

## Highlights

### Patient Demographics

Lincoln Health has a population of 38,768.  
The expected growth by 2035 is 6.2%.

### Deprivation

18.2% of the population are in the most deprived quintile.

### Mortality

Lincoln Health has lower life expectancy (81.0 years) than Lincolnshire (81.6 years).  
Premature mortality is higher in Lincoln Health (435 per 100k) than Lincolnshire (325.6 per 100k).

### Wider Determinants

Crime rates in Lincoln Health (14,424 per 100k) are higher than Lincolnshire (8,740 per 100k).  
The proportion of Unemployed (3.7%) is lower than Lincolnshire (4.2%).

**Note:** Portland Medical Practice, Newark Road Surgery, The Witham Practice and University Health Centre have merged to become Heart of Lincoln Medical Group.

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### Notes

*Primary Care Network (PCN) boundaries are for mapping/visual purposes only and do not represent the known contractual boundaries of PCN practices.*

*PCN boundaries were generated from practice patient registers, and geographical areas were then assigned to each PCN based on the greatest percentage of patients resident in that area.*

*It should be noted that some patients registered to a specific PCN are likely to reside outside of the defined boundaries in this map.*

<sup>1</sup> PCN boundary generated from practice patient registers with geographical areas then assigned to each PCN based on the greatest percentage of patients resident in that area. It should be noted that some patients registered to a specific PCN are likely to reside outside of the defined boundaries in this map.

<sup>2</sup> GP Practice Coverage [Lincolnshire Primary Care Network Alliance](#)

# PATIENT DEMOGRAPHICS

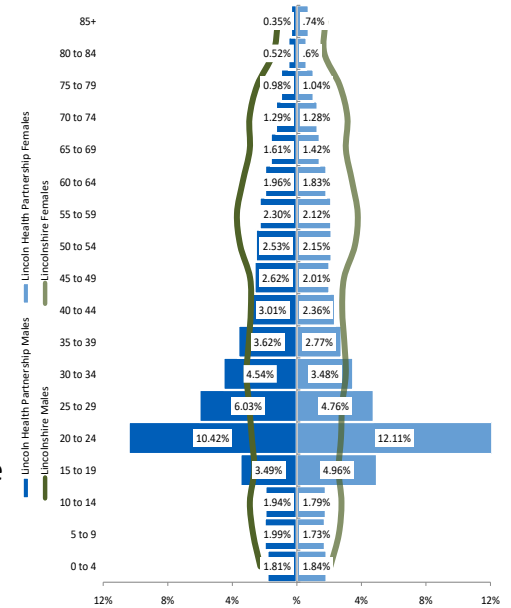
## Registered Patients by Practice and Age Category

Practice	Children & Young People		Working Age		Older People		Total Patients
Brayford Medical Practice	1,837	20.1%	6,464	70.6%	849	9.3%	9,150
Heart Of Lincoln Medical Group	5,742	19.4%	20,917	70.6%	2,959	10.0%	29,618
Lincoln Health Partnership	7,579	19.5%	27,381	70.6%	3,808	9.8%	38,768
Lincolnshire	166,329	20.6%	454,698	56.2%	187,968	23.2%	808,995

## REGISTERED PATIENTS

- The population of Lincoln Health has a lower proportion of Children and Young People than Lincolnshire. A difference of -1.0%.
- The population of Lincoln Health has a lower proportion of Older People than Lincolnshire. A difference of -13.4%.
- The highest proportion of males in Lincoln Health are aged 20 to 24.
- The highest proportion of females in Lincoln Health are aged 20 to 24.

## Registered Patients by Age Group

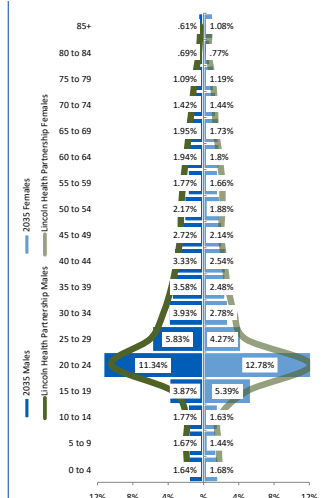
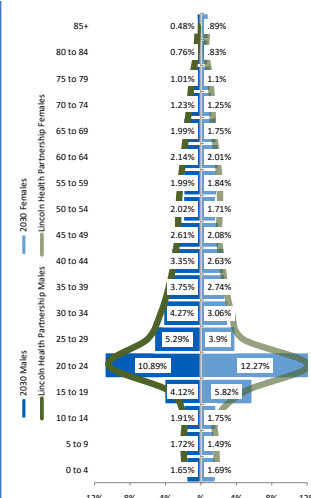
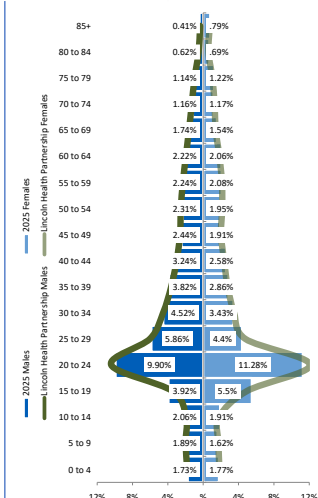


## PROJECTED LIST SIZE GROWTH

- Lincoln Health population will increase from 38,768 to 41,172 by 2035. An increase of 6.2%.
- The Lincoln Health older people population (65+) will increase from 3,808 to 4,924 by 2035. An increase of 29.3%.
- Over 85s will increase from 422 to 695 by 2035. An increase of 64.6%.

## Projected Patient List Size Growth at 2025, 2030 & 2035

	2022		2025		2030		2035	
	Patients	% diff to 2022	Patients	% diff to 2022	Patients	% diff to 2022	Patients	% diff to 2022
Children & Young People	7,579		7,961	5.0%	8,131	7.3%	7,862	3.7%
Working Age	27,381		26,951	-1.6%	27,639	0.9%	28,386	3.7%
Older People	3,808		4,088	7.3%	4,551	19.5%	4,924	29.3%
<b>Total</b>	<b>38,768</b>		<b>39,000</b>	<b>0.6%</b>	<b>40,320</b>	<b>4.0%</b>	<b>41,172</b>	<b>6.2%</b>



### Source

NHS Digital – Patients Registered at a GP Practice March 2022  
ONS – Population Projections 2022

# PATIENT DEMOGRAPHICS

Experian Mosaic population segmentation analysis allows for the PCN population to be divided into groups by their individual characteristics. Grouping different people into different segments gives a greater understanding and flexibility when trying to engage with patients.

Population Segmentation Group	PCN Coverage %	Key Features	Communication Preferences	
			✓	✗
Rental Hubs	56.0	- Aged 18-35 - Private renting - Singles and sharers - Urban locations - Young neighbourhoods - High use of smartphones	- SMS - Mobile - Email	- Post - Landline
Transient Renters	25.0	- Private renters - Low length of residence - Low cost housing - Singles and sharers - Older terraces	- SMS - Mobile	- Post - Landline
Aspiring Homemakers	4.7	- Younger households - Full-time employment - Private suburbs - Affordable housing costs - Starter salaries	- Email	- Landline
Vintage Value	4.1	- Elderly - Living alone - Low income - Small houses and flats - Need support - Low technology use	- Landline - Post - Prefer not to be contacted	- SMS - Email
Domestic Success	2.6	- Families with children - Upmarket suburban homes - Owned with a mortgage - High Internet use - Own new technology	- SMS - Email	- Mobile - Landline
<b>Penetration</b>	<b>92.4%</b>	Shows the proportion of the comparison area that is made up of your area's population for each Mosaic group.		

## SOCIO-ECONOMIC SEGMENTATION

- Over half of Lincoln Health are classified as Rental Hubs.
- Email is a preferred communication method for 63% of the population.
- 3% of the population prefer not to be contacted via mobile phone.

### Notes

For the purposes of this analysis patients assigned to a PCN were aggregated at LSOA and the predominant segmentation group for the given LSOA was assigned to all patients in that geographical area.

