MERTON COUNCIL

Tackling health inequalities – progress in closing the gap within Merton

Annual Public Health Report 2018

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Foreword

Dr Dagmar Zeuner, Director of Public Health

I am delighted to present my independent annual report on the health of the population of Merton, in fulfilment of my statutory duty as Director of Public Health.

This report addresses one of the central public health issues – tackling health inequalities, and specifically, progress in closing the gap within Merton.

The aim was to measure progress in closing the gap of inequalities in Merton but analysis of the available data showed this was not straight forward. This report therefore seeks to clarify meaning, definitions and measures of health inequalities. It provides analyses of trends over time, proposes measures to monitor future progress and summarises evidence of what works to reduce inequalities, as a resource for Councillors, officers and partners.

The findings confirm that inequalities in Merton are persistent, complex and difficult to shift and we need to actively and systematically target them, working with all our partners to make an impact. The data provides a clear basis of our new Health and Wellbeing Strategy and can provide a wider reference and resource to support our joint efforts to tackle inequalities helping us to measure our continuing efforts in closing the gap

I am grateful to my team and many colleagues from the Council, Merton Clinical Commissioning Group and other organisations for their support and contributions. These efforts are much appreciated – on top of everybody's busy daily work – and result in a more informed and collaborative output. We are keen to make our annual report as useful for partners as possible. Please email **public.health@merton.gov.uk** with any feedback you might have.

Councillor Tobin Byers, Cabinet Member for Adult Social Care and Health & Chair of Merton Health and Wellbeing Board

As the Cabinet Member responsible for public health I commend this annual report of our Director of Public Health.

Tackling inequalities, 'bridging the gap' between the east and west of Merton, is at the heart of what we do as a Council and addressing health inequalities is a major part of this and a core aim of Merton Health and Wellbeing Board.

As resources tighten it is especially important to understand where health inequalities exist, to measure progress in narrowing the 'gap' and identifying what works in trying to tackle inequalities. Some progress is evident and this report is helpful in highlighting the issues involved in effectively measuring change. However, the continuing gap in life expectancy between the most and least deprived areas of 6.2 years for men and a gap for healthy life expectancy of 9 year demonstrate that inequalities in Merton remain intransigent. Action needs to be taken across the whole life course so that all Merton residents can start well, live well and age well.

Merton Health and Wellbeing Strategy, which we are refreshing from 2019, will form a core part of our work to reduce health inequalities. This report provides a sound evidence base for the strategy. The data will help inform, not only our policies, but also the type of indicators we use to measure how effective our work is in future.

The solutions are multiple and wide-ranging and the only way to face the challenge of health inequalities head on, is for us to work in partnership for, and with, the communities and residents of Merton.

Dr Andrew Murray, Chair of Merton Clinical Commissioning Group

As the Chair of Merton Clinical Commissioning Group and a local GP, I see first hand the consequences of health inequalities and know that we need to work together to address the discrepancy between some of our communities in Merton.

The NHS has an important role to play and we must work collaboratively with communities and partners across Merton to co-create sustainable preventative solutions. Our work to develop a new model of health and wellbeing in the east of the borough around the Wilson is a key focus of this and we hope this will have a direct impact on health inequalities across Merton.

I commend the publication of this annual public health report. It is a useful resource and provides a strong focus on the role we can all play in tackling this challenge.

Executive summary

Context

This Annual Public Health Report (APHR) looks at health inequalities in Merton – the current picture and progress in closing the gap. This topic was selected for a number of reasons:

- It is a longstanding aim of the Merton Partnership to 'bridge the gap' between the east and west of the borough, addressing the disadvantage that some communities face;
- Our Public Sector Equality Duty obligations under the Equality Act 2010 mean that we need to pay due regard to equality and inclusion issues in all our decision making. Analysis in this report aims to support the Council and partners to meet this duty;
- Closing the gap in health inequalities was the overarching aim of the Health and Wellbeing Strategy (HWBS) 2015-2018; and this analysis is therefore central to impact monitoring, and to informing the refresh of the HWBS 2019-2024;
- Analysis and recommendations from this APHR will also inform other strategic work underway in health and social care, including the development of the Local Health and Care Plan, the developing Merton Prevention Framework, and the development and evaluation of the East Merton model of health and wellbeing centred on the Wilson site;
- There is synergy with the continued focus on health inequalities in London, including the refresh of the Mayor's Health Inequality Strategy.

Purpose

The APHR 2018 aims to provide a reference for officers, partners and residents to understand what we mean by inequalities, specifically health inequalities but also the underlying drivers of differences in health outcomes between different groups – inequalities in the social determinants of health such as poverty, education and employment.

The purpose of the APHR 2018 is to inform a shared understanding of where we are now, how far we have come in bridging the gap between the most and least deprived using some key indicators, and how we might best approach and monitor health inequalities in future.

The APHR 2018 is split into the following sections:

- Part 1 gives an overview of what we mean by inequalities, specifically health inequalities; how we measure them; and what we know works to tackle them;
- Part 2 outlines what we know about health inequalities in Merton over time (using a selection of health-specific indicators and others that represent the social determinants of health), and describes the methodology used to analyse the inequality gap.
- Part 3 concludes with a summary of what we can learn from this piece of work to take forward into the HWBS refresh and other strategic work.

The APHR 2018 is complemented by a *Supplementary Data Report* with additional analysis.

Summary of key findings

This APHR on Health Inequalities has investigated some of the key inequality gaps between the most and least deprived communities in Merton that impact on health outcomes. It casts new light and produces clear evidence to show a sustained gap in health and wellbeing across communities in Merton and provides robust data, on which our plans and policies can build, to address these inequalities.

- We know that there are inequalities between the east and the west of the borough, but this is the first time that we have looked systematically at the scale and trend in inequalities in Merton over time. This process has shown that it is more complex to monitor health inequalities than it first appears, and has been very useful to identify an approach that will help us to effectively track inequalities going forward.

- APHR analysis shows that inequalities are evident in every indicator we studied, the vast majority of which show a worse picture in the most deprived areas, as we would expect. Recent supplementary analysis from Public Health England (PHE)[1] reveals that the top three health indicators most strongly associated with deprivation locally are emergency hospital admissions; childhood obesity; and hospital stays for alcohol-related harm.

- These cumulative inequalities – which are evident throughout different life stages and in the environment within which our residents live – contribute to the overarching inequalities in health outcomes that we see in the significant differences in life expectancy of around 6.2 years for men and 3.4 years for women between the most and least deprived areas.[2] Inequalities in *healthy* life expectancy are even starker, with a difference of more than 9 years of healthy life between most and least deprived areas.

- In terms of trend in inequalities in Merton, the picture is mixed. There are some success stories, for instance the reducing gap between the most and least deprived areas in life expectancy for women, in School Readiness, and in the proportion of the economically active population claiming jobseeker's allowance (JSA), and the apparent reduction in the Child Poverty gap. However, the majority of indicators either show the inequality gap to be stable over time, to be increasing, or to be reducing for the 'wrong' reasons (for instance because the situation for those in more affluent areas appears to be worsening whilst that for those in the more deprived areas remains stable, narrowing the gap). It is evident from this analysis that inequalities in Merton are intransigent, and we need to keep them under review over a longer time frame.

The data gathered and analysis undertaken here will help inform the Merton HWBS which is being refreshed for 2019. This work represents the opportunity to act to address the identified inequalities by focusing on early intervention and a Health in All Policies approach.

As the analysis confirms that health inequalities are persistent, complex and difficult to shift, in order to make any progress, we have to actively and systematically target them through a long-term multi-sectoral approach across all partners; if we take our eye off the ball, health inequalities are likely to increase. Therefore we need to continuously monitor progress and review our approach over time.

[1] PHE Health Inequalities Briefing for Merton, March 2018 (relevant findings included in this APHR)

[2] These figures are from the national 'Slope Index of Inequality' indicator which looks at inequalities in life expectancy at birth between the 10% most and 10% least deprived areas in a borough. Readers may be aware that these are different figures for the gap in life expectancy than previously reported, for instance through the JSNA 2013/14 which gave a figure of 9 years for men and 13 years for women. See Box 3 in Chapter 1 of this report for an explanation of the changes to the data, trend and methodology behind the figures, and why we recommend the use of this Slope Index going forward, as the headline life expectancy indicator.

Recommendations for tackling health inequalities in Merton

A. Recommendations for tackling health inequalities in Merton

- We have Public Sector Equality Duty obligations under the Equality Act 2010, which means that we need to pay due regard to equality and inclusion issues in all of our decision making. The analysis in this APHR suggests that in order to make progress on closing the inequality gap in Merton, we need to actively and systematically target inequalities through a long-term multi-sectoral approach across all partners. This action should be based on detailed understanding of our population need, as set out in the Joint Strategic Needs Assessment (JSNA), and grounded in evidence of what works (discussed in more detail in Part 1).

- Whilst recognising the role of personal prevention approaches to improve health (e.g. support for individuals to stop smoking), the evidence shows that we need to rebalance our efforts towards population level prevention, recognising both the increased cost-effectiveness of interventions at population level compared to personal level interventions, and the evidence of increased impact on health inequalities.

- In order to reduce the steepness of the social gradient in health outcomes, the evidence shows that a 'proportionate universalism' approach should be adopted, meaning that population-wide action is vital, but that universal interventions should be undertaken with a scale and intensity that is proportionate to the level of disadvantage. Action needs to be taken across the whole life course so that all Merton residents can start well, live well and age well.

- In order to be effective, the evidence shows that approaches must be underpinned by participatory decision-making and co-design, empowering individuals and communities.

- The Health and Wellbeing Strategy to be refreshed from 2019 will form a core strand of Merton's strategy to reduce inequalities and will seek to address the health inequalities issues identified in this report through the approaches outlined above.

B. Recommendations for monitoring health inequalities in Merton

- The detailed analysis in this APHR will inform the suite of indicators for the HWBS from 2019. We want these indicators to be challenging, but also realistic and robust so that they give the Health and Wellbeing Board (HWBB) and partners a clear picture of how effectively we are working to tackle health inequalities. This will involve identifying indicators that can be scrutinised at sub-borough level to look at inequalities within Merton, and which enable tracking of change over time. The summary indicator table (Section 5) highlights some of the indicators we think would be most useful, including measures of inequalities in life expectancy, deprivation, education, employment (taking into account the changes to benefits with the introduction of Universal Credit by 2020), and a selection of key healthy lifestyle and disease indicators for children and adults.

- We need to be realistic about timescales in which we can expect changes to the inequality gaps in Merton to occur: different types of interventions will take different amounts of time to demonstrate impact. When setting targets, we therefore need to be explicit about the timescales within which we would expect to see changes to different metrics, and that these timeframes are likely to sit outside any local and national political cycles, requiring coordinated action over time. This is discussed in more detail in Part 1.

- Because some of the longer term health outcomes will take time to address, when developing a set of indicators to monitor progress through strategies such as the HWBS or the NHS's Local Health and Care Plan (covering 3-5 year time periods), it will be important to consider an underpinning logic model or theory of change, in order to choose shorter term 'proxy' measures that can help to suggest if change is occurring in the right direction. This is discussed in more detail in Part 3.

- A standardised methodology should be used across Merton to be able to effectively monitor inequalities and progress towards closing the gap, and we recommend that the methodology set out in this report (Section 2.2) is adopted across the Merton Partnership.

- Although this APHR has focused on place-based deprivation-linked inequality (using most/least deprived wards, or East/West gap), this is not the only way in which data should be broken down to look at inequalities: where possible it is important to look at inequalities by age, sex, ethnicity and other protected characteristics.

- It is important to measure inequalities in a standardised way, but this report highlights some important limitations in the data available which make measurement of inequalities challenging. In particular, many nationally available health and wellbeing indicators are only available at borough not ward level which does not enable analysis of sub-borough health inequalities, do not have timely data available, or lack historic data which means that we cannot analyse the trend in inequalities over time. Given this, Merton Public Health will feed back to PHE about the availability of sub-borough indicator data in easy to use formats, to inform their ongoing support to local authority public health teams. We will also respond to the government's consultation on Universal Credit metrics, to ensure data supports monitoring of inequalities over time.

Introduction and Context

The first priority of the Merton Partnership Community Plan is working to bridge the gap between the east and west of the borough and between different communities.

This Annual Public Health Report (APHR) aims to provide a reference for officers, partners and residents to understand what we mean by inequalities, specifically health inequalities but also the underlying drivers of differences in health outcomes between different groups – inequalities in the social determinants of health such as poverty, education and employment.

It aims to inform a shared understanding of where we are now, how far we have come in bridging the gap between the most and the least deprived areas in Merton for some key indicators, and how we might best approach and monitor health inequalities going forward.

It is a statutory duty for the Health and Wellbeing Board to produce a joint Health and Wellbeing Strategy (HWBS), based on the Joint Strategic Needs Assessment. The current Merton Health and Wellbeing Strategy 2015-2018 is coming to an end, and one aim of this APHR is explicitly to help inform the choice of indicators for the development of the Health and Wellbeing Strategy refresh from 2019.

This report is split into the following sections:

Part 1	Gives an overview of what we mean by inequalities, how we measure them, and what we know works to tackle them.
Part 2	Looks at what we know about health inequalities in Merton now and over time, and describes the methodology used to conduct inequality gap analysis, and uses some key indicators to give an indication of the complex picture.
Part 3	Discusses what we can learn from this piece of work to take forward into the HWBS refresh and other strategic work such as the Local Health and Care Plan.

1 Part 1: What do we know about health inequalities?

1.1. What do we mean by 'health inequalities'?

Health inequalities are unfair and avoidable differences in health status or the distribution of health determinants between different groups of people or communities.[3, 4] Inequalities in health are driven by inequalities in society – "the conditions in which people are born, grow, live, work, and age."[5]

Therefore this report looks at both health inequalities themselves (such as differences in life expectancy between the most and least deprived areas in Merton), as well as at inequalities in these broader determinants of health, such as poverty, education and employment.

There are many aspects of inequality that could be analysed, for instance by age, sex, ethnicity or other protected characteristics, but in this report we focus on comparing geographic inequalities (between the East and the West of the borough) and/or socioeconomic inequalities (between the most and least deprived areas). In Merton, there is significant correlation between socioeconomic inequalities and geography, with the east of the borough being more deprived than the more affluent west.

In 2008, Professor Sir Michael Marmot chaired an independent national review to propose the most **effective evidence-based strategies for reducing health inequalities** in England. The resulting report, 'Fair Society Healthy Lives' (2010) concluded that:

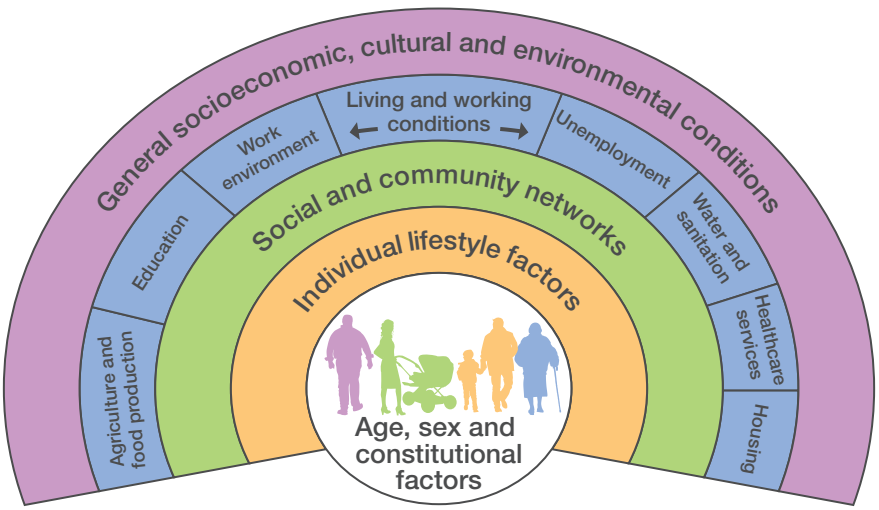
- **Health inequalities result from social inequalities –** the 'causes of the causes' or social determinants such as education, employment and living conditions. The result is a clear social gradient in health across society.
- This was demonstrated nationally by the **significant inequalities in life expectancy**, with those living in the poorest areas in England dying on average 7 years earlier than those in the richest areas at the time of the report.
- The more shocking finding was that **people in poorer areas not only die earlier but live more of their shorter lives in poor health** – on average living 17 years more of their lives with a disability than those in richer neighbourhoods (Figure 2 overleaf).

[3] World Health Organisation glossary http://www.who.int/hia/about/glos/en/index1.html

[4] PHE (2017) Reducing health inequalities: system, scale and sustainability

[5] Marmot Review (2010) Fair Society Healthy Lives

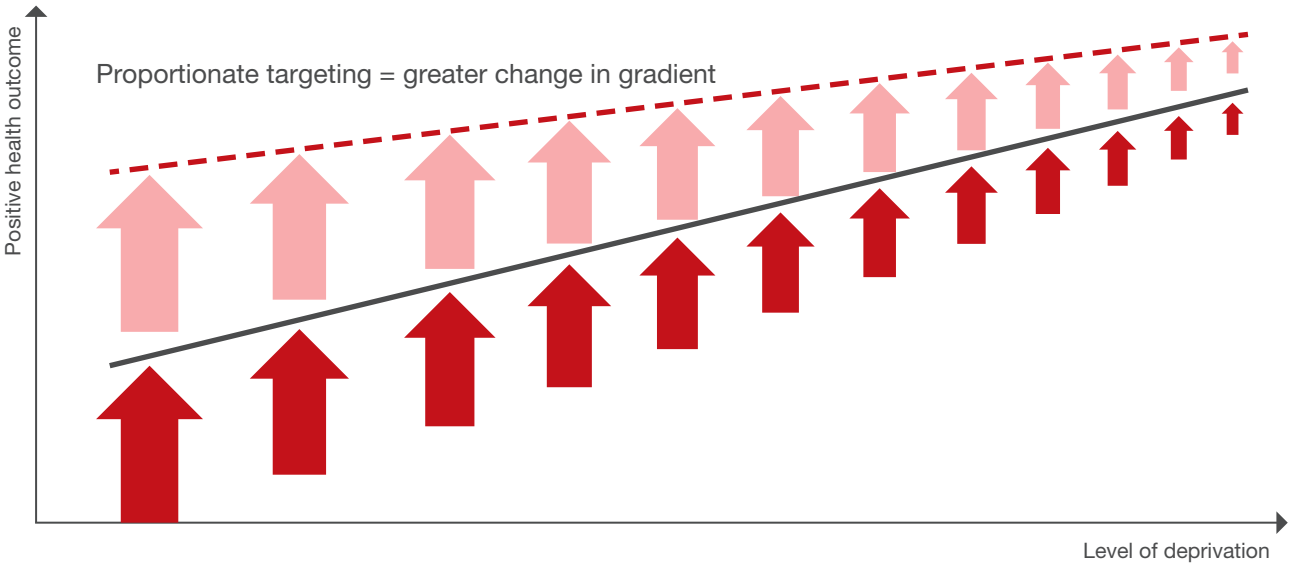
Figure 1: Dahlgren & Whitehead diagram: determinants of health and wellbeing



- However, the good news is that **health inequalities are not inevitable or immutable** – they can be prevented and rolled back, through coordinated action across all the social determinants of health, and across all sectors of society not just the most disadvantaged. This approach is called '**proportionate universalism**' – taking action **across the whole population** at sufficient scale and intensity to be universal but at the same time with effort **proportionately targeted** to particular groups in order to reduce the steepness of the social gradient in health inequalities over time (Figure 3).

