### Liverpool Women's Hospital Maternity and Gynaecology Prevention and Equity Population Profile 2023-24 Summary

Understanding our patient population helps us design and deliver services that achieve our quality ambitions for every patient, irrespective of their background, characteristics and the conditions in which they live.

There is a significant difference between demographics and experiences common among senior decision-makers and common among our patients. Designing services for the white and well-off would focus on about 10% of our maternity and emergency gynaecology patients.

50-75% of our patients have at least 1 risk factor for health inequalities. Health inequalities are defined as worse health due to unfair, avoidable and systematic differences. In healthcare, this may mean worse access, experience, safety or outcomes. The most vulnerable will be those for whom multiple factors combine.

### Core20 = 20% most deprived

64% of maternity bookers71% of emergency gynaecology admissions52% of elective gynaecology admissions **Ethnic minorities** (based on those with recorded data)

29% of maternity bookers

26% of emergency gynaecology admissions 14% of elective gynaecology admissions 16% of gynaecology outpatient attendances

People with additional or diverse needs and people dealing with adverse life experiences accessing our services are common events.

For example, an average month at LWH sees

- 29 admissions of someone with a recorded diagnosis of autism or learning disability
- 44 new internal referrals, 52 police notifications and 263 MARAC research requests received by the LWH Safeguarding Team, all relating to domestic abuse

This context means our patient population experience high levels of preventable clinical risk that we need to prevent, mitigate and plan for.

#### **Health literacy**

47% of people aged 16-65 in Liverpool are likely to have difficulties understanding or interpreting health information

### **Obesity and comorbidities**

20-25% of maternity bookers had a BMI 30-35 8.68% of deliveries were to women with gestational diabetes 24.3% of women in Liverpool aged 20+ have multimorbidity ( $\geq$ 2 long-term conditions in the QOF register), varying significantly by age

Available local and national projections to 2040 suggest small increases in patient catchment population but significant increases in complexity affecting both maternity and gynaecology due to increasing age and comorbidities

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# Liverpool Women's Hospital Prevention and Equity Population Profile 2023-24

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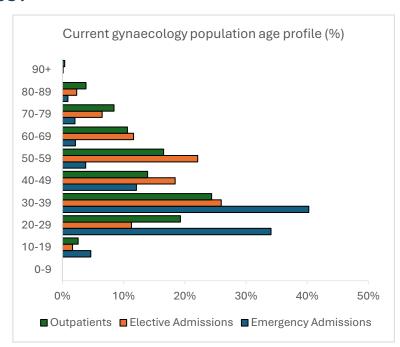
### Introduction

This profile aims to understand the key characteristics of the patient population using Liverpool Women's Hospital (LWH) services in 2023-24 in relation to health inequalities and major preventable risks affecting patient care and outcomes. This understanding will inform service planning and delivery, supporting delivery of our quality ambitions for every patient, irrespective of their background, characteristics and the conditions in which they live. The profile focuses on maternity and gynaecology services to align with and inform the Improving Hospital Gynaecology and Maternity Services in Liverpool programme led by NHS Cheshire and Merseyside.

### 1. Who uses our services?

Women of all ages use LWH gynaecology services. Women of reproductive age (aged 15-49) made up 91% of emergency gynaecology admissions. Elective and outpatient services had a broader peak across women of menopausal and reproductive age. 71.5% of deliveries were in women aged 25-36.

Women living in Liverpool local authority area formed the largest proportion of patients (65% of



deliveries and 52% of gynaecology admissions). Next were women from Sefton (16% and 19%), Knowsley (9% and 9%), other parts of Cheshire and Merseyside (6% and 12%) and areas outside Cheshire and Merseyside (3% and 7%). The proportions are different for gynaecology cancer services, in which 57% were from Liverpool, Sefton and Knowsley and 43% from other areas.

