



Nottinghamshire  
County Council



Director of Public Health's

# Annual Report

2016



Healthy People,  
Healthy Communities



Healthy People, Healthy Communities

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Director of Public Health - Annual Report 2016

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## Acknowledgements

To all members of the Nottinghamshire County Council Public Health team, without whom this report would not be possible.



The Health and Social Care Act 2012 sets out a requirement for all Directors of Public Health to produce an annual independent report on the health of their local population (the local authority is required to publish it). The report is to raise awareness and understanding of local health issues, highlight areas of specific concern and make recommendations for change.

This is my first report as Director of Public Health. I hope it successfully tells the story of how where we live, combined with how we live, shapes our health and wellbeing. This means how long we live as well as our quality of life and ultimately the impact this has on our health and social care services. We hear a lot about our NHS through the media and whilst some of our health may depend on our health care system, the majority doesn't and we all have a part to play. Almost everything we do has an impact in some way on our health and wellbeing.

One of the reasons that my team and I moved from the NHS into Nottinghamshire County Council in 2013 was to enable us to have a stronger influence on those factors that influence our health and which local government has a responsibility for. So we all need to ensure that health and wellbeing is embedded into all aspects of local government business and that it is a corporate objective for all the Local Authorities working in Nottinghamshire. This report will describe some of the work already underway in Nottinghamshire as well as some of the challenges and opportunities. As the Nottinghamshire Health and Wellbeing strategy will be refreshed in 2017, I will be using this report and the recommendations to influence that new strategy for Nottinghamshire.

Together we need to be confident that we have done all that we can to promote the health of our citizens. We all value our health, but often don't think about it until it's threatened. I have set out recommendations for how local government and all its stakeholders can work together to make further progress on this important agenda.

Whilst we are living longer, these additional years of life are not always being spent in good health. Figure 1 below shows the difference between life expectancy (how long a person can expect to live) and healthy life expectancy (how long a person can expect to live in "good" health) in Nottinghamshire. Healthy life expectancy begins to be plotted only from

2009, as that is when this data started to be collected. From this graph, you can see that in Nottinghamshire, whilst life expectancy is gradually increasing, healthy life expectancy is gradually improving for women, but has recently declined amongst men. The most recent picture is one comparable with England averages.

**Figure 1: Life Expectancy and Healthy Life Expectancy in Nottinghamshire**

**Life and Healthy Life Expectancies in Nottinghamshire (compared to England)**



**Definitions**

**Healthy life expectancy at birth**

The average number of years a person would expect to live in good health based on recent mortality rates and levels of self-reported good health.

**Note:** only measured and reported from 2009 onwards.

**Life expectancy at birth**

The average number of years a person would expect to live based on recent mortality rates.

Source: ONS Life Expectancies (via PHE PHOF Fingertips tool) (last accessed November 2016)



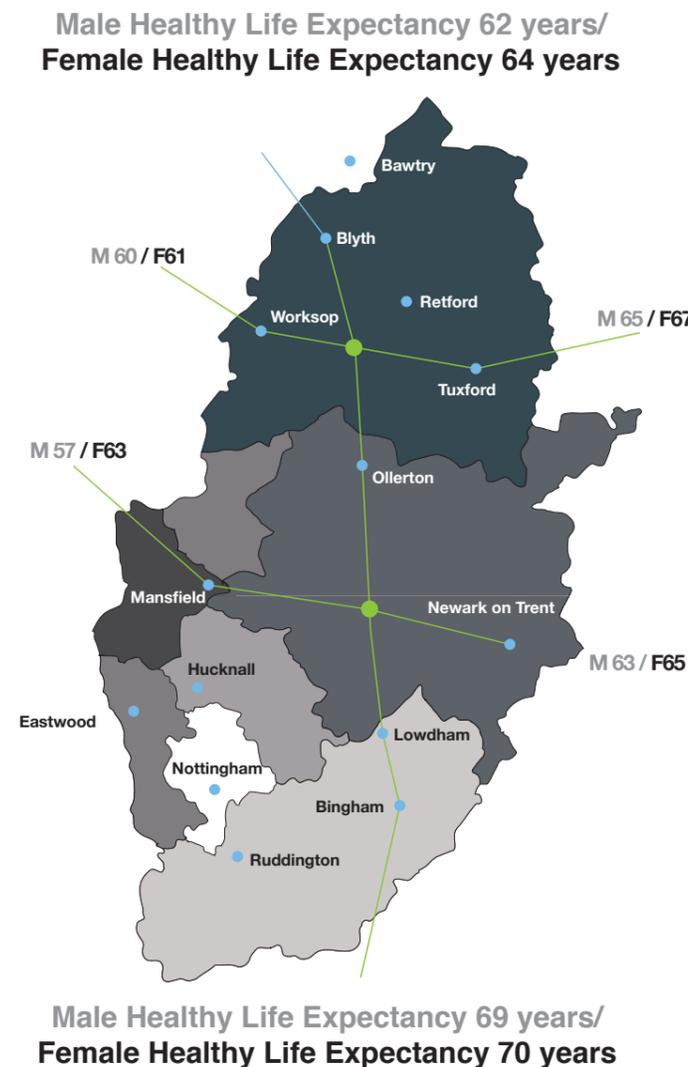
**Barbara Brady**  
Interim Director of Public Health  
for Nottinghamshire  
November 2016

The graph at figure 1 shows the picture for Nottinghamshire as a whole, but within the County, some communities have poorer levels of health than others. This eventually impacts on everyone as it places demands on our entire system.

Figure 2 below shows up to a 6 year difference in healthy life expectancy from the North to the South and West to East of Nottinghamshire. For instance, between Mansfield and Newark on Trent, healthy

life expectancy drops from 63 to 57 for men and from 65 to 63 for women. In a North-South direction there is a similar discrepancy, from 62 for men and 64 for women in the North of the County to 69 for men and 70 for women in the South. The pattern shown, with different healthy life expectations for different parts of the County, is not unique to Nottinghamshire. I would argue that all our residents should have the opportunity to enjoy the best health and wellbeing they can.

**Figure 2: "Road Map" showing differences in healthy life expectancies across Nottinghamshire**



The Marmot Report 'Fair Society, Healthy Lives' published in 2010<sup>1</sup> concluded that 'there is a social gradient in health: the lower a person's social position, the worse his or her health. Action should focus on reducing the gradient in health. Focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage.'

Although we are 6 years on from the publication of that report, it remains as relevant today as when it was published. The Marmot report proposed actions proven to reduce health inequalities. This report concentrates on some of our progress in implementing Marmot's recommendations. This year the focus is on where we live and the choices we make. Reports in future years will cover other aspects of the Marmot report, focussing on those aspects which require action at a local level.



# Chapter 2

Health starts where we live: the importance of place

The physical environment, the conditions in which we live and work, affect our health. This includes the built environment, housing, neighbourhoods and transport infrastructure and physical factors such as air and water quality. Where we live is important for our health and wellbeing.

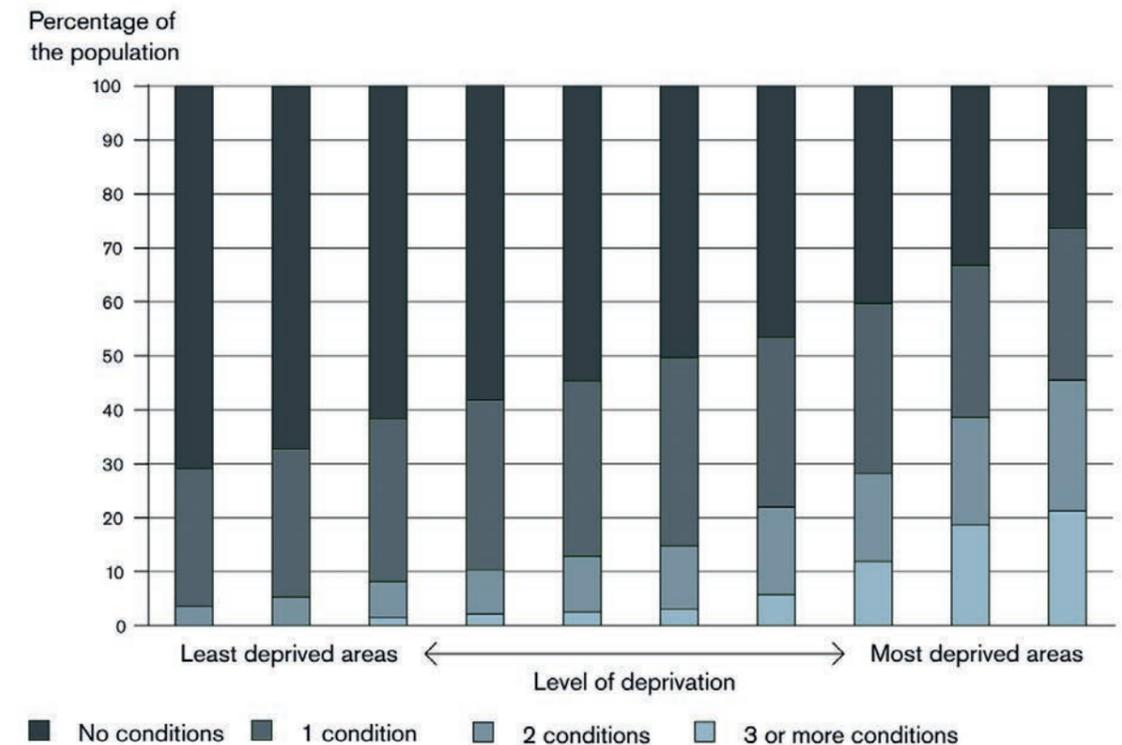
- Our local environment can support our health and help us to make healthy choices. Are there local shops that sell good quality fresh fruit and vegetables? Is it safe to cycle to school and work? Are there local job opportunities that we can get to inexpensively (preferably walking or cycling or by public transport) and in a reasonable amount of time? Is local housing warm, dry and affordable? Is the air clean? Do local restaurants and takeaways provide healthy menu choices?
- Our local environment can also support (or negatively affect) our wellbeing. Is it designed in a way to help people with dementia to move around? Are there safe parks and green spaces in which to exercise, play and relax? Is it an attractive place to live? Does it foster community

spirit and encourage people to get to know each other, or does it throw up barriers that make people feel isolated from each other?

