Buckinghamshire Council
Health & Adult Social Care Select Committee

Agenda

Date: Thursday 17 November 2022

Time: 10.00 am

Venue: The Oculus, Buckinghamshire Council, Gatehouse Road, Aylesbury HP19 8FF

Membership: J MacBean (Chairman), S Adoh, P Birchley, P Gomm, T Green, C Heap, H Mordue, S Morgan, C Poll, G Sandy, R Stuchbury, A Turner, N Thomas, M Walsh, J Wassell and Z McIntosh (Healthwatch Bucks)

Agenda Item		Time	Page No
1	**APOLOGIES FOR ABSENCE**	**10:00**	
2	**DECLARATIONS OF INTEREST**		
3	**MINUTES OF THE PREVIOUS MEETING** That the minutes of the meeting held on Thursday 22nd September 2022 be confirmed as a correct record.		**5 - 10**
4	**PUBLIC QUESTIONS** Public Questions is an opportunity for people who live, work or study in Buckinghamshire to put a question to a Select Committee. The Committee will hear from members of the public who have submitted questions in advance relating to items on the agenda. The Cabinet Member, relevant key partners and responsible officers will be invited to respond. Further information on how to register can be found here: https://www.buckinghamshire.gov.uk/your-council/getinvolved-with-council-decisions/select-committees/		
5	**CHAIRMAN'S UPDATE**	**10:10**	
6	**DIRECTOR OF PUBLIC HEALTH ANNUAL REPORT** The Director of Public Health Annual Report for 2022 is entitled "Hearts and Minds – Preventing Heart Disease and Stroke in Buckinghamshire". The report focuses on the importance of the	**10:15**	**11 - 84**

prevention of cardiovascular disease for Buckinghamshire's population. The aim is to support a strategic approach for the Council and partners to address the cardiovascular health and risk factors for our population.

The report states that differences in cardiovascular between different groups are a significant driver of health inequalities across Buckinghamshire. As well as hearing from the Director of Public Health, Members will also hear from a number of key health partners on their programmes aimed at reducing the risks of cardiovascular disease and how they are tackling health inequalities.

Presenters:
Dr Jane O'Grady, Director of Public Health
Dr Toby Gillman, Aylesbury GP
Mr Andrew McLaren, Chief Medical Officer, Buckinghamshire Healthcare NHS Trust
Ms Rose Hombo, Deputy Director of Quality, Oxford Health NHS Foundation Trust
Ms Philippa Baker, Place Director, Buckinghamshire

Papers:
Cover report
Director of Public Health Annual Report (full version)
Director of Public Health Annual Report (short version)

7	**BUCKINGHAMSHIRE HEALTHCARE NHS TRUST STRATEGY UPDATE**	**10:55**	**85 - 92**

The Committee reviewed Buckinghamshire Healthcare NHS Trust's Clinical Strategy in its early stages in February 2022. Five themes are identified in the strategy and this item provides an opportunity for Members to hear more about how the plans are developing under each theme. This item also includes an update on their Estates Strategy.

Presenters:
Mr Neil Macdonald, Chief Executive, Buckinghamshire Healthcare NHS Trust
Ms Ali Williams, Chief Commercial Officer
Mr Andrew McLaren, Chief Medical Officer
Mr Owen Sullivan, Interim Director of Strategy

Papers:
Report attached

8	**HEALTH & CARE INTEGRATION PROGRAMME**	**12:00**	**93 - 98**

At its February 2022 meeting, the Committee reviewed the progress in the development of the community hubs in Marlow and Thame. As part of this review, Members remain concerned about the provision of services for people who are fit to be discharged from Hospital but need further support services. The Committee will hear more about the progress being made in supporting intermediate care.

Presenters:
Mr Neil Macdonald, Chief Executive, Buckinghamshire Healthcare NHS Trust
Ms Jo Bashnonga, Health & Care Integration Programme Director
Ms Elaina Quesada, Service Director, Adult Social Care (Operations), Buckinghamshire Council

Papers:
Report attached

9	**HEALTHWATCH BUCKS UPDATE** The Committee will receive an update on recent key projects for Healthwatch Bucks.	**12:40**	**99 - 100**

Presenter:
Ms Zoe McIntosh, Chief Executive, Healthwatch Bucks

Papers:
Update attached

10	**WORK PROGRAMME** For Committee Members to discuss the items for the forthcoming meetings.	**12:45**	**101 - 104**

Presenters:
All Committee Members

Papers:
Work Programme

11	**DATE OF NEXT MEETING** The next meeting is due to take place on Thursday 9th February 2023 at 10am.	**13:00**

If you would like to attend a meeting, but need extra help to do so, for example because of a disability, please contact us as early as possible, so that we can try to put the right support in place.

For further information please contact: Liz Wheaton on 01296 383856, email democracy@buckinghamshire.gov.uk.

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Buckinghamshire Council

Health & Adult Social Care Select Committee

Minutes

MINUTES OF THE MEETING OF THE HEALTH & ADULT SOCIAL CARE SELECT COMMITTEE HELD ON THURSDAY 22 SEPTEMBER 2022 IN THE PARALYMPIC ROOM, BUCKINGHAMSHIRE COUNCIL, GATEHOUSE ROAD, HP19 8FF, COMMENCING AT 10.00 AM AND CONCLUDING AT 1.05 PM

MEMBERS PRESENT

J MacBean (Chairman), M Walsh (Vice-Chairman), T Green, C Heap, H Mordue, R Stuchbury, N Thomas, J Wassell and Z McIntosh

OTHERS IN ATTENDANCE

Mrs E Wheaton, Ms P Baker, Ms C Capell, Z Mohammed, Dr R Wood, Dr G Gavriel, Ms D Wiggins, Ms J McAteer and Mr R Bhasin

Agenda Item

1 APOLOGIES FOR ABSENCE

Apologies were received from Councillors S Adoh, T Birchley, C Poll, S Morgan, G Sandy, A Turner and P Gomm.

2 DECLARATIONS OF INTEREST

There were no declarations of interest.

3 MINUTES OF THE PREVIOUS MEETING

The minutes of the meeting held on Thursday 30th June 2022 were agreed as a correct record.

4 PUBLIC QUESTIONS

There were no public questions submitted for this meeting.

5 CHAIRMAN'S UPDATE

The Chairman thanked the Members on the Primary Care Network inquiry group for their contributions. She summarised the findings from the report as follows:

- The PCNs were developing at different rates and there were different working practices across the PCNs which were highlighted throughout the report.
- The report makes 17 recommendations, 15 of which were aimed at the newly formed Integrated Care Board.
- A key conclusion reached in the report was the key role that the network manager plays

in overseeing and delivering the ambitions around developing a successful PCN.

- A comment was made around the lack of sustainable funding for permanent roles which presented an additional challenge for PCNs.

Committee Members agreed the report subject to those Members who were not in attendance having a week to review it and feedback to the Chairman. The report would then be discussed at Cabinet in November and with the key health partner responsible for delivering the recommendations.

6 SYSTEM WINTER PLAN

The Chairman welcomed the following presenters to the meeting Dr George Gavriel, Chair of Buckinghamshire General Practice Leadership Group for the ICS, Caroline Capell, Director of Urgent & Emergency Care, Buckinghamshire Healthcare NHS Trust (BHT); Raghuv Bhasin, Chief Operating Officer, BHT; Jenny McAteer, Director of Quality, Performance and Standards, Adult Social Care; Dr Richard Wood, CEO, Berkshire West, Buckinghamshire and Oxfordshire LMC; Debbie Wiggins, Buckinghamshire Local Pharmaceutical Committee and Cllr Zahir Mohammed, Deputy Cabinet Member for Public Health.

Philippa Baker, newly appointed Place Director for Buckinghamshire, attended the meeting as an observer as she has not yet started in her role.

During their presentation, the following key points were made:

- The System Winter plan covered early stages of planning through to implementation. The focus laid around providing resilience for social care, effective discharge practices, outbreak management and vaccination provision.
- Buckinghamshire Healthcare NHS Trust (BHT) had taken a similar approach to winter planning as last year, with each of their providers contributing to delivering and supporting winter pressures.
- The pressures on mental health services had been increasing, particularly in light of the COVID pandemic. A number of patients had been in hospital due to poor mental health, and the teams were working closely with Oxford Health to get them into more appropriate settings.
- Pressures on primary care resulted in increased pressures on hospitals. BHT had been working with SCAS to direct patients through the 111 service. A central clinical assessment service was also in development. Furthermore, work had been undertaken with local pharmacies to strengthen support, particularly around infection control. Dr Wood and Dr Gavriel pointed out that those representing General Practice care providers had not yet been involved in winter resilience planning in General Practice.

During the discussion, Members raised the following questions:

- In response to a Member question, it was noted that NHS England had made an assurance framework for all local ICBs, which contained actions around key focus areas. The System Winter plan had been subjected to a peer review by Surrey Heartlands. It was agreed to circulate the peer review report to Members.

Action: Caroline Capell

- Actions outlined in the plan were tracked by the Buckinghamshire Urgent Emergency Care Board to ensure delivery.
- Regular and ongoing communication with all key partners and service providers was key to successful delivery.

- In response to a Member question, Caroline Capell reassured the Committee that work streams across all providers had intensive project plans dealing with each of the actions outlined in the plan. Fortnightly meetings were held with BHT's improvement board looking at hospital actions and weekly meetings were held with the ICB.
- As with previous years, there was a lot of uncertainty around winter planning, however, partners were ensuring that resources were in place to meet the additional demands, particularly in terms of staffing. A fundamental focus also laid in mitigating ambulance handover delays to ensure individuals requiring rapid care were treated promptly. It was agreed that more detailed information acquired in the upcoming meetings would be shared with the Committee before the next Select Committee meeting in November.
- A Member asked how the pressures on bed capacity in hospitals would be tackled over the winter. It was noted that an additional facility in Olympic Lodge at Stoke Mandeville had been independently evaluated as providing good outcomes for residents. This would be reopened on 3rd October with an additional 30 beds being provided by mid-November. Additional community beds within the main community wards in Amersham and Buckingham were also available.
- In December, the new paediatric Emergency Department building at Stoke Mandeville Hospital would be opened, providing 14 new bed spaces for young people and providing emergency care. The vacated space would provide additional overflow and assessment capacity.
- In addition to the increased number of beds, a Member asked how the additional staff required to manage this increased capacity would be managed. It was advised that some of the staff previously working at Olympic Lodge had been retained, but additional staff had also been recruited through agencies (one vacancy remained out of the 14 required). The Chief Nurse, was also working with senior nurses to examine how to best manage staff over the coming period. There was also a focus on international recruitment, particularly for maternity and midwifery. In the past 18 months, a programme delivering over 200 staff had also been successful. An additional £3.3 million of funding was provided to fund the increase in capacity. Although there was a 10 % vacancy rate, the team were continuously recruiting new staff, particularly nurses and healthcare assistants.
- A Member was interested in the development of virtual wards. Raghuv Bhasin explained that the roll-out of this project had gone well. Virtual wards allow healthcare professionals to monitor patients in their own homes through technology, with checks from nursing teams and oversight from clinicians. There were plans to expand this service to frail patients and potentially patients with diabetes.
- A Member raised concerns around the viability of virtual wards for patients who were less confident with digital technology. It was explained that the project initially started with small numbers. The Committee was reassured that treatment through virtual wards needed to work for both patients and the organisation. Patients would be provided with the equipment and technical competence would be checked throughout the process, so that any challenges were identified and support provided. Both the equipment and the support were fully funded. It was agreed to supply further information around patient satisfaction of the virtual ward programme to the Committee.

Action: Raghuv Bhasin

- In response to a Member question, Dr Gavriel explained that the Additional Roles Reimbursement Scheme (ARRS), in relation to Primary Care Networks, could deliver virtual wards, but the guidelines relating to the additional roles had to adhere to strict national guidelines. Dr Wood pointed out that the additional roles were originally conceived to support the sustainability and activity of General Practice. The Chairman reflected on the lack of flexibility around ARRS roles. She welcomed the approach to digital monitoring, though emphasised the importance of maintaining face-to-face care for some patients.

