A picture of health

Profile of our Trust's local population

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NHS
Chelsea and Westminster Hospital
NHS Foundation Trust

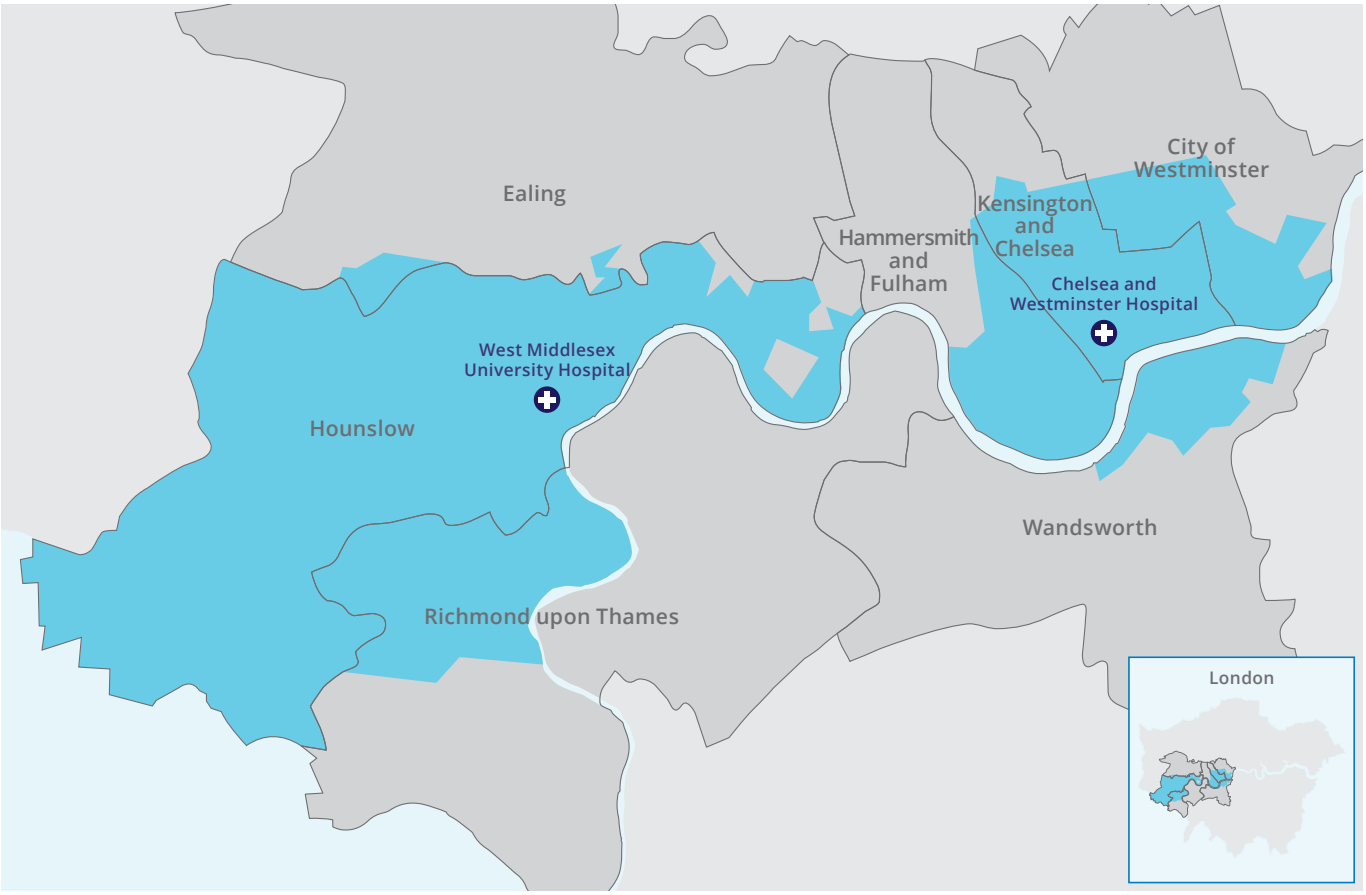
A picture of health

Profile of our Trust's local population

Our first-ever health profile describes the location, demographic characteristics and key health needs of our local community, whether or not they use our hospital services.

