Health needs assessment

Orthodox Jewish community in Stamford Hill, north Hackney.

September 2018

Contents

| Execu | utive Summary | 4 |
|-------|--------------------------------------|----|
| 1. | Introduction | |
| 1.1 | Judaism in the UK | 7 |
| 1.2 | Strictly Orthodox Judaism in Hackney | 8 |
| 2. | Methodology | 10 |
| 2.1 | Literature review | 10 |
| 2.2 | Quantitative analysis | 11 |
| 2.3 | Qualitative research | 13 |
| 2.4 | Limitations | 13 |
| 3. | Literature review on health outcomes | 15 |
| 3.1 | Child health and development | 15 |
| 3.2 | Maternal health | 15 |
| 3.3 | Obesity | 16 |
| 3.4 | Dental | 17 |
| 3.5 | Mental health | 17 |
| 3.6 | Vaccines and infectious diseases | 18 |
| 3.7 | Medical genetics | 19 |
| 3.8 | Breast Cancer | 20 |
| 4. | Demographics in Stamford Hill | 21 |
| 4.1 | Age structure | |
| 4.2 | Growth rates | 22 |
| 5. | Wider determinants of health | 24 |
| 5.1 | Deprivation | |
| 5.2 | Education | 25 |
| 5.3 | Housing | 26 |
| 6. | General Health | 27 |
| 6.1 | Health Status | 27 |
| 6.2 | Disability | 28 |
| 6.3 | Attendances and appointments | 29 |
| 7. | Lifestyle and health | |
| 7.1 | Physical Activity | |
| 7.2 | Nutrition | 38 |
| 7.3 | | |
| 7.4 | | |
| 8. | Maternal health | |
| 81 | | 47 |

| 8.2 | Health visiting | 48 | | |
|--------------------|---|----|--|--|
| 8.3 | Breastfeeding | 49 | | |
| 8.4 | Healthy Start Vitamins | 52 | | |
| 9. (| Child health | 54 | | |
| 9.1 | Oral health | 54 | | |
| 9.2 | Hearing and vision | 57 | | |
| 9.3 | Learning disability | 58 | | |
| 9.4 | Child health development services | 59 | | |
| 10 (| Chronic conditions | 63 | | |
| 10.1 | NHS Health Check | 63 | | |
| 10.2 | Cancer and screening | 64 | | |
| 10.3 | Cardiovascular disease | 67 | | |
| 10.4 | Respiratory diseases | 69 | | |
| 10.5 | Liver disease | 71 | | |
| 10.6 | Diabetes | 71 | | |
| 10.7 | Inflammatory bowel disease | 73 | | |
| 11 l | nfectious Diseases | 75 | | |
| 11.1 | Childhood immunisations | 75 | | |
| 11.2 | Teenage vaccinations | 78 | | |
| 12 N | Nental Health disorders | 83 | | |
| 12.1 | Common mental health disorders | 83 | | |
| 12.2 | Bipolar disorder | 85 | | |
| 12.3 | Eating disorders | 86 | | |
| 12.4 | Maternal mental health | 87 | | |
| 12.5 | Children and young people's mental health | 88 | | |
| 12 | .5.1 Emotional wellbeing | 90 | | |
| 14 [| Discussion | 94 | | |
| 15 Recommendations | | | | |
| Refere | nces | 99 | | |

Executive Summary

This report presents the findings of the Orthodox Jewish Health Needs Assessment which has aimed to identify the health and wellbeing needs of the Charedi community of Stamford Hill, north Hackney. The needs assessment describes the demographics of the population as well as analyses the available data on access to and use of services, adoption of healthy lifestyle behaviours, and the prevalence of disease.

The Charedi community represents 7% of Hackney's total population but over 22% of Hackney's child population. A youthful population age structure means that the crude rate of many diseases within the community appears to be low relative to the population at large. However, as the young population grows into adulthood, it is necessary to anticipate the future demand for health and care services.

In producing this health needs assessment, there have been limitations in finding accurate data that can provide insights into the needs of the Charedi community. Coding of religion in health records is not normal practice and even where religion is a recorded field, there is no option for patients to identify as Charedi Jewish or Orthodox Jewish. Wherever possible, efforts have been taken to use a variety of data sources and to corroborate findings through interviews. It will be necessary to explore how more reliable data can be collected to inform health assessments for the Charedi community in the future.

Nevertheless, the available data and qualitative interviews have led to a series of observed themes and trends. Data suggests that the Orthodox Jewish community has lower rates of smoking, alcohol consumption and drug use relative to the Hackney population average, and, correspondingly, lower rates of respiratory and liver disease are recorded in later life. Although smoking rates amongst men could be improved, these positive lifestyle behaviours have a protective impact upon future health and wellbeing. Notably, however, with regards to lifestyle and prevention, greater effort is required to reduce the high rates of adult obesity amongst Charedi residents. Throughout this needs assessment, national guidelines have been highlighted to support the adoption of healthy lifestyle behaviours, with particular emphasis on diet and exercise.

Married couples within the community have large numbers of children and maternal and child health are a high priority. Use of universal services, such as health visiting and healthy start vitamins, have been reviewed and, where appropriate, community specific examples have been highlighted. Oral health remains a particular concern amongst Charedi children, with dental decay amongst Charedi school children being

twice as high as the Hackney average. It is hoped that the Fluoride Varnish Programme – a dental health programme run in schools – could improve oral health outcomes for Charedi children. This needs assessment highlights that uptake of fluoride varnish by the Charedi independent schools is declining and should be improved if significant benefits are to be realised.

Mental health is an area of growing awareness and concern. Charedi community groups report an increasing number of cases of anxiety, depression and mental ill health amongst local residents. It has been suggested that within the Charedi community there is a specific issue around late presentation of mental health symptoms, often resulting in missed opportunities for early intervention. Whilst there is limited primary care data available to corroborate these findings, health professionals have commented on the unmet need in the Charedi community with regards to culturally specific treatment options for mental health. Given the high number of pregnancies within the community, postnatal depression is reported at a higher level than the Hackney average but may still be an under-estimation of need.

In some chapters of the report, GP practices with a high proportion of Charedi patients have been compared to other practices within Hackney to better understand use of services. It is clear that there may be economic and logistical barriers to Charedi patients accessing health services, including the challenges of attending GP appointments when large families need looking after. One particular area of concern is the low childhood vaccination rates amongst Charedi patients. Discussions with health professionals highlight that the barriers to completing vaccination schedules appear to be practical for many rather than belief—based. Improving these rates will undoubtedly reduce the risk of infectious diseases in the Orthodox Jewish community.

The discussion section of this report synthesises the evidence that has been collected throughout and suggestions are made for reducing unmet need and identifying where further work may be necessary to promote health and wellbeing in Stamford Hill.

1. Introduction

A health needs assessment is a systematic review of the health issues facing a population. It should lead to agreed understanding and priorities to improve health and reduce inequalities. [1] Equal outcomes and fairness, individual dignity and participative democracy underpin Hackney's Equality and Cohesion Policy. [2] These values mean that, at times, the needs of different groups within the London Borough of Hackney should be explored and responded to directly.

Box 1: Definitions

Charedi/ **Haredi** - Charedi Jews adhere Strictly to Jewish laws and are sometimes also referred to as Orthodox or Ultra-Orthodox Jews. Charedi comes from the verb 'hared', which literally means "to tremble" or "to fear" (in awe at the word of God). [3]

Stamford Hill – the area of north Hackney and south Haringey which covers the wards of Cazenove, Springfield, Stamford Hill West and Woodberry Down in Hackney and Seven Sisters in Haringey¹.

Rabbi/ **Rebbe** – a religious leader in the Jewish faith, usually associated with or in charge of a synagogue, and an expert in Jewish teachings.

Synagogue – a place of assembly for Jewish religious worship and prayer. There are many synagogues of various sizes within the Stamford Hill area.

Sabbath – the day of rest that begins at sundown on Friday and lasts until sunset on Saturday. For the Orthodox Jewish Community, there are a number of strict religious principles to be upheld during this time.

Yeshiva – a Jewish college where the emphasis is on religious teaching of the Torah. Young men sometimes move to yeshiva in other parts of the country or overseas.

This needs assessment will focus on the health needs of the Charedi community in Stamford Hill, north Hackney, as well as the wider determinants of health that may impact upon health outcomes. The Charedi community in Stamford Hill has been established for almost 100 years and represents the largest Charedi community in Europe. [4] The population has grown significantly in recent years and in light of this,

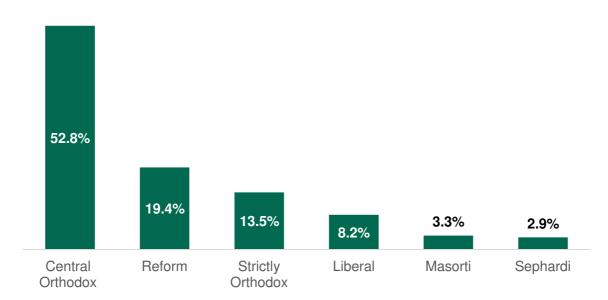
¹ This needs assessment includes the area of Stamford Hill that falls within the London Borough of Hackney, and does not include Haringey.

it is important to review the specific needs of the community in Hackney as well as the services that are accessed locally.

1.1 Judaism in the UK

The Board of Deputies of British Jews estimated that in 2011, at the time of the last Census, there were approximately 284,000 Jewish people living in the UK, making Judaism the fifth largest religion. [5] There are 6 major denominations of Judaism within the UK, namely: Central Orthodox; Reform; Strictly Orthodox (including Charedi); Liberal; Masorti; and Sephardi. [6] Figure 1 shows the proportion of households affiliated to these denominations, as determined by synagogue membership.

Figure 1: Major denominations of the Jewish faith in the UK as a proportion of household synagogue membership (2016)



Source: Adapted from the Institute of Jewish Policy Research (JPR) - Synagogue membership in the United Kingdom in 2016

Note: average household size may differ

Denominations of the Jewish religion differ in their interpretation of the Torah and the approach to religious practice. Strictly Orthodox groups, which includes the largely Charedi community in Stamford Hill, follow an exacting interpretation of religious teachings.

Whilst in some parts of the Jewish community there has been a notable decline in participation and observance in recent years, the same trend has not been seen in the Strictly Orthodox community. The population of the Charedi community is growing substantially in the UK and now 1 out of every 2 Jewish births is to a Strictly

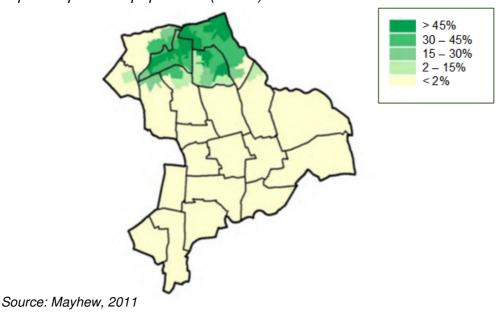
Orthodox mother. [7] There are a number of Strictly Orthodox/ Charedi communities in the UK, with others in Salford in Greater Manchester and Gateshead in Newcastle. Most recently a small community in Canvey Island has also developed, with some families having moved from Stamford Hill to enjoy greater access to more affordable and larger housing.

1.2 Strictly Orthodox Judaism in Hackney

The Jewish community in Stamford Hill has been established for over a hundred years. Towards the end of the 19th Century, Jews from Eastern Europe who had moved west and settled in Whitechapel, east London, began to move across to Hackney. In 1926 the Union of Orthodox Hebrew Congregations, a communal organisation and the representative body of Charedi synagogues, moved into Stamford Hill. After the Holocaust, as Jews fled persecution in Europe, many different Orthodox groups arrived in the area and soon a network of distinct independent schools, with their own synagogues, was formed. [4]

Today, Stamford Hill is the largest community of Strictly Orthodox Jews in the UK, and local estimates project the population to stand at roughly 25,000 people in 2018. 84% of the Stamford Hill community live in north Hackney and 16% in South Haringey, however, most of the existing Charedi infrastructure (including all independent schools) is based in Hackney. [8] Figure 2 shows the most recent formal assessment of where the Charedi population of Hackney are resident.

Figure 2: Map of the Charedi population in Hackney as a proportion of total lower super output area population (LSOA)²



² A small area with a defined population that can be used provide an overview of information about that population. In 2010, the average LSOA in London covered a population of 1722 people. [115]

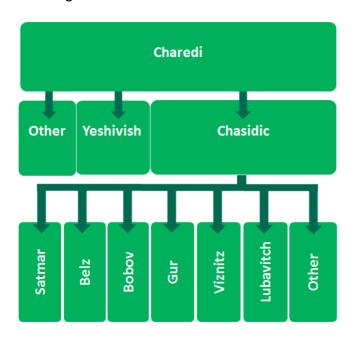
Religious beliefs and everyday practices form strong social-spatial boundaries that mark out the Orthodox Jewish community in north Hackney and most activities take place within a two mile radius of Stamford Hill. [9] This is important to ensure that all religious and other community services are accessible, particularly on the Sabbath when only walking is permitted.

A small proportion of Strictly Orthodox residents in Stamford Hill are Sephardi Jews, who have southern European and Middle Eastern heritage; however, most of the Strictly Orthodox community are of Ashkenazi descent from Central or Eastern Europe. Sephardi and Ashkenazi Jews can both be found within the religious substructures of the Orthodox Jewish community, described below.

The majority of Jewish residents within Stamford Hill are Charedi and follow Strictly Orthodox practice. There are two main Charedi sub-groups; Chasidic Jews, who are the majority in Stamford Hill, and Yeshivish, which is a sub-group associated with Lithuanian heritage and devotion to study. [8]

Among Chasidic Jews, there are also multiple different sub-communities, each originating from different locations in Eastern Europe, often with their own schools, synagogues and Rabbis. [8] The largest Chasidic community in Stamford Hill is Satmar, generally considered a more conservative group, which originates from Hungary/Romania. Other sects include Belz, Gur, Bobov, Viznitz and Lubavitch. This diversity within the community means that sects align themselves to different Rabbis and religious practice may subtly differ between groups.

Figure 3: An illustrative diagram of the main groups within the Charedi community residing in Stamford Hill



Source: Adapted from information provided by Interlink. Note: proportions are illustrative and not to scale.

2. Methodology

To complete this needs assessment, a range of literature and data sources were consulted, followed by a series of interviews and focus groups with health professionals and stakeholders as outlined below. It is important to note the limitations that have been encountered in conducting this work, which have been highlighted in detail in section 2.4.

2.1 Literature review

To review the existing research and studies that have already been undertaken, a literature review has been conducted, which has consisted of two major elements. Firstly, a review of the academic literature in Medline was undertaken using keyword searches, as shown in Box 2. Whilst the volume of literature specifically related to Charedi Jewish or Orthodox Jewish populations is not substantial, searches in Medline returned a number of studies when broad search terms were used.

Initially, only UK based studies were included, however, this was broadened to take account of research conducted amongst Orthodox Jewish communities internationally. This has allowed for a higher volume of relevant research to be uncovered and, where necessary, for comparisons to be made between UK Charedi communities and those in the USA, Belgium and Israel. All studies included were

written in the English language and published between 2000 and 2018. It was deemed that this time period provided a sufficient volume of research without compromising on its modern-day relevance.

There is a far larger body of research into inherited diseases and genetics amongst the Ashkenazi Jewish population. This includes some common conditions that are disproportionately prevalent amongst Ashkenazi Jews, and much rarer diseases. As the volume of research is so large, only the major conditions, where there is a large body of research, have been included.

Box 2: Keyword searches in journal database

| Keywords | Search |
|-------------------------------|--------|
| Orthodox Jewish | 49 |
| Charedi OR Haredi | 13 |
| Jewish AND health | 32 |
| Ashkenazi AND genetic disease | 252 |

Following the identification of the research articles and journals that fit these criteria, a further review of the abstracts was undertaken to ensure that any studies included aligned with the focus of the needs assessment.

Secondly, grey literature relating to the Charedi community was also accessed to supplement academic findings, usually via advice from colleagues and experts and through bibliographic references of reports. Contact was made with other local authorities in England where there are substantial Charedi communities and the websites of the Institute for Jewish Policy Research and The Interlink Foundation were searched.

2.2 Quantitative analysis

A number of data sets were used to better understand the health needs within the Charedi community, including the 2011 Census, Clinical Effectiveness Group (CEG) data and GP practice data, amongst other sources. These data sets are suitable for use as it is possible, in different ways, to make comparisons between Charedi and non-Charedi patients.

The 2011 Census provides a large sample of responses from residents within Hackney, which includes information on religion and health. Whilst Orthodox Jewish is not a specific category, a significant proportion of Hackney residents have reported that they are Jewish. It has been assumed for the purposes of this work that the majority of people in Hackney who have declared their religion as Jewish are Charedi. The Census in 2011 asked participants to rate their general health and

wellbeing as well as the impact of disability on their lives. The responses from Jewish residents in Hackney have been compared to those from respondents in Hackney who have declared that they are any other religion or none at all. This allows for some general overarching conclusions to be made about health and disability within the Charedi community compared to the Hackney average.

CEG data provides more specific information regarding the prevalence of disease within Hackney from anonymised coding within primary care records. A proportion of the GP records within Hackney (n = 7000) belong to patients where their religion has been recorded as 'Other Jewish' or 'Jewish'. Again, whilst Orthodox Jewish is not a specific category, it is appropriate to assume that most of the records in these categories belong to Charedi patients. By comparing the major chronic conditions between Jewish and non-Jewish patients, insight can be gleaned into whether there are major differences between the Charedi population and the Hackney average.

It is not always possible to reliably use CEG data to understand how patients are accessing and using services. The most accurate way to understand service use between Orthodox Jewish patients and other non-Jewish patients is by making comparisons between general practices. Practices that have high numbers of Charedi patients can be identified by assessment of the patient age structure of practices, as highlighted in Chapter 4. GP practices with high numbers of Charedi patients have a higher proportion of children registered with relatively fewer older people. An example of the patient age structures, can be seen in Appendix A.

From reviewing the age structures of practices, there are 5 GP practices in the Stamford Hill area with distinctly younger age structures than you would expect from Hackney at large. These practices are:

- Stamford Hill Group practice;
- Cranwich Road;
- Allerton Practice;
- Springfield Practice; and
- Clapton Surgery.

These practices have also confirmed that Charedi Jewish patients represent a significant proportion of their patient lists. There are other GP practices in the area which are used by Orthodox Jewish patients, for example Fountayne Road, Elm Practice and the Healy Surgery; however the proportion is lower and it would be harder to draw firm conclusions using practice-level comparisons.

2.3 Qualitative research

To support the literature and data analysis, it was imperative to undertake some detailed qualitative interviews, which has taken a number of forms. Initially, a set of scoping interviews took place with stakeholders, which informed the content of the needs assessment and the organisation of later qualitative work. Stakeholders included statutory bodies, such as Hackney Learning Trust and NHS organisations, and Charedi voluntary organisations, such as Interlink and Bikur Cholim.

In August 2017, a carousel of short focus groups covering a range of health topics with boys aged 11-14 years was carried out to gain a greater understanding of young boy's ideas, perceptions and expectations of health. Doing so allowed access a larger volume of qualitative information through group discussion.

Finally, a series of semi-structured interviews were conducted with health professionals with experience of working closely with the community, including GPs and practice nurses. A focus group was also held with Health Visitors covering the Stamford Hill area. A full list of interviewees as well as an example schedule of questions are included for reference in appendix B.

2.4 Limitations

As already highlighted, when reviewing local data it is not always possible or easy to distinguish between Charedi and non-Charedi people in Hackney. The major limitations in the data arise from variable recording of religion in patient health records. In City and Hackney GP practices, patients are asked to voluntarily provide their ethnicity according to NHS standard ethnicity codes. The response of 'Other – Jewish' or 'Jewish' provides the best proxy for the Charedi population, and is recorded at a higher rate in Stamford Hill than elsewhere in the borough, although numbers are significantly lower than expected.

Only 7000 patients in Hackney are recorded as Jewish in the primary care records and, within this, a proportion of these patients will not be Charedi. These 7000 patients do appear to represent expected demographic patterns for the Charedi population, however, it is not possible to say why these patients have their religion coded when others do not. It may be that particular practices are more likely to code for religion or that declaring religion when registering at a GP practice is self-selecting for other factors.

The 2016 Atkins survey found that 66% of Charedi households said that they would describe their household member's ethnic origin as White/White British. The remaining 34% would use the description "other ethnic group". Of these, 44% would

define themselves as Jewish, 49% as Orthodox Jewish, 1% as Charedi Jewish, 1% as Ultra-Orthodox Jewish and 1% as religious. This demonstrates that even within the Charedi community, there is not consistency in how an individual may define or report their ethnic group or religion when accessing services.

Similarly, it is generally agreed that Census data provides an undercount of religious groups. Some researchers believe that Jewish people in particular are less likely to identify themselves as such, however research from the Institute for Jewish Policy Research suggests that Jewish people are as likely or unlikely to choose not to respond to the question of religion as the general population. [10] In addition, as many of the questions within the Census ask participants to make a self-assessment of health status and disability, it may be that cultural perceptions of health and wellbeing distort the findings.

Additionally, in reviewing the available data, it is important to emphasise the high use of non-statutory community services and informal sources of support in the Charedi population which may reduce the use of formal services. Wherever possible in this needs assessment, efforts have been made to review the extent to which lower observed rates of disease prevalence or access could be offset by alternative sources of support.

Finally, as already highlighted, the community in Stamford Hill is diverse in its opinion towards and use of services. The community's views are not homogenous and there is great variation in how people engage with services and the perceptions they have of those services. Efforts have been taken to avoid generalisations but often the available data does not allow for a more specific understanding of views and behaviours within the Strictly Orthodox Community. It is important to consider that throughout this needs assessment, general trends identified in the data may mask a diversity of opinion.

3. Literature review on health outcomes

There is limited research and study into the specific health needs of the Charedi community. For that reason, research from overseas, as well as other parts of the UK, has been reviewed. In contrast, there is a large body of research relating to genetic conditions which may disproportionately affect Jews of Ashkenazi descent. The major genetic conditions that are highlighted in the literature have been referenced in this chapter.

It is important to note that the Charedi community in Stamford Hill engages with health and care services in ways that are compatible with broader religious and cultural values. [11] Recognising where behaviours and outcomes differ from the population at large, is vital in delivering culturally competent services that meet the needs of residents. Several key health themes have been identified and will be discussed throughout this chapter.