Figure 2: Life expectancy and disability free life expectancy at birth, persons by neighbourhood income level, England 1999-2003 (Source: Fair Society, Healthy Lives, 2010)

Figure 3: Proportionate universalism: acting across the social spectrum to change the health outcomes and reduce inequalities (Source: UCL Institute of Health Equity)



- The evidence set out in the Marmot Review also suggests that in order to shift health inequalities, **action needs to be taken across the life course**, even starting pre-conception, taking into account the accumulation of positive and negative effects on health and wellbeing throughout an individual's life (Figure 4). Marmot's six priority areas for action are given in Appendix 3.

- Marmot concluded that **reducing health inequalities is vital to a productive economy**, and that there is significant cost of inaction. Specifically, the Marmot Review estimated that inequality in illness can lead to productivity losses of between £31-33 billion per year, as well as the cost of lost taxes and higher welfare payments.

The most recent national data from Public Health England shows that over the past 15 years, **both life expectancy and healthy life expectancy in England have increased**, with the general population on average living longer and spending more years in good health. However, life expectancy has increased by more years than healthy life expectancy and so the average number of years lived in poor health has also increased.[6] The data also shows that despite the long-term trend of improvement in life expectancy and other headline indicators, stark inequalities remain. There has been **little change in inequalities** in male life expectancy, male and female healthy life expectancy and premature cancer mortality between the most and least deprived tenth of areas. For female life expectancy, there has been a small widening of the gap between the most and least deprived areas.[7]

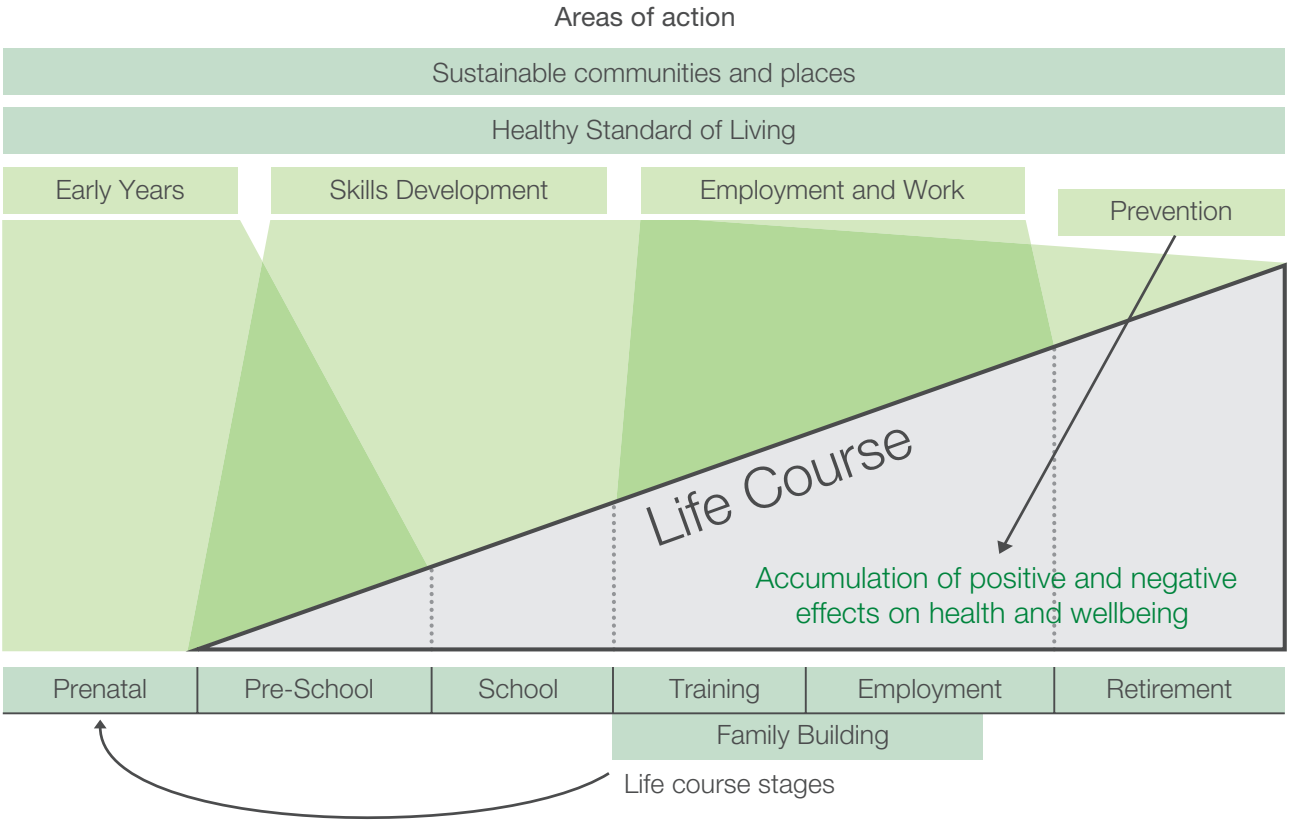
However, there is some evidence that a targeted and coordinated cross-government and NHS approach in some deprived areas **may be showing some impact** on inequalities.[8]

[6] PHE (2017) Health Profile for England https://www.gov.uk/government/publications/health-profile-for-england

[7] PHE (2017) Health Profile for England: Chapter 5 – inequality in health https://www.gov.uk/government/publications/health-profile-for-england/chapter-5-inequality-in-health#trends-in-health-inequality

[8] BMJ (2017) Investigating the impact of the English health inequalities strategy: time trend analysis http://www.bmj.com/content/358/bmj.j3310

Figure 4: 'Action across the life course' (Source: Fair Society, Healthy Lives, 2010)



1.2. How we measure and interpret inequalities

Absolute versus Relative inequality
We can measure either absolute or relative inequalities. Relative inequality looks at ratios, or *proportional* differences between groups (an example is the internationally used Gini co-efficient which looks at income inequality); absolute inequality reflects the *magnitude* of differences between groups. Both are useful measures, but when thinking about tracking health inequalities in Merton in this report, we have concentrated on looking at the absolute rather than the relative gap as it is easier to interpret.

In this report, we look at the absolute gap between the most and least deprived communities in Merton. The specific methodology used, and how the use of most/least deprived communities aligns with East/ West Merton, is set out in Section 2.2.

Box 1: Absolute vs. Relative inequality: an example

Consider someone in East Merton with an income of £10,000 compared to a West Merton resident with an income of £100,000. The *relative inequality* is 1:10 and does not change if these incomes both rise to £20,000 and £200,000 respectively (i.e. the ratio remains the same, 1:10). However, the *absolute* gain to the resident in West Merton of a doubling in salary is much larger than the gain to the resident in East Merton - £100,000 compared to £10,000, shown by the increase in the absolute inequality gap, from £90,000 to £180,000.

Interpreting changes in inequalities
We have to be careful when interpreting headline statistics, as an overall 'reduction' in inequality (for example, a narrowing of the absolute gap) may not be due to improved circumstances or outcomes for the most disadvantaged, but actually due to worsening or flat-lining outcomes in more affluent groups. This is demonstrated by a recent report from the Institute for Fiscal Studies on living standards which shows that the gap between the UK's richest and poorest households has narrowed since the 2007-08 recession, but that some of this narrowing has been driven by falls in the incomes of middle and top earning households, many of whom are employed in hardest hit financial and insurance sectors.[9] This apparent 'reduction in the inequality gap' is not a positive outcome, and would not be a good news story for Merton residents.

Inequalities may also appear to shift if there are significant population changes over time in an area. For instance, inward migration of more affluent groups with better health status into an area over time, e.g. as a result of new developments, or outward migration of more deprived groups with worse health status e.g. due to lack of affordable housing may appear to improve data on inequalities, but will not actually represent a real terms benefit for local residents. An understanding of the local population demographics and how they are changing over time is vital when interpreting changes to inequalities data.

It is also important to note that inequalities are often entrenched and will take time to shift, so we need to be planning for coordinated action beyond local and national political cycles.

What we want is for *everyone's* health and wellbeing to improve but that of the poorest to improve *fastest*. As the evidence set out by Marmot shows, the best way to do this is through a 'proportionate universalism' approach. This approach is supported by the National Institute for Health and Care Excellence (NICE): *"Tackling the social gradient in health requires a combination of both universal (population-wide) and targeted interventions that reflect the level of disadvantage and hence, the level of need."*[10]

[9] IFS (2017) Living standards, poverty & inequality in the UK https://www.ifs.org.uk/publications/9539

[10] NICE 2012 Health Inequalities and Population Health https://www.nice.org.uk/advice/lgb4/chapter/Introduction

1.3. What we know works to tackle health inequalities

So, to make sufficient progress at a population level on inequalities in health outcomes, such as inequalities in life expectancy and healthy life expectancy, the evidence tells us that sustainable and systematic action must be delivered at scale in the following ways:[11]

A. Intervening for population level impact
We know that in order to have an impact at population level, we need to take action at individual, community and population levels – separately, these are all important, but a combination of actions across these different levels will lead to greater impact. For example:

- *Individual level:* smoking cessation services delivered through primary care;
- *Community settings:* Health Champions and other peer support for healthy behaviours within community groups; health promoting environments and policies within schools, workplaces, high streets;
- *Population:* adopting a Health in All Policies approach across partners to influence the structural obstacles to good health, for example though healthy public policy (legislation, taxation, welfare etc) and a healthy urban environment.

This tiered approach in Merton underpins our developing 'Prevention Framework' (Figure 5).

At an individual level, there is evidence of the importance of the role that health and care services can play, in particular **primary care and community services**, in reducing inequalities, especially as people grow older with multiple morbidities.[12]

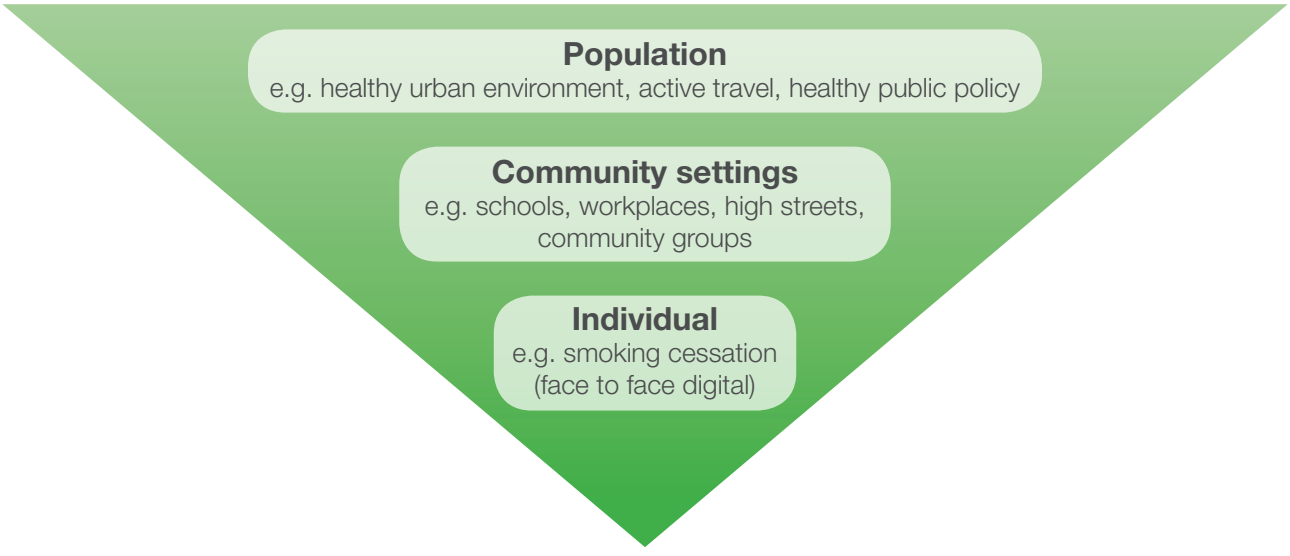
The evidence also shows that, whilst recognising the role of individual level approaches to improve health, it is important to **rebalance our efforts towards population level prevention** and efforts to address the social determinants of health, recognising both the increased cost-effectiveness of interventions at population level compared to personal level interventions, and the evidence of increased impact on health inequalities.[13]

[11] PHE (2017) Reducing health inequalities: system, scale and sustainability

[12] NHS Reducing health inequalities resources: https://www.england.nhs.uk/about/equality/equality-hub/resources/evidence/

[13] McDaid, D, Sassi, F & Merkur, S (2015) Promoting Health, Preventing Disease: The Economic Case. World Health Organisation: http://www.euro.who.int/__data/assets/pdf_file/0006/283695/Promoting-Health-Preventing-Disease-Economic-Case.pdf?ua=1

Figure 5: Merton Prevention Framework (Source: Merton Public Health)



We also know that we need to take a strategic and coordinated approach, with **interventions that are evidence-based, outcomes orientated, systematically applied, scaled up appropriately, appropriately resourced, and sustainable**.

In order to be effective, approaches must also be underpinned by effective participatory decision-making and co-design of interventions at local level, through **empowering individuals and local communities**.[14]

B. Intervening at different levels of risk
We know that there are different types of risk factors that drive poor health:

- Physiological risks e.g. high blood pressure, high cholesterol, chronic stress, depression;
- Behavioural risks e.g. smoking, poor diet, low physical activity, excess alcohol;
- Psychosocial risks e.g. loneliness, poor self-esteem, poor social networks;
- These risks are all influenced by wider risk conditions, or determinants of health, e.g. poverty, unemployment, poor educational attainment.

These four levels of risk are all interconnected. Therefore the evidence suggests that is important that **strategies to tackle health inequalities contain population-level actions across each of these levels of risk**, rather than solely individual level approaches, in order to create impact at a sufficient and sustainable scale.

[14] Marmot Review (2010) Fair Society Healthy Lives

C. Intervening for impact over time

We know that different types of interventions will take different amounts of time to demonstrate impact. For example, stopping smoking is likely to show impact over a short time period in terms of improved health and wellbeing for an individual (in addition to the longer term improvements to life expectancy and healthy life expectancy across a lifetime), whereas interventions to improve community green and built infrastructure – encouraging more people to walk and get active – are likely to take a decade or more for any impact on health to begin to become apparent. See Figure 6 for indicative timescales for different types of interventions.

Therefore **we need to be realistic about when we are likely to see any changes to different health outcome metrics**, depending on the type of intervention.

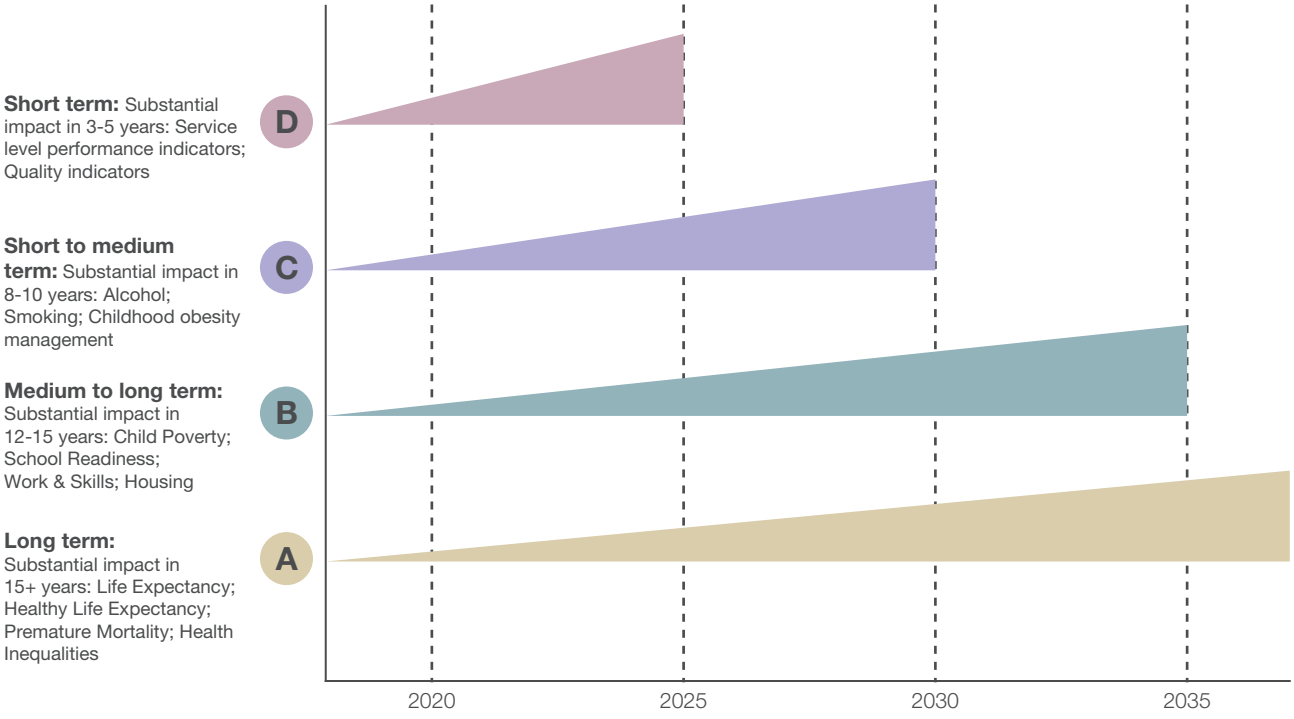
D. Intervening across the life course

We know that reducing health inequalities is most effective when we purposefully **tackle the wider determinants of health throughout the life course**, starting early in life (even before birth), ensuring every child has the best start in life, that children, young people and adults are able to maximise their capabilities and have control over their lives, and have access to fair employment and good work, within healthy and sustainable places and communities, all the way through to older age.[15] Marmot's six priority areas for action across the life course are set out in Appendix 3.

[15] Marmot Review (2010) Fair Society Healthy Lives

Figure 6: Time needed to deliver outcomes from different intervention types

(Source: adapted from PHE (2017) Reducing health inequalities: system, scale and sustainability, p11)



Different types of intervention will have different impacts over different time periods

In summary, what we know about health inequalities and how to tackle them:[16]

- Health inequalities are persistent, complex and difficult to shift.
- In order to make any progress, we have to actively and systematically target inequalities through a long-term multi-sectoral approach across all partners – including the NHS, Council, voluntary sector and the community – working at individual, community and population levels.
- We need to base our approach on evidence of what works to shift inequalities:
  - Intervening for population level impact, particularly given the increased cost-effectiveness of population level interventions compared to personal level interventions, and increased impact on health inequalities
  - Intervening at different levels of risk, including the importance of the role that NHS primary care and community services play in reducing inequalities;
  - Intervening for impact over time;
  - Intervening across the life course;
  - The importance of community empowerment.
- If we take our eye off the ball, health inequalities are likely to increase. Therefore we need to continuously monitor progress and review our approach over time.

