## Supporting commissioning decisions by assessing the burden of long-term conditions locally

People & Health Intelligence Section Southwark Public Health

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## **GATEWAY INFORMATION**

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## The report is aiming to improve our assessment of the burden and LTCs prioritisation process locally

## AIMS AND OBJECTIVES

This report aims to inform and support our commissioning decision process on improving the management and care coordination of long-term conditions (LTCs) locally.

The information provided in the report will be an important first step to drive better outcomes for long-term conditions at a local level.

## The main objectives are to:

- Provide epidemiological information on the burden of long-term conditions at a national and local level; and
- Develop a framework of metrics that will allow us to better assess the burden as well as prioritise these conditions locally

*Note*: Assessing multiple LTCs is outside the scope of this work. Unless otherwise specified we are primarily assessing cases and/or the prevalence of single chronic conditions locally – therefore the number of conditions does not necessarily equate to the number of people collectively, as some individuals may have more than one condition. This slide deck is intended for those involved in the commissioning and provision of LTC services locally, including SCCG/LTCs lead commissioner, local GPs and public health team.



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## The burden of LTCs and their management present a major challenge for health and social care

## THE CHALLENGE

According to the Department of Health: "A long-term condition (LTC) is one that cannot currently be cured but can be controlled with the use of medication and/or other therapies."

## **Currently:**

- There are around 15 million people living with a long-term condition (LTC) in England
- These people are the main driver of cost and activity in the NHS as they account for around 70% of overall health and care spend.
- They are disproportionately higher users of health services representing 55% of GP appointments, 68% of outpatient attendances, 72% of inpatient bed days, 58% of A&E attendances and 59% of practice nurse appointments, 40% of calls to the 111 service.
- Around 170,000 people die prematurely in England each year in total, with the main causes being cancers, circulatory diseases and respiratory conditions.

## In the Future:

- Demographic projections outline a 252% rise in the number of people over 65 by 2050 and consequently one or more LTC.
- While the number of people with any LTC should be relatively stable over the next 10 years, DH estimates that there will be a 30% increase in the number of people with three or more long term conditions over a 10 year period (2010 – 2020). In a quarter of people with multiple LTCs, one of the conditions will be depression.
- The average cost per year of someone with a long term condition is around £1,000; which rises to £3,000 for someone with two conditions and to £8,000 for people with 3 or more conditions.





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## The burden of LTCs by specific diseases: a list of 19 most prevalent conditions has been drawn locally

## THE LOCAL PICTURE

According to 2016-17 QOF data the top seven conditions from the list account for 69% of all selected LTCs locally.

- It's important to note that for a number of these conditions there is a wide variation in prevalence and diagnostic coverage between GP practices.
- Some conditions including Osteoarthritis and HIV are a high burden, while despite their rarity some conditions such as sickle cell disease is also of particular local importance due to it's impact on individuals and the health & care system.

Condition	South	nwark	London	England
	Cases	Prevalence	Prevalence	Prevalence
1. Hypertension (HBP)	34,338	10.6%	11.1%	13.8%
2. Depression (18+)	19,562	7.5%	6.6%	9.1%
3. Diabetes (17+)	16,121	6.1%	6.5%	6.7%
4. Asthma (all ages)	14,138	4.4%	4.6%	5.9%
5. Chronic Kidney Disease (18+)	5,630	2.2%	2.4%	4.1%
6. Cancer	4,732	1.5%	1.8%	2.6%
7. COPD	4,415	1.4%	1.2%	1.9%
8. Coronary Heart Disease (CHD)	4,401	1.4%	2.0%	3.2%
9. Severe Mental Illness (SMI)	4,001	1.2%	1.1%	0.9%
10. Stroke & TIA	2,900	0.9%	1.1%	1.8%
11. Atrial Fibrillation	2,470	0.8%	1.1%	1.8%
12. Heart Failure	1,475	0.5%	0.5%	0.8%
13. Epilepsy (18+)	1,377	0.5%	0.6%	0.8%
14. Rheumatoid arthritis (16+)	1,278	0.5%	0.5%	0.7%
15. Dementia	1,216	0.4%	0.5%	0.8%
16. Learning Disabilities (All ages)	1,001	0.3%	0.4%	0.5%
17. Sickle cell disease (SCD)*	724	0.2%	0.1%	0.03%
18. Osteoarthritis (45+) Knee (K) /	13,946 (K)	17.1%		18.2%
Hip (H)	8,444 (H)	10.3%	N/A	10.9%
19 HIV***	2.557	1 2%	0.6%	0.2%

\* Sickle cell disease (SCD) - is the name for a group of inherited conditions that affect the red blood cells. The most serious type is called sickle cell anaemia. SCD prevalence provided is made of sickle cell anaemia (678) and sickle cell Thalassaemia (46)

\*\* Osteoarthritis (OA) - Knee and Hip OA are the main forms of OA and the prevalence is provided on slide 7 and refers to adult OA cases for over 45s.

\*\*\* HIV prevalence - HIV prevalence, expressed as a rate per 1,000, is also provided on the next slide.



Slide 7

## Osteoarthritis and HIV are two burdensome conditions that we have added to the LTCs priority list

## THE LOCAL PICTURE

## Approximately 1 in 3 adults aged 45 years and over has a form of osteoarthritis (OA).

 Approximately 1 in 5 adults over 45 years in England have knee OA and 1 in 9 adults have hip OA. This varies between local authority areas.

The local prevalence of HIV (reported as rate per 1,000) remains significantly higher than London and England and is a cause for concern.

Condition	Sou	thwark	London	England
	Cases	Prevalence	Prevalence	Prevalence
Osteoarthritis (over 45				
years)	22,390	27.4%	NA	29.1%
a. Knee OA (over 45 years)	13,946	17.1%		18.2%
Severe	4,184	5.1%	NA	6.1%
b. Hip OA (over 45 years)	8,444	10.3%		10.9%
Severe	2,227 2.7%		NA	3.2%

Condition	Sou	thwark	London	England	
	Cases	Prevalence	Prevalence	Prevalence	
HIV diagnosis prevalence rates per 1000 (15-59 years)	2,557	11.5	5.8	2.3	





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## We have developed a framework for assessing the burden of long-term conditions locally

## SIX MEASURES OF INTEREST

For the purpose of better assessing the burden of various long terms conditions locally, we have developed a framework that include the following disease measures:

- The prevalence
- Health impact and inequalities
- Co-morbidity and risk factors
- Opportunities
- Resource impact (and system actors)
- Existing management and variation



## Assessing the long-term conditions burden locally -Framework 1

## PREVALENCE

## The ageing population and increased prevalence of long-term conditions have a significant impact on health and social care

- It is estimated that in England, over 30% of the population have one or more long term conditions.
- The number of people with one or more LTCs is expected to rise from 1.9million in 2008 to 2.9 million by 2018.

## Age and deprivation are major factors on the prevalence of the LTCs

- Long-term conditions are more prevalent in older people: 58% of people over 60 compared to 14% under 40;
- Some people living in a deprived area will have multiple health problems 10–15 years earlier than people in affluent areas; and
- In more deprived groups: people in the poorest social class have a 60% higher prevalence than those in the richest social class and 30% more severity of disease.





## Assessing the burden of long-term conditions locally – Framework 2

## **OTHER MEASURES OF INTEREST**

## Health impact and inequalities

LTCs are not just a health issue they can have a significant impact on a person's ability to work and live a full life.

*Socio-economic distribution*: Most individual LTCs are more common in people from lower socio-economic groups, and are usually more severe even in conditions where prevalence is lower – for e.g. stroke.

## **Opportunities**

There will be rising demand for the prevention and management of multi-morbidity rather than of single diseases *Care planning*: 72% of people with LTCs use their care plan to manage everyday health but only 5.4% of people with LTCs have a written care plan

## **Resource impact & system actors**

Although people with LTCs only account for 30% of the population, it is estimated that they utilise around 70% of the healthcare budget. Not all LTCs are equal in terms of the cost of health and social care. The most costly are dementia, kidney disease, stroke, heart failure and COPD

System actors include: NICE, NHSE, PHE and various national bodies dealing with managing these conditions nationally

Locally: SCCG, PH, LCNs and other local organisations

## Co-morbidity and risk factors

LTCs develop over a long period of time and similarly, many important adult risk factors for LTCs (poverty, smoking, diet, physical activity) also have their own natural histories. For example age (over 65 or older) being male/female and being overweight or obese are common risk factors for a number of CVDs.