- We also have an impact on our environment, from looking after our local surroundings to volunteering, which in turn has an impact on our health and wellbeing. Do we refrain from dropping litter? Are our homes energy efficient? Do we walk instead of driving? Do we consider the environment when we make choices about what we eat? Do we make choices that reduce noise pollution? Do we get involved in our local communities, get to know our neighbours and look out for each other?

The extent to which we live in homes and neighbourhoods that are good for mental and physical health varies considerably. Often those living in deprived areas live with the highest number of unhealthy environmental conditions (see figure 3).

**Figure 3: Percentage of the population in England living in areas with the least favourable environment conditions, 2001-6**



**Environmental conditions:** river water quality, air quality, green space, habitat favourable to biodiversity, flood risk, litter, detritus, housing conditions, road accidents, regulate sites (e.g. landfill) Source: Department for Environment, Food and Rural Affairs<sup>23</sup>

Source: Marmot Report 'Fair Society, Healthy Lives' 2010<sup>2</sup>

### The Marmot Report, Fair Society, Healthy Lives, recommends that local areas:

1. Prioritise policies and interventions that reduce both health inequalities across the social gradient and mitigate climate change, by:
  - a. Improving active travel
  - b. Improving the availability of good quality open and green spaces
  - c. Improving the food environment in local areas
  - d. Improving energy efficiency of housing
2. Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality

3. Support locally developed and evidence-based community regeneration programmes that:
  - a. Remove barriers to community participation and action
  - b. Reduce social isolation

To achieve these goals we must all work together: public agencies, private businesses, voluntary organisations, communities and citizens. Below we look in more detail at how to address the key objectives contained in the Marmot report in order to develop healthy places and communities in Nottinghamshire.

**Social Determinants of Health**  
The conditions in which people are born, grow, live, work and age

## Active travel

This involves more journeys happening through active travel (such as walking and cycling) rather than other forms of transport e.g. car. This will help improve the quality of life and physical and mental health of citizens as well as improving the environment by improving air quality and reducing congestion. People who live in walkable neighbourhoods have better social connections compared to areas with heavy car use. They are more likely to know their neighbours, trust other people and be socially engaged, all of which have a positive impact on health<sup>3</sup>.

For most people the easiest and most acceptable forms of physical activity are those that can be built into everyday life. The local environment can be an important influence on transport related physical activity (walking and cycling). Areas of greater deprivation are more likely to have transport environments that do not support walking and cycling. Fear of traffic can be a strong disincentive to allowing children to play outside and to go walking and cycling. Children in the 10% most deprived areas in the UK are more than three times more likely to be pedestrian casualties as children in the 10% least deprived<sup>4</sup>. Investing in better walking and cycling routes, reducing car speed to improve road safety and improving public transport all encourage active transport. Ensuring destinations such as workplaces, homes, schools, public facilities and open space are within walking and cycling distance helps to increase their 'walkability' and 'cycle-ability' and consequently to increase physical activity levels. Local areas should be designed so that they are easy and safe to walk around, with destinations such as workplaces, homes, schools, public facilities and open space within walking and cycling distance.

The Strategic Plan for Nottinghamshire<sup>5</sup> and subsequently both the Local Transport Plan<sup>6</sup> and Sustainable School Travel Strategy<sup>7</sup> promote the uptake of walking and cycling, reducing reliance on cars. The 2011 census data shows that 3% of people in Nottinghamshire aged 16-74 years old (excluding those working at home and not in employment) are travelling to work by bicycle. The target included in the Nottinghamshire Cycling Strategy Delivery Plan is to increase this level from 3% to 10% by 2025. Travel plans promote more sustainable travel to work by offering realistic alternatives to car trips. The implementation of these strategies has included the allocation of integrated transport block funding for local transport improvements, including those that specifically provide targeted walking and cycling infrastructure (e.g. footway or cycle route improvements, new crossing facilities) to enable people to access jobs, training and local services on foot or bicycle. These improvements have been complemented by focussed travel behaviour change campaigns such as residential, workplace, jobcentre and school travel planning to promote more sustainable travel to work, training, shops and services, to broaden travel horizons and offer realistic alternatives to car trips.

**Recommendation:** Continue to invest in safe walking and cycling infrastructure developments linking people to jobs, training and services (including the development and delivery of a joined up, safe and well connected cycle network across the County)

**Recommendation:** Target travel behaviour change campaigns to inform, encourage and enable people to make more walking and cycling trips more often

## Green spaces

The physical environment can have an important influence on choices to be physically active or sedentary. Access to high quality open spaces and opportunities for sport and recreation make an important contribution to the health and wellbeing of communities<sup>8</sup>. It is associated with positive health outcomes and can promote better mental health, decrease stress, reduce isolation, improve social cohesion and ease physical health problems<sup>9</sup>. The provision of natural habitats, trees, parks and walkable green space not only helps to promote physical and mental wellbeing, it improves air and water quality and reduces noise levels. Well designed and maintained good quality green space can also increase levels of social contact and integration<sup>10</sup>.

People from lower socioeconomic groups tend to have poorer access to environments that support physical activity such as parks, gardens and safe areas for play; are less likely to visit green space and more likely to live close to busy roads<sup>11</sup>.

Addressing this involves the provision and protection of natural habitats, trees, parks and walkable green space. Nottinghamshire County Council and the seven District/Borough Councils together play an important role in promoting parks, open spaces and allotments. They manage and maintain open spaces in the countryside through a network of country parks and cycle routes, including the nationally important Sherwood Forest.

**Recommendation:** Continue to protect, increase and improve green space particularly in our most deprived communities, and to improve access to open and green space for local residents

## Food environment

Our diets are often not as healthy as they should be, too high in fat, sugar and salt and low in fruit and vegetables and so increase the risk of stroke and heart diseases, type 2 diabetes, childhood and adult obesity and certain cancers. Improving the food environment, increasing the availability of good quality food, helps to address this, as do initiatives focused on improving individuals' diets (see chapter 3).

This can be addressed by promoting the provision of healthier food and drink across a range of settings using various tools such as the Government Buying Standards for Food and Catering services (GBSF)<sup>12</sup>, the Healthier and More Sustainable Catering guidance, Eatwell Guide and 5 A DAY.

The GBSF are aimed at ensuring food is produced to high levels of sustainability and nutritional standards, with a reduction in products that are high in fat, sugar and salt and promotion of fruit, vegetables and oily fish. Healthier catering needs to be at the heart of the tendering process and commissioners need to ensure that the GBSF and /or dedicated guidelines for early years, schools, hospitals and care homes are included in service specifications for publicly funded services.

The public sector needs to lead by example and healthy catering and vending can make a difference. District /Borough councils run and commission leisure services where there are cafes and vending machines. Nottinghamshire County Council through commissioned social care services has influence over diets of people receiving social care.

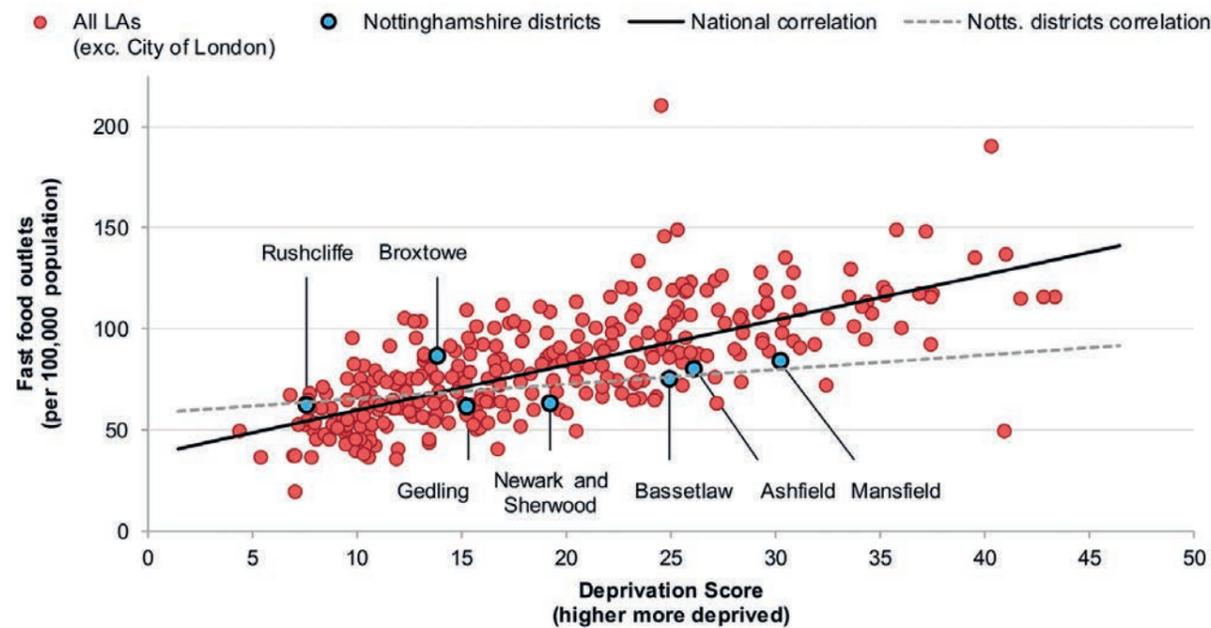
As part of improving health and wellbeing, NHS organisations are being encouraged to provide healthy food for staff, visitors and patients. This involves the banning of price promotions and advertisements of sugary drinks and foods high in fat, sugar and salt and the banning of these foods from checkouts along with ensuring that healthy options are available. This will be expanded to increase the number of sugar free drinks available and reducing portion sizes of snacks, confectionery and pre-packed meals.

**Recommendation:** All public sector organisations should provide healthy food for staff and visitors in line with what the NHS is doing

The physical environment can have an important influence on access to high calorie food. In deprived areas, healthy food is either not available, unacceptable, inaccessible or unaffordable. Improving the food environment involves addressing accessibility of affordable and nutritious food that is sustainably produced, processed and delivered. Having local shops within walking distance which stock healthy food also provides an environment that allows for active travel opportunities.

There is a positive association between deprivation and density of fast food outlets, with more deprived areas having more fast food outlets per head of population. Figure 4 shows the relationship between the density of fast food outlets and deprivation by local authority with the Nottinghamshire districts highlighted<sup>13</sup>. Locally, 30% of the variation in density of fast food outlets can be accounted for by deprivation.