- A Member asked about same-day emergency pathways as a way to reducing the demand on the ambulance service. It was noted that these services were treating patients who did not require a Hospital admission, with a maximum treatment time of up to 23 hours, which adheres to the national guidelines.
- The 111 service was delivered by South Central Ambulance Service. Work was being undertaken with SCAS and other urgent care providers to increase the workforce and use existing resources more effectively. Recruitment support for paramedics was also sought through different tiers, such as emergency care practitioners and increased support at the call handler stage.
- The well-being and resilience of staff was a priority across the whole health and social care system. There had been an increase in psychological and well-being support, more spaces for rest areas and flexible working support as a result of the cost-of-living crisis.
- Members raised concerns regarding the increased pressures on pharmacists due to the pandemic, particularly from residents who may be digitally excluded. The Chairman also asked what preparations for increased pressures would be put in place for pharmacists during the winter months. Caroline Capell acknowledged these pressures and went on to say that she was particularly concerned about remuneration remaining stagnant despite increased workloads. The Committee agreed that the increased use of pharmacies needed to be encouraged and highlighted the continued delivery of the vaccination programme by pharmacists alongside GPs.
- In response to a question about the integrated covid and flu vaccination programme, Caroline Capell explained that this directive comes from NHS England and the responsibility sits with the ICS with GP practices and partners responsible for delivering it. There can be supply issues due to the different ways the medications needed to be stored which can lead to problems with being able to administer both vaccines at the same time. Dr Gavriel added that communication between local providers was important in ensuring that the service was effective. Standalone vaccination centres were run by either local GP practices, pharmacies, or through a combination of independent providers. The Chairman agreed to contact the ICB's lead on the vaccination programme to ask for more information on this.

Action: Chairman

- A Member asked about the additional capacity to support children's mental health. Caroline Capell explained that Oxford Health had put a number of programmes in place to increase their workforce. Clinical support had been increased over the past 12-18 months. However, the provision of in-patient mental health facilities was a national problem. The teams were working towards early interventions through 111 and ambulance call centres.
- The market capacity around health and social was challenging nationally, but efforts were being made with an integrated approach with partners to generate additional capacity. The importance of communication between partners to ensure the best possible outcomes for residents was highlighted. A Member also emphasised the need for transparency around plans for discharging patients from hospital.
- Members raised concerns around support for carers. Jenny McAteer explained that adult social care had a transformation work programme working on this issue and she agreed to share the detailed plan with the Committee.

Action: Jenny McAteer

- A Member questioned what support would be provided to support vulnerable and older adults. A programme around admission avoidance, Immedicare, had been in place to directly support all care homes. The team had issued communications around this to promote the service. Public communications would also be distributed, as would information about support available from the Council and the voluntary sector.
- A Member asked whether plans were in place to provide cover for staff absences. Ms

McAteer explained that although maintaining staffing levels remained a challenge, both locally and nationally, ways to mitigate the pressures on staff had been implemented. This was mainly through work with the voluntary and social care sector to ensure that adequate care as in place for people who were discharged from Hospital. She agreed to provide more details around these plans with the Members.

Action: Jenny McAteer

The Chairman thanked all the presenters for their attendance and participation.

7 HEALTHWATCH BUCKS UPDATE

Ms Z McIntosh, Chief Executive, Healthwatch Bucks updated the Committee on the latest activities and made the following main points:

- Healthwatch Bucks had been working on two projects relating to social prescribing, one of which focused on residents' awareness of the service. It was found that awareness was low, but the feedback around the benefits of the service were positive. The report and recommendations, which were centred around raising awareness, had been forwarded to James Kent, Accountable Officer for the Integrated Care Board. This also linked with the communication and engagement plan and recruitment of additional roles identified through the HASC's inquiry into development of Primary Care Networks. The Committee asked to be notified of the response from the ICB.

Action: Zoe McIntosh

Healthwatch Bucks launched its annual report in July and hard copies were circulated to Members.

Highlights from the report included:

- Eighteen reports had been issued and recommendations forwarded to service providers and commissioners. These included enter and view visits to Community Opportunity providers, remote blood pressure monitoring, remote mental health support during Covid and cancer support.
- Healthwatch Bucks key priorities were around health equalities, primary care and social care with a focus on dementia. A project around early onset dementia was also planned. Members welcomed the focus on dementia support, which was also included in the Committee's work programme.

The Chairman thanked Ms McIntosh for her update.

8 DEVELOPMENT OF PRIMARY CARE NETWORKS INQUIRY

The Chairman thanked the Members on the Primary Care Network inquiry group for their contributions. She summarised the findings from the report as follows:

- The discrepancies in development and working practices between different PCNs were highlighted through the report. It included 17 recommendations, 15 of which were for the ICB's attention.
- A key conclusion reached in the report was the key role of the network manager to oversee and deliver the ambitions around developing a successful PCN.
- The uncertainty around the future funding for the additional roles was acknowledged

as an additional challenge for PCNs.

Committee Members agreed the report subject to those Members who were not in attendance having a week to review it and feedback to the Chairman. The report would then be discussed at Cabinet in November and with the key health partner responsible for delivering the recommendations.

9 WORK PROGRAMME

Members discussed the work programme and agreed the following items for the November meeting:

- Progress on the Buckinghamshire Healthcare NHS Trust's Clinical Strategy and Estates Strategy;
- Update on Sustainable Intermediate Care;
- Presentation of the Director for Public Health Annual Report.

The following items will be examined outside of meetings:

The scoping document for a forthcoming review around SEND being undertaken but the Children's and Education Select Committee would be circulated to Members for information, once agreed.

Action: Principal Scrutiny Officer

A Member mentioned the Buckinghamshire Suicide Audit three-year review. It was agreed to circulate this to Members once available.

Action: Principal Scrutiny Officer

10 DATE OF NEXT MEETING

Thursday 17th November 2022 at 10am.

Report to Health & Adult Social Care Select Committee

Date: Thursday 17th November 2022

Title: Director of Public Health Annual Report.

Hearts and Minds. Preventing Heart Disease and Stroke in Buckinghamshire

Author: Dr Jane O'Grady

Officer support:

Recommendations/Outcomes: The Health and Adult Social Care Select Committee is requested to note the Director of Public Health report and the recommendations contained within it.

1. Background

The Director of Public Health is required to produce an annual report on the health of Buckinghamshire's population. This year's themed report is on preventing cardiovascular disease which includes heart disease and stroke. It provides an overview of the impact of cardiovascular disease on the health and wellbeing of Buckinghamshire residents and what needs to be done to address it.

Cardiovascular disease is one of the largest drivers of poor health and death in the county and the biggest contributor to the gap in life expectancy between residents living in our most and least deprived areas. It is the second commonest cause of dementia. A large proportion of cardiovascular disease is preventable. The report highlights the need for a renewed focus on preventing cardiovascular disease and the risk factors that lead to it. The Council has a key role in this agenda through the services it provides and commissions and the Opportunity Bucks programme. Addressing the key risk factors will improve health in a variety of other ways including reducing the risk of cancer, diabetes, dementia, musculoskeletal problems and poor mental health and produce many other societal and economic benefits, making Buckinghamshire an even better place to live.

2. Main content of report

The report contains data on the impact of cardiovascular disease and the prevalence of risk factors for cardiovascular disease between different groups and areas in Buckinghamshire and what we can do to prevent it.

It highlights the risk factors for cardiovascular disease in 3 categories – behavioural risk factors such as smoking, often invisible clinical risk factors such as high blood pressure and diabetes, and social and environmental risk factors. We need to address all these categories of risk factors to tackle cardiovascular disease.

The social and environmental risk factors include stress at work and poor working conditions, working long hours, poor air quality and experiencing adverse temperatures such as very cold housing or insufficient protection from heat waves.

The behaviours people adopt are very heavily influenced by the commercial, social and physical environment around them, so a focus on individual change alone will be much less effective that changing the environments in which people live , learn, work and play. For example the availability, pricing and advertising of alcohol and unhealthy foods affect behaviour and drive social norms. Children and young people are particularly vulnerable to these environmental influences and many unhealthy behaviours are initiated during childhood and the teenage years and then hard to stop.

Some risk factors like diabetes, high blood pressure and high cholesterol often cannot be detected without clinical tests as many people have no symptoms till later in the course of their illness. It is important to increase the detection and management of these conditions, especially in groups at higher risk of cardiovascular disease, so effective preventive action can be taken.

The report identifies that people living in deprived areas and people from South Asian and black ethnic groups are at higher risk of cardiovascular disease. This is due to a combination of interlinked factors that may include adverse living and working conditions, exposure to chronic stress, opportunities to adopt healthy behaviours and biological factors. People living with serious mental illness are also at increased risk of cardiovascular disease. It is important to identify and address the modifiable risk factors to help prevent or delay cardiovascular disease in these groups.

The report highlights some of the preventive work already underway in Buckinghamshire but also identifies where more could be done. Action is needed from all partners who have an interest in the health and wellbeing of people who live and work in Buckinghamshire and the following recommendations are made for the council and its partners including the NHS.

Recommendations within the Director of Public Health Annual Report:

We need to work together with partners and communities across Buckinghamshire to

1. **Act on the broader determinants of health** such as income, debt, good quality employment, high quality education and healthy environments to level up outcomes across Buckinghamshire. Tackling these issues is an essential component of reducing inequalities in health and cardiovascular disease.
2. **Support a systematic large-scale improvement in behavioural risk factors** by
   - ensuring the physical, social, commercial and economic environments in which people live, work and learn support healthy behaviours
   - increasing the understanding and the skills required to design effective behaviour change interventions across Buckinghamshire Council, the NHS and partners including rolling out the behaviour change Making Every Contact Count programme. This enables people to have "healthy conversations" to support behaviour change in their day-to-day interactions
   - working with communities to understand what would support them to reduce their risk of cardiovascular disease and co-design and evaluate appropriate approaches
   - supporting NHS trusts to implement the NHS Long Term Plan smoking cessation support requirements as smoking is the single biggest modifiable driver of health inequalities
   - working together with partners and communities to develop a whole system approach to healthy eating and physical activity to combat the rise in unhealthy weight and obesity.
   - working together to tackle smoking via the Tobacco Control Action Plan.
   - working together to address harmful alcohol misuse through development of our new drug and alcohol strategy
3. **Increase detection and management of modifiable risk factors in people at higher risk of cardiovascular disease** including those living in more deprived areas, ethnic groups at higher risk of cardiovascular disease and those with mental illness by
   - increasing capacity in primary care in more deprived areas to undertake NHS health checks and detect and manage clinical risk factors such as high blood pressure and diabetes, and refer to appropriate interventions such as smoking cessation
   - working with people from ethnic minority groups to design effective, culturally competent approaches to increase detection of risk factors and management of risk factors
   - working with NHS and local authority partners to develop and implement the whole system plan to tackle inequalities in cardiovascular disease
4. **Improve data collection and monitoring to track progress**
   - Improve data collection in primary and secondary care to enable monitoring of outcomes by ethnicity and areas of deprivation and improve the quality, accuracy and completeness of ethnic monitoring data
   - Undertake equity audits to determine access to and uptake of prevention and treatment initiatives of cardiovascular disease by different groups

3. Next steps and review

Partners are working together to develop a plan to help prevent cardiovascular disease especially in groups at higher risk of cardiovascular disease. The Opportunity Bucks programme offers opportunities to address the broader determinants of health in the target wards and to work with communities to identify what would work for them to improve their health and quality of life. Health and wellbeing is one of the themes of the Opportunity Bucks programme and preventing cardiovascular disease will be a key component of that.

Director of Public Health Annual Report 2022

Hearts and Minds

Preventing heart disease and stroke in Buckinghamshire

Contents

Foreword

This year my annual report is about cardiovascular disease in Buckinghamshire and how we can prevent it.

Cardiovascular disease causes heart disease, stroke and the second commonest type of dementia -vascular dementia. It causes 1 in 5 of all deaths in Buckinghamshire and is the major contributor to the gap in life expectancy between people living in our most deprived and least deprived areas. Whilst cardiovascular disease can affect anyone, it is more common in men, some ethnic groups, such as South Asian and black ethnic groups and people living in more deprived areas. However, cardiovascular disease is not inevitable and there is a lot we can do as individuals, communities and organisations in Buckinghamshire to prevent it.