### Source

Experian Mosaic



# DEPRIVATION

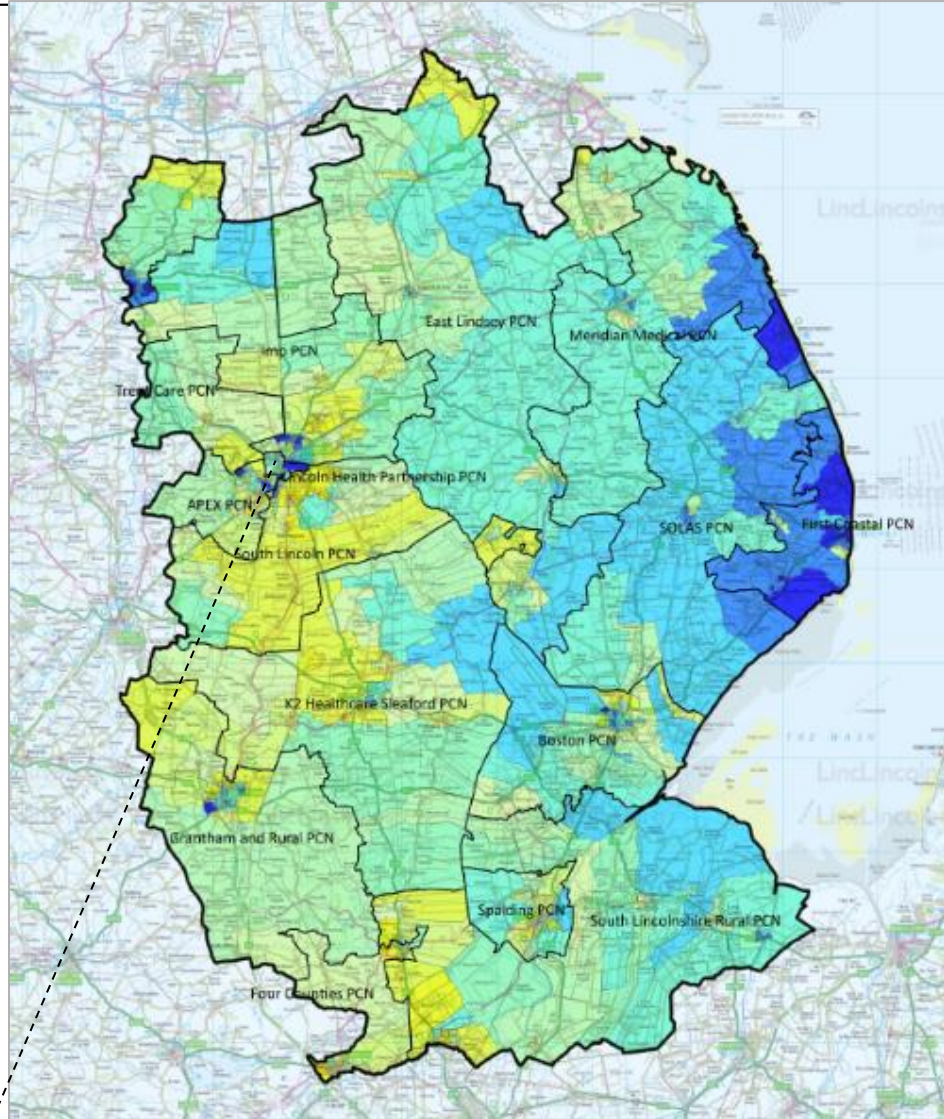
## OVERALL DEPRIVATION - LINCOLNSHIRE

The English Indices of Deprivation (IMD) measure relative levels of deprivation in 32,844 small areas or neighborhoods, called Lower Super Output Areas (LSOA), in England. An LSOA is a small geographic area where the population is between 1,000 and 3,000.

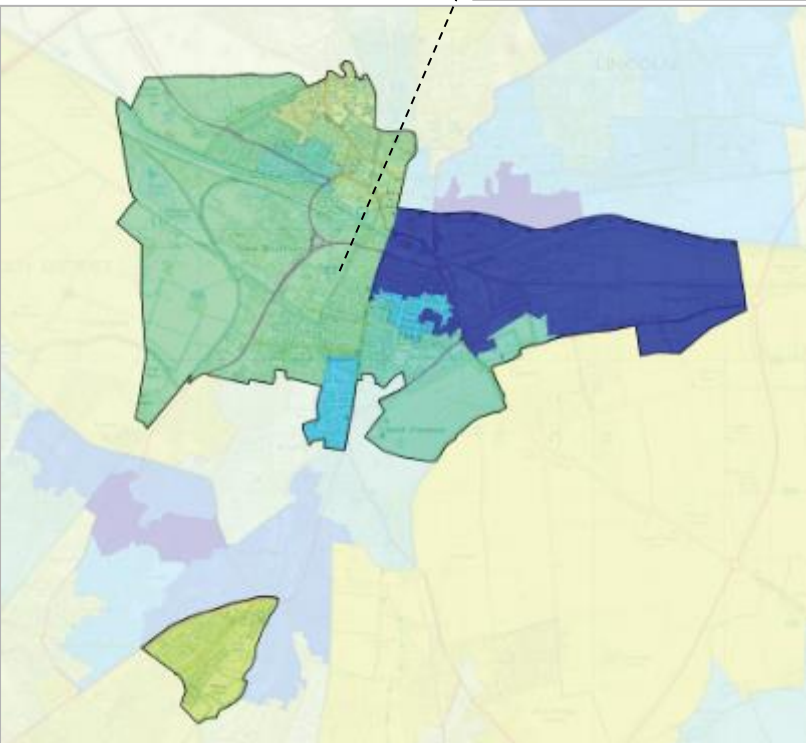
LSOA are ranked according to their level of deprivation relative to that of other areas. High ranking LSOAs can be referred to as the most deprived. The Indices of Deprivation measure deprivation on a relative rather than an absolute scale.

LSOA shaded dark blue are in the most deprived decile while areas shaded yellow are in the least deprived decile.

Lincolnshire has 420 LSOA, 65 of the LSOA are in the 20% most deprived.

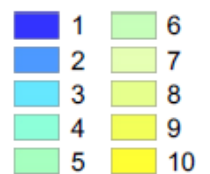


## OVERALL DEPRIVATION LINCOLN HEALTH PARTNERSHIP



1 of the 11 LSOA in Lincoln Health Partnership are in the 20% most deprived.

### Overall Deprivation by Decile



### Source

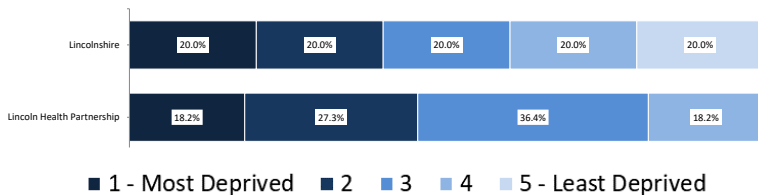
English Indices of Deprivation 2019

# DEPRIVATION

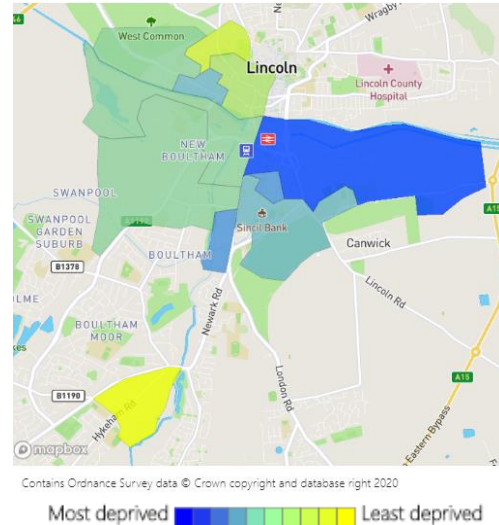
## OVERALL DEPRIVATION

The main IMD summary measure is a weighted average of the seven IMD domains: Income Deprivation, Employment Deprivation, Health Deprivation and Disability, Education Skills and Training Deprivation, Barriers to Housing and Services, Living Environment Deprivation, and Crime. The more deprived an area is, the higher the IMD score but the lower the rank.

% of LSOAs by Quintile of Deprivation Lincoln Health PCN, 2019



IMD 2019 – Local PCN Deciles

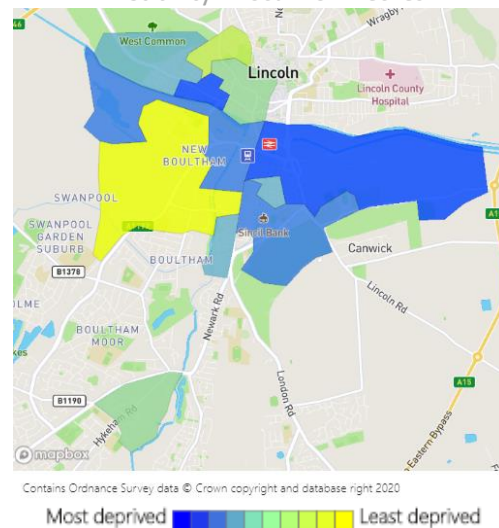


## HEALTH DEPRIVATION & DISABILITY

The Health Deprivation and Disability Domain measures the risk of premature death and the impairment of quality of life through poor physical or mental health. The domain measures morbidity, disability and premature mortality but not aspects of behaviour or environment that may be predictive of future health deprivation.

- Years of potential life lost: An age and sex standardised measure of premature death
- Comparative illness and disability ratio: An age and sex standardised morbidity/disability ratio
- Acute morbidity: An age and sex standardised rate of emergency admission to hospital
- Mood and anxiety disorders: A composite based on the rate of adults suffering from mood and anxiety disorders, hospital episodes data and suicide mortality data.

IMD 2019: Health Deprivation and Disability – Local PCN Deciles



### Notes

It should be noted that areas highlighted on this map (and subsequent maps showing deprivation) having higher or lower deprivation are calculated based on the LSOAs within the PCN boundary only. Therefore an area highlighted as having high deprivation on this map may not have high deprivation when compared to the rest of Lincolnshire or the national index.

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### Source

English Indices of Deprivation 2019

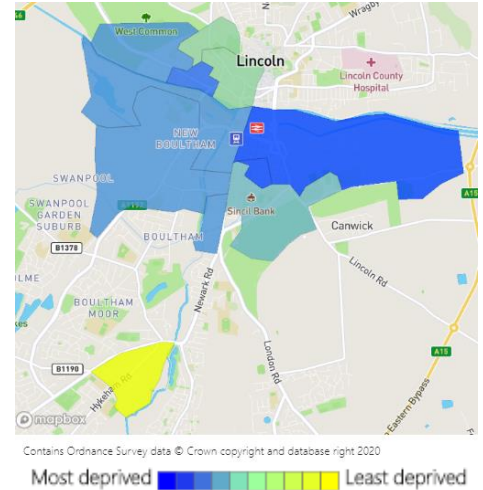


# DEPRIVATION

## INCOME DEPRIVATION AFFECTING CHILDREN

The *Income Deprivation Affecting Children Domain* shows the proportion of children aged 0-15 years in each LSOA that live in families that are income deprived; those that are in receipt of Income Support, income-based Jobseeker's Allowance, Universal Credit (where no adult is in 'Working – no requirements' conditionality regime), Pension Credit Guarantee or Child Tax Credit below a given threshold. The equivalised income (excluding housing benefits) is below 60% of the national median before housing costs.