**Figure 4: Relationship between density of fast food outlets and deprivation by local authority with Nottinghamshire County districts highlighted, 2013**



Source: Adapted from PHE NOO Fast food outlet density report 2013 URL: [http://www.noo.org.uk/visualisation/IMD2010 Local Authority Summaries](http://www.noo.org.uk/visualisation/IMD2010%20Local%20Authority%20Summaries)

Action on the food environment is supported by the National Institute of Health and Care Excellence<sup>14</sup> which recommends that the planning system restricts planning permission for takeaways and other food outlets in certain areas. Some local authorities have already started to use the legal and planning system to restrict the density of fast food outlets in local areas<sup>15</sup>.

Alongside planning policies, improving the quality of the food environment has the potential to influence food purchasing habits influencing diets<sup>16</sup>. Working with fast food businesses to improve the nutritional quality of the food they sell can improve access to healthier food choices and encourage people to adopt healthier eating habits. The Nottinghamshire Healthier Options Takeaway (HOT) merit scheme delivered by Environmental Health Officers aims to increase the accessibility and awareness of healthier options in hot food takeaways and sandwich shops, targeting those takeaways situated in areas of high deprivation within each district. There are currently nearly 100 businesses across the county that have been awarded the HOT scheme.

**Recommendation:** Continue to increase the proportion of fast food businesses who take part in the Nottinghamshire HOT merit scheme

Growing food contributes to active lifestyles, healthy diet and tackling food poverty. It provides employment, supports sustainable development and promotes links within and between communities. Food growing in allotments or community

gardens promotes inclusion and social interaction. New developments should provide gardens or growing space to enable people to grow food at home which can have a positive impact on physical and mental health. There is increasing evidence of the impact that gardening has on mental health and recovery from mental illness<sup>17</sup>.

### Energy efficiency in housing

Cold, damp houses have a negative impact on health and wellbeing with older people, children and people with long term illnesses or disabilities at greater risk from poor housing conditions. Another group at risk are elderly people living in big homes which they can't heat. Implementing measures to improve the energy efficiency of homes has the potential to increase the temperature of the home and reduce energy costs, which may have a positive impact on health outcomes<sup>18</sup>. In addition, improving the energy efficiency of the home can reduce carbon emissions and help create a more sustainable environment for the future.

It is important that the most vulnerable residents are able to access support to help reduce fuel poverty, especially older people, families with children under 5 and pregnant women. Nottinghamshire County Council commissions a service for the three boroughs of Gedling, Rushcliffe and Broxtowe. It aims to reduce fuel poverty by referring people to insulation and boiler replacement schemes, helping people switch to a more suitable tariff and providing access to relevant income related benefits. This scheme will from April 2017 be available across the whole County.

Standards can also be important in improving housing quality. Building Research Establishment (BRE) Home Quality Mark (HQM)<sup>19</sup> is a voluntary sustainability standard for new homes which helps house builders to demonstrate the high quality of their homes. At the same time, it also gives householders the confidence that the new homes they are choosing to buy or rent are well designed and built, and cost effective to run. Building for Life 12<sup>20</sup> is a government endorsed industry standard for well-designed houses and neighbourhoods, which uses 12 urban design criteria around integrating into the neighbourhood, creating a place, street and home.

### Integrated planning systems

Good planning can have a positive impact on the way we live our lives and can contribute to healthier lifestyles and environments. Local planning authorities should ensure that health and wellbeing, and health infrastructure are considered in local and neighbourhood plans and in planning decision making. Health partners should work effectively with local planning authorities in order to promote healthy communities and support appropriate health infrastructure.

The National Planning Policy Framework (NPPF)<sup>21</sup> (2012) requires planners to work in partnership with public health and other organisations in the promotion of healthy communities and help create healthy living environments. Both the NPPF and The National Planning Practice Guidance (NPPG)<sup>22</sup> (2012) set out a role for planners to consider health and wellbeing through both the plan-making and decision-making processes. An important step in tackling the social determinants of health at a local level is greater integration of

health, planning, transport, environmental health and housing departments to improve population health by 'designing in' health and modern health care from the outset to effectively address health and health inequalities.

The 'Spatial Planning for Health and Wellbeing of Nottinghamshire'<sup>23</sup> (2016) document approved by the Nottinghamshire Health and Wellbeing Board, identifies that local planning policies play a vital role in ensuring the health and wellbeing of the population as well as how planning matters impact on the health and wellbeing of Nottinghamshire residents. A health checklist is included to be used when developing local plans and assessing planning applications. This checklist ensures that the potential positive and negative impacts on health and wellbeing of proposals are considered, identifying opportunities for maximising potential health gains and minimising harm and addressing inequalities taking account of the wider determinants of health.

Also underway is the development of a Nottinghamshire 'Planning and Health Engagement Protocol' in which health is fully embedded into planning processes, maximising health and wellbeing and ensuring that health/social care infrastructure requirements are considered to serve the growth requirements of the population of Nottinghamshire. All this work is successfully being undertaken across the two tiers of Local Government in Nottinghamshire as both tiers have planning responsibilities. This additional complexity means that the implementation (the how) of the recommendations below will need to be informed by the local context.

### Recommendations: Planning teams should:

- Ensure that planning applications for new developments prioritise the need for both adults and children to be physically active as part of their daily life
- Work with developers to promote active travel and ensure that developments are appropriately designed
- Work with developers to provide new green, safe, accessible and pedestrian-only spaces and to improve the quality of existing green spaces
- Utilise planning powers to restrict the numbers of fast food outlets in line with NICE guidance

- Encourage house builders to use the Building for Life 12 government endorsed industry standard for well-designed houses and neighbourhoods
- Encourage housing developers in Nottinghamshire to sign up to the Building Research Establishment (BRE) Home Quality Mark (HQM) scheme.

### Recommendation: Local authorities should:

- Endorse the Spatial Planning for Health and Wellbeing of Nottinghamshire
- Secure support for the Nottinghamshire 'Planning and Health Engagement Protocol'



## Community based regeneration

'Communities, both place-based and where people share a common identity or affinity, have a vital contribution to make to health and wellbeing.'<sup>24</sup> The connections that people have with others within communities (often called social capital) can provide vital support and help buffer against life's ups and downs. Our social contacts can help us to find work, provide enjoyment, lend moral and practical support if we're ill or struggling, challenge us, help look after us and enrich our lives. This in turn impacts on our mental and physical health.

Social isolation, on the other hand, can have a negative impact on health and wellbeing. For example – those who have little social contact, are at higher risk of dementia, premature death and suicide.<sup>25</sup> According to one large study, the risk to one's health due to a lack of good social relationships is the same or greater than smoking, obesity or being physically inactive.<sup>26</sup> Poorer health, of course, means greater need for health and care services.

According to the Marmot report, 'social capital is shaped both by the ability of communities to define and organise themselves, and by the extent to which national and local organisations seek to involve and engage with communities.'<sup>27</sup> Social capital can mean different things to different groups, which is why it is crucial to work with communities when seeking to build social capital and to reduce social isolation. Addressing these issues is also important to reduce inequalities, because often more disadvantaged communities have 'high levels of stress, isolation and depression.'<sup>28</sup>

### Social isolation and loneliness

There is a difference between social isolation and loneliness. Social isolation generally means not having (enough) contact with other people. Loneliness, on the other hand, is a personal feeling of being lonely. While these two terms are distinct, some of the causes and solutions related to them are similar.

Marmot also recommends supporting community regeneration programmes that remove barriers that stop people from participating in their communities and together taking positive action, such as working at the neighbourhood level and involving local residents in specific projects.

The Marmot report also recommends reducing social isolation. In the 2011 Census in Nottinghamshire, there were around 95,000 one-person households (28% of the total). In 45% of these, around 43,000 households, the occupant was aged 65 and over. While living alone does not necessarily mean that a particular individual is socially isolated (or lonely), it does increase the risk. Other characteristics that may lead to social isolation include having multiple health issues, hearing loss, incontinence, alcohol problems, bereavement, older age, feeling unsafe in one's neighbourhood and being financially constrained.<sup>29</sup>

Strengthening communities and supporting the growth of the voluntary sector are ways to help people become more socially connected. Nottinghamshire has a great wealth of local organisations, self-help groups and community groups, and as funding for local government reduces, these groups will have an even greater role to play in helping communities to be more resilient and self-sufficient. The Council and its partners actively seek to support these groups, including through the Council's Grant Aid scheme, the Community Empowerment and Resilience Programme, and through wider initiatives to strengthen the sector as a whole.

### Social Prescribing

Social prescribing programmes are a way for GPs and other health and social care professionals to put people in touch with non-medical sources of support to help with financial, social or practical issues that may be affecting someone's health and wellbeing. These programmes often involve workers who help find and access the support or activities that will meet their needs, for example joining social groups to increase their social networks or getting debt advice.

There are many programmes that help people to become more socially connected, such as the Connect service, which the Council commissions from three voluntary sector organisations in the County, Children's Centres and Bassetlaw's social prescribing scheme, as well as the many clubs, cafes, support groups, befriending

projects, community transport schemes, and others provided by voluntary and community organisations that are too numerous to list. These represent a tremendous asset.

The Nottinghamshire Help Yourself website ([www.nottshelpyourself.org.uk](http://www.nottshelpyourself.org.uk)) is a partnership between health, the voluntary sector and Nottinghamshire County Council to bring information and advice together in one central place, so people can easily find out about services and community groups and join in. The active participation of individuals with their neighbours and in their communities is key to reducing social isolation and making communities healthier and happier places to live.

