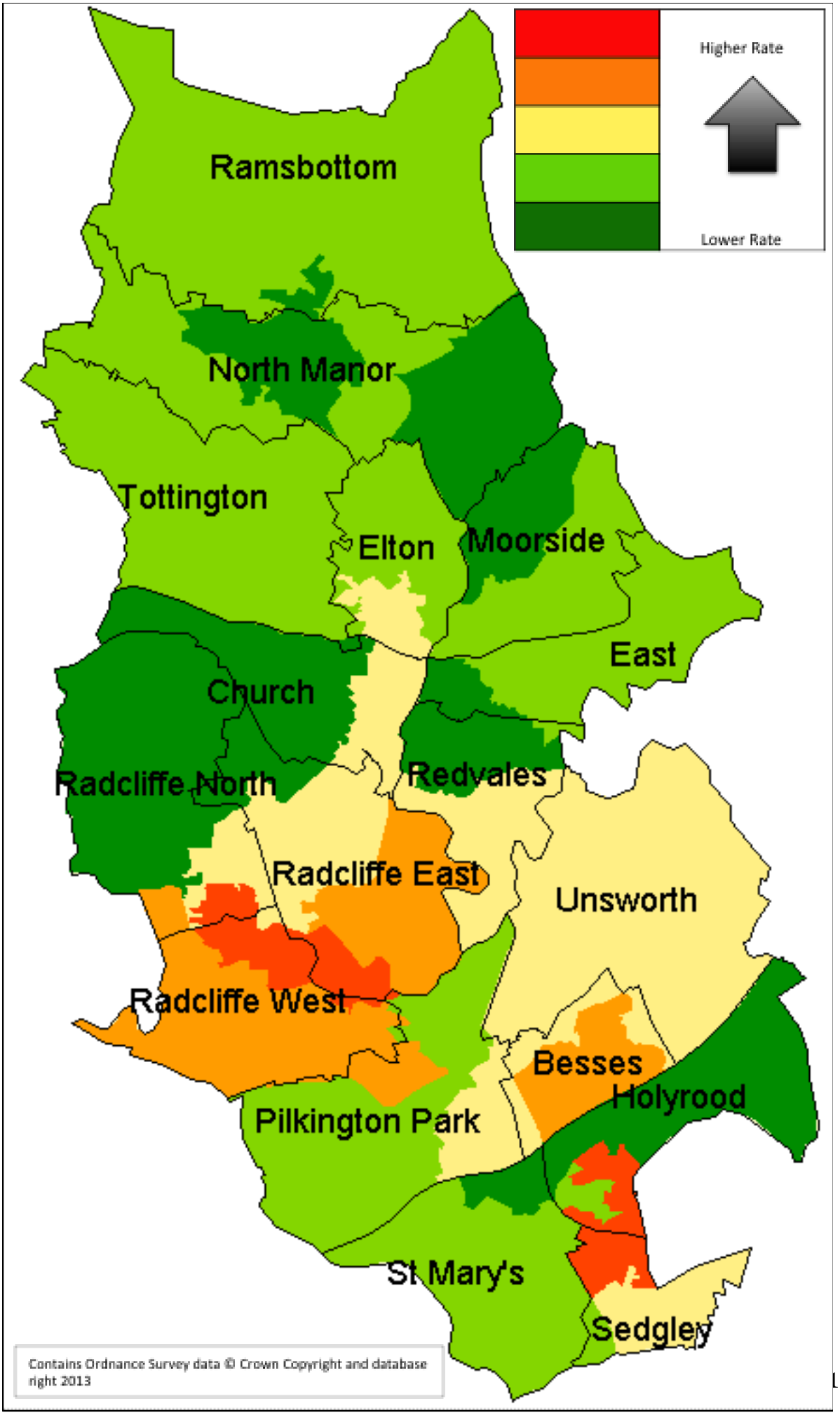
Liver Disease

Liver Disease is the fifth biggest cause of death in England and Wales but, unlike the other categories discussed above, it continues to increase on an annual basis. Rates have increased by more than 250% since the 1970s and are predicted to double over the next two decades.[110] In most instances it is preventable and onset has been triggered by excessive alcohol consumption, obesity and hepatitis.