See Appendix 1 for further reading and other useful tools for tackling health inequalities.

[16] Adapted from Kings Fund (2017) https://www.kingsfund.org.uk/blog/2017/08/reducing-inequalities-health-towards-brave-old-world

Part 2: Analysis of health inequalities in Merton

2.1. The Merton Story: overview of Merton as a place

Overall Merton is healthy, safe and has strong public and community assets. The health of people in Merton is generally better than the London and England average: life expectancy is higher than average and rates of death considered preventable are low. This is largely linked to the lower than average levels of deprivation in Merton. We have a range of public and community assets that are important to health; there are many green spaces, vibrant libraries, educational attainment is high, we have a wealth of small businesses and a strong Chamber of Commerce, as well as an active Voluntary and Community Sector and high levels of volunteering. We have good transport hubs, and a significant proportion of people who live in Merton also work in the borough.

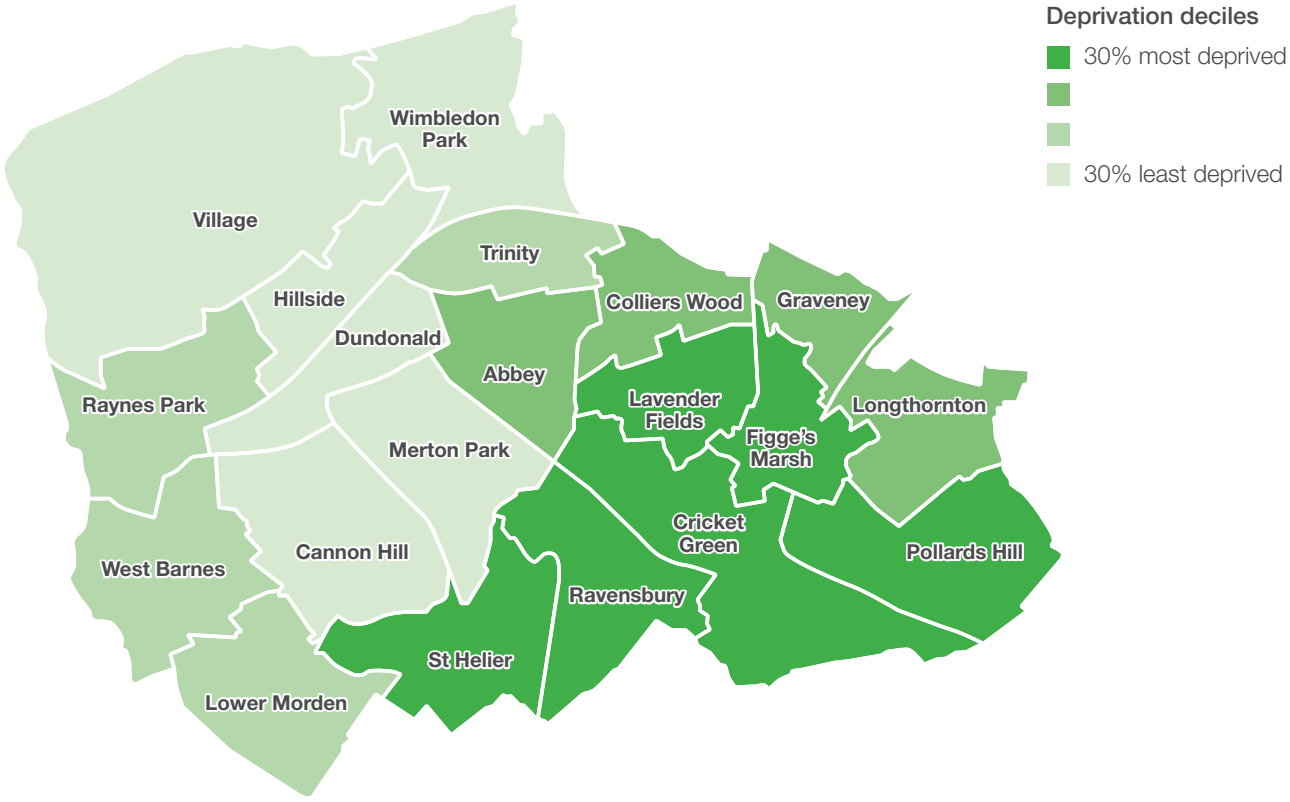
However, despite this positive picture, there are areas of concern. Significant social inequalities exist within the borough, and these are important drivers of poor health and wellbeing outcomes.

The Index of Multiple Deprivation (IMD) map (Figure 7) illustrates the contrast between the east and west of Merton: the darker the shading, the higher the level of deprivation. This shows that the most deprived areas are concentrated in the East of the borough, and the least deprived in the West.

The Merton Story 2018 is a summary of the Joint Strategic Needs Assessment and gives more detail of the distribution of risk and resilience factors for health and wellbeing in Merton, as well as the patterns of mortality and morbidity from disease.[17]

[17] See the Merton Story 2018: https://www2.merton.gov.uk/health-social-care/publichealth/jsna.htm

Figure 7: Index of Multiple Deprivation (IMD) 2015 for Merton Wards



2.2. Methodology for inequality 'gap analysis' used in this report

Inequality gap analysis: comparison of most and least deprived wards ('30/30')

This APHR on Health Inequalities uses a simple deprivation gap analysis to look at inequalities in Merton for a number of key indicators. Inequalities in health and the wider social determinants of health are often considered in terms of the gap between the most and least deprived groups of the population. Therefore, where possible in this report, the gap analysis carried out presents the difference between the averages of the 30% most and 30% least deprived wards in Merton based on the 2015 Index of Multiple Deprivation (IMD) deciles. Figure 8 below shows which wards fall into which category.

There are 20 wards in Merton, none of which fall into the IMD classification decile 1 or decile 2 (the most deprived). The 30% most deprived wards are classified in deciles 3 and 4, and the 30% least deprived wards are classified in deciles 9 and 10. The wards that are classified in deciles 3 and 4 are located in the east of the borough; similarly Merton wards in deciles 9 and 10 align with west Merton.

Gap analysis is useful in that it is a relatively easy concept to understand, and can be calculated easily without the need for statistical modelling. However, it is limited in that it only reflects the difference between the highest and lowest socioeconomic or deprived groups and can be potentially affected by extreme values within each of these groups.

This methodology was checked and agreed as valid by the Marmot team at the Institute of Health Equity at University College London.[18]

[18] Institute of Health Equity: http://www.instituteofhealthequity.org

Figure 8: Wards in Merton split by deprivation decile, based on the 2015 IMD deciles

Decile	Ward name	Locality
1	-	-
2	-	-
3	Cricket Green	East
4	Figge's Marsh	East
	Lavender Fields	East
	Pollards Hill	East
	Ravensbury	East
	St Helier	East
5	Longthornton	East
6	Colliers Wood	East
	Graveney	East
7	Abbey	East
8	Lower Morden	West
	Raynes Park	West
	Trinity	West
	West Barnes	West
9	Cannon Hill	West
	Dundonald	West
	Hillside	West
	Merton Park	West
	Wimbledon Park	West
10	Village	West

30% Most Deprived

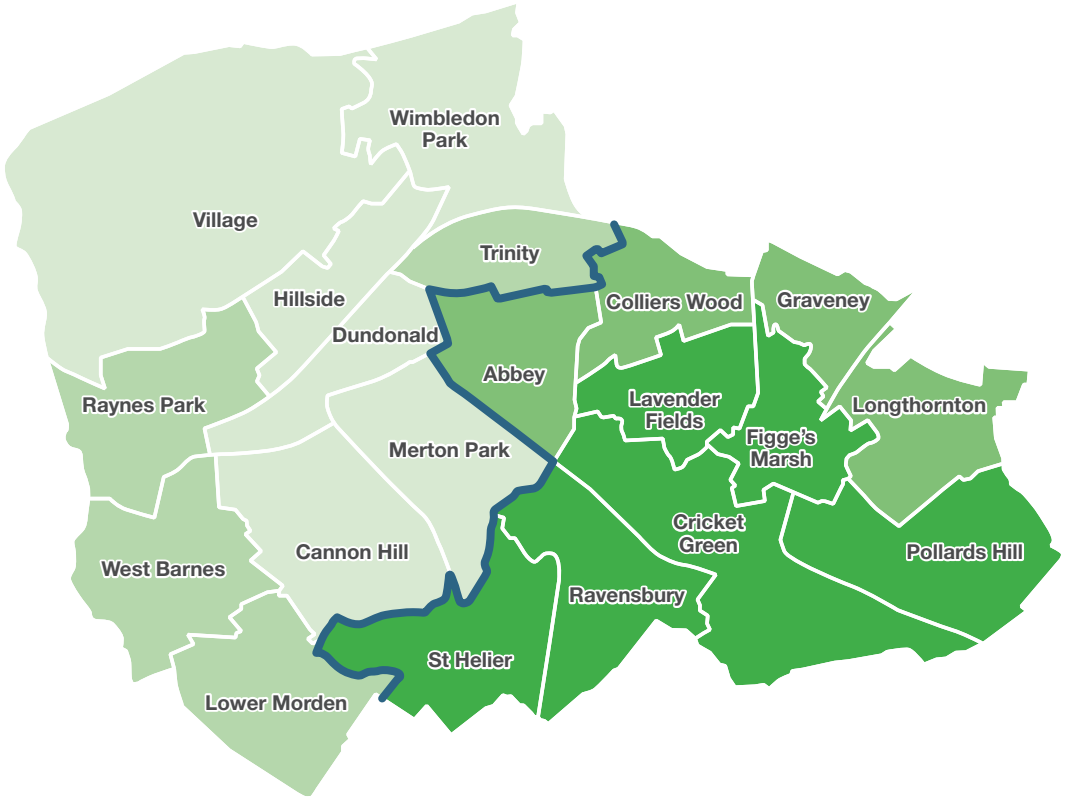
30% Least Deprived

Inequality gap analysis: comparison of East/ West wards ('E/W')
We were only able to calculate the gap between the most/least deprived for indicators where data was available by ward. For some indicators – particularly health related behaviours such as smoking, and morbidity data such as diabetes prevalence – local level data (and/or trend data) was only available by GP practice as it was based on GP-recorded interactions. In these cases, we have presented the results by East/West rather than most/least deprived. We make it clear for each indicator which analysis has been done, and why. See column 6 of the Summary Table of APHR Indicators in the Appendix.

The two methodologies do correlate relatively well, as a comparison of the map in Figure 7 with the map below (Figure 9) shows that the 6 wards in the east of the borough are in the 30% most deprived in England, in contrast with the west of the borough which had 6 wards in the 30% least deprived. The E/W methodology is likely to underestimate the size of the gap, as it includes GP-registered data aligned with all wards in East compared to all GP-registered data aligned with all wards in West Merton, not just those in the 30% most and 30% least deprived wards. As any East/West inequality gap is based on GP-registered data rather than the 'Merton resident' ward-based data used for the most/least deprived calculations, we cannot directly compare figures derived from the two different methodologies.

Other statistical calculations and comparisons
Where possible, we also calculated **Confidence Intervals** (see Appendix 4 Glossary for definitions), in order to gain some indication of whether the inequality gap was likely to be a statistically significant difference or was within the range of normal variation. In some instances, where we had some trend data but no very recent data, **Regression Analysis** was conducted, using the current trend data to project more recent missing data points. This enabled us to estimate the inequality gap should current trends continue. This is something that we can do more of, for the chosen indicators, to help us to determine targets for the HWBS.

Figure 9: Merton's East/West split used for gap analysis where only GP level data is available



As the purpose of this report was to look at inequalities within Merton, we have purposefully *not* compared the Merton inequality gap to the gaps found either in statistical comparator boroughs, neighbouring boroughs, London or England, in order to keep the analysis focused on Merton and understanding our local picture as a first step to coordinated action on inequalities. The only exception is the Slope Index of Inequality, as a single overarching statistical measure of inequality calculated centrally by Public Health England (PHE).

Challenges in data analysis

We faced a significant number of limitations and challenges with the data available, which has restricted the choice of indicators that we were able to analyse to look at inequality within Merton, particularly over time:

- **Lack of ward level data.** For some indicators which would have provided useful insight into health inequalities, there was no ward level data available, only borough level, so we could not look at the inequality gap within the borough. In some instances, where data was available by GP practice we were able to look at the East/West gap rather than the gap between the most/least deprived, as described above. GP practice data aligned to East/West is a useful proxy where ward level data is not available, but there are several caveats that need to be considered when interpreting this data, discussed in Box 2.

- **Limited trend data.** To calculate an accurate trend analysis requires at least 3 points of historic data (i.e. 2014/15, 2015/16, 2016/17), and ideally more. The more historic data points available, the more robust the analysis. For a significant number of indicators, where sub-borough data was available, it was only available for a single recent time point rather than for a number of points over time, and so trend analysis could not be undertaken. For a few other indicators, due to sample size (small numbers), the data at ward level had to be 'pooled' or grouped over a number of years in order to allow meaningful comparison at ward level. This then limited the number of time points that were available for trend analysis. For instance, data on alcohol-related harm was only available for two time points: 2010/11-2014/15 and 2011/12-2015/16, and so trend could not be accurately analysed.

- **Changes to indicator definitions.** Changes to indicator definitions over time restricted the ability to conduct trend analysis, as we would not be comparing 'like with like' and so trend over time could not be accurately analysed. This is the case with indicators such as the Index of Multiple

Box 2: Caveats when interpreting GP data (patients registered with a Merton GP)

GP Profile and/or Quality Outcomes Framework (QOF) data looks at the population of 'people registered with a Merton GP' rather than Merton residents. There will be a proportion of people registered with a GP (and therefore included in the data for that GP practice) who do not live near the GP practice, or even within the borough, for instance those registered with a GP near their work rather than home, or those who live near borough boundaries.

Additionally, compared to data collected in a standardised way across whole populations (e.g. the Census), GP recorded data relies firstly on an individual attending their GP, and then on GP diagnosis and the recording of behaviours or conditions. It can therefore be difficult to know how closely the GP diagnosed prevalence correlates with the underlying true prevalence. For instance, if over time GPs get better at asking patients about their smoking status and recording it on the patient record system, then prevalence will appear to increase over the same time period, when in fact the data is just becoming more representative of the true prevalence in the population. In addition, patients in more affluent areas may be more proactive in registering with a GP and/or following up symptoms with their GP, and so diagnosis rates and prevalence may appear higher than in more deprived areas where access may be lower.

Therefore GP data (as with all data) needs to be interpreted carefully, with an understanding of the biases inherent in the collection methods.

Deprivation (IMD). Changes to indicators in the future may hamper trend analysis going forward, so we need to be up to date with any changes, and aware of the most appropriate indicators to use, for instance with the shift by 2020 from recording claimants of Job Seekers Allowance and other benefits to those claiming Universal Credit.

2.3. Summary of indicators included in this report

The main focus of this report was to test out a methodology for calculating sub-borough health inequalities in Merton, and for tracking progress over time. Therefore the indicators included in this report are not meant to be comprehensive, but rather intended to provide a general picture of health inequalities in Merton, using a standard methodology that can be applied to other indicators, and by other partners not just health.

This report looks at health inequalities specifically, but also at some of the social inequalities such as poverty, education and employment that drive health inequalities. The focus is on geographic and socioeconomic inequalities, although there are many other aspects of inequality that could be measured in future, for instance by age, sex, ethnicity or other protected characteristics.

Approach to choosing indicators for analysis
The starting point for the indicators chosen for review in this APHR were the two Public Health England (PHE) collections of indicators reported in the Public Health Outcomes Framework (PHOF):[19]

- PHE Marmot indicators (15 indicators), giving an overview of the key social determinants of health covered in the Marmot Review 2010;
- PHE Health Equity indicators (18 indicators, 5 of which overlap with Marmot indicators), covering core health indicators, PHE priority areas, and social determinants of health.

This gave us a total of 28 indicators to review. We looked to see what data was available for each of these indicators at ward level, in order to be able to compare the most and least deprived wards. Only 39% of indicators (11/28) had any ward level data available to be able to calculate the latest sub-borough inequality gap, and of these, only one indicator (life expectancy) had readily available ward trend data to be able to look at changes in the gap over time. See Appendix 2 for the full list of indicators in these PHE indicator sets.

However, we wanted to include a sample of indicators in this report that represented the key themes found in the Marmot Review on health inequalities, and that gave a picture of the situation in Merton with regards to:

- Risk and resilience factors for health and wellbeing at a personal level (Physiological risks e.g. hypertension; Behavioural risks e.g. smoking; Psychosocial risks e.g. loneliness);
- Wider risk and resilience conditions at a population level (e.g. wider determinants such as poverty, education, employment, housing);
- Some measures of morbidity e.g. diabetes prevalence;
- Some measures of mortality e.g. life expectancy, premature mortality.

Given the substantial limitations in the PHE Marmot and Health Equity indicator data readily available through PHOF to be able to look at sub-borough inequality gaps, let alone the trend in the gap, we therefore supplemented these data sets with other routinely available data sets, particularly those available through the PHE Local Health portal (which provides data at a ward level and allows comparison at a regional and national level). This gave us a picture of the current inequality gap across a range of indicators, but also enabled us to look at trend data and whether the situation was improving or worsening.

We focused on national data sources for this report, rather than locally collected Merton data such as the Residents Survey, on the basis that standardised

[19] PHE PHOF: https://fingertips.phe.org.uk/profile/public-health-outcomes-framework

national indicators are more likely to continue to be collected and reported on, and to be available on an ongoing basis. However, this does not mean that it would not be useful to apply this methodology to locally collected data sets in future.

Structure of health inequalities data included in this report

The report is structured into the following Chapters, which are informed by the Marmot strategic priority areas for tackling heath inequalities, and which correlate with the Themes of the current Health & Wellbeing Strategy 2015-2018:

1. Key overarching indicators of inequality
2. Giving every child the best start in life
3. Prevention of poor physical and mental ill health
4. Creating the conditions for fair employment and good work for all
5. Ensuring a healthy standard of living for all
6. Creating and developing healthy and sustainable places and communities

Appendix 3 shows how the APHR Chapters map to the Marmot strategic priorities for action, and to the Health and Wellbeing Strategy 2015-18 Themes.

Table 1 below summarises the indicators that we considered in detail for this report, by Chapter. Section 5 of this report gives the full list of indicators in table form, with a visual Red/Amber/Green ('RAG') rated summary of whether local level data and/or trend data is available, whether it is likely to be available in future, and whether each indicator would be worth considering for the HWBS refresh 2019+.

Only a few graphs showing overarching indicators are included in the main body of the report – others are given in the *Supplementary Data Report* that sits alongside this APHR.