**Recommendation:** Continue to support the voluntary and community sector in order to improve health and wellbeing

**Recommendation:** Enhance social prescribing and related initiatives to help individuals and communities to tackle challenges affecting their health and wellbeing and reduce social isolation

**Recommendation:** The development of community capacity, empowerment and resilience should be a key component of the next version of the Joint Health and Wellbeing Strategy



# Chapter 3

How we live now: how behaviour impacts on health

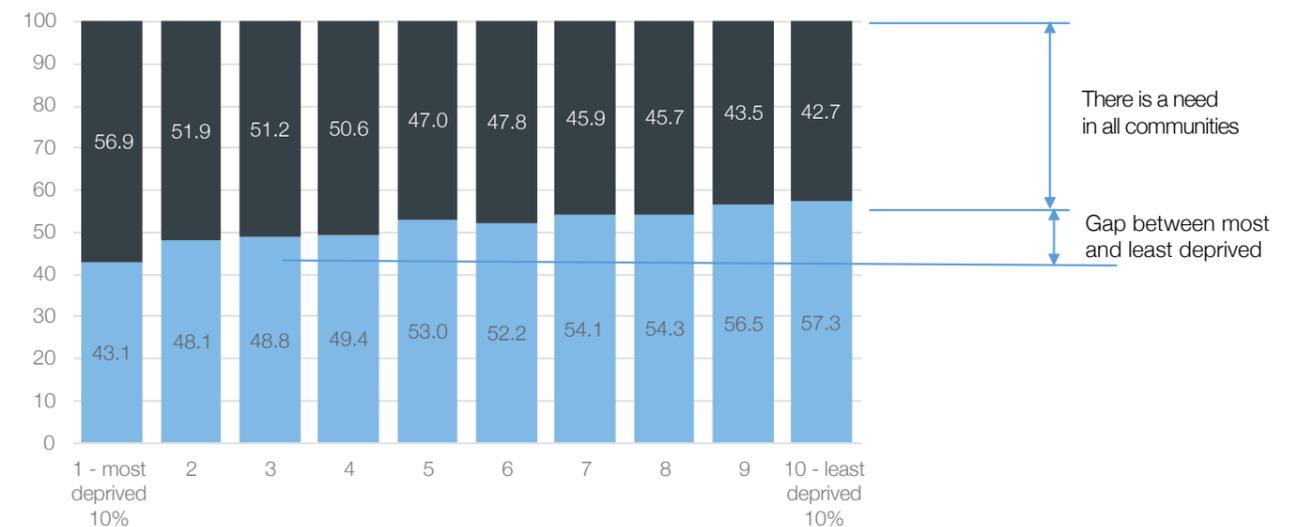
A growing proportion of our citizens are living with one or more long-term diseases (e.g. heart disease or diabetes) that affect both how long a person lives and their quality of life. Many studies show that the risk of developing long term health conditions is affected by behaviours such as smoking, poor diet, using drugs or alcohol, and lack of physical activity.

Making healthy choices at an individual level is influenced by foundations laid in childhood as well as by some of the environmental factors covered in Chapter 2. Nonetheless, it is possible to modify behaviours to improve health and making healthy decisions needs to be as easy to do as possible.

## Diet and Physical Activity

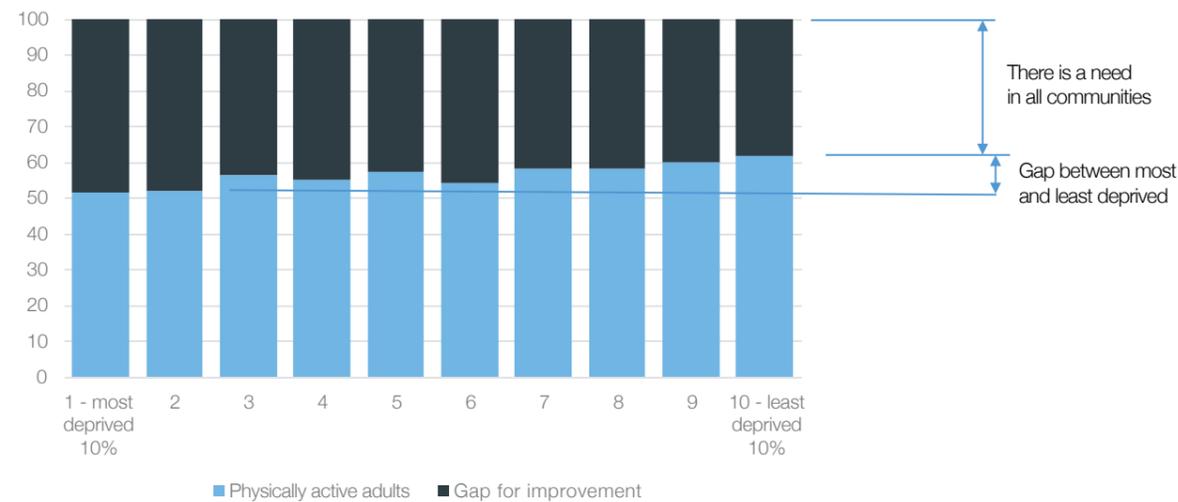
People of lower socioeconomic position tend to eat less healthy diets and be less physically active than people of higher socioeconomic position<sup>30</sup> (figures 5 & 6). These inequalities are likely to contribute to the inequalities in prevalence of obesity, and those diseases associated with it including type 2 diabetes, heart disease, cancer and liver disease. Higher levels of obesity are found among more deprived groups with the association being stronger for women than for men.

**Figure 5: Adults meeting the recommended 5 A DAY fruit and vegetable intake in England 2015.**



Source: Public Health Outcomes Framework for England deciles of deprivation.

**Figure 6: Percentage of adults meeting the recommended 150 minutes per week of physical activity in England, 2015**



Source: Public Health Outcomes Framework for England deciles of deprivation.2.13i

Improvements in dietary intake to meet the recently revised Eatwell Guide (figure 7)<sup>31</sup> would have significant benefits to the health of the population and society as a whole. The Eatwell Guide doesn't apply to children under two because they have different nutritional needs. Between the ages of 2-5 children should gradually move to eating the same food as the rest of the family, in the proportions shown in the Eatwell Guide.

**Figure 7: The Eatwell Guide**



Source: Public Health England in association with the Welsh government, Food Standards Scotland and the Food Standards Agency in Northern Ireland

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Even small increases in physical activity among those who are the least active can bring health benefits in all stages of life, from helping children and adults maintain a healthy weight to reducing hip fractures in older people. The largest health gains occur in people moving from inactive to moderately inactive and from moderately inactive to moderately active.<sup>32</sup>

In Nottinghamshire, the County Council has commissioned an Obesity Prevention and Weight Management service which delivers initiatives that target high risk population groups, to support children young people and families to eat a healthy diet and be more physically active. Taking a life-course approach this element focuses on:

- Wellbeing at work
- Promoting and implementing community healthy eating and physical activity initiatives engaging with specific community groups through partnership working
- Physical activity and healthy eating initiatives for primary school aged children
- Promoting and supporting initiatives related to national campaigns
- Sustaining behaviour change through maintenance groups linking to local communities
- Promoting physical activity opportunities including walking groups
- Raising awareness through behaviour change training opportunities for front line workers in public, private and community/voluntary sector.

### Smoking and Tobacco Control

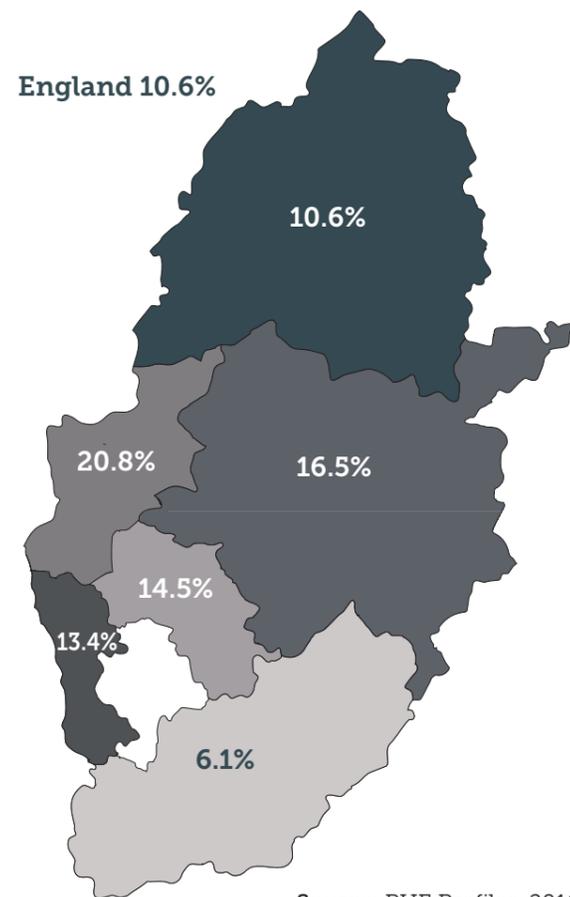
Smoking is the main cause of preventable illness and premature death. It accounts for 1,300 deaths a year in Nottinghamshire,

approximately 17% of all deaths (over the three years 2012-2014 there were 3,879 deaths attributable to tobacco in ages 35 or older<sup>33</sup>) in Nottinghamshire. It is also responsible for a third of all cancers and a seventh of heart disease. So, it's not surprising that smokers have much poorer health outcomes than non-smokers and are more likely to be admitted to hospital.

Smoking has been identified as the single biggest cause of inequality in death rates between rich and poor in the UK. People in poorer social groups who smoke tend to start smoking at an earlier age.<sup>34</sup> For those who take-up the habit before the age of 15 there is higher risk of lung cancer, respiratory and circulatory problems than those who start later, even after the amount smoked is taken into account. It is also true that the earlier someone commences smoking, the more likely they are to be a lifelong smoker.

Smoking prevalence is falling in the county, with the prevalence now at 15.7%. However, that figure rises to 26.2% amongst smokers from routine and manual occupations. Another group concerning us is pregnant women. In Nottinghamshire 14.5% of pregnant women smoke at the time of delivery compared to the national rate of 10.6%.<sup>35</sup> The variation between districts ranges from 6.1% in Rushcliffe to 20.8% in Mansfield, as shown in figure 8 below. Smoking during pregnancy can cause serious pregnancy-related health problems. These include complications during labour and an increased risk of miscarriage, premature birth, low birth-weight and sudden unexpected death in infancy.

**Figure 8: Smoking prevalence at the time of delivery by Clinical Commissioning Groups in Nottinghamshire, 2016**



Source: PHE Profiles, 2016

In Nottinghamshire, the County Council has commissioned a service which is aimed at preventing people starting to smoke, reducing smoking at time of delivery and addressing wider tobacco control issues such as exposure to second hand smoke. The service prioritises smokers from routine and manual occupations.