Our core catchment area

Our catchment area is the geographical footprint in which the Trust acts as a major provider of hospital services for the local community. This area spans parts of seven local authorities.



Our local population

620,000 people—that's **1 in 14** London residents—live within our catchment area. Residents of Hounslow make up 42% of our catchment population, compared to 1% of Ealing residents. **1 in 6** people living within the catchment are from the South West London region.

Good healthcare doesn't necessarily lead to good health—up to 85%[1] may be determined by conditions in which we are born, grow, live, work and age and includes factors like our education, housing and environment. Not everyone has the same opportunity to achieve good health. This can lead to stark differences in the health outcomes experienced between groups and individuals. For example, women and men with learning disabilities die 27 and 23 years earlier respectively when compared to the general population[2]. Of these premature deaths, 4 in 10 are considered avoidable, compared to 1 in 10 among those without a learning disability[3].

'Health inequalities' describe the systematic, avoidable and, therefore, unfair differences in people's health status and experiences, either within or between different population groups. These differences may be related to certain characteristics such as ethnicity, sexual orientation, socioeconomic factors (like household income), educational attainment, geographical factors (such as the difference between urban and rural areas) or social exclusion (such as people experiencing homelessness). Enabling everyone to achieve the best health and wellbeing is a question of social justice—keeping our communities well allows all of us to enjoy a better quality of life.

For us to start addressing inequalities, we need to better understand the local population's health needs. While public health information is routinely published for local government, for example, the same data does not exist for hospital populations. In large urban areas, including London, there are multiple hospitals, local boroughs, primary care providers and networks and integrated care systems which, coupled with a highly mobile population, have historically made understanding what constitutes a hospital's local population difficult. Simply describing the attending population misses those who cannot access services, do so elsewhere or are currently well. However, being able to determine and describe the population served by a hospital trust is essential if we want to understand local health and wellbeing status.

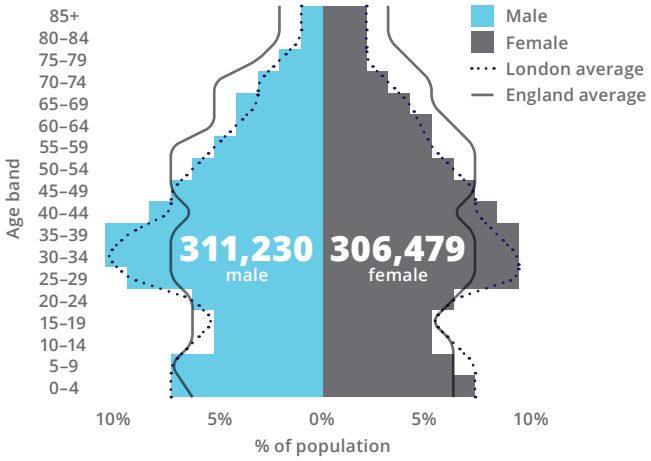
Based on an innovative population model—developed with colleagues from Imperial College London and supported by The Health Foundation—we have been able to estimate a core catchment area for Chelsea and Westminster Hospital NHS Foundation Trust (the Trust). The catchment model describes the geographic region from which people are likely to attend the Trust if they need hospital care such as accident and emergency (A&E), maternity or joint replacement services. Defining our local population like this allows us to describe its size, geo-spatial reach and basic demographic, social and health profile.

We believe this may be the first health profile created for an NHS trust in England. It starts to tell the story about the community we serve and, in particular, helps shine a light on potential priority areas for improving the health and wellbeing of our local population, including access to services, health outcomes and employment. Although this is a snapshot view and by no means exhaustive, we intend for this profile to spark conversations and stimulate meaningful change that contributes to our community living longer, healthier lives.