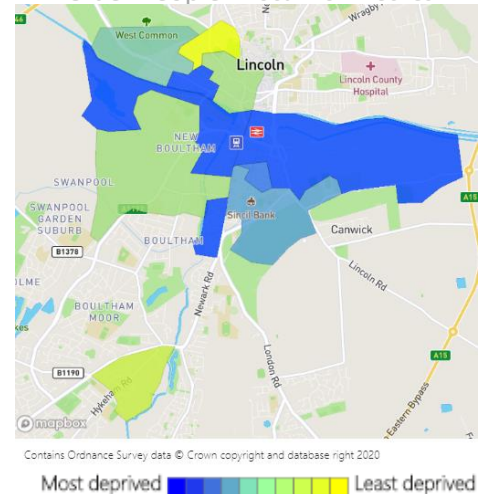
IMD 2019: Income Deprivation Affecting Children – Local PCN Deciles



## INCOME DEPRIVATION AFFECTING OLDER PEOPLE

The *Income Deprivation Affecting Older People Domain* shows the proportion of older people aged 60 and over that are experiencing deprivation due to low income. This is based on the percentage of the population aged 60 and over who receive income support, income based job seekers allowance, pension credit or child tax credit claimants aged 60 and over and their partners (if also aged 60 or over).

IMD 2019: Income Deprivation Affecting Older People – Local PCN Deciles



## BARRIERS TO HOUSING AND SERVICES

The *Barriers to Housing and Services Domain* measures the physical and financial accessibility of housing and local services. The indicators fall into two sub-domains: 'geographical barriers', which relate to the physical proximity of local services, and 'wider barriers' which include issues relating to access to housing such as affordability.

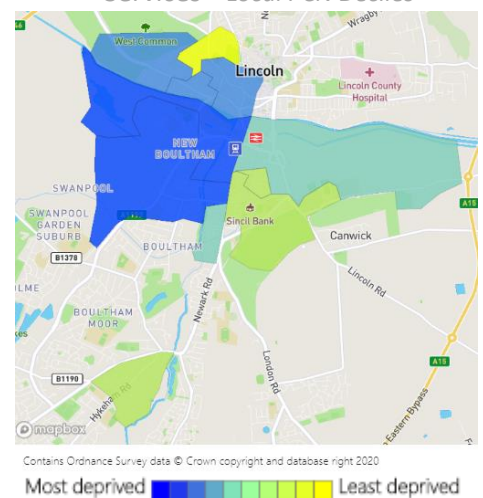
### *Geographical Barriers sub-domain*

- Road distance to a post office
- Road distance to a primary school
- Road distance to a general store or supermarket
- Road distance to a GP surgery.

### *Wider Barriers sub-domain*

- **Household overcrowding:** The proportion of all households in a Lower-layer Super Output Area which are judged to have insufficient space to meet the household's needs
- **Homelessness:** Local Authority District level rate of acceptances for housing assistance under the homelessness provisions of the 1996 Housing Act, assigned to the constituent LSOA
- **Housing affordability:** Difficulty of access to owner-occupation or the private rental market, expressed as the inability to afford to enter owner occupation or the private rental market.

IMD 2019: Barriers to Housing and Services – Local PCN Deciles



### Notes

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### Source

English Indices of Deprivation 2019

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# BURDEN OF DISEASE

## GLOBAL BURDEN OF DISEASE STUDY

The GBD was created in 1991 and is devised through epidemiological research. The aim is to produce measurable and comparable health outcome data, known as Disability Adjusted Life Years (DALYs). DALYs are calculated by adding together the number of years lost due to premature mortality (YLL) and the number of years lived with a disability (YLD), using a standard life expectancy age, in this instance derived from Japanese life expectancy.

In 2016, local authority data for GBD was introduced, making it possible to compare Lincolnshire nationally and globally. The data in this report is from the most recent iteration in 2019.

**Years lived with disability (YLDs)** are defined as years of life lived with any short-term or long-term health loss.

+

**Years of life lost (YLLs)** are defined as years lost due to premature mortality.

=

**Disability adjusted life years (DALYs)** equal the sum of years of life lost (YLLs) and years lived with disability (YLDs). One DALY equals one lost year of healthy life

### Top 10 YLD

1. Low Back Pain
2. Diabetes
3. Depressive Disorders
4. Headache Disorders
5. Age-Related Hearing Loss
6. Falls
7. Neck Pain
8. Osteoarthritis
9. COPD
10. Other Musculoskeletal

### Top 10 YLL

1. Ischaemic Heart Disease
2. Lung Cancer
3. Stroke
4. COPD
5. Lower Respiratory Infection
6. Colorectal Cancer
7. Alzheimer's Disease
8. Breast Cancer
9. Prostate Cancer
10. Pancreatic Cancer

### Top 10 DALY

1. Ischaemic Heart Disease
2. COPD
3. Low Back Pain
4. Lung Cancer
5. Stroke
6. Diabetes
7. Depressive Disorders
8. Colorectal Cancer
9. Alzheimer's Disease
10. Lower Respiratory Infection

The biggest killers in Lincolnshire are Ischaemic Heart Disease, Lung Cancer, Stroke, and COPD. When it comes to Years Lived with Disability the picture is very different. Low Back Pain, Diabetes and Depressive Disorders are the top three causes.

When premature mortality and disability data are combined to compare the overall burden of disease, the greatest single burden in Lincolnshire is Ischaemic Heart Disease, and second is COPD.

*Source*

GBD 2019

[Director of Public Health Annual Report 2019](#)

# BURDEN OF DISEASE

## Top 10 Years Lived with Disability\* for Males, Females and Persons

YLD	MALES			FEMALES			PERSONS		
		Rate**	Number of Years		Rate**	Number of Years		Rate**	Number of Years
	1. Low Back Pain	1057.8	209.2	1. Low Back Pain	1404.4	266.7	1. Low Back Pain	1239.4	480.5
2. Depressive Disorders	739.9	146.4	2. Headache Disorders	1112.6	211.3	2. Depressive Disorders	870.9	337.6	
3. Diabetes	692.9	137.1	3. Depressive Disorders	997.2	189.4	3. Headache Disorders	843.3	326.9	
4. Drug Use Disorders	604.1	119.5	4. Gynecological Diseases	989.0	187.8	4. Diabetes	585.4	227.0	
5. Alcohol Use Disorders	589.7	116.6	5. Anxiety Disorders	594.7	112.9	5. Gynecological Diseases	522.4	202.5	
6. Headache Disorders	555.7	109.9	6. Neck Pain	557.6	105.9	6. Neck Pain	501.0	194.2	
7. Neck Pain	439.0	86.8	7. Diabetes	492.4	93.5	7. Anxiety Disorders	483.9	187.6	
8. Falls	412.2	81.5	8. Asthma	478.6	90.9	8. Drug Use Disorders	452.4	175.4	
9. Anxiety Disorders	369.9	73.2	9. Other Musculoskeletal Disorders	461.2	87.6	9. Falls	424.7	164.6	
10. Other Musculoskeletal Disorders	347.4	68.7	10. Falls	440.4	83.6	10. Other Musculoskeletal Disorders	409.5	158.7	

## Top 10 Years of Life Lost\* for Males, Females and Persons

YLL	MALES			FEMALES			PERSONS		
		Rate**	Number of Years		Rate**	Number of Years		Rate**	Number of Years
	1. Ischaemic Heart Disease	1868.4	369.6	1. Ischaemic Heart Disease	831.9	158.0	1. Ischaemic Heart Disease	1322.3	512.6
2. Tracheal, Bronchus, And Lung Cancer	818.1	161.8	2. Breast Cancer	569.6	108.1	2. Tracheal, Bronchus, And Lung Cancer	676.1	262.1	
3. Self-Harm	687.0	135.9	3. Stroke	557.8	105.9	3. Stroke	543.6	210.7	
4. Chronic Obstructive Pulmonary Disease	554.7	109.7	4. Tracheal, Bronchus, And Lung Cancer	539.9	102.5	4. Chronic Obstructive Pulmonary Disease	509.7	197.6	
5. Road Injuries	551.7	109.1	5. Chronic Obstructive Pulmonary Disease	464.4	88.2	5. Self-Harm	424.2	164.4	
6. Stroke	536.2	106.1	6. Lower Respiratory Infections	365.5	69.4	6. Colon And Rectum Cancer	380.0	147.3	
7. Colon And Rectum Cancer	455.0	90.0	7. Colon And Rectum Cancer	310.2	58.9	7. Lower Respiratory Infections	368.2	142.7	
8. Prostate Cancer	399.4	79.0	8. Alzheimers Disease And Other Dementias	302.2	57.4	8. Road Injuries	349.6	135.6	
9. Lower Respiratory Infections	373.8	73.9	9. Ovarian Cancer	210.1	39.9	9. Breast Cancer	303.3	117.6	
10. Cirrhosis And Other Chronic Liver Diseases	342.5	67.7	10. Pancreatic Cancer	189.0	35.9	10. Cirrhosis And Other Chronic Liver Diseases	259.8	100.7	

