



**Midlands and Lancashire**  
Commissioning Support Unit

# Improving Care for People with Learning Disabilities in Leicester, Leicestershire & Rutland (LLR)

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# Aristotle

Bespoke system for M&LCSU customers (and others)

Platform for 100+ reports (NHS Performance metrics, Primary Care, ICB specific reports folder, PHM/ACG etc etc)

Varying levels of access dependent on user

Information Governance measures

The screenshot shows a web browser window with two tabs: 'Aristotle Xi' and 'Aristotle'. The address bar shows the URL: <https://aristotle.midlandsandlancshirescu.nhs.uk/portal/>. The page header includes the 'Aristotle Xi' logo and a search bar. A dark sidebar on the left contains a list of menu items: Benchmarking, Contract & Activity Monitoring, Covid Reports, Health Inequalities, ICS & ICP Specific Reports, Mental Health, Performance, Population Segmentation, Prescribing, Primary Care, Quality, Risk Stratification, STP-ICS Reporting Framework, Strategy Unit, Release Notices, and User Guides and Training. The main content area is titled 'Home' and features a 'Welcome Kate Allardyce' message from the NHS Midlands and Lancashire Commissioning Support Unit. Below the welcome message is an 'Important Notice' section with a pink background, providing instructions on navigating changes and attending training sessions. To the right of the notice are two other sections: 'Tips' (green background) about setting default parameters in Tableau reports, and 'Aristofacts' (orange background) about Desi Pubs in West Bromwich. On the far right, there is a 'In the news' section (blue background) with a scrollable list of news items, including 'Senior doctors back strike action in England'.

# LLRs PHM / ACG Risk Stratification Tool

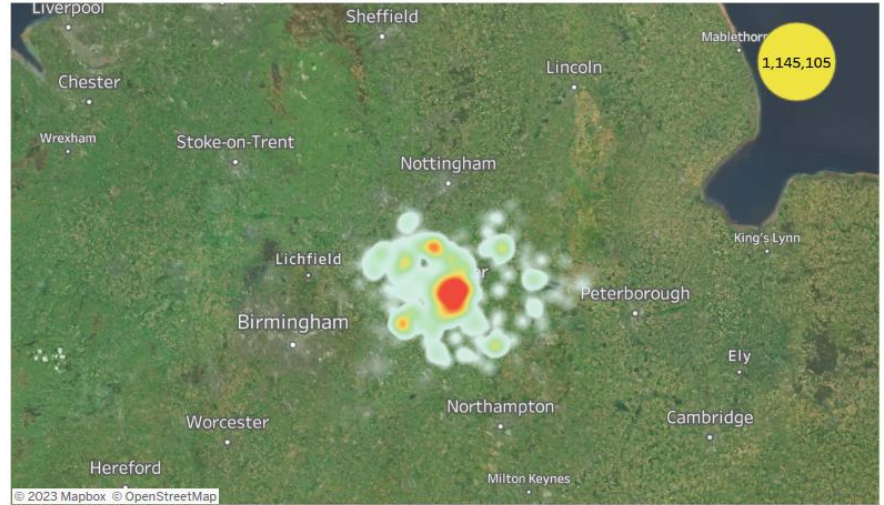
Information | Segmentation | Patient List

**Aristotle<sup>xi</sup>** PHM Risk Segmentation Tool **NHS Midlands and Lancashire Commissioning Support Unit**

Former CCG Name: (All) PCN: (All) GP Practice: (All)