Demographic profile

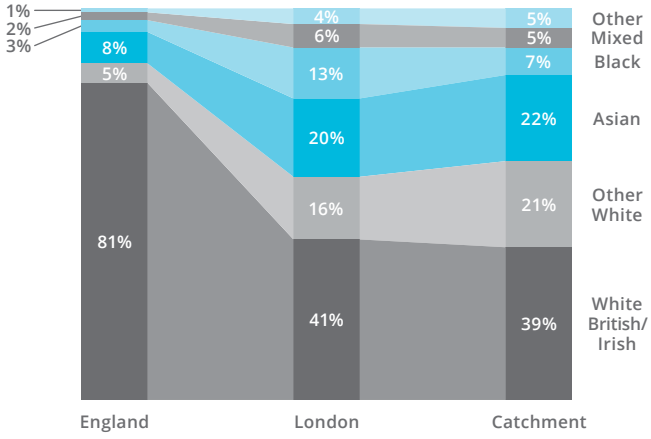
Using national population projections and other open-access data sources, we have been able to estimate an overarching demographic profile of the population that lives within our catchment area.

Age and gender structure



Compared to England, our local population has a younger structure. There is a significant 'bulge' in the proportion of particularly younger working adults, as well a greater proportion of children under the age of 10 years. Around 69% of our local population are of working age (15–64 years). This equates to a total dependency ratio of 449 per 1,000—this means, for every 1,000 adults of working age, there are 449 children or older adults who are financially dependent. This compares to a dependency ratio of 538 per 1,000 across England, primarily driven by the larger proportion of adults over the age of 65 years.