## 2. Which patient groups are at risk of worse outcomes because of unfair and avoidable differences?

Health inequalities are defined as avoidable, unfair and systematic differences in health between different groups of people<sup>1</sup>. In healthcare, this means people may have worse access, safety, experiences and outcomes. Reasonable adjustments could avoid or reduce these differences.

There is no single dataset that measures all the factors needed to assess risk of health inequalities. Therefore, this profile examines different factors relevant to the LWH patient population in turn. **The most vulnerable will be those for whom multiple factors combine.** 

Based on recorded ethnicity and deprivation alone, **70%** of maternity bookers

**75%** of emergency gynaecology admissions **50%** of elective gynaecology admissions have **at least 1 risk factor** for healthcare inequalities

#### Core20

64% of maternity bookers
71% of emergency gynaecology admissions
52% of elective gynaecology admissions
live in the 20% most deprived areas in the
country

#### Ethnic minorities\*

29% of maternity bookers

26% of emergency gynaecology admissions

14% of elective gynaecology admissions

16% of gynaecology outpatient attendances

\*based on those with recorded data = 84%M, 88%EmG, 89%ElG, 88%OPG

### Primary language other than English\*

16% of maternity bookers

14% of emergency gynaecology admissions

5% of elective gynaecology admissions

6% of gynaecology outpatient attendances

\*based on those with recorded data = 91%M, 99%EmG, 97%ElG, 95%OPG

Ethnicity and deprivation data alone indicate that the norm among our patient population is to be at risk of unfair and avoidable differences requiring consideration of reasonable adjustments. The differences between senior decision-maker populations and our typical patient population emphasise how important adjusting our understanding of the norm is. It is well-recognised nationally that people who are White British and well-off (eg. living in the 40% least deprived areas in the country) are typically disproportionately represented in senior decision-maker roles. However, they were the minority among our patients, making up just 9-10% of maternity bookers and gynaecology emergency admissions.

Almost two thirds of maternity bookers lived in the 20% most deprived areas in the country. Our partner hospitals in Liverpool University Hospitals Trust ranked in 2020

<sup>&</sup>lt;sup>1</sup> NICE. NICE and health inequalities. 2025. Available here

(the latest available data) as having the most deprived catchment population of any acute trust<sup>2</sup>. Specialist trusts are excluded so LWH is not ranked.

Missing data is more of a challenge for ethnicity and language, but where recorded, one in four maternity bookers is from an ethnic minority group and one in six has a primary language other than English. The term ethnic minorities refers to all ethnic groups except the White British. The lower proportions of patients from ethnic minorities and living in deprivation accessing elective and outpatient gynaecology services likely result from a combination of differing geographical patient distributions, differing age profiles and fertility rates in differing populations and potentially unmet elective care needs in some groups because of inequalities.

#### Diverse or additional needs

Every month at LWH (Apr-Oct 24)

- 18 admissions of people with autism
- 11 admissions of people with a learning disability
- 10 people are referred to the Safeguarding Team for significant mental health concerns

Other factors that can mean people are at increased risk of experiencing healthcare inequalities include other protected characteristics, diverse and/or additional needs and adverse life experiences, both in childhood and adult life. Available data (Apr-Oct 2024) indicates that **on average someone with a recorded diagnosis of autism or learning disability is admitted to LWH every day** (29 admissions per month). On average every 3 days, someone is referred to the LWH Safeguarding Team because of significant mental health concerns (10 referrals per month). Looking forward, roughly 1 in 6 girls in the last Liverpool Schools Census (2023/24) were recorded as having Special Educational Needs<sup>3</sup>. This is a broad category with variable implications for how people will access and experience healthcare, but is an indication of the population who will be the maternity and gynaecology patients of the future.