Other behaviour risk factors, for example people who smoke are more likely to have flare ups in their conditions and more likely to be admitted to hospital.

## Existing management and variation

Key guidance documents include:

- Kings Fund: Long-term conditions
- NICE guidance: multiple long-term conditions
- Department of Health: Long-term conditions compendium of information. 3rd edition, 2012.





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# We can group long term conditions into related areas: of which CVD and mental health / neurology dominate THE LOCAL PICTURE

## Locally cardiovascular diseases (CVD) are the most prevalent group of long-term conditions, followed by MH and neurological conditions .

High dependency and other LTCs are ranked third with respiratory conditions being the fourth prevalent group.

Other groups include:	Condition Crown	Condition	ш	ОНС	Southwark		London
3 - 1	Condition Group	Condition	INL	ฐกอ	Cases	Prevalence	Prevalence
The musculoskeletal		Dementia	0.5%	0.3%	1,216	0.4%	0.5%
conditions	Montal Health 9	Depression (18+)	7.6%	7.4%	19,562	7.5%	6.6%
conditions		Epilepsy (18+)	0.6%	0.5%	1,377	0.5%	0.6%
<ul> <li>Osteoporosis</li> </ul>	conditions	Learning Disabilities (All ages)	0.3%	0.3%	1,001	0.3%	0.4%
<ul> <li>Rheumatoid arthritis</li> </ul>	conditions	Serious Mental Health Illness (SMI)	1.3%	1.2%	4,001	1.2%	1.1%
The lifestyle group <ul> <li>Obesity</li> <li>Smoking</li> </ul>	Cardiovascular conditions	Atrial Fibrillation	0.8%	0.7%	2,470	0.8%	1.1%
		CHD	1.4%	1.4%	4,401	1.4%	2.0%
		Stroke & TIA	1.0%	0.8%	2,900	0.9%	1.1%
Omoking		Heart Failure	0.4%	0.5%	1,475	0.5%	0.5%
		Hypertension	11.1%	10.2%	34,338	10.6%	11.1%
I ne fertility, obstetrics	Respiratory	COPD	1.1%	1.6%	4,415	1.4%	1.1%
and gynaecology	conditions	Asthma	4.6%	4.2%	14,138	4.4%	4.6%
group	High dopondopov	Cancer	1.5%	1.4%	4,732	1.5%	1.8%
<ul> <li>Cervical screening</li> </ul>	8 other LTCs	Chronic Kidney Disease (18+)	1.9%	2.4%	5,630	2.2%	2.4%
<ul> <li>Contraception</li> </ul>		Diabetes (17+)	6.5%	5.8%	16,121	6.1%	6.5%

Source: NHS Digital, Quality & Outcomes Framework 2016-17



## In this section we will look at the group of cardiovascular diseases (CVDs)

## **CARDIOVASCULAR CONDITIONS**

Cardiovascular conditions are the most prevalent group of long-term conditions locally. This section will look at the main conditions within the cardiovascular group.

Condition	Condition	ILII	QHS	Soι	London	
Group	Condition	INL		Cases	Prevalence	Prevalence
	Atrial Fibrillation	0.8%	0.7%	2,470	0.8%	1.1%
	CHD	1.4%	1.4%	4,401	1.4%	2.0%
Cardiovascular	Stroke & TIA	1.0%	0.8%	2,900	0.9%	1.1%
conditions	Heart Failure	0.4%	0.5%	1,475	0.5%	0.5%
	Hypertension	11.1%	10.2%	34,338	10.6%	11.1%

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## Hypertension (HT) is the most recorded condition and the greatest risk for CVD mortality locally

**CARDIOVASCULAR CONDITIONS: HYPERTENSION** 

#### Prevalence

One in four people in England is affected by HT. In 2015-16 there were 33,523 patients in Southwark on the hypertension register, equivalent to a recorded prevalence of 10.6%. That's 8.7% lower than the expected SCCG prevalence (19.3%), meaning that only 55% of people with HT were diagnosed, and, another 45% (or 26,775 adults) yet to be diagnosed.

*Recent local trend*:  $\longrightarrow$  (no significant change)

## Health impact & inequalities

Locally:

- 26,618 (79.4%) people whose blood pressure is ≤150/90
- 901 (2.7%) people who are excepted to have an optimal control
- 5,985 (17.9%) additional people whose blood pressure is not ≤ 150/90

There is robust evidence that action to lower blood pressure does reduce the risk to health. People from most deprived areas are 30% more likely than those from least-deprived to have HBP.

#### **Resource impact & system actors**

Nationally it is estimated that for every 10 people diagnosed with HBP, a further 7 remain undiagnosed and untreated. Locally, there is large GP practice variation in terms of undiagnosed rates (ranging from 19% to 63%).

Over the next 10 years a 5mmHg reduction in BP could save an estimated 45,000 quality adjusted life years (QALYS), and save £850m on related health and social care costs.

*System actors include*: NICE, BHF, PHE, NHSE; and, locally: PH, SCCG, LCNs

### **Co-morbidity and risk factors**

Hypertension is quantitatively the most important risk factor for premature cardiovascular disease, being more common than smoking, dyslipidaemia, and diabetes; and accounting for an estimated 54% of all strokes and 47% of all ischemic heart disease events globally. Uncontrolled HT is a leading cause of heart disease and stroke.

## **Opportunities**

*Increase detection*: Improve the prevalence gap (close the GP variation in terms of recorded and estimated prevalence for high BP)

*Treat to NICE targets*: Ensure that those with confirmed HT go on to receive effective medicines to lower their BP.

*System improvements* to: (i) Enable GPs to refer more quickly and easily to behaviour change services; and, (ii) Encourage GPs to refer those found to be at high risk by the NHS Health Checks programme

## Existing management and variation

*Definition*: High blood pressure, also known as hypertension, is usually defined as having a sustained blood pressure of 140/90mmHg or above.

There is a significant GP practice variance with PHE prevalence model predicting that 44.1% of HT cases undiagnosed for 2014.

NICE CG127 (updated Nov.2016)



## **Coronary Heart Disease is a serious heart condition and the 2<sup>nd</sup> most common cause of mortality locally CARDIOVASCULAR CONDITIONS: CORONARY HEART DISEASE**

#### Prevalence

Coronary heart disease (CHD) is a major cause of death both in the UK and worldwide. In the UK, nearly one in seven men and one in twelve women die from CHD. Most deaths from CHD are caused by a heart attack. QOF data suggest that the prevalence of CHD has decreased in all UK nations in recent years. In Southwark, there were 4401 diagnosed CHD cases (or 1.4%) for 2015/16 and that's significantly lower than England rates (3.2%). *Recent local trend*:  $\clubsuit$  (decreasing)

## Health impact & inequalities

CHD kills more than twice as many women in the UK as breast cancer. Around 2.3 million people are living with CHD in the UK – over 60 per cent are male. CHD caused over 23,000 premature deaths in the UK. Amongst the three comparable mortality indicators (CHD deaths, alcohol-related deaths, and cancer deaths), relative inequalities in CHD mortality have increased over the long term. CHD (and CVDs) disproportionately affects people from disadvantaged backgrounds and is a major contributor to health inequalities.

## Resource impact & system actors

There were around 404,000 inpatient episodes of CHD in NHS hospitals in 2012/13 in England. The proportion of inpatient episodes attributed to CHD was almost twice as high among men as among women.

A wide range of national and local policies will have an impact on CHD including social and legal policies and policies on transport, housing and other determinants of health.

## Co-morbidity and risk factors

CHD is caused by a gradual narrowing of coronary arteries a process known as atherosclerosis. There are several factors increasing the risk of developing CHD such as: smoking, HBP, high cholesterol, diabetes, being physically inactive, being overweight/obese, family history, sex (men being more likely to be affected at and earlier age than women; and older age. Depression is commonly present in patients with CHD and is independently associated with increased cardiovascular morbidity and mortality.

## Opportunities

There are several ways to reduce the risk of developing CHD, which include interventions to lower the blood pressure and cholesterol levels, as well as modifying the lifestyle risky behaviours by eating healthier, being physically active and keeping a healthy weight while giving up smoking and reducing the amount of alcohol consumption. Locally: 92.6% of people diagnosed with CHD are taking aspirin, an alternative anti-platelet therapy, or an anti-coagulant; with 90.7% of them with a blood pressure ≤150 / 90.

## Existing management and variation

*Definition*: Coronary heart disease (CHD) is the term that describes what happens when your heart's blood supply is blocked or interrupted by a build-up of fatty substances in the coronary arteries.

