Adults, Health & Public Protection Policy & Scrutiny Committee

City of Westminster

Date:	21 March 2016
Classification:	General Release
Title:	**Primary Care Modelling Project**
Report of:	Stuart Lines, Deputy Director, Public Health
Cabinet Member Portfolio	Portfolio (Adults and Public Health)
Wards Involved:	All
Policy Context:	City for Choice
Report Author and Contact Details:	**Meenara Islam x8532** **mislam@westminster.gov.uk**

1. Executive Summary

1.1 The joint primary care modelling project is being undertaken to understand the current and future demographic profile of Westminster and the corresponding disease burden. The modelling and subsequent projections are intended to inform the decision making of the local Joint Primary Care Co-Commissioning Committee. To be able to commission quality primary care services to Westminster residents this Committee needs to understand the context in which primary care services are to be provided.

2. Key Matters for the Committee's Consideration

2.1 The Committee are asked to:

- Note the basis and progress of this project;
- Advise as to how it views the tool being used in Westminster by health and local authorities; and
- Share any other comments.

3. Background

3.1 In September 2014, the Westminster Health and Wellbeing Board received a report from NHS England on primary care commissioning. The Health and Wellbeing Board raised concerns that the strategy for primary care in Westminster was not forward looking enough and did not consider how changes to the population in Westminster, in particular the demographic and disease profiles, could impact on the level of need for primary care. It was also considered that it might be helpful to develop a greater understanding of how long-term housing, regeneration and infrastructure plans for the Borough might impact on the need for primary care services.

3.2 Following this meeting, the Chair of the Health and Wellbeing Board and the Chair of Central London Clinical Commissioning Group discussed undertaking a joint project to develop a better common understanding of some of these issues. At its meeting on 20 November 2014 it was agreed that the Board would commission officers to undertake a project to develop a model that would provide demographic projections and consequent disease burden projections to 2030. This model would be developed into a product that commissioners of service and the local primary care Joint Co-Commissioning Committees can use to assist with strategic decision making.

4. Project development

4.1 The project has three key outcomes:

- An understanding of the likely population size and profile for Westminster by 2030. This includes consideration of the daytime population (particularly the working population);

- An understanding of the likely burden of disease of this population by 2030; and

- Consideration of how new models of care being developed within the local health economy may impact on the use of primary care by this population in 2030.

4.2 The work will be delivered in three phases:

Phase 1

Develop a workable model which fulfils the brief originally agreed by the Health and Wellbeing Board and provides a strong foundation for Phase 2. Once the model has been tested, officers will collate health and local authority data and align the assumptions and baseline.

Phase 2

Overlay the impacts of regeneration, housing and infrastructure plans on the estimates modelled and allow for manipulation of variables and resulting impacts on population. This will include the mapping of the

existing provision of GP services both as regards numbers of clinicians as well as physical estate.

Phase 3

Undertake a joint assessment of how the size and needs of the Westminster population will impact on the demand for frontline primary care services. It is proposed that this assessment will inform the analysis used by NHS England, CLCCG and NWLCCG to plan for future provision. The assessment completed by the project will include the identification of local authority and voluntary sector levers (such as estates and planning policy) that could be used to support the provision of primary care to match population needs.

4.3 A joint team of analysts (nominated by the Clinical Commissioning Groups and the Council) are near to completing the Phase 1 of work and are developing and user testing a model. At the time of writing, the model is being refined and analysts from the local authority, Central London CCG and West London CCGs are working together to align local authority and health data assumptions and baselines.

5. Work undertaken as part of Phase 1

5.1 To develop the model, the team built on a previous London-wide piece of work by the London Health Commission. The population was divided by age and by health group into fifteen patient groups as shown in Figure 1.

Of these, four are healthy groups – the people in these groups are classified as "mostly healthy". A person is only part of any one group at a given time. The most significant and needs-intensive conditions at the time are prioritised.

