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A Health Needs Assessment for children and young people in Liverpool (0-19 years)

Stage 3: Pre-adolescence

Public Health Institute, Liverpool John Moores University

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A Health Needs Assessment for children and young people in Liverpool - Stage 3: Pre-adolescence

Public Health Institute, Liverpool John Moores University

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Contents

1.Introduction

The public health white paper 'Healthy Lives, Healthy People' (DH, 2010) emphasises the importance of giving all children a healthy start to life; in particular it highlights improving maternal health and children's health and development in order to improve a range of health and wellbeing related outcomes such as educational attainment, risk of mental illness, unhealthy lifestyles, road traffic deaths, hospital admissions and tooth decay (DH, 2010). Children and young people under the age of 20 make up 22.2% of the population of Liverpool and the health and wellbeing of children in the city is generally worse than the national average including higher levels of child poverty and obesity (PHE, 2015).

Liverpool City Council commissioned a health needs assessment (HNA) to inform the redesign of their public health provision for children and young people aged 0 to 19 years (currently covered by the Health Visiting, School Nursing and Family Partnership services). Liverpool City Council identified four stages of childhood/adolescence as the focus of the needs assessment:

- Stage 1: Conception to the first 1,000 days
- Stage 2: Readiness for early learning and school
- Stage 3: Pre-adolescence
- Stage 4: Young people aged 16-19 years

Aims & Objectives

The HNA aims to inform the development of a 0-19 years public health programme for Liverpool by comprehensively assessing the health needs of children in Liverpool focusing on four key life stages. The main objectives of the needs assessment are to:

- Identify children's health needs;
- Examine demand for services
- Map current service provision;
- Identify existing assets which lie outside this service provision;
- Assess the gaps between these factors
- Explore different models of service provision for the 0-19 programme

Four separate HNAs have been undertaken for each of the population groups identified above. In addition to individual reports, the findings from the four needs assessments have been triangulated to create a summary of key needs and priorities for children and young people in Liverpool across the life course. This third report of four focuses on stage three of the health needs assessment: Pre-adolescence.

2.Methodology

A five step methodology based on the National Institute for Healthcare Excellence (NICE, 2005) guide to health needs assessment was used (figure 1). HNA is a cyclical process but many of the elements can be conducted concurrently. The methodology will be the same for each of the four needs assessments and further details and considerations for each of the life stages are outlined below.

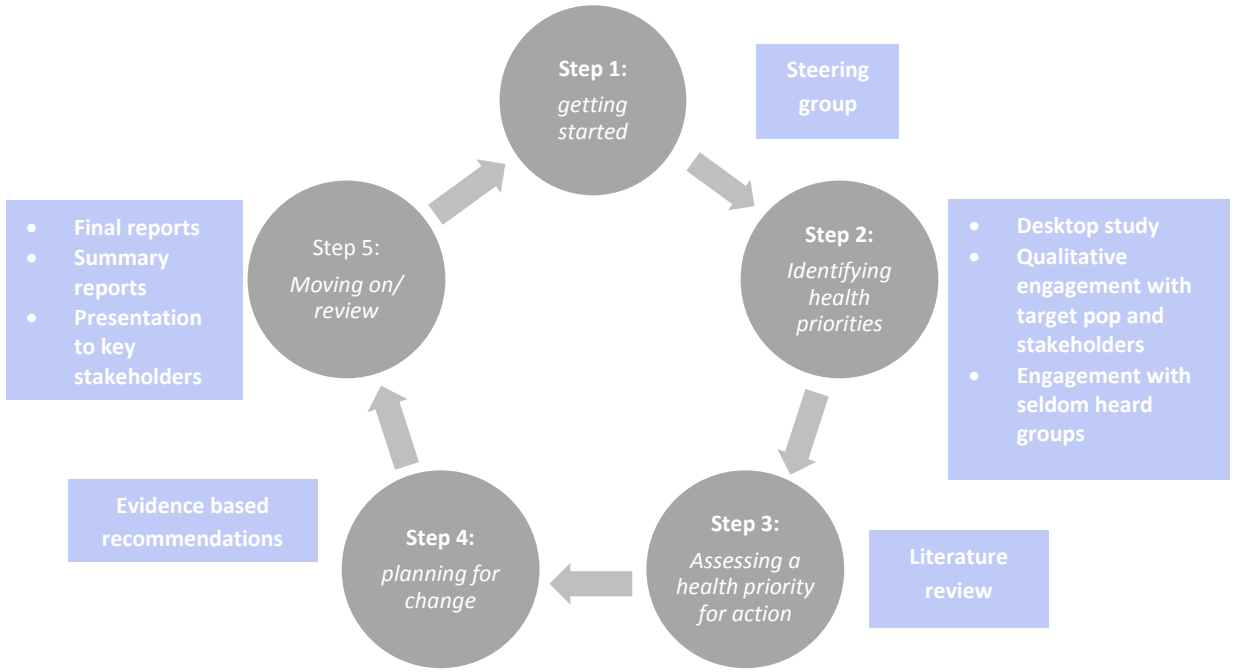


Figure 1. The five steps of health needs assessment (NICE, 2005)

A project steering group was established and included representation from the research team, commissioners at Liverpool City Council and key stakeholders involved in the commissioning and provision of children's services across Liverpool. The research team had regular contact with the steering group throughout the HNA. An internal advisory group was developed at Liverpool John Moores University and included key members of staff from Nursing and Allied Health for expert support and advice. The two groups provided advice and support around recruitment, interview materials and will provide feedback on draft reports.

All LJMU research is designed and delivered in compliance with rigorous ethical standards. Ethical approval for the research was granted by the LJMU Research Ethics Committee prior to the commencement of the evaluation (reference 16/CPH/020).

Identifying health priorities

Desktop study – Quantitative methods and analysis

Analysts from Liverpool City Council led on the analysis of data for the desktop study with direction from commissioners and the research team, which was then written up by the research team at LJMU. Data on children and young people was collated from a range of published and unpublished

sources to assess local need, map service provision and identify gaps in service provision and areas of unmet need.

The desktop study includes the following:

- Demographic data on children, young people and their parents/carers
- Health and wellbeing indicators for children and young people including disease prevalence, mortality, lifestyle factors, risk behaviours and uptake of health checks, vaccinations and screening
- Socio-economic profile data including poverty, housing status, education and employment
- Mapping of local service provision
- Provider and performance data from local service providers

Engagement with target population – Qualitative methods and analysis

Service user engagement

One focus group was conducted with eight children (5 males, 3 females) aged 9-10 years. The children were recruited through a youth club in an area of lower socio-economic deprivation. The research team also aimed to conduct further focus groups with children from areas of higher socio-economic deprivation and children with experiences of seeking asylum. All recruitment routes were explored including working with schools and services for asylum seekers, however due to limited recruitment uptakes, this was unfortunately not possible. Therefore additional stakeholder interviews (stakeholder engagement described below) exploring the needs of these populations were undertaken. Recruitment was supported by gatekeepers and held at a youth club. All participants received a participant information sheet and gave written consent to take part (parental consent was also gained for children under 16 years of age) and all participants received a £5 shopping voucher to thank them for their time. Focus groups and interview questions were informed by the literature and evidence, and focused on the children's understanding of what it means to be healthy and perceptions of their health needs.

Stakeholder engagement

Across the four stages for the HNA, 23 interviews were undertaken with key stakeholders involved in the delivery of children's services across Liverpool. This included Children's Services, primary and secondary school, school nursing, asylum seekers provision, substance use services, youth club, young person's advisory services and health projects, educational psychologist service, mental health services and general practice. Stakeholders were asked about service provision, health needs priorities and barriers to accessing healthcare.

Table 1. Stakeholder interviews

No.	Service and organisation
1	Children's Family Support & Residential Services, Liverpool City Council
2	Early Years Foundation Stage Teaching, Primary School

3	School Nursing, Liverpool Community Health
4	Academic specialising in women seeking asylum
5	Substance use service, Young Addaction
6	Youth Club
7	Young person's advisory service, Gay Youth R Out (GYRO), YPAS
8	The Educational and Child Psychology Service, Liverpool City Council
9	Young people's health group, Health Line Project, Merseyside Youth Association
10	Learning Support Secondary School, Secondary School
11	Young person's mental health service, Child and Adolescent Mental Health Services, NHS
12	GP, NHS

The focus group and telephone interviews were transcribed and analysed using thematic analysis to identify key themes for children's health needs during pre-adolescence and health services provided to support them.

Assessing a health priority for action

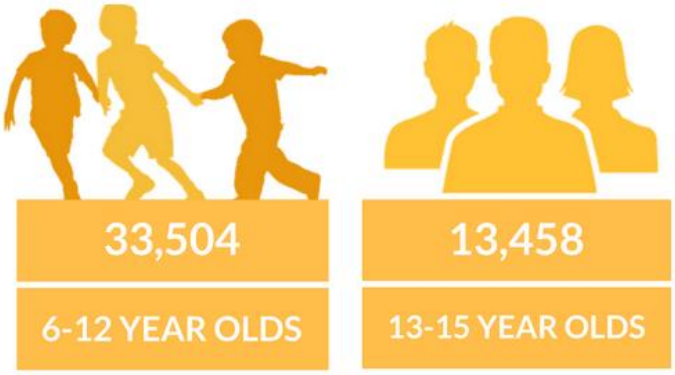
A comprehensive review of all relevant literature was conducted including academic peer reviewed journals, grey literature such as national and local policy and independent research. The review summarised the available evidence on interventions to address the priority health needs of the target population including an overview of key health priorities in comparison to the local context. The quantitative, qualitative analysis and literature review were then triangulated to develop evidence based recommendations to help inform the redesign of public health provision for 0-19 year olds in Liverpool.