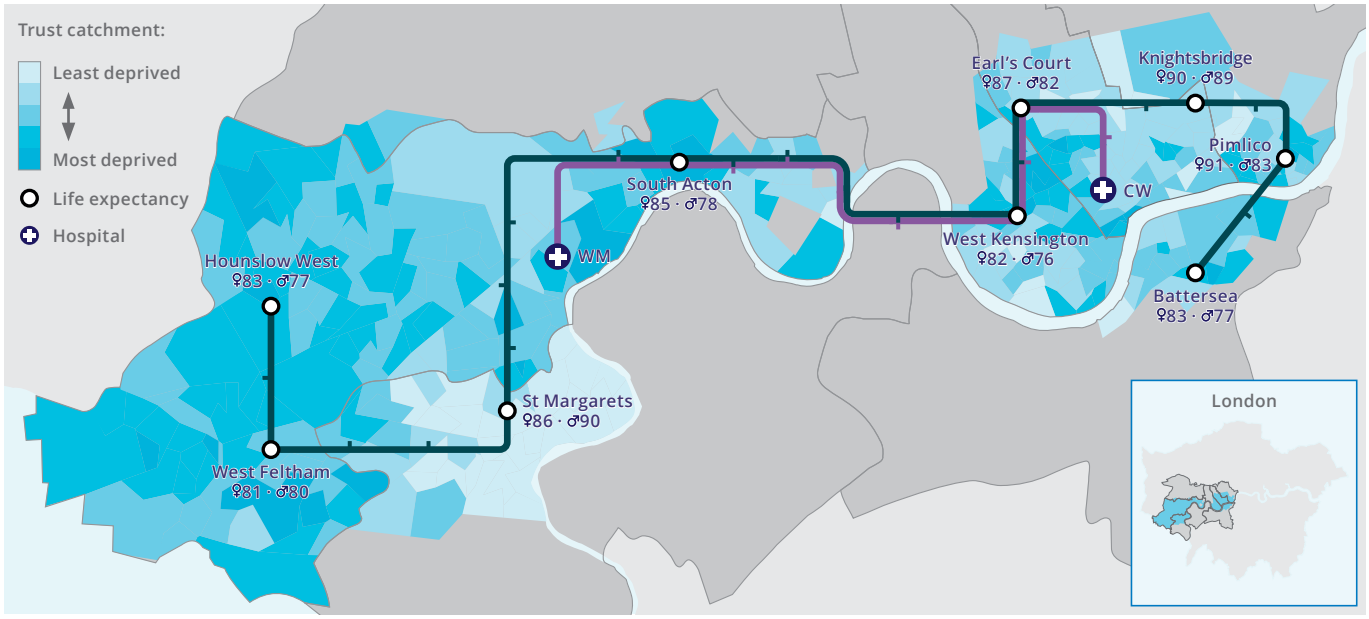
Ethnicity structure



Compared to London, our local population has a slightly smaller proportion of residents from Black Asian and Minority Ethnic (BAME) backgrounds at 40% compared to 44% across London. However, there is a markedly higher proportion of residents of Other White backgrounds—around 1 in 5 of local residents, compared to 1 in 6 across London. In contrast, England as a whole has a much less ethnically diverse profile, with more than 4 in 5 of the population reporting as White British or Irish.

Life expectancy and deprivation

Life expectancy describes the number of years someone can expect to live, and deprivation describes the social and economic status of an area[4]. These two indicators are often linked—life expectancy tends to be lower in more deprived areas. Areas with higher levels of deprivation also experience poorer health outcomes. Travelling across our local community reveals significant differences in levels of both deprivation and life expectancy.

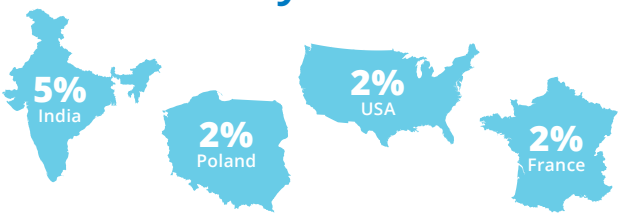


Deprivation across our local community varies significantly—areas of higher (darker) and lower (lighter) deprivation are dispersed throughout, with **3 in 50** people living in one of the 20% most deprived areas in England. Women living in parts of West Feltham die **10 years earlier** than women living in parts of Pimlico[5]. Men living in parts of West Kensington live **14 fewer years** than men living in parts of St Margarets[6]. Healthy life expectancy is the number of years someone can expect to live in good health. In the most deprived areas, women live **21 fewer years**[7] and men live **22 fewer years** in good health than those in the most affluent areas[8].

Ethnicity

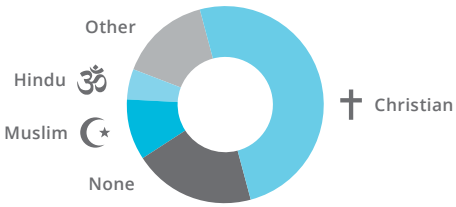
2 in 5 people identify as Black, Asian and Minority Ethnic (BAME) and **1 in 5** identify as being from a White background other than British or Irish

Country of birth



2 in 5 people were born outside the UK or Ireland[9]—the most commonly reported countries of birth include India (**1 in 20**), Poland (**1 in 50**), USA (**1 in 50**) and France (**1 in 50**)

Religion



1 in 2 people identify as Christian, **1 in 10** people identify as Muslim, **1 in 20** people identify as Hindu[10] and **1 in 5** people report having no religion

Language

87+
languages spoken

1 in 4 do not speak English as a first language[11]

18.5k
do not speak English well or at all[12]

French, Polish and Punjabi are spoken by more than **10,000 people** each—but many languages have fewer than **1,000 speakers**

Early years and childhood

Inequalities experienced from conception and into childhood can have lifelong implications, both on physical wellbeing and developmental and educational outcomes—taking action at this stage can impact on health and wellbeing throughout the life course, accruing greater benefits over time than those delivered at a later stage in life

Vaccination

1 in 4 children have not received 2 doses of the MMR vaccine by the time they are five years old—that's about 2,000 five-year-olds. MMR uptake rates are markedly lower than the national average (86%).

Certain religious communities, traveller populations and migrants are known to be more likely to have lower immunisation rates than the general population[13]. There is no clear relationship between deprivation and MMR uptake either locally or nationally.

Obesity

35% of children are overweight or obese by the time they reach their final year of primary school (10- to 11-years-olds)—about 4,500 children. This compares to 38% of children across London, and 34% across England.