3.1 Child health and development

The available literature highlights some trends with regards to weight and growth within the Charedi Jewish community across the life course. A cohort study in Gateshead found that, whilst there are no observed differences in birth weight, by aged 1-year Charedi children generally weigh less than their peers. [12] This has been found to remain significant even when accounting for parental height and weight. Factors that are likely to influence this are related to looking after large families and delayed or inadequate weaning onto solid foods. [12]

Evidence suggests that some aspects of religious observance may impact upon nutrient intake and weight bearing exercise during adolescence; both of which are necessary for bone development. A study in Brooklyn, New York found that spinal bone mineral density (BMD) is significantly decreased in ultra-Orthodox Jewish adolescents, especially in boys. [13] A range of factors are likely to be at play; however, a combination of low levels of physical exercise, reduced calcium intake due to religious requirements governing dairy and meat consumption, and limited vitamin D stores from sunlight and diet are likely to play a role. The study recognises that there may also be some genetic factors that influence these findings. [13]

3.2 Maternal health

A British study, in 2004, has looked at the relationship between Orthodox Jewish families and health visitors. [14] Interviews with health visitors found that many health visitors assume that experienced mothers and the strong support networks that exist within the community mean that their services are less necessary. At the

same time, families within the community commented on the cultural competency of health visitors and under-valued the potential of their role. The study, which is increasingly out of date and may not reflect current practice, reported that better joint working between health visitors and the community would improve the relationship and use of the service. [14]

With regards to maternal mental health, some studies have suggested that symptoms associated with postnatal depression are less prevalent amongst the Orthodox Jewish community compared with secular women. [15] However, other studies have indicated that postnatal depression may be under-reported within the Orthodox Jewish community, particularly if Orthodox Jewish women may be less forthcoming about their symptoms. [16] Confidence in the professional services provided is likely to influence the use of postpartum mental health services. [17]

Additionally, in light of findings that many members of the Orthodox Jewish community may have insufficient levels of vitamin D, an Israeli study compared vitamin D levels between Orthodox and Non-Orthodox Jewish mothers. [18] It was found that Orthodox mothers were far more likely to be vitamin D deficient than non-Orthodox Jewish mothers and should consider taking vitamin D supplements during pregnancy. [18]

3.3 Obesity

There is only a small quantity of available literature on obesity with regards to the Charedi community. That being said, many of the risk factors for overweight and obesity in the general population may be applicable to the Charedi community in Stamford Hill, including a lack of time to make active healthy choices, purchasing power and the cost of healthy foods, and a lack of access to leisure facilities. [19]

An Israeli study reviewed that, although religiosity appeared to have a protective effect on overall health outcomes, religiosity was also increasingly a marker for higher levels of obesity. [20] This is despite the observation that religious people tend to follow a healthier diet, and, in the case of Judaism, followers live by principles that may contribute to lower overall consumption of meat and dairy.

In addition, an American study into the eating habits of Orthodox Jewish women in Brooklyn found that some cultural and religious practices may also influence overweight and obesity. Interviews with Jewish women found that all individuals ate significantly more on the Sabbath than any other day of the week. [21] Additionally, overweight and obese women ate significantly more on the Sabbath than participants in the study who were a healthy weight. [21]

3.4 Dental

Sugar consumption is a major risk factor for tooth decay, also known as dental caries. [22] Dental decay has long been linked to deprivation in the UK, and it has also been shown that some ethnic groups have poorer oral health than others. [23]

The available literature highlights concern regarding dental health within the Charedi Jewish community. A study into Jewish dental habits found that, compared to non-Orthodox Jews, Orthodox Jews were significantly less likely to visit the dentist. [24] There may be numerous reasons for this, including lack of access to services, fear of visiting the dentist, and financial barriers. [24] [25]

In two specific studies of dental health carried out in Hackney, it was found that oral health amongst five-year-old children from the Charedi community was significantly worse than the Borough as a whole as well as the London and England averages. [26] An earlier study had, nevertheless, also found that Charedi mothers in Stamford Hill were welcoming of local initiatives that promoted better oral health and community signposting to services to improve their children's outcomes. [25]

3.5 Mental health

Mental health services can be challenging to access for ethnic and religious minority groups. [27] Stigma often leads to individuals both being reluctant to acknowledge emotional or mental health disorders and to reveal this to others. One study suggests that stigma is more pronounced in the Chasidic population than the non-Chasidic population. [28] Within the Charedi community, mental ill-health can be perceived as a risk to family life and, as such, can have an impact upon the actions taken by the individual and their family. [29] At the same time, other research has suggested that Charedi patients could face a lack of understanding from service providers, and it is important that professionals working with Orthodox Jewish communities recognise the different causes of distress. [30]

In a study of an Orthodox Jewish community in the North West of England, it was found that GPs perceived that formal NHS mental health services were not meeting the needs of minority groups and they were, as a result, less willing to refer their Orthodox Jewish patients into secondary mental health care. [27] The importance of understanding and responding to the specific cultural aspects of religious faith is vital for patients from minority religious communities. [31]

Studies have explored specific aspects of religiosity and the impact on mental wellbeing. In one study relating to the Orthodox Jewish community, the impact of the Sabbath on mental health was explored. It was found that there were positive mental

health benefits of the time taken on the Sabbath to think, rest from everyday concerns and deepen relationships with family. However, some people also expressed having fewer distractions from worry on the Sabbath, which caused people to be more aware of poor mental health. [32]

Specific work in Hackney has sought to improve the understanding of mental health within the local Charedi community. [33] This is in light of the fact that local Charedi residents may find mainstream mental health services challenging to access. Joint working between East London NHS Foundation Trust and a local community provider, Bikur Cholim to develop a mental health intervention for Charedi carers has been evaluated. The study reported improvements in mental wellbeing and increased likelihood to use services, suggesting that there is value to cultural considerations being made in the design of mental health services. [33]

3.6 Vaccines and infectious diseases

Low uptake of childhood vaccinations amongst the Orthodox Jewish community has been highlighted in the available literature. [34] This has led to outbreaks and spread of infectious disease between Orthodox Jewish communities in the UK and abroad. [35] [36] [37]

The reasons for low vaccination uptake have been explored in Stamford Hill and in communities overseas. In a study in Jerusalem, it was found that knowledge amongst Orthodox Jewish mothers about vaccination schedules was poor and that there was limited awareness as to why vaccinating children on time was important. [38] Some participants described attending immunisation appointments as stressful although, in one study, issues of trust or religious beliefs did not seem to play a significant role in influencing whether vaccinations were delayed or missed. [38]

A qualitative study into vaccination and immunisation in Stamford Hill found that the Charedi community did not have homogenous views with regards to immunisations, and there were a range of opinions offered. [39] For some Charedi people it was found that there was a strong belief in 'religious fatalism', whilst others were concerned about vaccine safety. This was particularly in light of some anxiety in the community regarding the measles, mumps and rubella (MMR) vaccination. This had resulted in variable practice with regards to immunisation even within families; some parents had fully vaccinated some of their children but not all. [39] In light of this, evidence suggests the importance of considering how health advice and guidance is considered by Orthodox Jewish communities. This is recognition that informal networks and word of mouth have a significant impact on practice within the Charedi community. [39] [38]

A report regarding the implementation of the World Health Organisation's 'Tailoring Immunisation Programmes' approach within the North London Charedi community also highlighted a broad range of practical considerations which were reported to influence vaccination uptake, including appointment availability and convenience, competing priorities, and the logistical challenges surrounding managing large families. [40]

3.7 Medical genetics

There is a significant body of research into Ashkenazi genetics and disease outcomes. A large proportion of the Orthodox Jewish community in Stamford hill are of Ashkenazi descent and so this has particular relevance. As the body of available research into medical genetics and Ashkenazi Jewish heritage is huge and complex, only the major disease types identified in the literature as disproportionately affecting people of Ashkenazi descent have been highlighted.

There are several conditions that are known to have higher than expected prevalence within Ashkenazi Jewish groups. This includes Tay-Sach's, Gaucher's disease, Crohn's disease (a sub set of inflammatory bowel disease), Parkinson's and BRACA 1 and 2 mutations that code for an increased incidence of breast and ovarian cancer. BRACA 1 and 2 mutations have been considered separately in section 3.8.

Tay-Sach's, a progressive condition that affects the nervous system and is usually fatal in childhood, and Gaucher's disease, a disease characterised by insufficient production of the lysosomal enzyme that causes fatigue, enlargement of the organs such as the liver and sometime lung abnormalities, are both rare in the population at large but significantly more common in Ashkenazi populations. Couples of Ashkenazi descent are advised to tell their Doctor if they plan to start a family as genetic counselling for these conditions can be advised. [41] Couples may also access private testing through the Dor Yeshorim organisation, which provides confidential compatibility testing without disclosing either partner's carrier status.

Crohn's disease is a condition that can affect the entire digestive tract, leading to symptoms of diarrhoea, cramps, fatigue and blood in faeces. [42] It is more prevalent in Orthodox Jewish communities and is estimated be of two to four-fold excess in population of Ashkenazi heritage. [43] The exact hereditary cause of Crohn's disease is uncertain, but genome wide analysis links individuals of Ashkenazi descent with Crohn's disease to a variant of the LRRK2 gene; a gene that was already associated with the development of Parkinson's disease in some instances. [44] People of Ashkenazi descent are more likely than the population at large to carry the variant LRRK2 gene; however, the rate of Parkinson's disease is in step with the wider population. [45]

3.8 Breast Cancer

BRCA 1 and 2 genetic mutations, which confer a higher risk of breast and ovarian cancer, are more common in women of Ashkenazi descent than the general population. [46] An American study in Detroit compared breast cancer rates in areas with high and low Jewish populations and found that the highest estimated rates of breast cancer were the areas with a higher Orthodox Jewish population. [46]

In the UK, routine breast screening for detection of early stage cancer starts at age 50 years. Uptake of breast screening, or mammography, amongst Orthodox Jewish women has been observed to be lower than expected. [47] There may be many reasons for this, both religious and practical, including being fearful of diagnosis, cost implications, allowing fate to run its course, concerns around the cultural relevance of health interventions, and other competing priorities that take precedence. [48]

In addition, some studies raise important questions around the acceptability of genetic testing for BRCA1 and 2, given that some treatments following diagnosis may not be appropriate to a person of Orthodox Jewish faith. [49] Moreover, it was recognised as important to acknowledge the role of the Rabbi in any decisions made with regards to cancer treatments. [50] Many patients will want to consult a Rabbi for advice on the best course of action to take, although, in many cases, Rabbis will advise patients to follow medical advice.

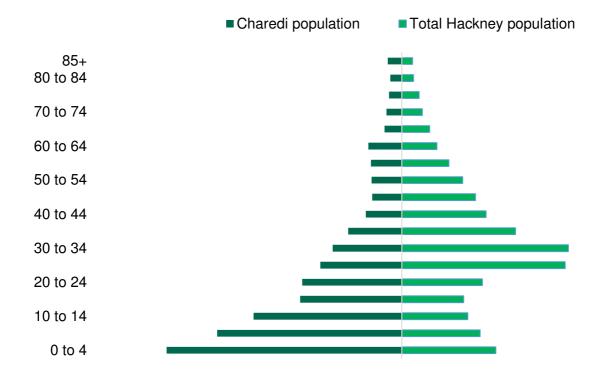
4. Demographics in Stamford Hill

At the time of the last Census, Strictly Orthodox Jews made up approximately 16% of Britain's total Jewish population, and the demographics of this community are highly distinctive. [51] The Charedi community is characterised by a high birth rate, international movement between other Charedi communities overseas, and an annual growth rate of between 4 and 5%. It is estimated that the community in Stamford Hill currently stands at approximately 25,000 people.

4.1 Age structure

The Charedi community has large numbers of children and teenagers, and relatively fewer older adults, producing a distinctive age structure. In 2011, it was estimated that 53.5% of the Stamford Hill Orthodox Jewish population were under 19 years of age, equivalent to 22% of the Hackney under 19 population. [8] This is despite Orthodox Jews accounting for roughly 7% of the total Hackney population. In comparison, Hackney at large has proportionally fewer children and more young, working-age adults from 25 to 40 years old. Similar age structures are found in Strictly Orthodox/ Charedi communities elsewhere in the UK and abroad. [52]

Figure 3: Population pyramid for the Hackney Charedi and total Hackney populations (all ages, 2011)



Source: Mayhew, 2011

The demographic features of the Strictly Orthodox age structure can be helpful in determining which services, for example GP practices, are most commonly used by the community where other data sources have limitations (see section 2.4).

4.2 Growth rates

The principle drivers of population growth in the community are natural change (more births than deaths) and international migration. The birth rate in Stamford Hill is high and there is estimated to be between 20-30 live births per week in the Charedi community in the area. Men and women are likely to get married young and go on to have many children, often more than 6.

The Institute of Jewish Policy Research estimates the total fertility rate to be between 6 and 7 children per couple. [53] The number of births within the community has increased considerably over recent years. Table 1 shows that the number of recorded births in the Kol Mevaser in Stamford Hill has more than doubled between 2006/07 and 2015/16.³ [54]

Table 1: Number of births listed in the Kol Mevaser annually (2006 to 2016)

| Year (Sept-Sept) | Number of births |
|------------------|------------------|
| 2006/07 | 542 |
| 2007/08 | 818 |
| 2008/09 | 733 |
| 2009/10 | 779 |
| 2010/11 | 949 |
| 2011/12 | 874 |
| 2012/13 | 906 |
| 2013/14 | 943 |
| 2014/15 | 905 |
| 2015/16 | 1149 |

Source: Interlink, 2017

In addition, there are strong relationships that exist between the Stamford Hill community and other Strictly Orthodox communities in the UK and overseas. Qualitative data from interviews describes high levels of migration both in and out of the community in Stamford Hill. Movement occurs at specific times, such as during teenage years for education, and in early adulthood for marriage. Interviewees describe that it is more common for men to travel to the woman's location to set up a home.

³ The Kol Mevaser is a weekly newssheet for the community which lists most births, as well as engagements and other notices. It is thought that it is a slight undercount of the true number of births as Sephardi and Lubavitch groups tend not to use the newssheet.

Figure 4 shows the country of birth for Jewish and non-Jewish residents of Hackney. Of Jewish people living in the 21 lower super output areas (LSOAs) in Hackney with >15% Charedi households, 76% were born in the UK, 11% were born in the Middle East and Asia (most likely to be Israel), 8% from Europe, 5% from the Americas and the Caribbean, and 1% from Africa. This is in contrast to Hackney as a whole, which has smaller proportion of UK-born and Middle Eastern residents and a larger proportion of residents from Europe, the Americas and the Caribbean, and Africa.

75%
60%

11%
6%
8%
14%
5%
7%
1%
9%

UK Middle East and Asia
Europe The Americas and the Caribbean

Figure 4: Country of birth of residents in Hackney (2011)

Source: Census, 2011

As a combined consequence of the high birth rate and, to a lesser degree, migration between communities in the UK and overseas, the Charedi community in Stamford Hill is currently estimated to be growing between 4 and 5% per annum. [8]

5. Wider determinants of health

The wider determinants of health include the social and environmental factors that can influence an individual's health outcomes, including economic deprivation, living and working conditions and educational attainment. A widely referenced model by Dahlgren and Whitehead is included below, which demonstrates the broad range of influences on health and wellbeing.

Benefit socioeconomic, cultural and environmental Conditions

living and working conditions

work environment and community networks water and sanitation

age, sex & hereditary factors

agriculture and food production

housing

Figure 5: The Wider Determinants of Health

Source: Dahlgren and Whitehead, 1991.

The Charedi community benefit from strong community bonds and there is a great degree of social support available for families that fall on hard times. However, it is also observed that many families might struggle with some factors that are typically associated with lower socioeconomic status. This may include barriers to accessing health and care services, and challenging living conditions, particularly where there is significant overcrowding.

To ensure that the healthcare outcomes of the Charedi population in Stamford Hill are understood fully, it is important to consider some of the broader influences on health and wellbeing within the area, as set out in this chapter.

5.1 Deprivation

Socio-economic status is a major determinant of health outcomes, impacting upon an individual's ability to make healthy choices and to have access to appropriate living conditions. According to the 2011 Census, in Hackney, nearly half of households of

the Jewish faith (46%) had low incomes of less than £15,000. Although 41% of Jewish people in Hackney have incomes over £30,000, Orthodox Jewish households and families tend to be larger and kosher food is typically more expensive. [55]

According to the 2011 Census, of those people defining themselves as Jewish in Hackney, 48% were in employment, either as employees or self-employed. [55] This is 10 percentile points lower than the population overall. Unemployment, however, is also very low at 3.3%, which suggests that a larger proportion of the population is not working and not seeking work. Within the Charedi community there are relatively more people looking after the home and studying than in the population overall.

Recent welfare changes have significantly impacted upon those on lower incomes across the country. The two-child limit on the child tax credit element of Universal Credit and the housing benefit cap has had a particularly acute impact on large families, such as those in the Charedi community. However, it is well known that charitable and philanthropic giving provides a source of support to many Charedi families who may otherwise be struggling.

5.2 Education

As highlighted in section 1.2, children within the Strictly Orthodox community account for 22% of all children in Hackney. Education and access to skills and qualifications is a driver of good health and school age attainment has been shown to influence both health behaviours and outcomes in adult life. Most Charedi school children attend independent schools. Within Hackney, it is estimated that there are approximately 29 independent schools attended by Charedi schoolchildren and four maintained schools (two primary and two secondary).

Boys and girls are educated separately in Strictly Orthodox schools and there is emphasis on religious teachings of the Torah. This is particularly the case for boys, where there is great priority given to religious studies. Girls generally have a broader secular education and participate in mainstream examinations during the teenage years. [56]

As highlighted in the recent Scrutiny Report undertaken by London Borough of Hackney, upon the completion of primary school, many boys will attend Yeshivas, or Jewish colleges, from age 12 – 13 years old. It is not uncommon for boys to travel to attend Yeshivas in their mid-teens and this may involve them moving to Gateshead, Manchester or further afield to do so. As will be discussed in section 11, this presents some important health considerations around access to health care services during the years that young men study away from home.

5.3 Housing

Poor living conditions have been associated with physical illnesses including eczema, heart disease, and mental health problems such as depression. Respiratory health, and particularly asthma, has been shown to be especially affected by poor housing in both adults and children. [57]

The Charedi population are three times less likely to live in social housing as compared with the general population, with the majority of Charedi residents living in private rental accommodation. The Charedi Survey 2016 found that only 28% of the Jewish households in Stamford Hill are owner occupiers, 63% of households privately rent and 9% live in council/social housing. Just under half of the Charedi families in Stamford Hill live in flats, maisonettes or apartments (48%), with 35% living in terraced whole houses, 12% in semi-detached whole houses or bungalows and 4% living in detached whole houses or bungalows.

Overcrowding is a concern in some of the households in the Charedi community and occupancy ratings⁴ can provide an understanding of the severity of the situation. Within the Jewish households in Stamford Hill, 35% require at least one more bedroom in order to meet current standards, compared to 15% of households in Hackney and 12% of households in London.

-

⁴ Occupancy ratings are based on a standard formula which subtracts the notional number of rooms required in an accommodation from the actual number of rooms.

6. General Health

The importance and preservation of health is a central tenant of the Jewish religion and Rabbis provide significant guidance on matters of health and wellbeing. The latest Census from 2011 provides some insights into self-reported health, wellbeing and disability amongst Hackney residents. Although this data is increasingly out of date, the larger sample size and ability to determine the religion of participants, nevertheless provides a useful comparison.

As highlighted in section 2.4 of this report, there are limitations with the Census data due to the inability to identify Charedi Jewish people specifically from others of the Jewish faith living in Hackney. Additionally, as much of the data in this section is self-reported, and to a degree subjective, there may be some cultural differences as to how individuals have perceived their own standard of health. In interviews and focus groups, some health professionals highlighted that their Orthodox Jewish patients may be less inclined to disclose poor health compared to the population at large.

6.1 Health Status

Jewish people in Hackney are more likely than the Hackney average to report to be in good or very good health, as shown in Figure 6. At the same time, non-Jewish residents of Hackney are almost twice as likely as Jewish residents to report being in bad or very bad health.

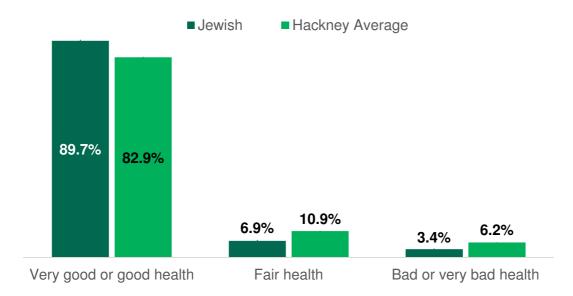


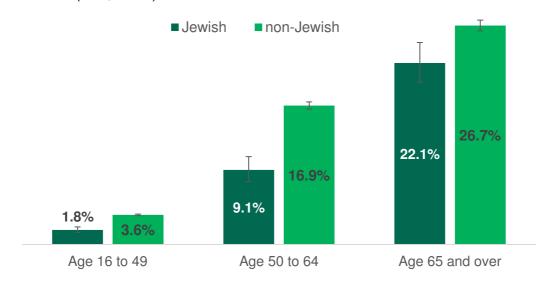
Figure 6: Self-reported health status amongst Hackney residents (all ages, 2011)

Source: Census, 2011

Despite the potential for these findings to be skewed by a younger population, when considering the age specific rates of self-reported health status, the Jewish

population in Hackney is still less likely to report being in bad or very bad health in all age bands throughout adulthood, as shown in Figure 7.

Figure 7: Self-reported bad or very bad health by age group amongst Hackney residents (16+, 2011)

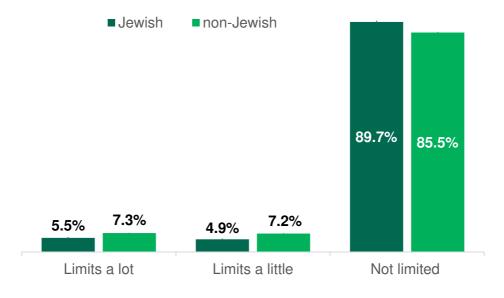


Source: Census, 2011

6.2 Disability

Figure 8 shows that, in 2011, Jewish respondents to the Census in Hackney were more likely to report that their day to day lives were not limited by disability.