Through identifying all people at significant risk of CVD and offer them appropriate advice and treatment to reduce their risks.

NICE guidance PH25. June 2010



## Stroke and TIA are serious heart conditions and common causes of morbidity and mortality locally CARDIOVASCULAR CONDITIONS: STROKE & TIA

#### Prevalence

There are more than 100,000 strokes in the UK each year; that is around one stroke every 5 minutes. Stroke is the fourth leading cause of death in UK (38,000 deaths each year).

2,900 patients in Southwark were on the stroke register in 2015-16; which equates to a prevalence of 0.9%, slightly below London (1.1%) and England (1.7%). Prevalence over the past 4 years have been stable. *Recent local trend*:  $\longrightarrow$  (no significant change)

#### Health impact & inequalities

In the UK over 245,000 hospital visits each year are due to strokes. Over 1.2 million people in the UK have survived a stroke or TIA, and almost half are under the age of 75.

*Locally*: There were 328 hospital admissions with a primary diagnosis of stroke in 2014-15. That rate was significantly above both the London and national levels (has been for the last 5 years).

People from a Black ethnic background are at a higher risk and twice as likely to have a stroke compared to those from a white background.

## Resource impact & system actors

NICE estimates that ongoing treatment costs post-stroke may be as high as £16,000 per year for a major stroke. Estimated cost of a stroke in the first year is £12,228.

There is a significantly higher number of patients that go direct to a stroke unit locally with still a high number of emergency readmissions. Latest figures show that just over half of patients (51.9%) with stroke are admitted to an acute stroke unit within 4 hours of arrival to hospital. This is significantly below the national average (60.3%).

## Co-morbidity and risk factors

Atrial fibrillation is one of the most common forms of abnormal heart rhythm (arrhythmia) and a major cause of stroke. AF is found in a third of all ischaemic strokes, even more after post-stroke atrial fibrillation monitoring. The prevalence of AF increases with age, so CCGs with older populations will have higher prevalence. 2,262 patients in Southwark were on the AF register in 2015-16. The PHE prevalence model predict that in average we would expect a much higher prevalence of AF locally with 46.6% of cases left undiagnosed

## **Opportunities**

• Early detection of AF must be prioritised throughout Southwark. AF is both under recognised and under treated. People with AF should be identified through opportunistic pulse checks, targeted particularly at those aged over 65 years and people with long term conditions.

• Reasons for poor control should be identified and addressed.

• Virtually all Southwark patients admitted with stroke are discharged with a joint health & social care plan (99.3% compared to 87.7% in England).

## Existing management and variation

Definition: A stroke occurs when the blood supply to part of the brain is cut off, causing brain cells to become damaged. A transient ischaemic attack (TIA), known as a "mini-stroke", is caused by a temporary disruption in the blood supply to part of the brain. Stroke risk assessment should be undertaken in all people with AF using the CHA2DS2VASc risk assessment tool at least annually. Those with CHA2DS2VASc score  $\geq$  2 should be offered anticoagulant therapy according to NICE Guidance 2014.

## Atrial Fibrillation is the most important risk factor for stroke with high undiagnosed rates locally

**CARDIOVASCULAR CONDITIONS: ATRIAL FIBRILLATION** 

#### Prevalence

Atrial fibrillation (AF) is the most common heart rhythm disturbance, affecting around one million people in the UK.

In 2016/17 there were 2470 patients on the AF register in Southwark (prevalence of 0.8%). This is significantly below the figures for London (1.1%) and England (1.8%). The estimated prevalence of AF is 1.3% (or 4091 people of which 1621 people with undiagnosed AF). *Recent local trends*: 1 (increasing)

### Health impact & inequalities

Locally, there are 2,834 people with a history of stroke or TIA in SCCG. Stroke admissions with a history of AF not prescribed anticoagulation prior to stroke is 53.5% (lower than neighbouring CCGs).

According to the CVD intelligence pack there are: 1,791 people with AF with a CHA2DS2-VASc score  $\geq$  2: with 251 (14%) of them not on anticoagulation therapy.

Increasing public awareness (and educational level) is associated with better diagnosis and prognosis.

#### Resource impact & system actors

AF can affect adults of any age, but it becomes more common as you get older. It affects about 7 in 100 people aged over 65, and more men than women have it. Using the GP cluster method of calculating potential gains, if each practice was to achieve as well as the upper quartile of its national cluster, then an additional 158 people would be treated.

#### **Co-morbidity and risk factors**

Atrial fibrillation increases the risk of stroke by a factor of 5, and strokes caused by AF are often more severe, with higher mortality and greater disability. In many patients no underlying cause can be found. Atrial fibrillation is more likely to occur in people with other conditions, such as HBP, atherosclerosis, or a heart valve problem. The risk and severity of stroke associated with AF is increased considerably by the presence of comorbidity.

#### **Opportunities**

Sometimes AF can be resolved once the underlying condition has been dealt with. Anticoagulation reduces the risk of stroke in people with AF by two thirds. Despite this, AF is underdiagnosed and under treated: up to a third of people with AF are unaware they have the condition and even when diagnosed inadequate treatment is common – large numbers do not receive anticoagulants or have poor anticoagulant control.

#### Existing management and variation

*Definition*: Atrial fibrillation is a heart condition that causes an irregular and often abnormally fast heart rate.

Blood thinning drugs like warfarin and a newer class of drugs called NOACs are the most effective treatments to reduce the risk of stroke in people with AF.

There is a large GP practice variation locally (20% to 80% of cases yet to be diagnosed).

HINST: developing a systematic approach to the identification and management of AF. Nov. 2011

PHE. NHS Southwark CCG: CVD intelligence pack. June 2017 PHE fingertips

Atrial fibrillation prevalence estimates for local populations. PHE 2015



## Heart failure is a chronic heart condition with a tangible impact on individuals as well as healthcare resources CARDIOVASCULAR CONDITIONS: HEART FAILURE

#### Prevalence

Heart failure (HF) occurs when the heart is not pumping blood around the body as well as it should, most commonly when the heart muscle has been damaged – for example, after a heart attack. Over half a million people in the UK have been diagnosed with heart failure.

In Southwark, there were 1475 diagnosed cases of HF (or 0.5%) for 2016/17, which was the same as the London but lower than England rates (0.8%). *Recent local trend*: — (no significant change)

## Health impact & inequalities

Living with heart failure causes disruption to the lives of sufferers. Facilitation of access to healthcare, through good communication between services and having a strong support network of both family and clinicians can reduce the impact of HF on the lives of the patients and those around them.

Socioeconomic status (SES) is a powerful predictor of incident coronary disease and adverse CVD outcomes. The evidence suggest that inequalities in heart disease morbidity and mortality lead to a disadvantage in patients with low SES.

## Resource impact & system actors

HF admission rates for 2016/17 was significantly higher than England average (228.6 vs. 156.9 respectively).

There is an additional (29.1%) risk of HF in people with diabetes (201011-12/13).

There is evidence to suggest that heart conditions affect people psychologically and emotionally, as well as physically.

https://www.bhf.org.uk/heart-health/conditions/coronary-heart-disease;

PHE fingertips

PHE. NHS Southwark CCG: CVD intelligence pack. June 2017

## **Co-morbidity and risk factors**

There are a number of reasons why someone may develop HF. It can be sudden or it can happen slowly over months or even years. The most common causes are: coronary artery disease and a heart attack; high blood pressure, faulty heart valves and damage of heart muscle (cardiomyopathy) - all affecting the heart's capacity to pump blood.

Comorbidity associated with heart failure is high; for e.g. the presence of kidney failure increases the use of health resources and leads to higher costs within the NHS.

## Opportunities

HF is a long-term condition that often gets worse over time. It can't be cured, but with treatment and lifestyle changes, many people can have a good quality life.

Reduce the risk: through identifying those at significant risk of a heart attack or HF (in particular people with HBP, cardiomyopathy, etc.) and offer them appropriate advice and treatment. A better control of CKD would help the HF prevention in those affected.

Awareness campaign s should be implemented to increase public awareness of HF and the importance of its prevention.

## Existing management and variation

Definition: see prevalence section

Acute heart failure can present as new-onset heart failure in people without known cardiac dysfunction, or as acute decompensation of chronic heart failure.

NICE guidance CG108. Aug. 2010

NICE guidance CG1987. Oct 2014

Southwark.gov.uk

## In this section we will look at mental health and neurological conditions

## **MENTAL & NEUROLOGICAL CONDITIONS**

Mental health and neurological conditions are the second most prevalent group of long-term conditions.