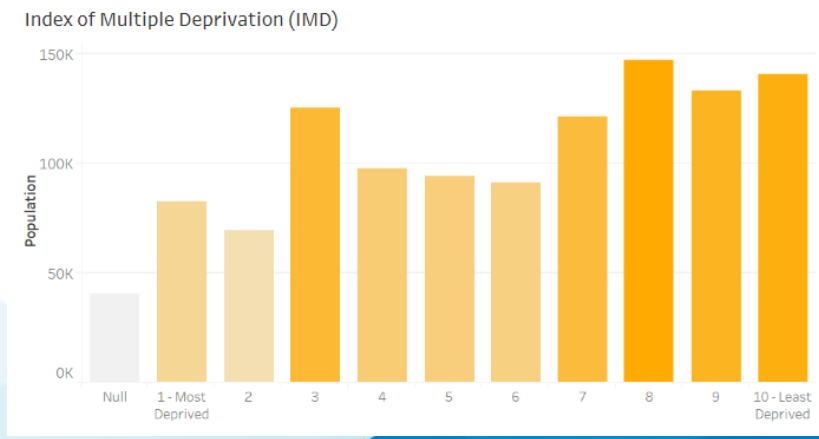
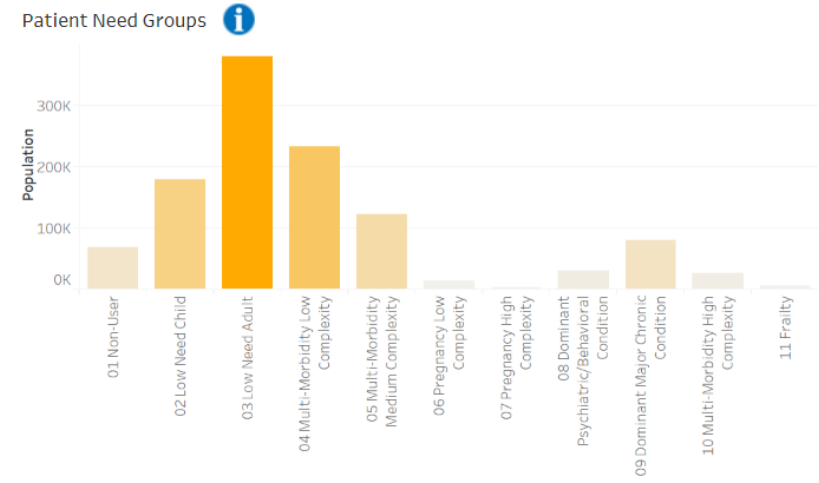
Preset Filters: RUB: (All) Frailty Description: (All) Obesity: (All) Care Home resident: (All) Care Plan: (All) LD Register: (All) LD Health Check: (All) SMI Register: (All) Chronic Condition Count: 0 Prescribed Items: 28 Emergency Visits: 0

Asthma: (All) ASD: (All) Bipolar: (All) COPD: (All) Heart Failure: (All) Renal: (All) Depression: (All) Dementia: (All) Diabetes: (All) Hypertension: (All) Hypothyroid: (All) Lipid Disorders: (All) Osteoporosis: (All) Parkinson's: (All)