Figure 8: Proportion of Hackney residents impacted by disability (all ages, 2011)



Source: Census, 2011

Figure 9 shows the self-reported impact of disability by age group. This reveals that, similarly to the rest of Hackney, the impact of disability amongst Jewish people increases with age. For those aged over 65 years, the self-reported impact of disability amongst Jewish people is in line with the rest of Hackney, although in the younger age groups the self-reported impact of disability is lower.

34%
Age 16 to 49

Age 50 to 64

Age 65 and over

Figure 9: Age specific proportion of Hackney residents impacted by of disability (16+, 2001)

Source: Census, 2011

As already stated, this information is self-reported and there may be cultural reasons as to why Jewish residents perceive that disability has less impact on their lives.

6.3 Attendances and appointments

Data on the use of healthcare services can highlight trends in access and use of both primary and secondary care services. By comparing the five GP practices with the highest proportion of Charedi patients with the rest of Hackney, it is evident that Orthodox Jewish patients attend appointments at GP practices less often than the average Hackney resident, as shown below in Figure 10.

There are a range of reasons as to why this might be, including good informal support networks within the community, a generally younger population, use of local private GPs, travel to Yeshivas during teenage years and young adulthood, and practical barriers to attending surgeries. These practical barriers are likely to include large families to look after and being unable or reluctant to attend appointments during the Sabbath or on religious festivals. Local private GPs are reportedly well

thought of in the community, and provide services such as walk-in clinics on the Sabbath.

0.41
0.41
2.09
0.55

Figure 10: Average rate of appointments in General Practice (per person).

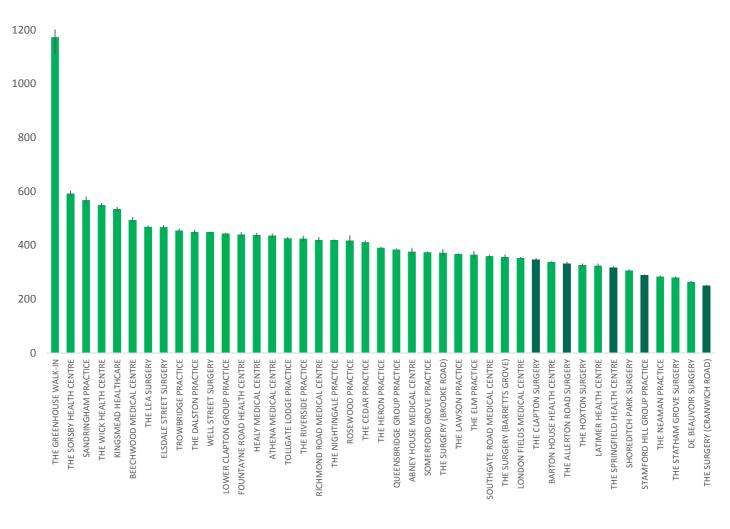
Average of top 2 Charedi Average of top 5 Charedi Average of other Hackney

Source: CEG, 2017

It could be hypothesised that a lower rate of use of primary care could lead to more attendances at hospital⁵. However A&E attendances follow a similar pattern, with the GP practices with the highest proportion of Orthodox Jewish patients having the lowest rate of attendance at A&E amongst their patients, as shown in Figure 11.

⁵ An attendance at A&E is defined as an unplanned attendance at an A&E or urgent care centre, whether or not the patient is admitted as a result.

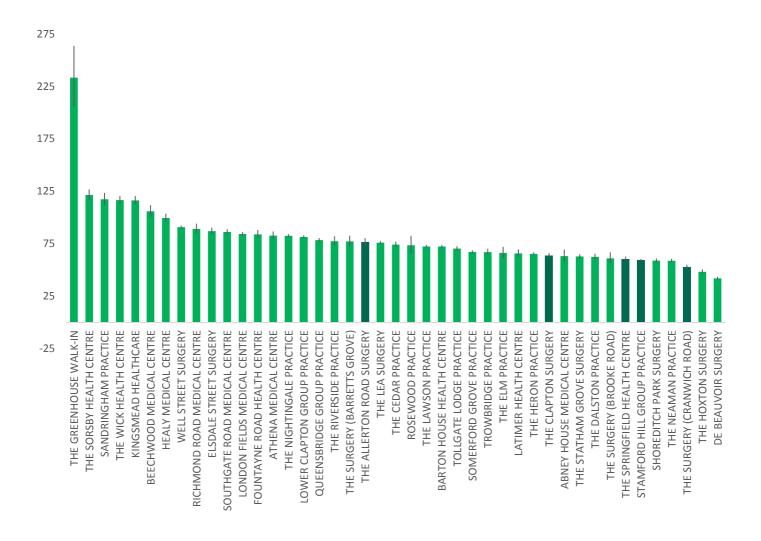
Figure 11: A&E attendances per 1000 patients by GP practice in City and Hackney (Jul 15 – Jun 16)



Source: NHS England Primary Care Web Tool

Emergency admissions at A&E, again, follow a similar pattern with most of the Orthodox Jewish practices falling in the bottom half of the Hackney distribution, as shown in Figure 12. Emergency admissions are defined as unplanned attendances at A&E where the patients spends time in the A&E department before being admitted into the hospital. It does not include cases where there has been a GP referral to A&E or transfers from other hospitals.

Figure 12: Rate of emergency admissions per 1000 patients in City and Hackney (all ages, Jul 15 – Jun 16)



Source: NHS England Primary Care Web Tool

6.4 Hatzola

Lower rates of primary and secondary care use amongst Orthodox Jewish patients may be observed because of the use of the Jewish ambulance service, Hatzola. Indeed, in many cases of accident, injury, or ill-health, Hatzola is likely to be one of the first ports of call for Orthodox Jewish families; the service will be able to give onsite support and guidance, as well as transportation to hospital if necessary.⁶

Hatzola have provided an assessment of the volume of calls they receive and for what purpose over the time period August 2016 to May 2017. In that time, Hatzola responded to 3,043 calls and Figure 13 shows that a significant proportion of the cases resulted in no further treatment or the patient being advised to seek care away from an acute setting. As a result, this may lead to the number of attendances and emergency admissions at hospital being lower amongst the Orthodox Jewish community.

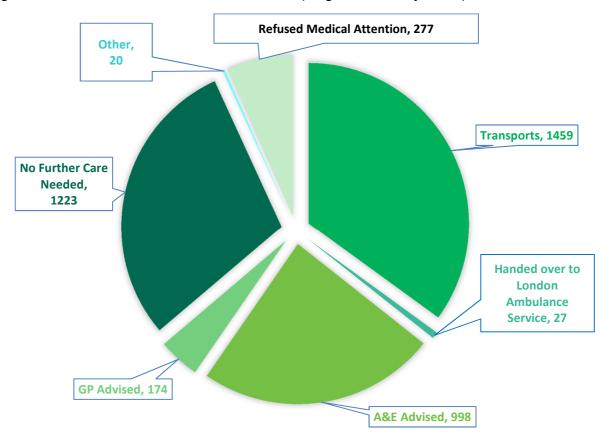


Figure 13: Outcomes from Hatzola call outs (Aug 2016 – May 2017)

Source: Hatzola, 2017

⁶ The service is funded by charitable donations from individuals and foundations and Hatzola does not receive government funding.

Further data provided by Hatzola shows that, amongst the Charedi community in Stamford Hill, the most common reason for calls are for cases of trauma, as shown in

Table 2. This data demonstrates that there is a relatively high rate of avoidable ill health within the community, with four out of the top five causes of emergency call outs largely relating to accident or injury. Whilst the same level of detail cannot be provided for local NHS ambulance services to serve as a comparison, the rate of burns in particular would appear to be high.

Table 2: Most common reasons for Hatzola call in Stamford Hill (Aug 16 – May 17)

| Reason for Hatzola attendance | Percentage of total cases (%) |
|-------------------------------|-------------------------------|
| Trauma | 20.0 |
| Falls | 16.8 |
| Minor trauma | 16.7 |
| Breathing problems | 9.9 |
| Burns | 9.8 |

Source: Hatzola, 2017

7. Lifestyle and health

Behavioural risk factors can impact upon an individual's health outcomes, and a key pillar of prevention is to encourage the moderation of lifestyle and social risk factors to promote health and wellbeing. Major lifestyle risk factors include smoking, drinking alcohol, eating a poor-quality diet, and not getting enough exercise.

Qualitative interviews with GPs flagged the importance of prevention to improve outcomes for their patients. One GP described what they saw as a *'prevention paradox'* with some members of the Orthodox Jewish community taking great care to treat disease and illness when it presented itself, but not doing enough to prevent ill-health through lifestyle measures before it arises.

This chapter will highlight the available data on healthy lifestyles as well as the opportunities for prevention of ill-health in the Charedi Community in Stamford Hill.

7.1 Physical Activity

Physical inactivity contributes to one in six deaths in the UK and increases the risk of a wide range of health problems, including cardiovascular disease, a number of cancers, hip fractures, depression and dementia. [58] While it is not until adulthood and older age that most of the associated increase in ill health is observed, physical inactivity often begins in childhood, laying the foundations for future poor outcomes.

The Chief Medical Officer (CMO) provides guidelines on how much exercise an individual should undertake each week to maintain a healthy lifestyle. The guidelines for adults aged 19 - 64 years are set out in Box 3^7 .

⁷ Individual physical and mental capabilities should be considered when interpreting the guidelines.

- 1. Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more one way to approach this is to do 30 minutes on at least 5 days a week.
- 2. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or combinations of moderate and vigorous intensity activity.
- 3. Adults should also undertake physical activity to improve muscle strength on at least two days a week.
- 4. All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Source: Department of Health [59]

In England, only 57% of adults meet these guidelines and in Hackney the figure is lower at 54%. In Hackney, 29% of adults are deemed to be 'inactive' which is defined as doing less than 30 equivalent minutes of exercise per week.

For many, meeting the CMO's targets can be challenging and common obstacles to achieving them include a lack of motivation or confidence, a lack of funds to pay for activities or childcare whilst taking part, and poor availability of facilities. [60] A local needs assessment of the Charedi community in Hackney in 2010 explored the main barriers to physical activity. Insufficient leisure time was the most frequently cited reason (47% men and 49% women), followed by lack of local facilities (23% men and 14% women), lack of money (11% men and 22% women) and caring responsibilities (6% men and 24% women). [61]

Barriers cited by Interlink have included; lack of free time; the demands of large families; a cultural preference for intellectual and religious activity over physical activity; and the requirement for gender-specific exercise opportunities. [62]

Similarly to adults, the CMO has produced weekly exercise guidelines for children which demonstrates the levels of activity children require for their health and wellbeing, as set out in Box 4. Many children do achieve these guideline levels of activity and there are many excellent initiatives throughout Hackney that encourage children to be as active as possible. In section 13 detail is provided on culturally appropriate physical activity opportunities for Charedi children living in Stamford Hill that are commissioned by Hackney Council.

Box 4: Chief Medical Officer's exercise guidelines for early years, children and young people

Early years (Under 5s)

- Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes, spread throughout the day.
- All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

Children and young people (5 – 18 years)

- All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day.
- Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.

Source: Department of Health [63]

During a series of focus groups with 30 Charedi schoolboys, as referenced in section 2.3, many of the boys recognised that they did not do enough, or very much, exercise. Although all participants could name some exercises they did, with biking and walking being the most popular, the time available for doing so was felt to be limited. One boy said that he was too busy and at school until late and it was also discussed that whilst PE in school was enjoyable it was generally only for 30 minutes per week.

In one group, there was brief discussion about the exercise habits of their parents. It was said that whilst they may buy exercise equipment, they did not always use it. The children highlighted that they often walk with their parents but that they generally don't do any other forms of activity with them.

In addition to these discussions, a survey was completed by the boys which included some questions relating to the amount of physical activity they undertook per week. Table 3 shows that, whilst all of the boys felt they were doing some exercise every week, many were doing far less than the national guidelines.

Table 3: Self-reported time spent exercising per week amongst Charedi schoolboys in Stamford Hill (11 – 14 years old, 2017).

| Time per week | Number of Responses |
|----------------------|---------------------|
| No answer provided | 4 |
| None | 0 |
| less than 30 minutes | 3 |
| 30 - 60 minutes | 9 |
| 1- 2 hours | 1 |
| More than 2 hours | 11 |

Source: London Borough of Hackney

Similarly, interviews with GPs highlighted particular concerns regarding the amount of exercise undertaken by some of their Orthodox Jewish patients. Two GPs discussed that insufficient time dedicated to exercise could explain some of the health concerns that were being brought to their surgeries, including some headaches in children and a lack of concentration, particularly amongst young boys. One GP referenced that with long days studying, particularly for boys, it was hard to fit in sufficient time for physical activity, but that it should be given greater importance. Another GP commented on the need to encourage exercise for all by integrating activity into the daily routine, including walking to school or to the synagogue rather than using cars.

7.2 Nutrition

Eating a balanced diet is central to growth and development as well as maintaining a healthy weight. The Government advises that adults and children over two eat a diet in accordance with the proportions set out in the Eatwell Guide, as shown Figure 14. The Guide encourages children and adults to eat a diet rich in fruit and vegetables as well as starchy carbohydrates such as potatoes, whole grain breads and cereals. Protein, including meat, fish and pulses, as well as dairy products should form a relatively smaller part of the diet.

As shown by the guide, high salt, sugar and fat foods, such as crisps, biscuits and chocolate should be eaten infrequently and in small portions. Additionally, consuming at least 6-8 glasses of water, or other low-sugar drinks, is important to maintain a healthy diet.

Check the label on packaged toods

Let he way preting the state of the

Figure 14: Eatwell Guide to eating a balanced, nutritious diet.

Source: PHE, 2016

As part of the focus group sessions ran last summer, diet and nutrition was discussed. When asked about foods that were enjoyed the most, all groups gave similar responses. Examples such as pizza, chips, burgers, ice cream, falafel and schnitzel were given. A small number of the children claimed to not enjoy eating vegetables.

There was a good understanding of the foods that were important to eat and those that should be eaten less often. Many of the boys referenced that vegetables, fruits, and fish/meat were good to eat and some highlighted the health benefits of milk, eggs, cereals and jacket potatoes. There was awareness that eggs are a good source of protein and discussion that "milk makes you strong".

The concept of '5-a-day' was brought up proactively and there was much discussion as to the types of fruits and vegetables that were liked and disliked. Interestingly, there was discussion as to whether it was even possible to achieve five a day, with some of the boys claiming that to do so would give you a stomach ache. Whilst some others said it was "quite possible", there was debate about how it could be achieved. This may suggest that for some, the principle is understood but rarely achieved.

Sugar, and the idea of healthy sugar, was discussed in all four groups. Most groups highlighted that it was important not to consume too much sugar and to "avoid added sugar". However, it was also discussed that "you can't get too much fruit and veg sugar" and some comments were made that "we need sugar and salt for your blood and protein", which indicates that there could be better awareness of how and why sugar and salt need to be limited in the diet.

Indeed, despite a reasonable awareness of the key messages around diet and nutrition, when asked about how often they ate certain food types, the majority of the boys were eating sweets (n=26), cakes (n=24) and crisps (n=24) at least weekly. Doing so is not only likely to impact upon weight gain and overall health but poor dental hygiene, as is discussed in greater detail in section 9.

7.3 Obesity

Levels of obesity, caused by a poor diet and low levels of activity, are increasing and contribute to a range of health complaints and diseases. Being overweight as an adult is associated with an increased risk of numerous chronic and severe health problems including cardiovascular disease (such as coronary heart disease and stroke), type 2 diabetes, obstructive sleep apnoea, obesity-attributable cancers and osteoarthritis. [64] Overweight and obesity in adulthood are defined as a Body Mass Index (BMI) of greater than 25 and 30 respectively.

Similarly, childhood obesity can also have a range of immediate impacts, for example anxiety, low self-esteem, and increased school absence. [65] It is also a significant risk factor for adult obesity, with eight out of ten obese teenagers becoming obese adults. [66]

To prevent children from becoming overweight and obese, a national, annual programme called the National Child Measurement Programme (NCMP) is led by PHE and delivered by local authorities, which involves the measurement of height and weight of children in Reception and Year 6. The purpose is to both provide population-level data on childhood weight, and to provide parents with feedback on their child's weight status. The programme is mandated in every state-maintained primary school and encouraged in non-state-maintained and special schools.

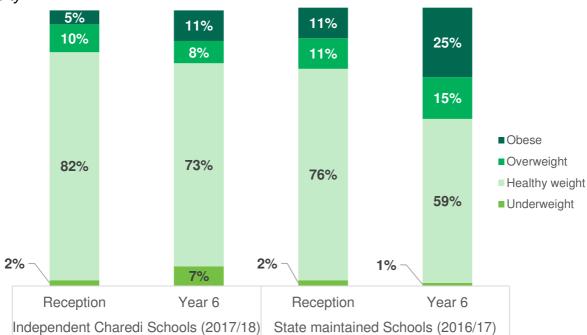
NCMP 2015/16 figures show that in England, the prevalence of overweight and obesity in reception year children is 22%, whilst in Hackney it is 25%. By year 6, national prevalence has increased to 34% and local prevalence in Hackney has increased significantly more to 43%. [67]

Following a successful pilot programme in 2015, all Charedi independent schools are invited to participate in an annual programme of pupil health checks. These health checks comprise the measurement of both the height and weight of pupils in reception and year 6 (as collected in the NCMP), as well as incorporating hearing and vision screening for reception pupils, as is discussed in section 9.2.

The most recent round of measurements in Hackney's independent Charedi primary schools was completed in 2017/18. 22 of the 23 Charedi primary schools participated in the health checks for reception pupils, though only 16 participated in the year 6 health checks.

As shown by Figure 15, 15% of Charedi reception year children were found to be overweight or obese, rising to 19% of children in year 6. These results show that being overweight or obese is less prevalent in Charedi children than in the rest of Hackney and the City, or than the London or national averages.

Figure 15: Proportion of reception and year 6 pupils in each weight category across both independent Charedi schools and State maintained schools in Hackney and the City.



Source: Independent Orthodox Jewish (OJ) School Health Check data, 2017/18

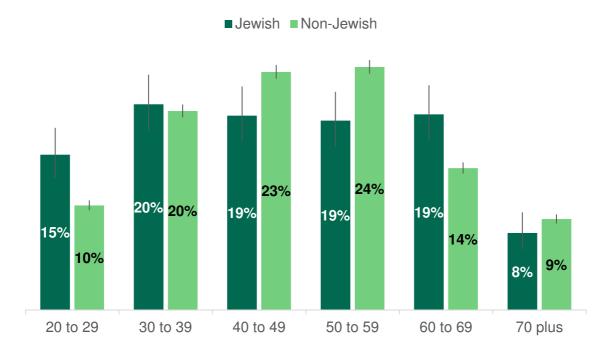
Despite the positive results amongst Charedi schoolchildren, the crude prevalence of obesity amongst Jewish men aged 20+ is 26%, which is almost twice that of non-Jewish men at 14%. The disparity is less stark amongst women, although the rate is also statistically higher amongst Jewish women (25%) compared to non-Jewish women (21%). The same pattern can be seen for severe obesity. 3% of Jewish men

are recorded as severely obese by their GPs, in comparison to 1% of Hackney's non-Jewish men. Amongst women, rates of severe obesity are 4% amongst Jewish women and 3% amongst non-Jewish women.

Figure 16 demonstrates that obesity occurs at a younger age in Jewish GP-registered men than it does in non-Jewish GP-registered men in Hackney. The same can also be seen for Jewish women in Hackney, as set out in Figure 17. For both Jewish men and women, rates of obesity are higher compared to other Hackney residents in early adulthood (20 - 29 years) but by 30 the obesity rate appears more in line with the Hackney average. For Jewish men, rates of obesity are also higher in the 60 to 69 age category, whilst for Jewish women obesity rates are also above the Hackney average from 50 to 69 years old.

In interviews with health professionals in Stamford Hill, adult obesity amongst the Charedi community was discussed with some suggesting that young parents have very little time and as a result may not prioritise lifestyle behaviours that support the maintenance of a healthy weight. It was also highlighted that marriage is an influential point in life for weight gain and that Jewish residents marry younger than average. Members of the community have also highlighted the role that multiple pregnancies may play in influencing young women's weight.

Figure 16: Prevalence of obesity by age in Jewish and non-Jewish men in City and Hackney (20+, 2017).



Source: CEG, 2017

18% 12% 19% 18% 15% 10% 17% 13% 9% 11% 20 to 29 30 to 39 40 to 49 50 to 59 60 to 69 70 plus

Figure 17: Prevalence of obesity by age in Jewish and non-Jewish women in Hackney (20+, 2017).

Source: CEG, 2017

7.4 Smoking

Every year, smoking kills around 100,000 people in the UK. [68] Smoking causes lung cancer, respiratory disease and heart disease as well as numerous cancers in other organs, such as the mouth, throat and bladder. Based on the Annual Population Survey 2016, 15.5% of adults in England currently smoke; 17% of men and 14% of women. In Hackney, the smoking rate is above the national average at 23%. Both nationally and locally, adults aged 25 to 34 are found to be the most likely to smoke. [69]

In the general population, the risk of smoking is strongly linked to socio-economic status and all measures of deprivation. [70] The majority of smokers in the general population start while in their teens, and many factors contribute to the chance of a young person starting to smoke. [71] These include living with parents or siblings who smoke, the level of exposure to tobacco industry marketing and the availability of cheap tobacco. [72]

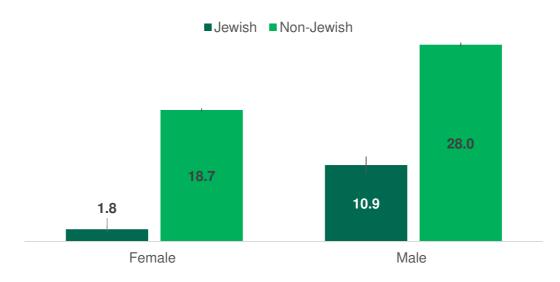
As part of the focus groups with Charedi schoolboys, the negative health impacts of smoking was discussed. All groups that took part evidenced a very good understanding of the health impacts of smoking and were emphatic in stating that

"smoking kills", it "blackens lungs", "it ruins the Hackney environment" and "it smells disgusting". Many of the boys discussed collectively that smoking was addictive, which they knew was a reason why many people couldn't stop once they started. Most of the boys in the group expressed that they had never been offered a cigarette (n=21/26) or tried one (n=24/26).