3.Findings

3.1 Identifying health priorities

Desktop study – Quantitative analysis

PREADOLESENCE IN NUMBERS[1]



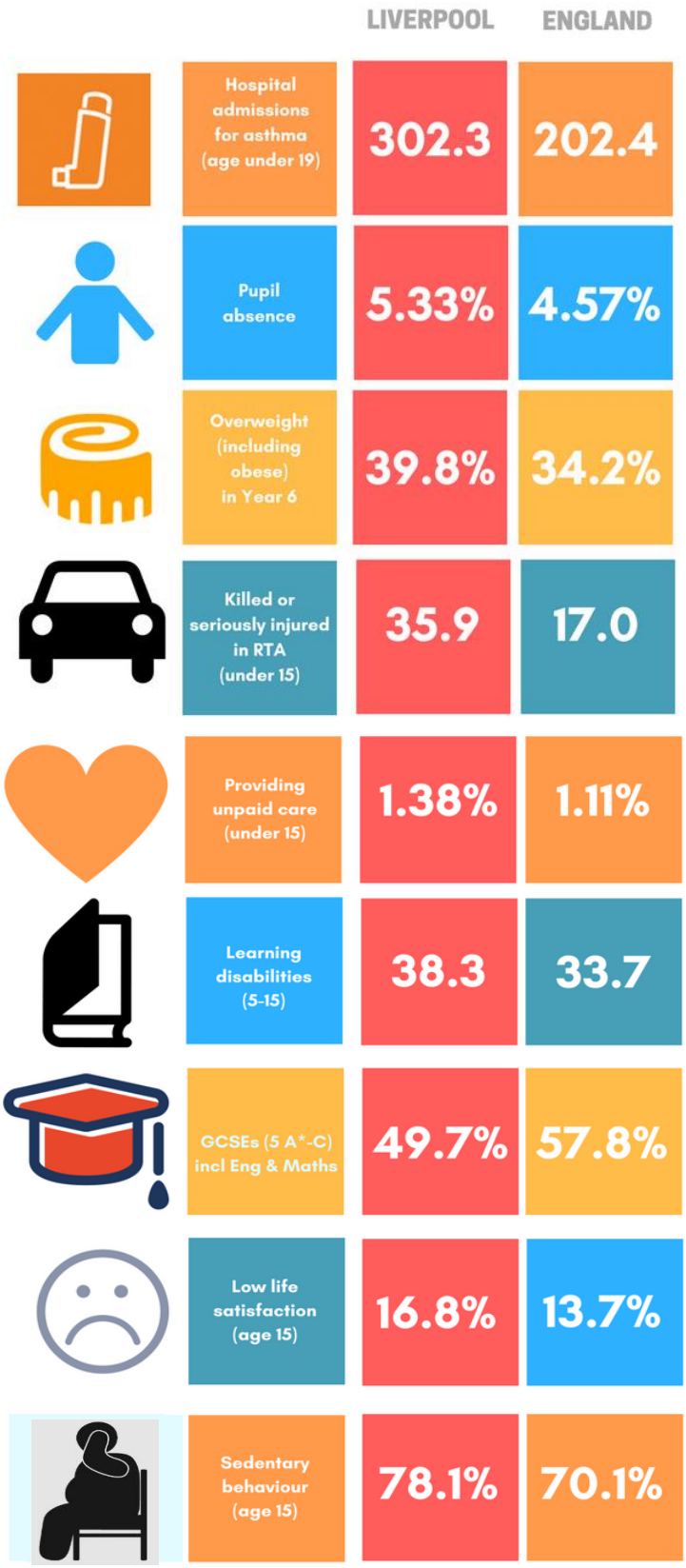
There are an estimated 33,504 children aged between 6 and 12 years in Liverpool, representing just under a third (31.4%) of the 0-19 years population. A further 13,458 are aged between 13 and 15 years representing 12.6% of the 0-19 years population. Overall, children aged between 6-15 years account for just under a tenth of the Liverpool population (9.8%). The HNA explore preadolescence for children aged between 8 and 12 years of age.

Key indicators

Data from a range of indicators from Public Health England profiles (including Health Profiles, the Public Health Outcomes Framework and Child and Maternal Profiles) were compared to identify areas which were worse and better than the national average. The figures below provide an overview of indicators for Liverpool.

[1] *Unless otherwise stated the data in this section were provided by Liverpool City Council intelligence team.*

Indicators significantly worse than the national average



Health

Hospital admissions

In 2015/16, there were 6,713 emergency hospital admissions among Liverpool residents aged 0-19 years. This was a 6.4% increase on the number of admissions seen five years previously (2012/13). Speke-Garston was the ward with the highest number of emergency admissions (n=406). There were 1,057 emergency admissions among 6-12 year olds and 2,237 among 13-19 year olds. The rate of admissions for these age groups was 32.6 and 56.9 per 1,000 respectively. This includes 827 in 15-17 year olds (rate 54.8 per 1,000). Everton had the highest rate of admissions for this age group (111.1 per 1,000).

Injuries are a leading cause of hospitalisation among children and are a major source of premature mortality and morbidity. They are also a source of long-term health issues including mental health related to injury experiences (PHE, 2016a; PHE, 2016b). There is also a strong link between unintentional injury and social deprivation with children from the most disadvantaged families more likely to be killed or seriously injured (PHE, 2016b). Between April 2013 and March 2016, there were 21,942 attendances at North West A&Es for injuries among 6-15 year Liverpool residents. The majority (92%) attended Alder Hey Children's Hospital and just under one in ten (8%) arrived by ambulance (TIIG, 2016).

Asthma is the most common long-term condition in childhood (PHE, 2016). Poor control of the condition and poor compliance with therapy can lead to exacerbated symptoms among children and result in hospital admission. Unplanned hospitalisation for asthma, diabetes and epilepsy in children and young people under 19 years is a national quality indicator in the NHS Outcomes Framework (DH, 2016). The rates of hospital admissions in Liverpool were significantly higher than the England average for asthma (302.3 per 10,000 vs 202.4 per 10,000) in 2015/16. Among 0-19 year olds in 2015/16 in Liverpool there were 416 admissions for asthma, diabetes and epilepsy combined. This is a rate of 4 per 1,000 population (aged 0-19 years).

Obesity and physical activity

The World Health Organization regards obesity as one of the most serious global health challenges for the 21st century. Obesity is strongly related to socio-economic status in children with an almost linear relationship between obesity prevalence and IMD-10 score for the area in which children live. PHE state that childhood obesity prevalence in the most deprived tenth of local areas is almost double that in the least deprived (PHE, 2010). In 2015/16, the prevalence of overweight (including obese) among Liverpool Year 6 pupils was 39.8% which was significantly higher than the England average (34.2%).

The National Child Measurement Programme (NCMP) measures the height and weight of one million school children in England every year. Data from the NCMP provides three yearly average data for children in Year 6. In Liverpool between 2012/13 to 2014/15, 23.2% of Year 6 children participating in the NCMP were obese; this was higher than the England average of 19.0%. This three year average increased from 22.1% between 2008/9 and 2010/11. Eighteen out of 30 wards in Liverpool had a rate of obesity which was significantly higher than the England average.

In the 2014 What About YOUth (WAY) survey, 11.9% of 15 year olds in Liverpool reported being physically active for at least one hour a day, seven days a week. This was slightly fewer than the England average of 13.9% (HSCIC, 2015). In the same survey, the percentage of 15 year olds with a

mean daily sedentary time of seven or more hours per day in the last week was significantly higher in Liverpool, at 78.1%, compared to the England average of 70.1%.

Education

There are 118 state funded primary schools in Liverpool with 38,994 pupils. This includes 56 community schools, 52 voluntary aided schools, 5 voluntary controlled, 2 foundation schools and 3 Academies. In state funded primary schools, 24.7% of pupils are known to be eligible and claiming free school meals. This is higher than the national average (14.3%). One quarter (25.2%) of pupils in state funded primary schools are from a minority ethnic group (this includes pupils who belong to any ethnic group which is not white British including: Irish, traveller of Irish Heritage, Gypsy/Roma and other white backgrounds). In 2016 44% of Liverpool pupils at the end of key stage 2 reached the expected standard in reading, writing and mathematics, compared to 53% nationally.

In [year] The overall absence rate for state-funded primary schools in Liverpool was higher than the national average (4.6% vs 4.0%); this included both authorised (3.5% vs 3.1%) and unauthorised (1.1% vs 0.9%) absence. The proportion of persistent absentees (3.2%) was also higher than the national average (2.1%). There were 16 permanent exclusions (0.04% per school registered population) and 337 fixed period exclusions (0.9%) among 217 pupils in Liverpool primary schools during 2014/15. The rate of permanent exclusions was higher than the national average while the rate of fixed term exclusions is lower than the national average. In total, 745 school days were lost due to fixed period exclusions each year.

In 2015/16 there were 31 state-funded secondary schools in Liverpool with 29,340 pupils. This included 5 community schools, 9 voluntary aided, one foundation and 16 academies. In state funded secondary schools, 24.5% of pupils were known to be eligible and claiming free school meals. This was higher than the national average (14.1%). Just under one in five (18.9%) of state funded secondary school pupils in Liverpool were from a minority ethnic group (this includes pupils who belong to any ethnic group outside of white British including Irish, Irish traveller, Gypsy/Roma and other white backgrounds).

In 2015/16 there were 4,295 pupils at the end of key stage 4. Overall 56.4% of those entered achieved A*-C Grades in England and Mathematics (slightly lower than the national average; 58.7%) and 51.0% achieved five or more A*-C grades including English and Maths which is lower than the England average (52.8%). There is considerable variation in Key Stage 4 attainment (5 or more GCSEs at A*-C) by ward with 16 wards falling below the Liverpool average in 2015.

School absence

School absence has important implications for young people; loss of education through school absence can make a substantial difference to pupils' achievements. Pupils with high absence rates are more likely to leave school with no or few qualifications and are at greater risk of being involved in criminal activity and anti-social behaviour (NAO, 2005). Educational achievement is linked not only to the quality of education received but also to young people's socio-economic status and subsequent employment, income, housing and access to other material resources. This understandably has wider impacts on health and health inequalities (PHE, 2016). In Liverpool in 2015/16, the rate of pupil absence was 5.33%; significantly higher than the England average (4.57%).