The main modifiable risk factors for cardiovascular disease include behavioural risk factors, such as smoking, 'clinical' risk factors and social and environmental risk factors. People can take action themselves on some risk factors but there is more that organisations and society can do to help people do this.

For the behavioural risk factors a whole system approach that makes healthy choices the easy choices is more effective in changing behaviours than focusing on the individual alone.

Raising awareness of other risk factors is also important. Many people do not know they have 'clinical' risk factors, such as high blood pressure, high cholesterol or diabetes, as they may not have any symptoms. However, if these conditions are found early there are very effective treatments to manage them and reduce the risk of people developing cardiovascular disease.

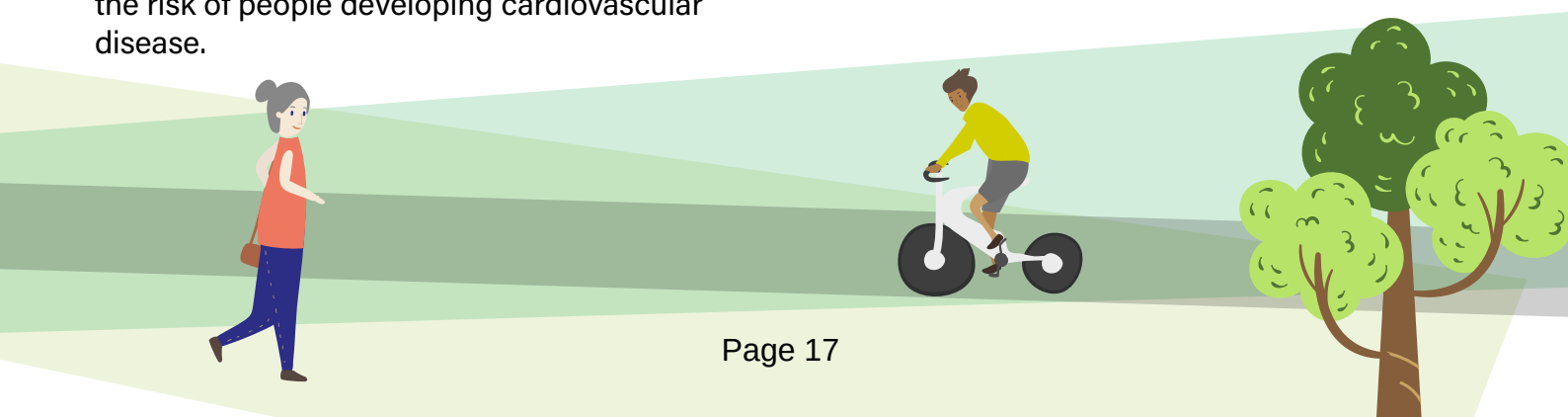
Finally, the conditions in which people live and work can also impact on their risk of cardiovascular disease. The social and environmental risk factors mean that a diverse range of people and organisations can impact on our residents' risk of cardiovascular disease through their role in planning, transport, air quality, housing conditions and stress at work.

Addressing the key risk factors successfully will improve health in many additional ways, including reducing the risk of cancer, diabetes, dementia, musculoskeletal problems and poor mental health. It will also produce many other benefits, including improving child health and learning, economic productivity, improving air quality, helping to mitigate the impacts of climate change and improving quality of life for our residents. To do this we will need action from a wide range of partners, including communities and individuals themselves, local government, the NHS, voluntary sector, businesses and national government but the benefits are definitely worth it!

Dr. Jane O'Grady
Director of Public Health and Community Safety, Buckinghamshire Council

Acknowledgements

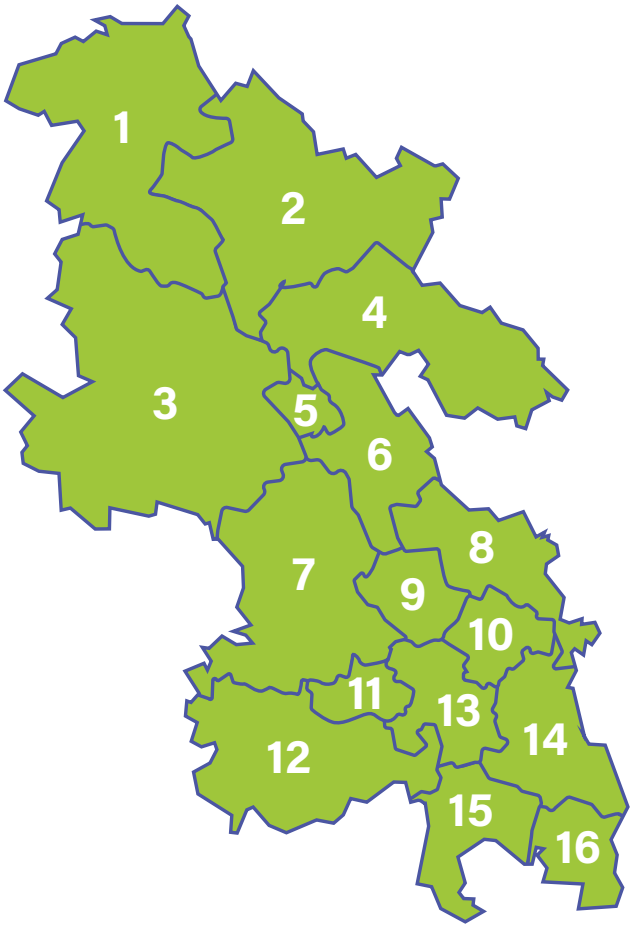
Thanks to Abigail Moffat, Caroline Thickens, David Stoye, Elizabeth Biggs, Elkie Dolling, Emma Dillner, Josiane Dyson, Layla Ravey, Louise Hurst, Lucie Smith, Michelle Baragona, Nicola Higgins, Sally Hone, Sarah Preston, Sarah Winchester, Thilina Jayatilleke, Tiffany Burch and Victoria Cooke.



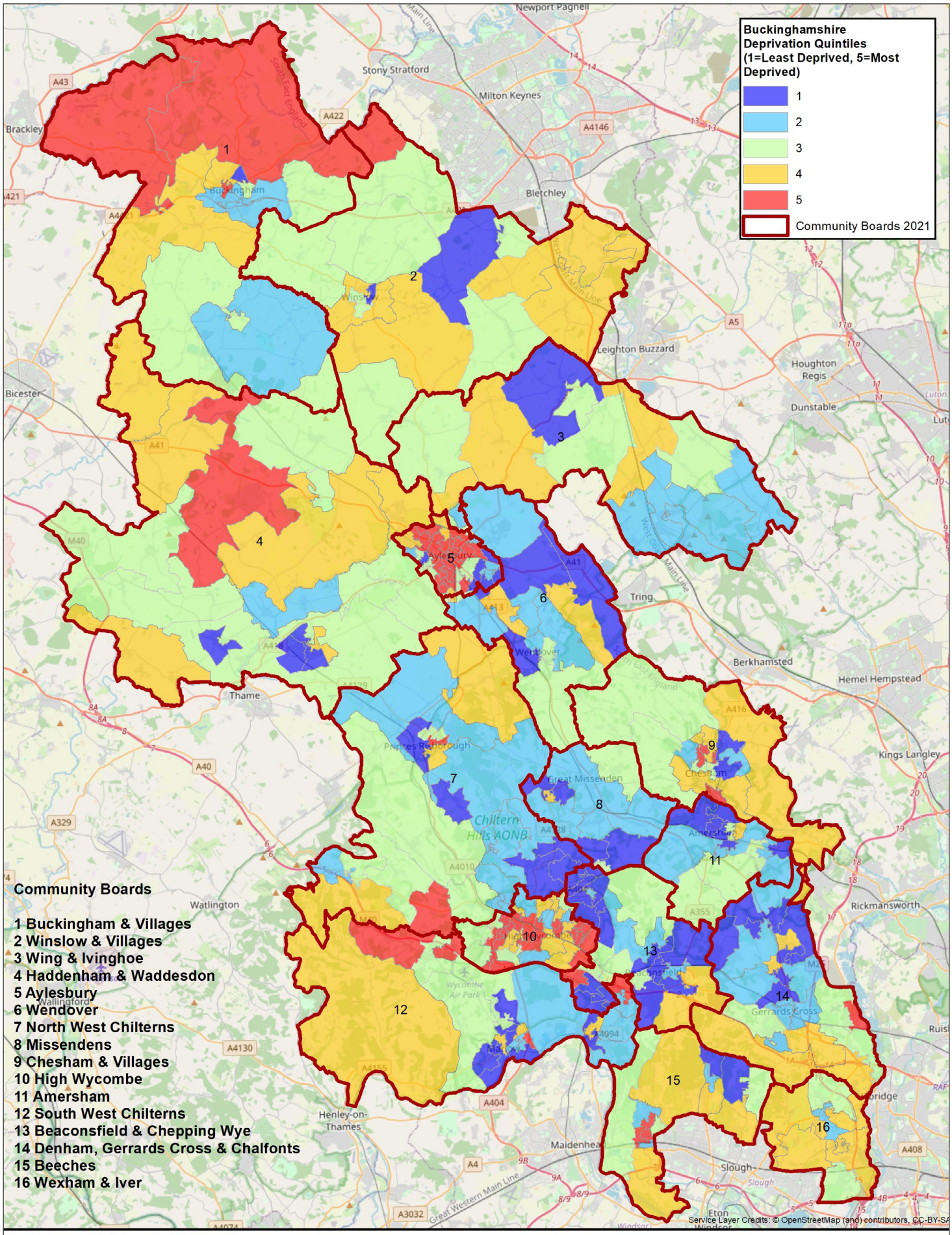
How to use this report

In addition to the report, there are a few tools to help with understanding the content.

- A glossary is available at the end of the document to clarify some of the technical language used.
- Analysis in this report sometimes mentions 'deprivation', 'least deprived' and 'most deprived'. Deprivation in England is measured using the Index of Multiple Deprivation (IMD). It is an official measure of relative deprivation and defines deprivation to include a wide range of an individual's living conditions. Within Buckinghamshire, the population for our county is split into five even groups (quintiles) containing 20% of the population each, based on the deprivation score of the areas they live in. When the term 'least deprived' is used, it means the 20% of the Buckinghamshire population who live in the least deprived areas within the county using the Index of Multiple Deprivation. The 'most deprived' means the 20% of the Buckinghamshire resident who live in the most deprived areas within the county using the Index of Multiple Deprivation. A map of deprivation quintiles for the county is on the next page.
- Some of the analysis also mentions community boards. These are boards that allow council members and communities to come together to address local issues that matter to them. There are 16 community boards across the county. A map for the boards is below.



1 Buckingham & Villages
2 Winslow & Villages
3 Haddenham & Waddesdon
4 Wing & Ivinghoe
5 Aylesbury
6 Wendover
7 North West Chilterns
8 Chesham & Villages
9 Missendens
10 Amersham
11 High Wycombe
12 South West Chilterns
13 Beaconsfield & Chepping Wye
14 Denham, Gerrards Cross & Chalfonts
15 Beeches
16 Wexham & The Ivers



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Produced by Public Health Intelligence
Buckinghamshire Council
30/06/2021

1. Introduction

Cardiovascular disease describes diseases of the heart and blood vessels. It includes heart disease, stroke, transient ischaemic attacks (mini-strokes) and can cause heart attacks, heart failure, chronic kidney disease, peripheral arterial disease and vascular dementia which is the second most common type of dementia. Cardiovascular disease costs the NHS in England £7.4 billion and the wider economy £15.8 billion every year. It is responsible for 1 in 4 premature deaths in the UK and is the biggest contributor to the gap in life expectancy between those living in the most and least deprived areas.

Buckinghamshire is one of least deprived and consequently healthiest counties in England. However, our residents still suffer from a significant burden of preventable diseases, including cardiovascular disease. Although our death rates from cardiovascular disease are lower than the national average, cardiovascular disease is a significant cause of ill health and disability in Buckinghamshire. It causes 1 in 5 deaths in Buckinghamshire and is the biggest contributor to the gap in life expectancy between people living in our most and least deprived areas.

The good news is that most cardiovascular disease can be prevented.