That being said, there may be benefit in school children being equipped with greater understanding of the underlying reasons why smoking is addictive and harmful. Only one boy correctly identified nicotine as being the ingredient that caused cigarettes to be addictive and there was also genuine interest in the number of chemicals in a cigarette and how they were made. Most of the boys across all groups were shocked that 4000 chemicals could be found in a cigarette – "Yuck!"; "Woah!"; "all a piece of poison".

By comparing the GP held data on smoking rates, it is clear that, in Hackney, smoking is strikingly more prevalent in the non-Jewish GP registered population in both men and women. Figure 18 shows that patients registered by their GPs as Jewish in Hackney are significantly less likely to smoke, although rates amongst Jewish men are notably higher than amongst Jewish women.

Figure 18: Crude smoking rate amongst men and women in Hackney (aged 20+, 2017)



Source: CEG, 2017

As the rate of smoking is very low amongst the female Jewish population throughout the life course, Figure 19 shows the rate of smoking by age amongst Jewish and non-Jewish men only. Although some interviewees felt that smoking was likely to be under-reported, the available data suggests that the Jewish male population is smoking at about half the rate of the Hackney population.

40 - 49

Figure 19: Smoking rate by age group amongst Jewish and non-Jewish men registered with a GP in Hackney (aged 20+, 2017).

Source: CEG, 2017

20 - 29

Lower rates of smoking than the population at large was highlighted in interviews with GPs and practice nurses in Stamford Hill, many of whom commented on the low rates of respiratory disease, including chronic obstructive pulmonary disease (COPD), as a result. The Charedi community can provide a powerful example where the benefits of historically low smoking rates are resulting in improved health in later life. Section 10 provides more details of the respiratory outcomes for the Jewish population in Hackney.

50 - 59

60 - 69

70+

7.5 Alcohol and drugs

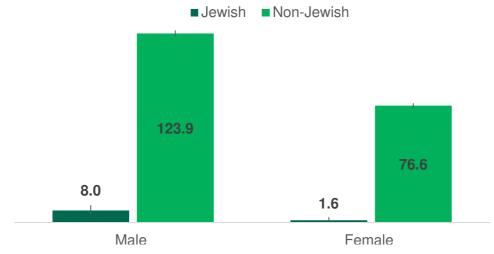
30 - 39

The misuse of drugs and alcohol is an issue of significant public health importance within Hackney, with the local population performing worse than the national and regional average against many indicators of substance misuse. [73] Alcohol and drug misuse can lead to use of hospital services due to illness and injury in the short term as well as liver disease and poor mental wellbeing in later life.

AUDIT-C is a tool commonly used to assess alcohol consumption based on a series of questions and the results are often recorded by GPs. [74] Amongst GP recorded Jewish residents in Hackney, GP recorded AUDIT-C scores show that the rate of alcohol consumption is significantly lower than the Hackney average. This is both the case for men and women, although, similarly to smoking, women within the Charedi community are significantly less likely to drink than men. Figure 20 demonstrates

that high risk drinking is very low amongst Jewish residents of Hackney compared to non-Jewish.

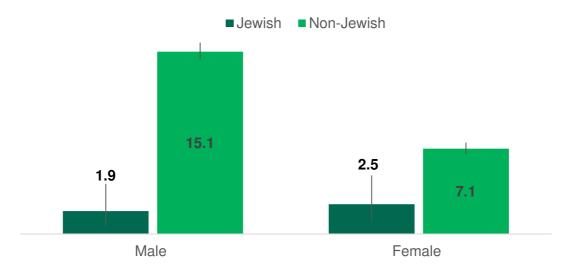
Figure 20: GP recorded AUDIT-C identification of high drinkers within Hackney per 1000 patients (age 20+, 2017)



Source: CEG, 2017

Similarly, it can also be seen that Jewish residents of Hackney are significantly less likely to have substance misuse or drug addiction therapy coded in their GP record at any stage in their life, as shown in Figure 21. Unlike alcohol consumption, men and women from Charedi backgrounds are aligned in terms of substance misuse or drug addiction. Low rates of alcohol and drug abuse within the Charedi community has a positive impact upon liver disease in later life as is evidenced in chapter 9.

Figure 21: GP recorded substance misuse or drug addiction ever on medical record within Hackney (aged 20+, 2017)



Source: CEG, 2017

8. Maternal health

The foundations of good health throughout the life course are set down during pregnancy, infancy and childhood, and good maternal health plays an important role. Keeping well in pregnancy is important for the physical and mental wellbeing of mother and baby. There are numerous recommendations for pregnant women to support healthy pregnancies and the development of the baby. These include eating a balanced and nutritious diet, stopping smoking, avoiding alcohol, and receiving the inactivated seasonal flu vaccine and whooping cough vaccine. [75] In addition to this there are benefits to mother and baby in maintaining an active lifestyle and undertaking light exercise for as long as possible.

Following pregnancy and childbirth, it is also important that new mothers can access the advice and support necessary to support looking after a new baby, including being aware of the signs and symptoms of post-natal depression. Maternal mental health is discussed in detail in chapter 12, which looks at the full range of available data on mental health.

8.1 Pregnancy

The high birth rate in Stamford Hill is a feature of Charedi couples having children at younger ages and also having large families, with many couples having six or seven children. Comparing the crude rate of women in Hackney who are currently pregnant, there is a stark difference between Jewish and non-Jewish mothers. Figure 22 reveals that there are close to three times as many women who are currently pregnant amongst Jewish mothers in Hackney compared to non-Jewish.

Figure 22: Crude rate of women who are currently pregnant in Hackney per 1000 women (aged 20 – 49, 2017)

60.0

22.3

Jewish

Non-Jewish

Source: CEG, 2017

GPs in the Stamford Hill area highlighted that they had high numbers of pregnant mothers and young children on their lists; one GP claimed that their practice had the highest number of births per week of any practice in the UK.

8.2 Health visiting

Health visitors work within the local community to support families during pregnancy and up to when a child turns five years old. These services can be provided in a range of local settings, including at GP practices, health centres and children centres. In addition, many health visitors will also attend to families in their homes.

Health visitors provide the Healthy Child Programme, a universal service available to all families that involves:

- health and development reviews from late pregnancy to 27 months;
- health promotion advice;
- advice on feeding and weaning; and
- management of minor ailments.

In the past there have been some concerns that some mothers from the Orthodox Jewish community were less engaged with aspects of the service. This could be for a number of reasons, including having access to experienced support within families or having had many children already. Interviews with two health visitors in the Stamford Hill area have focused on how the service seeks to engage with Charedi women in Stamford Hill to build trust in the service. The health visiting team, coordinated from the Homerton, works closely with the community to design new ways to increase the uptake of development reviews in an acceptable and accessible way to families. This includes giving particular attention to where appointments are offered (e.g. home, GP surgery / clinic setting) and the mother's preferences for meeting.

The mothers health support project (MHSP) is a pilot which has aimed to increase the uptake of the 27 month developmental review within the Orthodox Jewish community. Mothers' champions have been identified from within the Orthodox Jewish community to support women to plan their use of health visiting services and understand preferences. The aim of these project champions is to drive the process of engagement between health visitors and the women they work with, making active contact with families to promote the review and then providing clarity around the choices parents have made.

Representatives from three community organisations working with mothers and families in the Charedi community were interviewed to understand perspectives on

maternal health within Stamford Hill. The MHSP pilot was generally well received and it was viewed as an important strategy to improve the uptake of health visiting services. One participant described the use of community supporters in promoting health visiting as vital to building trust and making services seem more relevant to new mothers, saying 'the pilot proves [health visiting] is not just an outside agency that wants to tick a box'. There was a view that work to engage with the community made the service feel more genuinely appropriate and worthwhile. The community organisations who took part in interviews suggested that the volunteer approach could be extended to cover more of the health visiting pathway (not just the 27 month review) so that mothers are engaged as early as possible and in the antenatal period if possible.

A focus group with the health visitors in the Stamford Hill area was organised to understand their perspective on working with Orthodox Jewish mothers. It was recognised, primarily, that there is a large spectrum in terms of the trust that families have in the service and willingness to engage. One health visitor highlighted this in saying 'we say it's a single community but it's not, there are many communities and there can be very different views'. However, some common themes were identified and the group reported challenges in keeping appointments due to families generally being very busy. Because mothers are so pressed for time, it was discussed that many women will ask if the appointment is necessary and how long it will be. It was also felt that women within the community may trust an older female relative or friend more than the health visitor, which had implications when a health visitor wanted to make a referral or provide advice.

With regards to the 27 month review pilot, interestingly, interim feedback from health visitors suggests that they did not think that there had been many positive changes as a result. The group agreed that they had not experienced an increased level of engagement or willingness to make or keep appointments. It was suggested that when the mothers' champions are physically located within GP surgeries it is helpful but otherwise there doesn't appear to be an impact. There will be a review of the pilot in early 2019, which will consider the impacts seen throughout the duration of the pilot.

8.3 Breastfeeding

Compared to artificial formula feeding, breast milk can provide short and long term health and psychological benefits for mothers and babies and as a result, the National Institute for Health and Clinical Excellence (NICE) recommend exclusive breastfeeding of babies for at least 6 months. [75] [76] However, the proportion of mothers following the current guidelines on exclusively breastfeeding for the first six months of their baby's life have remained low since 2005 with only 1% of mothers

doing so. The barriers to exclusive breastfeeding are numerous but it is known that socioeconomically deprived mothers are less likely to breastfeed. [77]

Baby friendly initiatives in hospitals have been found to have a significant impact on the initiation of breastfeeding. The Homerton hospital in Hackney is currently working towards UNICEF Baby Friendly Status and is committed to 'supporting, protecting and promoting breastfeeding' in Hackney. [78] In addition to this, there are a range of antenatal classes that provide information on effective breastfeeding strategies before birth and breastfeeding drop in sessions to provide advice and support once the baby has arrived. Three of these weekly sessions take place in locations in Stamford Hill.

Figure 23 shows that mothers in child centre areas A and B in the north of the borough (covering Stamford Hill) were more likely to be breastfeeding at birth than those in Child Centre Areas C-F. Those in Child Centre Areas D and E had lower than average rates of breastfeeding at birth.

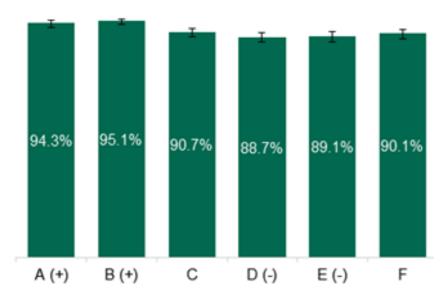


Figure 23: Breastfeeding prevalence at birth by children's centre area8

Source: Based on data of all births at Homerton University Hospital, restricted to City and Hackney residents from April 2013-March 2015.

Breastfeeding rates at 6-8 weeks in Hackney are also relatively high although there is variation within the Borough. As shown in Figure 24, by the 6–8 week check, rates of breastfeeding in all four areas (C-F) outside of Stamford Hill have declined more sharply than in areas A and B indicating that the gap is widening. Indeed, there is a decrease of 16.3 percentage points (from 90.7% to 74.4%) in Child Centre Area C compared with only a 6 percentage point decrease (from 94.3% to 86.3%) in Child Centre Area B between birth and the 6-8 week check.

-

⁸ (+) and (–) symbols indicate relativity to national average

86.3% 89.1% 74.4% 76.3% 77.2% 80.8% A(+) B(+) C(-) D(-) E(-) F

Figure 24: Breastfeeding prevalence at 6-8 weeks by children's centre area⁴

Source: Based on data from 6-8 week checks in Hackney and the City of London from 2013/14-2014/15 from Homerton University Hospital

Whilst it is positive that the Stamford Hill area has high rates of breastfeeding at birth and at the 6–8 week check, community organisations have provided some further insights during interviews. A concern was raised that there is such pressure to breastfeed a child that some Charedi mothers may be too embarrassed to say that they have been unable to do so at all or partially. This may prevent women from seeking advice and support when they need it.

It was also highlighted that 'if mothers don't get intervention early on with breastfeeding then you miss the opportunity'. It was said that, with few exceptions, all mothers from the Orthodox Jewish community want to undertake exclusive breastfeeding and only if there were health concerns for the mother or baby would an alternative be sought. Some interviewees were concerned that there had been, and may continue to be, a reduction in the number of breastfeeding support groups available in the Stamford Hill area, which were vital to maintaining high rates of breastfeeding. Community representatives commented on the importance of there being specific post-natal groups for Charedi mothers that are close to home and able to respond to the specific needs and concerns of Charedi Jewish mothers. For many it was deemed important that there were single sex classes available. There were also concerns that a lack of of easy access to these support services may lead women to seek out private breastfeeding support, which may create undue financial burden.

In relation to this, the tongue tie service at the Homerton was really valued by community organisations and it was seen as very helpful to mothers who were having problems feeding their babies because of tongue tie. Some members of the community expressed that they would be concerned if the service were not available.

8.4 Healthy Start Vitamins

Eating a healthy and varied diet is vital before, during, and after pregnancy to ensure that women have all the vitamins and minerals needed to support the growth and development of their baby. [75] It is also important, however, for pregnant women to take a folic acid supplement too; which protects the developing baby from neural tube defects, such as spina bifida. [79]

The national Healthy Start vitamins programme provides universal access to folic acid, and other essential nutrients, that mothers and babies need during pregnancy and the first year of life. Healthy Start vitamin tablets for pregnant women and mothers who have given birth in the last 12 months, contain folic acid and vitamins C and D. Supplements for children under 4 years old contain vitamins A, C and D. Vitamin drops and tablets are supplied in bottles, each containing enough for eight weeks. The vitamins are approved by the Vegetarian Society and are kosher certified (Basel Kosher Commission). They do not contain milk, egg, gluten, soya or peanut residues. [80]

Table 4. Daily doses of Healthy Start vitamins for women and children

| Contents | Women's tablets (Daily dose = 1 tablet) | Children's drops (Daily dose = 5 drops once a day) |
|------------|---|--|
| Folic Acid | 400 micrograms | none |
| Vitamin A | none | 233 micrograms |
| Vitamin C | 70 milligrams | 20 milligrams |
| Vitamin D3 | 10 micrograms | 7.5 micrograms |

A review of vitamin use in Hackney's Charedi population studied 692 pregnant women and their babies between October 2015 and March 2016. It showed that vitamins were acquired for free via Healthy Start but many people also purchased vitamins privately. Of the 613 expectant mothers taking vitamins during pregnancy, 42% purchased them privately and, of the 514 babies given vitamins, 52% were given privately purchased vitamins. [81] It may be that some Charedi mothers are unaware of the Healthy Start scheme suggesting that improved communication with the community could improve uptake.

The purchase of vitamins may be a financial burden, particularly for families on low incomes. It is recommended that communication strategies are developed to raise awareness of free Healthy Start vitamins and to ensure consistency of messages given to mothers by professionals. This may involve promotion via Charedi organisations or health professionals in the Stamford Hill area. A key message to

communicate is that healthy start vitamins have been Kosher certified and are appropriate for Orthodox Jewish mothers to take.

9. Child health

The Orthodox Jewish community in Stamford Hill has a notably young age structure, as highlighted in section 4.1. A healthy lifestyle in childhood sets the attitudes and behaviours for later life and also provides the foundation for good health outcomes throughout the life course.

A challenge in completing this chapter has been that, for many children, services are accessed through schools. As most Charedi children in Hackney attend independent schools, data collection is not straight forward and some children will not be accessing mainstream services. This is particularly the case for speech and language, special educational needs and physical disabilities. Charedi pupils are also likely to miss out on a comprehensive health and wellbeing offer, which would otherwise be provided by school nursing services in non-independent schools.

Children and young people's mental health is a vitally important area of consideration which has been reviewed in chapter 11 alongside the analysis of mental health in adults.

9.1 Oral health

Tooth decay is the most common oral disease affecting children and young people (CYP) in England, yet it is largely preventable. Poor oral health impacts children and families' health and wellbeing. It can have a significant impact on quality of life by causing severe pain, loss of sleep, affecting the ability to eat a healthy diet and, occasionally, by resulting in sepsis. In children, these factors may cause impaired socialisation, sickness and absence from school. [82] Parents may also have to take time off work to take their children to the dentist. Oral health is an integral part of overall health; when children are not healthy, this affects their ability to learn, thrive and develop and good oral health can contribute to school readiness. [83]

National advice to promote good oral health is to reduce the amount of foods and drinks containing 'free sugars' that are consumed. This includes all fizzy drinks, soft drinks and juices that have been sweetened with sugar. [84] Brushing teeth twice a day with a fluoride toothpaste will also reduce the likelihood of dental caries. [85] Regular attendance at a dentist is encouraged for children as soon as their first teeth come through and before their first birthday, as part of national initiatives such as NHSE Starting Well and the British Society of Paediatric Dentistry initiative 'Dental Checks by 1'. [86]

Within the Orthodox Jewish community, oral health is a particular concern and one that has been raised by GPs and health visitors. GPs commented that some of their

Charedi patients, including children and young people, have such poor oral health that it can cause them serious pain and discomfort. It was felt that there were many specific barriers to good oral health, such as limited access to information and advice and the expense of visiting a dentist.

Previous qualitative research conducted with mothers of families with young children in the Stamford Hill Orthodox Jewish community, revealed barriers and challenges for families in accessing dental care for their children and concluded with a recommendation for more information on the oral health status of children in the community. It also revealed a reliance on health information distributed through family and friends and limited understanding of dietary risk factors. [25]

To support oral health improvement programmes in Stamford Hill, baseline data was needed on the prevalence and severity of dental disease. As most Charedi schools are independent, children within the community have not been included in the PHE dental public health epidemiology programme survey of five-year-old children. Because of this, a specific local dental survey was carried out for Charedi schoolchildren in Hackney in 2015. [23]

The results of this local survey reveal that 58.4% of Charedi children aged 5 years had dental decay compared to just over a quarter (27%) in the Hackney population at large, as shown in Figure 25. In addition, the mean number of decayed teeth per child was 2.38 amongst the Charedi community compared to 1.0 for Hackney and London and 0.8 for England. [23] Of those Charedi children with decayed teeth, 26% had three or more decayed teeth and 10% of children had six or more decayed teeth at five years.

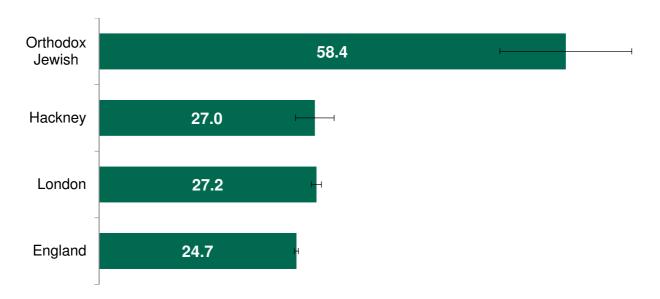


Figure 25: Percentage of five-year-old children with decay experience (2015)

Source: Klass et al, 2017

Incisor caries is an aggressive form of dental decay associated with long term bottle use with sugar-sweetened drinks, especially when these are given overnight or for long periods of the day. The prevalence of this aggressive form of caries was seen in 23% of Charedi Jewish children compared to 9.3% for Hackney, 8.2% for London and 5.6% for England, as shown in Figure 26.

Orthodox Jewish

Hackney

9.3

London

8.2

England

5.6

Figure 26: Percentage of five-year-old children with incisor caries (2015)

Source: Klass et al, 2017

Alongside the survey, a questionnaire was sent to parents of examined children. It focused primarily on oral health behaviours and found that only 20% of Charedi schoolchildren aged 5 years were brushing their teeth twice a day compared to 82% across England as a whole.

In order to address the high levels of dental decay within the Charedi community, an oral health action plan was developed. The key features of the action plan are a fluoride varnish programme, a toothpaste delivery programme, oral health training for front-line staff and culturally sensitive information resources. Supervised tooth brushing in Charedi schools is also being considered.

The fluoride varnish programme has been rolled out in participating Orthodox Jewish schools. The scheme involves applying a layer of varnish to the teeth of children who have parental consent. In Charedi schools, there have been some challenges in rolling out the scheme as broadly as planned. All 23 of the independent Charedi Jewish schools have been invited to join the programme however, the service provider has experienced difficulties both in encouraging schools to take up the programme and in retaining the schools that have been involved previously.

Current data from the service provider reveals that only eight Charedi schools have been involved in the last school year and 298 Charedi children have had fluoride varnish applied to their teeth. Improved participation in the fluoride varnish programme could improve these outcomes and reduce the need for painful or time-consuming dental procedures later.

9.2 Hearing and vision

Hearing and vision tests have been completed in participating Charedi schools as part of the national child measurement programme that has been undertaken in the independent schools. The results nationally are not recorded as a point of comparison but the results for children in reception at the Charedi schools are set out in Table 5. All but one of the Charedi schools participated in these reception health checks in 2017/18, with 835 pupils receiving the vision check and 827 receiving the hearing check – this shows positive engagement from parents and schools in Stamford Hill.

Table 5: Outcomes for vision and hearing tests in reception age children in Charedi independent schools in Hackney (reception age, 2017/18)

| | Vision | Hearing |
|--------|--------|---------|
| Passed | 90% | 85% |
| Failed | 9% | 15% |

Source: NCMP in independent Charedi schools, 2018

Note: The percentages above represent the breakdown of those children tested. It was not possible to test the vision of 1% of pupils that had agreed to screening, due to reasons other than absence or lack of consent.

Two GPs raised that they saw a reasonable number of children with hearing problems who they referred straight to a hearing clinic. It was felt that engagement with the hearing and vision tests in schools- with the option to be referred to a specialist if any issues are identified- could reduce unnecessary GP appointments in the future.

At the same time it was noted that headaches amongst children were sometimes attributable to poor eyesight, which may be exacerbated by long hours spent studying. Ensuring children have time outside to enjoy exercise, eat a healthy diet, and take precautions to protect their eyes in the sun can promote good eye health. [87]

Anecdotal feedback from Bikur Cholim suggests an increase in the number of parents of babies and young children with diagnosed hearing impairment accessing local peer support services.