Table 1: Summary of indicators included in this APHR on Health Inequalities, by Chapter

Overarching indicators	Best start in life	Prevention of poor health	Fair employment	Healthy living standards	Healthy places and communities
■ Life expectancy ■ Slope Index Inequality (inequality in life expectancy) ■ Healthy life expectancy ■ Premature mortality	■ Child Poverty / Income Deprivation Affecting Children (IDACI) ■ School readiness (child development at age 5), all, and those with Free School Meal status ■ Child excess weight (Reception) ■ Child excess weight (Y6)	■ Smoking prevalence ■ Alcohol related harm ■ Hypertension prevalence ■ Diabetes prevalence ■ Tuberculosis (TB) incidence ■ Mental health prevalence ■ Depression prevalence ■ Self reported wellbeing	■ Economically active population claiming Job seekers allowance (JSA) ■ Benefit claimants employment & support allowance (ESA)	■ Deprivation IMD 2015 (ward) ■ Deprivation IMD 2015 (GP) ■ Deprivation affecting Older People IMD 2015 (by GP) ■ Overcrowded households ■ Fuel poverty	■ Burglary ■ Theft ■ Criminal damage ■ Antisocial behaviour ■ Violence against the person ■ Older people (65+) living alone

2.4. Chapter 1: Key overarching indicators summarising the inequality gap

Life expectancy

The strategic overarching indicator in the Health and Wellbeing Strategy 2015-2018, used to measure and monitor differences in health and wellbeing between different communities in the borough, is life expectancy.

Data from PHE Local Health[20] shows that in Merton as a whole over the last few years life expectancy has increased, from 79.7 (2005-9) to 80.4 (2011-15) in men and from 83.3 to 84.2 in women over the same time period.

However, the trend in inequalities between the most and least deprived wards has been mixed. Most recent data shows that the current gap is **4.1 years** for men and **2.7 years** for women, between the 30% most and 30% least deprived wards (2011-15 data). Our analysis shows that the trend for women is positive – the difference in female life expectancy between the most deprived and least deprived wards **reduced** over the period 2005 to 2015, from 4.5 years to 2.7 years. In contrast, the difference in male life expectancy between the most deprived and least deprived wards remained **stable** over this time, at 4.1 years. Comparable data for gap analysis is not available for London or England.

See graphs in the *Supplementary Data Report* for more detail.

We are likely to be able to continue to access Life Expectancy (LE) data from PHE Local Health that will enable us to calculate the inequality gap in future years, and so monitor trend. However, the Slope Index of Inequality indicator discussed below may be a better more consistent indicator to use as it is a measure of inequality in life expectancy that is produced nationally and can be compared in a standardised way to other London boroughs.

Slope Index of Inequality (SII) – inequalities in life expectancy at birth

The slope index of inequality is a single score which represents the absolute gap in life expectancy at birth between the 10% most deprived and 10% least deprived areas. It is a measure of the social gradient in life expectancy, i.e. how much life expectancy varies with deprivation – the larger the SII score (in years), the greater the disparity in life expectancy.[21]

In 2014-16, the SII showed that the gap in life expectancy between people living in the most and least deprived tenths of areas in Merton was **6.2 years** for males and **3.4 years** for females. The England figures are 9.3 years (males) and 7.3 years (females), and London, 7.4 years (males) and 4.8 years (females). We have been advised by PHE that the SII figures for Merton are not directly comparable to these regional and national figures, due to the statistical methods for calculating SII; however, we can compare directly to our statistical comparator boroughs, which shows that the SII for both men and women is lower than Barnet (M: 6.3, F: 5.0), Enfield (M: 6.7, F: 4.7), and Redbridge (M: 7.8, F: 4.3), but higher than Ealing (M: 3.4, F: 2.8).

The life expectancy gap in Merton

SII data over time appears to show an increasing and then reducing inequality gap for men so it is similar now to what it was a decade ago (6.3 in 2005-07 compared to 6.2 in 2014-16), and potentially a slight decrease in the inequality gap in women (from 5.2 in 2005-07 to 3.4), but the overlapping confidence intervals suggest that this does not yet appear to be a statistically significant reduction. See Figures 10 and 11 over the page. This is an important indicator to keep tracking, to look at overarching inequalities over time.

[20] PHE Local Health http://www.localhealth.org.uk/

[21] SII is calculated by comparing the 10% most deprived deprivation deciles in an area with the 10% least deprived, so is a useful measure of inequality but is a different methodology from that used in the rest of this report (where we are comparing 30% most deprived wards with the 30% least deprived, or comparing East Merton wards with West wards).

Figure 10: Life expectancy and Slope Index of Inequality (males) from 2005-07 to 2014-16 (Source: Office for National Statistics)

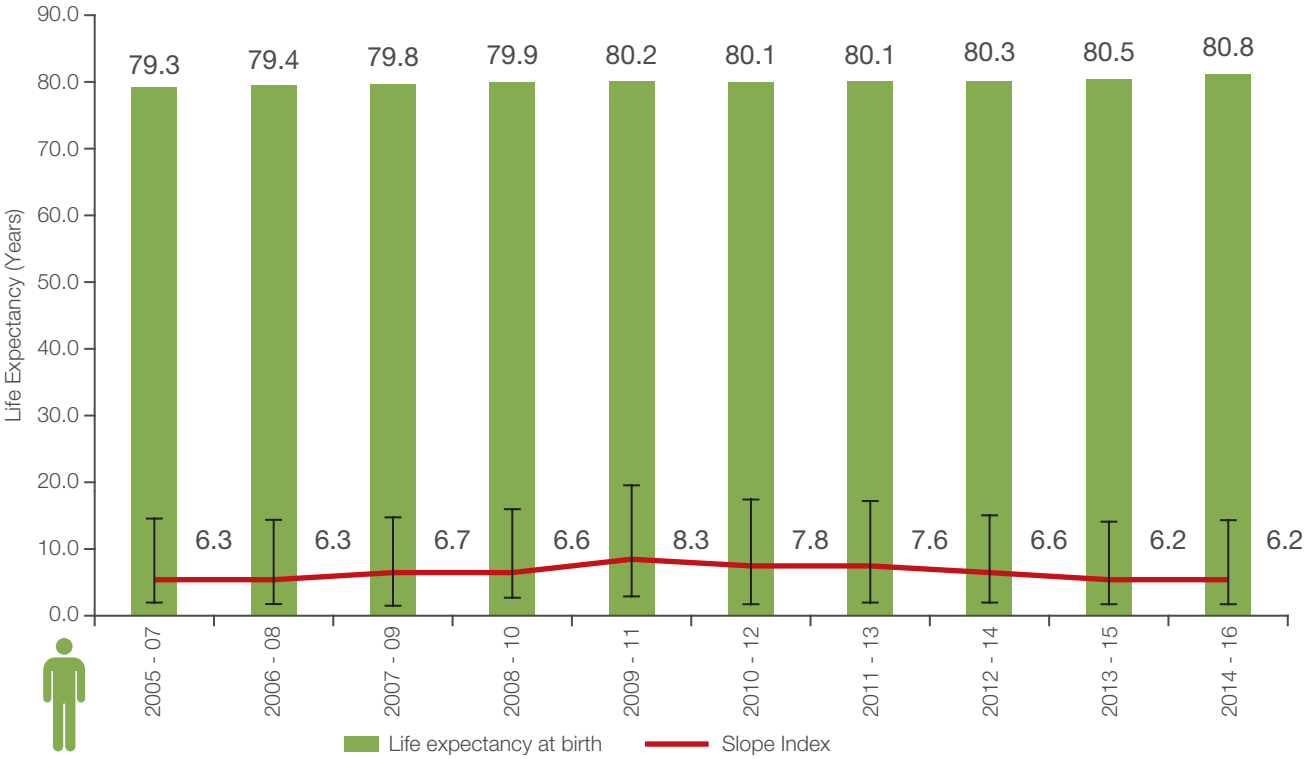


Figure 11: Life expectancy and Slope Index of Inequality (females) from 2005-07 to 2014-16 (Source: Office for National Statistics)

Box 3: Changes to the reporting of the inequality gap in Merton over time

In the 2013/14 Joint Strategic Needs Assessment, the life expectancy gap between the most and least deprived areas within the borough was reported as **9 years** for men and **13 years** for women (2006-10 data). This was based on the difference between the outliers – the most deprived ward compared to the least deprived ward.

The *Health and Wellbeing Strategy 2015-2018* uses an inequalities in life expectancy figure of **7.9 years** for men and **5.2 years** for women. This was based on Slope Index of Inequality data from 2011-13, looking at the most and least deprived 10% of areas within the borough.

In this *APHR 2018*, we report the following:

- Life expectancy inequality gap at birth: **4.1 years** (men), **2.7 years** (women)
- Slope Index of Inequality: **6.2 years** (men), **3.4 years** (women)

The difference is due in part to the use of more recent data, but more importantly, to the different methodology for calculating the inequality gap (see Table 2 below). Some of the reduction in the life expectancy figure for women is also due to the positive trend for the gap in life expectancy for women, discussed above in 2.4.1.

We recommend that going forward, the Slope Index of Inequality is used as the overarching measure of the life expectancy inequality gap, as it is produced nationally and can be compared to statistical comparator boroughs.

Table 2: How methodology, data source and trend over time have impacted on reporting of inequalities in life expectancy in Merton

Report	Indicator	Date	Inequality gap		Comment
			Male	Female	
JSNA 2013/14	*Life expectancy at birth*	*2006-10*	*9*	*13*	*Calculated by comparing the most deprived ward with the least deprived ward (e.g. the 2006-10 data shows life expectancy for men ranged from 76.1 in Ravensbury to 84.8 in Wimbledon Park, a gap of nearly 9 years).*
	Life expectancy at birth	*2006-10*	*2.8*	*3*	*Calculated by comparing the average for West Merton with the average for East Merton.*
HWBS 2015-2018	*Slope Index of Inequality*	*2011-13*	*7.9*	*5.2*	*Calculated by comparing the 10% most deprived deprivation deciles in an area with the 10% least deprived. (N.B. the figures reported here do not match with those shown in Figures 10 and 11 for the relevant years, because changes were made to the indicator definition in 2017 which retrospectively changed all the data since 2010-12).*
APHR 2018 (this report)	**Life expectancy at birth**	**2011-15**	**4.1**	**2.7**	**Calculated by comparing the 30% most and 30% least deprived wards (e.g. 2011-15 data shows an average life expectancy for men of 78.6 in the 30% most deprived wards compared to 82.7 in the 30% least deprived wards, a gap of just over 4 years).**
	Slope Index of Inequality	**2014-16**	**6.2**	**3.4**	**Calculated by comparing the 10% most deprived deprivation deciles in an area with the 10% least deprived.**

Healthy life expectancy

The gap in healthy life expectancy (HLE) is greater than the gap in life expectancy. The latest data (2009-2013) shows that the average healthy life expectancy at birth in Merton was 65.4 years for males and 66.3 years for females.

We cannot compare data on healthy life expectancy directly with that on life expectancy as the most recent data for each are from different data sources and time periods.[22] However, a general comparison shows that a significant amount of Merton residents' lives (c.15-18 years on average) are spent in ill health.

In addition, the gap between people living in the 30% most and 30% least deprived areas was 9.4 years for males and 9.3 years for females (see Table 3), so someone living in a deprived ward in the east of the borough is likely to spend more than 9 years more of their life in poor health than someone in a more affluent part of the borough, from around the age of 61 or 62 compared to 70 or 71, which will impact on the last years of working life, on family life and on a healthy and fulfilling retirement.

Unfortunately, this data is now a few years old, we are not able to calculate historic trend for the inequality gap in HLE as the data is not available from ONS by ward for single years (due to small sample sizes), and it is unclear whether data on this indicator will be available in future years in a format that will enable us to look at future trends in inequalities.[23]

As well as Healthy Life Expectancy at birth, we also have inequalities data from ONS for 2009-2013 on the following metrics:

- Disability Free Life Expectancy (DFLE) at birth (male and female)
- Disability Free Life Expectancy at age 65 (male and female)
- Proportion living without a disability at birth (male and female)
- Proportion living without a disability at age 65 (male and female)
- Proportion of life spent in good health at birth (male and female)
- Proportion of life spent in good health at age 65 (male and female)

These are all different ways of looking at the same issue of how much of someone's life they can expect to spend in good health (see the Glossary in Appendix 4 for the difference in definition between HLE and DFLE; Section 5: Summary Indicator Table for a summary of the gap for each of these indicators; and the *Supplementary Data Report* for the current data).

For all of these, we can see that there is a significant gap between the most and least deprived areas in Merton. However, as with HLE, these are now quite out of date, we are not able to calculate historic trend, and are unlikely to be able to calculate trend in the future for the reasons given above.

Premature mortality

Figure 12 opposite demonstrates the correlation between income deprivation and premature mortality (deaths in those under the age of 75) within Merton. Figure 13 shows the percentage of premature mortality by the 30% most and 30% least deprived wards in Merton, out of all deaths in the respective wards. The key message is that there is a social gradient to premature mortality, with a

Table 3: Comparison of Healthy Life Expectancy from birth for the 30% most deprived wards and the 30% least deprived wards, for men and for women, in Merton
(Source: ONS, 2009-2013)

HLE from birth (2009-2013)	Least deprived	Most deprived	Merton average	Inequality gap
Males	70.5	61.1	65.4	**9.4**
Females	71.2	61.9	66.3	**9.3**

12.5 percentage point gap between the 30% most and 30% least deprived wards. More people are dying prematurely in the most deprived areas – 38.5% (2 in 5) of all deaths are premature compared to 27% (1 in 4) in least deprived areas. What's more, this **gap has widened**. This is because premature mortality in the most deprived areas has remained more or less static over the last 3 year rolling averages since 2011-15, but premature mortality in the least deprived has declined slightly, causing the gap to increase.

However, there are only 3 data points so the trend in the gap will need to be monitored over a longer time period to see if it is significant.

[22] Life Expectancy: Local Health, 2011-15; Healthy Life Expectancy: ONS, 2009-13)

[23] ONS report that trend data on HLE at ward level is only possible decennially currently and as wards change so often in boundaries, trend data will always be difficult. In addition, due to sample size, the data at ward level needs to be 'pooled' or grouped over 5 year periods in order to allow meaningful comparison at ward level.

Figure 12: Premature mortality for Merton wards by percentage income deprived: deaths for all causes, under 75 years (2011-2015) (Source: PHE Health Inequalities Briefing Merton, 2018)

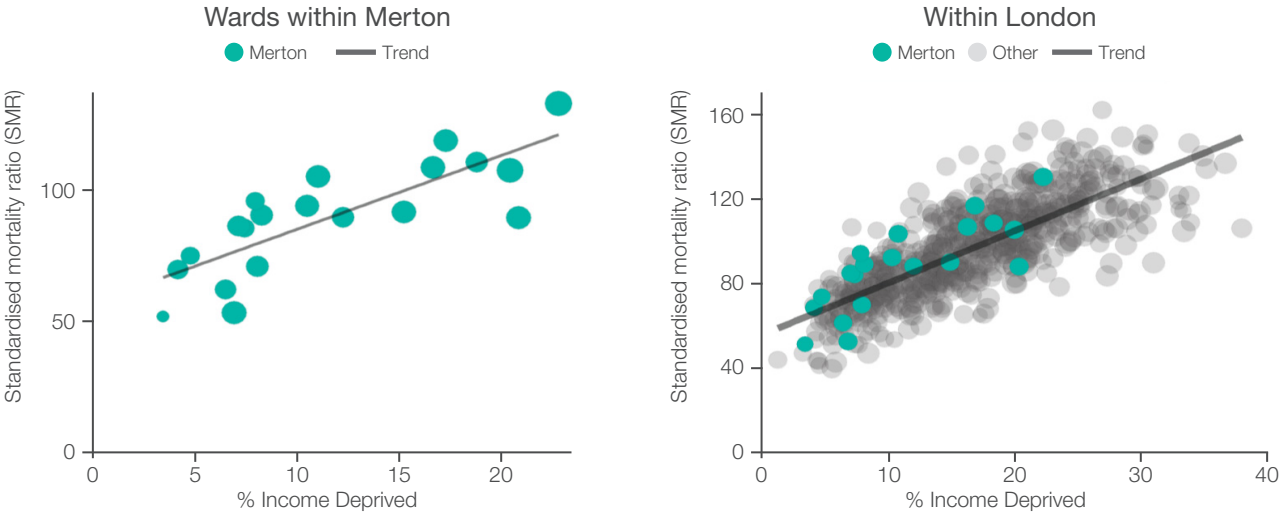
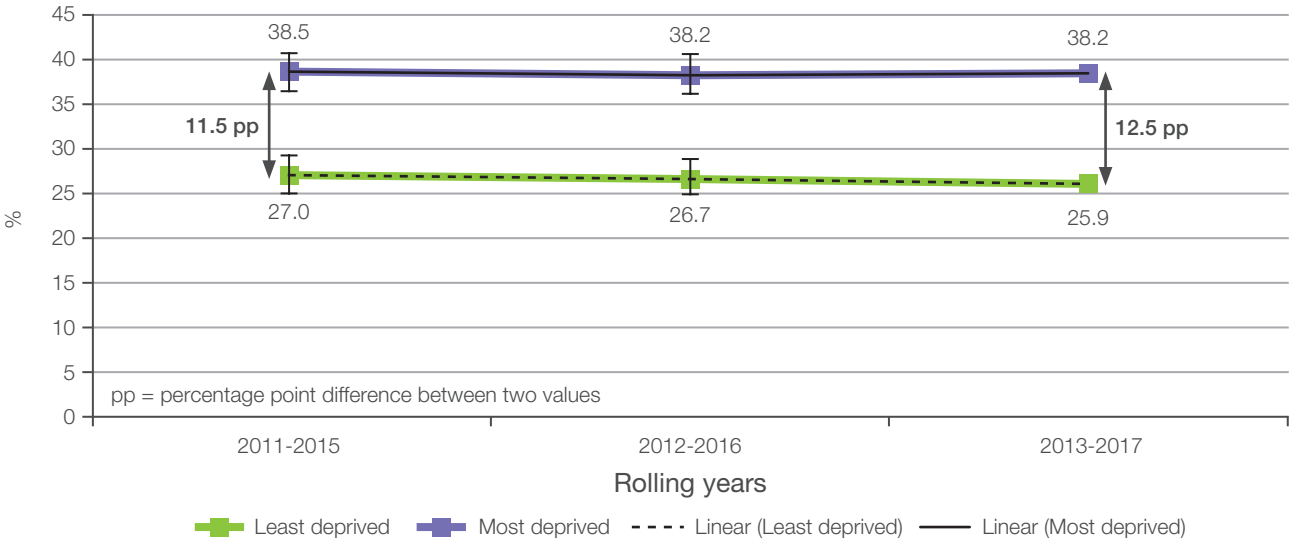


Figure 13: Premature mortality (under 75 years) as a percentage of all deaths, comparing the 30% most deprived wards in Merton with the 30% least deprived, from 2011-15 to 2013-17 (Source: Primary Care Mortality Data)



2.5. Chapter 2: Give every child the best start in life

Why is this important? *The early years are vital to future inequalities in health and wellbeing. The Marmot Report states that "giving every child the best start in life is crucial to reducing health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in early childhood. What happens during these early years (starting in the womb) has lifelong effects on many aspects of health and well-being – from obesity, heart disease and mental health, to educational achievement and economic status. Later interventions, although important, are considerably less effective where good early foundations are lacking."*

Child Poverty – children living in low income families

This 'Child Poverty' measure shows the proportion of children living in families in receipt of out-of-work benefits or in receipt of tax credits where their reported income is less than 60 per cent of UK median income. The indicator definition is "proportion of children aged 0–15 years living in income deprived households as a proportion of all children aged 0–15 years." It is also known as 'Income Deprivation Affecting Children Index' (IDACI).