Condition	Condition III		оце	Soι	London	
Group	Condition	INL		Cases	Prevalence	Prevalence
	Dementia	0.5%	0.3%	1,216	0.4%	0.5%
	Depression (18+)	7.6%	7.4%	19,562	7.5%	6.6%
Mental Health	Epilepsy (18+)	0.6%	0.5%	1,377	0.5%	0.6%
& Neurological conditions	Learning Disabilities (All ages)	0.3%	0.3%	1,001	0.3%	0.4%
	Serious Mental Health Illness (SMI)	1.3%	1.2%	4,001	1.2%	1.1%

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## Depression is a common mental health problem and the second most recorded condition locally

**MENTAL & NEUROLOGICAL CONDITIONS: DEPRESSION** 

#### Prevalence

In England, 1 in 6 people report experiencing a common mental health problem (CMD) such as anxiety and depression in any given week.

Locally, an estimated 47,600 adults suffer from a CMD and 41% of those (about 21,000) are diagnosed with depression (prevalence of 7.5%). In addition, about 1,460 children are estimated to have an emotional disorder (i.e. depression and/or anxiety). *Recent local trend*: (increasing)

## Health impact & inequalities

It is thought one in four people will experience a mental health problem in any given year, and 3.3 in 100 people are reported to have depression.

It is estimated that £1 in every £8 spent in England on long term conditions is linked to poor mental health.

46% of people with a mental health problem have a long term condition.

## Resource impact & system actors

Without treatment, depression is likely to be chronic, recurrent, and associated with increasing disability over time. This is a condition that has been predicted to be the leading cause of disease burden in 2030 by the WHO. Thus, the independent disability of depression might indicate an anticipated burden of depression in the context of physical disorders.

## Co-morbidity and risk factors

Evidence suggest that depression is more frequent in patients with physical disorders and particularly among patients with multiple physical disorders. This comorbidity is related to a poor quality of life (QoL), worse outcomes, higher medical costs and greater disability as when depression or a medical disease is present alone. It is well established that genetic factors act in concert with environmental factors across the lifespan to create a vulnerability to general depression.

## Opportunities

Mental health problems that are first identified in adolescence and adulthood can have their origins in pathways that begin much earlier in life with childhood mental health problems.

*Prevention* efforts should target both specific and non-specific risk factors, enhance protective factors and use a developmental approach. Evidence-based prevention programs include utilizing cognitive behavioural and/or interpersonal approaches, and family-based prevention strategies.

## Existing management and variation

*Definition*: Depression is a common mental disorder that causes people to experience depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration.

NICE CG90. Depression in adults: recognitions and management. Last updated April 2016



Naylor C, Parsonage M, McDaid D, et al. Long-term conditions and mental health: The cost of co-morbidities. *The King's Fund*, 2012. Kang HJ, et al. Comorbidity of depression with physical disorders: research and clinical implications. *Chonnam Med J*. 2015; 51(1): 8-18.

<sup>3-18.</sup> Slide 22

## Severe mental illness represents a significant burden and is associated with high levels of need locally MENTAL & NEUROLOGICAL CONDITIONS: SEVERE MENTAL ILLNESS

#### Prevalence

Severe mental illness (SMI) refers to psychotic conditions such as schizophrenia and bipolar affective disorder. The lifespan of people with SMI is shorter compared to the general population. Locally, SMI affect 1.2% of Southwark residents (4,001 people), compared to 1.1% in London. The prevalence of SMI increases with age: 54% of Southwark's SMI population are male and it most commonly affects people between 30-60 years of age.

Recent local trend: 1 (increasing)

## Health impact & inequalities

People with serious mental health problems die prematurely. The life expectancy of someone with a serious mental health problem such as bipolar disorder or schizophrenia is 15 to 20 years less than the general population. 46% of people with a mental health problem have a long term condition. Mental health problems are unevenly distributed across society with disproportionate impacts on people living in poverty, those who are unemployed and those experiencing discrimination. SMI is disproportionately diagnosed more within people from the Black ethnic background.

## Resource impact & system actors

It is estimated that £1 in every £8 spent in England on long term conditions is linked to poor mental health. It is also estimated that at least one third of people who access substance misuse services have a mental health problem. Unmet needs in SMI (i.e. schizophrenia) arise from a discrepancy between the use of mental health services and the extent of need for those services.

## Co-morbidity and risk factors

People with SMI can be affected by a vicious cycle of risk factors including smoking, obesity and socioeconomic deprivation. Due to these vulnerabilities, the SMI cohort represents significant health needs and costs. Individuals with SMI are prone to many different physical health problems including LTCs and multi-morbidities. A person with an SMI is more likely to have a co-morbid physical health problem when compared to the general population.

## **Opportunities**

SMI is a potentially burdensome mental health issue that is first identified in adolescence and adulthood can have their origins in pathways that begin much earlier in life.

In addition to modifiable lifestyle factors and psychotropic medication side effects, poorer access to and quality of received health care remain addressable problems for patients with SMI.

#### Existing management and variation

Greater individual and system level attention to these physical disorders that can worsen psychiatric stability, treatment adherence, and life expectancy as well as quality of life, will improve outcomes of these generally disadvantaged groups.

NICE guidance CG192. Last updated Aug. 2017

NICE guidance: Improving the physical health of people with SMIs - a guality improvement approach



## **Epilepsy is a neurological condition that requires particular attention and better management amongst CYP MENTAL & NEUROLOGICAL CONDITIONS: EPILEPSY**

#### Prevalence

Epilepsy is a neurological condition that affects an estimated 600,000 people and their families in the UK. It commonly starts in childhood. Accurate estimates of incidence and prevalence are difficult to achieve because identifying people who may have epilepsy is difficult.

The recorded prevalence locally for 2016/17 was 0.5% (1377 adults 18+), lower than London and England rates (0.6% and 0.8% respectively). *Recent local trend*: 1 (increasing)

### Health impact & inequalities

In the UK there are around 1,200 deaths related to epilepsy a year. Some of these deaths are caused by complications during or after a seizure. Recent studies show that the majority of premature deaths in people with epilepsy may be caused by another condition the person has alongside their epilepsy. The disabilities associated with epilepsy are cognitive, psychological, and social. There is evidence to suggest that people affected by the condition with a low socioeconomic status (SES) are more likely to have uncontrollable seizures than those from a higher status.

## Resource impact & system actors

In Southwark, the unplanned hospital admission rates for asthma and epilepsy in children under 19 years are higher than London averages, suggesting a need for better management of these conditions in the community, including schools.

The epilepsies (NICE CG 20) stated that the annual estimated cost of established epilepsies was £2 billion (direct and indirect costs).

## **Co-morbidity and risk factors**

Many people with epilepsy will have no obvious reason why they have developed it. In some cases the epilepsy is due to a previous illness. Examples would be a previous stroke or meningitis. The way that genes programme nerve cells to transmit messages may also make epilepsy more likely.

Although many enjoy a full and active life; for some epilepsy affects their health and quality of life more than just the effect of having seizures: anxiety, stress and depression are the most commonly reported mental health problem for people with epilepsy.

## **Opportunities**

Although they look different, all epileptic seizures are caused by a sudden change in how brain cells send chemical and electrical signals to each other. Good seizure control can sometimes take a long time to achieve. In a small proportion of people with epilepsy it may be impossible to control all seizures. Some children have severe forms of epilepsy or syndromes that are difficult to treat with medicines. Improving epilepsy care for children and young people: an integrated approach

## Existing management and variation

*Definition*: Epilepsy is a common neurological disorder characterised by recurring seizures. Two-thirds of people with active epilepsy have their epilepsy controlled satisfactorily with anti-epileptic drugs (AEDs). Other approaches may include surgery. Optimal management improves health outcomes and can also help to minimise other, often detrimental, impacts on social, educational and employment activity.

NICE guidance CG137. Feb. 2016

## Dementia is a debilitating condition with a significant burden to health and social care services

**MENTAL & NEUROLOGICAL CONDITIONS: DEMENTIA** 

#### Prevalence

The UK's ageing population has lead to the increase in the number of people with dementia. It is estimated that in 2015 there were more than 850,000 people living with the disease, a number which is projected to increase by 40% over the next 12 years.