9.3 Learning disability

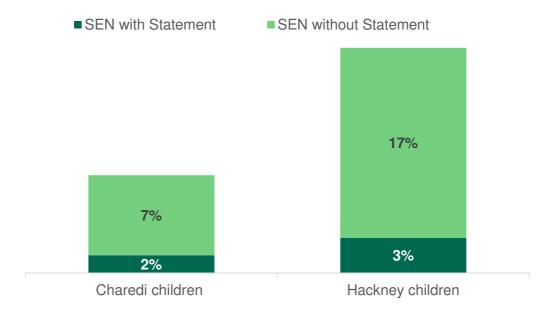
According to the Equality Act 2010, a disability is a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on your ability to do normal day-to-day activities. [88] Learning disability can be defined in different ways, however the most widely accepted definition in the UK is the presence of 3 core criteria: 1) lower intellectual ability, 2) significant impairment of social or adaptive functioning, and 3) onset in childhood. [89] It is recognised that this includes a wide range of abilities and the amount of everyday support a person needs can vary considerably.

The annual school Census includes information on children with special education needs and disability (SEND), however this only applies to state funded primary, secondary and special schools. As a result, there is no information regarding Charedi children attending independent or unregistered schools.

In 2015, Interlink gathered information on the number of children in Independent Charedi schools (aged 5-16) with and without a statement of special educational needs by approaching each independent school directly; they received data from 15 schools. Interlink identified 119 Hackney children with a statement of special educational needs, and 540 Hackney children with special educational needs but without a statement.

Using their estimates of the Charedi child population at the time, they calculated that this was equivalent to 1.6% of Charedi children with a statement and 7.3% of Charedi children receiving some special education needs support. Figure 27 highlights these findings from Interlink by comparison to the data collected for non-Jewish children in Hackney. Historically, SEND provision has been underdeveloped in Charedi schools, and it is thought that this is likely to result in more children going undiagnosed in these settings.

Figure 27: Percentage of Charedi and Hackney children identified with special educational needs



Source: Interlink, 2015

NB: Confidence intervals are not available

Since 2006-7, GP practices in England have also been asked to keep a register of their patients who have learning disabilities. The initial purpose of this was to provide an annual learning disability health check, however the list also ensures that healthcare professionals consider key issues of communication, consent, and the ability to follow a care plan. The actual numbers recorded by GPs are very small; many children and adults with mild learning disabilities may never discuss this with their doctor. Attending the GP about a diagnosis is usually a reflection of severity and a need to access further services.

With these limitations in mind, GP diagnosis of learning difficulties in Hackney appears to be similar between Jewish and non-Jewish groups. Comparing recorded learning disability on the GP record for children aged 0-19 years, suggests that Jewish and non-Jewish patients have a rate of just below 0.3%. It is, however, worth noting that when asked, GPs felt anecdotally that there was a relatively high rate of learning disabilities in the Orthodox Jewish community, particularly amongst boys.

9.4 Child health development services

Child health development services provide assessment and treatment to children who may struggle with day to day tasks as a result of physical disability, autism, coordination problems, or delay in development relative to peers. There are issues with making accurate assessments of the need for developmental services within the Charedi community. This is both because school age data is much harder to access amongst the Charedi independent schools and because religion is again not routinely captured when collecting patient data in mainstream services.

In 2014, Interlink worked with Healthwatch to produce a report that published feedback from parents on the use of children's health and development services. [90] Some specific barriers to accessing services were raised by the Charedi community, such as the challenges of non-Yiddish speakers engaging with children who may not have good English (which may prove particularly problematic in the provision of speech and language therapy or talking therapies) and cultural issues with mixed gender sessions.

Clinicians working in various roles in child health and development have commented on some specific cultural trends with regards to engagement with child development services. This has included a keenness for specialist input and private advice to complement local services. Three of the professionals interviewed raised this and highlighted that, in their opinion, most of the additional input sought was unnecessary and may be costly for families. It was also felt that many Charedi patients were less approving of group therapies and preferred 1:1 treatment from a trained therapist, which may not always be deemed appropriate or necessary by clinicians.

9.4.1 Hackney Ark

The Hackney Ark centre is an integrated local service for children and young people who have disabilities or special educational needs. Through the Ark, health, education and social care services are brought together to better respond to the varied needs of service users. Interviews with professionals and clinicians working at the Ark have highlighted there is generally a good level of engagement with the service provided amongst Charedi patients and that many of their patients are from Stamford Hill.

Professionals working with patients at the Ark have recognised some issues of coordination with independent schools. Some of the clinicians felt that they had been working with patients who had very late diagnoses, for example of autism, and it had caused surprise that their condition hadn't been picked up before. In addition, it was noted that having large families can make it very challenging to prioritise and meet the needs of a child with complex needs. Clinicians emphasised that parents generally do as much as they can to support their children but recognise that, for some, this must be very tough. In Hackney requests for funding for children with additional needs in schools go to the Health and Education Panel for approval. It can be difficult to assess the level of need that a child has when the NHS does not make assessments in private schools. In interviews, it was felt that this has led to patchy provision of support for children in independent schools, depending upon the ability to pay for private assessments.

Children can access NHS occupational therapy and physiotherapy through the Ark or in independent schools. Data on the use of these services for Charedi children is again challenging to access but many children have their GP practice recorded upon referral. Comparing referrals where there is a known GP, suggests that children registered at the 5 predominately Charedi practices represent approximately 30% of all occupational therapy and physiotherapy caseload in Hackney. This would be consistent with the proportion of children in Hackney from Orthodox Jewish families. There are, of course, limitations to this approach and there are likely to be lower numbers of Orthodox Jewish children referred from other settings.

9.4.2 Speech and language

Speech and language services are important for children who may have difficulties with their speech and sounds and, as a result, struggle with communication. The speech and language team at the Homerton Hospital have many Orthodox Jewish children under 5 in their service, and trained therapists run a drop in centre at the Lubavitch community centre. Universal speech and language services are only available within maintained schools from age 5. Independent schools may purchase speech and language services for their schools but many do not.

An interview with one of the service providers highlighted that the most common cases they see in their appointments are for stammering or voice issues such as nodules. It has also been observed that, compared to other groups, there appears to be an issue with late access to services at a more apparent stage of need. This may be because the signs and symptoms of speech and language problems are not identified quickly or because of barriers to access.

9.5 Accident and Injury

Accidents and injury are a public health concern and there are more than 2 million accidents around the home involving a child under 15 in the UK each year. [91] This can often result in children being treated by their GP or at an accident and emergency department, which can be very distressing. With regards to the north of Hackney, health professionals discussed two specific areas where improvements could be made in the Charedi community, namely road safety and burns.

Maintaining safety on the roads and in neighbourhoods is a local priority and there have been some concerns within the Stamford Hill area relating to road safety. This includes following rules and regulations related to seatbelts and car seats, and travelling with too many passengers in vehicles, for example on the school run. The law is clear that it is illegal for anyone to fail to wear a seatbelt whilst travelling in a vehicle. Failure to do so can result in a £100 on the spot fine or prosecution. [92]

Health visitors had particular concerns about road safety and it was raised in the focus group discussion that seatbelts were not used routinely in Stamford Hill. It was also raised that some very young children may be making their own way to school or nursery, sometimes in the company of a sibling who is a few years older. In some cases, young children are travelling unsupervised on scooters or bicycles. Making sure children are aware of good road safety practice is important in reducing avoidable accidents. Because of this, Hackney Council can offer free scooter and cycle training for children in the independent Charedi schools.

Additionally, some healthcare professionals have commented that there are a notable number of burns within the community, with some severe cases being caused by hot water urns that are used on the Sabbath when physical labour is prohibited. Injury can occur when a child pulls over the heater or scolds themselves with hot water if unsupervised. Whilst data is not easily accessible on the scale or severity of this issue, health professionals in Stamford Hill have commented that they have seen some cases of serious burns amongst their patients. Given the data in section 6.4 suggests that close to 10% of Hatzola calls are to burns, it is important that parents remain vigilant to safety when using water urns at home. This can include thinking carefully about the positioning of a hot water urn and being mindful of cables that could present a trip hazard.

10 Chronic conditions

Review of the available literature, interviews with medical professionals and discussions with Charedi community organisations have guided statistical investigation into a range of chronic conditions. Where appropriate, the crude prevalence of each condition, in comparison to the Hackney average, has been determined. However, it should be noted that due to the relatively youthful age structure of the Charedi population, it has also been necessary to produce age specific rates which determine the prevalence of disease within defined age brackets. If a crude rate only was used, it would not be possible to understand which conditions were more or less likely to occur within the Charedi community.

Many of the conditions highlighted in the following chapter have been considered in greater detail in the City and Hackney Joint Strategic Needs Assessments which can be found on the Hackney.gov.uk website.

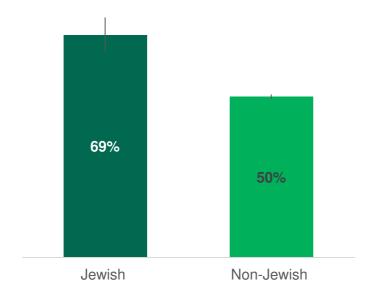
10.1 NHS Health Check

The NHS Health Check is a preventative health appointment for adults aged between 40 and 74 in England. [93] It is designed to spot the early signs of chronic conditions that become more prevalent with age. GPs collect local data on those patients that are offered and subsequently take up an NHS Health Check. In Hackney, the NHS Health Check is offered every five years to all patients in the eligible age group registered to GP practices in Hackney and the City of London who are not previously known to have a diagnosis of stroke, kidney disease, heart disease, type 2 diabetes, or dementia.

Completing a health check is a positive way to identify any risk factors for disease that may be modifiable through changes to lifestyle. The check may also pick up hidden health problems and it is hoped that this would allow them to be treated or managed at an earlier stage.

Figure 28 demonstrates that patients coded as Jewish within Hackney are significantly more likely than the general population to take up a health check if offered one. This is despite the fact that the proportion of the population that have been offered a health check is largely comparable (Jewish 37.3%; Non-Jewish 38.8%). This demonstrates positive levels of engagement amongst the Jewish community in Hackney and represents an important opportunity to deliver preventative health messages, particularly relating to obesity, to adults within the Stamford Hill community.

Figure 28: NHS Health Check offered and taken up (age 40 – 74)



Source: CEG

10.2 Cancer and screening

In Hackney and the City of London, around a third of all deaths can be attributed to cancer. Breast, colorectal, lung and prostate cancers account for the largest number of cancer deaths and are the four types of cancer with the highest incidence.

The risk of developing cancer depends on many factors, including non-modifiable risk factors such as age, ethnicity and genetics, as well as modifiable factors, including diet, exercise and smoking. In terms of ethnicity, it is established that some groups can have higher chances of developing certain cancers, due to a combination of genetic and lifestyle factors. For the Ashkenazi Jewish population, it has previously been found – as discussed in section 3.8 - that there is a higher genetic risk of breast cancer and colorectal cancer. [94] [95] [96] [97]

Figure 29 shows that the rate of cancer within each age band for Jewish residents is not statistically different to the Hackney average. For both the Jewish and non-Jewish Hackney residents, the rate of cancer increases with age as would be expected.

0.3 0.6 5.1 3.6 17.3 18.2 63.9 77.9 147.8 144.9 0 to 19 20 to 39 40 to 59 60 to 74 75+

Figure 29: Rate of cancer per 1000 patients in Hackney by age group (all ages, 2017)

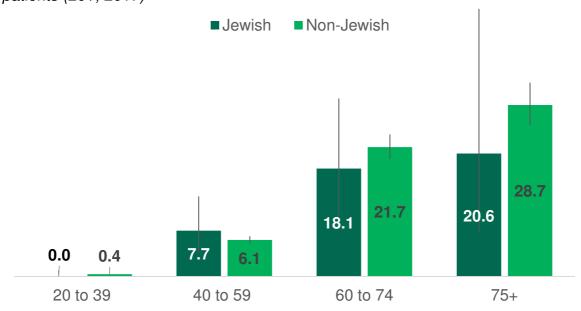
Source: CEG, 2017

When considering the rates of breast, bowel and lung cancer specifically, a similar pattern emerges where it is not statistically possible to draw firm conclusions about any observed disparities between the Jewish and non-Jewish populations. In the case of lung cancers, there are fewer than ten cases of lung cancer that can be identified amongst Jewish residents in Hackney and the small numbers involved make it hard to draw any firm conclusions.

As highlighted in section 3.8, Ashkenazi Jewish women are more likely to have BRCA1 / 2 genes which increase susceptibility to breast and ovarian cancers. Breast cancer where a patient has BRCA 1 or 2 is only a small proportion of the overall breast and ovarian cancer rate, however it increases the likelihood of developing breast and/or ovarian cancer at younger ages. Remaining vigilant to symptoms is paramount to early and successful treatment.

Figure 30 demonstrates the age-specific rate of breast cancer in Hackney, which due to the large confidence bars, shows that the prevalence of breast cancer in the Jewish and non-Jewish population is not statistically different in all age groups. Although there is a higher rate of BRCA1 / 2 mutations in the Ashkenazi community, other lifestyle factors may be driving the rate of breast cancer in the Hackney population, such as higher levels of alcohol consumption and increased smoking prevalence. Indeed, breastfeeding and pregnancy are known to have protective effects against developing breast cancer which may also reduce the risk to Jewish women.

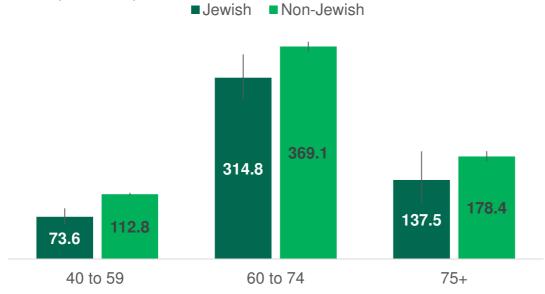
Figure 30: GP recorded age specific rate of breast cancer prevalence per 1000 patients (20+, 2017)



Source: CEG, 2017

During interviews, GPs were specifically asked about early detection of cancer, including routine screening. GPs unanimously felt that their patients were quick to book appointments if they had symptoms that concerned them, although there was a sense that the uptake of routine screening may be lower than the Hackney average. Figure 31 demonstrates that the rate of breast screening is lower amongst Jewish residents in Hackney in under 75 year olds.

Figure 31: GP recorded age specific rate of breast cancer screening per 1000 patients (40+, 2017)

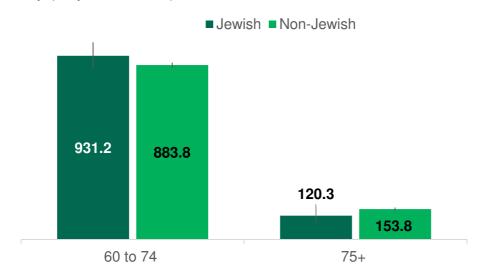


Source: CEG, 2017

As the BRCA1/2 gene is associated with cancer diagnosis at a younger age, the significantly lower screening rate in the 40-59 age bracket presents some concerns. Improving the screening rate for breast cancer amongst the Charedi community may enable clinicians to identify breast cancer at an earlier stage when it may be more easily treated.

Despite the observed differences in breast screening, Figure 32 shows that there is no statistical difference in the rate of bowel screening between Jewish and Non-Jewish residents in Hackney, with Jewish patients being as likely to participate in screening. This suggests that there may be specific issues or concerns around breast screening within the community that are not identified with bowel screening. There may be need for improved information for the community on the process, the benefits of screening, or reassurance that the service will be culturally appropriate.

Figure 32: GP recorded age specific bowel cancer screening rate per 1000 patients in Hackney (60 years+, 2017)



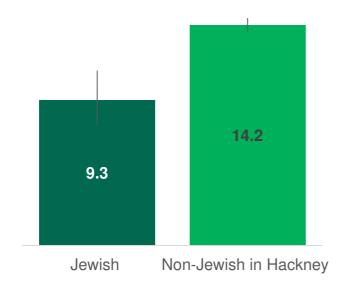
Source: CEG, 2017

10.3 Cardiovascular disease

Cardiovascular disease (CVD) is the collective name for a group of conditions which affect the heart and circulatory system. CVD results in the build-up of fatty substances known as plaques (or atheroma), which cause a hardening and narrowing of the arteries. This restricts blood flow and oxygen supply to vital organs and increases the risk of blood clots, which can block the flow of blood to the heart or brain. The main risk factors for CVD are a diet high in saturated fat, as well as smoking and drinking alcohol.

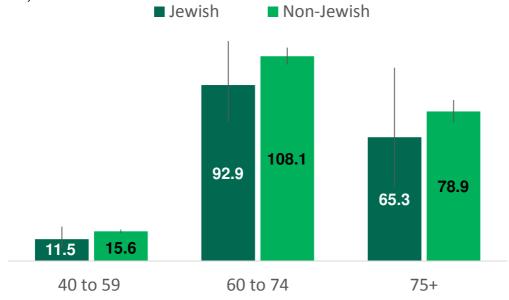
Because the Orthodox Jewish population is relatively youthful, the crude rate of Cardiovascular Disease (CVD) is significantly lower than in the population at large, as shown in Figure 33. However, when looking at age specific rates, Figure 34, the risk of CVD within the Jewish population is statistically similar to the rate within the non-Jewish population in all age bands.

Figure 33: Crude rate of patients at risk of CVD per 1000 patients (all ages, 2017)



Source: CEG, 2017

Figure 34: Age specific rate of patients at risk of CVD per 1000 patients (40 years+, 2017)



Source: CEG, 2017

10.4 Respiratory diseases

Respiratory diseases are 'diseases of the airways and other structures of the lungs' and a major cause of morbidity and premature mortality. The major risk factors for respiratory disease include smoking and second hand smoke, as well as air pollution and exposure to particulate matter, gasses and fumes.

As discussed in section 7.4, Orthodox Jewish residents in Hackney are significantly less likely to smoke than the Hackney population on average. This historical reduced smoking rate results in notably better respiratory health compared to the rest of the population. Figure 35 and Figure 36 demonstrate that both the crude rate of asthma across the entire population and the age-specific rates of asthma by age group are lower amongst Jewish patients.

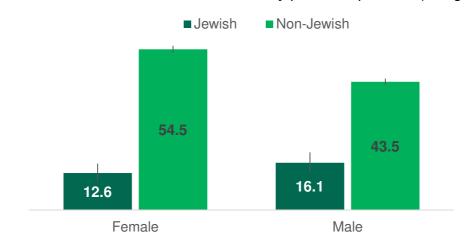
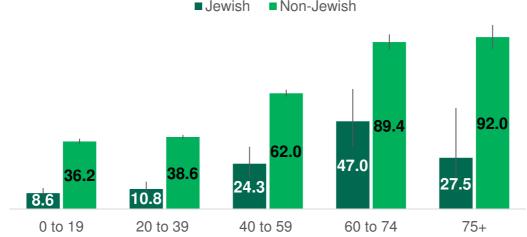


Figure 35: Crude rate of asthma in Hackney per 1000 patients (all ages, 2017)

Source: CEG, 2017

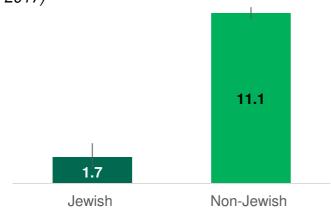




Source: CEG, 2017

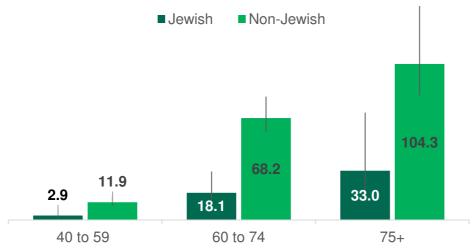
A similar pattern can be seen for chronic obstructive pulmonary disease (COPD), with the crude rate of COPD being highly significantly different between Jewish and non-Jewish patients, as per Figure 37. To account for the young Jewish population, given the prevalence of COPD increases with age, age specific rates have also been calculated. Only in the 40-59 age category is there not a statistical difference between Jewish and non-Jewish patients with regards to the prevalence of COPD, as shown in Figure 38.

Figure 37: GP recorded crude rate of COPD in Hackney per 1000 patients (all ages, 2017)



Source: CEG, 2017

Figure 38: GP recorded age specific rate of COPD in Hackney per 1000 patients (40+, 2017)



Source: CEG, 2017

The notable difference in respiratory health between Jewish and non-Jewish people demonstrates the powerful protective impact of low rates of smoking amongst Orthodox Jewish people in Hackney.

10.5 Liver disease

Liver disease within the Jewish community of Hackney is largely similar to the population at large, but is significantly lower in the 60 - 74 year age group when the rate of liver disease is at its highest in the general population. This may reflect the lower levels of drug and alcohol abuse within the Jewish community, as highlighted in section 7.5.

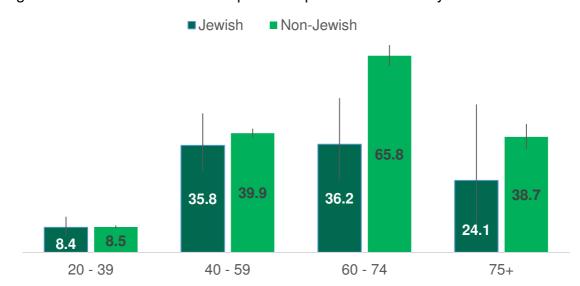


Figure 39: Rate of Liver Disease per 1000 patients in Hackney

Source: CEG

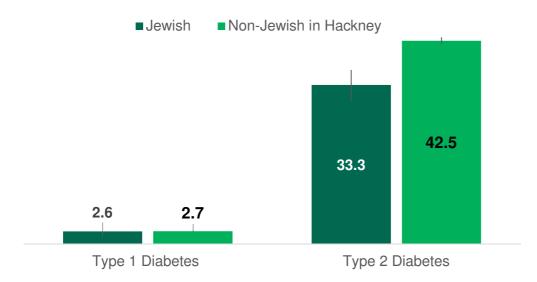
10.6 Diabetes

There are two major types of diabetes, type 1 and type 2. Type 1 diabetes is an autoimmune condition, caused when the immune system mistakenly attacks the pancreas leading to an inability to produce insulin. The condition is generally diagnosed at younger ages, although it is not known exactly what triggers the immune system response. [98]

Type 2 diabetes is a condition where either the pancreas does not produce enough insulin or cells in the body become resistant to it. This is often caused by a consistently high blood sugar level through the diet and, as a result, can be preventable through moderation of diet and increased uptake of exercise. [99]

When considering the prevalence of diabetes in Hackney, rates of type 1 diabetes are broadly similar between Jewish and Non-Jewish residents. However, when looking at type 2 diabetes, the Jewish population enjoys a significantly lower rate compared to the rate of non-Jewish patients, as shown in Figure 40.