Merton data shows that the gap in IDACI is significant but appears to be reducing, but that the underlying picture is less positive. The gap between the most and least deprived areas in 2015 was **21 percentage points** (27% of children living in low income households in the most deprived 30% of wards compared to 6% of children in the least deprived 30%). Extrapolating the data statistically using regression analysis suggests that the current 2018 gap is likely to be significantly smaller than this, at 6 percentage points (19% of children in the most deprived areas versus 13% in the least deprived areas). However, **although the gap appears to have reduced, the underlying picture is mixed** – the trend in child poverty in the most deprived areas is downwards (28% in 2010 to an estimated 19% in 2018) which is positive, but child poverty in the least deprived areas appears to be increasing over the same time period (from 7% to an estimated 13% in 2018), and it is this increase which partially drives the narrowing inequality gap. If published data confirms this anticipated trend, we need to understand what is driving this apparent increase in the least deprived areas.

We will be able to continue to monitor this indicator in the future, therefore it is important that this is an estimated indicator that is included in the refreshed HWBS, and that we continue to explore trend as more recent data is published to compare to our extrapolated trend data.

Child development

Child development at age 5 (a measure of 'school readiness') is an important indicator to look at the 'best start in life' for Merton's children. We have access to ward level data for 2013/14 from PHE Local Health so can calculate an inequality gap of **15.9 percentage points** (53.3% of children in the 30% most deprived wards reach a good level of development compared to 69.2% in the 30% least deprived wards).

However, this is relatively old data, and due to a lack of readily available recent ward level data, and/or ward level data over time, we were unable to calculate the trend in inequalities gap in the standardised way that we have approached measurement of health inequalities elsewhere in this report. In order to give us a proxy measure of the trend in inequalities, we looked at 'children with Free School Meal' (FSM) status (for which data is available at borough not ward level) as a proxy for 'most deprived' as we know that there is a correlation.[24] This data shows that 73.9% of all children achieve a good level of development in 2016/17, whereas only 63.9% of children with FSM status achieve a good level of development in the same time period, a gap of **10.0 percentage points.** This difference is statistically significant. There has been an increase in 'school readiness' in Merton over time, including for those with FSM status, and it appears that the inequality gap as calculated this way has **reduced** slightly (from 13.1 percentage points in 2012/13 to 10.0 in 2016/17).

It will be important to keep an eye on this indicator in case more recent ward level data becomes available, but in the absence of any other way to measure sub-borough inequalities in child development, it may be worth continuing to look at the gap between children with FSM status and all children, as a measure of inequality.

Child excess weight (overweight and obese)
Childhood obesity is a significant problem in Merton, with around 4,500 children (age 4 – 11 years) overweight or obese. 1 in 5 children in reception is overweight or obese, and nearly a third of children leaving primary school are overweight or obese. In addition, the problem is significantly worse in the most deprived areas, with the most recent 2014/15-2016/17 data showing a gap of **9.6 percentage points in excess weight at reception** (24.3% of children are overweight or obese in the 30% most deprived wards compared to 14.7% in the 30% least deprived) and **14.5 percentage points by Year 6** (40.2% in the 30% most deprived wards are overweight or obese compared to 25.7% in the 30% least deprived. For this reason, the gap in excess weight is a key indicator in the HWBS 2015-2018, and Merton HWBB has made tackling childhood obesity a priority.

In terms of trend, for reception age children, levels appear to be relatively stable in the most deprived areas but reducing slightly in the least deprived areas (although the reduction is not statistically significant), leading to a **slight increase** in the gap over time. Trend over time for Year 6 children (10-11 year olds) show levels of excess weight are reducing in the least deprived areas of the borough and increasing in the most deprived (although neither reduction nor increase are yet statistically significant) and hence the **gap is increasing**.

There are some signs from the most recent data that the overall trend in excess weight at borough level for Merton may be beginning to stabilise or decrease in the last available year's data (from 2014/15 to 2016/17). How the trend in the sub-borough inequalities gap looks over time will need to continue to be carefully monitored, and action taken through a whole systems preventative approach targeted in the most deprived areas, as set out in the last APHR on Childhood Obesity, and the related child healthy weight action plan.

Other 'best start in life' indicators:
We would have liked to look at the Merton inequality gap for the following PHE Marmot/Health Equity indicators, but data was either not available at ward level or not available for sufficient years to be able to calculate trend:

- Infant mortality (Health Equity)
- Low birthweight of term babies (Health Equity)
- Proportion of 5 year old children with/without dental decay (Health Equity)
- 19-24 year olds not in education, employment or training (Marmot)
- GCSE achievement (% young people achieving 5A*-C including English & Maths) (Marmot). The most recent data for this indicator shows a gap of **15.4 percentage points** between the most and least deprived wards (2013/14). This data is relatively old, and trend data is not available due to a recent change in indicator definition, but future trend may be possible to track. There is also an indicator which looks at 'GCSE achievement with FSM statuses' so in a similar way to School Readiness, we could look at the gap between the whole population and the FSM sub-group as a proxy for inequalities by most/least deprived. However, unlike for school readiness, comparative data is currently only available at one time point (2014/15), and so no trend can be produced.
- Other indicators that may be worth investigating to look at the inequality gap over time include the rate of hospital admissions between the most and least deprived areas for a number of key health conditions in children and young people, such as asthma, or injury.

[24] To note: in this analysis we are comparing data for a subset of the population with data for the whole population, rather than comparing two subsets of the population (most and least deprived), as for other indicators, so the methodology is not comparable to that used for other indicators.

2.6. Chapter 3: Prevention of poor physical and mental ill health

Why is this important? *The main causes of ill health and premature deaths in Merton are cancer and circulatory disease (including coronary heart disease and stroke). Known risk factors (unhealthy diet, smoking, lack of physical activity, and alcohol) account for around 40% of total ill health, and despite the fact that Merton generally ranks positively against London and England, the numbers of people in Merton with unhealthy behaviours are substantial. Consequently, changing patterns of unhealthy behaviour needs to be an important focus for prevention efforts. Furthermore, most risk factors are inversely associated with socio-economic conditions, and there is marked variation in patterns of healthy behaviours, and health outcomes, within Merton.*

Robust ward level data on the four behavioural lifestyle factors which impact most on preventable ill health is challenging to find, for both current inequality gap analysis as well as to look at trend in the gap.

As discussed in Section 1.3 looking at the different types of risk factors that drive poor health, in addition to the behavioural factors, there are also physiological risks such as hypertension (discussed below), and psychosocial risks such as loneliness (discussed in Chapter 6 – healthy and sustainable places). A few marker indicators for disease morbidity are also given below, to give a flavour of the inequality gaps seen in both physical and mental health in Merton, but these are not comprehensive, rather indicative of the issues.

Behavioural risk factor – Smoking
We do not have access to ward level trend data on smoking, so cannot look at the inequality gap between the 30% most and least deprived areas, but we can use GP data to look at the prevalence of smoking between east and west Merton, as recorded by GP Quality Outcome Framework (QOF) registers. This shows that the difference in recorded levels of smoking between east and west Merton is **6.2 percentage points** (19.36% prevalence in east Merton compared to 13.12% in west Merton), 2015/16 data. Due to the methodology for calculating this gap (by amalgamating data for individual GP practices), it is not possible to calculate accurate confidence intervals to be able to say whether this difference is statistically significant, but it is quite large.

The gap between east and west appears to have **increased** substantially, from 1.95% in 2012/13 to 6.23% in 2015/16, due to a general increase in smoking prevalence in east Merton and a general decreasing trend in west Merton. It is difficult to know if smoking prevalence is really increasing in east Merton (for instance, it may be that recording of smoking status is improving, rather than any change to underlying levels of smoking, as discussed in Box 2 in Section 2.2), but regardless, there is still a significant inequality gap, and smoking is one of the biggest preventable causes of ill health.

Physiological risk factor – hypertension
The difference in recorded levels of hypertension between east and west Merton is **1.5 percentage points** in 2016/17 (11.59% prevalence in east Merton compared to 10.06% in west Merton). This difference is statistically significant. There has been a slight **increase** in the gap between East and West (from 1.3 percentage points in 2011/12 to 1.5 in 2016/17), although the increase is unlikely to be statistically significant.

Morbidity – Diabetes prevalence
We have chosen diabetes prevalence as an example 'morbidity' indicator to look at the inequalities gap, as diabetes is a priority of the HWBB. The difference in recorded levels of diabetes between east and west is **3.1 percentage points** in 2016/17 (8.0% prevalence in east Merton compared to 4.85% in west Merton). This difference is statistically significant. There has been an **increase** in the gap between East and West (from 2.5 percentage points in 2011/12 to 3.1 in 2016/17), and this increase appears statistically significant.

Morbidity – Tuberculosis (TB)
The rate of TB in Merton overall is decreasing steadily. There is a significant difference in the rate of TB between the most and the least deprived areas of **25.6 per 100,000** (35.03 per 1000 population in the 30% most deprived wards compared to 9.37 rate per 100,000 in the 30% least deprived). Since 2011-13, there appears to have been a slightly faster rate of

decline in the 30% least deprived areas, resulting in a **slight widening** in the gap from 23.4 per 100,000 rate difference in 2011-13 to 25.6 percentage points in 2014-16. However, the numbers are relatively small so it is unlikely to be a statistically significant increase.

Morbidity – prevalence of mental health conditions

Mental health is an important indicator as health and wellbeing is not just about physical health but also mental health and wellbeing. We do not have access to ward level data on mental health, so cannot look at the inequality gap between the 30% most and least deprived areas, but we can use GP data to look at the prevalence of mental health between east and west Merton, as recorded by GP QOF data.

This shows that for recorded mental health prevalence, the difference between east and west Merton is **0.24 percentage points** (1.01% prevalence in east Merton compared to 0.77% in west Merton), using 2016/17 data. Although a relatively small recorded prevalence, this difference is statistically significant, as shown by the confidence intervals. The prevalence of mental health conditions recorded by GPs in Merton has increased slightly in both the east and the west, but appears to have increased at a faster rate in west Merton. This means that the **inequality gap appears to have decreased slightly** from 0.30 percentage points in 2012/13 to the current 0.24 percentage point gap. As highlighted earlier, GP prevalence data can be complex to interpret, as this decreased gap could be as a result of a real increase in prevalence of poor mental health, or, which is more likely, be a consequence of improved recognition and diagnosis of mental health conditions in primary care. If the latter is true, then this trend data may suggest that diagnosis rates are better in west Merton than east Merton, rather than that there has been an underlying increase in disease, and demonstrates the importance of primary and community care in tackling health inequalities, as discussed in Part 1. This data probably does not therefore tell a positive story of reducing inequality, rather points to poorer diagnosis for more deprived residents relative to their less deprived neighbours.

Morbidity – prevalence of depression

Again, we do not have ward level data for depression, but can use GP records of depression diagnosis to look at the inequality gap between east and west Merton. This shows that the difference in recorded depression is **0.45 percentage points** (7.14% in east Merton compared to 6.69% in west Merton, 2016/17 data). The difference in prevalence between the east and the west in 2016/17 is statistically significant. Between 2011/12 and 2016/17 the **inequality gap appears to have flipped**, from higher rates of depression in west Merton (difference of -1.81 percentage points) to higher rates in east Merton in 2016/17 (difference of 0.45 percentage points). **This is one of the only indicators we looked at where the rate of a disease or risk factor was higher in less deprived areas than more deprived areas at any point in the historical trend data** (the other indicators being rates of theft, and burglary, both higher in the least deprived areas).

As we know that major risk factors for poor mental health and wellbeing are those associated with deprivation (e.g. poor education, unemployment, social exclusion, and poor standards of living), this again points to an interpretation of historical better diagnosis of depression in west Merton compared to east Merton (rather than a true larger prevalence of disease), and therefore hidden inequalities in diagnosis/under-diagnosis of mental health conditions. However, the latest data suggests that this pattern may be in the process of being reversed. We need to continue to monitor this trend to better understand the picture of inequalities in mental health in Merton.

Self-reported wellbeing

The GLA has data on self-reported wellbeing at ward level. This presents a combined measure of well-being indicators based on 12 different measures, with scores over zero indicating a higher probability that the population on average experiences positive well-being. 2013 data, which is the most recent available, shows that the wellbeing score for the 30% most deprived wards was -2.3, suggesting poor wellbeing, compared to a score of 9.4 for the 30% least deprived areas, a gap of **11.7 points**.

This supports our hypothesis above that the lower prevalence of depression seen previously in East Merton is likely to be an artefact of lower diagnosis rates rather than better mental health. Between 2009 and 2013, the difference between the most and least deprived wards **reduced slightly**, (from 12.3 to 11.7). However, again this is not really a positive outcome, as wellbeing scores worsened in both the most and least deprived areas, but at a faster rate in the least deprived areas.

Limiting long term illness or disability

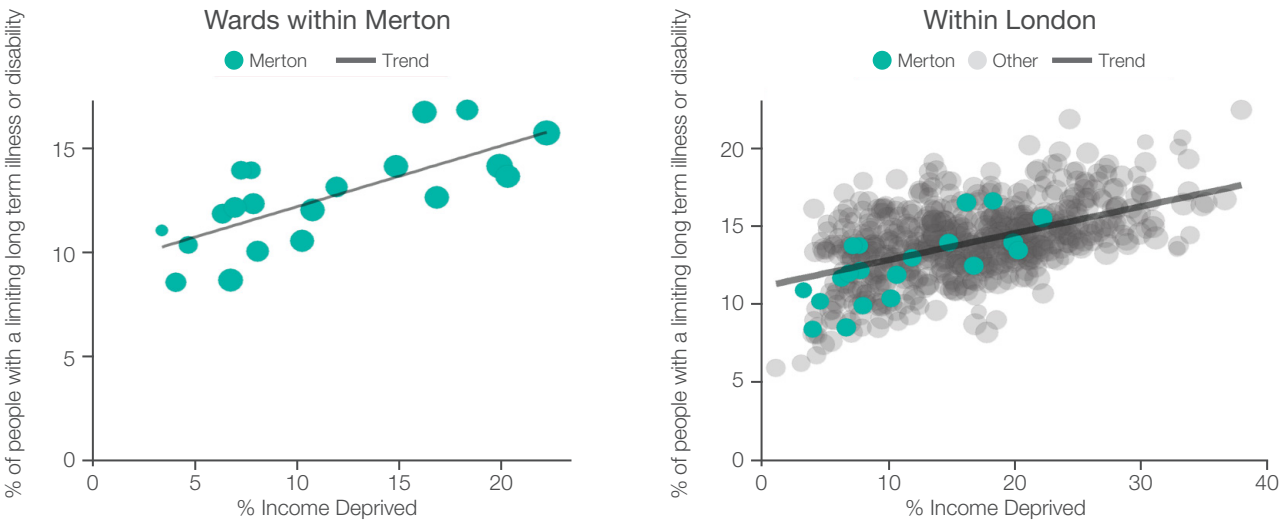
'Limiting long term illness or disability' data is based on a Census 2011 question, so we do not have recent or trend data on this indicator, but PHE's recent Health Inequalities Briefing, based on the Global Burden of Disease study, highlights the social gradient in Merton (see Figure 14 below).

Other 'prevention of poor health' indicators

Premature mortality is included in Chapter 1 as an overarching indicator of health inequality. There are a range of other indicators that we could consider for the HWBS refresh, or the Local Health and Care Plan which will look specifically at health and care services, in order to track health inequalities, for example:

- Risk factors/morbidity: Hospital admissions for alcohol related harm. We would have liked to have analysed this in more detail, given the importance of alcohol as a public health issue and the strong associated with income deprivation (and that this is a PHE Health Equity indicator), but although we can see there is an inequality gap between the most and least deprived wards (see *Supplementary Data Report*, and summary indicator table in Section 5), there is a lack of robust trend data at ward level.
- Morbidity: disease incidence (e.g. cancer); or all-cause, or disease-specific hospital admissions (e.g. for Coronary Heart Disease, Stroke, Chronic Obstructive Pulmonary Disease). See the *Supplementary Data Report* for single time point data on emergency hospital admissions related to income deprivation for which there is a strong relationship.
- Premature Mortality: Cardiovascular / Cancer mortality under 75 (both Health Equity)
- Mortality: Suicide (Health Equity)

Figure 14: Limiting long term illness or disability for Merton wards by percentage income deprived (2011) (Source: PHE Health Inequalities Briefing Merton, 2018)



2.7. Chapter 4: Creating the conditions for fair employment and good work for all

Why is this important? *The availability and nature of employment is a key determinant of health inequalities. Good quality work and working environment is a key contributing influence on an individual's health and wellbeing, and that of their family and community. Employment is important because being unemployed or having a poor quality job is bad for health, and good quality appropriately paid employment is a protective factor for health (moving from unemployment into work can substantially reduce the risk of premature mortality) and can contribute to reduced health inequalities. Increasing the quality and quantity of work can help reduce health inequalities.*

Economically active population claiming Job Seekers Allowance (JSA)

Data on claimants of Job Seekers Allowance (JSA) is an important measure of those out of work but who are deemed fit for work. According to ONS NOMIS, JSA 'is not an official measure of unemployment, but is the only indicative statistic available for areas smaller than Local Authorities.' The latest available data from ONS on the percentage of the economically active population claiming JSA shows that there is a **2.5 percentage point gap** in Merton in 2015 (3.3% in the 30% most deprived compared to 0.8% in 30% least deprived wards). This difference appears to be statistically significant.

However, there appears to be a substantial **reduction in the inequality gap over time**, decreasing from a 4.7 percentage point gap in 2011 to a 2.5 point gap in 2015, driven by general decrease across the borough but also a faster decrease in the most deprived wards. This appears positive, although it is difficult to say whether this decrease represents a real reduction in inequality, or changes to the way that benefits are claimed (although the data presented here and in the *Supplementary Data Report* is up to 2015, prior to the introduction of Universal Credit (UC)). Anecdotally, the Mitcham Job Centre do report that they are seeing more people in sustained work than previously, and that those who are left claiming employment related benefits over the long term have much more complex needs, including poor mental health as a significant issue.

As the most recent data is only available to 2015, regression analysis (using the current trend data to project missing data points) has been undertaken, which appears to show that inequality gap in 2018 is likely to narrow further, to just under 1 percentage point difference between the 30% most deprived wards compared to the 30% least deprived. However, the picture will be further complicated by the introduction of Universal Credit in the meantime (introduced into the SM4 Morden area in around 2016, and the CR4 Mitcham area from the end of 2017 – any change of circumstances for claimants, for example a change of address, will trigger a move from JSA to UC). The west of the borough will start the move to UC at the end of June 2018, and the move over to UC is not due to be completed until 2020 – so the data will need to be interpreted carefully going forward.