In 2015/16 the rate of absence in state funded secondary schools was higher than the national average (6.4% vs 5.3%) including both authorised (4.3% vs 4.0%) and unauthorised (2.0% vs 1.3%) absence. The proportion of persistent absentees (8.0%) was also higher than the national average (5.4%). There were 53 permanent exclusions (0.18% per school registered population) and 1,857 fixed period exclusions (6.29%) among 1,302 pupils in Liverpool secondary schools during 2014/15. In total 5,026 days of schooling were lost due to fixed period exclusions in the year.

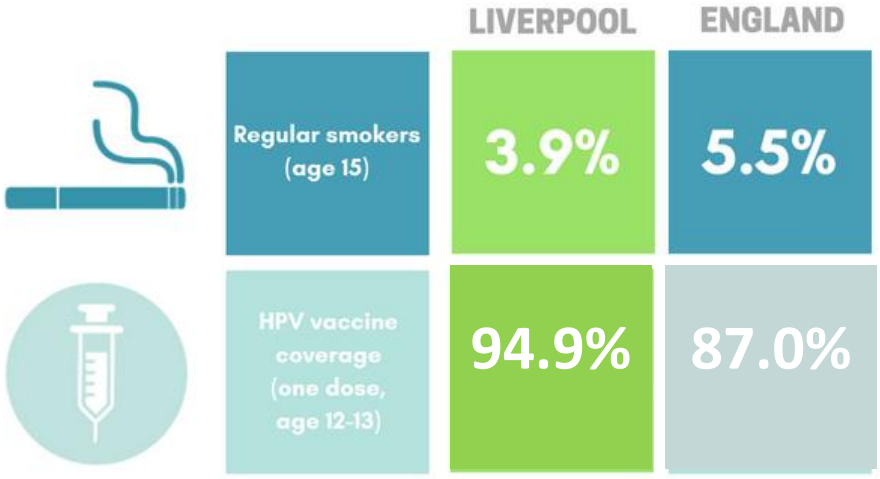
Young carers

A young carer is someone under 18 who helps look after someone in their family, or a friend, who is ill, disabled or misuses drugs or alcohol. The onset of their caring role will often occur between the ages of 8 and 10 years (McAndrew et al., 2012). This caring responsibility has a significant impact on childhood. Research states that one in 12 young carers care for more than 15 hours per week, and around one in 20 misses school because of their caring responsibilities (Children's Society, 2013). In year 2015/16, in Liverpool, there were significantly more young carers under the age of 15 (1.38%) compared to England as a whole (1.11%).

Learning disability

Children and young people with special educational needs and/or disabilities experience increased difficulties in terms of educational and social development. In 2015/16, the percentage of children in England with a statement of special educational needs or an education and health care plan was approximately 3% (DfE, 2016), which for Liverpool equated to over 1,500 children and young people aged 5-15 years (Liverpool City Council, 2016). However, in addition to these statutory processes, data suggests that 12% of the total pupil population receive some form of special educational needs support (DfE, 2016), which for Liverpool equates to over 6,200 children and young people across the city. Boys are reported to be almost twice as likely as girls to require support for special educational needs (DfE, 2016). In Liverpool, there were significantly more children with learning disabilities known to schools than in England as a whole (38.3 per 1,000 pupils in 2014, compared to 33.7 in England) (see above diagram) (PHI LJMU, 2016).

Indicators significantly BETTER than the national average



Smoking

Smoking addiction is largely developed in childhood and adolescence and young people are particularly susceptible to quickly developing a dependence on nicotine (Gervais et al, 2006). Young smokers experience more short and long-term respiratory conditions than their peers and those who start smoking in childhood are more likely to continue smoking as adults (HSCIC, 2016). Adults who started smoking at a young age have been exposed to harmful toxins from an earlier age and as a consequence have higher age specific rates for all tobacco related cancers (HSCIC, 2016). According to the Health Survey for England, the proportion of 8-15 year olds nationally who reported ever smoking a cigarette has declined steadily from 19% in 2003 to 4% in 2015 (HSCIC, 2016).

Data on young people's smoking habits in Liverpool is available from two large scale surveys. The What About YOUth (WAY) survey was carried out by the HSCIC in 2014 and asked 120,115 15 year olds across England about their health and wellbeing (HSCIC, 2015). Liverpool City Council also commissioned the Growing Up in Liverpool Survey which was carried out in Spring/Summer 2015 and surveyed 1,198 pupils in Year 8 across the city. In Liverpool in 2014, 6.5% of 15 year olds reported being current smokers and 3.9% reported they were regular smokers, both rates were significantly lower than the national average (8.2% and 5.5% respectively). Among year 8 pupils, 10% said they either smoke now or have done in the past (compared with 11% in the combined results from several local authorities). One percent of year 8 pupils said they smoked regularly and 2% had smoked at least one cigarette in the 7 days before the survey. The average age for starting smoking among smokers was 11 years old.

Life satisfaction

The What About YOUth (WAY) survey also found that 16.8% of 15 year olds in Liverpool reported low levels of life satisfaction, which was significantly higher that the England average of 13.7% (HSCIC, 2015).

HPV Vaccine coverage

The human papillomavirus (HPV) vaccine protects against cervical cancer which is the most common cancer among young women (aged 15-34), accounting for 16% of cancer diagnoses in this age group. HPV is a common infection which is often spread through sexual contact, and evidence suggests that

early sexual debut and higher numbers of sexual partners are related to a woman's susceptibility to developing cervical cancer (Deacon et al, 2000). It is estimated that as much as half the female population will be infected with HPV at some point in their lifetime however, only for some women will this infection will lead to the development of cervical cancer (ONS, 2014).

The national HPV immunisation programme was introduced in schools in September 2008 for females in year 8 (age 12-13 years). Originally a three dose programme, this was changed to a two dose programme in September 2014 after evidence reviewed by the Joint Committee on Vaccination and Immunisation (JCVI) suggested that the antibody response to two doses was as effective as three doses in adolescent females. It is recommended that the second dose of the vaccine is received no sooner than six months and no later than two years after the first dose (PHE, 2015).

In Liverpool in 2015/16, 2,185 girls in Year 8 (12-13 years) received dose one of the HPV vaccine. This represents 94.9% coverage which is higher than the England average (87.0%). Liverpool is one of 86 local authorities which offered the two doses of HPV vaccine across the 2015/16 academic year; overall uptake for doses 1 and 2 was 84.8%.

3.2 Engagement with target population – Qualitative analysis

Service user engagement

What does being 'healthy' mean?

Adopting a healthy lifestyle

All of the children could discuss what they thought the term 'healthy' meant. They discussed being healthy in terms of preventing and treating ill health through adopting a healthy lifestyle. They were able to provide numerous examples, including exercise and fitness, eating a balanced diet and weight management.

"It means what you do around other people like what you eat and how you stay safe" (focus group 1, male aged 10)

"Basically be fit and basically if you are like an obese person you can get fit and healthy so you cannot be obese" (focus group 1, male aged nine)

"Keeping track of eating healthy and hygienic foods…..like fruits, veg and water" (focus group 1, male aged 10)

They all believed that being healthy was important and discussed ways of monitoring their health.

"It really is important because if you are like to unhealthy your heart can get blocked and you can have a heart attack" (focus group 1, male aged 9)

"I would say keep track of what you are eating and like and make sure you don't eat as much as you would if you weren't trying to keep healthy" (focus group 1, male aged 10)

Preventing injury and reducing risky behaviours

Children also believed that staying safe was part of keeping healthy, for example staying safe from accidents to prevent physical injury and through avoiding risky of harmful behaviours such as smoking, using drugs and drinking alcohol.

"Say like if you do something silly outside and you get run over or something or get hurt" (focus group 1, male aged 10)

"If you smoke, say if you are a runner you couldn't run as long as could if you didn't smoke" (focus group 1, male aged 10)

The young people had quite a lot of knowledge around smoking and had previously learnt about smoking in school. They talked about the dangers of smoking and were aware that cigarettes contain chemicals. They also discussed the dangers of using e-cigs and believed they were unsafe to use.

"When you smoke, some smoke is invisible so say if you are like smoking at one end and they are there it would still get to them" and "…the smoke can go in their lungs" (focus group 1, male aged 10)

"Ciggies have all stuff like drugs [chemicals] and stuff that keep you addicted to it and you can get lung cancer" (focus group 1, female aged 10)

They all discussed keeping safe in terms of not hurting others through physical fighting. They also discussed how smoking can harm others health as well as theirs and gave examples of how to avoid harming others through not smoking in their presence to avoid second hand smoking. They also talked about the potential of self-harm when under the influence of drugs and alcohol.

"If you actually drink alcohol it can do things to you, but you can do things to yourself, it's one of the worst drugs that you can actually have" (focus group 1, male aged 10)

The effects of health on education

One of the young males discussed that not looking after your health could have an impact on your school work.

"If you eat like unhealthy food like way too much it can actually like, obviously it could make you unhealthy but it could affect your concentrating and all that" (focus group 1, male aged 10)

Encouraging others/role model

The children also talked about the importance of adopting a healthy lifestyle to show good practice to younger children. They believed it was important to be a good role model.

"Eating healthy so like when younger children see you eating healthy they will think it's better to eat healthy than eating all like sweets" (focus group 1, female aged 10)

Health knowledge

The children were asked how they knew information about health and if they had received any formal teaching around health and healthcare. They had mostly discussed health at school during lessons with their teachers.

"Like the smoking you can find out on cigarette packets or on adverts or stuff" (focus group 1, male aged 10)

"Tomorrow we are going to look in a pigs heart to see how, say if a pig runs how fast it beats and stuff and how it keeps healthy and when it eats like what it does to its heart and stuff" (focus group 1, male aged 10)

"In school we've got a display about smoking and it tells you what's in cigarettes and why you shouldn't smoke. Like there is toilet cleaner, nail varnish and petrol" (focus group 1, female aged 10)

The children also reported learning about health through watching television, specifically they described a documentary programme set at a children's hospital. They enjoyed the 'real life' aspect as the documentary followed the cases of real life (children) patients. The documentary even had footage of operations.