The work of this service is complementary to the peer-educator ASSIST programme in secondary schools. The ASSIST programme aims to reduce adolescent smoking prevalence and smoking initiation. It trains Year 8 students to work as 'peer supporters' who in turn will have informal conversations with other Year 8

students about the risks of smoking and using electronic nicotine substitution devices and the benefits of being smoke free. Until fairly recently, tobacco control and health education was concerned with advising young people about the health effects of tobacco use. More recently, however, the emergence of new tobacco and nicotine substitution products means that young people are experimenting with a number of new niche tobacco and nicotine substitution products. These products have risks associated with their use and require educators and public health professionals to rethink approaches to tobacco and nicotine education.

Recent controls on tobacco sales, including the removal of cigarette vending machines, the removal of tobacco displays from all retail premises and the legislation removing branding from cigarette packs, are helping to denormalize tobacco use and will result in fewer young people starting smoking in the future. Our service provider is also working in primary school settings to deliver early interventions in tobacco and nicotine education. The programme delivers a number of key messages to students in assemblies and engages with families to encourage smokefree homes and cars and signpost smokers to local stop smoking services.

The sale of illegal tobacco is not a victimless crime. Tobacco smuggling has strong links to organised criminal gangs and migrant worker exploitation. Often sold to children, illegal tobacco undermines the legal UK controls, creating new generations of children who will become addicted from their teens.

Whilst the smugglers make large amounts of money by avoiding paying taxes, the profits are often used to support other criminal activities. Sales of such products target people in our poorest communities and young people in those areas are especially at risk. There is local evidence that residents and young people in deprived areas in Nottinghamshire are increasingly turning to illegal tobacco sellers to make purchases. Moreover, the sale and distribution of illegal tobacco has emerged as a primary concern to a number of key strategic and local partners because it undermines the health of our most deprived communities. Her Majesty's Revenue and Customs (HMRC) estimates that one in six cigarettes and over half of hand rolled tobacco are now smuggled or fake.<sup>36</sup> In some areas, the sale of illicit cigarettes from pubs, private addresses, car boot sales or local shops is now the norm.

To counter this, Trading Standards along with the Police (funded by NCC) have focused their attention on this particular issue and have found that residents in some areas of our County are far more reliant on illegal tobacco than the HMRC estimates. This work between Public Health, Police and Trading Standards is only one example of what is happening locally. There are other complementary areas of work focused on reducing smoking-related litter and enforcing smoke free law.

The Council is committed to ensuring that tobacco control is part of mainstream public health work to address the harm from smoking. To achieve this, NCC is driving efforts to extend sign-ups to the Nottinghamshire Declaration on Tobacco Control beyond the Health and Wellbeing Board and key local institutions. This is taken forward through a strategic partnership arrangement.

## Alcohol

### Nationally

9 million adults drink at levels that increase the risk of harm to their health.

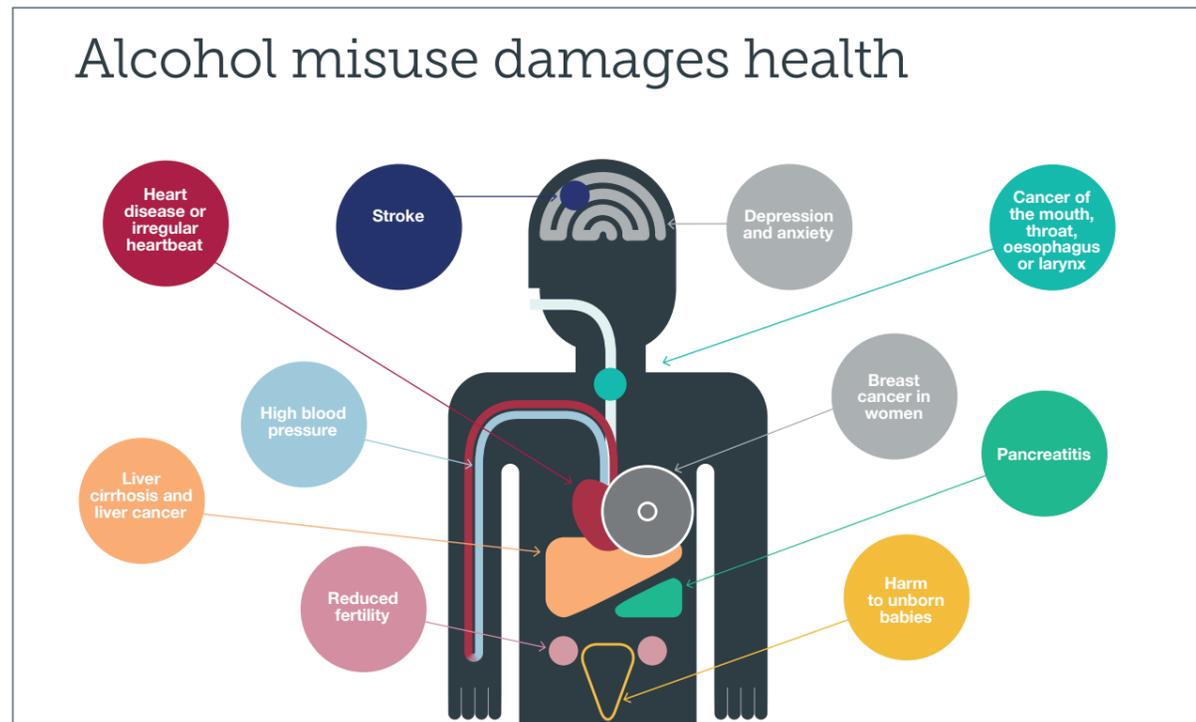
1.6 million show signs of alcohol dependence

Alcohol is the third biggest risk factor for illness and death

Alcohol can damage health and lead to early death. The problems are widespread both in Nottinghamshire and nationally. In Nottinghamshire, it is estimated that there are 131,011 adults who drink at levels that can adversely affect their health, and 21,632 dependent drinkers.

Harm caused by the consumption of alcohol is one of the main contributing factors of premature death and disability. Alcohol consumption contributes to more than 60 diseases and conditions including cardiovascular disease, liver disease and cancer.<sup>37</sup> Alcohol use represents 10% of the burden of disease and death in the UK which places it in the top three lifestyle factors after smoking and obesity.<sup>38</sup>

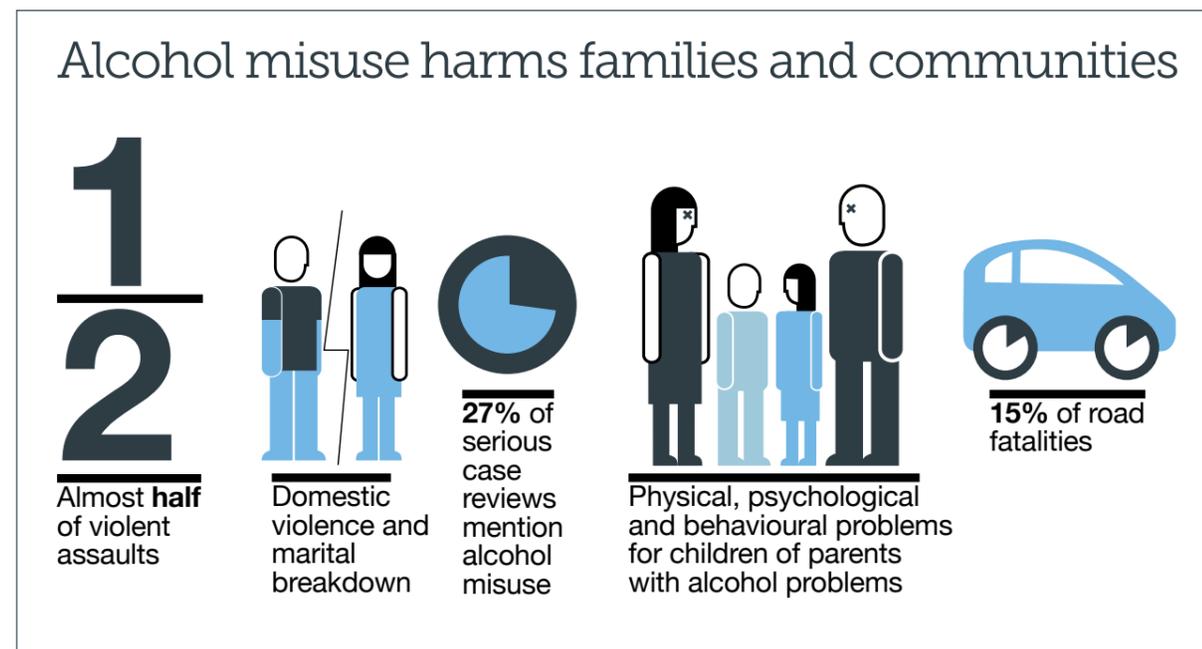
**Figure 9: Alcohol misuse damages health**



Source: Public Health England, 2013, Alcohol and drugs prevention, treatment and recovery: why invest?

As well as damaging health, alcohol misuse harms families and communities.

**Figure 10: Alcohol misuse harms families and communities**



Source: Public Health England, 2013, Alcohol and drugs prevention, treatment and recovery: why invest?