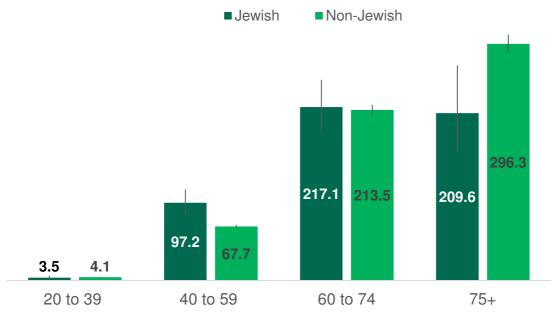
Figure 40: GP recorded crude rates of type 1 and type 2 diabetes in Hackney per 1000 patients (age, 2017)



Source: CEG, 2017

Of course, as type 2 diabetes increases in prevalence with advancing age, a population wide difference in the crude rate would be expected. Figure 41 reveals that when looking at age-specific rates, there is actually a higher rate of type 2 diabetes amongst Jewish patients in the 40 to 59 age group compared to the Hackney average. This is consistent with previous observations that the rate of obesity is higher amongst the Charedi population in the young adult age cohorts.

Figure 41: GP recorded age specific rates for type 2 diabetes in Hackney per 1000 patients (20+, 2017)



Source: CEG, 2017

10.7 Inflammatory bowel disease

The GPs and health professionals that were interviewed as part of this work, observed higher rates of Inflammatory Bowel Disease (IBD) in the Orthodox Jewish community compared to other patients. IBD is an overarching term for inflammatory conditions of the gut, principally including ulcerative colitis, which affects the colon, and Crohn's disease, which can affect the entire digestive tract. [100] As highlighted in section 3, there is a higher prevalence of Crohn's disease within the Ashkenazi population, with the rate estimated to be 2-4 times higher.

Figure 42 shows that when comparing the Jewish and non-Jewish populations in Hackney, the crude rate of IBD is almost twice as high as in the general population. This is different from the rate of irritable bowel syndrome (IBS), which is a common condition of the digestive system, causing stomach cramps, bloating, diarrhoea and constipation. Figure 42 also shows that the rate of IBS is much higher amongst the non-Jewish population compared to Jewish population. However, this may be explained by the higher proportion of children and young people in the Jewish population, as IBS is typically diagnosed in early adulthood.

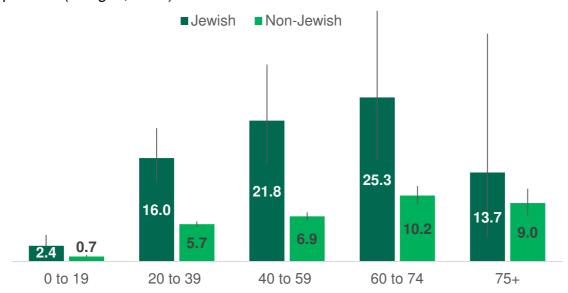
33.3
19.6
10.8
18D
18S

Figure 42: GP recorded crude rates for IBD and IBS in Hackney per 1000 patients

Source: CEG, 2017

When looking at age specific rates, in most age brackets, Jewish patients are experiencing a higher prevalence of IBD. Figure 43 shows that there is a large increase in diagnosis of the condition between the age of 20 and 39, which is close to three times the rate in the non-Jewish Hackney population.

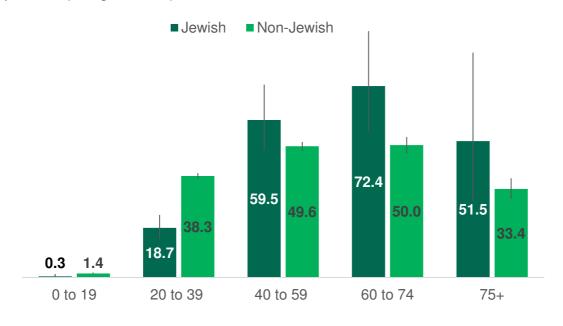
Figure 43: Age specific rates of inflammatory bowel disease in Hackney per 1000 patients (all ages, 2017)



Source: CEG, 2017

The same pattern is not observed for Irritable Bowel Syndrome (IBS); Figure 44 shows that in the 20 - 39 year age group, there is a higher reported prevalence of IBS amongst non-Jewish patients. However, the IBS rate is broadly similar between Jewish and non-Jewish groups at older ages, with the exception of the 60 - 74 year age group where Jewish patients have a marginally higher rate.

Figure 44: Age specific rate of irritable bowel syndrome in Hackney per 1000 patients (all ages, 2017)



Source: CEG, 2017

11 Infectious Diseases

Infectious diseases are diseases which can be spread and are caused by bacteria, viruses, fungi or parasites. [101] Many infections can be prevented through vaccination and, as a result, diseases that were once commonplace are now rare. Information on specific vaccines can be found on the NHS Choices website, alongside information on why vaccination is important, as below:

- Vaccinations are very quick to receive;
- They are proven to be very safe and effective at preventing disease;
- Once an individual has received a vaccine they will have a far better chance of fighting a disease if they catch it; and
- The more eligible individuals get vaccinated, the more likely the community at large will have greater immunity to disease. [102]

Vaccines are offered at a time when they are likely to have the greatest impact in protecting individuals from diseases that they may come into contact with. Parents should not be concerned about vaccinating children and babies at a young age as the volume of vaccine they receive is small and the viruses they are made from will have either been destroyed or weakened. [102] Getting vaccinated on time means that an individual is likely to have the maximum protection against a disease.

11.1 Childhood immunisations

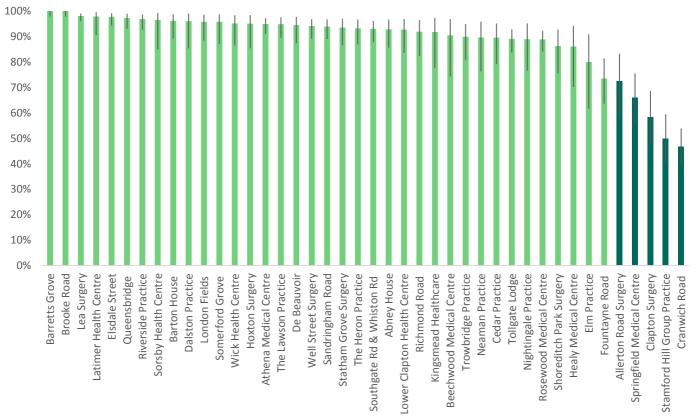
Improving both the coverage of immunisation and timeliness of receiving vaccinations was highlighted by all GPs that were interviewed, as well as nurses and health visitors. Cases of vaccine preventable disease (VPD) within the Stamford Hill area, including recent outbreaks of measles in 2012/13 and pertussis (whooping cough) in 2015, are a result of sub-optimal levels of immunisation within the Orthodox Jewish Community.

Although it is not possible to identify the religion of specific patients with regards to vaccination data, it is possible to compare the vaccination rates between areas of Hackney and between GP practices. The Stamford Hill area is the only area of Hackney which has failed to achieve 90% immunisation on time across a range of vaccinations. [103] It is hypothesised that whilst Charedi children may have low rates of vaccination on time, many are vaccinated late and so may catch up. Timeliness is important as vaccinations are given at the stage of development where they are clinically most necessary, however, it could be that the rates of unvaccinated children are lower than this data would suggest.

Figure 45 reveals that the GP practices with the highest proportion of Charedi patients tend to have a lower rate of immunisation for the infant 5 in 1 vaccination

compared to other GP practices in Hackney. The data in this section relates to the infant 5 in 1 vaccine, however it is now offered as a 6 in 1 vaccine. The vaccination provides protection from diphtheria, tetanus, whooping cough (pertussis), polio, Hib (Haemophilus Influenza Type B) and, recently added, Hepatitis B.

Figure 45: Rate of Immunisation of the infant 5 in 1 vaccine by GP practice in Hackney (2015/16)

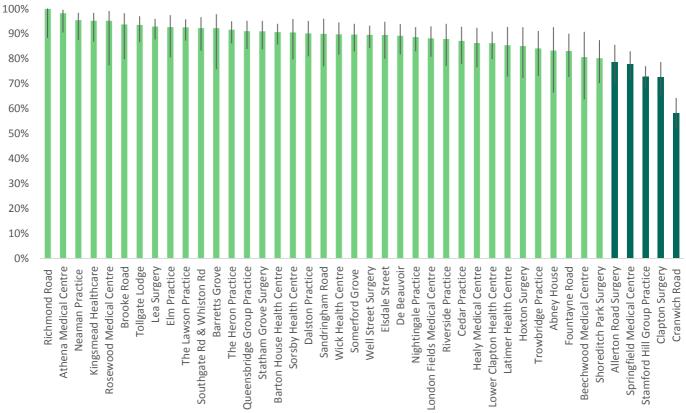


Source: NHS England, 2016

There may be many reasons as to why the rate of immunisation is lower in some communities over others, as highlighted in section 3.6. Local GPs said that the reasons are often logistical and that managing large families can make it easy for vaccinations to be missed. Moreover, during interviews with GPs, it was stated that some parents have unfounded concerns about vaccination safety. One suggestion was that parents were particularly cautious about vaccinations given under the age of one.

Feedback from Interlink suggests that both the limited access to mainstream media and the close knit nature of the Charedi community may play a role in allowing fears or concerns about vaccinations to propagate. However, even with that in mind, Figure 46 shows a similar pattern for the MMR dose at 24 months compared to the infant vaccinations. In this case, practices with a high proportion of Orthodox Jewish patients are seen to again lag behind other practices within the Borough.

Figure 46: Rate of completed MMR immunisation on time at 24 months completed by GP practice (2015/16)



Source: NHS England, 2016

Discussions with Interlink have suggested that there may still be some scepticism towards the MMR vaccine in the Charedi community following false reports about its safety in the 1980s. The MMR vaccine has a reliable safety record and its use has significantly reduced the rate of measles, mumps and rubella across the UK.

Given previous outbreaks of pertussis in the Charedi community, rates of immunisation for this condition at 5 years old have also been reviewed. Compared to the 5 in 1 and MMR vaccine, Figure 47 shows a general improvement in the rate of vaccination for pertussis and two practices with high proportions of Charedi patients, Springfield Practice and Stamford Hill Group Practice, have achieved the 90% standard. Although, in general, the rate of vaccination is better, it should be noted that the three practices with the lowest rate of vaccination are practices in Stamford Hill with a high proportion of Charedi patients.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% Rosewood Medical Centre Queensbridge Group Practice Cedar Practice Wick Health Centre Riverside Practice London Fields Medical Centre Sorsby Health Centre Nightingale Practice Athena Medical Centre Springfield Medical Centre Shoreditch Park Surgery **Brooke Road** Lea Surgery Somerford Grove Health Centre Tollgate Lodge Hoxton Surgery Latimer Health Centre Barton House Health Centre The Lawson Practice Statham Grove Surgery Southgate Rd & Whiston Rd De Beauvoir **Trowbridge Practice** Dalston Practice Kingsmead Healthcare -ower Clapton Health Centre **Beechwood Medical Centre Barretts Grove** Well Street Surgery Elm Practice The Heron Practice Sandringham Road Healy Medical Centre Stamford Hill Group Practice Fountayne Road Abney House Allerton Road Surgery Richmond Road **Elsdale Street** Clapton Surgery Cranwich Road

Figure 47: Rate of pertussis vaccination at 5 years by GP practice in Hackney (2015-2016)

Source: NHS England, 2016

11.2 Teenage vaccinations

The vaccination for Men ACWY provides protection against four strains of meningitis during the teenage years when spread of the disease is most likely. This vaccine has replaced the Men C vaccination in the routine adolescent vaccination programme and is given alongside the 3-in-1 teenage booster, which enhances protection from tetanus, diphtheria and polio. Whilst there is a programme in place for children in registered Charedi schools to receive the Men ACWY vaccine, there are concerns that some young people may be missing out, for example if schools do not accept the vaccination offer. Interviews and discussions with some local health professionals have also flagged that teenage boys within the Charedi community may not have adequate coverage from teenage vaccinations given the patterns of movement to study at yeshivas at this age.

In addition, the Human Papilloma Virus (HPV) vaccine is routinely provided to girls in mainstream secondary schools but, as yet, has not been rolled out within independent Charedi schools in Hackney. The HPV vaccine protects women and girls from developing cervical cancer as a result of HPV infection. [104] It is important to recognise that most people come into contact with this virus at some point in their lives and vaccinating against it can protect both girls and boys from future ill health.

11.3 Disease outbreaks

There have been outbreaks of vaccine-preventable diseases (e.g. measles and hepatitis A) within the Charedi community in Stamford Hill in recent years. The number of outbreaks and their size indicates inadequate vaccination coverage within the Charedi community. Hackney has a relatively mobile population and so maintaining vaccination coverage is vital to prevent reintroduction of infection from overseas.

PHE has undertaken a specific piece of work to identify issues with vaccine coverage within the Charedi Community and in that report identified a series of recent outbreaks that could have been avoidable with improved vaccine uptake. This is set out in Box 5.

Box 5: Recent vaccine preventable disease outbreaks in the Charedi Community in Stamford Hill

Pertussis (whooping cough), 2015: outbreaks were recorded in 2 Charedi households where mothers had not been vaccinated during pregnancy for pertussis, as per the national recommendations.

Measles, 2012/13: This outbreak resulted in 156 notifications of measles, predominately in children aged between 1 and 4 years. Whilst there will likely have been more cases, PHE were notified of at least 10 children being taken to hospital with suspected measles and 5 children being admitted for at least 1 night.

Hepatitis A, 2010: 5 cases were recorded whereby 2 individuals had acquired the infection in Israel and 3 individuals were secondary cases who caught the infection in the UK. As a result, 900 people in the Charedi community received an emergency vaccination.

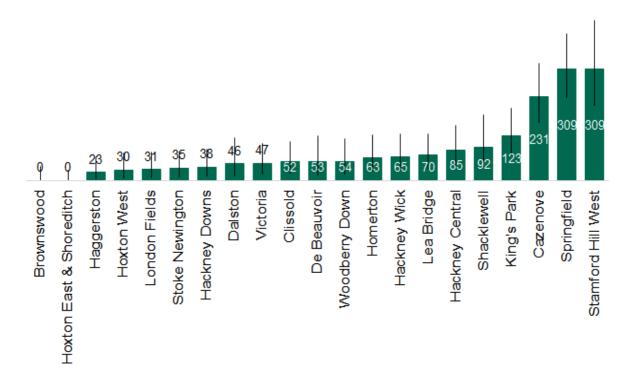
Mumps, 1998/99: 144 cases were recorded between 1998 and 1999, which may be an undercount of the true numbers.

Source: PHE [105]

The importance of immunisation was discussed at length with health professionals in Stamford Hill as part of this needs assessment. All stressed that vaccination coverage could be improved with some referencing improved rates of immunisation as their top health concern for the area. All GPs that were interviewed stressed that many parents within the Stamford Hill community do vaccinate all their children on time but others do not. It was also highlighted that levels of immunisation can vary between children within the same family. This leaves both the individual and the community at greater risk of outbreaks of vaccine-preventable illness.

As rates of childhood immunisation are lower amongst patients at GP practices in the Stamford Hill area, it is not surprising that there have been more cases of measles in the area. Figure 48 shows that when comparing ward level data, there are relatively more cases of measles in the wards with the highest proportion of Orthodox Jewish residents.

Figure 48: Rate of measles in Hackney, by ward per 100,000 patients (2012-16)



Note: Based on 225 measles cases with available data on ward. Ward population estimates are based on GLA ward population projections 2014.

The most recent outbreak of measles within the Charedi community was in 2012/13 and Figure 49 shows how this resulted in a dramatic increase in the number of cases of measles in City and Hackney relative to the London and England averages.

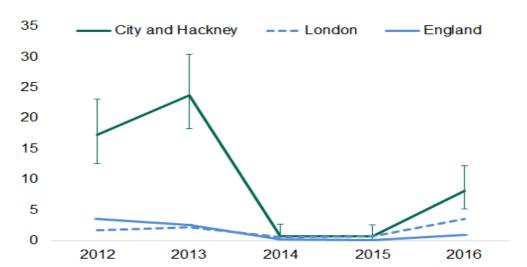


Figure 49: Incidence rate of measles over time per 100,000 patients (2012-16)

Source: Public Health England, Health Protection Profile

Note: The trend for London is an aggregate of incidence in all London boroughs. Confidence intervals are not available.

As a result of better uptake of the pertussis vaccine, the incidence of pertussis in Hackney does not follow such a striking geographic pattern, as is the case for measles (

Figure *50*). However, a small improvement in uptake for this vaccine could have a significant impact on the volume of cases, particularly within the Brownswood and Cazenove wards of Hackney.

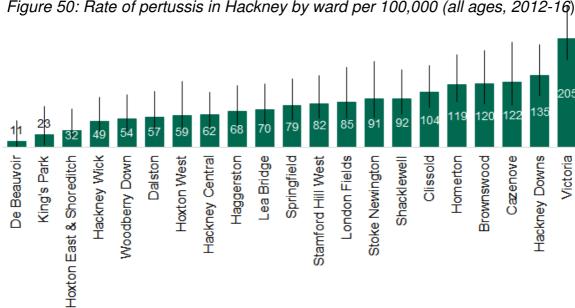


Figure 50: Rate of pertussis in Hackney by ward per 100,000 (all ages, 2012-16)

Note: Based on 215 pertussis cases with available data on ward. Ward population estimates are based on GLA ward population projections 2014.

12 Mental Health disorders

Across the UK, mental health problems affect 1 in 4 people each year. [106] This can include common conditions such as depression and anxiety as well as less common conditions such as schizophrenia and bipolar disorder. Mental health problems are often caused by a complex range of factors, but many people can experience particularly poor mental health in circumstances where they have experienced bereavement, family breakdown, financial concerns or abuse. [107] It is also known that people with long-term physical conditions are more likely to develop depression and anxiety, which in turn may exacerbate their long-term physical conditions.

There are some major limitations to using GP data alone to estimate prevalence of mental health conditions. Work by City and Hackney clinical commissioning group (CCG) suggests that not all those being treated for depression by their GP are recorded as such⁹. Furthermore, a large portion of those using secondary care psychiatric services (provided mostly by East London Foundation Trust) do not have a recorded primary diagnosis with their GP.

As is the case for some minority groups, there is often significant use of community specific mental health services, and this is also the case in the Charedi community. Individuals from the Charedi community are likely to refer themselves to community organisations, such as Bikur Cholim, during stressful circumstances or when suffering from mental ill health in the first instance. For that reason, it is important to note that the prevalence of mental ill health may be higher than reported.

12.1 Common mental health disorders

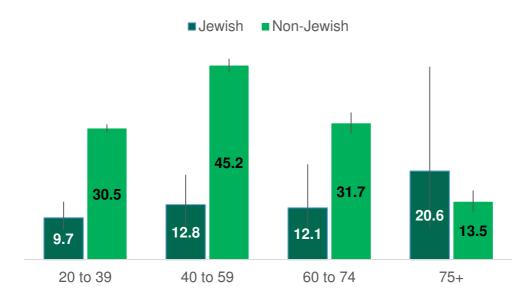
The available GP data on mental health suggests that patients coded as Jewish are less likely to have depression and/or anxiety recorded as a diagnosis. Some of the interviewed health professionals felt that the rate of mental health problems may be lower amongst the Orthodox Jewish community than the wider population because of the high levels of community support that exists. However, interviews with community organisations have highlighted that there is also likely to be underreporting and significant unmet need in the Orthodox Jewish community.

Figure 51 demonstrates that the rate of depression amongst Jewish patients in Hackney is lower than amongst the wider population of Hackney. This is the case across all age groups in adulthood. Similarly, the same trend is observed for mixed

⁹ In 2013, an audit by City and Hackney CCG found 5,233 people on depression or anxiety medications who are not recorded as having depression, anxiety or serious mental illness.

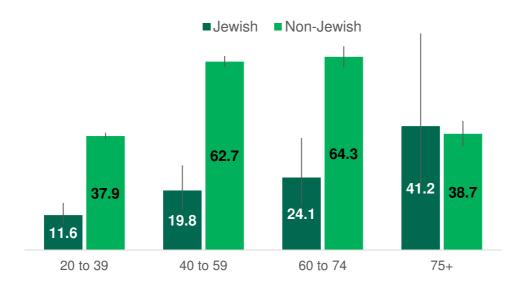
anxiety and depression, as shown in Figure 52, although the rate for over 75s was aligned with the non-Jewish population.

Figure 51: GP recorded rate of depression per 1000 patients in Hackney (20+, 2017)



Source: CEG, 2017

Figure 52: GP recorded rate of mixed anxiety and depression per 1000 patients in Hackney (20+, 2017)



Source: CEG, 2017

A representative from Bikur Cholim highlighted a range of reasons why mental health may be recorded as lower amongst the Orthodox Jewish community and, in particular, focused on the stigma that exists around mental illness and suitability for marriage. Because of these concerns, it was felt that some individuals and their families may persevere with poor mental health for some time before accessing

support and be at a greater stage of need when they do. This would corroborate with anecdotal evidence from mental health professionals that there is a high rate of attendance at A&E for mental ill health amongst Charedi patients relative to the population at large.

On the other hand, one GP felt strongly that their Charedi patients discussed their mental health freely and openly and were no different to patients from other cultural backgrounds in their attitudes to treatment and medication. However, there was universal agreement amongst GPs that there was need for more culturally appropriate talking therapies. Similarly, Bikur Cholim felt that many residents in Stamford Hill could avoid crisis if early stage talking therapies were more appropriate to Charedi culture and recognised the unique concerns and causes of stress within the community.