"On TV I've watched documentaries. Operation ouch on CBBC. It's basically set in hospital, sometimes its set in alder hey hospital and sometimes its set in Manchester but mainly set in alder hey. So basically they video camera on the children's hospitals" (focus group 1, male aged 10)

The children did comment that sometimes television can have a negative impact on health in terms of glamorising risky health behaviours such as smoking, or through showing such behaviours and not providing a health warning or portraying the negative effects.

"It persuades you to smoke….I don't know really I've just seen lots of people on the telly smoke on programmes but they don't tell you anything about it. Like they can try to do it in private so no one knows but they just do it" (focus group 1, male aged 10)

Mixed messages

The young people believed that watching television was a good way to learn about health, but they were sceptical about using the internet. They reported mixed messages and not knowing which information to believe. They also found it difficult to understand which was the most up-to-date and relevant information.

"I think the internet is only good sometimes because sometimes it lies…like when a teacher tells you about alcohol in school or you watch on the telly or go on the internet it tells you something different" (focus group 1, male aged 10)

Support

The children could list a number of different avenues for health support. This included advice and support from leaflets, television, internet, doctors, hospital, walk in centre, dentist, teachers, school nurse, youth club, Childline and families and friends. They agreed that someone would go straight to hospital if they had serious concerns about their health.

Some were aware of a school nurse, whilst most believed that teachers trained in first aid were available if needed rather than the school having specific school nurse provision.

"Like every year a nurse comes in and they weigh us to see if we are the average weight for our year and measure us" (focus group 1, male aged 10)

"In our school we do have a medical room but we don't have a nurse there all the time, it's a teacher" (focus group 1, male aged 10)

One child discussed having a designated member of staff at their school who they could talk to about their problems and worries. Other agreed that this was a good idea.

"In my school we have like this one person who takes care of problems and stuff and stops people worrying about things" (focus group 1, male aged 10)

"Well it's nice to know someone is there when you actually need them" (focus group 1, male aged 10)

One young person discussed having advocate 'student school counsellors' who were class peers who they could go to with concerns regarding general school life and any worries they have. They would then go to a teacher or head teacher to share these concerns.

"We have two school counsellors in every class, a boy and a girl and you speak to them if you have any problems" (focus group 1, male aged 10)

Children reported that they would rather speak to a person than access advice through ways such as the internet, and they would rather speak to someone more experienced or older than themselves.

If a friend came to them for support they said they would try to offer help and advice, but would tell their parents or older sibling or someone more experienced.

"Tell someone that's in their family or like really really close to them" (focus group 1, male aged 10)

The children all believed that it was really important for children and young people to be taught about health and to be made aware of where to go for health advice and support. They enjoyed having a discussion about health and believed that all children and young people should have the opportunity to learn more about their health and how to stay healthy.

When asked, they believed that it was important to involve parents in health education. They believed that everyone should be taught about how to live healthily. They also reported taking information home from school lessons to their parents; they thought it was important to pass that knowledge on to others.

The children made a number of recommendations including inviting health professionals to provide health specific lessons at schools, healthcare training for teachers delivering lessons around health, and involving parents and the wider family in health education. They also wanted better support for parents who might require support with their own and their child's health.

"I think the health centres that actually know a lot about health and how it can affect your body, maybe they should talk to the head or the person that came up with the school and who can put it on the curriculum for teachers" (focus group 1, male aged 10)

What I think they should do, parents should come to school and actually see how good their child is doing. You might think like parents evening, but come to school and see what their child is actually doing throughout the day" (focus group 1, male aged 10)

Stakeholder engagement

Obesity and Unhealthy Diets

Poor diet was highlighted by stakeholders as being a key health concern for this age group. It was noted by a youth worker that children were often eating a lot of junk food and that this resulted in them turning down healthy snacks that were offered to them during sessions:

"We notice the way that they are eating because we offer a hot snack you know or a healthy snack so if they are not eating any of the food that we are offering we can see that they have got a problem with their dietary needs" (Youth Worker).

The Youth Worker discussed how they, along with their colleagues, would discuss these concerns with parents and would offer advice on how to encourage children to eat more healthily. They were also involved in running cooking classes for young people in order to help them to gain new skills and further increase their understanding of healthy food. Additionally, the Family Support Worker

also discussed how they would provide additional practical support in supporting parents to provide a healthy diet for their children by helping them to develop menus and assisting them with budgeting and shopping.

The School Nurse discussed how obesity is an increasing health concern for this age group. They described the NCMP process, in terms of checking their student's weight in Reception and again at Year 6 and parents receive a letter if there are any concerns. The Family Support Worker also discussed 'the walking bus initiative' which encourages children to walk to school and therefore increases the amount of exercise they are having.

Mental Health and Emotional Wellbeing

Mental health was a key issue raised by stakeholders in relation to this age group. It was stated by practitioners from the family support service and School Nursing that there has been a significant rise in the number of young people experiencing mental health difficulties. Related to emotional and mental wellbeing, it was highlighted that managing the pressures of social media is one of the biggest challenges to promoting good mental health. The Family Support Worker discussed how young people being exposed to stressful situations at home had a detrimental impact on their mental health.

"I think the effects that domestic violence and alcohol abuse are having in young children witnessing it, that's the main thing [issue] at the moment" (Family Support Worker).

Some stakeholders discussed problems with referrals to CAMHS due to their restrictive criteria and waiting lists.

"I think sometimes CAHMS can be quite difficult to get them referred into, we struggle there to hit the criteria" (School Nurse).

"Or thresholds might be so high that there's ones who might have readily got support from people but now the thresholds are just too high for the child to meet that threshold criteria." (MYA)

Additionally, the Family Support Worker also discussed how the age restrictions imposed by CAHMS had created difficulties in referrals, citing examples of young people ages 3 and 17 years who were considered too young or too old but had limited options outside of CAHMS.

The School Nurse discussed how they were implementing additional mental health with a focus on early intervention. Here, the School Nurse described that the aim was to prevent mental health issues developing and to support young people who already required a mental health intervention.

Low levels of confidence and self-esteem were also highlighted as a key concern for this age group, which was recognised as having the potential to impact on mental health and emotional wellbeing. The Youth Worker discussed how their service aimed to increased confidence and self-esteem through play and sports which also helped them to reinforce inclusion and encourage the young people to have respect for one another.

One stakeholder also spoke about how their organisation encouraged school students to take part in promoting mental health in order to raise awareness. This was done through sessions with the students, as well as encouraging them to take part in a peer mentoring programme where they can work towards different awards. They also spoke about how they worked with school to put on campaigns and mental health promotion events by involving the children in the campaigns.

"They do peer mentoring with groups of teenagers and that's through three different awards; so bronze, silver and gold. A platinum award where the young people build up evidence of how they are peer mentoring, how they're being effective as they go up the scale." (MYA)

"So there were 220 children involved in that over three nights and then the theatre was full every night so they were delivering it to their family and their friends and to selected audiences so that's like wide spread awareness of mental health and that's one of the ways in which we make mental health promotion everyone's business" (MYA)

A secondary school teacher spoke about how mental health issues appeared to come in waves and in different years. For example, this stakeholder described how there had been an issue with year ten pupils self-harming one term and that they currently had an issue with anxiety and stress amongst year nine pupils. This teacher spoke about linking in with CAMHS to provide the correct level of support to their students, although they felt that more still needed to be done. They also spoke about being in the process of setting up a five week course which was to be run by the school keyworker and delivered to parents to help them support their children.

"We have CAMHS support, we have a key worker and a link worker, and we've kind of tiered it really in terms of support. We have a lady who comes in and does 1:1 sessions for those that are kind of just low risk really, and if she feels that more intense support is needed then we can refer on to our next stage of it – so it's kind of… we're working to it but it's still not enough." (Secondary School Teacher)

Sexual Health

The Sexual Health Worker discussed how their service often worked with primary schools to deliver educational sessions. For this age group these sessions discussed issues such as emotions and feelings with regards to attraction and self-esteem. This stakeholder explained how these were important issues to raise with this age group as they are related to sexual behaviour. In addition to this the Sexual Health Worker described also discussing issues relating to puberty with this age group and delivering assemblies within schools that discussed safe online behaviour:

"We work with primary schools and that involves like puberty sessions, and things like growing up and feelings and emotions and talking about attraction…we offer things like internet safety" (Sexual Health Worker).

The secondary school teacher discussed the difficulties of providing sex education in a multi-faith school. They explained how it was something that the school is aware of and were trying to improve upon by bringing in external partners to deliver support.

"Not so much sexual health but that's something that we're looking at bringing agencies in. Obviously being a joint faith school there are restriction but we've made it quite clear that these young people need educating, they're doing it…" (Secondary School Teacher)

General Behaviour and Socialisation

It was noted by some stakeholders that socialisation was of concern with regards to this age group. The Youth Worker highlighted how the further development of social skills could potentially be

hindered due to young people spending time a lot of time watching television and/or using computers:

"If there are children just going home and sitting in front of a computer or television and not mixing with any other children except in school then obviously their social skills are going to be less than what other children using Centre bases" (Youth Worker)

This therefore highlights the importance of the availability, access to and awareness of facilities such as youth centres, and the role they play in encouraging children to be sociable. The Youth Worker also discussed how their youth centre did additional outreach work with children who did not access their local centre.

The School Nurse discussed how, for this age group, often the main health issues that they had to deal with in their role was proving support around bedwetting. Their service provided a monthly drop-in session for parents and whilst this had to be operated in conjunction with primary schools they felt that there was a good level of uptake by schools and that the sessions were well attended.

With regards to school, the secondary school teacher felt that the lack of motivation and attendance of some students was down to the lack of self-belief and that this was something which the young people needed support with. The teacher also highlighted increases in permanent exclusions.

"So there's a lot of work to be done really and kind of I think giving a lot of these young people some self-belief as well. Giving them kind of the confidence that they can do things, they can… you know what they've necessarily grown up with doesn't have to be their life." (Secondary School Teacher)

"We went to an alternative provision workshop meeting yesterday, ran by the City Council on social inclusion and the numbers of permanent exclusions for this year and for young people that are in reception or class one are rising. Which is quite scary really." (Secondary School Teacher)

Substance Use

Some stakeholders discussed how they were starting to have some discussions about alcohol and substance use with this age group. The majority of concerns about young people and alcohol and substance use tended to be focused on teenagers; however the Drug and Alcohol Team Leader did discuss how they would do interventions in primary schools if they were requested.