In Nottinghamshire, the County Council has commissioned a substance misuse service (both drugs and alcohol), which delivers a behaviour change programme for those who require help with drug and/or alcohol issues. The Police and Crime Commissioner contributes to this contract for those individuals who have substance misuse issues and who are also in the criminal justice system. Services are available in all seven districts of Nottinghamshire. The service has a focus on:

- Improving and increasing access and engagement into the service for those needing support for their substance misuse. In particular, this service reaches into communities to engage with more people year on year 'upstream' before they reach a stage of problematic substance misuse
- Outcomes – of successful completions of substance misuse support, improved mental health and wellbeing, improved housing situations and an increase in engagement with education, training and employment

**Recommendation:** Protect resources which enable the ongoing delivery of activities related to diet and exercise, alcohol and tobacco use

- Supporting individuals to achieve and sustain recovery – recognising that this is not just a process of shedding symptoms but a process of growth and wellbeing; focussing on the potential, not the pathology
- A strengths and assets-based approach – valuing the capacity, skills, knowledge, connections and potential in individuals, families and communities, utilising community assets to support individuals to achieve and sustain their recovery goals

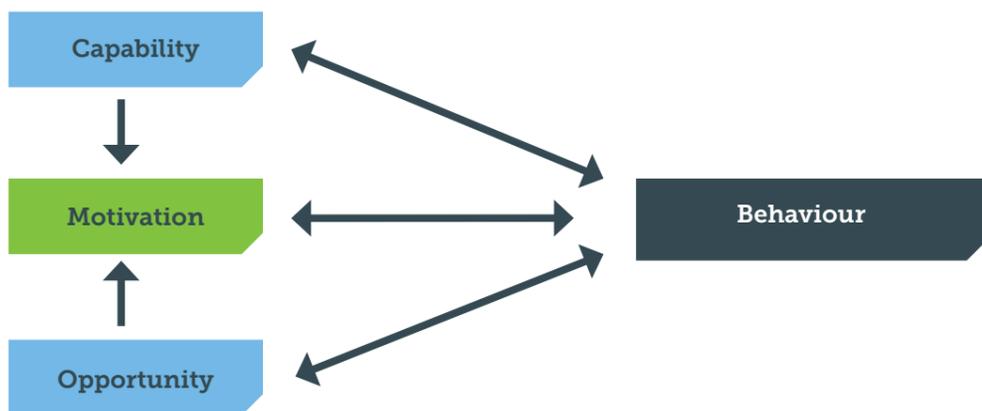


# Chapter 4

## Encouraging change and preventing disease

'Health Education' has been successful in getting key messages out such as advice about smoking, eating and drinking. More recently there have been national programmes such as 'One You' or 'Change for Life'. In fact it would be difficult today to find someone who hasn't received information about the harm of smoking and drinking alcohol. However, that information doesn't in itself result in changing behaviours, it's more complex than that, as shown in figure 11.

**Figure 11: Capability, Opportunity, Motivation - Behaviour<sup>39</sup>**



This chapter of the report will highlight 4 areas of work currently underway which are designed to help identify individuals with 'risk factors' and encourage and support them to make change.

- Making Every Contact Count (MECC)
- NHS Health Checks Programme
- National Diabetes Prevention Programme
- Annual Health Checks for People with Learning Disabilities

Making Every Contact Count (MECC) Work is currently underway to make every contact count (MECC) across the County.

MECC uses the millions of day-to-day contacts that organisations and people have with other people to support them in making positive changes to their health and wellbeing, by offering consistent and concise healthy lifestyle advice and signposting to appropriate local services.

A MECC interaction takes a matter of minutes and is structured to fit into and complement existing professional clinical, care and social engagement. Making every contact count across health and care organisations could potentially have a significant impact on the health of our population.

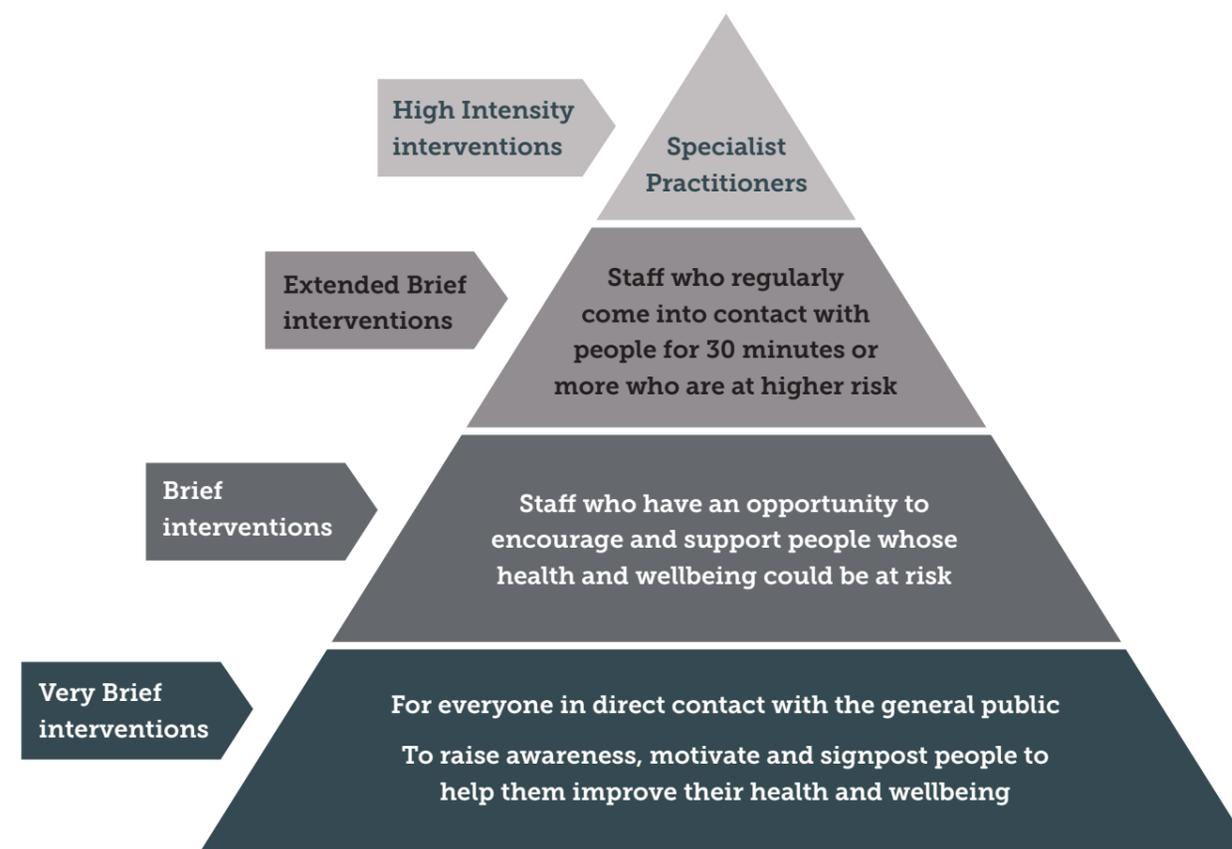
Partner organisations such as local authorities and the voluntary sector can also use the MECC approach, MECC plus, to help people think about wider issues such as debt management, housing and welfare rights advice and directing them to services that can provide support.

To enable this to happen, organisations need to provide their staff with the leadership, environment, training and information they need. For staff MECC means having the competence and confidence to deliver healthy lifestyle messages, to encourage people to change their behaviour, and to direct them to local services that can support them.

For individuals MECC means seeking support and taking action to improve their own lifestyle by eating well, maintaining a healthy weight, drinking alcohol sensibly, exercising regularly, not smoking and looking after their health and wellbeing.

MECC and MECC plus<sup>40</sup> can help to tackle health inequalities by supporting individual behaviour change across a range of behaviours, and addressing wider determinants of health at the individual level.

**Figure 12: Making Every Contact Count as a Behaviour Change Intervention<sup>41</sup>**



At a population level MECC can also help address equal access to services, by engaging those who may not have otherwise engaged in a 'healthy conversation' or considered accessing specialised local support services, such as for weight management. Across Nottinghamshire, many staff are already "making every contact count" across a wide range of organisations. However, this is not currently done in a systematic, system wide approach.

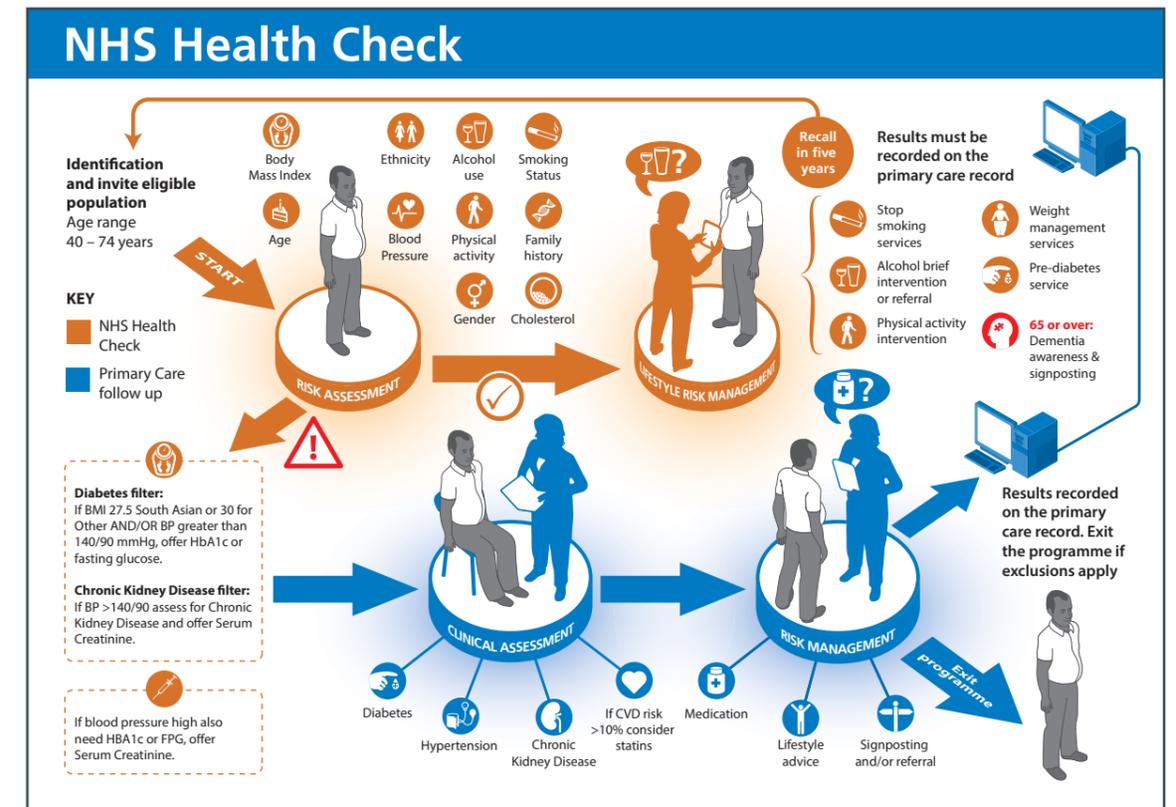
**Recommendation:** All those organisations represented on the Nottinghamshire HWB Board have an implementation plan that secures the delivery of MECC to include:

- Identification of a Board Level Public Health Champion with responsibility for MECC
- Inclusion of MECC in the mandatory training programme for all appropriate frontline staff
- Working with local Health Education providers to include MECC in local graduate and post-graduate training programmes for relevant staff

## NHS Health Check Program

Whereas MECC is focused on using existing professional clinical, care and social engagement, the NHS Health Check is more targeted. It is a cardiovascular risk assessment programme which aims to delay or prevent the onset of diabetes, heart and kidney disease and stroke for eligible people aged 40-74. It follows a risk assessment approach that results in referrals to existing programmes to support people to address risk factors, such as stopping smoking, losing weight, being more active and drinking within recommended limits.