Carrying excess weight is more common among boys and those from Black, Asian and Other ethnicities. Children living in the most deprived parts of the country are almost twice as likely to be obese than those in the most affluent parts[14].

School meals

About **15% of school age children take up free school meals (FSM)**, though a similar proportion may be eligible but not taking up this offer. This uptake rate is similar to the London rate (16%) and higher than the England average (14%).

FSM-eligible pupils are more likely to be from low-income families, though not all children in poverty are eligible for FSMs. Eligible children make less academic progress than non-eligible children[15], but evidence regarding the impact of FSM-uptake on attainment is mixed[16].

Tooth decay

Tooth decay is almost entirely preventable but **nearly 1 in 3 (28%) five-year-olds have signs of visible tooth decay**, compared to just under a quarter of children across England.

Children from Asian or Other ethnic backgrounds experience higher rates of decay[17]. Those from more deprived groups are more likely to have poorer dental health and to be hospitalised for dental health problems[18].

Development

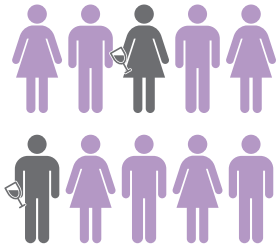
About 1 in 4 five-year-olds have not reached the expected level of development by the end of their first school year. This is lower than the England average (28%). Achieving 'school readiness' has a marked effect on a child's ability to maximise their learning opportunities, achieve good school grades and eventually secure better employment opportunities[19].

There is a clear association between decreasing rates of school readiness and increasing deprivation[20], with lower rates of school readiness also being seen among children with a first language other than English and those of Asian, Black and Other ethnicities.

Health behaviours

Unhealthy behaviours, including smoking, excess alcohol consumption or physical inactivity, tend to be more common in certain populations, and the negative impacts of these behaviours are often also more pronounced within particular groups—this can also be linked to differences in people's perception of risk and attitudes towards health, which can vary by age, gender, ethnicity, deprivation and other factors

Alcohol



We estimate 80,000 residents, equating to about **1 in 5 adults, may be drinking at levels considered to be harmful or hazardous to health.** Although there is no safe level of alcohol consumption, the Chief Medical Officer (CMO) recommends men and women do not drink more than 14 units of alcohol per week[21].

Men and older adults are more likely to drink above recommended levels[22]. It is estimated that 3 in 10 hospital inpatients drink more than 14 units weekly, a 50% higher prevalence than the general population[23]. While people in more affluent areas are more likely to drink in excess[24] or binge drink[25] than those in more deprived areas, the latter group is more likely to have an alcohol-related hospital admission or to die from an alcohol-related cause[26].

Smoking

60,000 (12%) of adults are current smokers. This is slightly lower than London (13%) and England (14%) averages. Smoking rates may be as high as 16% in the most deprived parts of our community, and as low as 10.5% in the most affluent areas.

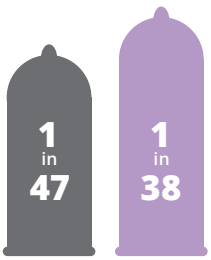
A third of all cigarettes smoked are by people with a mental health problem[27]. About 1 in 4 patients in hospital beds are smokers. Smokers see their GP 35% more than non-smokers[28]. People of White and Mixed ethnicities, those identifying as gay, lesbian or bisexual, and deprived groups are more likely to smoke[29].

Physical activity

1 in 5 adults are physically inactive, meaning they do less than 30 minutes of moderate intensity activity each week. This is similar to London and England levels. The CMO recommends that adults are moderately physically active for at least 150 minutes each week[30].

Physical inactivity is more common among people from Asian, Black and Other ethnic groups, those with disabilities, older adults and those living in more deprived areas[31]. Not meeting recommended levels of physical activity can contribute to increased risk of a range of long-term physical and mental health conditions[32].

Sexual health



The chlamydia diagnosis rate is 2,140 for every 100,000—or 1 in 47—15 to 25 year olds. This is lower than the London rate of 2,610 per 100,000—or 1 in 38. Chlamydia often goes undetected, so higher detection rates are a positive sign of increased testing activity. In our catchment, around 1,440 young people are diagnosed with chlamydia each year.