Asylum Seekers

Several health needs were discussed by stakeholders in relation to young asylum seekers. Diet was of concern to one stakeholder, who discussed how the limited funds received by those seeking asylum means that parents are often unable to buy fruit and vegetables or pay for school lunches.

Climate was another concern; one/stakeholders described how many asylum seekers come from countries with a much hotter climate, resulting in their clothes being inappropriate for the British climate. Again, due to limited funds it was often the case that asylum seekers could afford warm clothes and often had to depend on donations. Inadequate clothing was also discussed in relation to parents not being able to buy school uniforms for their children and children having clothing that was in poor condition. This increased the stigma faced by young asylum seekers and consequently impacted upon their emotional and mental wellbeing. In relation to this, one stakeholder explained:

"It is just shocking seeing the way some kids are dressed or the way there shoes are…like holes and things, literally falling apart" (Academic and Activist).

Inappropriate and inadequate housing was also raised by stakeholders with regards to asylum seekers. Stakeholders felt that the housing assigned to those seeking asylum was often in poor condition and had numerous problems that were associated with ill-health such as damp and infestations.

The Youth Worker discussed working with young asylum seekers. Whilst they had only had limited contact with this group they did highlight how they were difficult to engage because of the language barrier. Additionally, they also reflected on how asylum seekers are often moved on to different locations which creates further boundaries in engagement as it can mean that it is difficult to build a relationship with them.

The secondary school spoke about the amount of students within the school who were new to the country and the barriers that this presented for the students and staff.

"We have a lot of students who are new to the country, English is an additional language which obviously puts an awful lot of pressure on the teachers really and us in trying to support them." (Secondary School Teacher)

"I think if you ask any teacher within our school it's definitely at the minute trying to support the students who are new to the country. That I would say is one of the biggest things that would come out." (Secondary School Teacher)

"If you start looking at people, whether they are children or families that have got protected characteristics. So they might have a disability or their ethnicity or their gender or their ability or disability. That will have a baring upon them because do services understand the needs of the populations that their working with" (Academic and Activist)

Multiagency Work

The Educational Psychologist discussed how multiagency working can often be successful, as long as all of the services involved are equally committed. They did state that facilitating multiagency work is often easier in regards to younger children compared to teenagers when it can be difficult to get all of those concerned to attend meetings due to limited resources. They also discussed how multiagency working can be difficult to facilitate when the young person has challenging behaviour because it can be difficult to determine which criteria they meet and who should have the primary responsibility for working with them.

It was also noted by some stakeholders that because parents and families play an important role in their child's health and wellbeing that they are also a key stakeholder and they should be included in any key decisions, providing their involvement is appropriate.

"We work with the families too because we can't do anything for a young person without consent from the parents" (School Nurse).

However, the LGBT Worker did also discuss how some young people were concerned about their confidentially being broken and as a result were less likely to access services such as their local GP because of this.

The Residential Worker, LGBT Worker and School Nurse cited examples of multiagency working with The Brook and Addaction and all had positive experiences of working with these specialist organisations.

Funding cuts and restraints were recognised across all of the different types of services. The stakeholders discussed how multiagency working was key in dealing with some of the limitations created by these cuts as it allowed different services to pool resources.

"With the council there are restructures all the time and there's another so many million that has to be saved next year so it's funding cuts. So sometimes you have to think outside of the box a little bit and be a bit creative. Maybe do things that you would normally pass on because that agency isn't there and you have to try and manage it" (Family Support Worker).

The school teacher felt that other agencies see schools as being the best agency to lead the Early Help Assessment Tool (E-HAT)[2] but they felt that a school is not always best placed to do so and that other agencies should be aware of this.

"And it's about making sure other agencies know that it's not just schools that can hold the E-HATS too because sometimes they look to us because we are the point of contact for them every day, so we see them every day but we're not always necessarily the best people to be lead on that." (Secondary School Teacher)

Stakeholders also felt that parents needed further support. Parents who may have had negative experiences of healthcare or during their own education and face barriers engaging with health professionals and schools.

"So the barriers for parents, again it could be about parents feeling disillusioned with experiences of care that they might have had as children or young people themselves, or as parents. Are those services then family friendly, are they family centred organisations. I mean one time we were doing a case study with parents and on average some parents had like 29 different support services engaged with them." (MYA)

[2] EHAT is a tool used for gathering information and a standard approach in assessment for the identification of Early Help needs. EHAT helps practitioners to gather and understand information about the needs and strengths of children and the family (LCC)

3.3 Assessing a health priority for action

Putting the findings into context: A review of the literature

In order to make effective recommendations for practice, it is important to consider the desktop study and qualitative findings within the wider policy context. The following presents a review of key literature relating to the priority health needs of the target population. This wider evidence builds on findings from the desktop study and qualitative work, and addresses any gaps identified through this process.

Pre-adolescence (around ages 8-12) is a period in a child's life when significant and fundamental transitions occur, with physical and emotional changes around the age of 11 and 12 during puberty (Mensah et al., 2013). During this time a child begins to become more independent from their family and increasingly dependent on friends, along with developing their own identity and value systems. As these changes occur it is common for a child in this age group to be particularly self-conscious and lacking in self-esteem (Sodha, 2008).

Studies suggest that British children and young people are more likely to engage in a range of risky behaviours than others in the developed world (Margo et al., 2006) and understanding the experiences and outcomes for children during pre-adolescence is key to understanding some of the more problematic behaviours that children can engage in during this period of their lives (Sodha, 2008).

Health priorities

Emotional health and wellbeing

Mental health and wellbeing was a prominent theme throughout the qualitative findings. Research suggests that there has been a growth in recent years in poor emotional wellbeing and mental health among some children and young people (Margo et al., 2006). For example, previous research has suggested that poor emotional wellbeing and health increased during the 1990s (Nuffield Foundation, 2004). In addition, previous studies of wellbeing of younger groups have suggested that one in five children between the age of eight and 10 suffered from either declining or consistently low levels of wellbeing (Gutman and Feinstein, 2008). These children were more likely to be boys, low achievers and children from lower socioeconomic groups. As pre-adolescents become more independent and begin to spend more time with their peers, the importance of 'fitting in' becomes increasingly important. Within this context, bullying is common. Previous research has suggested that bullying could potentially be an issue for young people between the ages of 10–13. A survey of parents and children found that four in 10 of this age group had experienced one or more forms of bullying in the past 12 months (Gilby et al., 2008). Increased access to mobile phones and the internet, particularly in terms of access to social media, has also been associated with increased incidence of 'cyber bullying' and depression (O'Keeffe and Clarke-Pearson, 2011). Previous research suggests that these effects could be associated with lower levels of self-esteem and agency, and more negative attitudes towards school (Gilby et al., 2008).

Body image begins to become important during the pre-adolescent period. In Liverpool, 52.5% of young people aged 14-16 reported that they felt their body was 'about the right size', similar to the England average of 52.4% (PHE, 2016). Research suggests that maternal eating disorders predict body dissatisfaction and weight/shape concerns in adolescent girls and dieting in boys (Micali et al.,

2015). Consequently prevention strategies should be gender-specific and target modifiable predictors in childhood and early adolescence.

Self-harming behaviours appear to have greatly increased in frequency in adolescents in the past few decades, with hospital admissions due to self-harm increasing by 68% between 2000 and 2010 (YoungMinds, 2011). Reasons behind this increase are unclear, but research suggests that greater availability of medication, increased stress facing adolescents, greater alcohol and drug consumption, and social transmission of the behaviour are possible contributory factors (Hawton et al., 2012). Research suggests that around 10% of adolescents report having self-harmed, with such behaviours more common in female adolescents than male adolescents. Self-harm presentations become increasingly common from age 12 years onwards, particularly in girls, such that between ages 12 years and 15 years the girl-to-boy ratio is as high as five or six to one. There have been few studies of self-harm in individuals younger than 12 years, making the estimation of self-harm in children in the community impossible, but presentations to hospital after self-harm are rare in this age group. The sex ratio decreases with age in the later teenage years as the behaviour becomes increasingly common in boys and levels off in girls. Self-harm rates are higher in adolescents from lower socioeconomic groups (Hawton et al., 2012).

Education and social and emotional wellbeing

Research evidence shows that education and health are closely linked (Bradley and Greene, 2013; Suhrcke and de Paz Nieves, 2011), and consequently promoting the health and wellbeing of children and young people within schools has the potential to improve educational outcomes and health and wellbeing outcomes (PHE, 2014b). The educational process as a whole provides skills such as critical thinking and making choices enabling for options for healthy lifestyles.

Current NICE guidance on social and emotional wellbeing in primary education (NICE, 2008) and secondary education (NICE, 2009a) is aimed at teachers and school governors, and staff in local authority children's services, primary care and child and adolescent mental health services. Guidance focuses on universal interventions used as part of an organisation-wide approach (that is, interventions that can be used to support all young people). It does not cover targeted approaches. Here, recommendations include:

- Local authorities should ensure schools provide an emotionally secure environment that prevents bullying and provides help and support for children (and their families) who may have problems.
- Schools should have a programme to help develop the emotional and social wellbeing of all children. It should be integrated into all aspects of the curriculum and staff should be trained to deliver it effectively.
- Schools should also plan activities to help children develop social and emotional skills and wellbeing, and to help parents develop their parenting skills.
- Schools and local authorities should make sure teachers and other staff are trained to identify when children at school show signs of anxiety or social and emotional problems. They should be able to discuss the problems with parents and carers and develop a plan to deal with them, involving specialists where needed. Those at higher risk of these problems include looked after children, those in families where there is instability or conflict and those who have had a bereavement.

(LPHO, 2012; NICE, 2008; NICE, 2009)

School absences

As highlighted in the quantitative section, absence from school has important wide-ranging implications for young people. In Liverpool in 2014/15, the rate of pupil absence was 5.47%; significantly higher than the England average (4.62%).