Figure 13: The NHS Health Check



Cardiovascular disease is the most important cause of early death in Nottinghamshire and can cause a wide range of ill health conditions, including chronic kidney disease, stroke and dementia. Evidence from the UK and internationally shows that risk assessment and management programmes can help to prevent and reduce impact of cardiovascular diseases.<sup>42</sup>

The County Council has a duty to ensure that NHS Health Checks are offered to all eligible 40-74 year olds once every five years, to ensure that the risk assessments meet the required standard and to seek continuous improvement in the uptake of the NHS Health Checks. You are eligible if you haven't had a stroke, don't already have heart disease, diabetes or kidney disease.

The programme started in Nottinghamshire in 2009, delivered by GPs, and initially commissioned by NHS Nottinghamshire County Primary Care Trust and supported by the provision of lifestyle services e.g. stop smoking. Take-up of the check was slow from 2009 to 2013 and was variable around the County due to variation and uncertainty in practice management and implementation. In 2013 the Local Authority became responsible for the programme, and in 2014 following local market research, adopted the brand name NHS Heart Check-Up.

**Figure 14: NHS Heart Check Up**



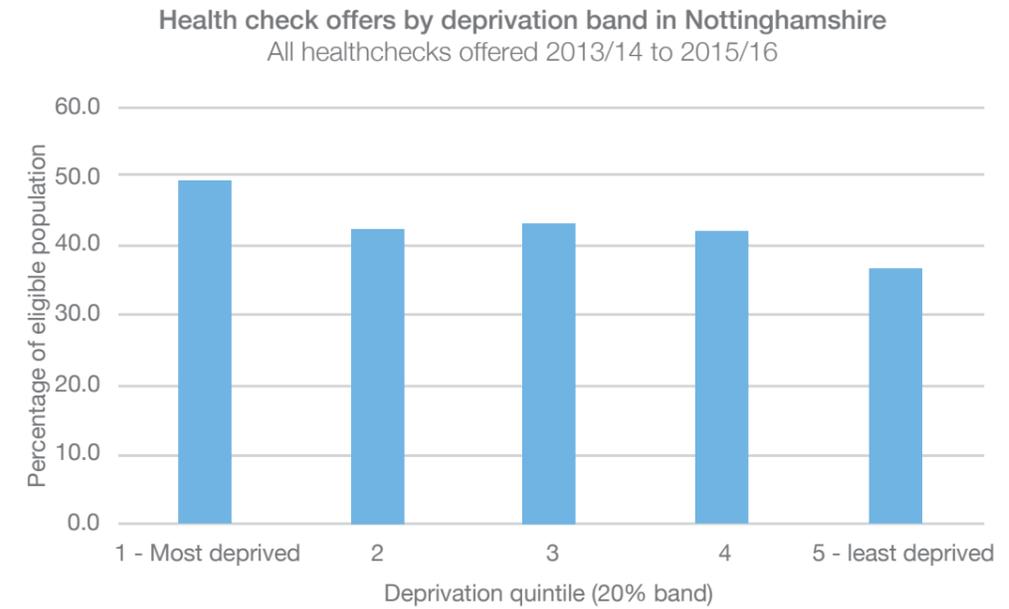
The eligible Nottinghamshire population currently stands at 252,359 people. By March 2016, 33% of the current eligible population had been offered a check. Of those only 57%, took up the offer. Local data suggest that take up in Nottinghamshire is greater in women and older ages.

**Figure 15: Health checks offered and taken up in the population**



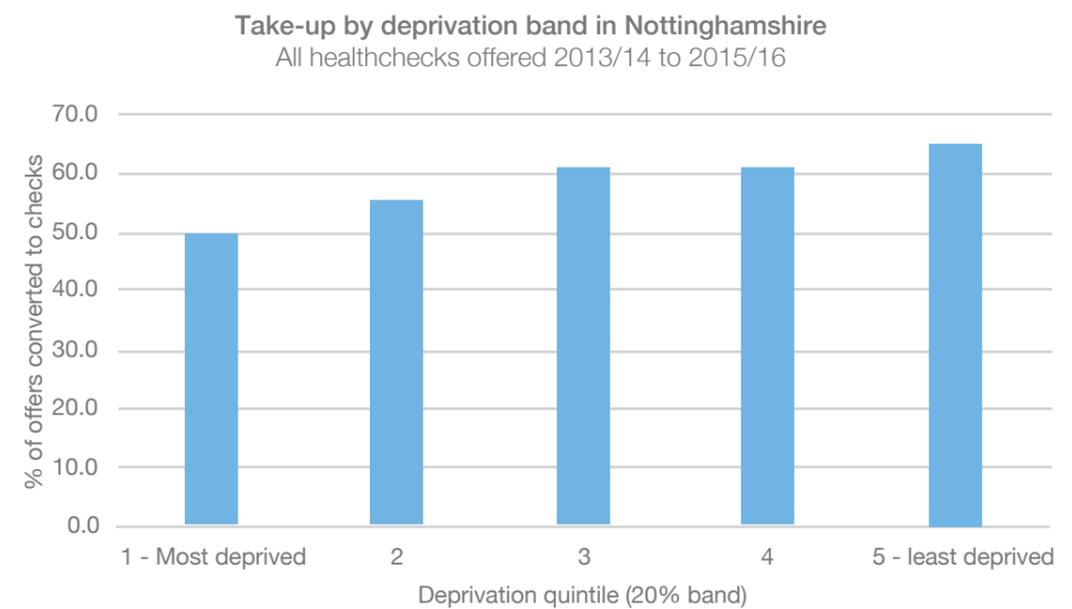
Figures 16 and 17 below show that most deprived are more likely to be offered a health check but the least deprived are more likely to take up the offer.

**Figure 16: Health checks offered – by deprivation band**



The cardiovascular risk is higher in more deprived populations in the County. The profile of offers across the deprivation scale reflects this need.

**Figure 17: Health checks take up – by deprivation band**



However the profile of 'conversion' is very different: the more deprived people are, the less likely they are to attend for a health check after an invitation.



## National Diabetes Prevention Programme

Mansfield and Ashfield, Newark & Sherwood, Nottingham North & East, Rushcliffe and Nottingham West CCGs, started to implement the new National Diabetes Prevention Programme (NDPP) in 2016. (Bassetlaw CCG is applying to be in the next wave, starting in 2017.)

This lifestyle change and education programme is for adults found to have a high risk of developing type 2 diabetes in the near future (known as pre-diabetes or non-diabetic hyperglycaemia). They will be offered advice and support to reduce and manage their risk, with the aim of preventing or delaying the onset of type 2 diabetes. GP practices in Nottinghamshire started to identify patients who could benefit from the programme in August 2016. At the moment the programme is expecting that 40% of those who could benefit from the program will actually take it up

## Annual Health Checks for People with Learning Disabilities

People aged 14 and over who have been assessed as having moderate, severe or profound learning disabilities, or people with a mild learning disability who have other complex health needs, are entitled to a free annual health check with their GP. Regular health checks for people with learning disabilities often uncover treatable health conditions.

During the health check, the GP or practice nurse will carry out the following for the person with learning disability;

- a general physical examination, including checking their weight, heart rate, blood pressure and taking blood and urine samples

- assessing the patient's behaviour, including asking questions about their lifestyle, and mental health
- a check for epilepsy
- a check on any prescribed medicines the patient is currently taking
- a check on whether any chronic illnesses, such as asthma or diabetes, are being well managed
- a review of any arrangements with other health professionals, such as physiotherapists or speech therapists.

The scheme differs from the NHS Health Check Programme as it includes assessment of specific risks that most affect the health and wellbeing of people with learning disabilities e.g. thyroid function tests.

A report on learning disabilities health checks conducted in other areas suggests that less than half of people with learning disabilities are having the appropriate checks done, and that some elements of the check are not being done as well as others. In Nottinghamshire in 2011, 48% of those eligible for a health check actually received one. It is not clear from the data if this is because eligible individuals weren't offered the check or those chose not to take it up. Either way this is another missed opportunity to help prevent health problems, or identify them early.

**Recommendation:** GP practices target those on their patient lists eligible for the appropriate health check that are most likely to be at high risk (5 yearly NHS Health Check for those aged 40-74)

**Recommendation:** GP practices systematically and consistently invite relevant individuals from their patient lists for annual Learning Disability health checks



# Chapter 5

Dealing with consequences: Impacts of preventable disease on the health and care system



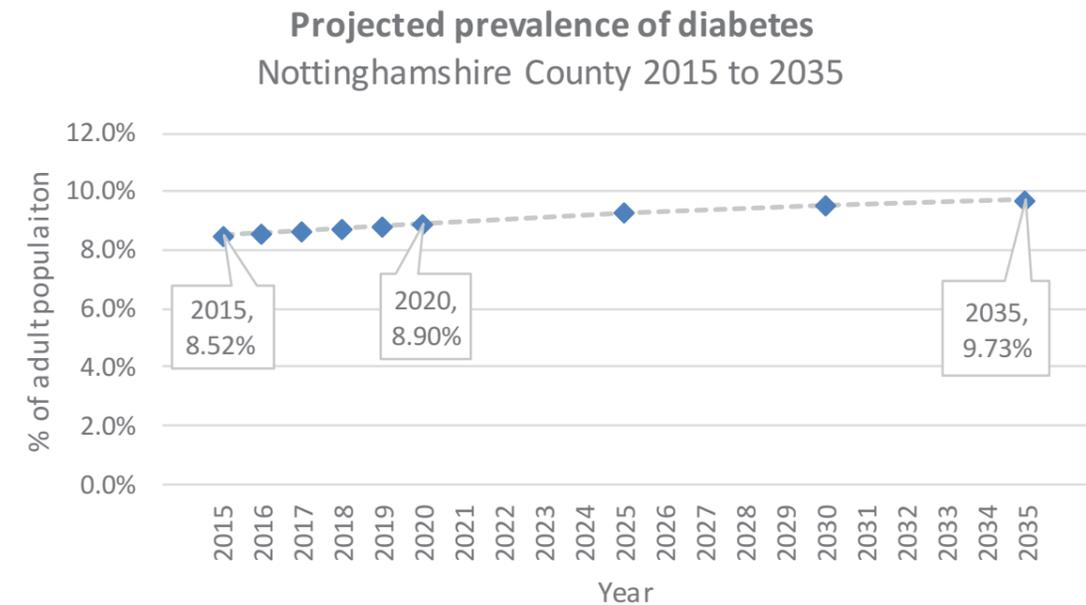
We know from the Marmot report and other studies that it is a combination of the issues highlighted in earlier chapters that contribute to ill health and in turn drive demand for the NHS and care services. To illustrate this point this chapter will use the example of type 2 diabetes to show how the various aspects come together.