## Top 10 Disability Adjusted Life Years\* for Males, Females and Persons

DALYS	MALES			FEMALES			PERSONS		
		Rate**	Number of Years		Rate**	Number of Years		Rate**	Number of Years
	1. Ischaemic Heart Disease	1923.6	380.5	1. Low Back Pain	1404.4	266.7	1. Ischaemic Heart Disease	1368.0	530.3
2. Low Back Pain	1057.8	209.2	2. Headache Disorders	1112.6	211.3	2. Low Back Pain	1239.4	480.5	
3. Drug Use Disorders	875.7	173.2	3. Depressive Disorders	997.2	189.4	3. Depressive Disorders	870.9	337.6	
4. Tracheal, Bronchus, And Lung Cancer	830.2	164.2	4. Gynecological Diseases	990.9	188.2	4. Headache Disorders	843.3	326.9	
5. Diabetes Mellitus	814.5	161.1	5. Ischaemic Heart Disease	868.7	165.0	5. Chronic Obstructive Pulmonary Disease	758.3	294.0	
6. Chronic Obstructive Pulmonary Disease	809.3	160.1	6. Chronic Obstructive Pulmonary Disease	707.9	134.4	6. Diabetes Mellitus	689.5	267.3	
7. Depressive Disorders	739.9	146.4	7. Stroke	670.2	127.3	7. Tracheal, Bronchus, And Lung Cancer	686.1	266.0	
8. Self-Harm	697.8	138.0	8. Breast Cancer	638.7	121.3	8. Stroke	638.7	247.6	
9. Alcohol Use Disorders	671.1	132.8	9. Anxiety Disorders	594.7	112.9	9. Drug Use Disorders	619.3	240.1	
10. Road Injuries	646.5	127.9	10. Diabetes Mellitus	581.2	110.4	10. Falls	530.7	205.8	

### Notes

Years lived with disability (YLDs) are defined as years of life lived with any short-term or long-term health loss.

Disability adjusted life years (DALYs) equal the sum of years of life lost (YLLs) and years lived with disability (YLDs). One DALY equals one lost year of healthy life

\* Calculated using the level 3 categorisation of health conditions from the GBD methodology. For more information see - [GBD Compare](#)

\*\* rate per 100,000

### Source

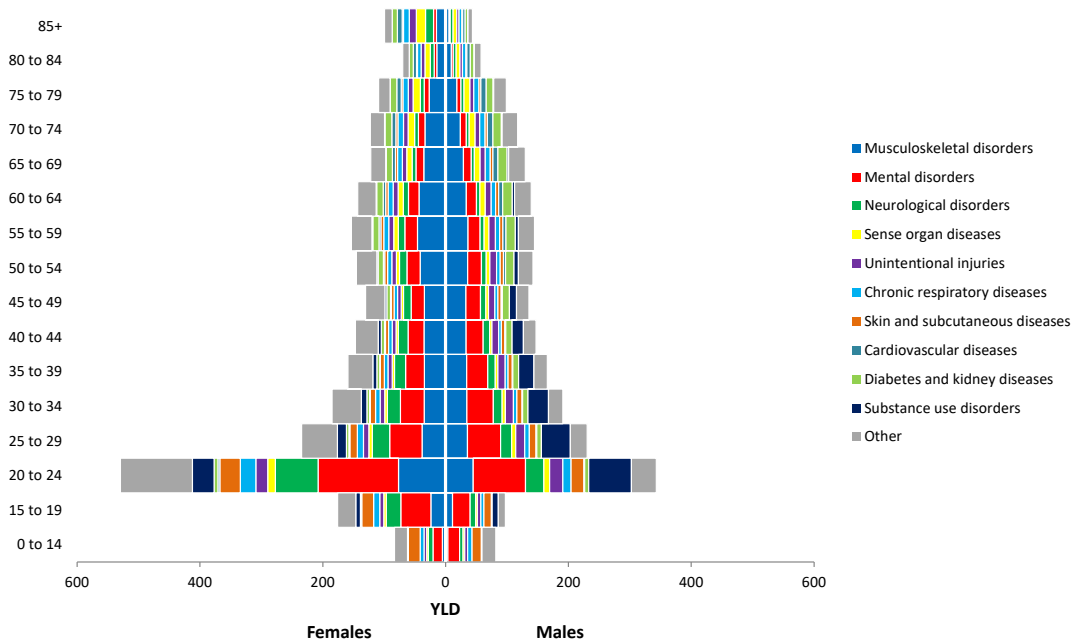
GBD 2019



# GBD – YEARS LIVED WITH DISABILITY

Contributing conditions to Years Lived with Disability\* for Males, Females and Persons

## Lincoln Health Partnership



Contributing conditions to Years Lived Disability\* by sex and age

	Musculoskeletal Disorders		Mental Disorders		Neurological Disorders		Sense Organ Diseases		Unintentional Injuries		Chronic Respiratory Diseases		Skin and Subcutaneous Diseases		Cardiovascular Diseases		Diabetes and Kidney Diseases		Substance Use Disorders	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
0 to 14	3.84	5.15	19.04	15.37	5.64	7.57	2.64	2.78	4.88	4.26	7.05	6.41	15.14	19.48	0.30	0.37	0.41	0.33	0.24	0.15
15 to 19	11.28	24.01	28.67	48.88	9.13	23.60	2.62	4.20	5.81	6.67	4.96	10.00	12.24	19.17	0.36	1.05	0.82	1.08	10.06	7.53
20 to 24	45.09	76.51	85.19	131.20	29.68	69.55	9.44	12.37	21.41	19.25	13.49	25.41	20.94	33.38	1.32	3.16	6.54	6.07	69.51	35.36
25 to 29	35.52	38.43	54.10	52.60	18.18	28.36	6.31	5.45	14.81	8.90	7.41	10.01	10.96	12.02	1.10	1.77	7.67	3.94	47.19	14.57
30 to 34	34.76	34.98	42.86	38.47	14.42	21.21	5.32	4.46	13.07	7.59	5.64	7.40	8.40	8.45	0.95	1.27	8.75	4.13	33.29	9.18
35 to 39	34.31	34.40	34.25	30.80	12.28	17.93	4.29	3.85	11.81	6.76	4.71	6.07	6.83	6.35	0.99	1.05	9.54	4.60	24.98	6.50
40 to 44	33.36	35.08	27.78	25.97	10.58	16.04	3.76	3.59	10.83	6.40	4.39	5.67	5.82	5.06	1.50	1.73	10.34	5.36	18.47	4.84
45 to 49	33.17	34.59	23.69	21.38	8.75	12.60	4.27	3.65	10.30	6.05	4.99	5.70	5.23	4.13	2.01	1.57	11.52	6.13	11.48	3.02
50 to 54	35.99	41.51	22.40	21.50	7.78	11.97	5.90	5.18	10.84	7.29	6.13	7.10	5.36	4.49	3.22	2.16	13.82	8.44	7.02	2.16
55 to 59	36.41	45.77	19.86	20.70	6.62	10.63	7.77	7.26	10.54	8.15	6.87	8.14	5.28	4.63	4.89	3.11	15.27	10.18	5.08	1.56
60 to 64	33.77	43.13	16.49	17.24	5.55	8.46	8.86	8.47	9.61	8.00	7.23	8.13	4.91	4.15	6.63	4.10	15.63	10.51	3.71	1.04
65 to 69	29.12	35.63	12.85	12.69	4.74	6.30	9.42	8.67	8.38	7.08	8.19	7.95	4.44	3.43	8.02	4.89	15.04	10.13	2.34	0.65
70 to 74	24.13	33.52	9.63	10.77	4.65	6.24	9.80	10.51	7.24	7.59	8.77	8.96	3.90	3.30	8.93	6.59	13.73	11.40	1.36	0.49
75 to 79	18.33	26.72	6.75	8.07	4.91	6.42	9.67	11.68	6.24	7.84	8.59	8.77	3.10	2.74	8.59	7.32	11.25	10.41	0.81	0.36
80 to 84	9.35	14.35	3.30	4.30	4.43	6.19	6.46	8.86	3.99	6.11	5.57	5.87	1.70	1.62	5.43	5.37	6.24	6.37	0.35	0.20
85+	5.63	14.79	2.04	4.87	4.56	12.94	5.98	15.15	3.62	11.55	4.88	9.35	1.20	2.12	4.08	7.92	4.39	8.04	0.25	0.30

### BURDEN OF DISEASE IN LINCOLN HEALTH PCN

- There are 4,901 Years Lived with Disability (YLD) per year amongst patients registered to Lincoln Health GP Practices.
- Musculoskeletal Disorders are the leading cause of YLD making 20% of all YLD.
- YLD due to Musculoskeletal Disorders are higher amongst females across the life course.
- YLD due to Substance Use are higher in males, particularly between the ages of 15 and 50.

**Notes**

Years lived with disability (YLDs) are defined as years of life lived with any short-term or long-term health loss.