The transition between primary and secondary school represents a major change for most pupils and schools need to work together to put in place arrangements to make the transition as smooth as possible. Schools have a role in promoting factors that create resilience, helping to develop skills such as emotional management, self-awareness, optimism, a sense of coherence, social skills and empathy (Weare, 2010). Those who have been absent should be positively welcomed on their return (WAG, 2011)

Targeted approaches are required for children who are showing early signs of emotional and social difficulties (NICE, 2008; NICE, 2009). Schools have a safeguarding duty in respect of their pupils, and as part of this should investigate any unexplained absences, with prompt action and early intervention crucial in ensuring the best possible outcomes (DfE, 2016)

Children who are persistently absent face a number of multiple and overlapping needs within the home, including substance misuse, mental and physical health issues, housing issues, poor family relationships and poverty (Tallis, 2015). Targeted support is required for those with poor attendance. Key to effective interventions are the following actions:

- Identifying children/families in need
- Parental engagement
- Addressing student behavioural issues
- Joint working – including social services, housing and mental health services, as well as crisis support agencies such as food banks and domestic violence services where appropriate
- Supporting and training pastoral staff and teachers

(NICE, 2008; NICE, 2009; Tallis, 2015)

The importance of addressing the wider determinants of school absence, involving joint working, is illustrated by the reported 50% reduction in self-reported school absence days following insulation measures in fuel-poor homes (Barnado's, 2012; DH, 2009). Targeted specialist therapeutic help should be located within a universal, whole school approach, creating a supportive environment that will help to reduce stigma (as with Pyramid clubs [school activity clubs that aim to improve children's confidence and friendship development]) (Weare, 2010).

Targeted approaches in schools are mainly delivered by the voluntary sector, for example Pyramid after school clubs, which help shy, quiet, withdrawn children develop confidence (UWL, online). School-Home Support (SHS) is a charity that partners with schools to tackle poor attendance. They work to address the root causes of the issues that are preventing children from attending school. Strategies can then be developed from the particular needs identified, such as developing mechanisms for coping with bullying (Kearney, 2008; Place et al., 2000). SHS report some success,

with interventions increasing attendance on average by 34 days – and 64% per cent of young people in the scheme making academic improvement within the academic year (Tallis, 2015).

Special educational needs and disabilities

Children and young people with special educational needs and/or disabilities experience increased difficulties in terms of educational and social development. Children with learning disabilities are at greatly increased risk of behaviour problems but less likely to receive early intervention. Early intervention can help to resolve problems quickly and prevent poor long-term outcomes such as behavioural difficulties (The Challenging Behaviour Foundation, 2014). There is robust evidence that early behavioural interventions such as the Triple P Parenting Programme[3] and Incredible Years interventions can have positive effects on both parent and child outcomes (NICE, 2013a; NICE, 2015b). Local authorities should ensure that children with learning disabilities and their families are able to access existing early intervention programmes (The Challenging Behaviour Foundation, 2014).

Children and young people with caring responsibilities

Young carers are those who care for family members to such a level that their emotional and physical responsibilities negatively impact on their own development. They provide care to another family member, usually an adult, who has a physical illness/disability, mental ill health, sensory disability, problematic drug or alcohol use or is HIV positive (The Children's Society, 2013). The onset of their caring role will often occur between the ages of 8 and 10 years (McAndrew et al., 2012) and research suggests that one in 12 young carers care for more than 15 hours per week, around one in 20 misses school because of their caring responsibilities, and are no more likely than their peers to come into contact with support agencies (The Children's Society, 2013).

. Many young carers remain 'hidden' and beyond the reach of services and supports designed to help them in their caring role (Smyth et al., 2011). Being a young carer can have detrimental effects on young people, including problems at school, health problems, emotional difficulties, isolation and lack of time for leisure (Frank and McLarnon, 2008). However, although young carers have identified current stresses and service shortcomings which may make it harder for them to cope, they also identified personal gains from their experiences (Heyman and Heyman, 2013).

In Liverpool, there are significantly more young carers under the age of 15 (1.38%) compared to England as a whole (1.11%). Data from 2012-2013 captured by Barnardos Liverpool Action With Young Carers reported that 156 young carers were receiving support from the service (Liverpool City Council, 2014b).

Support for young carers should be in line with the government publication 'Recognised, valued and supported: Next Steps for Carers Strategy (2010)'(DH, 2010; The Children's Society, 2012b). The vision is that 'Children and young people will be protected from inappropriate caring and have the support they need to learn, develop and thrive, to enjoy positive childhoods'. Services should provide an opportunity for young carers to be themselves, focussing on them as young people and not as young carers (BLF, 2013). Schools and school nurses have an important role in identifying young carers and supporting their health and wellbeing and directing them to services (DH & DfE, 2014; Smyth et al., 2011). Young carers projects or similar direct services made available through

[3] Positive Parenting Programme, or Triple P – is a population based parenting programme used, for example, in Glasgow http://www.glasgowlife.org.uk/communities/childrenyoungpeopleandfamilies/under5's/ppp/pages/default.aspx

local targeted youth support are effective (Frank and McLarnon, 2008). Local authority commissioners can link with the voluntary sector organisations that work to provide support for young carers (including Action for Children, Barnado's, Carers UK, and the Children's Society). The support required can be summarised as follows:

- Seek to identify young carers and intervene early, with multi-disciplinary working following a whole-family approach, providing support so that family units are sustained that which avoid children being required to take on inappropriate caring roles
- Schools to ensure links are in place with young carer's services
- Children's mental health services to link with young carer's projects
- Listen to the voices of young carers and ensure all services are young people friendly
- Young carers to be supported by relevant agencies to ensure they are able to lead a life away from their caring responsibilities
- Ensure the school knows which children are young carers, so that flexible solutions can be discussed in relation to homework etc.
- Be aware that the young carer may need help and support in emergency situations such as a school mini bus running late on the way home from a school trip, or if they themselves need emergency or routine health care.

(BLF, 2013; DfE, 2011; DH, 2010; DH & DfE, undated; LPHO, 2012; Smyth et al., 2011; The Children's Society, 2012a; The Children's Society, 2012b).

Obesity and physical activity

Up to 79% of children who are obese in their teens are likely to remain obese as adults, which can lead to health problems in adulthood such as Type 2 diabetes, heart disease and certain cancers (NICE, 2015c). Various diseases or conditions may be associated with obesity in children, including Type 2 diabetes, a condition rarely found in children until recently. Being overweight as a child can also impact on self-esteem and quality of life (NICE, 2015c).

Younger generations are becoming obese at earlier ages and staying obese for longer (DH, 2016; Johnsonet al., 2015). Obesity rates are highest for children from the most deprived areas (DH, 2016; HSCIC, 2015).

In England, there was an increase in levels of overweight and obesity amongst children aged 10-11 between 2006 and 2010; this plateaud between 2010 to 2015. However latest figures for 2015/16 show that levels have risen again. Over a third (34.2%) of children aged 10-11 were either overweight or obese in 2015/16, and current figures show that almost 1 in 5 (19.8%) are obese (PHE, 2017).

Children in Liverpool have higher than average levels of overweight and obesity; 39.8% of children aged 10-11 are overweight (including obese), compared to 34.2% nationally; and 23.8% are obese, compared to 19.8% nationally (2015/16) (PHE, 2017).

NICE clinical guidelines on the prevention, identification, assessment and management of overweight and obesity in adults and children aim to stop the rise in obesity and related diseases, make preventative interventions more effective, and improve the care (particularly primary care) of obese adults and children (NICE, 2006 [updated 2015]). This guidance focuses on encouraging

individuals to eat a healthy diet and take the recommended level of exercise. Previous NICE public health guidelines in 2012 had outlined how to work with local communities to tackle obesity (NICE, 2012b).

Interventions relating to obesity in school age children are detailed in the literature review for Stage 2 of this health needs assessment. They can be summarised as follows:

- Ensure obesity is a priority in local planning, involving joint working between local authorities, local communities, local employers, schools, charities and the NHS
- Create a network of community champions, ensuring local authorities and the NHS are exemplars of good practice
- Listen to the views of children, young people, adults, families and communities, involving them in commissioning decisions
- Ensure family involvement in interventions to ensure that improvements benefit the whole family and can be maintained

(LGA, 2013; NICE, 2006 [updated 2015]; NICE, 2012b; NICE, 2015c).

A report by the Chief Medical Officer detailed the importance of physical activity in order to remain healthier, with a minimum of three hours per day recommended for children under five years who can walk unaided, and a minimum of one hour per day recommended for those aged five to 18 years (DH, 2011). The government recently released a new childhood obesity strategy which aims to significantly reduce England's rate of childhood obesity within the next ten years (DH, 2016). It cites a number of actions which aim to tackle the wider determinants of childhood obesity. These include a soft drinks industry levy, a sugar reduction programme within the food and drinks industry, research into making products healthier in collaboration with the food and drinks industry, and a framework for the nutrient profile on foods and drinks to be updated. It also includes actions to be taken by schools, in ensuring 30 minutes minimum of physical activity per day, encouraging walking and cycling to school and improvements to school food.

Access to green spaces is particularly important for children and young people in order for them to grow and develop appropriately (PHE, 2014a). Sport is reported to be associated with improved psychosocial health above and beyond improvements attributable to participation in physical activity, particularly in terms of team sports, which appear to be associated with improved health outcomes compared to individual activities, due to the social nature of the participation (Eime et al., 2013). Limited access to green spaces has been linked to higher body mass index (BMI) scores, along with a positive association being reported between academic attainment and the physical activity levels of children and young people (PHE, 2014b).

Risk-taking behaviours

During pre-adolescence, young people's attitudes towards risk-taking behaviours change as they begin to desire more independence and autonomy. There is a dearth of robust evidence available on this topic, however a key survey of parents and children delivered in 2008 suggests that almost 60% of 10–19 year olds agreed with the statement 'I like taking risks in life' (Gilby et al., 2008). While the majority of this age group do not begin to engage in risky behaviours associated with particularly

negative impacts until later teenage years (for example, drinking, smoking, substance misuse and violence [Gilby et al., 2008], there some evidence suggests that these behaviours are beginning to occur amongst a small minority of pre-adolescents earlier than ever before (Sodha, 2008).