2. Risk factors for cardiovascular disease

The risk of cardiovascular disease is determined by a range of interlinked factors. Some risk factors are personal characteristics that cannot be changed, such as age and ethnicity. Modifiable risk factors include health-related behaviours such as smoking or biological or clinical risk factors such as high blood pressure. The physical, social and economic environment in which people live, learn and work also has a profound impact on their risk of cardiovascular disease. These broader determinants of health affect people's stress levels, ability to adopt healthy behaviours or avoid exposure to harmful environmental conditions such as poor air quality which all impact on their cardiovascular health.

The risk factors are dealt with in turn in the following sections.

2.1 Behavioural risk factors

2.1.1 The challenge of changing behaviour and best practice

The health behaviours that increase the risk of cardiovascular disease are smoking, unhealthy eating, drinking too much alcohol and being insufficiently physically active. These risk factors increase the risk of cardiovascular disease but also contribute to the development of clinical risk factors such as high blood pressure, obesity, diabetes and high cholesterol that also increase the risk of cardiovascular disease. Addressing these risk factors holistically would also decrease the risk of many other diseases, including cancer and dementia, and improve many other aspects of life from birth to old age, increase economic productivity and contribute to a better quality of life for residents.

However, changing behaviours is hard and these behaviours do not occur in a vacuum. These behaviours are influenced by the social, economic, cultural and physical environment in which people live. For a person to change their behaviour they must have the Capacity (including knowledge, skills and ability), Opportunity and Motivation to perform the desired Behaviour – known as the COM-B model of behaviour change. For instance, it is hard to eat healthily if you do not have enough money. It has been shown that families from the poorest tenth of the population need to spend 75% of their disposable income to eat the recommended healthy diet. Likewise, if there are not safe places to play, safe walking or cycling routes to school, work or shops it is harder to build in the required level of physical activity into the day.

In addition, most health-related behaviours are shaped in childhood and adolescence and are influenced by a wide range of factors when we are an impressionable age. The health behaviours of young people are strongly influenced by the people they see around them, including parents, other adults and their peers. For instance, we know that children who have parents who smoke are more likely to become smokers themselves. The pricing, advertising and availability of food and alcohol affect consumption significantly and the food and alcohol industry spend many millions on advertising their products to influence cultural norms and consumption. The density of fast food outlets is higher in more deprived areas. For all these reasons the prevalence of health promoting or health harming behaviours varies across the population and over time. Changing behaviour requires much more than a focus on the individual and their behaviour but a whole system approach that supports the individual to make healthy choices and makes healthy choices the easy choices.

Stopping smoking is a good example of the variety of interventions needed to change behaviour: legislation creates 'smoke free' environments making it harder to smoke in public places, cigarettes are less affordable because of taxation, pictures on packaging show the real effect on people bodies, cigarettes are less visible within society due to a lack of advertising, and smoking cessation services support people develop skills to stop smoking.

To enable people to live healthy lives we must understand their barriers to making behaviour change and what would help them make a change. This differs for diverse groups of people. The best way to do this is to use co-design to involve people in shaping and testing and evaluating services and interventions that they will want to use. Co-production takes this process one step further where communities and individuals help deliver the service or intervention themselves. Effective behaviour change also requires that we understand people's views on the wider environmental changes that would be necessary to enable behaviour change.

Evidence shows that interventions that alter our environments to promote health, such as structural changes that require little or no action from individuals, see the largest population health gains and gains in the most vulnerable communities compared to individual-based approaches. For example, more than 50% of the population are overweight or obese. A strategy that focuses solely on changing the behaviour of individuals one person at a time cannot reverse this epidemic. A whole system approach at population level is required that addresses a

wide range of factors such as food formulation, pricing, advertising, availability of healthy food and social norms.

2.1.2 What we are doing

Recognising the importance of effective behaviour change, we are training teams in the council, NHS and wider partners in the use of the COM-B model described above to co-design services with communities.

We are also rolling out the Making Every Contact Count programme to support behaviour change across the council and partners. Making Every Contact Count (MECC) is an evidence-based approach to behaviour change which uses the day-to-day interactions people and organisations have with others to cascade health and wellbeing messages and information, whilst supporting people to make plans and identify actions that will improve their health. MECC gives people the skills to have 'healthy conversations' with their friends, family and community which can help sow the seeds of change and improve health and wellbeing

Public Health and partners have trained 245 people in MECC, including people from several organisations including adult social care staff and social care providers, voluntary and community organisations, schools, food banks, housing trusts and parish councils.

We are also working with partners across Buckinghamshire to produce multiagency strategies and action plans on the four risk factors that consider the impact of the wider environment on health behaviours. This includes strategies and plans on:

- Physical activity.
- Tobacco control.
- Whole systems approach to healthy weight.
- The Buckinghamshire Drug and Alcohol Strategy is being reviewed and updated by the local multi agency partnership in 2022.

The next section looks at each of these behavioural risk factors in turn and highlights what we can do about them locally.

2.1.3 Smoking and tobacco

Smoking and cardiovascular disease risk

Smoking is a major cause of cardiovascular disease (CVD) and accounts for approximately one of every four deaths from cardiovascular disease nationally. Smoking is also the single biggest driver of inequality in death rates between the least and most deprived communities. Over half the difference in the risk of premature death between the least and most deprived is due to smoking.[1] Most smokers started smoking in their teenage years and the addictive nature of tobacco makes it more difficult to stop.

Smokers are two to four times more likely to get heart disease compared to people who do not smoke, and smoking doubles the risk of a stroke and the risk of dying from a stroke.

People who smoke are also 30-40% more likely to develop type 2 diabetes and need more insulin to regulate their blood sugar.[2] Dementia is also more likely to develop in smokers than people who have never smoked.[3]

The risk of cardiovascular disease increases with the number of cigarettes smoked per day and the numbers of years people have been smoking. Even people who smoke fewer than five cigarettes a day may show signs of early cardiovascular disease. People who smoke 20

cigarettes a day are six times more likely to have a stroke compared to non-smokers. Exposure to second-hand smoke can also cause heart disease, heart attacks and strokes in non-smokers.

Smoking rates have been falling nationally for many years and during the COVID pandemic in 2020, in England at least 300,000 people quit smoking successfully. Over two million people cut down on the number of cigarettes they smoke each day.[4] However, during the first lockdown in 2020, a study found that there was a 25% rise in 18 to 34-year-olds who smoke - resulting in more than 652,000 new smokers among this age group.[5]

Smoking prevalence in Buckinghamshire

In Buckinghamshire, it is estimated that about 11.3% of adults smoked in 2019. While the prevalence of smoking in Buckinghamshire has been falling and is lower than the national average, unfortunately our smoking rates have increased since 2017 when 9.6% of adults were smokers in Buckinghamshire.

The prevalence of smoking varies across residents in Buckinghamshire. Men have higher smoking rates than women. One in five people living in our most deprived areas are smokers compared to one in ten in our least deprived areas. Residents in routine and manual occupations are 2.5 times more likely to smoke in Buckinghamshire compared to people in managerial and professional occupations. Almost three in ten unemployed residents smoke compared to one in ten employed residents.

Residents with serious mental illness are three times more likely to smoke (three in ten smoke) compared to other residents (one in ten).

In England, residents from minority ethnic groups are less likely to smoke compared to residents from predominantly white ethnic groups (9.7% of black adults and 10.8% of Asian adults smoke compared to 14.7% of white adults). Within all ethnic groups, women are less likely to smoke compared to men - 15.9% of men in England smoke compared to 12.5% of women.[6] When looking at some minority ethnic groups the difference is larger. For example, 13.9% of Asian men smoke compared to 2.9% of Asian women.[7]

Smoking and the NHS

One in every 20 NHS hospital beds are occupied by someone with a smoking-related illness.

In Buckinghamshire in 2019/20 there were 3,085 hospital admissions attributable to smoking resulting in a rate of 957 per 100,000 which is lower than the England average of 1,398 per 100,000.[8] An audit in 2016 of admissions in the local hospital found that one in four were smokers but the majority were not asked if they would like to quit smoking. People who smoke are more likely to have complications after surgery, such as infections or delayed healing, and need to stay longer in hospital.

Evidence shows that smoking cessation interventions delivered as routine within hospitals could have a major impact on the number of smokers making a quit attempt.

The NHS Long Term Plan has set a goal to support people in contact with NHS services to quit smoking. This is based on an evidence-based model already implemented in Canada (Ottawa model) and Manchester (CURE model).

The model relies on health care professionals identifying patients who smoke at the time of admission. Patients then receive brief advice from that health care professional before being referred to a tobacco dependency advisor in the hospital. Patients receive appropriate nicotine replacement therapy and counselling to aid them to quit. The Ottawa Model can improve long-term quit rates by 11% and could save the NHS nearly 100,000 admissions by the end of 2023/24.

The CURE project is also estimated to save 30,880 bed days per year across England.

By applying the Ottawa Model outcomes to the that in Buckinghamshire population, the following benefits over five years:

- 284 lives saved.
- 9,429 extra quitters.
- A net saving of £5,490,884.

Quitting smoking

The best thing all smokers can do for their heart and general health is to quit smoking. Even long-term smokers can see rapid health improvements when they quit. Within one year of quitting smoking, the risk of a heart attack drops significantly. In addition, within five years of quitting smoking, smokers lower their risk of a stroke to almost that of a person who has never smoked.

People's success at quitting smoking varies 44.5% of people under 18 years old report successful quitting compared to 61.4% of people aged over 60 years old.[9] Men are also more likely to quit successfully at 62% compared to women at 54%. Residents in the most deprived areas are just as likely to try to quit smoking, but they often find it harder to stop smoking compared to people in less deprived areas.[10] Data from ONS (Office for National Statistics) 2012 showed that of all those people who had ever smoked (current and ex-smokers), men and women in the most deprived fifth of areas were less likely to have given up smoking (46.5% and 48.5% respectively) than those in the least deprived fifth (74.0% and 76.0% respectively).[11] Ethnicity does not seem to impact on a person's chances of quitting.

What we are doing in Buckinghamshire

A wide range of partner organisations in Buckinghamshire, including public and voluntary sectors, are working together to help people to stop smoking and reduce the harm from tobacco. The Buckinghamshire Tobacco Control Strategy sets out our ambitions to achieve a smokefree future for residents. The three main aims of the strategy are to:

1. Continue to reduce smoking prevalence rates and inequalities caused by smoking for adults, children and young people.
2. Reduce the harms associated with second-hand smoke.
3. Reduce the supply and demand of illicit tobacco.

Partners are now working together as the Buckinghamshire Tobacco Control Alliance to implement the annual action plan against the four themes of the strategy: Prevention first, Supporting smokers to quit, Eliminate variations in smoking rates and Effective enforcement.

Work which is taking place to support this includes:

Smoking cessation support and e-cigarette pilot: Buckinghamshire's Stop Smoking Service, Live Well Stay Well, offers free stop smoking support to residents in Buckinghamshire. They have launched a new e-cigarette pilot so that clients can choose this method to support them to quit smoking.

Surgery waiting lists: Increase the number of patients on surgical waiting lists who quit smoking while waiting for their operation, including training staff in Making Every Contact Count (MECC).

NHS Long Term Plan – tobacco dependency services: A dedicated inpatient model that will ensure that all inpatients for acute, maternity and mental health services are screened for their smoking status, offered in-house support services to quit, including access to stop smoking aids such as nicotine replacement therapy, and then discharged into community services. Services must have a fully functioning service, with a trained workforce and appropriate IT systems and processes in place by 2023/24.

Dedicated campaigns: Promoting national campaign such as Stoptober, No Smoking Day and Better Health. Partners are encouraged to also share messages through their own channels. Smokefree Sidelines – a grass roots football campaign aimed at encouraging parents and spectators not to smoke around the pitch sidelines in front of children and young people.

2.1.4 Physical activity

Regular physical activity can reduce the risk of heart disease and stroke by 25%.[12] It also reduces the risk factors that lead to an increased risk of these diseases[13] such as high blood pressure and type 2 diabetes by one third. Regular physical activity can improve cholesterol levels by raising your HDL ('good') cholesterol levels and simultaneously lower your LDL ('bad') levels.[14]

Recommended levels of physical activity are at least 150 minutes a week of moderate-intensity physical activity or at least 75 minutes a week[15] of vigorous-intensity physical activity.