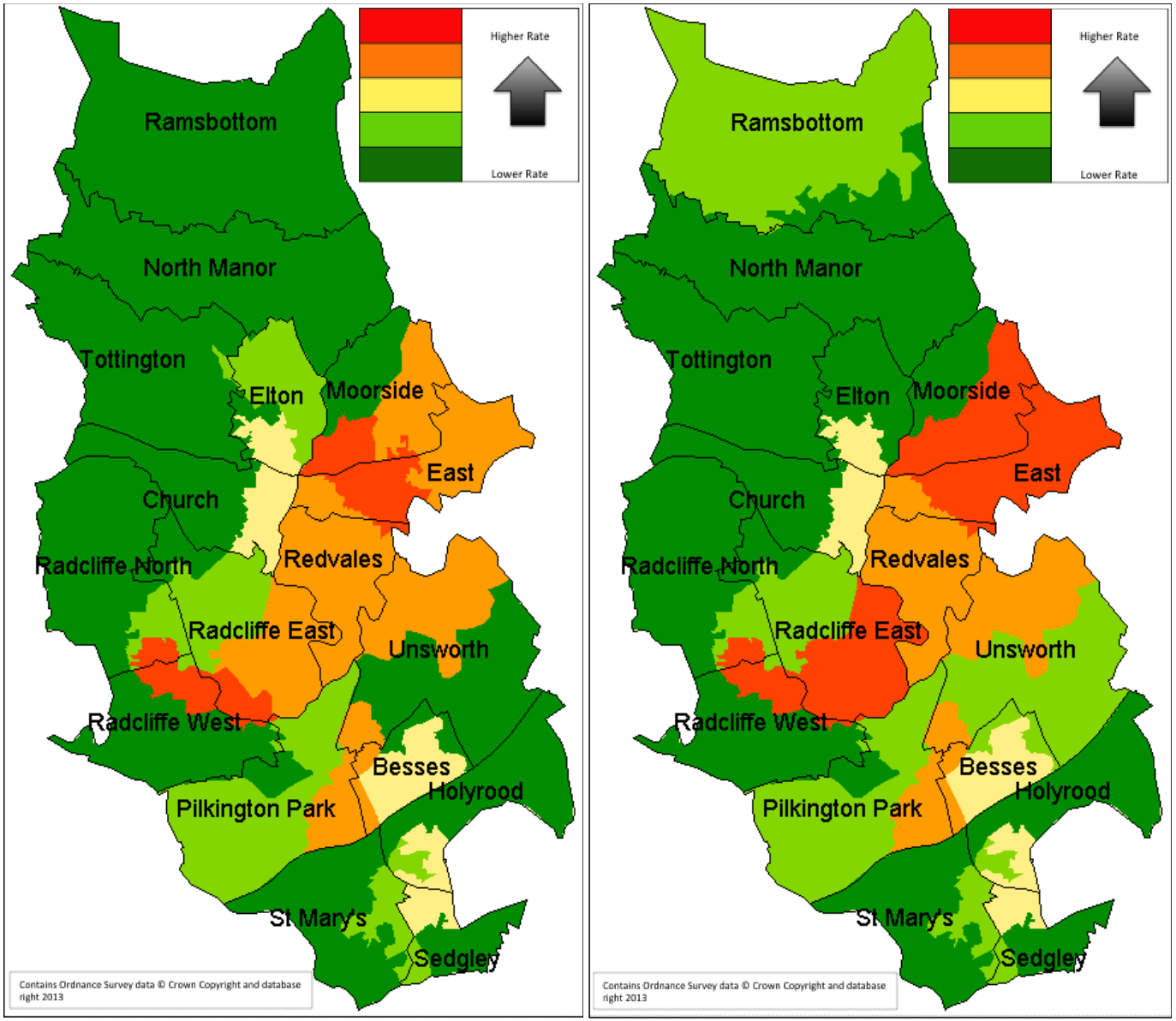
At 18.8 per 100,000 population aged under 75 the mortality rate is far higher than the national average (14.4). It is third highest amongst the tier 1 comparators, after Sefton (24.4) and Stockport (19.4).