Figure 1

Segmentation of the population: 15 patient groups
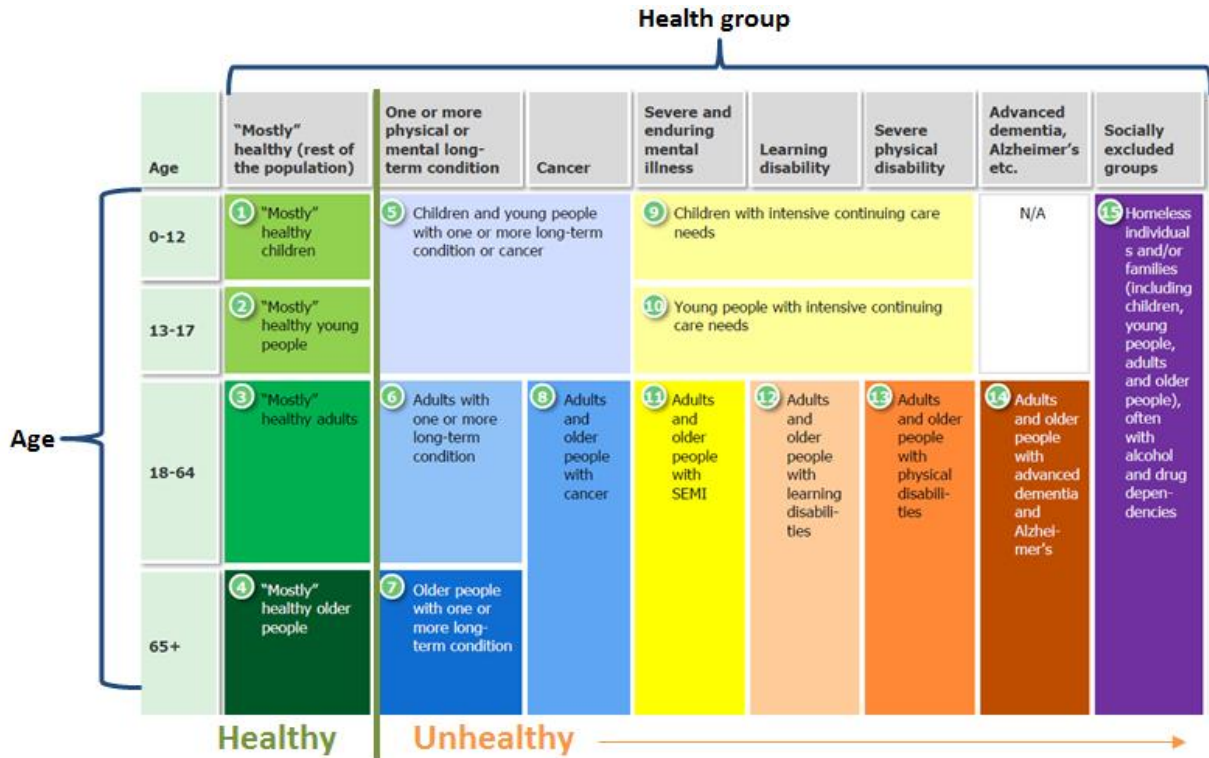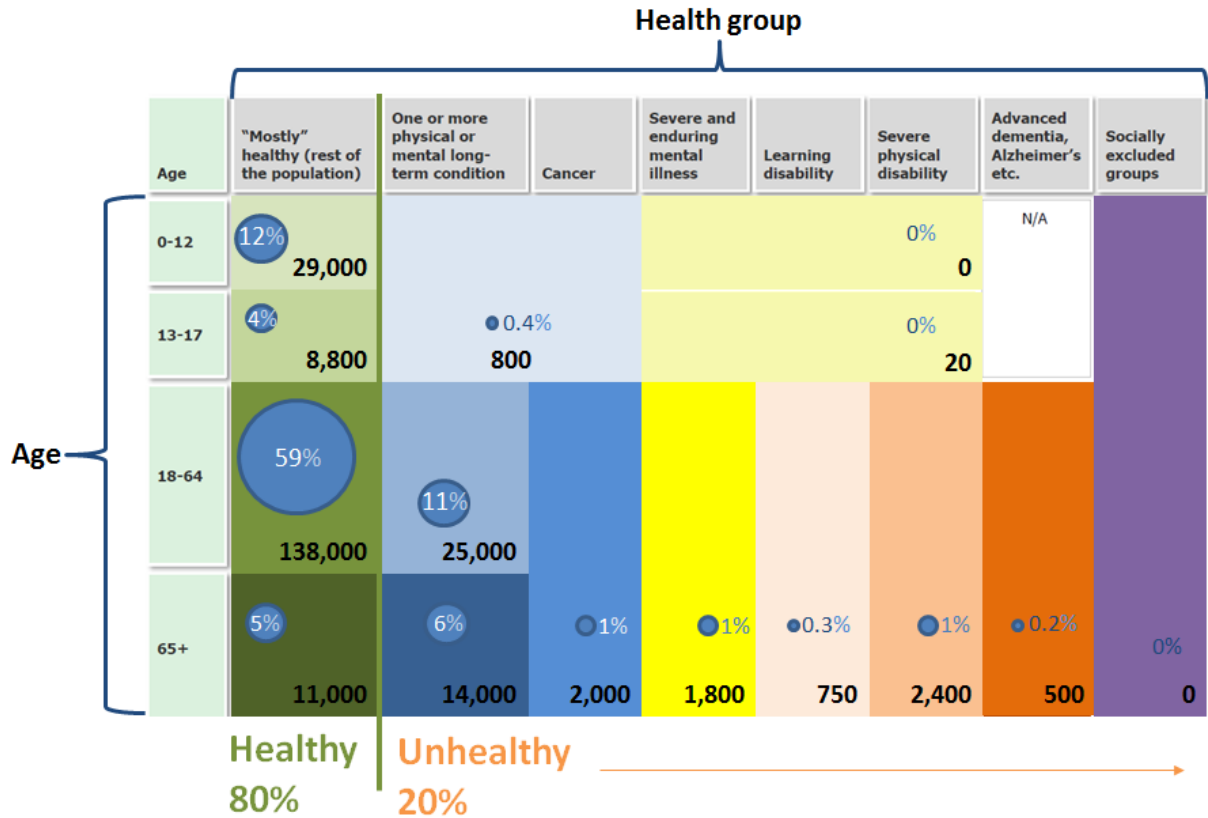