12.2 Bipolar disorder

Bipolar disorder is a condition which can affect moods and people typically have episodes of feeling very depressed and periods of mania (feeling very upbeat and overactive). [108] The disorder can occur at any time although the symptoms often manifest in adolescence. Jewish patients are recorded as having higher rates of bipolar disorder than the general population for most of adulthood. Indeed, Figure 53, reveals that the GP held data suggests that there are higher rates of bipolar disorder amongst Jewish compared to non-Jewish residents of Hackney between the ages of 20 and 75.

Jewish Non-Jewish

0.0

60 to 74

75 +

8.3

40 to 59

Figure 53: GP recorded age specific rate of bipolar disorder per 1000 patients in Hackney (20+, 2017)

Source: CEG, 2017

20 to 39

8.4

3.1

It is unclear why rates of bipolar disorder would be higher than in the rest of the population and it is worth highlighting again the potential limitations of the local data. Bikur Cholim suggests that this may be because more severe mental health conditions are more commonly reported because managing these conditions within families, without external support, is difficult.

12.3 Eating disorders

Eating disorders describe a broad range of unhealthy attitudes to food and eating that often become obsessive and can cause ill health. Eating disorders can involve overeating and binging or diet restriction and over-exercising to maintain a very low body weight. [109] The causes of eating disorders are poorly understood although being female, an adolescent or young adult, and living in a western society are all associated with developing an eating disorder. [110]

The rate of eating disorders, according to local data, is strikingly lower in the Jewish population of Hackney compared to the non-Jewish rate in younger age groups. Interestingly, in the over 40 age category there is a higher rate of eating disorders amongst Jewish people than in younger categories. In this age group, the Jewish and non-Jewish populations are broadly aligned. GPs have corroborated that they see fewer cases of eating disorders amongst Charedi patients; however, Bikur Cholim suggest that there are cases of eating disorders in Stamford Hill although the symptoms may present differently.

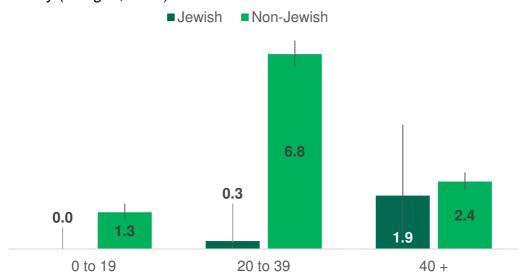


Figure 54: GP recorded age specific rate of eating disorders per 1000 patients in Hackney (all ages, 2017)

Source: CEG, 2017

12.4 Maternal mental health

Good maternal mental health is important throughout pregnancy and after childbirth. Postnatal depression can affect up to 10% of women within a year of giving birth and, less commonly, can also impact upon fathers. [111] Box 5 highlights some of the symptoms of postnatal depression.

Box 5: Symptoms of postnatal depression

- a persistent feeling of sadness and low mood
- lack of enjoyment and loss of interest in the wider world
- lack of energy and feeling tired all the time
- trouble sleeping at night and feeling sleepy during the day
- difficulty bonding with your baby
- withdrawing from contact with other people
- problems concentrating and making decisions
- frightening thoughts for example, about hurting your baby

Source: NHS Choices [111]

Figure 55 shows that whilst there is not a statistical difference in the rate of postnatal depression amongst older mothers (aged 40 - 49 years), there is a significantly higher rate amongst Jewish women under 40. In the 15 - 24 and 25 - 39 year old age groups, postnatal depression could be as much as three times more common amongst Jewish mothers in Hackney.

It is important to bear in mind that women are likely to have far more children in the Jewish population compared to the non-Jewish population. What is not clear is whether postnatal depression is more common with increasing family size or whether the discrepancy simply reflects that there are relatively more births in the Orthodox Jewish community.

Numerous discussions have been had with community organisations regarding postnatal depression, including Beis Brucha, Bikur Cholim and interlink, as well as with individuals who work closely with new parents in Stamford Hill. There was a collective view that Orthodox Jewish mothers and their families were increasingly aware of and alert to the symptoms of postnatal depression, but that there may still be some reluctance to come forward. As with many elements of mental health, it was raised that some people may struggle on with lower level needs but seek help if the problem is severe enough. One of the interviewees described making culturally appropriate leaflets on postnatal depression as a lot of women don't read the leaflets provided by the hospital or health visitor. The Mothers in Mind charity was also spoken of highly in supporting women with postnatal depression in Stamford Hill.

18.9 12.2 12.7

25 - 39

40 - 49

Figure 55: GP recorded rate of postnatal depression per 1000 women of childbearing age in Hackney (15 – 49, 2017)

Source: CEG, 2017

15 - 24

12.5 Children and young people's mental health

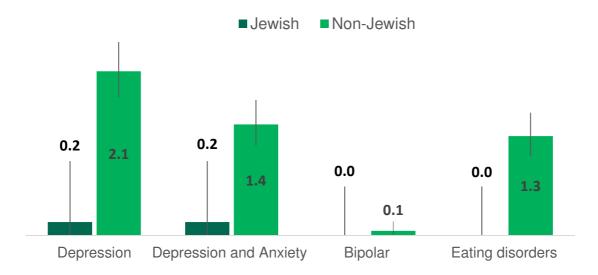
The available GP held data on children and young people's mental health suggests lower rates of depression, anxiety and eating disorders amongst patients coded as Jewish. Accounting for error, it would not be possible to draw the same conclusion for bipolar disorder. As shown in Figure 56, the rate of poor mental health is recorded to be much higher amongst children and young people in the rest of Hackney.

Bikur Cholim have said that 'the level of demand within the community is great' with regards to young people's mental health and wellbeing. However, it was also highlighted that parents may try to avoid using Children and Adolescent Mental Health Services (CAMHS) until the need is great in case there are implications for the child or any siblings relating to future marriage prospects. It was also highlighted that parents and families, who may not have very much spare income, sometimes 'spend money they do not have on private consultations with therapists' who are perceived to have a good track record working with the community. Bikur Cholim have concerns that some of these private therapists are expensive and less comprehensive than the NHS offer.

One organisation stated that there were some really good examples of mental health support in Hackney, from within the community and provided by the NHS. It was discussed that, despite initial reluctance, many people from the Orthodox Jewish

community had had good experiences of First Steps, the children and young people's mental health service provided by the NHS.

Figure 56: GP recorded rates of mental health conditions in children and young people in Hackney (under 18 years, 2017)



Source: CEG, 2017

Discussions with clinicians at First Steps have identified some trends that they have observed in working closely with children and young people from Stamford Hill. Primarily, it was noted that families are committed to their children's welfare and to access support because of the importance of family life within the community. The service feels that the proportion of Orthodox Jewish families accessing First Steps roughly reflects the proportion of families within the local community. However, because of the stigma associated with mental health, some families don't access support until it's become too difficult manage alone. For that reason, diagnosis may be made later than for other communities and the problems being dealt with may have become more severe by the time help is sought from outside family networks. There were deemed to be some challenges in making sure children's health needs are identified quickly within the independent school settings. It was suggested that some children with speech and language issues, such as a stammer or unmet learning needs, may later present at CAMHS with distress due to the emotional impact of these unresolved needs.

Some services in health and education/local authority, such as Education Psychology, are not provided in independent schools. This may add to late diagnosis, reduced joint work to coordinate care plans, children's emotional distress and a tendency to look for private therapy that can be expensive and is not able to offer joined up working with other community services.

It was a concern for the First Steps service that the community may view CAMHS as a last resort and clinicians described efforts to adapt to cultural requirements, which included adapting groups to include teaching from the Torah and being aware of the challenges of mixed gender sessions. It was also recognised that parents may be reluctant to label their child as having accessed mental health support in light of any implications that might have for the child or siblings in later life. However, once support is requested or a diagnosis is made, clinicians highlighted that parents are generally very engaged in supporting their child; seeking second opinions and exploring all treatment options available.

12.5.1 Emotional wellbeing

In addition to interviews with clinicians, emotional health and wellbeing was discussed with Charedi schoolboys in summer 2017. Although the children hadn't heard of techniques or strategies such as mindfulness, in all four groups of children, the boys were easily able to identify things that made them feel good. Very common examples were; being with family and friends, "getting wise" or studying, God, holidays, weddings, and going for meals or eating favourite foods e.g. ice cream or pizza.

There was more uncertainty about what might make someone feel less good and one group, in particular, struggled with the question. With prompting there were examples given which mainly focused on relatives being ill or dying and there was a consistent concern raised around not finding a good match for marriage in the future. Some of the boys discussed that they didn't like being embarrassed or seeing someone else be embarrassed. It was also said that not having enough money to pay for a fine was something that would make you feel sad.

A number of the boys talked about crying when they felt bad, whilst it was highlighted by others that they had "parents who did my worrying for me". In three of the groups there was a good discussion around solutions for dealing with feeling bad, for example, talking to your father, talking to a teddy, telling jokes, and doing something that makes you feel better, for example, eating an ice cream.

13 Service mapping

There are many universal services which Charedi families and individuals can access, including the full breadth of NHS services, many of which have strategies for improved engagement with residents in Stamford Hill. This includes the health visiting service where community champions play an important role in communicating the needs and wants of families to the NHS. This needs assessment has flagged that in some areas, notably mental health, it may be important to explore the opportunities to ensure that universal services can also meet the needs of Strictly Orthodox Jewish patients.

In addition to this, the public health team in Hackney have also developed a number of interventions that aim to improve access to services for Charedi residents where there is evidence of unmet need. Hackney Council also runs regular opportunities for grant funding to local initiatives, such as the Healthier City and Hackney Fund. Through this fund, and others, Charedi organisations have received funding for bespoke local projects.

School Reception and Year 6 Health Check

Activity

- Building on the National Child
 Measurement Programme in maintained
 schools, the health check has been
 piloted among reception age children in
 23 Independent Charedi schools since
 2014/15. This was expanded in 2016/17
 and 2017/18 to include year 6 children.
- Homerton University Hospital has been commissioned to deliver the programme in Charedi schools in partnership with two commissioned providers from the Orthodox Jewish community.

Objective

- This programme was established to provide a better understanding of the health needs of school children in the 23 independent Charedi schools in Hackney;
- This includes measuring weight and height and providing hearing and vision screening to reception year children. Children requiring a referral to a specialist service (e.g. optometrist or hearing service) can be identified;
- In year 6, there are dental health education sessions in addition to measuring height and weight. So far this has been undertaken in 5 boy's schools and 10 girls' schools with the aim of improving dental health.

Activity Objective

Oral Health Fluoride Varnish Programme

- The fluoride varnish programme has been implemented in reception and year 1 of Orthodox Jewish Independent schools, although not all schools have taken up the offer.
- Children aged 4 6 years old receive two varnish applications to their teeth per year. This strengthens teeth against dental cavities and decay.
- In the Orthodox Jewish schools, this programme has been developed as an extension to the reception health check.

- To improve oral health, reduce oral health inequalities and prevent dental caries amongst Orthodox Jewish children.
- It is hoped that this may also increase access to dental services and oral health promotion messages.

Fitness Fun Programme

- Young women from the community were supported to take up training to become fitness instructors to deliver weekly fitness sessions in 9 junior girls' schools and 5 senior girls' schools.
- 4 local children's/family community centres are being used to run sessions, including a father's exercise session and mother's postnatal/antenatal pilates sessions. There are also exercise sessions provided for children with special needs/disabilities.
- To provide access and increase levels of physical activity, providing culturally specific opportunities to safely engage in structured exercise.
- Participation in exercise, as part of a healthy lifestyle, can prevent obesity, diabetes and cardio-vascular disease.
- Designed to remove some of the barriers to accessing leisure services due to affordability, proximity, and cultural factors of requiring single gender exercise classes.

PE Training in boys schools

- Structured physical education training for teachers in Charedi boys' schools was organised through the public health team in Hackney.
- Young Hackney youth and sports unit have devised culturally appropriate training and, so far, 9 staff members from 5 boy's schools have taken part.
- Given the minimal PE provision in Charedi boys' schools, there was deemed to be health benefits in supporting schools to provide physical exercise to their pupils.
- The objective is to assist participating schools in implementing PE into the curriculum, whilst promoting the overall benefits of physical activity on health and wellbeing.

| Activity | Objective |
|--|--|
| A physical activity and healthy lifestyle initiative for Orthodox Jewish young people in Hackney. A series of 7 projects, each running as a 10 week programme of activity, including ball games, circuit classes for boys and aerobics for girls. Participation is amongst Orthodox Jewish young people aged from 8 – 15 years in separate male and female only sessions. Accessing approximately 375 children and young people per programme from all Charedi schools in the Borough. | To increase access and levels of physical activity with opportunities for a healthier lifestyle. To remove the practical and cultural barriers to participation in mainstream exercise groups. To improve health and wellbeing of those involved with the programme. |

Healthy Lifestyles Programme

- A healthy lifestyle clinical intervention project for overweight or obese children aged 8 – 13 years.
- The sessions run three times per year, with each programme lasting for 10 weeks. The content of these sessions include dietetic input/advice and physical activity sessions.
- Engaging approximately 150 Charedi children, with referrals from GPs and dieticians, and directly from patients through the Jewish press.

- To increase awareness of healthy eating for both parents and children accessing the services.
- To improve independent-living skills that promote future healthy behaviours and health into adulthood.
- To ensure positive emotional wellbeing that may be affected by overweight and obesity.

New Stop Smoking HUB in Stamford Hill

- The new HUB will be run from Cranwich Road surgery every Thursday with appointments being available between 9am and 1pm.
- This provides the option of a convenient smoking cessation clinic for the Orthodox Jewish community.
- The aim of the clinic is to further reduce smoking rates amongst the Orthodox Jewish community by providing convenient and easy to access services.

14 Discussion

This report has looked at the health needs of the Charedi Jewish community in Stamford Hill, north Hackney. It is clear that as the population continues to grow and expand that a changing profile of healthcare needs are emerging. Being prepared for what this means in terms of health and wellbeing is important so that future demand for services, where appropriate, can be anticipated. It is also important to note that whilst this needs assessment has sought to identify trends and patterns, the views, behaviours and attitudes of Charedi people living in Hackney are not homogenous. The data provided in this needs assessment should be considered in light of the dialogue and discussion that has been had with healthcare professionals, colleagues across Hackney Council and the Charedi community.

In conducting this needs assessment, some clear themes have emerged from the literature, local data and qualitative interviews. The distinct demographics of the community, for example; a youthful age structure, high birth rate and relatively smaller old age population, means that some of the most pressing health needs of the community differ from the broader population.

What is clear, from both the local data and discussion with health professionals, is that there is need for greater emphasis upon prevention within the Orthodox Jewish community in Stamford Hill. In early adulthood, more Jewish patients in Hackney are overweight and obese compared to the general population, and this will have a range of impacts upon health and wellbeing throughout the life course. An improved approach to prevention would include more residents in Stamford Hill eating a balanced and nutritious diet that is low on refined sugar and saturated fats. At the same time, GPs particularly focussed on the need to improve the levels of exercise in the Charedi community by expanding the offer available to children in and out of schools and by encouraging walking over driving wherever possible.

This needs assessment has highlighted the national guidelines on exercise and healthy eating although it may be beneficial to consider how best to improve understanding of these guidelines in Stamford Hill specifically. More time spent doing physical education in independent schools would have benefits for physical and mental health in the community and London Borough of Hackney can support with training and advice for teachers.

There have been some excellent examples of partnership between the Charedi independent schools and health teams in recent years, notably through the national child measurement programme. Oral health does, however, remain a particular concern and it is known that there is a high rate of dental decay amongst young

children, which can be painful and costly to treat. The Fluoride Varnish Programme is available to all Charedi independent schools but uptake is low.

With regards to prevention, much more also needs to be done to ensure that the Charedi population is adequately protected from vaccine preventable infectious diseases. Whilst there was a general consensus amongst healthcare professionals that immunisation appears to be improving, it is evident that GP practices with a high proportion of Charedi patients have by far the lowest immunisation rates in Hackney. It may well be the case that over time, Charedi children catch up on their immunisations. Nevertheless, vaccinations are scheduled according to vulnerable windows where children, teenagers and adults most need to be protected. Failing to vaccinate on time remains an issue even if some people do catch up later on.

Mental health is also an area where health professionals reached a broad consensus. It was felt that high levels of informal support and guidance within the community probably did lead to lower reported levels of common mental health conditions. GPs also generally felt that their patients were forthcoming to discuss their mental health concerns and were responsive to the advice given to them. Nevertheless, low rates of reported mental health conditions, may also point to some unmet need. Health professionals and members of the community have raised concerns around the appropriateness of current mental health provision for members of the Charedi community and suggestions were made that culturally specific talking therapies may improve Charedi people's experience of mental health support locally. This would build upon the many positive examples of support that exist for post-natal depression.

Discussions with community organisations such as Bikur Cholim have identified concerns that anxiety and depression in the community is a present unmet need, and that there are growing concerns about increasing mental ill health amongst young people. Bikur Cholim also highlighted disproportionate attendances at A&E amongst Orthodox Jewish patients for issues of mental health. This suggests that greater emphasis on early intervention could have both social and economic benefits.

When looking at chronic conditions, it is clear that the crude rates of disease within the community can appear significantly reduced compared to the population at large. This is primarily because rates of long term conditions increase with age and so the more youthful Charedi population have relatively fewer cases. That being said, age-specific rates generally show similar trends between Jewish and Non-Jewish patients and, for example, there is no significant difference in the rates of CVD, cancer and type 2 diabetes between Jewish and non-Jewish when accounting for

age. For that reason, as the Charedi population ages, it will be important to be aware of the potential for increasing rates of chronic disease.

It is worth reflecting on two conditions that were discussed in the chronic diseases chapter. Firstly, the rate of inflammatory bowel disease is significantly higher in the Charedi community than expected. This is backed up by the available literature, which recognises higher rates of IBD in other Charedi populations. However, GPs have not expressed concerns around the management or identification of individuals with IBD.

Secondly, it is known that there is a genetic susceptibility to breast cancer caused by increased BRCA1 and 2 in Ashkenazi women. Whilst the breast cancer rate seems broadly comparable with the Hackney average, it is worth highlighting that breast cancer as a result of the BRCA1 or 2 gene is a relatively small proportion of the total breast cancer rate. It may be that the population at large has a higher incidence of breast cancer where there hasn't been an obvious genetic link which may mask the genetic susceptibility amongst Charedi women. Either way, this needs assessment should not provide false assurance regarding the rate of breast cancer and it is important that women remain vigilant towards signs and symptoms. In addition, this report has established that breast cancer screening rates could be improved and given the genetic risk of breast cancer in the Charedi community, eligible women should be encouraged to attend these appointments.

Finally, any conclusions that have been made in this needs assessment could be strengthened by improved access to data that relates specifically to Charedi Jewish patients. The main reason for this is that religion is not routinely recorded in GP records and where it is 'Orthodox Jewish' or 'Charedi' are not possible options. For that reason, when reviewing GP held data on disease prevalence, there are significant limitations in the accuracy of the data. Greater certainty could be achieved if there were consistent coding of patients who identify as Charedi Jewish.

15 Recommendations

This needs assessment has sought to investigate the areas of discrepancy of outcome between Charedi and non-Charedi residents in Hackney, with a view to understanding where improvements in health outcomes could be made. A series of recommendations, in light of analysis of the available data and discussions, have been set out here.

- Data this needs assessment has relied upon consideration of a number of data sources to corroborate findings; however, there are significant limitations to the datasets used. To improve the understanding of the health needs of the Charedi community, there would need to be a revised protocol for how patients are coded within GP surgeries. This would allow for a larger population to be identified which would improve the statistical certainty of findings.
- **Planning for growth** it is clear from demographic projections that the Charedi community will continue at a rate of 4 5% per year. Whilst the population is relatively youthful at the moment, it will be important to consider the changing needs of the community as the large young population moves into adulthood. From a public health perspective, embedding healthy lifestyles in childhood will have the greatest impact on later adult outcomes.
- Obesity in early adulthood there is a sharp increase in the rate of obesity in early adulthood, which is not seen in the rest of the Hackney population to the same extent. Maintaining a healthy weight is important in preventing a range of chronic conditions, including cardiovascular disease, cancer and type 2 diabetes. Given Charedi children in school settings are generally lighter than their non-Jewish peers, this suggests that there is an important window of opportunity around the time of marriage and starting a family to reinforce messages around diet and exercise. Access to appropriate and sustainable exercise opportunities is an important part of this.
- Immunisation it has been known that the rate of vaccination uptake is often lower amongst Charedi patients. Data local to Hackney shows that this is particularly the case for the infant 5 in 1 (now 6 in 1) vaccination and MMR vaccinations in infancy. Whilst it may be the case that Charedi children are often immunised late rather than not at all, it is still important to emphasise the need to vaccinate according to the schedule. It is recommended that opportunities for community vaccination programmes and improved access to information are explored to increase vaccination rates above 90% in Stamford Hill GP practices.

- Oral Health poor oral health can have lifelong consequences and dental health is much poorer amongst the Orthodox Jewish community than the population at large. The fluoride varnish programme has the opportunity to improve oral health outcomes but uptake by independent schools is poor; only six schools have participated in the last year. It is vital that more schools engage with the programme to reduce dental decay and costly and/ or painful treatments later.
- Mother and baby services during qualitative interviews with community organisations, there was a degree of nervousness around breastfeeding and postnatal support groups. Whilst there are groups available in the Stamford Hill area, with growing demand, many felt passionately that there needed to be more.
- Mental health the available data regarding mental health is particularly difficult to interpret and community organisations report that there is significant under reporting of mental health complaints, including depression and anxiety. In part, this may be due to a sense that universal services are not specific to the needs of Charedi patients. It is recommended that opportunities are explored to improve the acceptability of secondary care mental health provision to the Charedi community. In particular, postnatal depression is reported to be high within the Charedi community and there may be opportunities to improve understanding amongst mothers and families.
- Health communications communication with the Charedi community is
 important for improving awareness of services. Compiling this needs assessment
 has exposed some areas where the community have relatively limited
 understanding of the statutory offer, for example, in purchasing vitamins rather
 than claiming the free Health Start vitamins. It is important that service
 commissioners consider community specific opportunities for communicating with
 Charedi residents.