The recorded prevalence has risen locally from 0.23% in 2010/11 to 0.38% in 2016/17 for patients of all ages (1216 adults). Despite the recent increase, the prevalence is still significantly lower compared to the national and London averages (0.8% and 0.5% respectively). *Recent local trend*: (increasing)

## Health impact & inequalities

There is evidence that untreated comorbidities in people with dementia may be increasing health and care costs significantly by causing a deterioration in the dementia.

International research suggests that part of this cost could result from people with dementia and comorbidities not having their conditions appropriately managed, resulting in them accruing greater treatment costs than adults who do not have dementia but suffer from the same comorbid conditions.

## Resource impact & system actors

Dementia has been predicted to cost the UK economy £26bn a year, with the current cost of dementia diagnosis and treatment to the NHS coming in at £4.3bn. It is estimated that there is currently a total net loss of approximately: £377 million for people with dementia and diabetes, £115.7 million for people with dementia and UTIs, and £501.7 million for people with dementia and depression.

## Co-morbidity and risk factors

Vascular dementia results from conditions that damage the brain's blood vessels. In general, the risk factors for vascular dementia are the same as those for heart disease and stroke.

Some evidence suggest that hypertension and diabetes are the comorbidities most frequently found in older people with dementia. However, four of the five most common comorbidities people with dementia are admitted to hospital for in the UK are preventable conditions - a fall, broken/fractured hip or hip replacement, urinary infections and chest infections.

## Opportunities

Identifying people who may be at risk and early diagnosis of dementia are important factors in ensuring the most efficient and highest quality care for this patient group and their carers and also reduce the number of emergency admissions to hospital. Significant savings could therefore be made to health and social care by developing policies and strategies to improve the prevention, diagnosis, treatment and management of comorbid conditions in people with dementia.

## Existing management and variation

*Definition:* 'Dementia' is a clinical syndrome (group of symptoms) characterised by difficulties with one or more areas of mental function. People with dementia are at higher risk of not receiving the appropriate treatment when they have been diagnosed, as dementia has the potential to complicate care for other conditions, as well as making management of those conditions more difficult.

NICE guidance CG42. Last updated Sep. 2016

## Learning disabilities remain an underdiagnosed condition with a significant impact on care services MENTAL & NEUROLOGICAL CONDITIONS: LEARNING DISABILITY

#### Prevalence

Approximately 1.5million people in the UK have a learning disability (LD).

The recorded prevalence locally for 2016/17 was 0.3% (1001 cases of all ages; 699 adults 18+); that's lower to London and England rates (0.4% and 0.5% respectively). Prevalence models suggest that there are around 5800 people with LD in Southwark: a figure projected to increase to 6500 by 2021. The largest cohort are those aged 25 to 34 years; with those 60-64 age group predicted to have a 34% increase between 2016 and 2021.

#### Health impact & inequalities

People with LDs tend to take longer to develop new skills and may require support with everyday activities. The extent of the disability varies from mild to severe/profound. Children and young people with LDs are much more likely than others to live in poverty and to have additional long term health problems and disabilities (such as epilepsy and sensory impairments). Locally, the majority of people receiving support for LD are in the white ethnic group (53%) followed by BME (30%).

## Resource impact & system actors

Many people with LDs will be unknown to LD or other social care services; which suggests that locally we may have many more people with LDs that have support needs which, if left unmet, will put them at a significant disadvantage. Locally, higher care costs can be found for people under 25 (£833 pp) followed by those in their 50s. Local estimates also suggest that placement outside the borough incurs higher residential care costs.

## Co-morbidity and risk factors

A learning disability can be described as a reduced intellectual ability which affects someone's ability to perform everyday activities. Some causes of LD can include: mental illness, genetic causes, complications during birth, or childhood illnesses. Many conditions associated with LD also impact physical or mental health. Between 25% and 40% of people with LD experience mental health problems. About 50% of people with learning disability have at least one significant mental or physical health problem.

### **Opportunities**

The social model looks at ways of removing barriers that restrict life choices for disabled people. When barriers are removed, disabled people can be independent and equal in society, with choice and control over their own lives. The support adults with LD receive varies greatly depending on their individual needs. With the advent of Learning & Disability services, and the introduction of effective screening procedures, people with LDs should be identified and their particular support needs met.

## Existing management and variation

Definition: See Co-morbidities section above.

A learning disability is a lifelong condition; it is not an illness and cannot be cured.

NICE guideline: people with learning disabilities. Updated Oct. 2017 NICE guidance NG54. Sep. 2016



Liaison and diversion manager and practitioner resources: Learning disability

Learning disabilities in Southwark - draft JSNA. Public health and Children & Adult Services (2018).

## In this section we will look at high dependency and other long-term conditions group

## **HIGH DEPENDENCY CONDITIONS**

High dependency and other LTCs are the third most prevalent group of long-term conditions locally.

Condition			0110	Sout	London	
Group	Condition	IHL	QHS	Cases	Prevalence	Prevalence
	Cancer*	1.5%	1.4%	4,732	1.5%	1.8%
пign dopondopov &	Chronic Kidney Disease	1 0%	2 /0/			
other LTCs	(18+)	1.970	2.4 /0	5,630	2.2%	2.4%
other LICS	Diabetes (17+)	6.5%	5.8%	16,121	6.1%	6.5%

Note: Cancers are not included on this report, and will be covered separately within the JSNA



## Diabetes is a major risk factor for CVD and the fourth most recorded chronic condition locally

**HIGH DEPENDENCY CONDITIONS: DIABETES** 

#### Prevalence

Approximately 9% of the adult population in the UK has diabetes. The estimated total prevalence of diabetes in NHS Southwark CCG is 9.1% (diagnosed 5.9%, undiagnosed 3.2%). Locally, men (5.3%) have a higher diagnosed prevalence than women (4.9%)

Additionally, there are an estimated 10.2% of people in SCCG who are at increased risk of developing diabetes (i.e. with nondiabetic hyperglycaemia). *Recent local rend:* (increasing)

## Health impact & inequalities

There are currently 3.4 million people with Type 2 diabetes in England with around 200,000 new diagnoses every year. The evidence clearly points to the fact that socio-economic inequalities in diabetes care do exist. Low individual SES and residential area deprivation are often associated with worse process indicators and worse intermediate outcomes, resulting in higher risks of macrovascular (coronary artery disease, peripheral arterial disease, and stroke) and microvascular complications (diabetic nephropathy, neuropathy, and retinopathy).

## **Resource impact & system actors**

One in six of all people in hospital have diabetes – while diabetes is often not the reason for admission, they often need a longer stay in hospital, are more likely to be re admitted and their risk of dying is higher. Diabetes care is estimated to account for at least 5% of UK healthcare expenditure, and up to 10% of NHS expenditure. *System actors include*: NICE, Diabetes UK, PHE, NHSE; and local expertise: PH, SCCG, LCNs

## Co-morbidity and risk factors

Diabetes is a common, chronic disease that may lead to a range of complications which can cause disability and reduce quality of life and life expectancy. (also see health impact/inequalities) Type 2 diabetes is commonly associated with obesity, physical inactivity, raised blood pressure, and therefore is recognised to have an increased cardiovascular risk.

### **Opportunities**

*Improve diagnosis*: Improve the prevalence gap (close the GP variation in terms of recorded and estimated prevalence for IGT and diagnosed diabetes)

*Follow NICE* recommendations: for managing type 2 diabetes in adults, with a focus on patient education, dietary advice, managing cardiovascular risk, managing blood glucose levels, and identifying and managing long-term complications.

*System improvements* to: Enable GPs to identify those with prediabetes and refer more quickly and easily to behaviour change services.

## Existing management and variation

*Definition*: Diabetes is a disease that affects the body's ability to produce or respond to the hormone insulin. This causes glucose to quickly rise in the blood.

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NHS Diabetes Prevention Programme

- NICE Guidance NG28 (updated May 2017)
- Diabetes UK: Diabetes primary and community care



## Chronic Kidney Disease (CKD) is a serious health problem and the fifth most prevalent LTC locally HIGH DEPENDENCY CONDITIONS: CHRONIC KIDNEY DISEASE

#### Prevalence

The CKD prevalence model for adults aged 16 and over in England. It is expected that 2.6 million people aged 16 years and older in England have CKD stage 3-5. This is equal to 6.1% of the population of this age group. CKD stage 3-5 prevalence is higher in women than in men, 7.4% versus 4.7% [1].

Locally the QOF prevalence of CKD stage 3-5 (18+) in 2016 was 2.2% (men: 2%; women 1.5%), while the modelled (expected) prevalence for same disease stages is estimated to be 3.3%. *Recent local trend*: N/A.