5.2   We have applied the London-wide results to our local population (taking into account age and general health). The estimates for Westminster are shown in Figure 2.

Overall, 80% of the population are in one of the four healthy groups, and 20% are in one of the eleven unhealthy groups. The majority (59%) of the population are mostly healthy and of working age. However, there are, for example, estimated to be 25,000 adults of working age with one or more long-term conditions, and 2,000 adults with cancer.

Figure 2

Number and percentage of the population in each group, Westminster 2015

Age	"Mostly" healthy (rest of the population)	One or more physical or mental long-term condition	Cancer	Severe and enduring mental illness	Learning disability	Severe physical disability	Advanced dementia, Alzheimer's etc.	Socially excluded groups
0-12	12% 29,000					0% 0	N/A	
13-17	4% 8,800	0.4% 800				0% 20		
18-64	59% 138,000	11% 25,000						
65+	5% 11,000	6% 14,000	1% 2,000	1% 1,800	0.3% 750	1% 2,400	0.2% 500	0% 0

Healthy 80%   Unhealthy 20%

5.3   In addition to showing the percentage and number in each group, the model also allows us to:

- Compare the estimates to figures for Kensington and Chelsea and Hammersmith and Fulham and the London-wide average;
- Show the expected trend over the next 15 years;
- Show estimates by ward; and
- Select a different source of population projections.

5.4   At the time of writing, the model is being refined and analysts from the local authority, Central London CCG and West London CCGs are working together align local authority and health data assumptions and baselines. As in all forecasting work there are some important limitations and assumptions that need to be considered, including:

- As the UK has no population register there is uncertainty throughout all population data. The population of Westminster is particularly hard to count because of factors such as population churn, users of private healthcare and private education, clustering of families in dwellings, students, part-time residents, migration and communal establishments. Possibilities of the GLA amending population projections in 2016 may have a significant impact, particularly on the estimates of the population

of older people in the Borough. There are currently no projections available for the number of people registered with a GP in the Central London CCG area (of which only 80% live in Westminster and 20% live in other London Boroughs);

- The number of people with a health condition is difficult to estimate because not all people will be diagnosed and in contact with health services, in addition to other limitations of the local data available such as lack of information about people who are not registered with a GP or who use private healthcare, and assumptions about how London-wide and Borough-level data can be applied to local populations;

- Future trends in population and health are influenced by a complex mix of factors that are difficult to model including regeneration, housing and infrastructure plans in addition to changes in health care provision, disease risk factors and patient behavior.

If you have any queries about this Report or wish to inspect any of the Background Papers please contact Meenara Islam x8532 mislam@westminster.gov.uk

APPENDIX A

An outline of the model will be provided using one of the patient groups as an example: Adults aged 18 years and over with any form and stage of cancer.

Currently, it is estimated that there are 2,000 people in the cancer group in Westminster (Figure 3). This is 1% of the population and similar to the London average. It is estimated that the number of people with cancer will increase over the next 15 years because:

- Life expectancy is increasing. More older people are alive today than ever before. As cancer is primarily a disease of older people, it is likely that more people are diagnosed with cancer;
- Population projections expect that the total population in Westminster will increase;
- People are living longer with cancer because of a greater focus on early diagnosis and advancements in cancer treatments; and
- Changing risk factors such as an increase in obesity rates and a decrease in smoking rates also affect cancer trends.