References

- [1] Hooper J and Longworth P, "Health needs assessment workbook," 2002. [Online]. Available: http://healthimpactassessment.pbworks.com/f/Health+needs+assessment+workbook+-+HDA+England+-+2002.pdf.
- [2] London Borough of Hackney, "Corporate Equality and Cohesion Policy," June 2013. [Online]. Available: https://www.hackney.gov.uk/equality-diversity. [Accessed 15 August 2017].
- [3] Oxford dictionaries, Definitoin: Haredi.
- [4] Baker TFT, "Hackney: Judaism, in A History of the County of Middlesex: Volume 10, Hackney," 1995. [Online]. Available: http://www.british-history.ac.uk/vch/middx/vol10/pp145-148. [Accessed 31 July 2017].
- [5] Board of Deputies of British Jews, "Jews in Numbers," 2014. [Online]. Available: www.bod.org.uk/jewish-facts-info/jews-in-numbers/. [Accessed 21 May 2018].
- [6] D. Casale Mashiah and J. Boyd, "Synagogue membership in the United Kingdom in 2016," Institute for Jewish Policy Research, 2017.
- [7] D. D. C. Mashiah, "Vital statistics of the UK Jewish population: births and deaths," Institute for Jewish Policy Research, London, 2018.
- [8] Interlink, "Size of the Charedi population of Stamford Hill, London," London, July 2015.
- [9] Valins O, "Stubborn identities and the constructoin of socio-spatial boundaries: ultra-orthodox Jews living in contemporary Britain," *Trans Inst Br Geogr*, vol. 28, no. 2, pp. 158-175, 2003.
- [10] Graham D, Boyd J and Vulkan D, "2011 Census results (England and Wales): Initial insights about the UK Jewish population," Institute for Jewish Policy Research, London, 2012.
- [11] E. Gabbay, M. McCarthy and J. Fins, "The Care of the Ultra-Orthodox Jewish Patient," *Journal of Religious Health*, vol. 56, no. 2, pp. 545 560, 2017.
- [12] C. Wright, D. Stone and K. Parkinson, "Undernutrition in British Haredi infants within the Gateshead Millennium Cohort Study," *Archives of Disease in Childhood*, vol. 95, pp. 630-633, 2010.
- [13] Taha W et al., "Reduced Spinal Bone Mineral Density in Adolescents of an Ultra-Orthodox Jewish Community in Brooklyn," *Pediatrics*, vol. 107, no. 5, 2001.
- [14] S. Abbott, "Lay and professional views on health visiting in an orthodox Jewish community," *British Journal of Community Nursing*, vol. 9, no. 2, pp. 80 86, 2004.
- [15] R. Dankner, R. Goldberg, R. Fisch and R. Crum, "Cultural elements of postpartum depression. A study of 327 Jewish Jerusalem women.," *The journal of reproductive medicine*, vol. 45, no. 2, pp. 97 104, 2000.
- [16] S. Glasser, L. Hadad, R. Bina, V. Boyko and R. Magnezi, "Rate, risk factors and assessment of a counselling intervention for antenatal depression by public health nurses in an Israeli ultra-orthodox community," *Journal of advnaced nursing*, vol. 72, no. 7, pp. 1602 1615, 2016.

- [17] R. Bina, "Seeking help for postpartum depression in the Israeli Jewish orthodox community: factors associated with use of professional and informal help.," *Women and Health*, vol. 54, no. 5, pp. 455 473, 2014.
- [18] M. Mukamel, Y. Weisman, R. Somech, Z. Eisenberg, J. Landman, I. Shapira, Z. Spirer and U. Jurgenson, "Vitamin D deficiency and insufficiency in Orthodox and non-Orthodox Jewish mothers in Israel," *The Israel Medical Association Journal*, vol. 3, no. 6, pp. 419 421, 2001.
- [19] Government Office for Science, "Foresight, Tackling Obesities: Future Choices Project Report 2nd edition," London, 2007.
- [20] A. Shmueli and D. Tamir, "Health behavior and religiosity among Israeli Jews," *The Israel Medical Association Journal*, vol. 9, no. 10, pp. 703 707, 2007.
- [21] D. Rosenberg, C. Swencionis and C. Segal-Isaacson, "Caloric Intake on the Sabbath: A Pilot Study of Contributing Factors to Obesity in the Orthodox Jewish Community," *Journal of Religious Health*, vol. 55, no. 5, pp. 1824 31, 2016.
- [22] Sheiham A and James P, "A reappraisal of the quantitative relationship between sugar intake and dental caries: the need for new criteria for developing goals for sugar intake," *BMC Public Health*, vol. 14, p. 863, 2014.
- [23] C. Klass, A. Mondkar and D. Wright, "Oral health and oral health behaviours of five-year-old children in the Charedi Orthodox Jewish Community in North London, UK.," *Community Dental Health*, pp. 60 64, 2017.
- [24] Lazarus Z, Pirutinsky S, Korbman M, Rosmarin DH, "Dental utilization disparities in a Jewish context: reasons and potential solutions," *Community Dental Health*, vol. 32, no. 4, pp. 247-51, 2015.
- [25] S. Scambler, C. Klass, D. Wright and J. Gallagher, "Insights into the oral health beliefs and practices of mothers from a north London Orthodox Jewish community," *BMC Oral Health*, pp. 10 14, 2010.
- [26] C. Klass, A. Mondkar and D. Wright, "Oral health and oral health behaviours of five-year-old children in the Charedi Orthodox Jewish Community in North London, UK," *Community Dental Health*, vol. 34, no. 1, pp. 60 64, 2017.
- [27] P. McEvoy, T. Williamson, R. Kada, D. Frazer, C. Dhilwayo and L. Gask, "Improving access to mental health care in an Orthodox Jewish community: a critical reflection upon the accommodation of otherness.," *BMC Health Services Research*, 2017.
- [28] Coleman-Brueckheimer K and Dein S, "Health Care Behaviours and Beliefs in Hasidic Jewish Populations: A Systematic Review of the Literature," *J Relig Health*, vol. 50, pp. 422-36, 2011.
- [29] S. Pirutinsky, D. Rosen, R. Shapiro Safran and D. Rosmarin, "Do medical models of mental illness increased or decreased stigmatization of mental illness among orthodox Jews?," *Journal of nervous and mental disease,* vol. 198, no. 7, pp. 508 512, 2010.
- [30] D. Greenberg and E. Witztum, "Challenges and conflicts in the delivery of mental health services to ultra-orthodox Jews.," *Asian Journal of Psychiatry*, vol. 6, no. 1, pp. 71 73, 2013.

- [31] B. Posmontier and K. Fisher, "A narratology of postpartum psychosis in an Orthodox Jewish woman.," *Perspectives in Psychiatric Care*, vol. 50, no. 3, pp. 167 177, 2014.
- [32] S. Dein and K. Loewenthal, "The mental health benefits and costs of Sabbath observance among Orthodox Jews.," *Journal of Religious Health*, vol. 52, no. 4, pp. 1382 1390, 2013.
- [33] A. Perry, C. Gardener, J. Dove, Y. Eiger and K. Loewenthal, "Improving mental health knowledge of the Charedi Orthodox Jewish Community in North London: A partnership project," *The international journal of social psychiatry*, vol. 64, no. 3, pp. 235 247, 2018.
- [34] N. Fournet and e. al., "Under-vaccinated groups in Europe and their beliefs, attitudes and reasons for non-vaccination; two systematic reviews.," *BMC Public Health*, vol. 18, no. 1, p. 196, 2018.
- [35] E. Anis and e. al., "Measles in a highly vaccinated society: the 2007-08 outbreak in Israel.," *Journal of Infectious Disease*, vol. 59, no. 4, pp. 252 258, 2009.
- [36] T. Lernout, E. Kissling, V. Hutse and G. Top, "Clusters of measles cases in Jewish orthodox communities in Antwerp, epidemiologically linked to the United Kingdom: a preliminary report," *Eurosurveillance*, 15 November 2007.
- [37] V. Rew, P. Mook, S. Trienekens, K. Baker, T. Dallman, C. Jenkins, P. Crook and N. Thomson, "Whole-genome sequencing revealed concurrent outbreaks of shigellosis in the English Orthodox Jewish Community caused by multiple importations of Shigella sonnei from Israel.," *Microbial genomics*, 27 March 2018.
- [38] C. Stein Zamir and A. Israeli, "Knowledge, attitudes and perceptions about routine childhood vaccinations among Jewish Ultra-Orthodox mothers residing in communities with low vaccination coverage in the Jerusalem district," *Maternal and Child Health Journal*, vol. 21, no. 5, pp. 1010 1017, 2017.
- [39] L. Henderson, C. Millett and N. Thorogood, "Perceptions of childhood immunization in a minority community: qualitative study," *Journal of the Royal Society of Medicine*, vol. 101, no. 5, pp. 244 251, 2008.
- [40] P. H. England, "Tailoring Immunisation Programmes, Charedi community, north London. Implementation of the WHO's Tailoring Immunisation Programmes (TIP)," PHE Publications, London, 2016.
- [41] NHS Choices, "Tay-sachs disease," NHS, 07 Feb 2018. [Online]. Available: https://www.nhs.uk/conditions/tay-sachs-disease/. [Accessed 05 July 2018].
- [42] NHS Choices, "Overview Crohn's disease," 04 04 2018. [Online]. Available: https://www.nhs.uk/conditions/crohns-disease/. [Accessed 13 August 2018].
- [43] M. A. Rivas and e. el, "Insights into the genetic epidemiology of Crohn's and rare diseases in the Ashkenazi Jewish population," *PLOS Genetics*, vol. 14, no. 5, 2018.
- [44] K. Y. Hui and e. al, "Functional variants in the LRRK2 gene confer shared effects on risk for Crohn's disease and Parkinson's disease," *Science translational medicine*, vol. 10, no. 423, 2018.
- [45] L. N. Clark and e. al, "Frequency of LRRK2 mutations in early- and late-onset Parkinson disease," *American Academy of Neurology*, vol. 67, no. 10, 2006.

- [46] R. Tkatch, K. Schwartz, R. Shore, L. Penner, M. Simon and T. Albrecht, "Breast cancer incidence rates among orthodox Jewish women," *Journal of Immigrant and Minority Health*, vol. 16, no. 5, pp. 1007 - 1010, 2014.
- [47] A. Freund, M. Cohen and F. Azaiza, "Factors associated with routine screening for the early detection of breast cancer in cultural-ethnic and faith-based communities," *Ethnicity and Health*, pp. 1 17, 2017.
- [48] R. Tkatch and e. al., "Barriers to Cancer Screening among Orthodox Jewish Women," *Journal of Community Health*, vol. 39, no. 6, pp. 1200 1208, 2014.
- [49] P. Mor and O. K., "Ethical issues related to BRCA gene testing in orthodox Jewish women," *Nursing ethics*, vol. 15, no. 4, pp. 512-522, 2008.
- [50] T. Bressler, "Orthodox Jewish Thought Leaders' Insights Regarding BRCA Mutations: A Descriptive Study," *Journal of Oncology Practice*, vol. 13, no. 4, pp. 303 309, 2016.
- [51] Board of deputies of British Jews, "Jews in Numbers," 2013. [Online]. Available: https://www.bod.org.uk/jewish-facts-info/jews-in-numbers/. [Accessed 4 September 2017].
- [52] Jerusalem Institute for Israel Studies and The Israel Democracy Institute, "Statistical report on ultra-orthodox society in Israel," Jerusalem, 2016.
- [53] Institute of Jewish Policy Research, "Strictly Orthodox rising: What the demography of British Jews tells us about the future of the community," London, 2015b.
- [54] Interlink, Kol Mevaser Birth Data 2006-2017, 2017.
- [55] ONS, Census 2011, ONS, 2011.
- [56] C. Holman and N. Holman, "Torah, worship and acts of loving kindness: baseline indicators for the charedi community in Stamford Hill," Interlink, London, 2002.
- [57] Shelter, "People lliving in bad housing numbers and health impacts," 1
 August 2013. [Online]. Available:
 http://england.shelter.org.uk/__data/assets/pdf_file/0010/726166/People_livin
 g in bad housing.pdf. [Accessed 29 July 2017].
- [58] Public Health England, "Health matters: getting every adult active every day," July 2016. [Online]. Available: https://www.gov.uk/government/publications/health-matters-getting-every-adult-active-every-day/health-matters-getting-every-adult-active-every-day. [Accessed 6 August 2017].
- [59] C. M. Officer, "UK physical activity guidelines," 11 July 2011. [Online]. Available: https://www.gov.uk/government/publications/uk-physical-activity-guidelines. [Accessed 27 February 2018].
- [60] Koshoedo S, Simkhada P and Van Teijlingen E., "Review of barriers to engaging black and minority ethnic groups in physical activity in the United Kingdom," *Global Journal of Health Science*, vol. 1, no. 2, 2009.
- [61] NHS City and Hackney, "Orthodox Jewish Needs Assessment (summary)," 2010.
- [62] Interlink, "Submission for Health and Wellbeing Profile," 2011.

- [63] Gov.uk, "UK physical activity guidelines," 11 July 2011. [Online]. Available: https://www.gov.uk/government/publications/uk-physical-activity-guidelines. [Accessed 18 June 2018].
- [64] Government Office for Science: Foresight, "Tackling Obesites: Future Choices Project Report 2nd ed.," October 2007. [Online]. Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file /287937/07-1184x-tackling-obesities-future-choices-report.pdf. [Accessed 1 August 2017].
- [65] Public Health England, "Making the case for tackling obesity why invest?," February 2015. [Online]. Available: https://khub.net/documents/31798783/32184747/Making+the+case+for+tackling+obesity+-+why+invest+-+supporting+references/091f75ad-91fd-4275-aa37-e17b31984b67?version=1.1. [Accessed 1 August 0207].
- [66] ""Report of the Children and Young People's Heatlh Outcomes Forum"," 2014.
- [67] NHS Digital, "National Child Measurement Programme England, 2015-16," 3 November 2016. [Online]. Available: http://content.digital.nhs.uk/searchcatalogue?productid=23381&q=national+c hild+measurement+programme&sort=Relevance&size=10&page=1#top. [Accessed 6 August 2017].
- [68] ASH, "Smoking and disease factsheet," London, 2016.
- [69] ASH, "Smoking statistics," ASH, 2017.
- [70] ASH, "Beyond Smoking Kills: Protecting Children, Reducing Inequalities," ASH, 2015.
- [71] Hopkinson A et al., "Child uptake of smoking by area across the UK," *Thorax*, vol. 69, no. 9, pp. 873-5, 2013.
- [72] Leonardi-Bee J, Jere M and Britton J, "Exposure to parental and sibling smoking and the risk of smoking uptake in childnood and adolescenc: a systematic review and meta-analysis," *Thorax*, vol. 66, no. 10, pp. 847-55, 2011.
- [73] Hackney and City of London, "A Substance Misuse Health Needs Assessment for the Residents of Hackney and City of London," London, 2014.
- [74] Gov.uk, "Alcohol use screening tests," 1 June 2017. [Online]. Available: https://www.gov.uk/government/publications/alcohol-use-screening-tests. [Accessed 25 May 2018].
- [75] NHS Choices, "Your pregnancy and baby guide," 27 Jan 2017. [Online]. Available: https://www.nhs.uk/conditions/pregnancy-and-baby/healthy-pregnancy-diet/. [Accessed 06 June 2018].
- [76] NICE, "Postnatal care," June 2015. [Online]. Available: https://www.nice.org.uk/guidance/qs37/chapter/quality-statement-5-breastfeeding. [Accessed 01 June 2018].
- [77] Unicef, "Supporting breastfeeding research," 2018. [Online]. Available: https://www.unicef.org.uk/babyfriendly/news-and-research/baby-friendly-research/research-supporting-breastfeeding/supporting-breastfeeding-research/. [Accessed 01 June 2015].

- [78] Homerton University Hospital, "Breastfeeding," 2014. [Online]. Available: http://www.homerton.nhs.uk/our-services/services-a-z/c/childrens-services-in-the-community/health-visiting-service/breastfeeding/. [Accessed 01 June 2018].
- [79] NHS Choices, "Why do I need folic acid in pregnancy?," NHS, 16 March 2018. [Online]. Available: https://www.nhs.uk/chq/pages/913.aspx?categoryid=54#. [Accessed 06 June 2018].
- [80] The City and Hackney Public Health Team, "Healthy Start City and Hackney: Free Vitamins for Mothers and Children Guidance note for Health and Care Professionals," [Online]. Available: https://hackney.gov.uk/healthy-start. [Accessed 4th August 2017].
- [81] Jewish Maternity Programme, "Mothers Health Support Project Pilot Report October 2015-March 2016," 2016.
- [82] Health and Social Care Information Centre, "Children's dental health survey 2013, Report 1: Attitudes, behaviours and children's dental health, England, Wales and Northern Ireland.," 2015.
- [83] Public Health England, "Local authorities improving oral health: commissioning better oral health for children and young people," London, 2014.
- [84] Public Health England, "Health matters: child dental health," 14 June 2017. [Online]. Available: https://www.gov.uk/government/publications/healthmatters-child-dental-health/health-matters-child-dental-health. [Accessed 06 June 2018].
- [85] Public Health England, "Health matters: child dental health," 14 June 2017. [Online]. Available: https://www.gov.uk/government/publications/healthmatters-child-dental-health/health-matters-child-dental-health. [Accessed 07 June 2018].
- [86] British Society of Paediatric Dentistry, "Dental Check by One," 2018. [Online]. Available: https://www.bspd.co.uk/Resources/Dental-Check-by-One. [Accessed 19 June 2018].
- [87] NHS Choices, "Healthy Body," 26 June 2017. [Online]. Available: https://www.nhs.uk/live-well/healthy-body/contact-lens-safety/?tabname=head. [Accessed 15 August 2018].
- [88] Equality Act c. 15, London: HMSO, 2010.
- [89] NICE, "Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges," NICE, 2015.
- [90] Interlink, "Community Insight Report: How Charedi children and young people access child health and development services," London, 2014.
- [91] The Royal Society for the Prevention of Accidents, "Accidents to children," 2018. [Online]. Available: https://www.rospa.com/home-safety/advice/child-safety/accidents-to-children/. [Accessed 22 June 2018].
- [92] THINK!, "Seatbelts," Department for Transport, [Online]. Available: http://think.direct.gov.uk/seat-belts.html. [Accessed 04 June 2018].
- [93] N. Choices, "NHS Health Check," NHS, 12 12 2017. [Online]. Available: https://www.nhs.uk/conditions/nhs-health-check/. [Accessed 27 March 2018].

- [94] Cancer Research UK, "Breast Cancer," 10 October 2017. [Online]. Available: http://www.cancerresearchuk.org/about-cancer/breast-cancer/. [Accessed 17 November 2017].
- [95] Cancer Research UK, "Lung cancer," March 2017. [Online]. Available: http://www.cancerresearchuk.org/about-cancer/lung-cancer. [Accessed January 2018].
- [96] Cancer Research UK, "Prostate cancer," 2017 June. [Online]. Available: http://www.cancerresearchuk.org/about-cancer/prostate-cancer. [Accessed February 2018].
- [97] Cancer Research UK, "Bowel cancer," September 2015. [Online]. Available: http://www.cancerresearchuk.org/about-cancer/bowel-cancer. [Accessed January 2018].
- [98] Diabetes.co.uk, "Gestational diabetes," Diabetes.co.uk, 2017. [Online]. Available: http://www.diabetes.co.uk/gestational-diabetes.html. [Accessed 1 Dec 2017].
- [99] NICE, "PH 38 Type 2 diabetes: prevention in people at high risk," 2012.
- [100] NHS Choices, "Inflammatory Bowel Disease," 25 April 2017. [Online]. Available: https://www.nhs.uk/conditions/inflammatory-bowel-disease/. [Accessed 27 April 2018].
- [101] World Health Organisation, "Infectious diseases," 2018. [Online]. Available: http://www.who.int/topics/infectious diseases/en/. [Accessed 19 July 2018].
- [102] NHS Choices, "Vaccinations," 07 April 2016. [Online]. Available: https://www.nhs.uk/conditions/vaccinations/reasons-to-have-your-child-vaccinated/. [Accessed 10 April 2018].
- [103] City and Hackney, "Joint Strategic Needs Assessment Children and young people," London, 2016.
- [104] NHS Choices, "Vaccinations," 21 October 2017. [Online]. Available: https://www.nhs.uk/conditions/vaccinations/who-should-have-hpv-cervical-cancer-cervarix-gardasil-vaccine/. [Accessed 25 May 2018].
- [105] Public Health England, "Tailoring Immunisation Programmes, Charedi community, north London, Implementation of the WHO's Tailoring Immunisation Programmes (TIP)," London, 2016.
- [106] Mind, "Mental health facts and statistics," 2013. [Online]. Available: https://www.mind.org.uk/information-support/types-of-mental-health-problems/statistics-and-facts-about-mental-health/how-common-are-mental-health-problems/#.WxZU5tIrluo. [Accessed 05 June 2018].
- [107] Mind, "Mental health problems an introduction," 2013. [Online]. Available: https://www.mind.org.uk/information-support/types-of-mental-health-problems/mental-health-problems-introduction/causes/#.WxZYR-kzXMU. [Accessed 05 June 2018].
- [108] NHS Choices, "Bipolar disorder," 26 April 2014. [Online]. Available: https://www.nhs.uk/conditions/bipolar-disorder/. [Accessed 05 June 2018].
- [109] NHS Choices, "Eating Disorders," 16 January 2018. [Online]. Available: https://www.nhs.uk/conditions/eating-disorders/. [Accessed 05 June 2018].
- [110] Faiburn CG and Harrison PJ, "Eating disorders," *Lancet,* vol. 361, no. 9355, pp. 407-16, 2003.

- [111] NHS Choices, "Postnatal depression," 11 February 2016. [Online]. Available: https://www.nhs.uk/conditions/post-natal-depression/. [Accessed 06 June 2018].
- [112] National Obesity Obervatory, "A simple guide to classifying body mass index in children," June 2011. [Online]. Available: http://webarchive.nationalarchives.gov.uk/20170110173352/http://www.noo.org.uk/uploads/doc/vid_11762_classifyingBMIinchildren.pdf. [Accessed 1 August 2017].
- [113] Royal College of Surgeons: Faculty of Dental Surgery, "The state of children's oral health in England," 2015.
- [114] Public Health England, "Dental Health," [Online]. Available: http://www.nwph.net/dentalhealth/. [Accessed 07 June 2018].
- [115] Greater London Authority, "LSOA Atlas," 2014. [Online]. Available: https://data.london.gov.uk/dataset/lsoa-atlas. [Accessed 19 July 2018].