## Health impact & inequalities

In kidney care, the delays faced by people from ethnic minority backgrounds in receiving a suitable kidney transplant are widely recognised. Expansion of renal unit facilities across the country has reduced travel times in most areas, however the evidence suggest the possibility of inequitable geographic access to RRT persists. [3]

## Resource impact & system actors

More than half of CKD's national budget (£1.4 billion) is spent on renal replacement therapy (RRT) for the 2% of people with CKD that progresses to kidney failure [2].

We have a significantly lower than expected number of people with diabetes recorded as undergoing RRT. However, the additional risk of RRT in people with diabetes locally is still 51.3% higher than in the general local population (2011/12).

## **Co-morbidity and risk factors**

People with CKD tend to have a number of co-morbidities and the prevalence of co-morbidity increases with decreasing renal function (CVD, diabetes, hypertension and anaemia).

CKD is associated with increasing age (stage 3-5: 13.5% of people aged 65-74 and 32.7% of people aged 75 and over), and with conditions such as HT and diabetes. This is likely to have implications for Southwark due to a large population of African origin who are at increased risk of both HT and diabetes.

## Opportunities

CKD is often unrecognised because there are no specific symptoms, and it is often not diagnosed or diagnosed late. A late presentation was still reported as 19% overall in the Renal Association's 2013 <u>UK</u> <u>Renal Registry report</u>.

The early identification and investigation of people who have or are at risk of developing CKD remains an important aspect of improving diagnosis and disease management.

## Existing management and variation

*Definition*: CKD is a type of kidney disease in which there is gradual loss of kidney function over a period of months or years.

CKD is divided into 5 stages and uses the combination of an index of kidney function, the glomerular filtration rate (GFR), and markers of kidney damage to define the stages.

NICE CG182: CKD in adults - assessment and management. Updated 2015



<sup>1.</sup> CKD prevalence model. PHE 2014.

Kerr M, et al. (2012) Estimating the financial cost of chronic kidney disease to the NHS in England. Nephrology Dialysis Transplantation. 27 (Suppl. 3): iii73–80

## In this section we will look at respiratory conditions group

## **RESPIRATORY CONDITIONS**

Respiratory conditions are the fourth and least prevalent group of long-term conditions locally.

Condition	Condition			Southwark		London	
Group	Condition	INL	QID	Cases	Prevalence	Prevalence	
Respiratory	COPD	1.1%	1.6%	4,415	1.4%	1.1%	
conditions	Asthma	4.6%	4.2%	14,138	4.4%	4.6%	

Jouthwa southwark

## Asthma is a common, chronic respiratory disease and the fifth most recorded condition locally

**RESPIRATORY CONDITIONS: ASTHMA** 

#### Prevalence

Asthma is one of the most common chronic diseases in childhood and affects 5–10% of all children in the general population.

1 in 11 children in the UK (or 200,000 children and young people in London) receive treatment for asthma.

The local asthma prevalence for 2016 was 4.4% (14,138 cases in 2016) as compared to 4.6% and 5.9% in London and England respectively. The estimated prevalence (2008) locally was 8.8%. *Recent local trend:* **1** *(increasing)* 

#### Health impact & inequalities

As thma affects about five million people in the UK. The annual as thma cost to the NHS is  $\pm 1.1$  billion.

There are differences in care levels across the UK with nearly twice as many people with asthma in Northern Ireland (48.2%) receiving basic asthma care as in London (27.6%). This inequality is not just geographical but generational. A quarter of people aged 18-29 (25.1%) received basic asthma care, compared to 41.7% of people aged 70-79.

## Resource impact & system actors

Locally: In 2012/13, there were 1.12 asthma admissions and 0.98 emergency admissions (EA) per 1000 population. In 2015/16, A&E attendance (<18 years old) was 481 per 1000 population. Asthma mean length of stay for EA in 2012/13 was 2.36 days; and, asthma cost per EA was £839 (2010/11). System actors: Asthma UK, NICE, BTS, NHSE, PHE. Locally: PH, SCCG, LCNs

#### **Co-morbidity and risk factors**

Asthma is often associated with various comorbidities. The most frequently reported asthma comorbid conditions include rhinitis, sinusitis, gastroesophageal reflux disease, obstructive sleep apnoea, hormonal disorders and psychopathologies.

Factors that increase the risk of asthma include: allergies, family history, obesity, smoking, prematurity/low birth weight and viral respiratory infections.

#### **Opportunities**

Over diagnosis of childhood asthma is common in primary care, leading to unnecessary treatment, disease burden, and impact on quality of life. However, only in a small percentage of children is a diagnosis of asthma confirmed by lung function tests. (see NICE NG80)

It is estimated that 75% of emergency asthma admissions are preventable.

#### Existing management and variation

*Definition*: Asthma is a respiratory condition marked by attacks of spasm in the bronchi of the lungs, causing difficulty in breathing. Measures of basic care for people with asthma are constantly improving, but two thirds of people are still not receiving the basic asthma care. *National guidance*:

British Thoracic Society guidelines on the management of asthma. NICE guidance NG80. Nov. 2017



## Chronic Obstructive Pulmonary Disease (COPD) is a major cause of morbidity and mortality locally

**RESPIRATORY CONDITIONS: COPD** 

#### Prevalence

The prevalence of diagnosed COPD in England for 2014/15 was 1.82%, which equates to approximately 1,034,578 people. Locally, the recorded prevalence of COPD is 1.4% (4415 cases), while the estimated prevalence for 2011 was 3.1%. Around half of cases are diagnosed in those under 70s.

QOF data for England show that spirometry was used to confirm the diagnosis in approximately 90% of people with COPD (of those not exception reported). That figure was 82.4% for SCCG (2015/16). *Recent local trend*: **1** (increasing)

## Health impact & inequalities

COPD causes 115,000 emergency admissions per year, 24,000 deaths per year and 16,000 deaths within 90 days of admission.

Locally: COPD admission and emergency admissions per 100 patients on disease register are significantly higher than England average (16.2% and 15.1% respectively).

PHE's INHALE tool (<u>http://fingertips.phe.org.uk/inhale</u>), shows that potentially unwarranted variation exists.

## Resource impact & system actors

COPD is a major cause of morbidity and mortality in the UK with over 27,000 deaths per annum. There are an estimated 3 million people suffering from the disease in the UK – with 2.1 million presumed, but as yet, undiagnosed.

SCCG had an estimated 36.6% of detected COPD prevalence for 2011/12. COPD cost per admission locally is £2074 (lower than national average).

## **Co-morbidity and risk factors**

COPD is a serious long-term lung disease which is common in later life and mainly caused by smoking. QOF smoking prevalence for SCCG is 18.6%; and GP practice range from 10.1% to 26.5%. Type 2 respiratory failure occurs in a quarter of COPD admissions. Multi-morbidity is the norm with nearly half of people with COPD having three or more additional diagnoses; in only one in five patients will COPD be an isolated disorder.

## **Opportunities**

COPD is not just a disease of the lungs, but is a multi-system disease requiring a multidimensional assessment and holistic approach to management.

Both pharmacological and non-pharmacological therapy not only improves current control (symptoms, health status, activity levels) but also can reduce future risk of exacerbations, disease progression and mortality (depending on the intervention).

## Existing management and variation

A diagnosis of COPD relies on clinical judgement based on a combination of history, physical examination and confirmation of the presence of airflow obstruction using spirometry.

NICE clinical guideline (CG101) specifies that post-bronchodilator spirometry should be used to diagnose and grade the severity of airways obstruction. Failure to use post-bronchodilator readings has been shown to overestimate the prevalence of COPD by 25%.

NICE guidance CG101. June 2010

COPD in England – finding the measure of success. National COPD Audit Programme.2016. <u>Gaduzo S, et al. Diagnosis and management of COPD in primary care. Aug. 2015</u> BHF: COPD resources for health care professionals

## In this section we will look at musculoskeletal conditions

## **MUSCULOSKELETAL CONDITIONS**

Osteoarthritis (of the knee and hip) and rheumatoid arthritis are the most common conditions of this group.