This is expected to result in a 54% increase in the number of people in the cancer group in Westminster; from 2,000 people in 2015 to 3,000 people in 2030 (Figure 4).

Figure 3
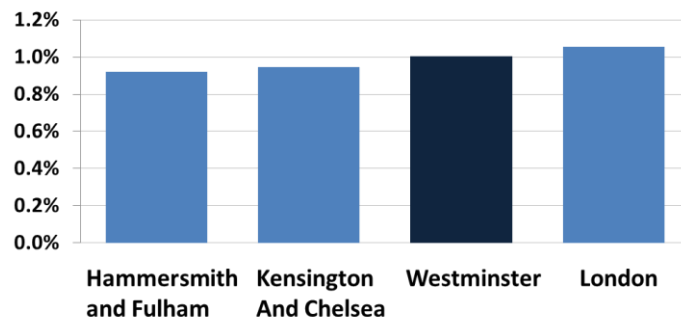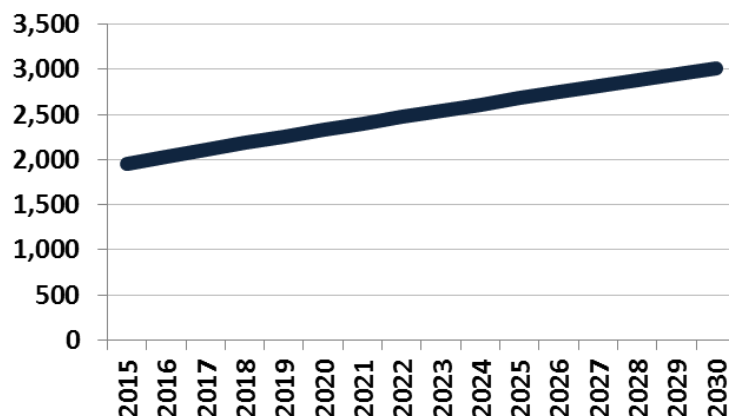**Estimated number of people with cancer aged 18 years and over, 2015**

Figure 4

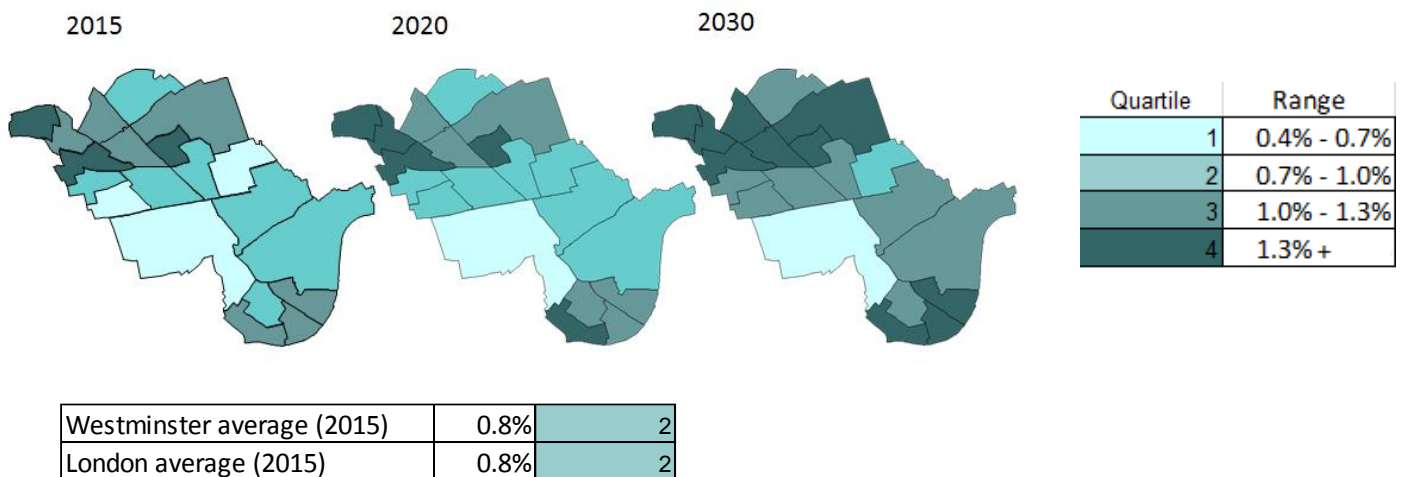**Estimated increase in the number of people with cancer aged 18 years and over, 2015-2030**

The average cost of treatment of someone in the cancer group in London is almost £12,000 per year (*source: London Health Commission*). Most of this cost is from hospital visits which amount to £8,500. An average person in the cancer group has eleven outpatient hospital visits and fifteen inpatient day visits.