Sexually transmitted infections, including chlamydia, are greatest among people from BAME groups, young heterosexuals, men who have sex with men[33] and people living in the most deprived areas[34]. Although chlamydia diagnosis rates are highest among young people, they are increasing year-on-year in over 25 year olds[35].

Long-term conditions

There are clear inequalities in relation to long-term conditions and, while age is often a key driver for these differences, gender, ethnicity and deprivation also play a significant role—many long-term conditions can be prevented or delayed through lifestyle changes, while prognosis can be improved by early identification and effective management

Dementia

Around **3,300 people aged 65 or over are living with diagnosed dementia**. Across the catchment, around a third of dementia cases are believed to be undiagnosed.

Age is the biggest risk factor for dementia[36] but people from Black and South Asian ethnicities have up to four times greater prevalence[37], particularly due to increased risk of vascular dementia[38]. Behaviours that contribute to poorer cardiovascular health (eg smoking, physical inactivity) may also increase dementia risk[39].

Disability

Nearly 1 in 5 people are living with a disability. The most commonly reported disabilities are related to mobility, stamina, breathing, fatigue or dexterity.

People with disabilities are around 41% less likely to be in employment than those who do not consider themselves disabled[40]. Those with learning difficulties, mental illness, epilepsy and certain progressive illnesses are least likely to be in employment[41].

Mental health

Nearly **1 in 5 adults** are living with a common mental health disorder such as anxiety or depression.

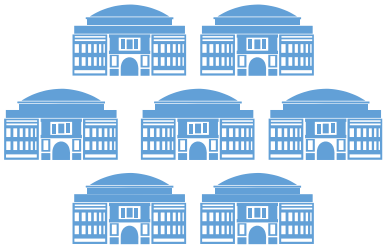
People living with severe mental illness have an average life expectancy 20 years shorter than the general population[42]. They have more than three times as many emergency hospital attendances and nearly five times as many unplanned admissions[43]. Those from the lowest 20% income bracket are up to three times more likely to develop mental health problems than those in the highest[44].

Bowel cancer

Just over 300 local residents are diagnosed with bowel cancer each year but **less than half of adults aged 60–74 years took up the offer of screening**. Early detection of bowel cancer can more than double the chance of someone surviving for at least one year after diagnosis.

Uptake of bowel cancer screening is lower among men, in ethnically diverse communities and deprived populations[45]. Survival rates are better in the most affluent groups[46]. About half of cases are avoidable, being strongly linked to a range of lifestyle factors, particularly diet.

Diabetes



There are more than **36,000 people aged 16 or over living with diagnosed and undiagnosed diabetes**—enough to fill the Royal Albert Hall 7 times. About 90% of diabetes cases are type 2 diabetes[47], which is strongly associated with obesity, poor diet and physical inactivity.

Type 2 diabetes is 60% more common in those living in the most deprived compared to the least deprived areas[48]. People of South Asian and Black ethnicities are two to four times more likely to develop the disease than White people[49].

Wider determinants of health

The wider determinants of health are social, economic and environmental factors which shape the way people live throughout the course of life—the impact of wider determinants on health is more significant than that of healthcare, genetics or behaviours, and addressing the impact of the wider determinants is therefore a fundamental part of addressing health inequalities

Air quality

Air pollution contributes to the equivalent of 211 deaths locally each year and nearly **40% of playgrounds and parks**[50] **(2 in 5) exceed the maximum average nitrogen dioxide (NO_2) limit**[51], almost two thirds more than the London average (26%). Both our hospitals are located in areas where air pollution exceeds recommended limits[52]. The NHS is responsible for 6% of all carbon emissions and 5% of total air pollution across England[53].

Average NO_2 levels in children's playgrounds increase proportionally with deprivation in the surrounding area[54]. Groups particularly affected by air pollution include low income communities, older people, children, pregnant women and those with existing respiratory or cardiovascular illness[55].