Disability adjusted life years (DALYs) equal the sum of years of life lost (YLLs) and years lived with disability (YLDs). One DALY equals one lost year of healthy life

\* Calculated using the level 2 categorisation of health conditions from the GBD methodology. For more information see - [GBD Compare](#)

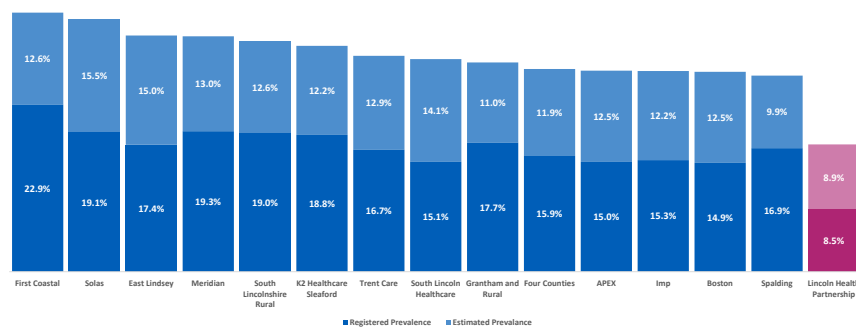
**Source**

GBD 2019

# DISEASE PREVALENCE & DIAGNOSIS

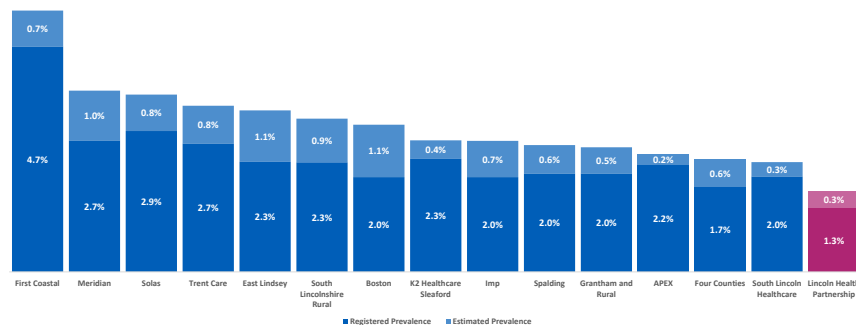
	Portland Medical Practice	Brayford Medical Practice	University Health Centre	Newark Road Surgery	Lincoln Health Partnership	Lincolnshire	England
2019 Deprivation Score	29.5	23.6	21.2	18.4	23.2	21.7	21.7
Diabetes Prevalence 17+	5.9	5.4	0.4	7.6	4.3	7.9	7.1
Asthma Prevalence 6+	4.2	5.3	3.8	7.6	5.0	7.1	6.4
COPD Prevalence	1.8	1.5	0.0	2.3	1.3	2.3	1.9
Cancer Prevalence	1.9	2.2	0.1	3.7	1.8	4.0	3.2
Osteoporosis Prevalence 50+	0.2	1.0	0.0	0.1	0.4	0.8	0.8
Rheumatoid Arthritis Prevalence 16+	0.5	0.5	0.0	0.9	0.4	0.9	0.8
Long-Term MSK 16+	16.4	13.4	3.2	18.7	11.9	21.4	17.0
Dementia Prevalence	0.5	0.6	0.0	0.8	0.4	0.9	0.7
Depression 18+ Prevalence	9.1	14.0	10.6	17.0	12.0	13.3	12.3
Mental Health Prevalence	1.6	1.5	0.3	0.8	1.0	0.8	0.9
Atrial Fibrillation Prevalence	1.5	1.2	0.0	2.4	1.2	2.7	2.0
Heart Failure Prevalence	0.6	0.9	0.0	0.7	0.5	1.4	0.9
CHD Prevalence	2.2	1.9	0.0	3.8	1.8	4.1	3.0
Stroke Prevalence	1.2	1.0	0.0	2.2	1.0	2.3	1.8
PAD Prevalence	0.4	0.3	0.0	0.8	0.3	0.7	0.6
Hypertension Prevalence	10.2	8.5	0.2	18.5	8.5	17.0	13.9

## Hypertension – Estimated Total Prevalence vs Actual Prevalence 2020/21



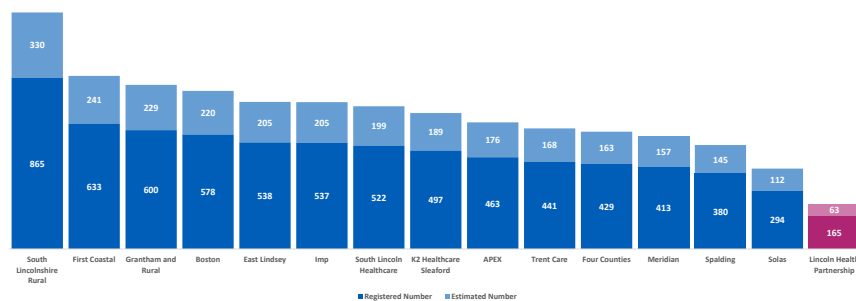
	Registered Prevalence	Estimated Undiagnosed Patients	Total Estimated Prevalence
Lincoln Health Partnership	3,254	3,464	6,718
Lincolnshire	135,444	99,982	235,426

## COPD – Estimated Total Prevalence vs Actual Prevalence 2020/21



	Registered Prevalence	Estimated Undiagnosed Patients	Total Estimated Prevalence
Lincoln Health Partnership	504	132	636
Lincolnshire	18,419	5,619	24,038

## Dementia – Estimated based on a diagnosis rate of 61%



	Registered Prevalence	Estimated Undiagnosed Patients	Total Estimated Prevalence
Lincoln Health Partnership	165	63	228
Lincolnshire	7,355	2,802	10,157

### Notes

GP practices are sorted from most deprived to least deprived.

### Source

NHS Digital Quality Outcomes Framework, 2020/21  
OHID

# ADMISSIONS - INEQUALITIES

## SLOPE INDEX OF INEQUALITY (SII) AND RELATIVE INDEX OF INEQUALITY (RII)

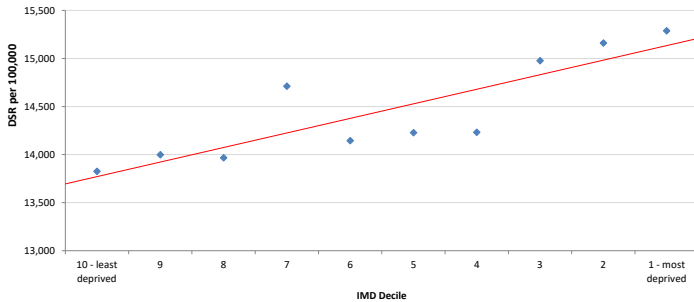
SII and RII are used to quantify the relative inequality gap

The SII is a measure of the difference between the most deprived and least deprived.

The RII is a measure of the ratio between the most deprived and least deprived.

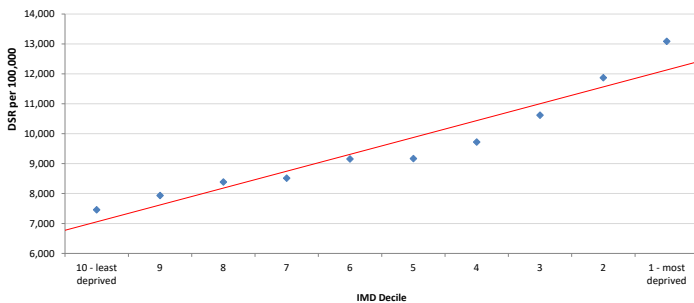
The SII and RII are calculated using Lincolnshire Hospital Admissions data 2018/19 to 2020/21.

**Slope Index of Inequality: Elective Admissions and IMD**  
Inequality Gap (SII) = 1383.8  
Relative Index (RII) = 1.1



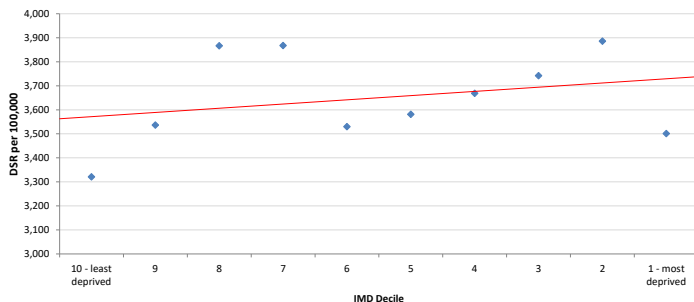
- Elective Admissions has an Inequality Gap of 1,383 admissions per 100k and a Relative Index of 1.1.
- Elective admissions are significantly lower in deciles 10 to 4 than deciles 3 to 1 with the exception of decile 7 which has an admission rate comparable to that of more deprived areas.

**Slope Index of Inequality: Emergency Admissions and IMD**  
Inequality Gap (SII) = 5202.5  
Relative Index (RII) = 1.8



- Emergency Admissions has an Inequality Gap of 5,202 admissions per 100k and a Relative Index of 1.8.
- Emergency admissions in the most deprived decile significantly higher than all other deciles. The rate of admission increases more dramatically as deprivation increases; particularly between deprivation deciles 4 to 1.

**Slope Index of Inequality: Cancer and IMD**  
Inequality Gap (SII) = 196.8  
Relative Index (RII) = 1.1



- Cancer has an Inequality Gap of 196 admissions per 100k and a Relative Index of 1.1.
- Cancer admissions by deprivation decile do not appear to follow strong linear pattern with most deprived decile having the second lowest rate of cancer admission.