The data reported here is 'all economically active population claiming JSA'; perhaps a more useful indicator to look at in more detail going forward would be *long term* claimants (for example those claiming employment related benefits for more than a year) – this is a Marmot indicator, but data is not currently readily available at ward level.

Benefit claimants – employment and support allowance (ESA)

Data on claimants of Employment and Support Allowance (ESA) is an important measure of those with a short or long term health condition or disability that impacts on their ability to work; eligibility is dependent on sickness certification. The latest available data from ONS on the percentage of the working age population claiming ESA shows that there is a **3.4 percentage point gap in Merton in 2017** (5.04% in the 30% most deprived compared to 1.64% in 30% least deprived wards). This difference is statistically significant. The inequality gap appears to be r**elatively stable over time** (3.2 percentage points difference in 2014 compared to the current 3.4 point gap).

As with JSA, ESA claimants will gradually be moved over to UC by 2020, with those in the east of the borough moving over sooner than those in the west, which will have implications for how the data available for the years between 2016 to 2020 is interpreted.

Other 'fair employment, good work' indicators
Other employment related data that we considered included 'Benefits claimants – income support' and 'Benefits claimants – Incapacity Benefit/Severe Disablement allowance' but the numbers were too small to be able to make meaningful conclusions at ward level.

At present NOMIS is still the only source of unemployment data, and 'Claiming UC' at borough level is all that is currently available for Universal Credit. In the future, it is likely that the data will be able to be split by reason for claiming UC, and by sub-borough geographies, and we will need to review in order to choose the most appropriate indicators for tracking progress related to fair employment and good work. The Government has recently launched a consultation on how to assess the number of people claiming unemployment-related benefits, and so there is opportunity to shape the way that the data is collected and reported to enable us to better monitor inequalities in the future as Universal Credit is rolled out.[25]

We would have liked to have looked at the Merton inequality gap for the following PHE Marmot/Health Equity indicators, but data was not readily available at ward level:

- Unemployment (Marmot)
- Long term claimants of Jobseekers Allowance (Marmot)
- Work related illness (Marmot)
- Employment gap for those with a long-term condition (Health Equity)

[25] Consultation: Proposals for a new statistical series to count unemployed claimants https://www.gov.uk/government/consultations/proposals-for-a-new-statistical-series-to-count-unemployed-claimants

2.8. Chapter 5: Ensure healthy standard of living for all

Why is this important? *As the Marmot review sets out, "having insufficient money to lead a healthy life is a highly significant cause of health inequalities." An insufficient income can cause poor health as "it is more difficult to avoid stress and feel in control; access…material resources; adopt and maintain healthy behaviours; and feel supported by a financial safety net."[26] Additionally, those living with health problems are more susceptible to unemployment, lower earnings, and lower household income, and poorer standard of living, so poor health can then lead to deprivation, in a vicious cycle for poor health outcomes.*

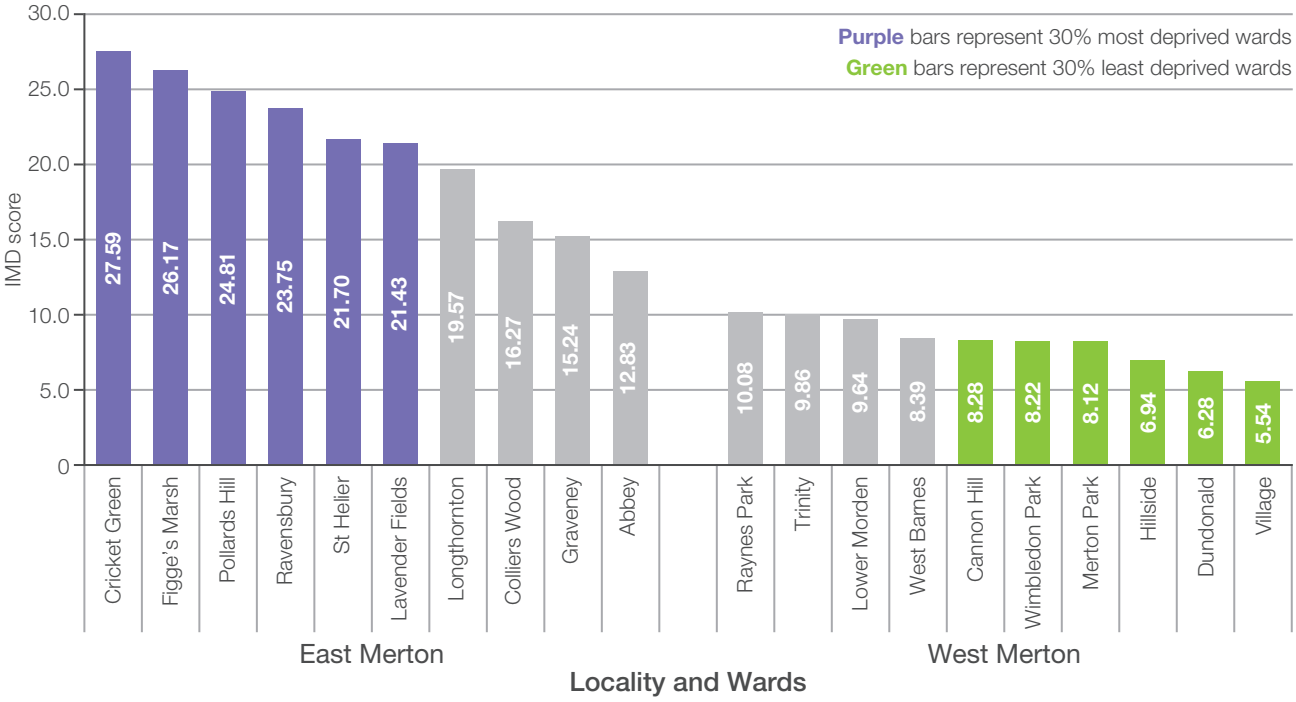
Deprivation by ward
The overall ward scores for the IMD (2015) deprivation index shows that there is a difference in score between the 30% most deprived and the 30% least deprived wards of **17.01 points** (score of 24.24 in the most deprived compared to a score of 7.23 in the least deprived). The higher the score the more deprived the area.[27] No benchmarking or confidence intervals are available for this data, and **trend data is not available** for IMD either – although IMD is updated every few years, it is not recommended to compare scores year on year as the underlying indicators change over time.

Deprivation by GP
Similarly, IMD 2015 data split by GP Practice IMD scores shows that there is a substantial difference between the average score of GP practices in east Merton and those in west Merton of **11.74 points** (score of 20.01 in the east compared to a score of 11.28 in the west). As before, the higher the score the more deprived the area.

[26] Health Foundation (2018) What makes us healthy? An introduction to the social determinants of health https://www.health.org.uk/sites/health/files/What-makes-us-healthy-quick-guide.pdf

[27] PHE Fingertips definitions: "The Indices of Deprivation 2015 are relative measures of deprivation. This means it can tell you if one area is more deprived than another, but not by how much. The IMD 2015 is not a measure of affluence; all of the indicators used in the index are designed to identify aspects of deprivation, not affluence. Therefore the area ranked as the least deprived is not necessarily the most affluent".

Figure 15: Index of multiple deprivation 2015 ward scores



IMD 2015 data by GP practice is also available looking specifically at deprivation affecting children, and affecting older people:

- Income deprivation affecting children index (IDACI):[28] there is a difference between the average IDACI proportion of GP practices in east and those in west Merton of **13.33 percentage points** (25.24% compared to 11.91%).

- Income deprivation affecting older people index (IDAOPI):[29] there is a difference between the average IDAOPI proportion of GP practices in east and those in west Merton of **8.63 percentage points** (23.38% compared to 14.75%).

Both of these look at the income aspect of IMD for younger and older people. However, any direct comparison between IDACI and IDAOPI is not appropriate as the measures are calculated in different ways.

As with IMD by ward, although previous data for IMD by GP practice is available for the years 2004, 2007, 2010, 2015, this data is not comparable as the weighting of indicators has been changed over time. Therefore **trend data is not available**.

Overcrowding

We only had access to data on household overcrowding at ward level from the 2011 Census. The borough average is 16.1% of households in Merton that are overcrowded, with an inequality gap of **10.2 percentage points** between the most and least deprived areas (21.2% of households are overcrowded in the 30% most deprived wards compared to 11.0% in the least deprived – twice as many). **No trend data** is available on household overcrowding.

Fuel Poverty

Fuel poverty is influenced both by housing typology, including the age and size of housing, as well as the ability of those living there to pay for utilities. We have data from 2015 on fuel poverty (the percentage of households that experience fuel poverty, based on the 'low income high cost' methodology) for wards in Merton which shows that the inequality gap is **1.4 percentage points** between the 30% most and least deprived areas (10.5% in the most deprived areas compared to 9.1% in the least deprived). This difference appears to be statistically significant. This is a new indicator on the PHE Local Health portal, and so whilst **historic trend at ward level is not available** which means that we cannot look

at the trend in the inequality gap to date, we may be able to monitor trend in the future.

Other 'healthy standard of living' indicators
We would have liked to have looked at the Merton inequality gap for the following PHE Marmot/Health Equity indicators, but data was not readily available at ward level:

- Households not reaching minimum income standard (Marmot)
- Homelessness (Health Equity)

[28] Based on the same indicator as Child Poverty. LSOA level deprivation data are applied proportionally to GP practice populations.

[29] 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). LSOA level deprivation data are applied proportionally to GP practice populations.

2.9. Chapter 6: Develop healthy, sustainable places and communities

Why is this important? *The places in which people live influence the health and wellbeing of individuals, families and communities. This includes the nature of the physical environment, the access to green spaces, and how safe, connected and represented people feel within their neighbourhoods and wider community.*

Reported Crime
Metropolitan Police Data for 2017 gives a picture of reported crime in the borough. Both historic and future trend data is available, but has not been calculated for this report as it is available by month and so amalgamating the data is time consuming but possible.

- *Burglary:* Difference in ward scores is **-3.4 per 1000 population rate difference** (5.3 per 1000 in the 30% most deprived compared to 8.7 per 1000 in the 30% least deprived wards).
- *Theft:* Difference in ward scores is **-8.5 per 1000 population rate difference** (18.0 per 1000 in the 30% most deprived compared to 26.5 per 1000 in the 30% least deprived wards).
- *Criminal damage:* Difference in ward scores is **4.2 per 1000 population rate difference** (8.5 per 100,000 in the 30% most deprived compared to 4.3 per 1000 in the 30% least deprived wards).
- *Antisocial behaviour:* Difference in ward scores is **7.0 per 1000 population rate difference** (19.5 per 1000 in the 30% most deprived compared to 12.5 per 1000 in the 30% least deprived wards).
- *Violence against the person:* Difference in ward scores is **14.5 per 1000 population rate difference** (28.9 per 1000 in the 30% most deprived compared to 14.5 per 1000 in the 30% least deprived wards).

The gap for burglary and theft are both in favour of the most deprived areas (i.e. there is less reported burglary and theft in the more deprived areas); however, this is to be expected as it is probable that the more expensive assets are likely to be found in the more affluent areas, and therefore be a target for theft. There may also be increased reporting of crime in the least deprived areas.

Social isolation

Social isolation is a psychosocial risk factor for poor health and wellbeing. We have some Census 2011 data at ward level on the number of people aged 65 and over living alone (as a percentage of the total number of people aged 65 and over), which shows a gap of **0.5 percentage points** between the 30% most deprived (34.2%) and the 30% least deprived (33.7%). However this metric doesn't tell us how many of those actually feel socially isolated, and there is **no trend data** available as the next Census is in 2021.

Other 'healthy and sustainable places' indicators

There is relatively little easily accessible and up-to-date ward level data for the social determinants of 'place' to be able to look at inequalities. This is an area we will need to think carefully about how to monitor in the forthcoming HWBS 2019+.

- We would have liked to have looked at the Merton inequality gap in 'Utilisation of outdoor space for exercise/health reasons' (PHE Marmot indicator), but data was not available at ward level.
- Other indicators that it may be worth investigating include measures of air quality, levels of volunteering, or the percentage of the population who vote.

3 Part 3: Lessons for addressing health inequalities in Merton

This APHR on Health Inequalities has investigated some of the key inequality gaps between the most and least deprived communities in Merton that impact on health outcomes. It casts new light and produces clear evidence to show a sustained gap in health and wellbeing across communities in Merton and provides robust data, on which our plans and policies can build, to address these inequalities.

In particular, the findings from this piece of work can directly be used to inform the refresh of the Health and Wellbeing Strategy 2019+, as well as other data analysis and reporting such as the Joint Strategic Needs Assessment, other statutory assessments such the Community Safety Partnership strategic assessment, and the development of indicators and reporting for other strategic work such as the NHS's Local Health and Care Plan.

3.1. Conclusions

Measurement of inequalities
It is important to measure inequalities in a standardised way, but the process of analysing indicators for this report has shown that it is challenging given the limitations in the data available. In particular:

- Many nationally available indicators are only available at borough not ward level which does not enable analysis of sub-borough inequalities. For instance, most PHE Marmot indicators and PHE Health Equity indicators are not available at sub-borough level. This is surprising, and something that we will be feeding back to the data and intelligence team at Public Health England, as in order to track progress on health inequality and to effectively target interventions, sub-borough analysis is vital;

- Some indicators only had data available from a number of years ago, for instance the most recent Healthy Life Expectancy data was from 2009-2013, ward level data for School Readiness was only available for 2013/14, and the most recent data on 'Limiting long term illness or disability' and on 'Household Overcrowding' are from 2011 (as these are from Census data, only collected every 10 years). This means that making relevant conclusions from this data is difficult;

- Where sub-borough data was not available, in some cases there were other ways to look at the likely inequality gap, for example by comparing borough level Child Development data with data for a sub-set of the population with Free School Meal status;

- Where sub-borough data is available for nationally available indicators, often only single data points are readily available through data portals such as PHOF or PHE Local Health. This lack of historic data means that no trend can be calculated. Even where trend data is available, it is often only available for limited time points, which makes trend analysis less accurate. For example, Premature Mortality data was only available for three points, where as Slope Index of Inequality data was available for ten. We can be more confident to make conclusions about trend from more data points;

- Because of the different methodologies used for calculating the inequality gap (30/30 versus East/West), it is not possible to directly compare the magnitude of the gaps between the different methods;

- Using the data available, it is often difficult to calculate if the current gap is significantly different from a statistical perspective, and/or whether the trend is statistically significant.

We have only looked at two related aspects of inequality: geographic and socioeconomic inequalities. It would be worth looking at other measures of inequality, for instance age, sex, ethnicity or other protected characteristics. Where nationally available data cannot be broken down by these characteristics, we may need to look at locally collected data.

Inequalities in Merton

Despite the challenges, the analysis undertaken in this APHR shows that there is much that we can say about inequalities in Merton:

- **Inequalities are evident in every indicator** studied. The vast majority of indicators demonstrated a substantially worse picture in the most deprived areas. For example, we found a 14.5 percentage point difference in proportion of children who are overweight or obese in primary school (Year 6), between the most and least deprived wards in Merton.

  PHE's recent Health Inequalities Briefing for Merton (2018), based on the Global Burden of Disease study, states that the top three indicators **most strongly associated with deprivation locally** are: emergency hospital admissions for all causes, childhood obesity (Year 6), and hospital stays for alcohol-related harm.

  The only indicators that appeared to be in favour of the most deprived wards, or where there was an unclear picture were:

  i. *Depression* – between 2011/12 and 2016/17 the inequality gap appears to have flipped, from higher rates of depression in West Merton to higher rates in East Merton. The previous higher rates seen in the West of the borough are likely to be a measure of under-diagnosis in the East rather than less mental health need/better mental health.

  ii. *Theft and burglary* – the rates of these reported crimes are higher in west of the borough, which is not surprising given the socioeconomic picture, as this is where more expensive assets are likely to be, as well as potentially increased rates of reporting by residents.

- **The magnitude of the inequality gap varied**, and the relevance of the size of the gap to residents' health and wellbeing outcomes varies from indicator to indicator. For instance, the difference in percentage of overweight or obese children in Year 6 between the most/least deprived is 14.5 percentage points, which equates to 735 children (2014/15-2016/17) where as the difference in percentage of residents claiming ESA between the most/least deprived is smaller at 3.4 percentage points, but equates to 1,605 residents;

- **In terms of trend in inequalities in Merton, the picture is mixed**. The general message is that inequalities in Merton are intransigent, but that we need to keep them under review over a longer time frame.

  i. There are some success stories, for instance the reducing gap in life expectancy at birth for women in Merton (although the reduction is not yet statistically significant), the apparent reduction in the Child Poverty gap (although the main trend is based on extrapolated data due to lack of very recent published data); the reducing gap in School Readiness (comparing child development at age 5 for all children with that of children with free school meal status), and the reductions in the gap in the economically active population claiming jobseeker's allowance (JSA) between the most and least deprived areas;

  ii. There are a number of areas where the inequality gap appears to be stable (e.g. male life expectancy at birth, ESA claimants), or where picture is complex (e.g. recorded depression prevalence);

  iii. In some cases, the gap appears to be reducing for the 'wrong' reasons, for instance because the situation for those in more affluent areas appears to be worsening whilst that for those in the more deprived areas remains stable or worsening at a slower rate, or improving, all of which have the effect of narrowing the gap. This is the case for Child Poverty, mental health prevalence, and self-reported wellbeing;

iv. Unfortunately, analysis also shows that there are a substantial number of indicators where inequalities appear to be increasing, including child excess weight, prevalence of smoking, diabetes and hypertension, and premature mortality.

- **Cumulative inequalities throughout life and the environments within which our residents live contribute to overarching inequalities in health outcomes.** We can see these most clearly in the significant differences in life expectancy between the most and least deprived parts of our borough, of around 6.2 years for men and 3.4 years for women borough (Slope Index of Inequality). Inequalities in *healthy* life expectancy are even starker, with a difference of more than 9 years of healthy life.

3.2. Recommendations

A. Recommendations for tackling health inequalities in Merton

The Public Sector Equality Duty obligations under the Equality Act 2010 mean that we need to pay due regard to equality and inclusion issues in all our decision making.

We know that health inequalities are persistent, complex and difficult to shift. We therefore need to take consistent and intelligent action on health inequalities in Merton, actively and systematically targeting inequalities through a long-term multi-sectoral approach across all partners – including the NHS, Council, voluntary sector and the community – in order to be able to make any progress.

This action should be:

- Based on evidence of need, driven by data – for example, detailed understanding of which groups have worst health outcomes and why;

- Grounded in evidence of what works and is cost-effective, for example using evidence-driven interventions such as those set out in NICE guidance;

- Grounded in evidence of what works to shift inequalities in particular, using the evidence-based approach of proportionate universalism, with both carefully considered universal approaches (even in times of austerity) and carefully targeted approaches to those who are most at risk of poor health and wellbeing. This includes:

  i. Intervening for population level impact, recognising the increased cost-effectiveness of population level interventions compared to personal level interventions, and increased impact on health inequalities;

  ii. Intervening at different levels of risk, including the importance of the role that NHS primary care and community services play in reducing inequalities;

  iii. Intervening across the whole life course, giving all residents the best start in life, so they can start well, live well and age well;

To be effective, approaches must be underpinned by participatory decision-making and co-design, and driven through individual and community empowerment.