The survey with parents and children also reported that just under half of all 10-13 year olds (46%) surveyed said they had engaged in at least one of the following risky behaviours: getting into trouble at school; been drunk; started a fight; smoked cigarettes, skipped school; bullied someone; used an illegal drug; been expelled; stolen something; engaged in graffiti; or ran away from home(Gilby et al., 2008). In Liverpool, hospital admissions for substance misuse amongst 15-24 year olds are significantly worse than the national average, but levels of smoking and alcohol use amongst 15 year olds are significantly better (PHI LJMU, 2016).

Prevention approaches for young people are usually not drug, alcohol or tobacco specific but are focused more on reducing risks and increasing resilience (PHE, 2015). Evidence shows that physical and mental wellbeing, and good social relationships and support are all protective factors (PHE, 2015). Approaches that build resilience and ensure informed decision making seem to be most effective (PHE, 2015). Young people need to understand basic information about alcohol and other substances and their effects. Harm reduction messages (drinking less, getting home safely etc.) are also important. Education setting interventions are detailed in NICE recommendations and cover further education colleges and sixth form colleges (NICE, 2007; NICE, 2010b; NICE, 2012a; NICE, 2015a).

Several important risk and protective factors relate to a young person's family environment. Parents can be helped to deal with alcohol and other issues through simple leaflets and courses focussing on parenting skills (Mentor, 2013). For those whose risk-taking behaviour is already a cause for concern, family-based prevention approaches have been found to be more than twice as effective as approaches that are solely child focused (for example schools-based, peer-based or individual-based)(JRF, 2009). A combination of family- and child-focused approaches is recommended.

Injuries

Road traffic accidents are the most significant cause of unintentional injury for young people (EuroSafe, 2010). In Liverpool, significantly more children are killed or seriously injured in road traffic accidents (35.9 per 100,000) compared to the national average (17.0 per 100,000, 2013-15) (PHE, 2017).

Examples of effective actions for reducing injury risks for young people include lowering speed limits, promotions of cycle helmets, sports and workplace safety measures, and life skill development programmes in schools and colleges (as described under the above alcohol heading) (EuroSafe, 2010). Public Health England suggest steps for improving safety for young and novice drivers and riders. However they point out that travel independence of young people can be supported by local authorities through creating safe environments, with the provision of safe cycling and walking facilities, and improved access to public transport, including travel passes (PHE, 2014). Children and young people who live in more deprived areas are at a much greater risk of injury than those from the most affluent areas (PHE, 2014). It is important to support action on child poverty, as outlined in the Liverpool City Region Child Poverty Strategy (Liverpool City Region, 2011). The provision of good housing in safe neighbourhoods with access to green spaces will help to reduce injury risks for children and young people.

Common Health Conditions

Asthma is the most common long-term medical condition, with current figures showing that 1 in 11 children diagnosed with this condition (NICE, 2013b). As discussed, poor control of asthma and poor compliance with therapy can lead to exacerbated symptoms among children and result in hospital admissions, which in Liverpool, are higher than the national average amongst those aged 0-19.

NICE draft guidelines on the management of asthma note the importance of involving children and their families in discussions so they can make informed decisions about their care (NICE, 2016). In order to avoid medical emergencies, the guidelines note the importance of exploring the possible reasons for uncontrolled asthma, which could include lack of adherence; inappropriate inhaler technique; psychosocial factors; and seasonal or environmental factors. The guidelines give details of levels of clinical care required for acute attacks as well as long-term management. They suggest the offer of a self-management package, with supportive education, to children aged 5 and over and their families or carers (NICE, 2016).

Parents should be advised about the dangers to their children with asthma of smoking, and be offered appropriate support to stop smoking at every visit. They should be advised to at least avoid smoking in rooms/cars used by children with asthma. Weight-loss interventions (including dietary and exercise-based programmes) can be considered for overweight and obese children with asthma to improve asthma control. All children with asthma should be encouraged to engage in regular physical activity, because of its general health benefits (GINA, 2016; SIGN, 2016) (NICE, 2013b).

Children often have fewer symptoms over time, and an important part of their management is the 'step down' of treatment if asthma is well controlled (NICE, 2016). An increase in symptoms or an asthma attack is usually caused by exposure to a trigger that the person is sensitive to. Triggers may be viral infections, environmental tobacco smoke, aeroallergens or exercise. There is no cure for asthma, so management of the condition focuses on reducing exposure to known triggers (NICE, 2016).

Good, affordable, warm housing can reduce the incidence of childhood asthma (DH, 2009). Fuel poverty can have damaging effects, with coldness impairing lung function and triggering broncho-constriction in asthma. Home energy improvements have been shown to decrease school sickness by 80% in children with asthma or recurrent respiratory infections (Somerville et al., 2000).

Economic wellbeing

There is a strong association between socioeconomic status and health. Families on low income or reliant on benefits are more likely to experience poorer health outcomes, and research shows that a number of health conditions are linked with deprivation (Marmot, 2010).

Levels of deprivation within Liverpool are particularly high in the north, with 40% of households in the city considered to be living at or close to the poverty line (Liverpool City Council, 2014d). Child poverty data shows that 32.5% of all children in Liverpool reside in a household in receipt of out-of-work benefits or tax credits with a median income less than 60% of the UK median income. This is significantly higher than the North West figure (22.1%) and the England average (20.1%) (Liverpool City Council, 2014c).

There is a large body of evidence to suggest that poverty has a substantial effect on health and development for children and young people (Cabieses et al., 2016). These effects have been shown to include lower educational attainment, job insecurity and unemployment in adulthood, increased likelihood of engaging in criminal and antisocial behaviour, and greater chance of imprisonment and higher risk of premature death (APPG, 2016).

It is important to build resilience and tackle inequalities by addressing the social determinants of health and wellbeing, through joint action by a broad range of organisations. This involves a consideration of the health impact of wider services and initiatives, such as providing good quality family housing; opportunities for exercise and access to green spaces; and improved access for parents to information about informal and formal health and social services (LPHO, 2012; UCLAN, 2010). It would also involve supporting action on child poverty, as outlined in the Liverpool City Region Child Poverty Strategy (Liverpool City Region, 2011).

Asylum Seekers

An Asylum Seeker is an individual who has entered the UK to claim asylum and has registered this fact with the UK Border Agency. Those who have their asylum claim accepted become a refugee and are given "leave to remain". Those who have their asylum claim rejected are required to leave the UK. Once an asylum claim has been accept, the individual becomes known as a refugee. A refugee is entitled to the same rights and support as any other individual who is a legal resident, including the right to work. Refugees usually must reapply to remain in the UK after three or five years (Asylum Link Merseyside, 2017).

To be recognised as a refugee, individuals must have left their home country and be unable to return due to well-founded fear of persecution because of race, religion, nationality, political opinion and/or membership of a particular social group. The criteria for the granting of can be found in the 1951 UN Convention relating to the Status of Refugees. The UK is a signatory to the convention and consequently has a legal obligation to protect refugees (Asylum Link Merseyside, 2017).

Liverpool has one of the five initial assessment centres in the UK, where individuals seeking asylum are housed for up to three weeks whilst their claim is assessed. In 2013 nearly 3,970 people underwent assessment in Liverpool; 332 0-5 year olds (11.2%), 366 5-16 year olds (12.3%), and 2,272 aged 16 year or over (76.5%) (Liverpool City Council, 2014a).

Research conducted by Liverpool City Council (Liverpool City Council, 2014a) stated that people seeking asylum often experienced psychological trauma and that access to general and specialist mental health services was difficult. The report also suggested that screenings for tuberculous and HIV were not always completed in a timely manner and often the individual concerned had been removed from the UK or elsewhere in the North West before this screening was complete. Attention was also drawn to the limited translations services available to enable more effective and seamless care and support.

It is government policy that the majority of unaccompanied asylum seeking children should enter local authority care. Providing a stable base and the development of a relationship with a key adult, such as a foster carer, is seen as the core to the long term welfare of the child (Simmonds and Merredew, 2010). Support and training for foster parents and health and social service staff is necessary, ensuring that they have a good understanding of the particular issues affecting unaccompanied asylum-seeking children (NICE, 2010a). Comprehensive initial health assessments

are important, to assist in early intervention with any problems identified. These should be sensitive to the culture of the child, and with access to interpreters where necessary. For emotional wellbeing, it is important for the child to establish friendship networks and culturally relevant networks, including those that meet religious, dietary, dress beliefs and needs. Contact with or information about family and friends in the country of origin may also be very important. It is essential however, that any of this is driven through consultation and discussion with young people themselves (Simmonds and Merredew, 2010,NICE, 2010a)

Overarching themes include the importance of involving young people, giving them opportunities to express their view, to be involved in decisions about their health and care and to make informed choices (DH, 2012).

4.Discussion & Recommendations

Pre-adolescence is an important time in a child's life when significant and fundamental changes take place (Mensah et al., 2013). Children can experience emotional and physical changes during puberty and at this time develop their own identity and value systems (Sodha, 2008). As these changes occur it is common for a child in this age group to be particularly self-conscious and lacking in self-esteem and a time when they may engage in risky behaviours (Sodha, 2008). Understanding the experiences and outcomes of children during pre-adolescence is key to understanding and supporting them during this time of transition.

Obesity is now considered as one of the most serious global health challenges, with childhood obesity linked to obesity in adulthood and a number of long-term health conditions later in life. Children currently have their weight checked in Reception and again in year 6 as part of the NCMP, with parents receiving a letter if the school nurse has any concerns over a child's weight. The literature review and quantitative analysis showed that Liverpool has a significantly higher prevalence of obesity amongst year 6 pupils when compared to the national average.

During the focus group with the children, discussions about health were largely associated with preventing and treating ill-health through adopting a healthy lifestyle. Specifically, children focused on exercise and fitness, eating a balanced diet and weight management. They used the term obese as a negative term and associated it with poor diet and being unfit. Whilst this appeared to be a priority for the children, stakeholders also had concerns with pre-adolescent children's diet and noted that children they work with often opt for 'junk food' over health snacks and confirmed that obesity was a growing concern for this age group. Stakeholders discussed the need to share concerns with parents and providing advice around encouraging children to eat more healthily. Support included cooking classes to build skills and practical advice to develop menus and shop on a budget to increase parents and children's understanding of healthy eating.