Physical inactivity (defined as less than 30 minutes moderate physical activity per week) increases the risk of high blood pressure, high cholesterol levels and increase the chances of being overweight or obese and having diabetes, all of which are risk factors for cardiovascular disease. Increasing levels of activity in inactive adults in England to just 30 minutes per week could increase overall life expectancy of inactive adults by three years.[14]

Sitting down for long periods also increases the risk of heart disease, high cholesterol, type 2 diabetes, obesity and even some cancers.[16] Increased sitting time is associated with an increased risk of death regardless of physical activity levels, and therefore is now recognised as an independent risk factor in addition to lack of exercise.

The Buckinghamshire picture

In 2020 67.5% of people in Buckinghamshire said they met the recommended physical activity levels which is a slight increase over the last four years. However, studies show that people often overestimate the amount of activity they do. More than one in five adults are currently inactive and this has not improved over this period. The greatest health gains will be made by increasing activity levels in inactive people. If we increased physical activity levels from current 67.5% of adults meeting national guidelines to 71% of Buckinghamshire adults, 163 deaths could be avoided and 59 cases of diabetes prevented over five years (Source: Revised Health Impact of Physical Inactivity Model [2013], 2018).

Who is less active?

National data show that men and women have similar activity levels with 62% and 60% respectively reporting that they meet physical activity guidelines.[3] Activity levels generally fall with age, the sharpest decrease coming at age 75+ years. Those who are long-term unemployed or have never worked are the least likely to be active (52%).[15] There are also significant differences in activity levels based on ethnic background with 63% white adults, 52% black adults and 48% South Asian adults[15] reporting that they meet the physical activity guidelines.

COVID and physical activity

COVID and lockdown had a significant impact on activity levels and the impact has been greater on those with long term conditions, older adults and people from black, Asian and minority ethnic groups.[15] The largest fall in activity levels was seen in those with the lowest activity levels initially and so the inequalities in physical activity have widened. Adult physical activity levels decrease as deprivation increases, and if you live within a deprived area, you are almost four times more likely to die early than someone in the least deprived area.[14]

What we are doing in Buckinghamshire

A wide range of partners are working together to help people to increase their physical activity levels and have developed the Buckinghamshire Physical Activity Strategy 2018-2023. There is an annual action plan delivering the four pillars of the strategy: Active Environments, Active Communities, Skilled Workforce and Working Collaboratively.

Two subgroups focusing on older adults (Live Longer Better Alliance) and disabilities (The Sport and Physical Activity for All Network) have also been developed. Work which is taking place includes:

Skilled workforce: Active Medicine – free training for frontline workers and volunteers

to improve knowledge, skills and confidence to promote physical activity and empower patients/residents to be more active. A total of 1,301 people have been trained via 68 training sessions.

Managing long-term conditions – providing specialist training for instructors to develop physical activity interventions to support residents to manage their long-term condition(s).

Active Communities and reducing sedentary behaviour: Active Movement is a whole school approach to inspire children and families to sit less and move more. The 12 month programme educates and empowers teachers to include movement into everyday class routines. Four Buckinghamshire schools took part in phase one, involving 1,579 pupils and two more schools joined in January 2022. Schools have reported benefits such as improved concentration levels and better engagement from pupils. For more details on how to implement this programme into your school, home and/or office contact the Public Health team.

The Active Communities pilot launched in May 2021 for wards in Aylesbury (Aylesbury northwest) and Wycombe (Abbey; Booker; Cressex & Castlefield; West Wycombe) to encourage residents to sit less and move more. The programme has been designed to take a whole community approach to help everyone make small changes to increase movement in our daily routine. Within the first six months the project has engaged with 2,777 residents, introduced four Active Park Walks with 575 walkers so far and has linked with over 50 different local services and organisations, which include doctors surgeries, pharmacies, care homes, nurseries, schools, faith settings and community centres. These settings have introduced a range of healthier changes.

Active Environments: Simply Walk – offering over 60 volunteer-led walks across the county, all walkers are welcome whether fit and active, require a walking aid or new to exercise. The service runs all year round, in all weathers, giving the opportunity for residents to meet new people improve physical activity levels and general wellbeing. All walks are led by trained volunteers and range from 30 minutes to over 90 minutes. Walkers can either book online or just turn up and complete a registration form with a walk leader. A map of walk locations can be found here.

Active Travel – multiagency working to increase the number of residents cycling and walking as part of the Active Travel Fund actions of Tranche one and two and supporting schools to achieve the mode shift award as part of the national school travel awards scheme.

Play Streets - implementing temporary road closures on residential roads, to allow for chaperoned children's play and community connection on the street.

Working collaboratively: Increasing awareness of local activity opportunities – all partners supporting the use of the Bucks Online Directory and the Bucks Family Information Service to stakeholders and residents.

We are working together to support the Buckinghamshire leisure strategy and health based physical activity programmes across the county.

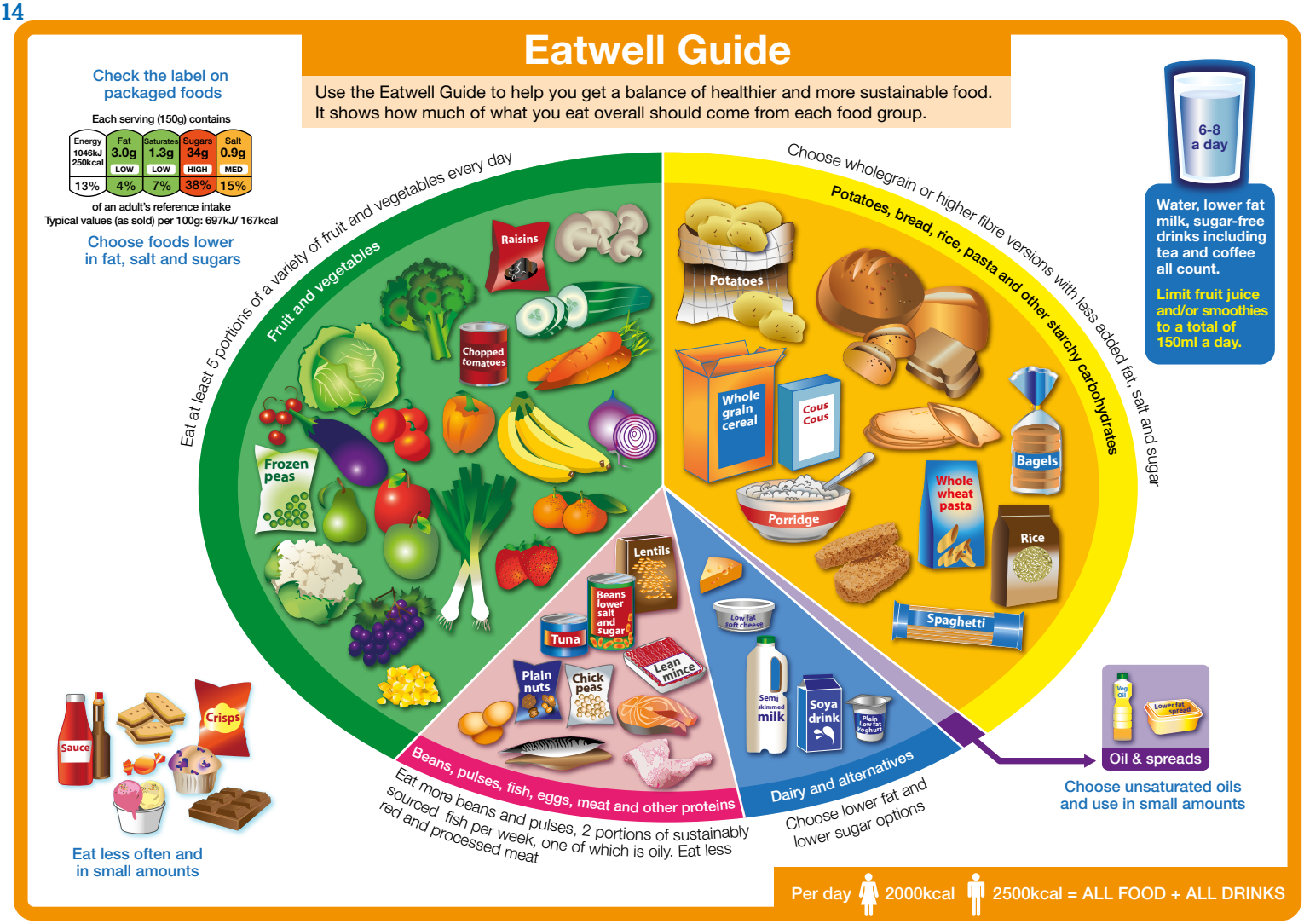


Figure 1: Eatwell Guide

Healthy Eating

A healthy diet can reduce the risk of heart disease and stroke significantly. A poor diet is one of the biggest risk factors for preventable ill health in England.[17]

The Eatwell Guide (Figure 1) shows the different types of foods and drinks we should be eating – and in what portions to have a healthy balanced diet.[18] Foods high in salt, fat and sugar lead to conditions such as high blood pressure, high cholesterol and obesity, all of which are risk factors for cardiovascular disease.

Eating at least five portions of a variety of fruit and vegetables a day could reduce the risk of deaths from chronic diseases, such as heart disease, stroke and cancer by up to 20%,[19] with each increase of one portion of fruit or vegetables a day lowering the risk of coronary heart disease by 4% and the risk of stroke by 6%.[20] There are variations in fruit and vegetables consumption across communities and only 20% of adults meet the recommended five-a-day guideline in the most deprived areas.[21]

Currently, only 55.4% of adults in England eat the recommended five portions a day, with Buckinghamshire slightly higher at 58.4% (2019/20),[22] with fewer men than women meeting the guideline.[23] However, other data sources put the figure even lower, according to Health Survey for England data only 28% of adults and 18% of children are eating the recommended five portions of fruit and vegetables per day, with fewer men than women meeting the guideline.[1]

Too much salt in our diet leads to high blood pressure, which is a major cause of heart disease and 69% of adults in England are estimated to be eating too much salt. For every gram of salt we remove from the average UK diet, we can reduce deaths from heart attacks

and strokes and save 4,147 lives per year. Up to 75% of the salt we eat comes from processed foods (e.g., bread, cheese, meat products like bacon) and food eaten out of the home.[24]

Eating away from home

More than one quarter of adults and one fifth of children in England are eating food from out-of-home food outlets (restaurants and takeaways) at least once a week.[25] These meals tend to have higher fat, saturated fats, sugar and salt, and lower levels of healthy nutrients. Often eating meals prepared away from home is linked with cardiovascular disease, with those regularly eating two meals or more per day prepared away from the home having a greater risk of death from cardiovascular disease and cancer.[26] Fast food outlets (including chip shops, burger bars and pizza places) account for more than a quarter of all eateries in England. More deprived areas tend to have higher concentrations of fast-food outlets, with five times more outlets found in these areas than in the most affluent areas.[27]

Food insecurity

Food insecurity is when people cannot afford enough food to meet their basic needs.

The poorest 20% of UK households would need to spend 39% of their disposable income on food to meet the NHS Eatwell Guide costs and the poorest 10% would have to spend 75%. This is in contrast to just 8% for the richest 20%.[28]

COVID-19 has increased the number of people in food insecurity and the numbers of people using food banks. Pre-COVID 7.6% of the UK population were facing food insecurity, increasing to 9.9% (5.2 million adults) between February and July 2021.[29] The priority for people affected by food insecurity is to put food on the table that is filling, rather than focusing on the nutritional value of the food.

Eating habits during the pandemic

During the COVID-19 pandemic 40% of adults gained on average half a stone (one stone is the same as 14 pounds in weight).[30] Eating habits during the pandemic changed with a third of people reporting snacking on unhealthy food and drinks at least once a day (35%), an increase from 26% pre-pandemic. Sales data also showed an increase of 15% in take-home snack foods, such as crisps, sweets and biscuits. A quarter of alcohol drinkers also said their intake had increased since the second lockdown, with sales showing a 28% increase in shops compared to 2019.[31] In Buckinghamshire food bank use during the pandemic increased significantly compared to pre-pandemic levels. There are six food banks in Buckinghamshire with the number of food parcels distributed increasing from 16,158 in 2019 to 26,514 in 2021.