Using local data on limiting long-term illness from the 2011 Census and the local age profile, we have estimated the number of people in the cancer group by electoral ward (Figure 5).

It is estimated that most people with cancer are in the north of the borough as these areas are more deprived. As the number of people with cancer increases over time, these areas will be affected most strongly.
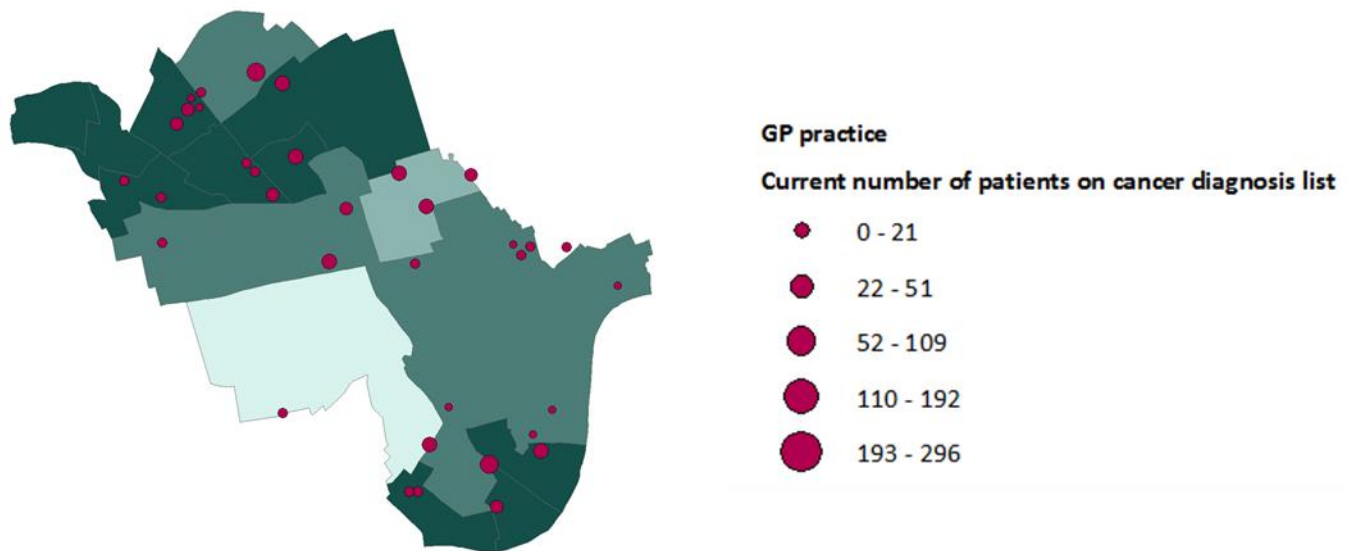
Figure 5

Estimated number of people with cancer aged 18 years and over by electoral ward, Westminster 2015 – 2030

Quartile	Range
1	0.4% - 0.7%
2	0.7% - 1.0%
3	1.0% - 1.3%
4	1.3% +

|		
Westminster average (2015)	0.8%	2
London average (2015)	0.8%	2

After further refining the model and overlaying the impacts of regeneration, housing and infrastructure plans on the estimates, the final phase of the project will be to undertake a joint analysis of how the needs of the Westminster population will impact on the demand for frontline services (including primary care). Some preliminary findings are shown in Figure 6.

Figure 6

Estimated number of people with cancer aged 18 years and over by electoral ward, and current location of GP practices, Westminster 2030
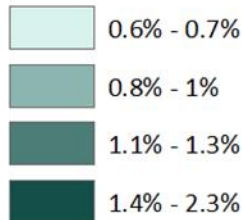
The map shows the current location of GP practices as red dots. The size of the red dots indicates the number of their patients that have been diagnosed with cancer. It also shows the percentage of the population estimated to be in the cancer group in 2030 as in the previous slide. People in the cancer group have on average twenty-six GP visits per year (*source: London Health Commission*). An increase in the number of people in the cancer group from 2,000 to 3,000 would therefore mean an additional 26,000 GP visits per year. We expect that mostly the GP practices in the north of the Borough will be affected.