The Chief Medical Officer report (DH, 2011) detailed the importance of physical exercise to remain healthy and recommends daily exercise for children. The children themselves discussed actively taking part in sports at school, with stakeholders also discussing a 'walking bus initiative' which encouraged children to walk to school and therefore increase opportunities for children to be physically active. Stakeholders felt that whilst it was important to convey messages of healthy eating and encourage regular exercise, it was also important to consider that healthy body image is a key message during the pre-adolescent period and that messages regarding weight should be appropriately disseminated.

We know from previous research that young people's attitudes to risk change during pre-adolescence, as they begin to desire more independence and autonomy. Whilst engaging in risky behaviours is more likely to occur after the pre-adolescence stage, it is still important to consider prevention interventions at this stage. Whilst family based approaches are recommended for young people engaging in risky behaviours, prevention approaches usually focus more specifically on building resilience to reduce risks (PHE, 2015). Some stakeholders discussed how they were starting to have some discussions about alcohol and substance use with this age group. The majority of concerns about young people and alcohol and substance use tended to be focused on teenagers; however the Drug and Alcohol Team Leader did discuss how they would implement interventions in primary schools if they were requested. The children who participated in the focus group did view

staying safe as a way of being healthy and whilst none of them did talk about engaging any risky behaviours they appeared to have good knowledge around the dangers of smoking, drinking alcohol and using drugs. The Liverpool City Region Child Poverty Strategy recognises that children who live in more deprived areas are at a much greater risk of injury. The children at the focus group also viewed accidents, fighting and physical injury as an unhealthy behaviour. Interestingly, the children also viewed the responsibility of safety of others as a form of healthy behaviour.

Research suggests that there has been a growth in recent years in poor emotional wellbeing and mental health among some children and young people (Margo et al., 2006). The qualitative work demonstrated this, with mental health and wellbeing being a prominent theme throughout the full needs assessment (0-19 years). Whilst mental health was a prominent discussion with the older groups (discussed in report four), the pre-adolescent children did consider wellbeing as an important health factor.

Stakeholders had great concern about the rise in poor mental health for children during adolescence. They discussed some children being exposed to stressful situations at home, and how this had a detrimental impact on their mental health. Stakeholders also had concerns about waiting times for more specialist services such as CAMHS, and a demand for services associated with the growing number of children requiring support. Stakeholders also felt there was a concern around the lack of provision for children showing early signs of or low level mental health issues that did not meet the criteria to attend specialist support; here it was felt felt that there was not a direct service for these children, with many services working outside of their remit to support them and provide early intervention to prevent the need for more specialist services.

Evidence shows that having good social relationships is a protective factor for good mental health and wellbeing (PHE, 2015). Pre-adolescence is a time when children become more independent from their family and start to spend more time with their friends. Stakeholders were concerned that children in this age group were not forming as many relationships or developing their social skills due to increased time watching television and using computers. They stressed the importance of accessing youth clubs, sports clubs and other outside school activities to socialise with peers.

Stakeholders also linked low self-esteem and lack of self-belief to poor motivation and engagement and attainment at school. The children's focus groups reflected this, stating that not looking after their health could have an impact on their school work. Research shows that education and health are closely linked, and schools therefore have a responsibility to promote health and wellbeing, enhance critical thinking skills and enable options for healthy lifestyles to improve health and wellbeing, and educational outcomes. Guidance on social and emotional wellbeing in primary and secondary education recommends that schools provide an emotionally secure environment through providing emotional and social wellbeing support and activities for children to develop their social and emotional skills and strengthen resilience, alongside support for parents to develop their skills and support their children (LPHO, 2012; NICE, 2008; NICE, 2009). Stakeholders also discussed the importance of multiagency working to support children during their transition from primary to secondary school.

During the focus group, the children's health knowledge appeared to come from lessons at school and from watching television. They did however discuss receiving mixed messages from different education sources and were sometimes unsure of the facts. The children could list a number of different avenues for health support, and they preferred to speak to a person, either a health

professional or someone experienced, rather than using the internet for advice. They all believed that it was important for children and young people to be taught about health and to be made aware of where to go for health advice and support. They also thought it was important to involve parents in health education. Liverpool is currently part of the Youth Connect 5 Programme, which uses a train the trainer model to provide a programme of training sessions with parents to help improve their parenting skills to strengthen their relationship with their children.

Factors leading to and consequences of, economic deprivation was a key theme running through all stages of this HNA (0-19 years). There was a strong association between socioeconomic status and health, with families on low income or reliant on benefits more likely to experience poorer health outcomes. Liverpool has areas of high deprivation and child poverty data shows that Liverpool is significantly higher than the national average for children lining in households receiving out of work benefits and tax credits. Deprivation is linked to poor physical and mental health, housing, diet, education and employment. It is therefore important to build resilience and tackle inequalities by addressing the social determinants of health and wellbeing, through joint action by a broad range of organisations.

This section of the HNA also looked at children seeking asylum as a seldom heard group and health priority. With Liverpool hosting one of the five initial assessment centres in the UK, families seeking asylum often require health provision for their children. Local research suggests that people seeking asylum are often experiencing psychological trauma and that access to general and specialist mental health services was difficult (Liverpool City Council, 2014a).

Whilst it was not possible to speak with children seeking asylum, the stakeholder interviews explored at the needs and provision for this group of children. Economic deprivation and limited funds were seen as a concern with children not always having access to healthy foods, warm clothing or adequate housing which could have a detrimental effect on their physical, mental health and education. Literature shows that building support networks is essential for building resilience; however children often find it difficult to build friendships with often living in temporary accommodation and needing to move around often. This also has a negative impact on their education. Stakeholders also described the difficulties in ensuring they supported and educated children with language barriers, learning difficulties and those who had experiences trauma. Early intervention was recognised as key to understanding the physical and mental health needs of children seeking asylum to ensure culturally sensitive support is put in place to support their emotional wellbeing.

Recommendations

- Children described television as a key source of health information but expressed more scepticism about the Internet, with uncertainty about which information to believe. Although a breadth of health information is provided through a range of sources (such as school, for example) consider ways to include health within education materials/ sessions on media and digital literacy in classrooms.
- The children participating in the focus groups preferred face-to-face communication about health with those who were older and had more experience. Health promotion campaigns which encourage discussion between children and parents may be a particularly appealing format for children.

- Children recognised their own role in sharing health information. Review the existing evidence on children as peer health advocates and consider how this could link into existing school council structures and wider community organisations.
- The role of parents was raised as central throughout the HNA. Children believed that parents should be included in education around healthy lifestyles. Stakeholders also discussed the importance of support for parents, family friendly organisations and family based approaches.
- Obesity, physical activity and healthy eating featured heavily within this HNA. There is an abundance of evidence regarding health initiatives to tackle health priorities for pre-adolescent children, particularly in areas such as physical activity and healthy eating. School-based support (including maximising opportunities for children to be physically active in and around the school day), parental involvement, and improved access to green spaces have all been recommended as integral to tackling these issues. Local authorities, communities, schools, charities and the NHS should work to provide holistic support; the importance of which has been raised across each section of this HNA and should continue to be encouraged across the Liverpool City Region. All recommendations should be developed and implemented in collaboration with a wide range of stakeholders.
- Whilst it is important to covey messages of healthy eating and encourage regular exercise, it's also important to consider that body image begins to become important during the pre-adolescent period, and it is therefore important that these messages are disseminated in a safe and appropriate way.
- Creating safe environments for physical activities such as walking and cycling are paramount, and link with recommendations relating to both obesity and injuries; another key public health priority amongst this age group. Effective education should be employed consistently in a range of settings (such as schools and youth centres) to cover road safety and cycling proficiency (including helmet use).
- Mental health was highlighted as a key concern for this age group, with evidence suggesting that issues such as confidence, socialisation, self-esteem, anxiety and stress were key priority areas. Stakeholders suggested that mental health provision for early intervention and lower level mental health concerns appears to be limited. Teachers raised the importance of working effectively with external services, community organisations and parents to improve identification and support regarding these issues. This holistic approach to mental health should be encouraged, with a focus on understanding the role of community organisations in supporting confidence building, self-esteem and coping strategies, particularly where resources are limited amongst existing CAMHS arrangements.
- Risk-taking behaviours were highlighted as an important feature within this HNA, where pre-adolescent's being to experiment with their independence and autonomy. Prevention approaches suggest that increasing resilience and social and emotional wellbeing will reduce the prevalence of risk-taking behaviours, and link into the recommendations regarding mental health (see above).
- Although not described amongst the qualitative data, we know that rates of self-harm are increasing amongst adolescents. Self-hard presentations become common from aged 12 onwards, suggesting early prevention is vital. Organisations should work together to further understand self-harm and consider appropriate implementing strategies in line with mental health support.

- Sexual health was identified as an important issue to explore amongst pre-adolescent children, particularly in terms of ensuring equitable and consistent delivery of educational sessions (this was particularly an issue raised in relation to the faith schools). Schools should be encouraged to consider the education they provide, and whether this could be enhanced by collaborative working with external organisations.
- Education and pupil absences are important indicators for health and wellbeing. Programmes of school-based social and emotional wellbeing should be integrated into all aspects of the school curriculum and should also include parent involvement. A number of targeted recommendations have been identified by NICE; stakeholders should ensure that these are consistently implemented and that all school staff are appropriately trained to deliver effective support.
- Young carers were identified as a priority population group for Liverpool. Evidence has suggested that many young carers can remain hidden. Organisations should work to understand and identify the extent of young carers in Liverpool. Work with community groups could help identify young carers and the types of support they need. Work should be joined with statutory support, schools and community organisations to ensure that appropriate support is given to young carers.
- The needs of young asylum seekers featured within this stage of the HNA, with issues such as housing, language and nutrition viewed as priorities amongst this group. Multi-agency working is required to further understand the extent of health and wellbeing issues within this population, with consideration as to whether there are further hidden needs that are yet to be uncovered.

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