2.1.5 Body weight

A healthy weight is defined using a measure called by a Body Mass Index (BMI).[32] A BMI of more than 25 is defined as being overweight and over 30 as being obese.

Obesity and being overweight is one of the leading risk factors for cardiovascular disease, particularly where people carry excess weight around their waist.[33] In the UK, around one in six heart and circulatory disease deaths are associated with being overweight.[34]

Obese people are also more likely to develop other risk factors for cardiovascular disease. They are more likely to develop high blood pressure and type 2 diabetes than those with a normal range BMI.[35] People who are obese are also 30% more likely to develop dementia than those with normal range BMIs.[36]

The risk of developing cardiovascular disease increases the more overweight a person is.[37] Waist circumference is also an important indicator of the risk of cardiovascular disease. Adults with a very high waist measurement (Men: more than 102cm. Women: more than 88cm) have an increased risk of cardiovascular disease compared to adults with the 'ideal' waist circumference (Men: less than 94cm. Women: less than 80cm).

Most adults in the UK are overweight or obese: almost seven in ten men and six in ten women are overweight or obese. Furthermore, 26% of men and 29% of women are obese. Unfortunately, during the COVID-19 pandemic 40% of adults gained on average half a stone in weight, of whom 21% gained a stone or more.[38,] Children who are obese are more likely to be obese as adults.[39, 40] One in five children aged ten to 11 are classified as obese.[41]

Overweight and obesity in Buckinghamshire

In Buckinghamshire six in ten adults (63.1%) are overweight or obese, and the numbers who are obese has been increasing since 2017/18. Almost one in five (18.2%) of four to five-year-olds and almost one in three (31%) of ten to 11-year-olds are also overweight or obese. Childhood obesity has also increased since 2017/18 in children aged ten to 11 years.[42]

Both cardiovascular disease and obesity are strongly associated with health inequalities. Both adults and children in the most deprived areas have almost double the chance of being obese compared with the least deprived.[43, 44] In the ward of Micklefield in High Wycombe, one in four Reception age children are overweight or obese, increasing to two in five in Year 6. Likewise, in Southcourt one in five Reception age children are overweight or obese, increasing to two in five in Year 6. This is in comparison to the more affluent area of Greater Marlow where one in seven Reception age children are overweight or obese, increasing to one in five in Year 6. People of South Asian ethnicity also have an increased risk of cardiovascular disease and diabetes at a lower weight compared with white groups.[45]

What are we doing to support healthy eating and a healthy weight?

Obesity is difficult to address, affected by a mixture of social, economic, biological and environmental factors that shape how we live and our individual behaviours. By creating healthier places to live and addressing other factors that affect our health and choices, such as education, employment and income, the quality and safety of the environment and the places we live and work in, it will help people maintain a healthy weight and improve overall health.

Whilst eating a healthy diet and maintaining calorie balance is down to individuals, the availability of food high in calories is now making it much harder for people to maintain healthier lifestyles. It is important the food environment supports people to improve their health. Improving the nutrient content of the food and drink we buy, cook and eat must be a priority at both a national and local level. We can take practical steps at a local level to enhance the healthy eating options available.

We also need to create an environment which provides people with the opportunity to be active and move more throughout their day. The built environment (e.g., housing, estates, workplaces etc.) can play a significant role in increasing the opportunities for people to be active and can impact on both physical and mental wellbeing. By protecting and enhancing green spaces for allotments, park runs and children's play areas we can create an environment that helps to shape people's preferences and behaviours to encourage activity.

Whole system approach to obesity

Within Buckinghamshire we have recently started taking a 'whole systems approach to obesity.' This brings together partners from a wide variety of backgrounds, such as housing, planning, transport, leisure, schools and local

communities, to develop and agree on a shared action plan to address obesity, looking at these wider environmental factors.

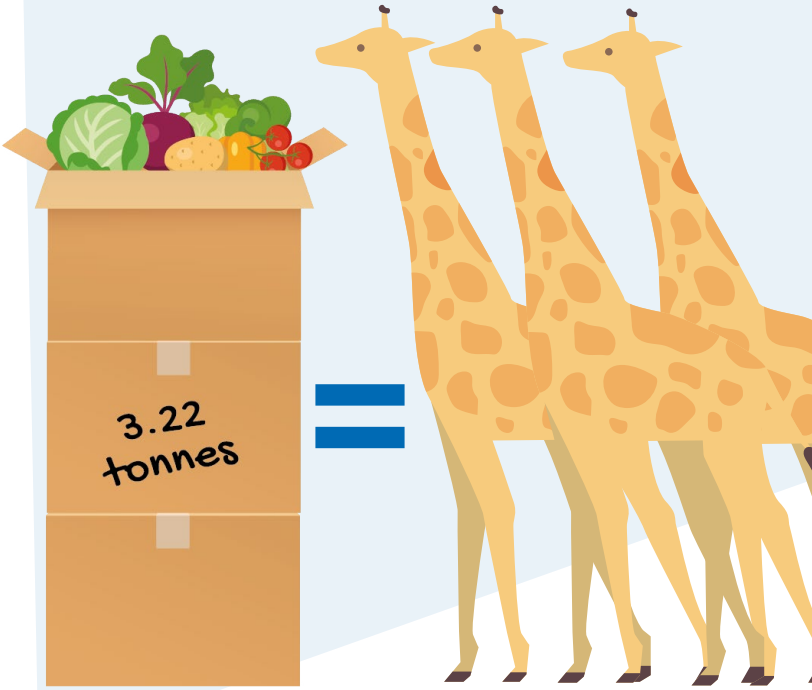
- **Food knowledge and environment** – improving the food environment to support people to make healthier choices and improve food knowledge and understanding.
- **Transport** – reducing sedentary behaviour and encourage communities to increase active transport and travel options to increase physical activity levels.
- **Physical activity** – increasing physical activity uptake through promotion and increasing the range of activities offered.
- **Schools** – enabling schools to contribute to children and young people achieving a healthy weight, creating consistent messages on food and physical activity for both pupils and parents.

Some examples of community projects we are delivering with communities and partners to increase people's access to fresh fruit and vegetables, improve their knowledge to cook their own nutritious meals and try their hand at growing their own produce are included below:

Grow to Give

Grow to Give encourages people to grow more food in their gardens and allotments and donate this surplus to food banks and community fridges in their local area to support people experiencing food insecurity. It was set up by residents Justine Hamer and Sheila Bees in Aylesbury and Wycombe in 2019. With support and funds from Buckinghamshire Council and Feedback the scheme has gone from strength to strength with 14 allotment sites and 200 community growers now participating.

In 2021 the community of growers donated 3.22 tonnes of produce for food parcels that supported over 600 families, that is the same weight as 403 baskets of fruit and vegetables, three giraffes or two family sized cars.



In 2022 the project will partner with five new allotment sites in the Chesham and Iver/ Wexham area in addition to the 14 existing sites in Aylesbury and High Wycombe. The project relies on the generosity of local food growers and champions at each allotment site, helping to keep the scheme running on the ground. We are also keen to expand to as many plot holders as possible so even more produce could be donated.

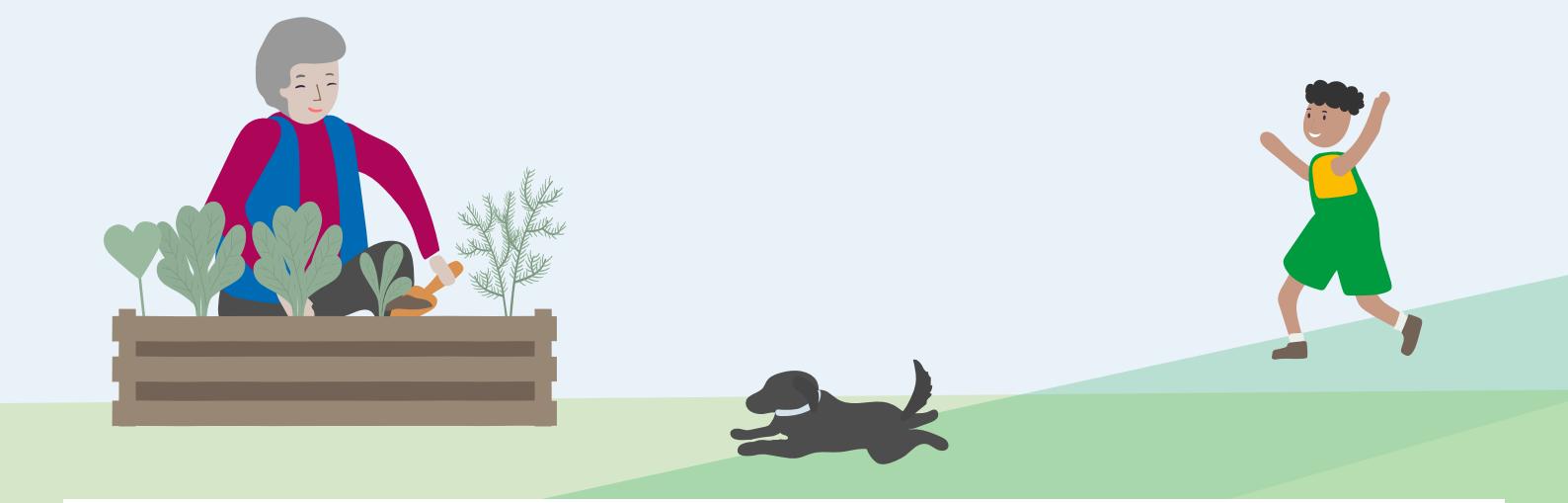
The project has also developed 20 recipe cards and videos to ensure people receiving the produce get healthy and simple recipe ideas to use the donated food. It also helped develop a community of eco-friendly growers and held eco-growing master classes to support growers get the most out of their site, engaging 100 people in the sessions.

Starting your own scheme is a simple, fun and healthy way to bring your community together while helping those in need. On the Grow to Give website there are free downloadable resources including a how to guide, posters to advertise the scheme at your allotment or in your local community.

Adam Townsend, Foodbank Manager at the Aylesbury Vineyard Storehouse commented:
"Having fresh, seasonal, locally grown food to give our food bank clients is just fantastic! It's even encouraged some of our customers to start growing themselves. It's been a really tough year and the Grow to Give donations just show how much people care."

Justine and Sheila who run the project are in awe of the generosity of local growers. The pair said:
"We just can't believe people have taken Grow to Give into their hearts so quickly, and it's all down to our local allotment champions and fabulous growers…Each week it's so uplifting seeing the fabulous produce they donate, it's a great example of community spirit and what can be achieved working together."

A grower from Ashbrook Allotment said:
"I've really enjoyed donating some of my surplus crops to Grow to Give. I always grow too much of most crops throughout the year and it is good to know it can be put to such a great cause. If this helps in anyway to help get someone through a difficult time that is really satisfying to know. Our allotment site has really come together to support Grow to Give and I am sure all who contribute very much enjoy the regular updates on how much has been collected so far."



Community growing sites –
Grow It, Cook It, Eat It

Grow It, Cook It, Eat It brings communities together to create shared growing sites in their local area. Open to all, the sites provide a supportive area where people can develop their skills, knowledge and confidence to grow their own fruit and vegetables. There are currently four sites across the county in High Wycombe, Aylesbury and Chesham, with plans to develop a further two sites in the Iver and Buckingham areas. Each site is led by an experienced 'Expert Gardener' who is on hand to offer support and guidance as needed, with the aim being the local community will take ownership of the site and keep it going long-term.

During the set-up phase of the sites this year, many community members and local organisations have generously stepped forward offering workforce, tools, sheds, greenhouses and plants to help get the sites off the ground.

The project also has a cooking element which launched late 2021. Local community volunteers are trained to empower and inspire others to cook healthy and nutritious meals from scratch. Delivering a five-week cookery course, volunteers cover topics such as healthy meals on a budget, basic cookery skills and reducing waste.