Income

Nearly 1 in 7 children and young people (14%)[a] **live in low income households**. This compares to 17% across England and 19% across London.

Lone parent homes are at greater risk of living in low income households, compared to two parent homes[56]. Children of Bangladeshi and Pakistani ethnicity are most likely to live in low income households, while children of Indian ethnicity are least likely to do so[57].

Overcrowding

Nearly 1 in 10 households is estimated to be overcrowded[b]. This is slightly lower than the London average (12%) but more than double the average across England (5%). Living in overcrowded conditions is linked to respiratory problems[58], depression, anxiety and stress, and a greater risk of accidents around the home[59].

People from BAME backgrounds are more likely to be living in overcrowded accommodation than those from White backgrounds[60]. More deprived households are also more likely to be overcrowded[61].

Fuel poverty

Nearly 30,000 (1 in 9) households are in fuel poverty, meaning they do not have the financial resources to adequately heat their home. This is equal to 11% of households in our catchment, a similar rate to that seen across England. Cold, poorly insulated homes pose a risk to health, particularly in terms of circulatory and respiratory disease and mental ill-health[62].

Older people, those on low incomes, and households with children under 16 or individuals with disabilities or other long term illnesses are more likely to experience fuel poverty, with people living in private rented accommodation and those from BAME groups also being disproportionately affected[63].

a under 16 years of age

b homes are deemed overcrowded if they do not have enough bedrooms, according to the households size and composition

Improving population health

Our approach to addressing health inequalities

Case studies

There are many things we are doing at the Trust to reduce health inequalities and improve population health, including:

- **Alcohol harm reduction strategy:** Our plan for working with local commissioners and alcohol services to reduce harm from alcohol in our local community, through better support for individuals and families, staff training and use of data.
- **Antenatal smoking cessation:** Innovative multidisciplinary team collaboration, providing families with flexible support to achieve smoke-free pregnancies and homes.
- **Dental health programme:** Delivering health improvement advice and support for children, pregnant women and older adults receiving care at the Trust.
- **'You Are Not Alone':** Proactively supporting Trust staff who are living with domestic abuse to disclose this and access holistic advice and support.
- **Perinatal positivity:** Promoting perinatal mental health and wellbeing for parents-to-be.
- **Food parcels during coronavirus:** A pilot project to improve food security for discharged patients during self-isolation, or while social-distancing measures are in place.
- **Future public health leaders:** Developing the next generation of leaders through hosting public health innovation and improvement fellowships, and acting as a healthcare public health training location for senior registrars.
- **Public health improvement research:** Working with the regional applied research collaboration to understand how best practice can be implemented and evaluated to improve quality and outcomes in health and social care.
- **Rapid access infant feeding team:** Reducing avoidable emergency hospital visits and admissions through midwifery-led rapid access reviews for babies with excessive weight loss or jaundice.
- **Supportive signposting for proactive prevention:** A central hub that accepts self-referrals and links clients to relevant early help services to prevent safeguarding issues from escalating, and help reduce health and social inequalities.

Next steps

Despite health outcomes being predominantly driven by wider determinants of health, taking a population health approach presents many opportunities for the Trust, including new ways of thinking about health service design and delivery.

Hospitals such as ours are rooted in the community. Through our size and scale we have a unique opportunity to increase the contribution we make to our local population's health. This could be through providing good and equitable hospital care, by helping keep people well through health promotion advice, offering local employment, or reducing our environmental footprint, to name just a few examples.

If we want to reduce unfair differences in health outcomes, we need to not only provide the right interventions or initiatives, but to carefully target these resources towards those in the population with the greatest need. Only in this way we can 'level-up' health outcomes to make them equal within and across population groups.

This work needs a collective effort. We need colleagues from across the hospital, local community groups, NHS, government, employers, third sector and residents to come together to work with us. We want to hear your views and suggestions about how we can contribute to improved population health for our local community, and find out more about all the good work that is already happening.

Please do get in touch and become part of the story by emailing publichealthcwft@chelwest.nhs.uk.

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