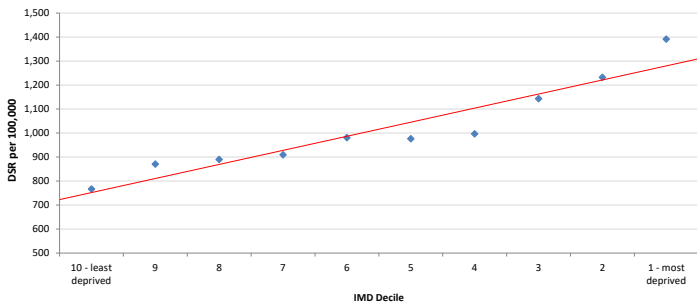
### Source

Hospital Episode Statistics (HES) Contains Information from NHS Digital, licenced under the current version of the Open Government Licence  
ONS – Mid Year Estimates



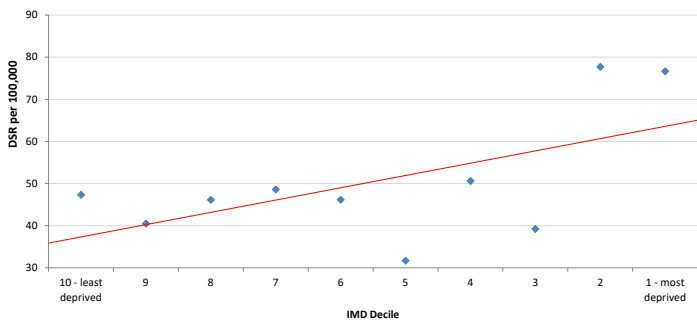
# ADMISSIONS - INEQUALITIES

**Slope Index of Inequality: Cardiovascular and IMD**  
 Inequality Gap (SII) = 533.2  
 Relative Index (RII) = 1.7



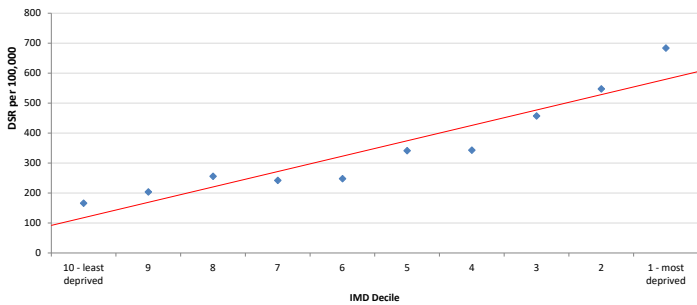
- Cardiovascular has an Inequality Gap of 533 admissions per 100k and a Relative Index of 1.7.
- Whilst the least deprived decile has significantly lower rates of CVD admissions than all other deciles, there are less defined differences between deciles 9 to 4.

**Slope Index of Inequality: Diabetes and IMD**  
 Inequality Gap (SII) = 27.6  
 Relative Index (RII) = 1.8



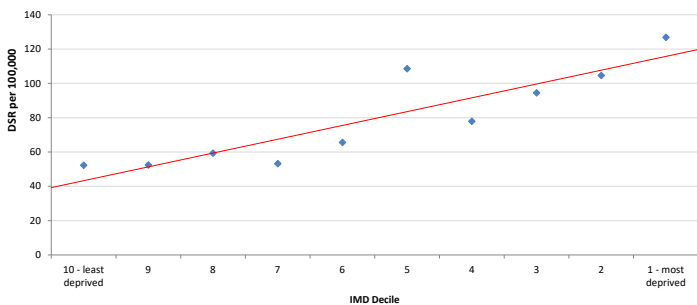
- Diabetes has an Inequality Gap of 27 admissions per 100k and a Relative Index of 1.8.
- Diabetes admission rates are not significantly different for deciles 3 to 10 (least deprived) whereas rates in the two most deprived deciles are significantly greater.

**Slope Index of Inequality: COPD 35+ and IMD**  
 Inequality Gap (SII) = 471.2  
 Relative Index (RII) = 5.2



- COPD Aged 35+ has an Inequality Gap of 471 admissions per 100k and a Relative Index of 5.2.
- There is strong correlation between increased COPD admissions as deprivation increases. Similarly, those living in the least deprived 50% of the population are all have significantly lower COPD rates than those in the most deprived 50%.

**Slope Index of Inequality: Liver Disease and IMD**  
 Inequality Gap (SII) = 74.5  
 Relative Index (RII) = 2.8



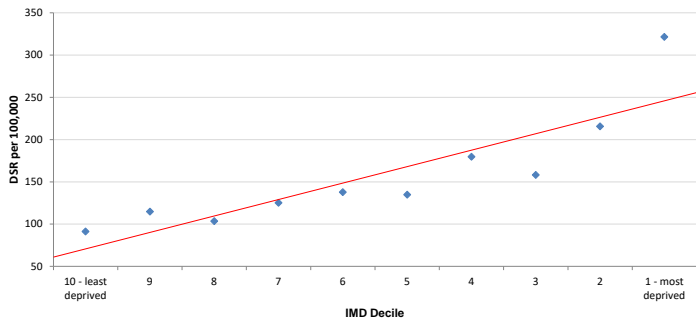
- Liver Disease has an Inequality Gap of 74 admissions per 100k and a Relative Index of 2.8.
- Liver disease admissions in decile 5 are comparable to those of the more deprived decile.

Source

Hospital Episode Statistics (HES) Contains Information from NHS Digital, licenced under the current version of the Open Government Licence ONS – Mid Year Estimates

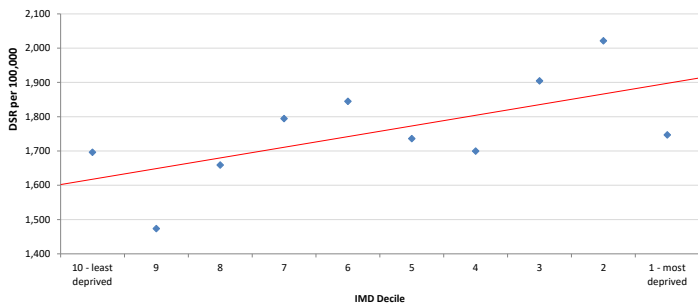
# ADMISSIONS - INEQUALITIES

**Slope Index of Inequality: Intentional Self-harm and IMD**  
 Inequality Gap (SII) = 170.9  
 Relative Index (RII) = 3.5



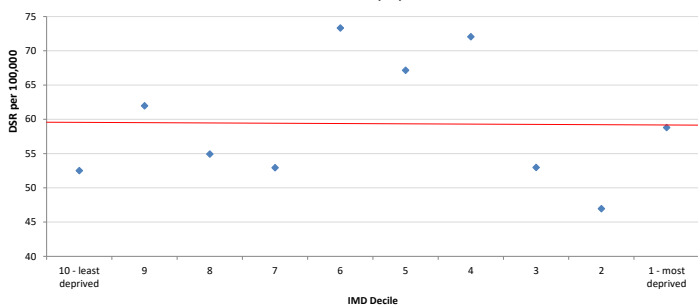
- Intentional Self Harm has an Inequality Gap of 170 and a Relative Index of 3.5.
- There is a decline in the rates from decile 4 to decile 3 and a spike in decile 1.

**Slope Index of Inequality: Falls 65+ and IMD**  
 Inequality Gap (SII) = 329.9  
 Relative Index (RII) = 1.2



- Falls Aged 65+ has an Inequality Gap of 329 admissions per 100k and a Relative Index of 1.2.
- There were no significant differences between the admissions rates of deprivation deciles except for those living in decile 9.

**Slope Index of Inequality: Mental Health under 18 and IMD**  
 Inequality Gap (SII) = -0.5  
 Relative Index (RII) = 1



- Mental Health Aged Under 18 has an Inequality Gap of -0.5 admissions per 100k and a Relative Index of 1.
- There were no detectable differences between admissions rates and deprivation.

**Source**

Hospital Episode Statistics (HES) Contains Information from NHS Digital, licenced under the current version of the Open Government Licence  
 ONS – Mid Year Estimates