Of the available data on adverse life experiences affecting women attending LWH, the data on violence against women and girls stands out starkly. An average month in the LWH Safeguarding Team will see 44 new internal referrals, 52 police notifications and 263 MARAC research requests received by the LWH Safeguarding Team, all relating to domestic abuse. The national and local data on violence against women and girls is context for Lived Experience Panel and community feedback to the Improving Hospital Gynaecology and Maternity Services in Liverpool programme that a feeling of safety is crucial when accessing maternity and gynaecology services. A recent report from Healthwatch Liverpool and partners describes some of the impacts

<sup>&</sup>lt;sup>2</sup> Office for Health Improvement and Disparities. NHS Acute (Hospital) Trust Catchment Populations: 2022 Rebase Experimental Statistics. 2022. Available <a href="here">here</a>.

<sup>&</sup>lt;sup>3</sup> Liverpool City Council Public Health. Women's Health JSNA [unpublished analysis].

previous experiences of sexual assault can have on future healthcare engagement, particularly when intimate procedures are involved, as is often the case for maternity

### Domestic abuse referrals at LWH

Every month at LWH (Apr-Oct 24), the LWH Safeguarding Team received

- 44 internal referrals
- 52 police notifications
- 263 MARAC research requests

### Violence against women and girls: National and local context

The Home Office estimate that in the UK, in her lifetime,

- 1 in 4 women will experience domestic abuse
- 1 in 5 women will experience sexual assault

Liverpool's annual police recorded sexual offences rate is

1.5x the national average and 80% of victims are women

and gynaecology.4

This profile cannot cover all relevant factors. Currently available data for as many characteristics as possible is summarised in appendix 2.

## 3. What are the major preventable clinical risks in our patient population?

The conditions in which people are born, grow, live, work and age and the inequalities in them, some of which were described in section 2, influence health behaviours, further increasing health inequalities. Therefore, the characteristics of our patient population influence the patterns of preventable clinical risk that LWH must plan for and manage and increases the importance of our role in prevention. This section of the profile presents selected major patterns of clinical risk affecting maternity and gynaecology services.

#### **Health literacy**

47% of people aged 16-65 in Liverpool are likely to have difficulties understanding or interpreting health information Low health literacy is a significant risk as it influences the other risks people take in terms of health behaviours and affects how, when and where people access healthcare. Examples in maternity and gynaecology include late booking of pregnancies, low uptake of HPV vaccination and cervical screening and

late presentations of gynaecological cancers. Half of adults aged 16-65 in Liverpool (47.4%) are likely to have difficulties understanding or interpreting health information, rising to two-thirds (67.5%) if the information contains numbers<sup>5</sup>.

LWH patients continue to be adversely affected by the risks of smoking and the risks of unprotected sex in terms of sexually-transmitted infections and unwanted pregnancies.

<sup>&</sup>lt;sup>4</sup> Healthwatch Liverpool. The impact of Sexual Trauma on attendance for health appointments. 2024. Available <a href="here">here</a>.

<sup>&</sup>lt;sup>5</sup> University of Southampton. Health Literacy: Prevalence Estimates for Local Authorities. 2025. Available here

9.4% of LWH bookers and intrauterine transfers smoke. Liverpool's abortion rate is higher than the national average and increasing at a faster rate (2012-2021 data)<sup>6</sup>.

The LWH patient population experiences high rates of obesity<sup>7</sup> and other comorbidities<sup>8</sup>.

Obesity carries significant clinical risks in maternity

### **Obesity and comorbidities**

20-25% of maternity bookers had a BMI 30-35

8.68% of deliveries were to women with gestational diabetes

24.3% of women in Liverpool aged 20+ have multimorbidity ( $\ge$ 2 long-term conditions in the QOF register), varying significantly by age

and gynaecology services, including increased symptoms (eg. with dysmenorrhoea) and increased complication rates (eg. gestational diabetes, anaesthetic complications, wound infections). Severe obesity may require specific equipment or services.