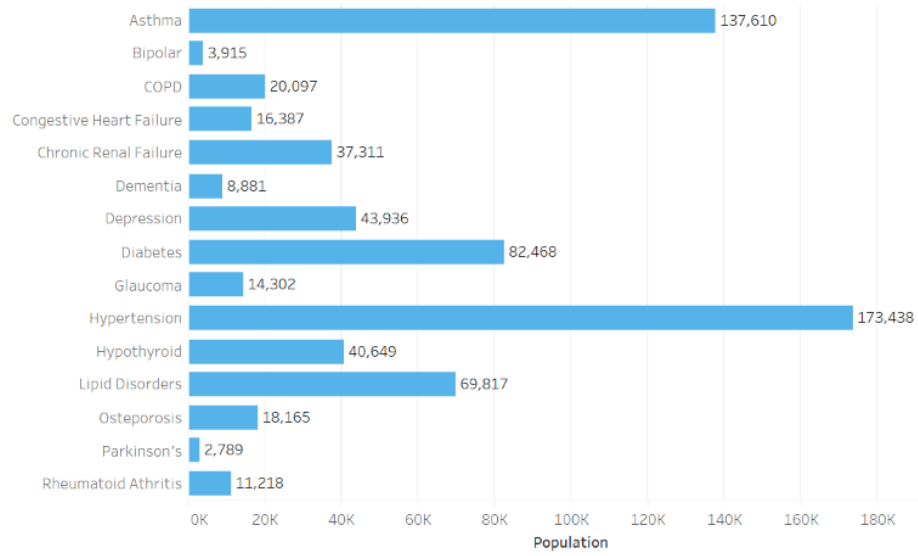


**PHM Segmentation Matrix**

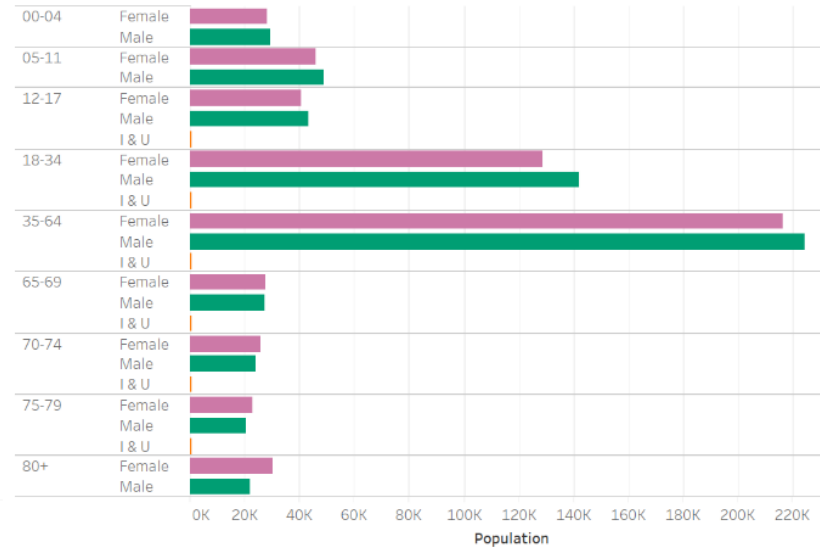
		Infants (0-5yrs)	Children (6-17yrs)	Working age adults (18-64yrs)	Older Adults (65+yrs)
<b>Generally Well</b>	Generally Well - Low Risk	37,945	79,604	210,336	11,873
	Generally Well - Higher Risk	19,982	41,852	121,484	5,264
	Generally Well - Other	2,274	4,626	28,213	824
<b>Managed LTCs</b>	Managed LTCs - Low Risk	5,633	22,395	162,110	35,265
	Managed LTCs - Higher Risk	3,286	12,578	76,119	12,735
	Managed LTCs - Other	261	955	11,219	2,465
<b>Complex Health Issues</b>	Complex Health Issues - Lower Risk	364	1,795	61,027	84,821
	Complex Health Issues - Higher Risk	257	1,226	35,204	39,292
	Complex Health Issues - Other	24	80	4,485	7,232