Condition	Southwark		London	England
	Cases	Prevalence	Prevalence	Prevalence
Osteoarthritis (over 45 years)	22,390	27.4%	NA	29.1%
a. Knee OA (over 45 years) Severe	13,946 <i>4,184</i>	17.1% <i>5.1%</i>	NA	18.2% <i>6.1%</i>
b. Hip OA (over 45 years) Severe	8,444 2,227	10.3% <i>2.7%</i>	NA	10.9% <i>3.2%</i>
Rheumatoid arthritis (16+)	1,278	0.5%	0.5%	0.7%



## Osteoarthritis (of knee and hip) is a common musculoskeletal condition and highly prevalent locally MUSCULOSKELETAL CONDITIONS: OSTEOARTHRITIS

#### Prevalence

The exact incidence and prevalence of osteoarthritis is difficult to determine – however, approximately 1 in 5 adults (18.2%) over 45 years in England have osteoarthritis (OA) of the knee and 1 in 9 adults (10.9%) have OA of the hip. This varies between different LAs in England.

According to Arthritis UK (MSK calculator), the local OA prevalence (people over 45) is 10.3% (8,444 people) for hip OA, and 17.1% (13,946) for Knee OA. *Recent local trends*: N/A

## Health impact & inequalities

OA is the most common form of arthritis and poses a large burden to the health and social care system. It causes pain and stiffness, especially in the hip, knee, and thumb joints.

The disease symptoms are debilitating and, as well as causing physical impairment, can affect the psychosocial wellbeing of the patient. Many people with OA also experience fatigue, poor sleep, anxiety, depression, social isolation, loss of work, financial difficulty and a general deterioration in quality of life.

## Resource impact & system actors

Locally for 2011-12, there have been 174 knee replacement and 134 hip replacements (or 2/1,000 people over 45) at a cost of £1.34milion and £900,000 respectively. *System actors include*:

National bodies: NICE, Arthritis Research UK, Primary Care Rheumatology Society, RCGPs, PHE, NHSE; and Local expertise: PH, SCCG, LCNs

## **Co-morbidity and risk factors**

Given the projected increases in obesity, and the growth and ageing of the population the proportion of people affected by osteoarthritis is expected to rise. Furthermore, the impact of this disease is substantially increased by the common occurrence of comorbid conditions, such as hypertension and renal impairment.

There are a number of risk factors for the development of osteoarthritis including increasing age, female sex, genetic factors and previous joint injury. The largest modifiable risk factor is obesity.

## Opportunities

*Increase detection*: Improve the prevalence gap (close the GP variation in terms of recorded and estimated prevalence for IGT and Diabetes)

*Follow NICE* recommendations: for improving the diagnosis, a holistic approach to OA assessment and management, education and self-management as well as non-pharmacological and drug treatment and referrals for consideration of join surgery.

## Existing management and variation

*Definition*: OA is a degenerative joint disease (affecting joint cartilage and the underlying bone), most common from middle age onward.

There is variation in the prevalence of both knee and hip osteoarthritis at local authority level in England as estimated by the MSK Calculator.

NICE Quality standard QS87. June 2015



Arthritis Research UK - Prevalence of osteoarthritis in England and local authorities: Southwark. PHE. <u>Arthritis Research UK: data and statistics</u> <u>Osteoarthritis 3: impact on patients. Feb.2012</u>

# Rheumatoid arthritis could be challenging, but early diagnosis and treatment can make a big difference MUSCULOSKELETAL CONDITIONS: RHEUMATOID ARTHRITIS

#### Prevalence

RA is a systemic disease, meaning that it doesn't just affect joints. RA can affect a person's whole system, including organs such as the lungs, heart and eyes. About 1% of the population in the UK has RA – more than 400,000 people in the UK. The recorded prevalence locally for 2016/17 was 0.5% (1278 cases diagnosed on 16+). Southwark diagnosed RA prevalence was significantly lower compared to the national average (0.5% versus 0.73% respectively) and within a mid-range compared to other London CCGs. *Recent local trend*:  $\longrightarrow$  (stable for the last four years)

## Health impact & inequalities

The impact of the disease is dependent upon numerous factors including the aggressiveness of the onset, how well controlled it is and how long a patient has had the disease for. RA can be a profoundly debilitating and disabling disease. It's a condition that affects more women than men, roughly two to three times as many women. Ease of access to healthcare services could play an important role in rates of utilisation and management of RA.

## Resource impact & system actors

Although RA can affect anyone (age 16 +), three quarters of people with RA are first diagnosed when of working age - with the largest cohort being over 40 years old. RA is thus a major cause of sickness absence and worklessness - this is estimated to cost around £1.8 billion per year. Almost a third of people with RA have given up work due to their condition, with well over a quarter doing so within one year of diagnosis, and over half within six years.

## Co-morbidity and risk factors

RA is an autoimmune disease, which means that the immune system starts attacking body's own tissues, which causes inflammation. Inflammation in RA becomes a long-term (chronic) process. There's some evidence that lifestyle factors may increase the risk of developing the condition. People with RA have a higher risk of suffering a heart attack, atrial fibrillation and strokes compared to the general population: 80 per cent of RA patients have one or more comorbidities with the average being 1.6.

## Opportunities

There's no cure for RA yet, but modern treatments can ease the symptoms and alter the way the disease progresses to keep joint damage to a minimum. Most people can have periods of months or even years between flare-ups, when there's little inflammation, although damage can still be caused in these periods. Early diagnosis of *RA* and effective *treatment* with disease-modifying antirheumatic drugs (DMARDs) are essential to reduce joint destruction and disability. Centralising care will have a positive impact on health outcomes.

## Existing management and variation

Definition: See co-morbidity section.

Management: See Opportunities section above and NICE guidance. Variation: There is a large variation in diagnosed RA prevalence among Southwark GP practices.

NICE guidance CG79. Last updated Dec. 2015



#### Arthritis Research UK: what is rheumatoid arthritis?

Inflammatory arthritis in Southwark. Overview of prevalence data. PHIS team. March 2017. Breaking down barriers: rheumatoid arthritis and public awareness. National RA society (NRAS). July 2013.

## Other chronic conditions considered as part of this assessment

## **OTHER CHRONIC CONDITIONS**

Both sickle cell diseases and HIV are of a particular importance due to a high prevalence locally.

Condition	Southwark		London	England	
	Cases	Prevalence	Prevalence	Prevalence	
HIV diagnosis prevalence rates per 1000 (15-59 years)	2,557	11.5	5.8	2.3	
Sickle cell disease (SCD)	724	0.2%	0.1%	0.03%	

outhwo

## Improving the HIV prevention and management remains a challenge and healthcare priority locally OTHER CHRONIC CONDITIONS: HIV

#### Prevalence

Sexual health is a national and local public health priority. Southwark has some of the highest rates of HIV nationally. For 2015/16, the recorded prevalence of HIV in Southwark was 1.2% (2557 living with HIV in the borough) and that's significantly higher than London and England rates (0.6% and 0.2% respectively). Over half of all diagnosed HIV cases in Southwark were acquired through sex between men. The rate of new diagnosis of HIV for 2016 was still much higher than the England rate, but has gone down by 27% (from 60.1 to 44 per 100,000).

## Health impact & inequalities

Southwark has some of the highest levels of sexual health need nationally due to its young, mobile and ethnically diverse population. This demography, combined with improved service access following the national sexual health modernisation initiative has resulted in high levels of demand for GUM services. HIV/AIDS has had a great impact on society, both as an illness and as a source of discrimination. The disease also has large economic impacts.

## Resource impact & system actors

Sexual health would be a key focus in 2018, with a new sexual and reproductive health strategy to be developed with Lambeth and Lewisham councils.

Late diagnoses is the most important predictor of HIV-related morbidity and short-term mortality: over one-third (37 per cent) of adults newly diagnoses with HIV were diagnoses late in Southwark between 2014 and 2016.

## **Co-morbidity and risk factors**

Certain groups of people (including men who have sex with men or those from a black African ethnic background) are at particularly high risk and are advised to have regular HIV tests and STI screen if they have unprotected sex.

There is an increased risks of certain comorbidities. Diseases of the cardiovascular system, kidneys, liver, cognitive function, malignancies, and metabolic bone disease appear to be more common among HIV-infected patients.

## Opportunities

There is no cure for infection caused by the human immunodeficiency virus (HIV) but a number of drugs slow or halt disease progression. Treatment aims to prevent the mortality and morbidity associated with chronic HIV infection whilst minimising drug toxicity. Treatment also reduces the risk of HIV transmission; this risk and strategies to reduce HIV transmission should be discussed with patients and their sexual partners.

## Existing management and variation

*Definition*: Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) is a spectrum of conditions caused by infection with the human immunodeficiency virus (HIV).

NICE guidelines recommend GPs offer an HIV test to everyone at least once a year in high prevalence areas. This approach requires a change of mindset, normalising HIV testing as a routine screening in general practice.