110 British Liver Trust factsheet (2008)

Prevalence of All Cancers (2005-09) by Local Data Quintile (indirectly age-sex standardised ratios relative to England: range 94.00 – 133.600)



Standardised Mortality Ratio for Circulatory Disease (Left) and Coronary Heart Disease (Right) (2006-10) by Local Data Quintile (range 67.400 – 233.800 and 44.200 – 270.600 respectively)



Inequalities Summary

The Health and Disability Deprivation domain of the Index of Multiple Deprivation illustrates the inequality of health outcomes. Within the domain score it captures relative information pertaining to poor health and early mortality, as well as disability. The map overleaf shows that the most health deprived super output areas are in Moorside (Chesham Fold), Radcliffe North (Radcliffe Boro FC/Coronation Road) and the previously noted area of Elms North in Unsworth. These three areas all reside within the worst 1% nationally. Overall Moorside has the highest concentration of health deprivation within its boundaries.

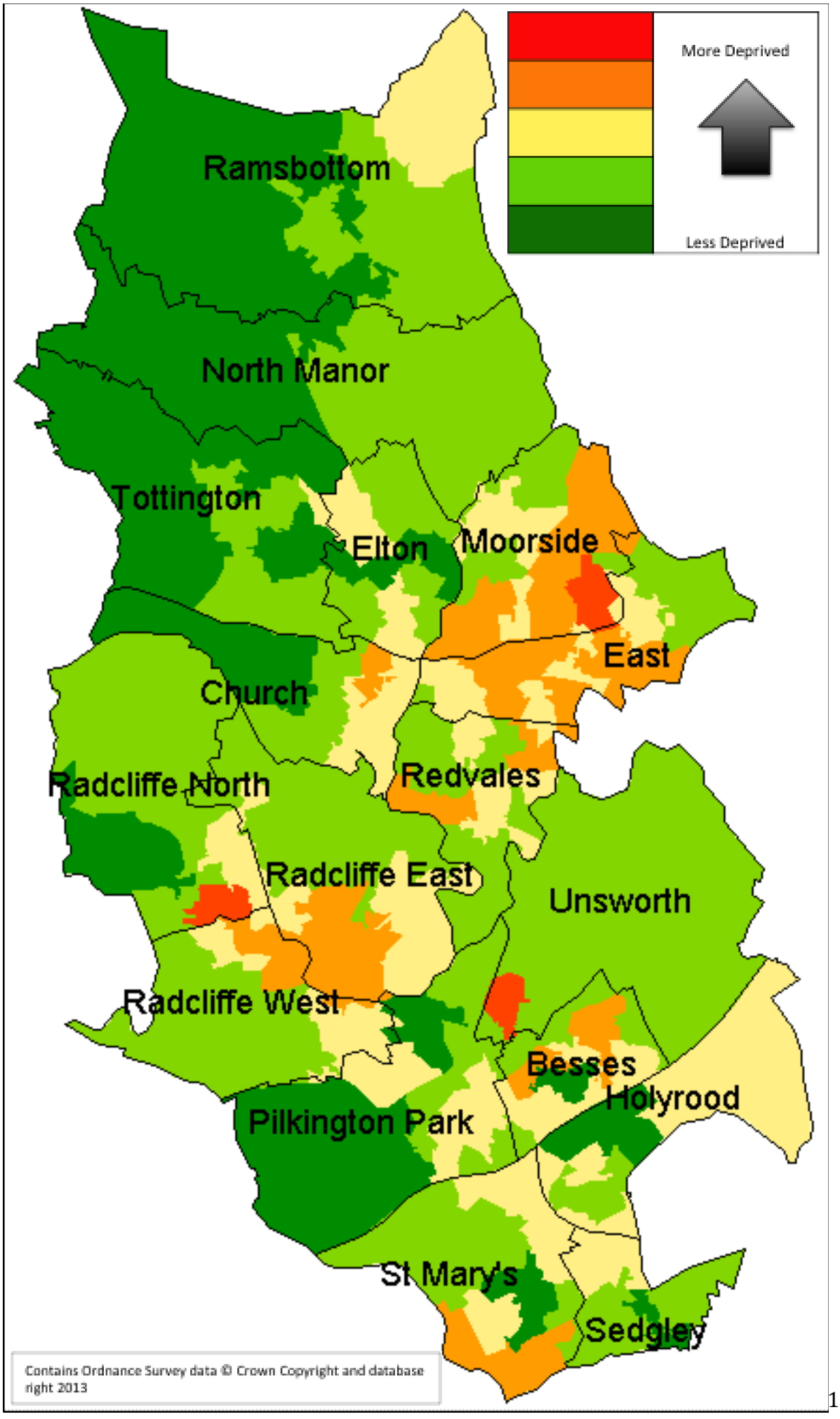
The table below aggregates the Health domain data from lower super output area to ward level and also presents the aggregate data for the overall Index of Multiple Deprivation, in order to demonstrate the relationship between health and overarching deprivation. Male and female life expectancy data is also included. The limiting long-term illness dataset is not available for comparison, as this is put together using CAS (Census Area Statistics) wards rather than the current electoral ones, and there are some differences in the boundaries.