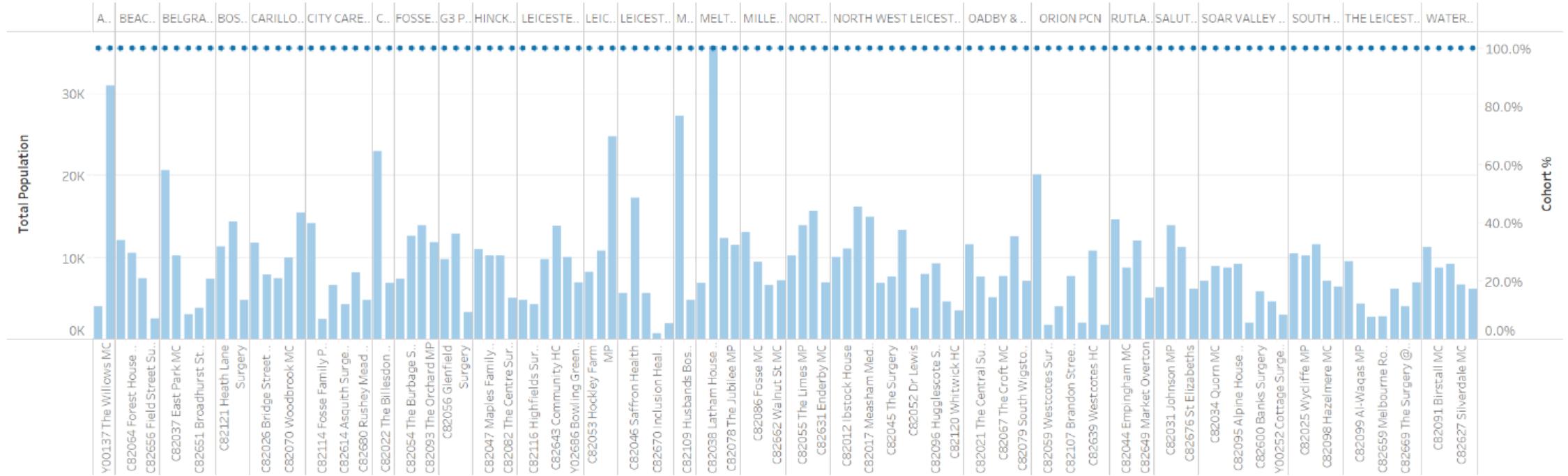
### Long Term Conditions



### Age and sex

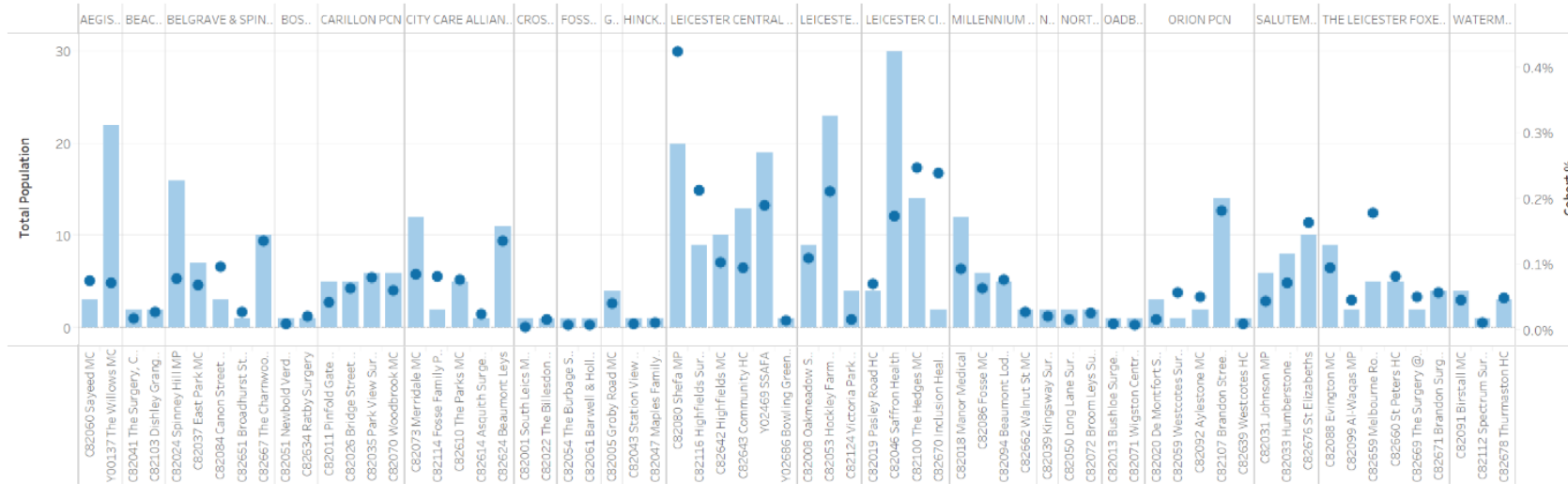


### Practice breakdown



# Example: Patients on SMI Register with Diabetes, living in 20% most deprived areas – cohort of 402

Practice breakdown



Information Segmentation Patient List



## Selected Cohort - Patient List



**Patients** - click on an NHS Number to view patient history (only available to GP users)

NHS Number	Age	Chronic Condition Count	MRS Score	Prob of Emergency Admission
400100	58	11.0	74.0	94.8%
354884	57	18.0	73.0	94.4%
366313	61	17.0	69.0	93.0%
424861	83	16.0	89.0	86.4%
51366	45	17.0	62.0	85.0%
588055	53	10.0	61.0	80.4%
287962	75	12.0	96.0	75.0%

## Cohort Summary

Activity and Cost for last 12 months

Total Population	Hospital Admission Count	Emergency Visits	Outpatient Count	Cost
402	234	249	1,152	473,482.00

# Presented to

**8<sup>th</sup> March 23**

LLR's Learning Disabilities & Autism Health Inequalities Group

**May /June 23**

Midlands Learning Disability and Autism Reducing Health Inequalities Network

Rutland Staying Healthy Partnership

Leicestershire County Council Health & Wellbeing Board

LPT Community Multi-Disciplinary Team

De Montfort University LD Student Nurses

**July 23**

MLCSU's PHM KSN (Knowledge & Skills Network)