If we take our eye off the ball, health inequalities are likely to increase. Therefore we need to intervene for impact over time, and to continuously monitor progress.

B. Recommendations for monitoring health inequalities in Merton

1. The analysis set out in this report will inform the choice of a suite of indicators for the HWBS 2019+

The analysis within this report, particularly around which indicators *can* be tracked at sub-borough level to look at inequalities within Merton, and at changes to the inequality gap over time, should inform the indicators chosen to support the monitoring of the HWBS from 2019. The strategy is likely to cover a period of 5 years, from 2019-2024, and will form the core of Merton's strategy to reduce inequalities.

The table in Section 5 is the most accessible summary of the findings, set out by indicator. The last column indicates whether the indicator may be a good choice for the HWBS 2019+.

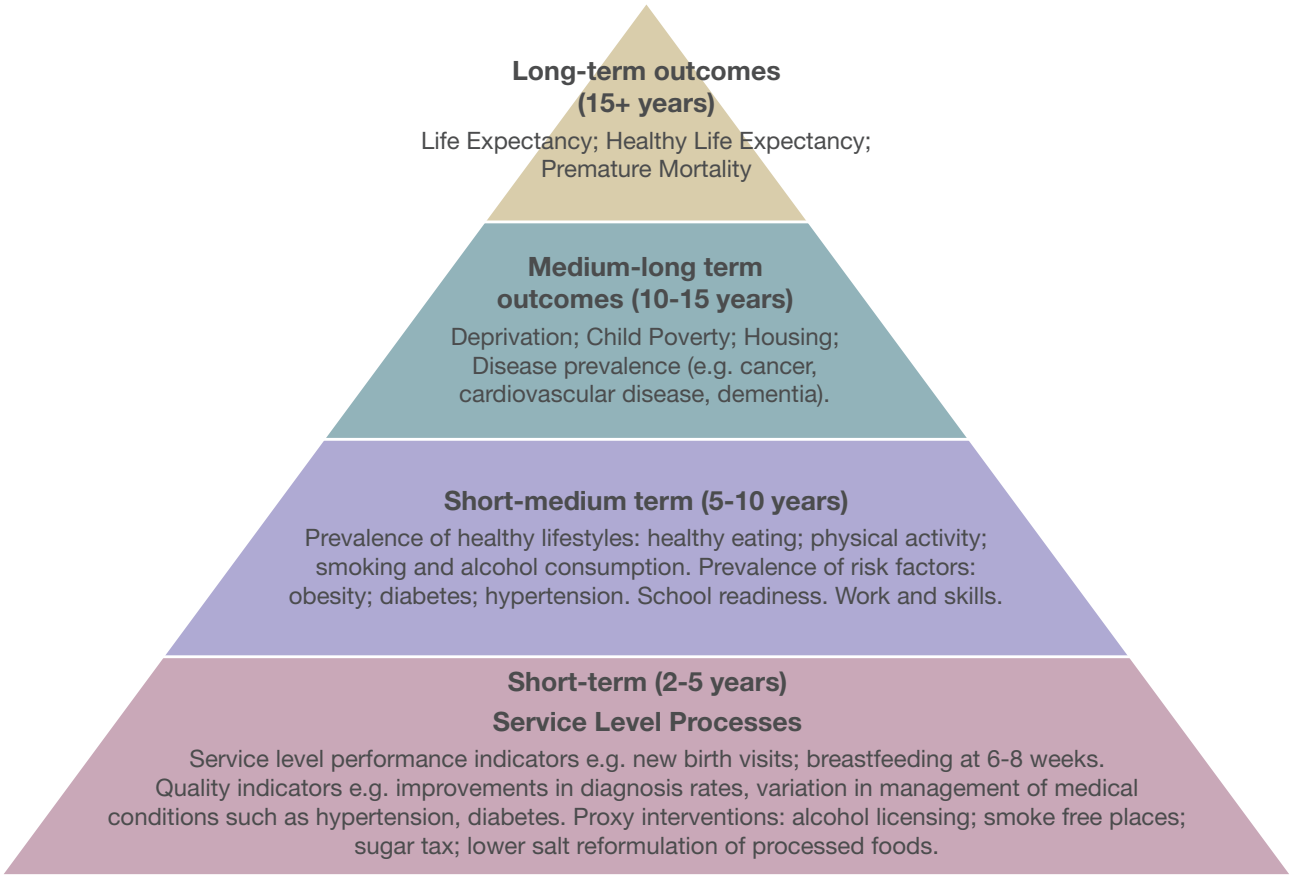
In terms of overall inequalities in life expectancy in Merton, we recommend that the Slope Index of Inequality is used as the overarching measure of the life expectancy inequality gap, as it is produced nationally and can be compared to statistical comparator boroughs.

Some borough level indicators will be important to monitor, but it is also important that some key indicators are also monitored at a sub-borough level to look at the inequality gap. Where no sub-borough and/or trend data is available (historic and/or future) in order to be able to calculate an inequality gap, we may need to think about how we keep eye on progress in closing the gap in other ways, for example using the methodology that we have used for Child Development by comparing borough level data for all children with borough level data for those with Free School Meal status.

When developing a set of indicators, it is important to think about an underpinning logic model or theory of change, in order to develop a hierarchy of indicators, with a clear logical progression and explicit assumptions on the relationships between each tier. See Figure 16 for an example of this tiered approach to developing a suite of indicators for monitoring.

Although this APHR has focused on place-based deprivation-linked inequality (using most/least deprived wards, or E/W gap), this is not the only way in which data should be broken down to look at inequalities. Although as this report has highlighted, there is a lack of data available at sub-borough level even broken down to ward level, but where possible it is important to look at inequalities by age, sex, ethnicity and other protected characteristics.

Figure 16: Example for a tiered approach to monitoring Health & Wellbeing outcomes and proxies over relevant time periods



2. We need to be realistic about timescales in which we can expect to see changes to the inequalities gap in Merton

Part 1 (Section 1.3) of this report reminds us that different types of interventions will take different amounts of time to demonstrate impact. When setting targets, we therefore need to be explicit about the timescales within which we would expect to see changes to different metrics, and that these are likely to sit outside any local and national political cycles, requiring coordinated action over time.

Regression analysis for chosen indicators will help to set realistic but ambitious targets – recognising that sometimes these targets will be to *halt the rise* in the inequality gap, or to *hold the gap stable*, rather than to actually to be able to reduce the gap within the time frames of most strategies (3-5 years), especially given the recent context of financial austerity.

When choosing targets, it is also important to benchmark ourselves against our statistical comparator boroughs, neighbouring boroughs, as well as the London and England figures.

3. A standardised methodology should be used across Merton to be able to effectively monitor inequalities and progress towards closing the gap

We recommend that the methodology used for gap analysis and trend analysis in this report is adopted by the council and partners for calculating and reporting the gap in inequalities between the East and the West of the borough, to meet the 'bridging the gap' priority of the Merton Partnership.

This has implications for the choice of indicators for forthcoming strategic work such as the NHS's Local Health and Care Plan, and how we look at reporting inequalities as part of statutory assessments (for example the Community Safety Partnership Strategic Assessment), as well as for analysis of other locally collected data, particularly that which is done on a regular basis using relatively standard indicators, such as the council's Residents Survey.

Other partners may also be interested in thinking about taking a 'logic model' approach to developing a suite of indicators to monitor outcomes over defined time periods, with some that focus on short term change as a proxy for longer term progress.

We recommend that where possible, and where granularity of data is sufficient, that indicators from nationally available datasets are used for monitoring trend over time. Where data is collected locally, for instance through the Residents Survey, or in ad hoc surveys for regular reports such as the Strategic Assessment, it is really important to carefully consider how indicators are chosen and worded, to enable consistency of trend analysis over time.

C. Recommendations for monitoring health inequalities nationally

Given that data in many of the easily accessible national PHE data sets is only available at borough not ward level (therefore limiting analysis of sub-borough inequalities), Public Health Merton will feedback to PHE's data and intelligence team about the availability of sub-borough indicator data in easy to use formats, for instance through the online Local Health portal, and particularly for the PHE Marmot and PHE Health Equity indicator sets, to inform their ongoing support to local authority public health teams.

We will also respond to the government's consultation on Universal Credit metrics, as discussed in Chapter 4, to ensure that we are able to access ward level data on appropriate indicators to continue to measure trend in inequalities in the domain of fair employment and good work.

4 Appendices

Appendix 1: Resources for understanding and tackling health inequalities

- **Department of Health (2008) Systematically Addressing Health Inequalities**
  http://webarchive.nationalarchives.gov.uk/20130124043456/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_086573.pdf

- **Department of Health (2011) Health Inequalities National Support Team – A Generic Diagnostic Framework for Addressing Inequalities in Outcome at Population Level from Evidence-based Interventions**
  https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/215615/dh_126331.pdf

- **Institute of Health Equity:**
  http://www.instituteofhealthequity.org/

- **Kings Fund (2010): Tackling inequalities in General Practice**
  https://www.kingsfund.org.uk/sites/default/files/Health%20Inequalities.pdf

- **Kings Fund (2013) Improving the public's health: A resource for local authorities**
  https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/improving-the-publics-health-kingsfund-dec13.pdf

- **Kings Fund (2013) Improving the public's health:**
  https://www.kingsfund.org.uk/projects/improving-publics-health

- **Kings Fund (2017)**
  https://www.kingsfund.org.uk/blog/2017/08/reducing-inequalities-health-towards-brave-old-world

- **LGA Feb 2018 'A matter of justice: Local government's role in tackling health inequalities'**
  https://local.gov.uk/matter-justice-local-governments-role-tackling-health-inequalities

- **LGA: Health in all policies: A manual for local government**
  https://local.gov.uk/health-all-policies-manual-local-government

- **Health Foundation: healthy lives infographics series**
  https://www.health.org.uk/collection/healthy-lives-infographics

- **Health Foundation: healthy lives quick guide**
  https://www.health.org.uk/sites/health/files/What-makes-us-healthy-quick-guide.pdf

- **Marmot (2010): Fair Society Healthy Lives**
  http://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf

- **NHS Reducing health inequalities resources:**
  https://www.england.nhs.uk/about/equality/equality-hub/resources/evidence/

- **PHE Local Health:**
  http://www.localhealth.org.uk/

- **PHE Public Health Outcomes Framework (PHOF):**
  https://fingertips.phe.org.uk/profile/public-health-outcomes-framework

- **PHE Public Health Profiles:**
  https://fingertips.phe.org.uk/

- **PHE (2017) Reducing health inequalities: system, scale and sustainability**
  https://www.gov.uk/government/publications/reducing-health-inequalities-in-local-areas

- **WHO (2015): McDaid, D, Sassi, F & Merkur, S (2015) Promoting Health, Preventing Disease: The Economic Case. World Health Organisation.**
  http://www.euro.who.int/__data/assets/pdf_file/0006/283695/Promoting-Health-Preventing-Disease-Economic-Case.pdf?ua=1

Appendix 2: PHE Indicators sets (Marmot; Health Equity)

Marmot indicators
Life expectancy at birth – males and females
Healthy life expectancy at birth – males and females
Inequality in life expectancy at birth – males and females
People reporting low life satisfaction
Good level of development at age 5
Good level of development at age 5 with free school meal status
GCSE achieved (5A*-C including English & Maths)
GCSE achieved (5A*-C including English & Maths) with free school meal status
19-24 year olds who are not in employment, education or training
Unemployment % (ONS model-based method)
Long-term claimants of Jobseeker's Allowance
Work-related illness
Households not reaching Minimum Income Standard
Fuel poverty for high fuel cost households
Utilisation of outdoor space for exercise/health reasons

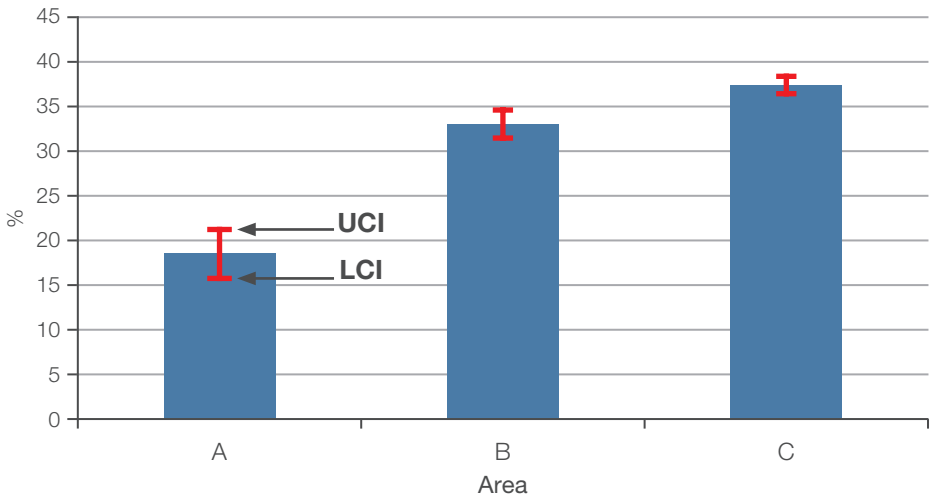
Health Equity Indicators
Life expectancy at birth
Healthy life expectancy at birth
Cardiovascular disease mortality under 75 years
Cancer mortality under 75 years
Infant mortality
Low birthweight of term babies
Proportion of five year old children with dental decay
Child excess weight in 4-5 and 10-11 year olds
Alcohol related hospital admissions
Prevalence of smoking among persons aged 18 years and over
Incidence of tuberculosis
Suicide
Self-reported wellbeing – low life satisfaction
Children in low income families (all dependent children under 20)
Readiness for school
Young people not in employment, education or training
Employment gap for those with a long-term condition
Homelessness

In **bold** – same or similar indicators between the two indicator sets

Appendix 3: Marmot priorities mapped to HWBS 2015-18 and APHR 2018

HLE from birth (2009-2013)	HLE from birth (2009-2013)	Inequality gap
-	-	Chapter 1: Overarching indicators
1. Giving every child the best start in life	Theme 1: Best start in life	Chapter 2: best start in life
2. Enabling all children, young people and adults to maximize their capabilities and have control over their lives	Theme 1: Best start in life Theme 3: Life skills, lifelong learning and good work	Chapter 2: best start in life
3. Creating the conditions for fair employment and good work for all	Theme 3: Life skills, lifelong learning and good work	Chapter 4: creating the conditions for fair employment and good work
4. Ensuring a healthy standard of living for all	Theme 5: A good natural and built environment	Chapter 5: Ensuring a healthy standard of living for all
5. Creating and developing healthy and sustainable places and communities	Theme 4: Community participation and feeling safe Theme 5: A good natural and built environment	Chapter 6: develop healthy and sustainable places and communities
6. Strengthening the role and impact of ill-health prevention	Theme 2: Good health	Chapter 3: prevention of poor physical and mental ill health

Appendix 4: Glossary

Term	Definition
Confidence Intervals	Confidence intervals are an indicator of how accurate a set of data values is likely to be. Generally, the more values there are in a dataset, the more accurate the data is likely to be. Confidence intervals of 95% are routinely used. This indicates that 95% of the time, the values would be expected to fall within the range of the upper and lower confidence interval values, around the mean (average) value. It is possible to tell whether a value is statistically significantly higher or lower using confidence intervals. In the following chart, the red markers are the confidence interval levels and in area A, the arrows point to the upper (UCI) and lower (LCI) confidence intervals. An value is considered statistically significantly higher or lower than another value if there is a gap in values, for example, below the UCI in Area A is lower than the LCI in areas B and C, therefore Area A is significantly lower than areas A and B. 
Decile	A decile is method of splitting up a set of ranked data into 10 equally sized subsections.
Directly Standardised Rate	Direct standardisation involves applying the rates of disease observed in the study group of people to a ‘standard’ population. The choice of the standard population depends on available data, and the purpose of the analysis.
Health Inequality	“Health inequalities are the preventable, unfair and unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental and economic conditions within societies, which determine the risk of people getting ill, their ability to prevent sickness, or opportunities to take action and access treatment when ill health occurs.” – NHS England

Healthy life expectancy vs. Disability Free life expectancy	From the 2011 Census, one question was asked for each of the two indicators – healthy life expectancy (HLE) and disability free life expectancy (DFLE). Healthy life expectancy is a very general question about overall health and the DFLE question asked about longer term health problems or disabilities that would be expected to last for more than a year. These two questions are related in that they are enquiring about peoples' perceptions of their own health, however the responses would not necessarily be linked, for example, it is possible to be limited by a disability but still feel in good health. Census questions: ■ *Healthy life expectancy question: "How is your health in general?" Very Good/Good/Fair/Bad/Very bad.* ■ *Disability free life expectancy question: "Do you have any health problems or disabilities that you expect will last for more than a year?" Yes/No. If the answer was yes, a further question was asked; "Do these health problems or disabilities, when taken singly or together, substantially limit your ability to carry out normal day to day activities? If you are receiving medication or treatment, please consider what the situation would be without the medication or treatment" Yes/No.*
IMD	The Index of Multiple Deprivation (IMD) is a measure of relative deprivation for small areas in England (Lower Super Output Areas (LSOA)). It is a combined measure of deprivation based on a total of 37 separate indicators that have been grouped into seven domains, each of which reflects a different aspect of deprivation experienced by individuals living in an area. The IMD ranks every small area in England from 1 (most deprived area) to 32,844 (least deprived area).
IDACI	The Income Deprivation Affecting Children Index (IDACI) is a specific subset of the Income Deprivation Domain relating to child poverty factors. The index is calculated by the Office of the Deputy Prime Minister and measures in a local area the proportion of children under the age of 16 that live in income deprived households. Income deprived families are defined as families that receive: ■ Income Support; or ■ income-based Jobseekers Allowance; or ■ income-based Employment and Support Allowance; or ■ Pension Credit (Guarantee); or ■ Working Tax Credit or Child Tax Credit with an equalised income (excluding housing benefit) below 60 per cent of the national median before housing costs
IDAOPI	The Income Deprivation Affecting Older People Index (IDAOPI) is another subset of the Income Deprivation Domain. 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).

Inequity	Inequity is an instance of injustice or unfairness. Health inequities are differences in health status between population groups that are socially produced, systematic in their unequal distribution across the population, avoidable and unfair. "Inequity and inequality: these terms are sometimes confused, but are not interchangeable, inequity refers to unfair, avoidable differences arising from poor governance, corruption or cultural exclusion while inequality simply refers to the uneven distribution of health or health resources as a result of genetic or other factors or the lack of resources." – Global Health Europe
Inequality	"Health inequalities can be defined as differences in health status or in the distribution of health determinants between different population groups. For example, differences in mobility between elderly people and younger populations or differences in mortality rates between people from different social classes." – World Health Organisation Absolute Inequality reflects the magnitude of difference in health between two subgroups. Relative Inequality measures show proportionate differences in health among subgroups.
Life expectancy at birth	Life expectancy at birth can be defined as the average number of years a person would expect to live based on contemporary mortality rates. For a particular area and time period, it is an estimate of the average number of years a new born baby would survive if he or she experienced the age-specific mortality rates for that area and time period throughout his or her life. Figures reflect mortality among those living in an area in each time period, rather than what will be experienced throughout life among those born in the area. The figures are not therefore the number of years a baby born in the area could actually expect to live, both because the mortality rates of the area are likely to change in the future and because many of those born in the area will live elsewhere for at least some part of their lives. This indicator is an extremely important measure of mortality and morbidity.
Proportionate universalism	To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. Proportionate universalism is the resourcing and delivering of universal services at a scale and intensity proportionate to the degree of need.
Regression Analysis	In statistical modelling, regression analysis is a set of statistical processes for estimating the relationships among variables. It includes many techniques for modelling and analysing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables (or 'predictors').
Slope index of inequality (years)	This is a single score representing the gap between the best-off and worst-off within a district for a chosen indicator. The slope index score represents the gap in years of life expectancy at birth between the most deprived and least deprived communities within a local authority area. The larger the index score (in years), the greater the disparity in life expectancy.