### Intergenerational transfer of risk

9.0% of babies were born prematurely (<37 weeks)

10.9% of term babies were born small for gestational age

Inequalities are further entrenched by transfer of preventable risk between generations. In maternity, this is particularly seen in preventable neonatal risks, which include a significant proportion of prematurity and babies born small for gestation age.

### 4. What should we expect in the future?

The Office for National Statistics (ONS) provides population projections for local authority areas based on mid-year population estimates and current assumptions of future fertility, mortality and migration<sup>9</sup>. If the projected changes

### ONS Projected Population Change in Liverpool between 2023 and 2040

6% increase in the number of people aged 0-19

2% increase in the number of people aged 20-69

34% increase in the number of people aged ≥70

for Liverpool by 2040 were seen across the whole LWH catchment population, the age profile of current care use suggests this population change alone would lead to a 3% increase in emergency gynaecology admissions, and 5-6% increases in elective gynaecology admissions and gynaecology outpatient appointments. However, two thirds of the increase in elective and outpatient gynaecology (an additional 169 admissions and 2561 appointments) would be in the 70+ group, meaning an **increase in age-related complexity in gynaecology.** 

ONS's estimate based on 2021 assumptions is that across the UK there will be a 6% increase in the total number of births per year by 2040<sup>10</sup>. Their projections show a

<sup>&</sup>lt;sup>6</sup> Liverpool City Council Public Health. Women's Health JSNA [unpublished analysis].

<sup>&</sup>lt;sup>7</sup> NHS England. National Maternity Dashboard. 2024. Available <u>here</u>

<sup>&</sup>lt;sup>8</sup> Liverpool City Council Public Health. Women's Health JSNA [unpublished analysis].

<sup>&</sup>lt;sup>9</sup> Office for National Statistics. Population projections for local authorities. 2020. Available here

<sup>&</sup>lt;sup>10</sup> Office for National Statistics. National population projections: 2021-based. 2024. Available here

### ONS projected change in mother's age at delivery in the UK between 2023 and 2040

62% reduction in mothers aged 15-19

23% reduction in mothers aged 20-24

2% increase in mothers aged 25-29

1% increase in mothers aged 30-34

23% increase in mothers aged 35-39

81% increase in mothers aged 40+

marked change in age profile of women at delivery, indicating an increase in agerelated complexity in maternity.

National projections for obesity and comorbidities have been estimated by extrapolating current trends in these conditions. Cancer Research UK estimate that, if trends to 2019 continue, there will be a 27% increase between

2019 and 2040 in women in England with a BMI≥30, an increase disproportionately affecting people living in deprived areas¹¹. The Health Foundation estimates that, if current trends continue, there will be a 37% increase between 2023 and 2040 in the number of people living with major illness (at least 2 long-term conditions in the QOF register)¹². LCC Public Health project that the long-term condition that will experience the biggest increase in prevalence in Liverpool is depression¹³. If recent trends continue, LWH would see further significant increases in complexity in maternity and gynaecology due to obesity and comorbidities.

### Conclusion and recommendations

### Conclusion

We must acknowledge the gap between demographics and experiences common among senior decision-makers and common among our patients. Designing services for the white and well-off would focus on about 10% of our patients.

50-75% of LWH maternity and gynaecology have at least one risk factor for worse outcomes due to health inequalities. Delivering our quality ambitions for all patients therefore involves service design that responds to our patient population needs and embeds a robust approach to reasonable adjustments that reduce health inequalities.

Available local and national projections to 2040 indicate small increases in patient population but large increases in complexity affecting both maternity and gynaecology due to increasing age and comorbidities. Prevention is critical to reducing this future burden as well as being a key tool in reducing inequalities.