JHU / ACG System Webinars - Case Studies from around the UK

Health & Care Analytics Conference 202

# People with a learning disability

Analysis of GP data via the Aristotle system as at 18.04.23

Sally Vallance, Public Health, Leicestershire County Council

Kate Allardyce, NHS Midlands and Lancashire Commissioning Support Unit



PEOPLE



PROMOTE



PROTECT



PROVIDE



PARTNERSHIP



## Data Source: Aristotle

- The Aristotle system pulls data from GP, hospital and prescribing records, this is a summary of data viewed on 18<sup>th</sup> April 2023
- It allows us to view data for all people registered with a GP in Leicester, Leicestershire and Rutland (not necessarily the same as those that live within those LA boundaries)
- For this summary, we're using the filter 'LD register' to see LD patients registered with their GP as our whole population and then filtering further to explore different data
- The LD register field is likely to be reliable in GP records for patients 14 years and over
- Other fields used (e.g. conditions etc) may be less reliable and should be used as a guide only
- Not all conditions can be viewed, we're limited to approx. 15 currently. It should be noted that more may be present in this population than reported on here
- We have to suppress data by rounding to the nearest 5 (to avoid any chance of individuals being identified and to comply with data rules), this can mean some totals are out slightly



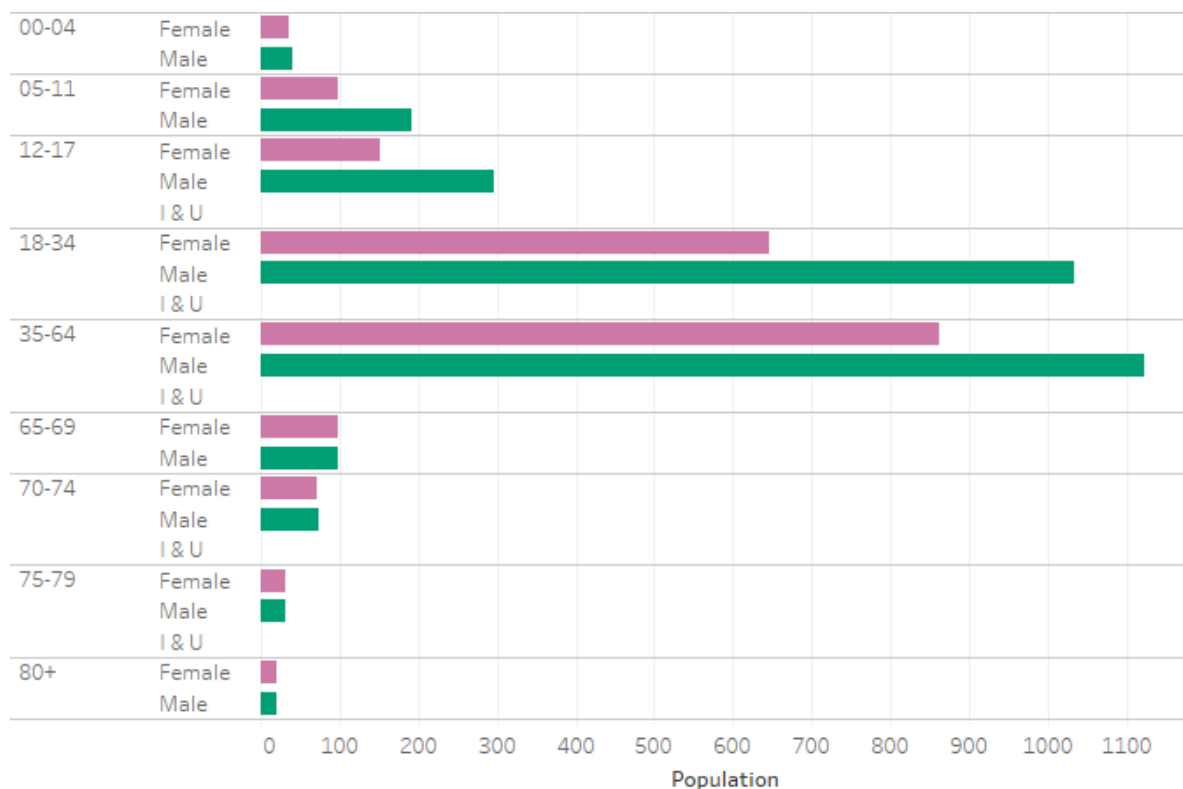


## LD registered population

- 4,925 people on the LD register with a GP based in LLR
  - 2,100 (42.6%) registered with a GP in Leicester City
  - 2,690 (54.6%) registered with a GP in Leicestershire
  - 135 (2.7%) registered with a GP in Rutland
- Remember, being registered with a GP who is based in that LA doesn't necessarily mean you live in the same LA
  - Use LA data as a guide for this reason



## Age and sex



In LLR, the size of size of population by age group for people with a LD diagnosis are:

- 815 children under 17 years
- 3,670 working age adults (18-64 years)
- 445 older people (65+)

There are more men (59.0%) than women (41.0%) registered with LD



All counts are rounded to 5, numbers below 7 are suppressed. As such totals may not match.