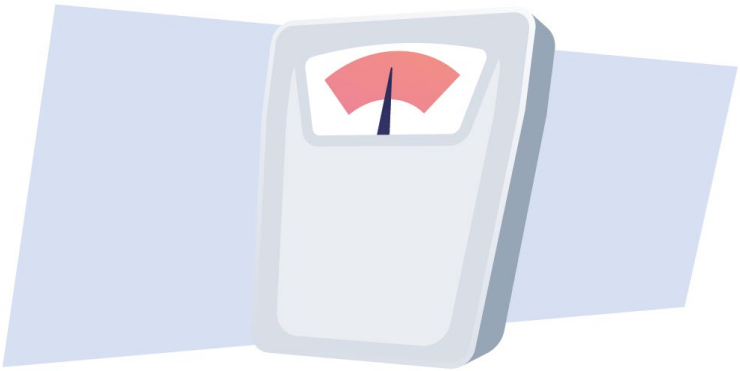
For further details of each of the growing sites, and to register your interest in getting involved on a growing site and/or as a volunteer cookery tutor, please visit the Grow It Cook It Eat It webpages (healthandwellbeingbucks.org).

Veggies in containers

The veggies in containers project was developed to show people how easy it is to grow their own food regardless of the space they have available whether in the garden, on balconies, in window boxes and even indoors.

As part of the project Restore Hope (Chesham and Latimer), The Vineyard Foodbank (Aylesbury) and The Women's Cultural Arena (High Wycombe) distributed a total of 251 growing kits to households who were currently using their services. Kits included containers, soil, seeds, equipment, and full instructions to allow people to try their hand at growing. Each kit also came with recipe cards enabling people to cook healthy and nutritious meals with the foods they have grown.

The project was well received by those involved with many stating they had increased confidence to try growing their own vegetables. Those with young children found the children really got engaged and provided opportunities for shared enjoyment with parents, but also provided educational value and introduced children to new foods.



Weight management

Buckinghamshire Council commissions some weight management services through our integrated lifestyle service, Live Well Stay Well.[46] Additional funding was received in 2021/22, for a one-year period, from the government to support weight management in groups with higher need of these services.

A review of current services and people accessing them in relation to need for weight management services identified three groups of people who were not attending services in the numbers expected: men, people from minority ethnic backgrounds and those with mild learning disabilities. Services were further targeted to areas with the highest rates of diabetes, and excess weight in adults which were Aylesbury and Wycombe.

We worked with the following organisations to help improve healthy eating and healthy weight in these groups.

- **Talkback-UK** - a service for adults with a mild learning disability, based on developing the knowledge and understanding of food, nutrition, and weight issues. Taking a practical approach, they are educating people around shopping for the right food, reading food labels, cooking and trying new foods and selecting healthy foods, as well as including physical activity into everyday life.
- **Karima Foundation** (High Wycombe) - a local community organisation will provide lifestyle advice and physical activity sessions that are culturally appropriate to the black and ethnic minority population of High Wycombe.
- **Wycombe Wanderers Sports and Education Trust** - the charity of Wycombe Wanderers Football Club, using the appeal of football to deliver healthy weight services. Providing men and women only sessions across both High Wycombe and Aylesbury.
- **The Fitness Garden** - a community interest company working to improve the health of the people of High Wycombe through education and engagement in health fitness and mental wellbeing. Providing dedicated services for men and black, Asian, and ethnic minority groups, the Fitness Garden deliver services using both face to face contact and technology to keep people motivated and engaged in their journey to losing weight.
- **Man v Fat** - UK's largest male only weight loss programme. Based around a football league where all players want to enjoy football, lose weight and get healthier. The league is not just decided on goals scored, but also weight lost. Sessions start with dietary advice (and a weigh-in) followed by 28 minutes of football. Sessions run in both Aylesbury and High Wycombe.

We are currently reviewing the outcomes of each of the above programmes to help support future commissioning of services across Buckinghamshire.

2.1.6 Alcohol

Chronic alcohol consumption of more than 3.75 units per day (approx. 280ml wine or 660ml beer) is associated with an increased incidence of high blood pressure and of cardiovascular diseases, such as heart attack, heart failure and stroke.[47] One unit is 8g of pure alcohol and a standard glass (175ml) of wine contains 2.1 units and a bottle (330ml) of beer contains 1.7 units. This calculator works out the number of units in a particular drink.

Global estimates indicate that the alcohol accounts for 16% of high blood pressure worldwide.[48] Regular excess alcohol consumption also contributes calories which may lead to weight gain and abnormal heart rhythms can be exacerbated by alcohol consumption.

UK health advice is that, for both men and women, it is safest not to drink more than 14 units of alcohol a week to keep alcohol health risks to a low level. It is estimated that over one quarter (29%) of Buckinghamshire residents drink more than 14 units per week, compared to 26% nationally. This equates to 120,000 adults in Buckinghamshire drinking above recommended levels.

On average, people on low incomes drink less alcohol than people on higher incomes. However, people from deprived areas are more likely to die or suffer from a disease related to their alcohol use.[49]

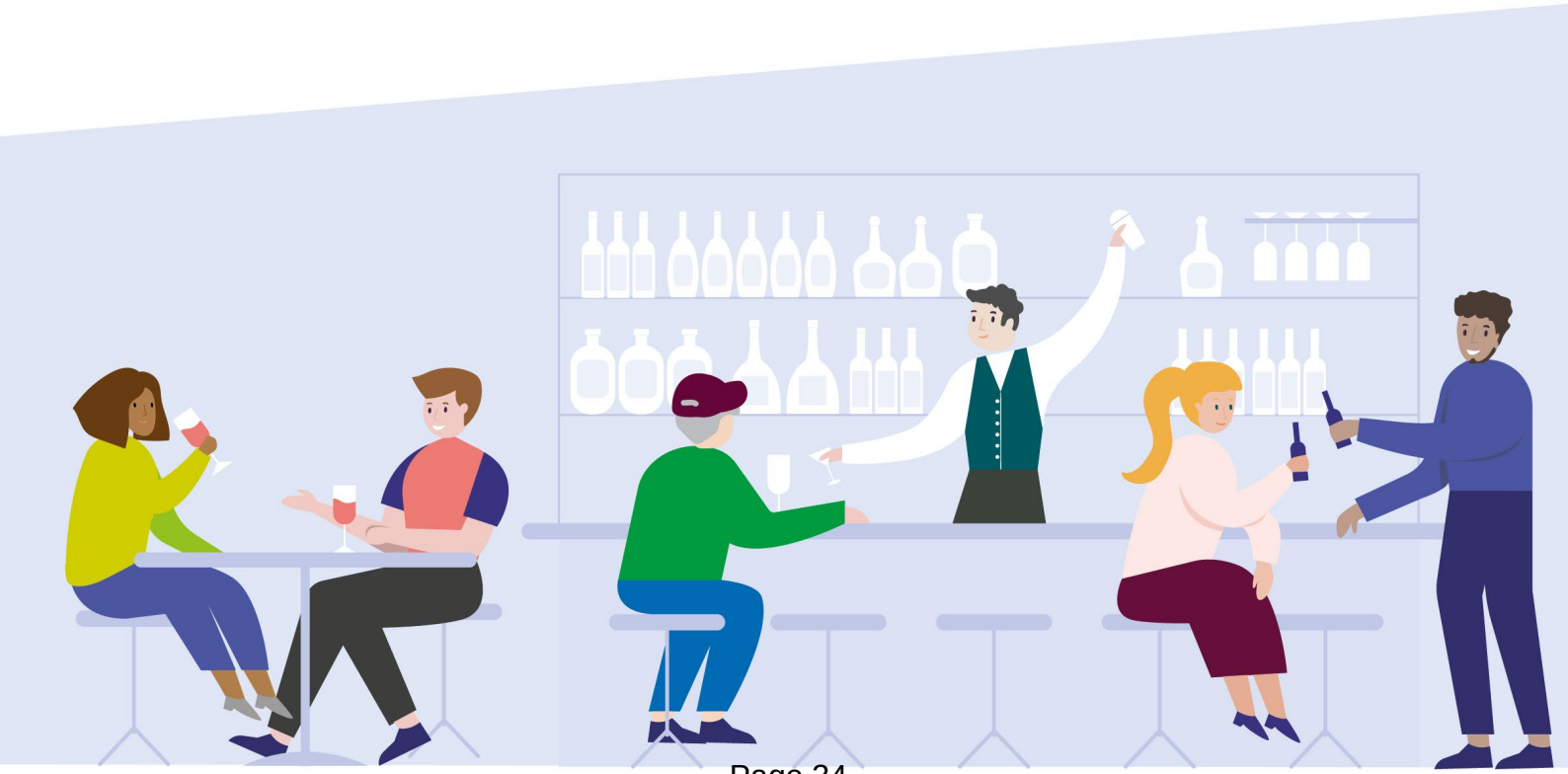
Adults in ethnic minority groups are less likely to report drinking alcohol at a hazardous, harmful or dependent level compared to white groups.[50]

What we are doing

The Buckinghamshire Drug and Alcohol Strategy is being reviewed and updated by the local multi-agency partnership in 2022. The updated Buckinghamshire strategy will also take account of the new national drugs plan.

As part of the NHS Health Check simple questions are asked about people's health. This includes how much alcohol people drink, enabling advice about alcohol to be offered. Further details are available on the NHS website.

Buckinghamshire Council commissions a range of services to support people with problematic alcohol use.



2.2 Clinical risk factors

2.2.1 High blood pressure

High blood pressure (also called hypertension) affects more than one in four adults and increases the risk of stroke, heart disease, kidney failure and some types of dementia.

Surveys suggest that 30% of men and 26% of women have high blood pressure and the prevalence increases with age, rising to more than 50% in people aged over 60 years. It is more common in men than women up to the age of 65 years. High blood pressure is more common in people of South Asian, black African, black Caribbean or Irish ethnicity and people who have a relative with high blood pressure. People living in the most deprived areas are 30% more likely to have high blood pressure compared to people living in the least deprived areas.

High blood pressure is responsible for 12% of all visits to GPs with an estimated annual cost to the NHS of over £2 billion.

In England, only 57% of the estimated number of adults who have high blood pressure have had it detected, and only 56% of people under 80 who have been diagnosed with high blood pressure have achieved the NICE recommended target of BP of 140/90 mmHg.

Modifiable factors that increase the risk of high blood pressure include being overweight, being insufficiently active, eating an unhealthy diet containing too much salt and not enough fruit and vegetables, drinking too much alcohol and smoking.

The higher the blood pressure the higher the risk of harm. Each 2mmHg rise in systolic blood pressure is associated with a 7% increase in deaths from heart disease and 10% increase in deaths from stroke. High blood pressure can be reduced by drug treatment. Reducing salt in food, eating healthily, drinking less alcohol, being more physically active and losing weight if overweight can also help to reduce blood pressure. Research suggests that for every 10mmHg reduction in blood pressure the risk of heart disease and heart failure reduces by 17% and 28% respectively and the risk of stroke reduces by 27% and deaths from all causes reduce by 13%.

Detecting high blood pressure

People with high blood pressure may not know they have it because they may not have any symptoms. The only way to detect high blood pressure is through a simple measurement using a blood pressure machine. The longer high blood pressure goes undiagnosed or uncontrolled, the greater the risk of harm to health.

Residents who are aged 40 to 74 years are eligible for the NHS Health Check once every five years. This checks for high blood pressure and other risk factors for heart disease and stroke and staff can give advice to promote a healthier life and refer to behaviour change or other services.

High blood pressure and COVID-19

High blood pressure is linked to higher risk of serious illness if someone develops COVID-19.[51] Some studies suggest that people with high blood pressure are more at risk of getting seriously ill with and dying of COVID-19. Research into the link between high blood pressure and COVID-19 is ongoing. However, people with untreated high blood pressure seem to be more at risk of complications from COVID-19 than those whose high blood pressure is managed with medication.

During the COVID pandemic, an estimated 49,208 fewer people in the Buckinghamshire, Oxfordshire and Berkshire West (BOB) area had their high blood pressure managed to the target level. This means for the BOB area that there is now the risk for an extra 736 heart attacks and strokes over the next three years.

2.2.2 Diabetes

Diabetes is one of the most common chronic diseases in the UK with 4.1 million people living with a diagnosis of diabetes and a further 850,000 people estimated to be living with diabetes but not yet diagnosed. Diabetes diagnoses have doubled in the last 15 years, and 13.6 million people are estimated to be at risk of developing diabetes in future.