There is clear symmetry in the table with the 8 most deprived wards for health also being in the top 8 for overall deprivation. The relative positions of East and Moorside have swapped, showing that Moorside is the most health deprived ward in the Borough. Unsworth has a slightly higher ranking than normal for health deprivation, attributable to the pocket of deprivation described above. It is also interesting to note that St. Mary's is in the top 6 of both indices, yet does not feature prominently in the mapping for cancer, circulatory disease or coronary heart disease. It does have the fourth highest proportion of residents with a limiting long-term illness.

Life expectancy for males and females also shows an association with the deprivation indices, although life expectancy in Besses appears higher than would be expected.

Ward	IMD (average)	Health (average)	Male Life Expectancy	Female Life Expectancy
East	40.01	1.05	75.4	77.4
Moorside	39.45	1.18	75.7	78.1
Radcliffe West	32.32	0.87	75.7	80.2
Besses	30.88	0.72	78.4	82.6
Redvales	29.01	0.82	75.6	80.7
Radcliffe East	28.06	0.80	76.9	79.7
St. Mary's	23.62	0.64	75.3	80.5
Radcliffe North	20.62	0.48	76.6	81.3
Holyrood	19.86	0.36	81.1	86.8
Sedgley	18.75	0.38	81.6	88.7
Unsworth	18.44	0.47	80.6	83.8
Elton	16.83	0.29	78.3	84.1
Church	14.31	0.20	80.5	81.5
Pilkington Park	12.63	0.12	82.0	82.3
Ramsbottom	12.52	-0.02	81.6	83.6
Tottington	11.86	0.11	79.6	80.8
North Manor	9.97	0.09	81.9	84.7

Health Domain (IMD 2010) by Local Data Quintile (range -0.68 – 2.43)



The following inequalities should also be highlighted:

Protected Characteristic	Inequalities
Age	• The prevalence of limiting long-term illness rises sharply with age, ranging from 5% of 0-15 year olds to 50% of 63-84 year olds, and 73% over the age of 85. • Modelled estimates of prevalence indicate that 41% of the population in Bury over 65 will suffer from CHD, with 23% experiencing COPD. The expected 'curve' for hypertension starts earlier, with a 41% expected prevalence rate amongst 45-64 year olds, rising to 66% at 65-74.
Gender	• The gap in life expectancy at birth by gender in Bury is 3.7 years (77.5 males; 81.2 Females), slightly lower than the national gap (4.0 years). • The expected prevalence of CHD, COPD and hypertension in Bury is higher for men than women.
Ethnicity	• Expected prevalence of CHD, COPD and hypertension is far greater in Bury for those from a White ethnic background. There is some variation amongst the other ethnic groups, with a greater modelled prevalence of CHD amongst Asian than Black ethnic groups. The converse is true in relation to COPD and hypertension.
Religion	• Residents from Sikh, Muslim and Hindu religious backgrounds in Bury are less likely to report having a limiting long term illness or 'bad or very bad' health than the general population.
Sexual Orientation	• No disease model exists locally for the LGBT population, but given the high rates of smoking and substance misuse, a higher prevalence of respiratory, cardiovascular and liver disease can be predicted.

Ill Health and Mortality Comparison Table (continued overleaf)