# Index of multiple deprivation (IMD) & LD

## LLR practices

- Largest group live in IMD decile 1 (most deprived), 635 people (12.9%)
- 1,110 people (22.5%) live in the 20% most deprived neighbourhoods of England
  - This compares to 13.4% of the non-LD population
  - Significantly more people with LD live in 20% most deprived areas than people without LD

## Leicester city practices

- Largest group live in IMD decile 1 (most deprived), 555 people (26.4%)
- 965 people (45.9%) live in the 20% most deprived neighbourhoods of England (this proportion is 31.4% in the non-LD population)

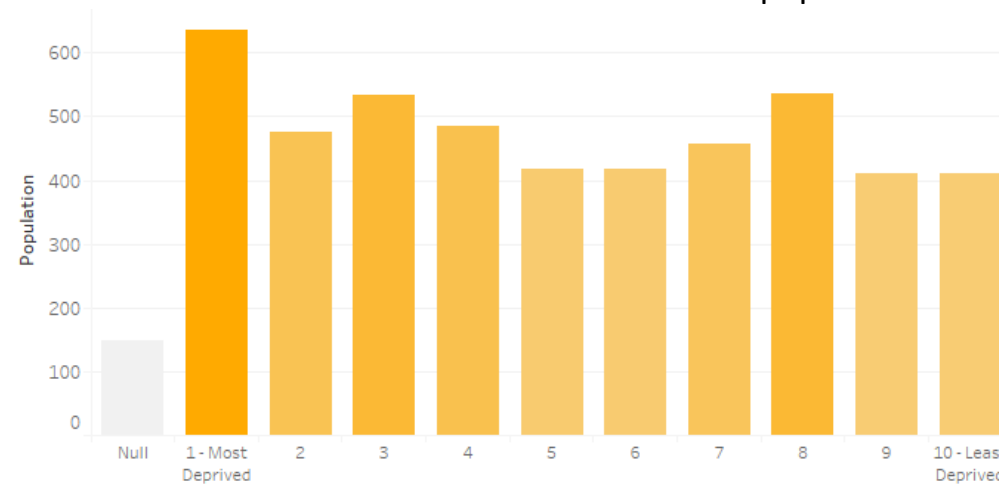
## Leicestershire practices

- Largest group live in IMD decile 8 (less deprived), 460 people (17.1%)
- 145 people (5.4%) live in the 20% most deprived neighbourhoods of England (this proportion is 3.2% in the non-LD population)

## Rutland practices

- Largest group live in IMD decile 10 (least deprived), 35 people (25.9%)

IMD deciles for LD popn. In LLR



Practices with the highest number of IMD 20% most deprived LD registered patients are:

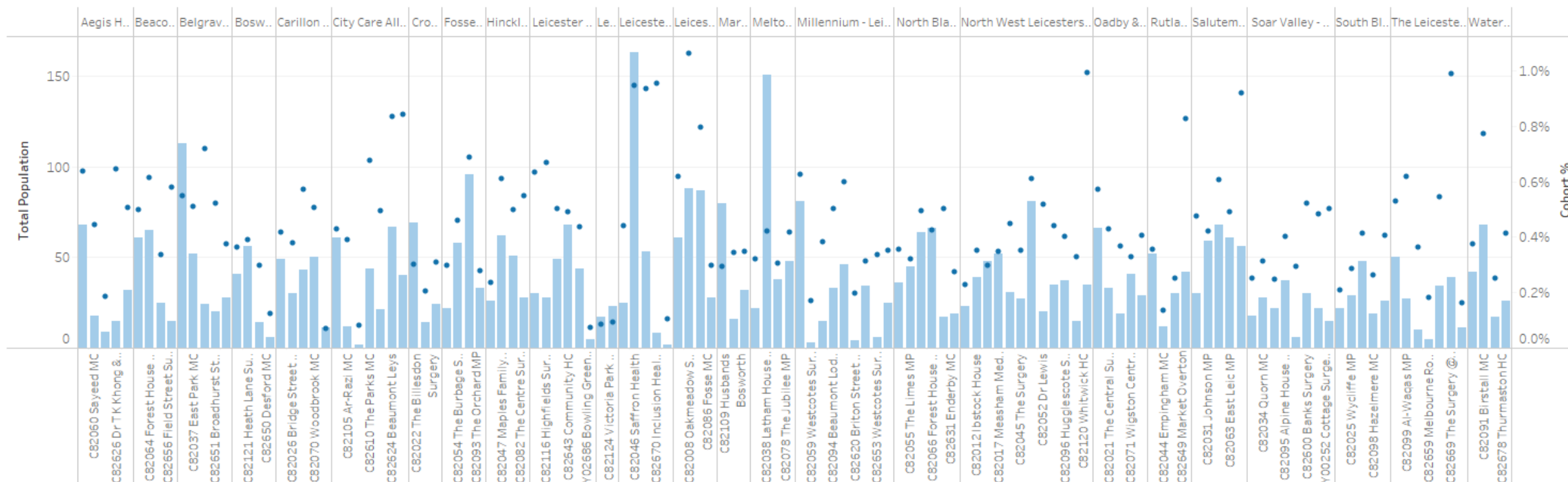
- Saffron Health (105)
- Hockley Farm MP (70)
- Beaumont Leys (55)
- Oakmeadow surgery (50)



Blue dots represent the % of the registered population at that surgery that have LD, blue bars are the numbers of patients at the practice


# Registered practices

Practice breakdown





# Health status

PHM Segmentation Matrix 

		Infants (0-5yrs)	Children (6-17yrs)	Working age adults (18-64yrs)	Older Adults (65+yrs)
Generally Well	Generally Well - Low Risk		15	10	
	Generally Well - Higher Risk		10	15	
	Generally Well - Other				
Managed LTCs	Managed LTCs - Low Risk	30	180	475	30
	Managed LTCs - Higher Risk	15	100	370	15
	Managed LTCs - Other			60	
Complex Health Issues	Complex Health Issues - Lower Risk	25	235	1,410	175
	Complex Health Issues - Higher Risk	20	160	1,110	180
	Complex Health Issues - Other		10	220	40

The largest health status group is complex health issues – lower risk (1,845 people, 37.5%)

This is closely followed by complex health issues – higher risk (1,47 people, 29.9%)

Focussing on the Complex Health Issues – both high, low and other risk categories, 810 people (22.5%) are living in IMD 20% most deprived neighbourhoods

**PHM Segmentation**

- Generally Well - Zero Chronic Conditions
- Managed LTCs - 1 or 2 Chronic Conditions
- Complex Health Issues - 3 or more Chronic Conditions
- Lower Risk - Acorn Wellbeing type 'Healthy' or 'Caution'
- Higher Risk - Acorn Wellbeing type 'At Risk' or 'Health Challenges'



## Health checks

- 3,685 (74.8%) are on the GP system as having a health check
- 1,245 people are down as **not** having a health check with the following features:
  - 440 (35.3%) are registered with practices in the city
  - 785 (62.9%) are registered with practices in the county
  - 20 (1.7%) are registered with practices in Rutland
  - 270 (21.7%) are from IMD 20% most deprived
  - 305 (24.5%) fall into the complex high risk category
  - Individual practice numbers available



## Health conditions & learning disability (national picture)

- Common health conditions for people with LD include:
  - Mental health problems (8.4 times more common) – Bipolar, depression and SMI register data available
  - Epilepsy (estimated prevalence of 22%) – not available
  - Being underweight or overweight (6.4% underweight and 37.5% obese, both higher than comparator populations) – obesity data available but not under weight
  - Dementia (4.3% aged 55-64 and 5.9% for 65-74 in 2017/18, 0.3% and 1.1% in comparator group) - available Source: Mencap HI overview
- Top 5 groupings for cause of death:
  - Covid 19, circulatory diseases (heart failure, hypertension & lipid disorder data available), respiratory diseases (COPD and asthma data), cancers, nervous system diseases (not available) Source: LeDeR National programme



# Health conditions and LD

The proportion of people with a condition is significantly higher in the LD population than the non-LD population for 9 conditions

The proportion of people with a condition is significantly lower in the LD population than the non-LD population for 2 conditions (hypertension and COPD)