<sup>&</sup>lt;sup>11</sup> Cancer Research UK. Overweight and obesity prevalence projections for the UK, England, Scotland, Wales and Northern Ireland, based on data to 2019/20. 2022. Available <a href="here">here</a>

<sup>&</sup>lt;sup>12</sup> The Health Foundation. Health inequalities in 2040: current and projected patterns of illness by deprivation in England. 2024. Available <u>here</u>

<sup>&</sup>lt;sup>13</sup> Ashton M et al. State of Health in the City: Liverpool 2040. 2024. Liverpool City Council. Available here

### Recommendations

### For the Hospital Gynaecology and Maternity Services in Liverpool programme

A sustainable future model of care that responds to the programme's Case for Change should also

### 1. Be informed by the best available projections of future patient needs,

- 1.1. Considering the equipment, services and multi-disciplinary arrangements needed to prepare for future projections of small increases in overall patient population size but significant increases in complexity
- 1.2. Supporting the embedding and mainstreaming of preventive approaches

### 2. Support access for our most vulnerable patients including,

- 2.1. Creating a feeling and space of safety for women accessing intimate care
- 2.2. Delivering a simple model and public communications that makes it easy for patients with low health literacy to know when, where and how to access care
- 2.3. Minimising indirect costs to the patient of accessing care (eg travel costs, time off work), particularly considering options for outreach offers to bring care closer to the patient and one-stop offers to minimise repeat visits

### For Liverpool Women's Hospital to respond to health inequalities and prevention

### 1. Strategic leadership and effective governance

- 1.1. Add health inequalities to the LWH corporate risk register as a major preventable cause of worse patient outcomes and of clinical complexity
- 1.2. Agree equity as a dimension of quality and therefore to be considered in existing quality standards and improvement processes
- 1.3. Explore an LWH Prevention and Health Inequalities Group to develop and implement a prevention and health inequalities plan aligned with the forthcoming UHLG strategy

### 2. Data and reporting

- 2.1. Integrate this profile's approach to understanding our patient population into business as usual internal data reporting processes
- 2.2. Explore data processes for understanding health inequalities in key performance indicators by ethnicity and deprivation

### 3. Create capacity and awareness for the response

- 3.1. Share this report and/or the accompanying slides with staff at all levels of LWH
- 3.2. Explore options to establish sustainable capacity to develop and deliver a population needs-informed prevention and health inequalities plan

### 4. Innovate and pilot new programmes responding to key inequalities

- 4.1. Become a pilot site, focussing on maternity, for the NHSE North West Health Literate Organisation programme (beginning April 2025)
- 4.2. Be a pilot site for #CheckWithMeFirst, supporting trauma-informed care

### Appendix 1: Methods and Acknowledgements

### Methods

The profile uses Liverpool Women's Hospital data for the last full April-March year, 2023/24. Where this was not possible, other available timeframes were first alternative. Other relevant populations, such as local authority or national populations, were second alternative. Project timescales meant only already extracted and aggregated data requiring no or minimal initial analysis could be included.

Groups considered in question 2 were drawn from the NHS Core20Plus approach to health inequalities and checked against the Women's Health Strategy for England, the Women of the North report and the Liverpool Women's Health Joint Strategic Needs Assessment (in progress). Groups with available data and most relevant to the patient population at Liverpool Women's Hospital were chosen for inclusion in this initial profile.

Risks in question 3 were prioritised for inclusion based on the available evidence base and informed by discussion with lead clinicians at Liverpool Women's Hospital.

### Acknowledgements

My thanks to all those at Liverpool Women's Hospital (LWH) who advised on the development of this profile. Particular thanks go to Hayley McCabe (Information and Performance Manager, LWH), Deborah Ward (Head of Safeguarding, LWH) and Sophie Kelly (Lead Public Health Epidemiologist, Liverpool City Council) for their support accessing data.