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	No Polarity Rank (1=highest)	North West		England	
Breast Screening Rate	Aged 53-64	1	2011-12	**77.6**	75.6	N/A	75.6	74.3	78.7	2		74.7	⊙	77.0	⊙
Cervical Screening Rate	Aged 25-64	2	2011-12	**80.3**	82.2	N/A	74.8	81.3	78.5	3		78.1	⊙	78.6	⊙
HPV Vaccination (%)		3	2011-12	**88.7**	84.3	91.7	93.7	92	95	5		91.0	■	86.8	⊙
Asthma Prevalence	Observed	4	2011-12	**6.4**	6.4	N/A	6.2	6.5	6.5		3=	6.3	◆	5.9	◆
	Expected	5	2008	**9.2**	9.1	N/A	9.2	9.2	9.2		1=	N/A		9.1	◆
CHD Prevalence	Observed	6	2011-12	**3.7**	4.0	N/A	4.5	4.0	4.1		5	N/A		3.4	◆
	Expected	7	2011	**6.3**	6.3	6.3	7.3	5.8	6.2		2	6.5	⁘	5.8	◆
COPD Prevalence	Observed	8	2011-12	**1.9**	1.8	N/A	2.4	2.0	2.2		4	2.2	⁘	1.7	◆
	Expected	9	2011	**5.0**	3.5	3.5	5.3	4.5	4.7		2	4.3	◆	3.6	◆
Diabetes Prevalence	Observed	10	2011-12	**5.7**	5.6	N/A	6.0	5.5	5.4		2	N/A		5.8	⁘
	Expected	11	2012	**7.3**	7.5	7.6	7.8	7.2	6.9		4	N/A		7.3	•
Hypertension	Observed	12	2011-12	**13.5**	13.2	N/A	16.2	14.1	14.0		4	N/A		13.6	⁘
	Expected	13	2011	**31.7**	31.8	32.2	34.2	31.3	31.1		4	31.5	◆	30.5	◆
Tuberculosis Case Rate		14	2010-12	**10.3**	10.3	N/A	4.0	6.4	5.7			N/A		13.9	⊙

1 Less than 3 years since last test, NHS Breast Screening Programme

2 Less than 3 years since last test, NHS Cervical Screening Programme

3 Percentage of Year 8 girls who completed all 3 doses of the HPV vaccine (Child and Maternal Health Observatory)

4 QOF crude prevalence rate

5 Modelled estimate as percentage of GP total list, Inhale Asthma Profile (North West figure is North of England)

6 QOF crude prevalence rate

7 Modelled estimate of prevalence 16+, ERPHO

8 QOF crude prevalence rate

9 Modelled estimate of prevalence 16+, ERPHO

10 QOF crude prevalence rate, 17+

11 Modelled estimate of prevalence 16+, YHPHO Diabetes Prevalence model

12 QOF crude prevalence rate

13 Modelled estimate of prevalence 16+, ERPHO

14 PHE enhanced tuberculosis surveillance (Eng rate is 2012 only)

⊙ Bury figure is better than national or regional average

■ Bury figure is worse than national or regional average

* Difference from national/regional has been tested as statistically significant

◆ Bury figure is higher than national or regional average (but no polarity - higher is not necessarily better)

⁘ Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Dataset			Period	Bury	Calderdale	Lancashire	Sefton	Stockport	Stockton-on-Tees	Polarity Rank (1=best)	No Polarity Rank (1=highest)	North West		England	
Incidence of All Cancers	QOF	15	2011-12	**1.68**	1.83	N/A	2.30	1.92	1.65	2		1.81	/	1.77	/
Incidence of All Cancers	Age-Standardised	16	2008-10	**447.7**	398.8	N/A	447.2	415.5	418.0	5		N/A		402.8	n
Incidence of Breast Cancer		17	2008-10	**107.5**	89.7	N/A	100.4	108.2	98.5	4		100.6	n	100.0	n
Incidence of Colorectal Cancer		17	2008-10	**52.9**	46.0	N/A	54.7	47.6	48.1	4		50.1	n	47.9	n
Incidence of Lung Cancer		17	2008-10	**128.4**	114.9	N/A	127.3	106.1	138.1	4		128.1	n	100.0	n *
Incidence of Prostate Cancer		17	2008-10	**123.5**	107.6	N/A	99.2	101.1	71.9	5		97.7	n *	100.0	n *
CHD Emergency Admission Rate		18	2011-12	**206.6**	226.0	229.4	202.3	247.6	233.0	2		N/A		198.3	n
Stroke Emergency Admission Rate		19	2011-12	**97.4**	75.4	92.8	81.6	98.5	109.9	4		N/A		89.5	n
Myocardial Infarction Emergency Admission Rate		20	2006-11	**93.4**	130.4	111.3	101.7	123.7	114.5	1		N/A		100.0	/
Revascularisation Admission Rate		21	2011-12	**127.5**	134.8	142.5	124.1	130.1	146.9	2		N/A		140.5	/
Mortality: All Causes	Under 65	22	2006-10	**105.9**	111.4	112.1	111.9	108.3	100.8	2		N/A		100.0	n
	Under 75	22	2006-10	**110.5**	112.7	109.5	109.4	101.4	114.3	4		N/A		100.0	n
Mortality: Cancer	Under 75	23	2009-11	**113.5**	120.3	115.7	112.1	115.1	126.2	2		N/A		108.1	n
Mortality: Cardiovascular Disease	Under 75	24	2011	**75.5**	77.6	71.0	76.3	61.7	65.0	4		N/A		N/A	
Mortality: Circulatory Disease	Under 75	25	2006-10	**120.4**	115.6	109.5	106.1	110.1	104.5	6		N/A		100.0	n *
Mortality: Coronary Heart Disease	Under 75	25	2006-10	**125.6**	106.5	113.0	108.3	110.4	112.1	6		N/A		100.0	n *
Mortality: Diabetes	18+	26	2008-10	**123.8**	93.9	99.8	93.8	79.0	94.5	6		99.6	n	100.6	n
Mortality: Liver Disease	Under 75	27	2009-11	**18.8**	16.0	18.3	24.4	19.4	16.1	4		N/A		14.4	n
Mortality: Respiratory Disease	Under 75	28	2011	**28.7**	41.5	N/A	35.3	27.3	36.1	2		N/A		N/A	
Mortality: Strokes		29	2006-10	**117.2**	96.1	112.4	98.1	103.5	113.8	6		N/A		100.0	n *