NICE guidance: HIV and AIDS. Updated Oct. 2017



# Sickle cell disease is a rare condition, but with a high prevalence and healthcare importance locally OTHER CHRONIC CONDITIONS: SICKLE CELL DISEASE

#### Prevalence

Sickle cell disease (SCD) - is the name for a group of inherited conditions that affect the red blood cells. The most serious type is called sickle cell anaemia. SCD is estimated to affect 1 in every 2000 live births in England, and is the most common genetic conditions at birth.

SCD prevalence locally for 2016/17 is 0.2%, and is made of sickle cell anaemia (678 cases) and sickle cell Thalassaemia (46 cases). The local prevalence is significantly higher than London and England rates (0.1% and 0.03% respectively).

Recent local trend: No available data.

#### Health impact & inequalities

SCD varies in severity - it can still be a serious condition that can have a significant impact on a person's life. A number of health problems may develop, such as attacks of pain ("sickle-cell crisis"), anaemia, swelling in the hands/feet, bacterial infections and stroke. The average life expectancy (LE) in the developed world is 40 to 60 years.

Drug abuse is reported to be an emerging or understudied problem among SCD patients and its association with chronic pain in some patients.

## Resource impact & system actors

It is estimated that there are between 12,500 and 15,000 people with sickle cell disease in the UK. The prevalence of the disease is increasing because of immigration into the UK and new births. SCD patients with depression incur higher expenditures and longer stays than SCD patients without depression.

## Co-morbidity and risk factors

Sickle cell disease is caused by a faulty gene that affects how red blood cells develop. If both parents have this faulty gene, there's a 25% chance of each child they have being born with sickle cell disease. The child's parents often won't have the condition themselves because they may be carriers of the sickle cell trait . SCD mainly affects people of African, Caribbean, Middle Eastern, Eastern Mediterranean and Asian origin. In the UK, it's particularly common in people with an African or Caribbean family background.

## **Opportunities**

Sickle cell disease is a serious and lifelong condition, although longterm treatment can help manage many of the problems associated with it. SCD is often detected during pregnancy or soon after birth. Screening for SCD in pregnancy is offered to all pregnant women in England to check if there's a risk of a child being born with the condition, and all babies are offered screening as part of the new-born blood spot test. Blood tests can also be carried out at any age to check for the condition or to see if you're a carrier of the faulty gene that causes it.

## Existing management and variation

*Definition*: SCDs encompasses a group of inherited conditions which have the inheritance of sickle haemoglobin in common.

People with SCD will need specialist care throughout their lives. A number of treatments are available to help manage problems caused by the condition.

NICE guidance QS58. April 2014

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## Setting long-term condition priorities with biggest gains locally

## TOP THREE INDIVIDUAL DISEASE CONDITIONS

Individual disease prevalence ranking	Health impact and co- morbidities	NHS and other disease related costs	Effective interventions		
1. Hypertension (10.6%) One in four people in England is affected by HT. In 2015-16 there were 33,523 patients in Southwark on the HT register. Undiagnosed: 45% <i>Recent local trend</i> : — no significant change	HT is the 3 <sup>rd</sup> biggest risk factor for premature death and disability in England; at least half of all heart attacks and stroke are associated with high BP. People from most deprived areas are 30% more likely to have HBP than the least- deprived.	Over the next 10 years a 5mmHg reduction in BP could save an estimated 45,000 quality adjusted life years (QALYS), and save £850m on related health and social care costs.	Increase detection: improve the prevalence gap locally; Treat those diagnosed with HT to NICE targets; and System improvement : Enable GPs to refer quickly and effectively to behaviour change interventions.		
2. Depression (7.5%) An estimated 19,562 adults are diagnosed with depression locally (prevalence of 7.5%). Undiagnosed: unknown Recent local trend: increasing	It is thought one in four people will experience a mental health problem in any given year, and 3.3 in 100 people are reported to have depression. 46% of people with a mental health problem have a long term condition.	It is estimated that £1 in every £8 spent in England on long term conditions is linked to poor mental health. This is a condition that has been predicted to be the leading cause of disease burden in 2030 by the WHO.	<i>Prevention</i> efforts should target both specific and non-specific risk factors. Evidence-based prevention programs include utilizing cognitive behavioural and/or interpersonal approaches, and family-based prevention strategies.		
<b>3. Diabetes (6.1%)</b> The estimated total prevalence of diabetes locally is 9.1% (diagnosed 5.9%,) Undiagnosed : 3.2% <i>Recent local trend:</i> <i>(increasing)</i>	There are currently 3.4 million people with Type 2 DM in England with around 200,000 new diagnoses every year. Diabetes is a common, chronic disease that may lead to a range of complications which can cause disability and reduce quality of life and life expectancy.	Diabetes care is estimated to account for at least 5% of UK healthcare expenditure, and up to 10% of NHS expenditure. Primary care and screening for diabetes are key areas for where improved quality of care could contribute to NHS cost savings.	<i>Improve diagnosis</i> : Improve the prevalence gap <i>Follow NICE</i> recommendations: for managing type 2 diabetes in adults <i>System improvements</i> : Enable GPs to identify those with pre-diabetes and refer more quickly and easily to behaviour change services.		
	Southwark				



southwark

## Setting long-term condition priorities with biggest gains locally

## **TOP DISEASE GROUP CONDITION**

Disease group ranking	Health impact	NHS costs	Effective interventions
Cardiovascular conditions (AF, CHD, Stroke/TIA, HF, HT) Locally there were 45,584 people diagnosed with CVD (above diagnosis combined) for 2015/16.	CVD was responsible for 27% (126,682) of all deaths in England in 2014. A significant proportion of these deaths are premature. It is projected that by 2022 the number of people with	Treatment for CVD is increasing over time, with prescriptions and operations for CVD having substantially increased over the last two decades. The National Health Service in England spent	Through identifying and treating patients at who have risk factors for CVD the overall burden of CVD can be reduced. Both primary and secondary prevention measures are necessary to
Trend: Yeclining over time	a higher than 20% risk of cardiovascular disease could rise from 3.5 million in 2010 to 4.2 million.	around £6.8 billion on CVD in 2012/2013, the majority of which came from spending on secondary care.	CVD and inequalities in CVD mortality and prevalence.



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# The overall burden of LTCs can be reduced locally by focusing on the early diagnosis and better management NEXT STEPS

- 1. This report listed nineteen conditions that account for almost half of all the diagnosed disease prevalence locally. The top seven account for 69% of all selected LTCs burden with HT, Depression, Diabetes and Osteoarthritis the most prevalent ones (64%).
- 2. The ageing population and increased prevalence of certain LTCs (in particular CVDs and MH/Neurological conditions) have a significant impact on health and social care.
- 3. Some conditions are rising more quickly than others. Those are: cancers, diabetes, and chronic kidney disease
- 4. A framework of measures has been developed that assess the individual diseases of interest: prevalence, health impact and inequalities, resources, co-morbidities/risk factors, opportunities and management.

#### Actions:

- 1. Reduce the overall burden of LTCs locally by focusing on the early diagnosis, treatment and management of most prevalent conditions and those in the rise.
- 2. Use available data sources (and modelling estimates) to better predict the future burden of disease relating to major LTCs locally.
- 3. Identify the interventions which, if delivered efficiently and effectively, will turn the curve and reduce the burden of disease and therefore the costs to the health and social care system locally.

## **Opportunities**

- 1. Tackling the issue by:
- Better understanding the wide GP variation in terms of recorded and estimated prevalence for most prevalent conditions (including: HT, AF, and diabetes);
- Ensuring that those with confirmed diagnosis (HT, diabetes, asthma and CKD) go on to receive effective treatments and are managed according to the latest NICE guidance.
- 2. Use prevalence and budget modelling data to:
- Better understand the costs and impact on health and social care for all LTCs and particularly the most prevalent ones locally;
- More in depth analysis of those conditions that lead to comorbidities and higher cost to the system (i.e. HT, depression and diabetes);
- 3. Improvements are required to:
- Support individual behaviour change aimed at reducing key behaviour risk factors (i.e. smoking, physical inactivity, alcohol intake);
- A more effective GP referral using NHS health checks data for those identified to be at higher risk.
- 4. Apply an integrated (health & social care) model of tackling top LTCs locally (more effective collaboration with key stakeholders and LCNs).
- 5. Better understand the constellation of LTCs and the way they interact which is linked to effective management of complications and co-morbidities