Social gradient in health	The social gradient in heath refers to the fact that inequalities in population health status are related to inequalities in social status; people who are relatively disadvantaged have progressively worse health outcomes than those who are more advantaged.
Standardised Admission Ratio (SAR)	The Standardised Admission Ratio (SAR) is a summary estimate of admission rates relative to the national pattern of admissions and takes into account differences in a population's age, sex and socioeconomic deprivation.
Wider determinants of health (also known as the social and economic determinants)	The wider determinants of health are a diverse range of social, economic and environmental factors which impact on people's health. These factors can be largely outside of an individual's direct control, and are influenced by the local, national and international distribution of power and resources which shape the conditions of daily life. Examples of wider determinants of health include: ■ Socioeconomic status ■ Education ■ Income ■ Smoking status ■ Employment ■ Alcohol use ■ Social networks

5 Summary table of APHR 2018 indicators

Chapter	Type of indicator	Indicator Green: analysis included in this report Grey: not covered in this report in detail	Most recent data source (year)	Timescale for change[i]	Merton inequality gap[ii]			Trend in Merton inequality gap[iii] (+/–; stable; mixed; Not Available)	PHE Marmot indicator (Y/N)	PHE Health Equity Indicator (Y/N)	Current Merton indicator?[iv]	Geography level for data availability[v]	Inequality trend to date?[vi] (Y/N) i.e. can we measure historic trend in inequalities using gap analysis?	Inequality trend in future?[vii] (Y/N/Maybe) i.e. will we be able to measure future gap trend?	Consider as a HWBS 2019-2024 indicator? (Y/N/Maybe)
					Method of calculating gap										
					30/30	East/ West	Other								
Chapter 1: Overarching indicators of inequality in health and wellbeing	Determinant	Life Expectancy at birth (Males)	Local Health (2011-15)	Long term	M: 4.1 years			Stable	Y	Y	HWBS	Ward; Borough	Y	Y	Y (SII may be more robust)
	Determinant	Life Expectancy at birth (Females)	Local Health (2011-15)	Long term	F: 2.7 years			Reducing (unclear if statistically significant)	Y	Y	HWBS	Ward; Borough	Y	Y	Y (SII may be more robust)
	Determinant	Inequality in life expectancy at birth [Slope Index of Inequality] (Males)	PHOF (2014-16)	Long term	M: 6.2 years			Stable	Y	N	-	Sub-borough[viii] (10/10 analysis)	Y	Y	Y
	Determinant	Inequality in life expectancy at birth [Slope Index of Inequality] (Females)	PHOF (2014-16)	Long term	F: 3.4 years			Reducing (but not yet statistically significant)	Y	N	-	Sub-borough	Y	Y	Y
	Determinant	Healthy life Expectancy at birth (male)	ONS (2009-13)	Long term	9.4 years			N/A	Y	Y	MP	(as above)	N	N	Y (borough not gap)
	Determinant	Healthy life Expectancy at birth (female)	ONS (2009-13)	Long term	9.3 years			N/A	Y	Y	MP	Ward; Borough	N	N	Y (borough not gap)
	Determinant	Disability free life expectancy from birth (male and female)	ONS (2009-13)	Long term	M: 7.8 years F: 7.1 years			N/A	N	N	-	Ward; Borough	N	N	M (borough not gap)
	Determinant	Disability free life expectancy at age 65 (male and female)	ONS (2009-13)	Long term	M: 3.1 years F: 2.7 years			N/A	N	N	-	Ward; Borough	N	N	M (borough not gap)
	Determinant	Proportion living without disability at birth (male and female)	ONS (2009-13)	Long term	M: 4.7 % points F: 4.5 % points			N/A	N	N	-	Ward; Borough	N	N	M (borough not gap)
	Determinant	Proportion living without disability at age 65 (male and female)	ONS (2009-13)	Long term	M: 8.7 % points F: 7.0 % points			N/A	N	N	-	Ward; Borough	N	N	M (borough not gap)
	Determinant	Proportion of life spent in good health at birth (male and female)	ONS (2009-13)	Long term	M: 6.7 % points F: 7.2 % points			N/A	N	N	-	Ward; Borough	N	N	M (borough not gap)
	Determinant	Proportion of life spent in good health at age 65 (male and female)	ONS (2009-13)	Long term	M: 13.4 % points F: 11.8 % points			N/A	N	N	-	Ward; Borough	N	N	M (borough not gap)
	Mortality	Premature mortality (deaths in those under the age of 75)	Primary Care Mortality (PCMD) (2013-17)	Long term	12.5 % points			Increasing (unlikely to be statistically significant)	N	N	-	Ward; Borough	Y	Y	Y

Chapter	Type of indicator	Indicator	Data source (year)	Timescale for change?	Merton Gap			Trend in gap	PHE Marmot indicator	PHE Health Equity Indicator	Current Merton indicator?	Geography level for data availability	Inequality trend to date?	Inequality trend in future?	Consider as a HWBS 2019+ indicator?
					30/30	East/ West	Other								
Chapter 2: Best start in life	Determinant	Child Poverty - children living in low income families	HMRC and GLA (2015)	Medium to long term	21 % points (2015); 6 % points (2018 extrapolation)			Reducing (mixed underlying picture)	N	Y	-	Ward; Borough	Y	Y	Y
	Mortality	Infant mortality	PHOF (2014/16)	Medium to long term					N	Y	-	Borough	N	N	N
	Determinant / Morbidity	Low birthweight of term babies	PHE Local Health (2011-2015)	Medium to long term	0.8 % points			N/A	N	Y	-	Ward; Borough	N	Maybe via Local Health in future – to monitor	M
	Determinant	School readiness - child development at age 5 (end of reception)	Dep't for Education via PHE Local Health (2013/14)	Medium to long term	15.9 % points			N/A at ward level, only borough	Y	Y	-	Ward; Borough	N	N	M (borough not gap); lack of recent data
	Determinant	School readiness - child development at age 5 (end of reception) with free school meal (FSM) status	PHE Local Health (2016/17)	Medium to long term	10.0 % points (all children vs. those with FSM status: at borough not ward level)			Gap between all children and those with FSM reducing	Y	Y	HWBS (pupil premium not FSM)	Borough	Y but using different gap methodology	Y but using different gap methodology	Y (but gap analysis using different methodology)
	Determinant	GCSE achieved (5A*-C incl. English & Maths)	PHE Local Health (2013/14)	Medium to long term	15.4 % points			N/A – only two time points	Y	N	-	Ward; Borough	N – not robust as only two time points	Maybe via Local Health in future – to monitor	M if sufficient trend data available in future
	Determinant	GCSE achieved (5A*-C incl. English & Maths) with FSM status	PHOF (2015)	Medium to long term					Y	N	HWBS (pupil premium not FSM)	Borough	N	N	M (borough, not gap)
	Determinant	19-24 year olds / young people not in employment, education or training	GLA (2015)	Medium to long term					Y (19-24 year olds)	Y (16-18 year olds)	MP (16-17 year olds NEET)	Borough	N	N	M (borough, not gap)
	Morbidity	Proportion of 5 year olds with dental decay	PHOF (2016/17)	Short to medium term					N	Y	-	Borough	N	N	M (borough, not gap)
	Morbidity	Child Excess weight (Reception)	National Obesity Observatory/ PHE (14/15-16/17)	Short to medium term	9.6% points			Increasing	N	Y	-	Ward; Borough	Y	Y	Y – HWBB priority
	Morbidity	Child Excess weight (Year 6)	NOO / PHE (14/15-16/17)	Short to medium term	14.5% points			Increasing	N	Y	SP, MP, HWBS	Ward; Borough	Y	Y	Y – HWBB priority

Chapter	Type of indicator	Indicator	Data source (year)	Timescale for change?	Merton Gap			Trend in gap	PHE Marmot indicator	PHE Health Equity Indicator	Current Merton indicator?	Geography level for data availability	Inequality trend to date?	Inequality trend in future?	Consider as a HWBS 2019+ indicator?
					30/30	East/ West	Other								
Chapter 3: Prevention of ill health	Lifestyle / behavioural risk factor	Smoking prevalence (as recorded in GP Profiles)	GP QOF (2015/16)	Short to medium term	6.2 % points			Increasing	N	N but similar (see indicator below)	-	GP; Borough	Y	Y	Y, in lieu of ward data for Health Equity indicator
	Lifestyle / behavioural risk factor	Prevalence of smoking in those aged 18+	PHOF (2014)	Short to medium term					N	Y	HWBS	Borough	N	N	N – use similar indicator
	Lifestyle / Morbidity	Hospital stays due to alcohol related harm (Standardised Admission Ratio, SAR)	PHE Local Health HES (2011/12 - 2015/16)	Short to medium term	38.2 difference in Standardised Admission Ratio			N/A – only two time points	N	N but similar indicator[30]	HWBS	Ward; Borough	N – not robust (only 2 time points)	Maybe via Local Health in future – to monitor	Y if sufficient trend data available in future
	Physiological risk factor / Morbidity	Hypertension prevalence (GP profiles)	GP QOF (2016/17)	Short to medium term	1.5 % points			Increasing (not yet statistically significant)	N	N	-	GP; Borough	Y	Y	Y
	Morbidity	Diabetes prevalence (GP profiles)	GP QOF (2016/17)	Short to medium term	3.1 % points			Increasing (Statistically significant)	N	N	-	GP; Borough	Y	Y	Y – HWBB priority
	Morbidity	Incidence Rate of tuberculosis (TB)	PHE (2014-2016)	Short to medium term	25.6 per 100,000 rate difference			Increasing (unlikely to be statistically significant: small no.s)	N	Y	-	Ward; Borough	Y	Y	Y
	Morbidity	Mental Health (GP profiles)	GP QOF (2016/17)	Short to medium term	0.24 % points			Decreasing (but complex picture)	N	N	-	GP; Borough	Y	Y	Y – parity of esteem
	Morbidity	Depression (GP profiles)	GP QOF (2016/17)	Short to medium term	0.45 % points			Unclear trend (complex picture)	N	N	-	GP, Borough	Y	Y	Y – MCCG investment
	Morbidity	Self reported wellbeing – low life satisfaction	GLA (2013)	Medium to long term	11.7 point gap (2013)			Decreasing (but complex picture)	Y	Y		Borough	Y	M – monitor to see if more recent data	M (borough not gap); lack recent data
	Mortality	Suicide	PHOF (2014/16)	Medium to long term					N	Y		Borough	N	N	N
	Mortality	Cardiovascular disease mortality under 75 years	PHOF (2014/16)	Long term					N	Y		Borough	N	N	N – use premature mortality
	Mortality	Cancer mortality under 75 years	PHE Local Health (2010-14)	Long term	Not calculated but available at ward level			N/A – only two time points	N	Y	-	Ward; Borough	N – not robust as only two time points	Maybe via Local Health in future – to monitor	M if sufficient trend data available in future

[30] PHE Marmot indicator is Directly Standardised Rate (Merton: 495 per 100,000 in 2016/17); however, this is only available at borough, whereas PHE Local Health shows Standardised Admission Ratios by ward.

Chapter	Type of indicator	Indicator	Data source (year)	Timescale for change?	Merton Gap			Trend in gap	PHE Marmot indicator	PHE Health Equity Indicator	Current Merton indicator?	Geography level for data availability	Inequality trend to date?	Inequality trend in future?	Consider as a HWBS 2019+ indicator?
					30/30	East/ West	Other								
Chapter 4: Fair employment, good work	Determinant	Unemployment % (ONS model-based method)	PHOF (2016)	Medium to long term					Y	N	-	Borough	N	N	Await new Universal Credit (UC) metrics
	Determinant	Long term claimants of job seekers allowance	PHOF (2016)	Medium to long term					Y	N	-	Borough	N	N	Await new UC metrics
	Determinant	Work related illness	PHOF	Medium to long term					Y	N	-	London, England	N	N	N – limited borough data available
	Determinant	Households not reaching Minimum Income Standard	PHOF	Medium to long term					Y	N	-	London, England	N	N	N – limited borough data available
	Determinant	Employment gap for those with a long term condition	PHOF (2016/17)	Medium to long term					N	Y	-	Borough, London, England	Limited	N	M (borough not gap); await new UC metrics)
	Determinant	Economically active population claiming jobseeker's allowance (JSA)[31]	ONS NOMIS (2015)	Medium to long term	2.5 % points			Reducing	N but similar (see above indicators)	N	HWBS	Ward; Borough	Y	Y but depends on new UC metrics	Y (in lieu of ward data for Marmot/ Equity indicators); await new UC metrics
	Determinant	Employment & Support Allowance (ESA)	ONS NOMIS (2017)	Medium to long term	3.4 % points			Stable	N	N	--	Ward; Borough	Y	Y but depends on new UC metrics	Y (as above); but await new UC metrics
	Determinant	Incapacity benefit	NOMIS (2017)	Medium to long term	Not calculated as numbers too small			Numbers too small to make robust conclusions	N	N	HWBS	Ward; Borough	Y but numbers too small for robust trend	Y but numbers too small for robust trend	Await new UC metrics
	Determinant	Severe disablement allowance	NOMIS (2017)	Medium to long term	Not calculated as numbers too small			Numbers too small to make robust conclusions	N	N	-	Ward; Borough	Y but numbers too small to make robust conclusions	Y but numbers too small to make robust conclusions	Await new UC metrics

[31] According to NOMIS: JSA "is not an official measure of unemployment, but is the only indicative statistic available for areas smaller than Local Authorities."

Chapter	Type of indicator	Indicator	Data source (year)	Timescale for change?	Merton Gap			Trend in gap	PHE Marmot indicator	PHE Health Equity Indicator	Current Merton indicator?	Geography level for data availability	Inequality trend to date?	Inequality trend in future?	Consider as a HWBS 2019+ indicator?
					30/30	East/ West	Other								
Chapter 5: Healthy standard of living	Determinant	Deprivation IMD 2015	IMD (2015)	Long term	17.01 point difference in average score			N/A	N	N	-	LSOA; Ward	N	N	Y (trend not available, but can look at relative change over time)
	Determinant	Deprivation IMD 2015	IMD GP Profiles (2015) DCLG	Long term	11.74 point difference in score			N/A	N	N	-	GP; Borough	N	N	N (use IMD 2015 by ward as above)
	Determinant	Deprivation IMD 2015- IDACI - Children (GP profiles)	IMD GP Profiles (2015) DCLG	Long term	13.33 % point difference in score			N/A	N	N	-	GP; Borough	N	N	N – difficult to interpret, direct trend not available, Child Poverty is a better indicator
	Determinant	Deprivation IMD 2015- Deprivation in Older People	IMD GP Profiles (2015) DCLG	Long term	8.63 % point difference in score			N/A	N	N	-	GP; Borough	N	N	N – difficult to interpret, direct trend not available
	Determinant	Household overcrowding	ONS Census (2011)	Medium to long term	10.2 % points			N/A	N	N	-	Ward; Borough	N	N	N (lack of both recent data and trend until next Census in 2021)
	Determinant	Fuel poverty for high cost fuel households	PHE Local Health (ONS 2015)	Medium to long term	1.4 % points			N/A	Y	N	-	Ward; Borough	N	Maybe via Local Health in future – to monitor	M if sufficient trend data available in future
	Determinant	Homelessness	PHOF (2015/16)	Medium to long term					N	Y	-	Borough	N	N	Y (borough, not E/W or 30/30 gap), as a good measure of equity in itself)

Chapter	Type of indicator	Indicator	Data source (year)	Timescale for change?	Merton Gap			Trend in gap	PHE Marmot indicator	PHE Health Equity Indicator	Current Merton indicator?	Geography level for data availability	Inequality trend to date?	Inequality trend in future?	Consider as a HWBS 2019+ indicator?
					30/30	East/ West	Other								
Chapter 6: Healthy, sustainable communities	Determinant	Burglary	Metropolitan Police Data (2017)	Medium to long term	-3.4 per 1000 rate difference			N/A	N	N	-	Ward; Borough	Y but not calculated for this report	Y	N
	Determinant	Theft	Metropolitan Police Data (2017)	Medium to long term	-8.5 per 1000 rate difference			N/A	N	N	-	Ward; Borough	Y but not calculated for this report	Y	N
	Determinant	Criminal damage	Metropolitan Police Data (2017)	Medium to long term	4.2 per 1000 rate difference			N/A	N	N	-	Ward; Borough	Y but not calculated for this report	Y	N
	Determinant	Antisocial behaviour	Metropolitan Police Data (2017)	Medium to long term	7.0 per 1000 rate difference			N/A	N	N	-	Ward; Borough	Y but not calculated for this report	Y	Y
	Determinant	Violence against the person	Metropolitan Police Data (2017)	Medium to long term	14.5 per 1000 rate difference			N/A	N	N	-	Ward; Borough	Y but not calculated for this report	Y	M
	Determinant (Psychosocial risk factor)	Older people (65+) living alone	ONS Census (2011)	Medium to long term	0.5 % points			N/A	N	N	-	Ward, Borough	N	N	N as not a measure of social isolation in itself, and lack of timely trend data (Census)
	Determinant	Utilisation of outdoor space for exercise/ health reasons	PHOF (2015/16)	Short to medium term					Y	N	HWBS	Borough	N	N	Y (borough not gap)

[i] These represent the following approximate timescales: Short term: 3-5 years; Short to medium term: 8-10 years; Medium to long term: 12-15 years; Long term: 15+ years

[ii] 30/30 = absolute gap between the 30% most and least deprived wards in Merton; E/W = absolute gap between the average of the East Merton wards compared to the West Merton wards

[iii] Up (red), down (green), stable or mixed picture (orange), NA (not available) - grey

[iv] Indicators that are currently reported on. MP = Merton Partnership, SP = Public Health Service Plan, HWBS = Health and Wellbeing Strategy 2015-2018 indicator

[v] Geographic level that data is available at. LSOA = Lower Super Output Area; GP = GP practice

[vi] Is sufficient historic data available for this indicator so that trend can be calculated? Need at least 3 points of data in order to be able to accurately assess trend, and more is preferable.

[vii] Will this indicator be in use in the future? Will we be able to measure trend going forward?

[viii] Sub-borough gap analysis inherent in the data presented at borough level, comparing 10% most deprived with 10% least deprived areas

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