15 QOF crude rate

16 National Cancer Intelligence Network e-atlas (Eng figure is UK)

17 Indirectly standardised registration ratios, EMPHO

18 Directly standardised rate per 100,000, WMPHO

19 Directly standardised rate per 100,000, WMPHO

20 Indirectly age standardised ratio, EMPHO

21 Directly standardised rate per 100,000, WMPHO

22 Standardised mortality ratio, EMPHO

23 Directly standardised rate per 100,000, Public Health Outcomes Framework

24 Directly age-standardised registration rates (note Sefton is South Sefton CCG; Stockton is Hartlepool and Stockton CCG) Health and Social Care Information Centre

25 Standardised mortality ratio, EMPHO

26 Indirectly standardised ratio, Health and Social Care Information Centre

27 Directly standardised rate per 100,000, Public Health Outcomes Framework

28 Standardised mortality ratio, EMPHO

Bury figure is better than national or regional average

Bury figure is worse than national or regional average

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Bury figure is lower than national or regional average (but no polarity - lower is not necessarily worse)

Priorities

- Target rates for breast and cervical screening are being achieved but there is significant local variation by GP practice. Increasing the standard to a uniform level could have a considerable impact in reducing both the incidence of cancer and the prospects of survival.
- Regional research suggests that there are lower screening rates than average amongst lesbian and bisexual women. Further analysis should be undertaken in Bury to ascertain whether and why this is the case locally. It would also be beneficial to research relative screening uptake by religion and ethnicity to ascertain whether there are any further inequalities.
- Whilst the take-up of the HPV vaccine has increased since the time of the last JSNA the level is still lower than all tier 1 comparator authorities apart from Calderdale and as such increasing this level should remain a priority.
- Research should be undertaken to ascertain whether the disease prevalence estimates by ethnicity, age and gender are mirrored in the observed dataset – thus enabling analysis of sub-groups where there may be the likelihood of particularly high rates of un-diagnosis. Prevalence amongst the LGBT population should also be examined, as higher rates are anticipated due to reported levels of substance misuse in regional and national research.
- According to the QOF dataset for 2011/12 Bury has a better rate for all cancers than the comparator areas. When examining individual cancer standardised registration ratios, however, those for breast, colorectal, lung and prostate cancer are actually above most comparator areas, albeit for an earlier time period. This discrepancy requires further research. The individual cancer statistics suggest there is the need to maintain focus on reducing cancer incidence.
- The mortality rates for individual conditions vary. Of most concern are those for circulatory disease, coronary heart disease, strokes and diabetes. For all these conditions the rates are higher than all comparator areas.
- When considering the Health and Disability domain of the Index of Multiple Deprivation, Moorside, East and Radcliffe West are shown to have the highest levels of deprivation. The output area in Unsworth ward highlighted earlier in the report also features prominently.