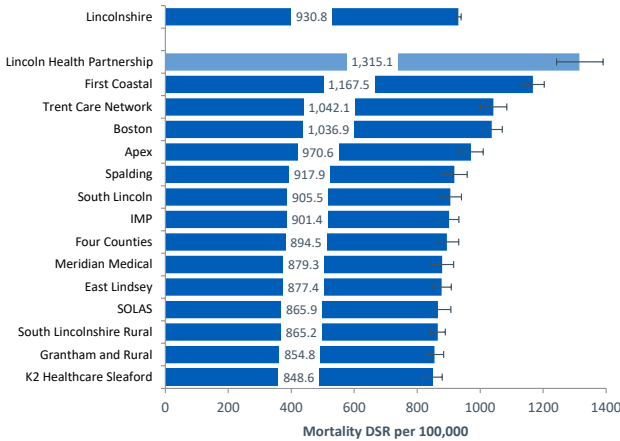
# MORTALITY

Death Count, All Age All Cause, 2017-21\*

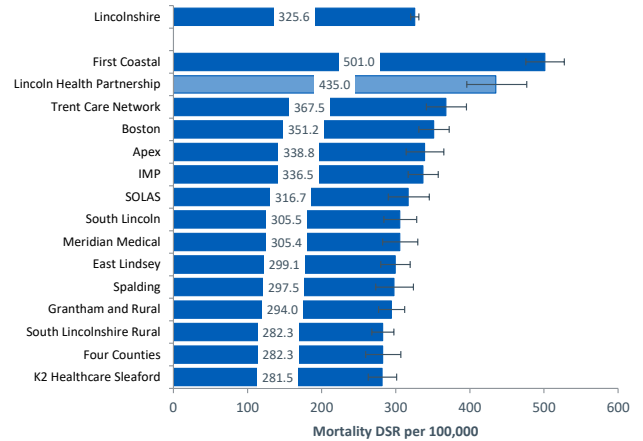
	2017	2018	2019	2020	2021	2017-2021
Apex	500	470	490	545	495	2,500
Boston	765	755	745	860	705	3,830
East Lindsey	605	675	675	725	625	3,305
First Coastal	855	815	845	1,020	905	4,440
Four Counties	445	455	460	490	495	2,345
Grantham and Rural	690	685	650	755	720	3,500
IMP	620	610	645	745	690	3,310
K2 Healthcare Sleaford	605	595	650	710	565	3,125
<b>Lincoln Health Partnership</b>	<b>240</b>	<b>285</b>	<b>255</b>	<b>245</b>	<b>255</b>	<b>1,280</b>
Meridian Medical	425	455	455	530	520	2,385
SOLAS	330	360	340	420	360	1,810
South Lincoln	535	540	550	620	460	2,705
South Lincolnshire Rural	1,030	1,105	1,060	1,095	1,020	5,310
Spalding	400	380	370	500	405	2,055
Trent Care Network	475	500	455	515	475	2,420
<b>Lincolnshire</b>	<b>8,520</b>	<b>8,685</b>	<b>8,645</b>	<b>9,775</b>	<b>8,695</b>	<b>44,320</b>

- Between 2017 and 2021 there were 1,280 deaths registered for patients of Lincoln Health, equivalent to 1315.1 deaths per 100,000 patients.
- Lincoln Health ranks 2nd out of the 15 PCNs in Lincolnshire for premature mortality (where 1st is the highest); higher than the Lincolnshire rate of 930.8 per 100,000.
- Lincoln Health has one of the lower Life Expectancy rates at 81.0.
- Ischaemic Heart Disease is ranked 1<sup>st</sup> in the top five causes of death.

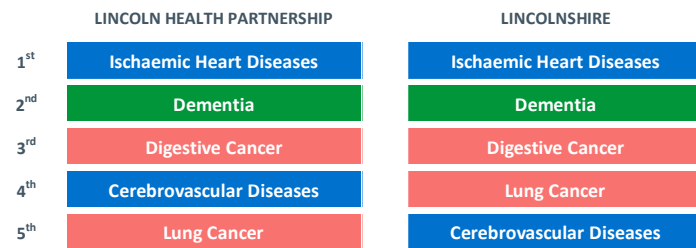
All Age All Cause Mortality 2017-21



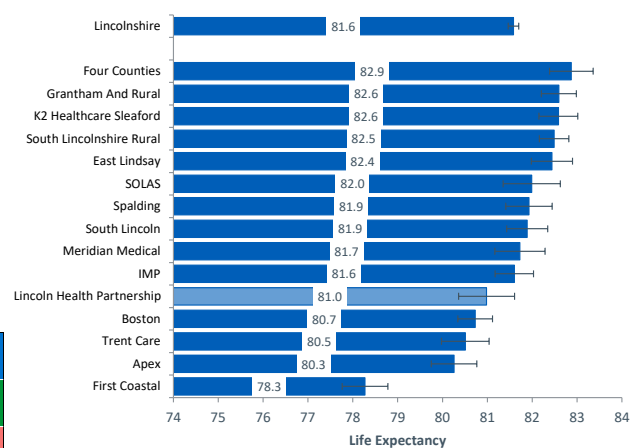
Under 75 Mortality from All Causes 2017-21



Top 5 Causes of Death PCN vs. Lincolnshire, 2017-2021



Life Expectancy at Birth 2017-21\*\*



Top 5 Causes of Death by Age Group, 2017-2021

	Children and Young People	Working Age	Older People	Elderly	All People
1 <sup>st</sup>	Intentional Self-Harm	Ischaemic Heart Diseases	Ischaemic Heart Diseases	Dementia	Ischaemic Heart Diseases
2 <sup>nd</sup>	Injuries To The Head	Lung Cancer	Digestive Cancer	Ischaemic Heart Diseases	Dementia
3 <sup>rd</sup>	Mesothelial And Soft Tissue Cancer	Digestive Cancer	Lung Cancer	Cerebrovascular Diseases	Digestive Cancer
4 <sup>th</sup>	Thyroid And Other Endocrine Cancer	Accidental Poisoning	Dementia	Degenerative Disease	Cerebrovascular Diseases
5 <sup>th</sup>	Mental And Behavioural Disorders Due To Psychoactive Subst.	Liver Disease	Cerebrovascular Diseases	Digestive Cancer	Lung Cancer

**Notes**

\*All figures are rounded to 5

\*\* Life expectancy is calculated using a PHE tool

Life expectancy is a theoretical estimate of the average number of years from birth a person is expected to live. It is based on current death rates by age group

**Source**

NHS Digital (2022), Primary Care Mortality Data – Civil Registration (non-publicly available)



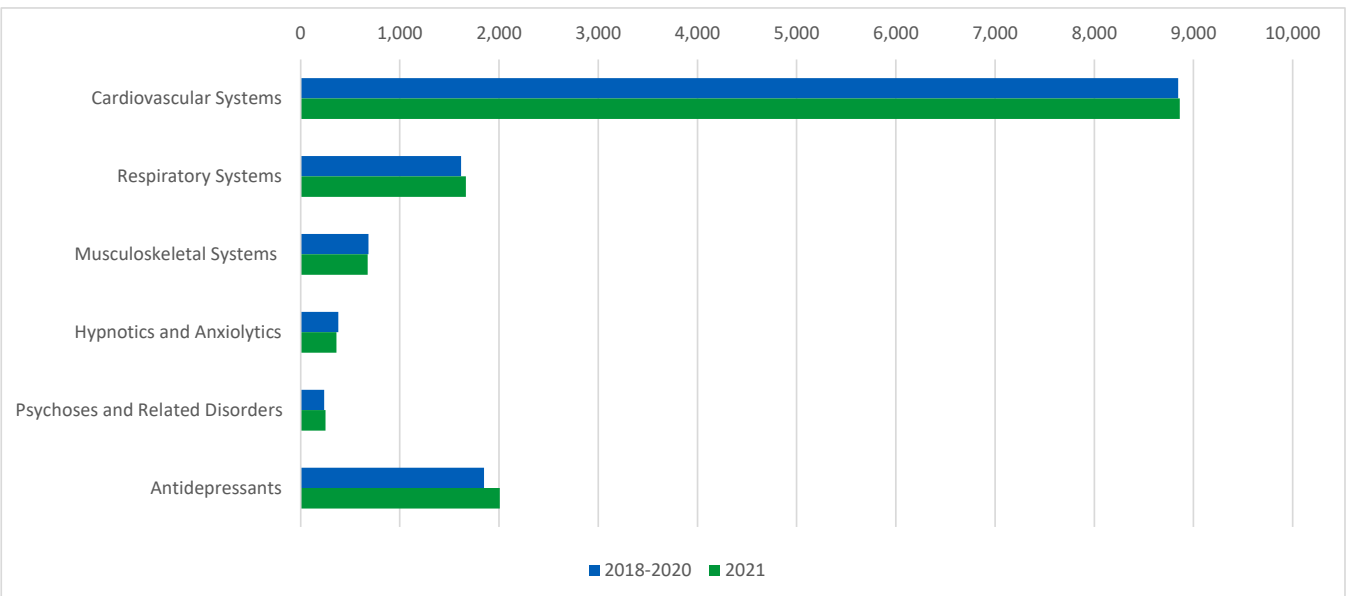
## Prescribed Items January 2021 – December 2021

		Brayford Medical Practice	Heart Of Lincoln Medical Group	Lincoln Health Partnership	Lincolnshire
Cardiovascular Systems	Number of Items	33,048	124,712	157,760	7,072,185
	Rate per 1,000 population	3611.8	4210.7	4,069.34	8,741.9
Respiratory Systems	Number of Items	9,748	26,391	36,139	1,334,441
	Rate per 1,000 population	1065.4	891.0	932.19	1,649.5
Musculoskeletal Systems	Number of Items	4,395	9,199	13,594	541,888
	Rate per 1,000 population	480.3	310.6	350.7	669.8
Hypnotics and Anxiolytics	Number of Items	7,120	8,965	16,085	288,543
	Rate per 1,000 population	778.1	302.7	414.9	356.7
Psychoses and Related Disorders	Number of Items	6,296	9,002	15,298	199,958
	Rate per 1,000 population	688.1	303.9	394.6	247.2
Antidepressants	Number of Items	18,122	49,481	67,603	1,608,933
	Rate per 1,000 population	1,980.5	1,670.6	1,743.8	1,988.8



- Lincoln Health has a lower rate (4,069.3) of Cardiovascular prescribed items than Lincolnshire (8,741.9).
- The rate of Musculoskeletal prescribed items (350.7) in Lincoln Health is lower than Lincolnshire (669.8).

## Prescribed Items in Lincolnshire January 2018 – December 2021 Rates per 1,000



- The three-year average rate for prescribed antidepressants (1,849.7) in Lincolnshire is lower than the number prescribed throughout 2021 (2,007.4).
- For Hypnotics and Anxiolytics, the rate of prescribed items in 2021 (361.2) is lower than the three-year average (378.8).