### Appendix 2: At risk groups profile

**Table.** LWH Population Profile Summary by groups at risk of health inequalities displaying most recent available data for LWH, or closest available single indicator by local authority, as at December 2024

\* = % where data recorded, † = April-October 2024 data, ‡ = 2021 census data, ¶ = unpublished LCC Women's Health JSNA, § = https://healthliteracy.geodata.uk/

Group (people who)	LWH data (2023/24)			Local authority prevalence		
	Maternity	Emergency Gynae	Elective & Outpatient	Liverpool	Sefton	Knowsley
	Bookers	Admissions	Gynae			
Live in the Core20 (most deprived)	64%	71%	52% (elective admissions)			
Are of ethnic minority backgrounds*	29%	26%	14% (elective admissions) 16% (outpatient attendances)	5.7% Asian or Asian British 3.5% Black, Black British, Caribbean or African 3.5% Mixed or multiple ethnic groups 3.3% Other ethnic groups 6.7% White minority groups including 0.2% Roma and 0.1% Gypsy or Irish Traveller ‡	1.5% Asian or Asian British 0.5% Black, Black British, Caribbean or African 1.5% Mixed or multiple ethnic groups 1.5% Other ethnic groups 4% White minority groups ‡	1.6% Asian or Asian British 0.8% Black, Black British, Caribbean or African 1.7% Mixed or multiple ethnic groups 0.6% Other ethnic group ‡
Have a primary language other than English*	16%	14%	5% (elective) 6% (outpatient)	9.6% of residents, 24.3% of whom cannot speak English well or at all ‡	3.6% of residents, 24.3% of whom cannot speak English well or at all ‡	3.0% of residents, 20.2% of whom cannot speak English well or at all ‡
Identify as LGB+				4.7% of women ‡	2.5% of residents ‡	2.3% of residents ‡
Identify as transgender				0.7% of residents ‡	0.3% of residents ‡	0.2% of residents ‡
Are neurodiverse	18.2 admissions per month (any specialty) †					
Have a learning disability	10.7 admissions per month (any specialty) †					
Have a disability				23.0% (self-identified) ‡		
Have a sensory impairment				7.3% of women aged 18+ have some hearing loss ¶		
Have a significant mental health condition	10.0 referrals per month to the LWH Safeguarding Team because of significant mental health concerns (any specialty) †			22.1% aged 18+ have a diagnosis of depression ¶		
Have dementia	1.2 admissions per month (any specialty) †			0.77% of women aged 18+ ¶		
Are a victim of domestic abuse	research requ	•	otifications, 263.2 MARAC LWH Safeguarding Team (any specialty) †	1904 cases referred to MARAC in 2022/23 ¶		

Are a victim of sexual	4.3 referrals per month to the LWH Safeguarding Team relating			3.8 sexual offences per 1000		
abuse/assault (note this data does	to sexual abuse (any specialty) †			population in 2022/23, of which		
not capture impacts of non-recent				about 80% of victims are women		
abuse)				1		
Are experiencing homelessness	3.8 referrals per month to the LWH Safeguarding Team relating					
	to homelessness (any specialty) †					
Have a substance misuse problem	8.5 referrals per month to the LWH Safeguarding Team relating			1512 women in drug and alcohol		
	to substance misuse (any specialty) †			treatment services in 2022/23 ¶		
Are a vulnerable migrant (eg				0.61% of total population $\P$		
seeking asylum or are a refugee)						
Are a victim of modern slavery	2.7 referrals per	month to the LWH Sa	afeguarding Team relating			
	to modern slavery (any specialty) †					
Are in or have experience of the				172 per 10,000 children in care in		
care system				2022¶		
Are an unpaid carer				11.5% of women (self-reported) ‡		
Are engaged in sex work						
Have experience of the criminal				368 women in probation services		
justice system				in 2024 ¶		
Have low health literacy				47.4% of adults aged 16-65	41.8% of adults aged 16-65	48.8% of adults aged 16-65
				67.5% if information includes	61.0% if information	68.6% if information
				numbers §	includes numbers §	includes numbers §

### Other....

(groups not captured here that may be considered include those relating to marriage or civil partnership, those relating to religion and belief, people who live in remote rural and island communities, and military veterans and their families)