The risk factors for type 2 diabetes are well known although we don't know why some people develop type 2 diabetes and others don't. The main risk factors are obesity, low physical activity levels, poor diet and nutrition. These risk factors are all associated with deprivation. 47% of Type 2 diabetes in England is attributable to obesity<sup>43</sup>. The risk of developing diabetes is 13 times higher in obese women and 5 times higher in men.<sup>44</sup>

**Type 2 Diabetes.** When your body can't produce enough insulin, or when the insulin that is produced doesn't work properly. It tends to develop in later life although increasingly we are seeing children developing this. Diabetes is usually diagnosed following the results of a blood test that measures the average of a person's blood glucose levels over the past 3 months.

It is an imbalance between our calorie intake compared with our energy expenditure (how active we are) that causes obesity/excess weight. Earlier in this report, we highlighted how where we lived shaped and influenced our levels of activity and our food environment. This report has also described some of the other work underway locally to encourage and support people to make behavior change such as being more active and selective about what we eat and drink. Yet it is apparent from figure 18 that we are still expecting an increase in the number of people developing this type of diabetes. This is based on our understanding of current levels of physical activity and our diet.

Figure 18: Predicted prevalence of diabetes in adults in Nottinghamshire



Source: Public Health England diabetes 2016 prevalence models  
<http://www.yhpho.org.uk/resource/view.aspx?RID=154049>

Once a diagnosis of diabetes is made then that individual is placed on a Diabetes Register at their GP practice. The GP practice is then responsible for ensuring the delivery of evidence based interventions to help manage that individual's diabetes. GP Practices are incentivised to do this through the Quality and Outcomes Framework. (Whilst the example here is diabetes, similar registers exist for other diseases such as heart disease)

Figure 19 below shows the current position regarding diabetes in Nottinghamshire. There are issues apparent from the figures:

- 1 Missing population: approximately 20% of the diabetes population is not diagnosed and therefore does not appear on diabetes registers (that's approx. 10,500 citizens).
- 2 14.7% of all patients diagnosed with diabetes have been 'Excepted' by their

practice either on personal or medical grounds from performance reports (that's approx. 6,500 citizens). This figure masks the wide variation at practice level (from 1.8% to 37% of the practice's diagnosed patients).

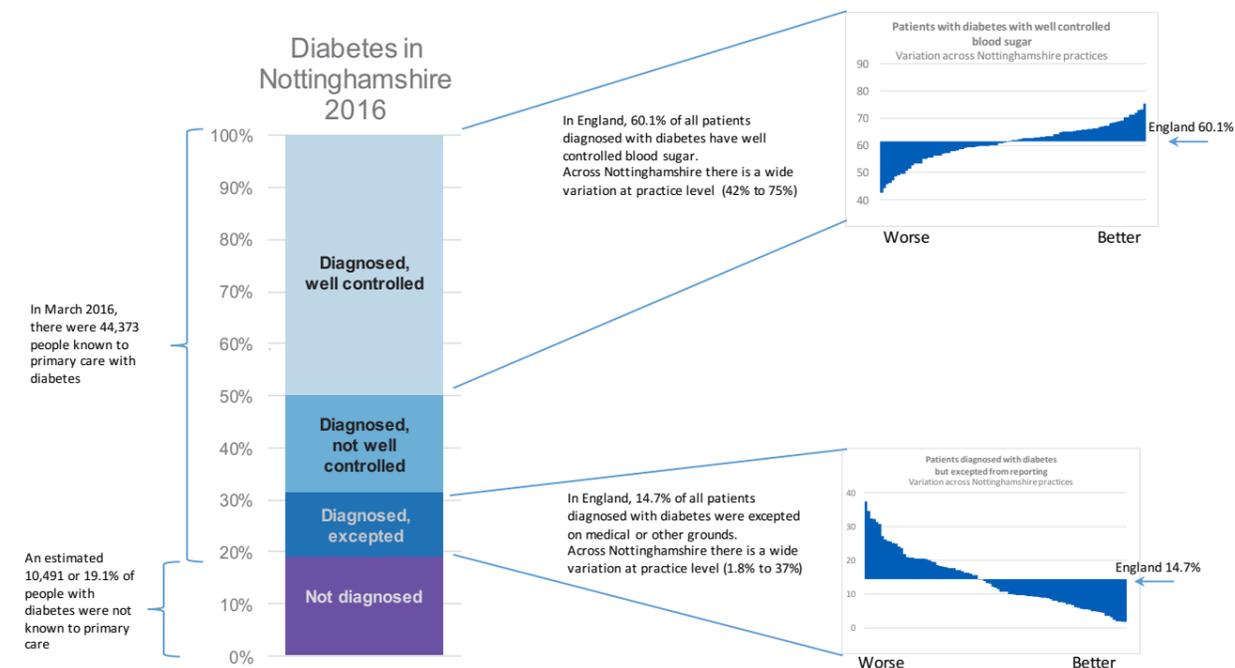
- 3 Diagnosed but not well controlled: this group of people are being managed by their practice however their blood glucose levels are outside of what is described as well controlled levels.

All three groups above together represent approximately 50% of the diabetes population (that's approx. 27,500 citizens). This means that 50% of people with diabetes are either not identified or not well controlled. They are at greater risk of all the complications of poorly managed diabetes e.g. sight loss, amputations, kidney failure and hospitalisation, as they are either not identified, aren't accessing evidence based interventions or are not being well managed.



If all practices in Nottinghamshire were performing at the England average or better, then an additional 2,000 patients would have well controlled diabetes and therefore fewer complications and hospitalisation.

**Figure 19: Diabetes in Nottinghamshire 2016**



Ways of reducing variation for the identification and care of patients with diabetes include identifying and sharing the ways that the better performing GP practices are achieving optimal results; and implementing these methods in the poorer performing practices, through mentorship, pairing of practices and training; systematic audit and performance management.

**Recommendation:** CCGs and GP practices should reduce variation for the identification and care of patients with diabetes, with the aim of all practices achieving at least the national average

**Recommendation:** A similar approach to identification and care of patients is rolled out across the other long term conditions that contribute most to ill health and demand for the use of NHS and care services

I hope that you have found this report interesting. The combination of where we live and how we live creates a snowball effect, it starts small and gathers momentum so you need to make sure you are on the right path. The report highlights what we have already done as well as where future opportunities lie. In next year's report, I will be reporting on how much we have been able to seize these opportunities as well as covering the other aspects of the Marmot report.

The table below summarises for ease of reference all the recommendations made in the report. Next year the DPH annual report will report on progress made against these.

For those of you who would like further information on what is happening regarding the health of the public in Nottinghamshire, I would advise you to have a look at the following excellent resources.

- The Joint Strategic Needs Assessment (JSNA) provides a picture of the current and future health and wellbeing needs of the local population available at <http://jsna.nottinghamcity.gov.uk/insight/Strategic-Framework/Nottinghamshire-JSNA.aspx>
- The Public Health Outcomes Framework, a set of desired outcomes and the indicators that helps us understand how well public health is being improved and protected. Information relating to Nottinghamshire is available at <http://www.phoutcomes.info/>

### Recommendations:

Continue to invest in safe walking and cycling infrastructure developments linking people to jobs, training and services (including the development and delivery of a joined up, safe and well connected cycle network across the County).

Target travel behaviour change campaigns to inform, encourage and enable people to make more walking and cycling trips more often.

Continue to protect, increase and improve green space particularly in our most deprived communities, and to improve access to open and green space for local residents.

All public sector organisations should provide healthy food for staff and visitors in line with what the NHS is doing

Continue to increase the proportion of fast food businesses who take part in the Nottinghamshire HOT merit scheme.

Planning teams should:

- Ensure that planning applications for new developments prioritise the need for both adults and children to be physically active as part of their daily life
- Work with developers to promote active travel and ensure that developments are appropriately designed
- Work with developers to provide new green, safe, accessible and pedestrian-only spaces and to improve the quality of existing green spaces
- Utilise planning powers to restrict the number of fast food outlets in line with NICE guidelines
- Encourage house builders to use the Building for Life 12 government endorsed industry standard for well-designed houses and neighbourhoods.
- Encourage housing developers to sign up to the Building Research Establishment (BRE) Home Quality Mark (HQM) scheme.

Local authorities should:

- Endorse the Spatial Planning for Health and Wellbeing of Nottinghamshire
- Secure support for the Nottinghamshire 'Planning and Health Engagement Protocol'.

Continue to support the voluntary and community sector in order to improve health and wellbeing

Enhance social prescribing and related initiatives to help individuals and communities to tackle challenges affecting their health and wellbeing and reduce social isolation

The development of community capacity, empowerment and resilience should be a key component of the next version of the Joint Health and Wellbeing Strategy.

Protect resources which enable the ongoing delivery of activities related to diet and exercise, alcohol and tobacco use.

All those organisations represented on the Nottinghamshire HWB Board have an implementation plan that secures the delivery of Making Every Contact Count to include:

- Identification of a Board Level Public Health Champion with responsibility for MECC
- Inclusion of MECC in the mandatory training programme for all appropriate frontline staff
- Working with local Health Education providers to include MECC in local graduate and post-graduate training programmes for relevant staff

GP practices target those on their patient lists eligible for the appropriate health check that are most likely to be at high risk (5 yearly NHS Health Check for those aged 40-74).

GP practices systematically and consistently invite relevant individuals from their patient lists for annual Learning Disability health checks.

CCGs and GP practices should reduce variation for the identification and care of patients with diabetes, with the aim of all practices achieving at least the national average.

A similar approach to identification and care of patients is rolled out across the other long term conditions that contribute most to ill health and demand for the use of NHS and care services.

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