### Notes

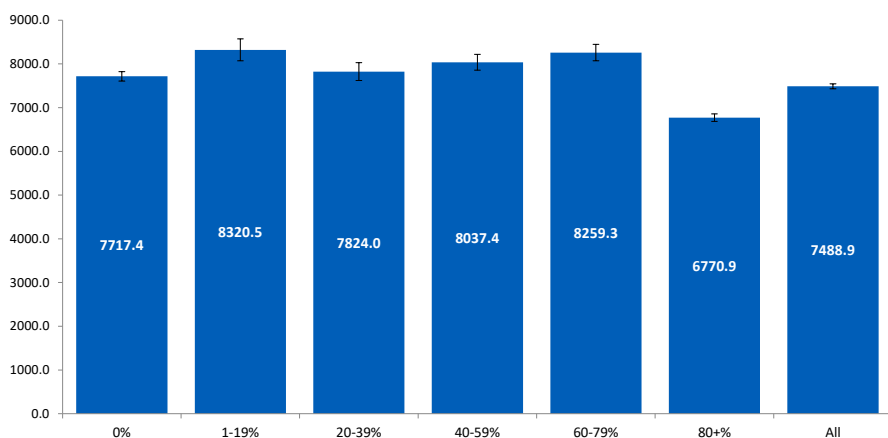
Number of prescribed items for specific conditions and rates per 1,000 population.  
2018-2020 is a calculated average for each prescribed item, compared to 2021

### Source

Open Prescribing

# ACCESS TO SERVICES

Proportion of Population in Lincolnshire who have access to a GP within 15 minutes



	20/21 Emergency Admissions	DSR per 100,000
0%	19,991	7717.4
1-19%	4,273	8320.5
20-39%	5,765	7824.0
40-59%	7,589	8037.4
60-79%	7,470	8259.3
80+%	23,391	6770.9
All	68,479	7488.9

## ACCESS TO SERVICES – LINCOLNSHIRE

The data for Lincolnshire was grouped into 20% bands with 0% as a band.

- 1% to 19% is the highest rate in Lincolnshire that can access a GP within 15 minutes.
- 80% to 100% is the lowest rate.

Access to Key Services 2019 – Lincoln Health

IMD Decile	GP - Public Transport/Walk		GP - Car		Pharmacy - Car *2015	
	Number	Proportion	Number	Proportion	Number	Proportion
1	8,735	100.0	8,735	100.0	8,735	100.0
2	-	-	-	-	-	-
3	4,832	94.8	5,094	100.0	5,094	100.0
4	4,324	100.0	4,324	100.0	4,324	100.0
5	15,038	86.8	17,017	98.3	17,039	98.4
6	4,774	95.9	4,978	100.0	4,978	100.0
7	1,635	44.6	3,668	100.0	3,668	100.0
8	2,792	100.0	2,792	100.0	2,792	100.0
9	-	-	-	-	-	-
10	-	-	-	-	-	-
Total Patients*	42,129	89.8	46,608	99.4	46,630	99.4

## ACCESS TO SERVICES – LINCOLN HEALTH

- 90% of Lincoln Health population are able to walk or take public transport to access their GP.
- 99% have access to a Pharmacy using a car.

### Notes

\* Who are able to access services with 15 minutes

### Source

[Journey Time Statistics](#)

Hospital Episode Statistics (HES) Contains Information from NHS Digital, licenced under the current version of the Open Government Licence

# WIDER DETERMINANTS OF HEALTH

## Economic activity

	Portland Medical Practice	Brayford Medical Practice	University Health Centre	Newark Road Surgery	Lincoln Health Partnership	Lincolnshire	England
2019 Deprivation Score	29.5	23.6	21.2	18.4	23.2	21.7	21.7
% in paid work or in full-time education - 16+	67.8	67.3	92.7	65.2	75.0	56.7	56.7
% unemployed - 16+	4.9	6.2	1.8	2.0	3.7	4.2	5.5

## Claimants

		Lincoln Health Partnership	Lincolnshire
Claimant Count Aged 16-24	Number	125	2,685
	Rate per 100,000 population	1,065.1	3,431.9
Claimant Count Aged 25-49	Number	485	9,445
	Rate per 100,000 population	3,553.4	3,982.7
Claimant Count Aged 50+	Number	170	4,510
	Rate per 100,000 population	1,930.1	1,249.9
Universal Credit Count Aged 16-24	Number	390	8,741
	Rate per 100,000 population	3,323.1	11,172.5
Universal Credit Count Aged 25-49	Number	1,577	39,360
	Rate per 100,000 population	11,554.0	16,597.2
Universal Credit Count Aged 50+	Number	386	14,417
	Rate per 100,000 population	4,382.4	3,995.6
DLA Count Aged Under 5	Number	5	476
	Rate per 100,000 population	353.4	1,354.6
DLA Count Aged 5-10	Number	68	3,321
	Rate per 100,000 population	3,928.4	6,361.0
DLA Count Aged 11-15	Number	54	3,597
	Rate per 100,000 population	3,778.9	7,915.6
ESA Count Aged 18-24	Number	12	238
	Rate per 100,000 population	106.9	388.0
ESA Count Aged 25-49	Number	241	7,655
	Rate per 100,000 population	1,765.7	3,227.9
ESA Count Aged 50+	Number	280	11,042
	Rate per 100,000 population	5,600.0	6,388.2
Pension Credits Count Aged 65-74	Number	178	6,313
	Rate per 100,000 population	8,195.2	6,489.9
Pension Credits Count Aged 75-84	Number	149	7,533
	Rate per 100,000 population	12,273.5	11,245.5
Pension Credits Count Aged 85+	Number	80	4,393
	Rate per 100,000 population	18,957.3	18,530.4

## Qualifications

		Lincoln Health Partnership	Lincolnshire
No Qualifications	Number	2,799	154,691
	Proportion	14.5%	26.1%
5+ O Levels/CSE/GCSE <sup>1</sup>	Number	9,636	182,684
	Proportion	49.9%	30.9%
Degree <sup>2</sup>	Number	2,792	61,171
	Proportion	14.5%	10.3%
NVQ Level 1	Number	1,789	53,041
	Proportion	9.3%	9.0%
NVQ Level 2	Number	3,068	102,391
	Proportion	15.9%	17.3%
NVQ Level 3	Number	2,550	72,772
	Proportion	13.2%	12.3%
Professional Qualification	Number	1,642	78,252
	Proportion	8.5%	13.2%

### Notes

<sup>1</sup>5+ O level (Passes)/CSEs (Grade 1)/GCSEs (Grades A\*-C), School Certificate, 1 A level/2-3 AS levels/VCEs, Higher Diploma, Welsh Baccalaureate Intermediate Diploma

<sup>2</sup>Degree (for example BA, BSc), Higher degree (for example MA, PhD, PGCE)

### Source

Economic Activity – GP Patient Survey 2021

Crime – Data.Police.UK 2021

Claimants - DWP - March 2022

Universal Credit - DWP - March 2022

DLA - DWP - November 2021

ESA - DWP - November 2021

Pension Credits - DWP - November 2021

Children in RLI – DWP – 2020/21

Qualifications – Census 2011

Employment – Census 2011

## Children in low income families

		Lincoln Health Partnership	Lincolnshire
Number of Children in Relative Low Income Aged 0-4	Number	167	6,632
	Rate per 100,000 population	11,802.1	18,873.6
Number of Children in Relative Low Income Aged 5-10	Number	152	7,270
	Rate per 100,000 population	8,781.1	13,924.8
Number of Children in Relative Low Income Aged 11-15	Number	135	6,445
	Rate per 100,000 population	9,447.2	14,182.9
Number of Children in Relative Low Income Aged 16-19	Number	88	4,642
	Rate per 100,000 population	2,929.4	13,840.6
Number of Children in Relative Low Income In Working Families	Number	373	16,515
Number of Children in Relative Low Income Not In Working Families	Number	178	8,253
Number of Children in Relative Low Income Ratio*	Ratio	25:12	3303:1651

## Employment type

		Lincoln Health Partnership	Lincolnshire
Managers, Directors and Senior Officials	Number	709	36,499
	Proportion	6.8%	10.9%
Professional Occupations	Number	1,362	43,806
	Proportion	13.1%	13.1%
Associate Professional and Technical Occupations	Number	1,135	36,224
	Proportion	10.9%	10.8%
Administrative and Secretarial Occupations	Number	861	33,819
	Proportion	8.3%	10.1%
Skilled Trades Occupations	Number	871	44,421
	Proportion	8.4%	13.3%
Caring, Leisure and Other Service Occupations	Number	879	34,116
	Proportion	8.5%	10.2%
Sales and Customer Service Occupations	Number	1,711	28,087
	Proportion	16.5%	8.4%
Process Plant and Machine Operatives	Number	982	34,320
	Proportion	9.5%	10.3%
Elementary Occupations	Number	1,865	42,843
	Proportion	18.0%	12.8%

## Crime

		Lincoln Health Partnership	Lincolnshire
Anti-social behaviour	Number of Crimes	1,534	18,605
	Rate per 100,000 population	3,957	2,311
Drugs	Number of Crimes	174	1,508
	Rate per 100,000 population	449	187
Public order	Number of Crimes	500	4,874
	Rate per 100,000 population	1,290	605
Violence and sexual offences	Number of Crimes	1,548	23,416
	Rate per 100,000 population	3,993	2,908
Total Number of Crimes	Number of Crimes	5,592	70,373
	Rate per 100,000 population	14,424	8,740