There is no statistical difference in the proportion of LD and non-LD populations with 4 conditions

Confidence level	LD population		Non-LD population		Significance compared to NON LD pop
	No. (LD popn)	% (LD popn)	No. (non-LD)	% (non-LD)	
95.0%					
<b>Whole population</b>	<b>4,925</b>	<b>100.0</b>	<b>1,152,220</b>	<b>100.0</b>	
Bipolar	110	2.2	3,865	0.3	Higher
Depression	310	6.3	43,960	3.8	Higher
Obesity	220	4.5	34,725	3.0	Higher
Dementia	75	1.5	8,740	0.8	Higher
Heart failure	75	1.5	16,380	1.4	Similar
Hypertension	590	12.0	173,945	15.1	Lower
Lipid disorder	305	6.2	69,415	6.0	Similar
Asthma	775	15.7	138,595	12.0	Higher
COPD	50	1.0	20,330	1.8	Lower
Hypothyroid	400	8.1	40,600	3.5	Higher
Diabetes	550	11.2	82,230	7.1	Higher
Renal	150	3.0	36,805	3.2	Similar
Osteoporosis	80	1.6	18,270	1.6	Similar
ASD	235	4.8	2,030	0.2	Higher
SMI Register	335	6.8	9170	0.8	Higher





All counts are rounded to 5, numbers below 7 are suppressed. As such totals may not match.

## Health conditions and LD continued

- The most prevalent condition for people with LD is asthma (775 people, 15.7% of the LD population)
  - This is followed by hypertension (590 people, 12.0%) and diabetes (550 people, 11.2%)
- The conditions with the biggest difference between people with LD and those without are:
  - Severe Mental Illness (SMI) where 6.8% of the LD population are on the SMI register compared to 0.8% of the non-LD population (this is very similar to the national difference on slide 10)
  - Hypothyroid (8.1% of the LD population and 3.5% of non-LD) which is exactly the same rate as a study of GP records nationally in 2017/18 for the LD population\*
  - ASD (4.8% of the LD population and 0.2% of the non-LD), nationally ASD was found for 30.7% of the LD population in 2021-22\*\*



## Deprivation and conditions

- Comparing the LD and non-LD populations and condition prevalence in the 20% most deprived areas, we see a significantly higher proportion of people with LD and a condition than those without LD and a condition
- This is the case across all conditions apart from bipolar and ASD
- The difference is largest between the LD and non-LD populations living in the 20% most deprived areas for:
  - COPD – the LD population living in the most deprived areas are around two and a half times more likely to have COPD (40.0% of the LD population compared to 16.5% of the non-LD population)
  - Heart failure – the LD population living in the most deprived areas are more than twice as likely to have heart failure (33.3% of the LD population compared to 10.8% of the non-LD population)



## Other risk categories

- 1,930 (39.2%) people with LD have 5 or more chronic conditions, over 4 times more than the non-LD population
  - This compares to 9.7% of the non-LD population and is a significantly higher rate in the LD population
- 300 people (6.1%) with LD are at a risk  $\geq 0.33$  of emergency hospital admission, over 4 times higher than the non-LD population
  - This compares to 1.5% of the non-LD population and is a significantly higher risk in the LD population



## Key messages/conclusions

- The size of our LD registered population is 4,925 across LLR (our best measure of the size of the population?)
- People are significantly more likely to live in high deprivation (IMD 20% MD) if they have a LD (compared to those that don't have LD).
  - 22.5% for LD compared to 13.4% for non-LD
- People with LD are more likely to have health conditions than people without LD
  - 4 times more likely to have 5+ chronic conditions if someone has LD (compared to someone without LD)
  - Common conditions are asthma, hypertension and diabetes (are these clinics and pathways accessible to people with LD and have we got our preventative offer right?)
- Significantly more people with LD and a health condition live in the 20% most deprived areas (compared to people without LD but with a condition)
  - This is particularly the case for COPD and heart failure
  - Are we targeting enough on the 20% most deprived areas generally and are we ensuring a focus on our LD population as part of the wider system focus on deprivation?
- The LD population is 4 times more likely to be at risk of emergency admission compared to the rest of the population
  - 6.1% of people with LD have a risk of emergency hospital admission  $\geq 0.33$  as opposed to 1.5% of the non-LD population – opportunity to work with this cohort as part of admission prevention work?