Diabetes comprises a group of disorders characterised by persistently raised levels of sugar in the blood. There are two main types of diabetes – the most common is type 2 accounting for nine in ten cases. Type 1 and type 2 diabetes are both associated with an increased risk of cardiovascular disease and other health problems.

People with type 2 diabetes have double the risk of cardiovascular disease, such as heart attack, heart failure and stroke, and have an increased risk of other problems, including loss of sight, and kidney disease. The life expectancy of people with type 2 diabetes is reduced by up to ten years.

There are several risk factors that may make someone more likely to be diagnosed with type 2 diabetes – a combination of characteristics people are born with and features of our environment and behaviours. The main modifiable risk factor for type 2 diabetes is being overweight or obese, which accounts for 80-85% of the overall risk. Being overweight is associated with a three-fold increased risk and being obese is associated with a seven-fold increased risk of diabetes compared to people of a healthy weight. Another contributor is higher levels of sedentary behaviour, which itself is associated with a two-fold increased risk of diabetes. A further predictor of future type 2 diabetes diagnosis is elevated blood sugar levels during pregnancy – gestational diabetes. Gestational diabetes is associated with a seven-fold increased risk of type 2 diabetes in later life.

Diabetes is also a significant contributor to health inequalities. People of Asian, African, and Afro-Caribbean ethnicity have up to a three to six times increased risk of type 2 diabetes compared to people of white ethnicity, and their risk of developing type 2 diabetes increases earlier from age 25 compared to from age 40 for people from white groups. Nationally, people living in the most deprived areas are 2.5 times more likely to develop diabetes compared to people in the least deprived areas. People with diabetes living in the most deprived areas are also three times more likely to develop serious complications from diabetes.

It is estimated that more than half of cases of type 2 diabetes can be prevented or delayed. People can reduce their risk of developing diabetes by (1) eating a healthy diet, such as one that is high in fibre and with a low glycaemic index (the glycaemic index is a rating of how quickly carbohydrate foods affect blood sugar levels. Low index foods are broken down more slowly, thereby causing more gradual rises in blood sugar levels); (2) being more physically active (not sitting for long length periods of time and being physically active in line with national guidelines); and (3) losing weight if overweight. The NHS Diabetes Prevention Programme (DPP) was launched in 2016 and aims to provide personalised support to people at risk of developing type 2 diabetes, such as adults with a fasting plasma glucose between 5.5-6.9 mmol/L or with a history of gestational diabetes. Individuals can find out if they are at risk and register for the DPP on the Healthier You website.

2.2.3 Cholesterol

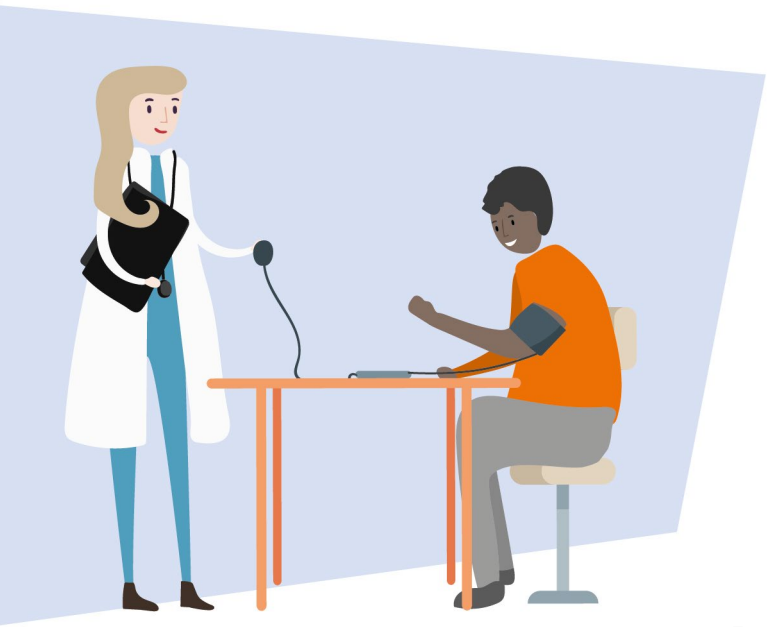
Cholesterol is the main fat found in the blood. Elevated levels of total cholesterol (above 5mmol/L) causes narrowing of the arteries with fatty deposits leading to cardiovascular disease. There are two important types of cholesterol – high density lipoprotein (HDL) or non-high density lipoprotein (non-HDL). It is now known that non-HDL cholesterol, rather than low density lipoprotein (LDL) cholesterol specifically, is the key risk factor for cardiovascular disease (NICE, 2021). For these purposes the terms are interchangeable. Non-HDL cholesterol is often referred to as 'bad' cholesterol, and a raised level (above 4mmol/L) is also an important cause of atherosclerosis. HDL cholesterol is often referred to as 'good' cholesterol as it

has a protective role against cardiovascular disease. However, the beneficial effects of 'good' cholesterol may only occur up to a certain level (approximately 1.4mmol/L), and extremely high levels (above 2.3mmol/L) may also be harmful.

High levels of 'bad' cholesterol are estimated to cause one quarter of cardiovascular disease in Buckinghamshire.

In the majority of cases, high cholesterol levels are due to a combination of environmental factors and health behaviours, including a diet high in saturated fat, low levels of exercise, smoking and drinking excess alcohol, although the specific relationships with 'good' and 'bad' cholesterol may vary. For example, evidence has shown that, within reasonable limits, the more someone is active the more they can raise their 'good' cholesterol; but more intense activity may be needed in order to start reducing 'bad' cholesterol levels. Other risk factors for high cholesterol levels include being male, being from a South Asian background and being older.

It is estimated that one in 250 people have a genetic condition called familial hypercholesterolaemia (FH) which results in high cholesterol levels. If untreated half of men and one third of women with FH develop coronary heart disease by the time they reach 55 years old, but if FH is identified and treatment started early enough people with FH can have the same life expectancy as the general population.



2.3 Social economic and environmental risk factors

2.3.1 Healthy work

The work people do can affect their risk of cardiovascular disease. Stress at work can take several forms described as job strain and low effort-reward work. Job strain describes work with high demands combined with low control. Low effort-reward describes work where there are limited career opportunities, low salary and low social approval. Both higher job strain and low effort-reward work are associated with an increased risk of death from cardiovascular disease[52] and are more common in people with lower income or in lower job grades.

A study of 10,000 British civil servants found that behavioural risk factors could only explain a third of the difference in the incidence of coronary heart disease between different civil servants.[53] Biological risk factors, such as metabolic syndrome (a medical term for the combination of diabetes, high blood pressure and obesity), accounted for around another third of the difference.[54] The study found that work grade affected the risk of central obesity (excess fat around the waist – a known risk factor for cardiovascular disease) and metabolic syndrome and that civil servants in the highest grade work were least likely to have central obesity or metabolic syndrome.[55] Jobs that had higher job strain or stress were associated with an increased risk of obesity.[56]

Working longer hours increases the risk of cardiovascular disease – international evidence has shown that people that work 55 hours or more per week are 17% more likely to die from heart disease and 35% more likely to die from stroke, compared to people working 35-40 hours a week.[57]

2.3.2 Extreme temperatures

Both low and high temperatures are associated with increases in death from cardiovascular disease.[58] Globally 'non-optimal temperature' accounted for 1.96 million deaths globally according to the Global Burden of Disease study.[59]

Higher temperatures increase the risk for death from heart disease, heart failure and heart attacks.

Very cold temperatures increase the risk of heart attack and stroke. People who have pre-existing long-term conditions are most at risk of falling ill in the days after temperatures drop. Elderly people are especially vulnerable in winter months. Before the COVID pandemic circulatory diseases accounted for around a fifth of all excess winter deaths.[60]

2.3.3 Housing

The quality of housing and our ability to keep our houses warm is important.

Cold homes are associated with an increased risk of cardiovascular disease and other health issues.[61]

When there is a cold snap in the weather, hospitals see an increase in patients with a heart attack almost immediately and an increase in stroke around five days after the start of the cold weather.[62] Cold temperatures below 12° cause blood vessels to narrow, causing an increase in blood pressure and blood viscosity,[63] leading to an increase in heart attacks and stroke.[64]

The risks of ill health are even higher for people who are homeless. Homeless people have a threefold increased risk of cardiovascular disease and an increased risk of death from[65] cardiovascular disease.

2.3.4 Air quality

It is estimated that poor air quality is responsible for up to 36,000 deaths per year in the UK, and the majority of UK deaths attributable to outdoor air pollution are from heart disease and stroke.

Evidence from nine cities across England showed that the risk of out of hospital cardiac arrests and emergency admission for stroke was higher on days with higher pollution.[66] Air pollution rates are highest in more deprived neighbourhoods in England.[67]

Tackling air quality through active travel can have dual benefits in reducing cardiovascular disease risk – studies show that people that live in places where walking and cycling are convenient and safe have lower levels of obesity and diabetes.[68]

2.3.5 Cardiovascular disease and COVID

Studies have shown that cardiovascular disease is associated with poorer outcomes from COVID-19 infection[69] and many of the risk factors for developing cardiovascular disease (such as being obese, having high blood pressure or having type 2 diabetes) are also risk factors for worse COVID-19 outcomes. The risk is greatest for people with poorly controlled disease.

However, evidence is emerging that the reverse is also true – that COVID-19 disease may be a risk factor for cardiovascular disease. Firstly, cardiovascular complications may occur during initial COVID-19 infection, including blood clots and damage or inflammation to heart muscle.

Secondly, cardiovascular events are more likely to occur up to a year after COVID-19 infection. The risk of any cardiovascular event is 63% higher (45 additional people affected per 1,000) and the risk of a major event (heart attack, stroke or death) is 55% higher (23 additional people affected per 1,000) than people who have not had COVID-19 infection. These increased risks of cardiovascular events affect working age adults as well as older adults and affect those without as well as those with pre-existing cardiovascular disease.

Thirdly, it is not known what the longer-term effects of COVID-19 infection are yet, but they could include an increased risk of future cardiovascular disease. An estimated 1.7 million people in the UK reported experiencing long COVID in March 2022, of which common symptoms include chest pain, palpitations and shortness of breath.

Lastly, the pandemic itself has had an adverse impact on many of the risk factors for cardiovascular disease.

The pandemic has led to a worsening of some people's mental health and economic circumstances and increased the proportion of people with unhealthy behaviours, such as eating unhealthily, gaining weight, doing less physical activity and drinking more alcohol. The pandemic also reduced access to routine health care and preventive interventions, such as NHS health checks to detect cardiovascular disease risk factors and management of high blood pressure and diabetes.

3. Who is Most at Risk?

This section highlights the national picture. There is less data available at a Buckinghamshire level but that which we do have shows a similar picture and is included in the following section.

The risk of cardiovascular disease increases with age and is generally higher in men, certain ethnic groups and people living in more deprived areas. People with severe mental illness and some people with learning disability are also at higher risk of developing cardiovascular disease. The reasons for this are complex and reflect a mix of interlinked factors such as living and working conditions, exposure to chronic stress, opportunities to adopt healthy behaviours and biological factors. If we are to tackle inequalities in health it is important to identify the modifiable risk factors that can help prevent or delay cardiovascular disease in these groups.

3.1 People living in deprived areas

Our health is strongly influenced by the places we live, work, and learn. People that live in the most deprived areas of England are four times more likely to die early from cardiovascular disease (before the age of 75), compared with people that live in the least deprived areas.[70]

The link between deprivation and death from cardiovascular disease follows a gradient. As the level of deprivation increases the death rate from cardiovascular disease increases. The graph below shows that although premature mortality from cardiovascular disease in England decreased between 2001 and 2019, differences between more and less deprived groups persisted. In 2020, there was a marked increase in premature mortality from cardiovascular disease, with the steepest increases in the most deprived deciles widening the gap. When the population is split into tenths (deciles) by deprivation, the risk of early death from cardiovascular disease was higher with increasing deprivation consistently from 2001 to 2020.[71]

3.1.1 Health behaviours

The health behaviours people adopt are influenced by a wide range of factors, including their social and economic circumstances and the environments in which they live. Health behaviours that reduce the risk of cardiovascular disease are often more common in less deprived areas and those that increase the risk are more common in more deprived areas.

Smoking

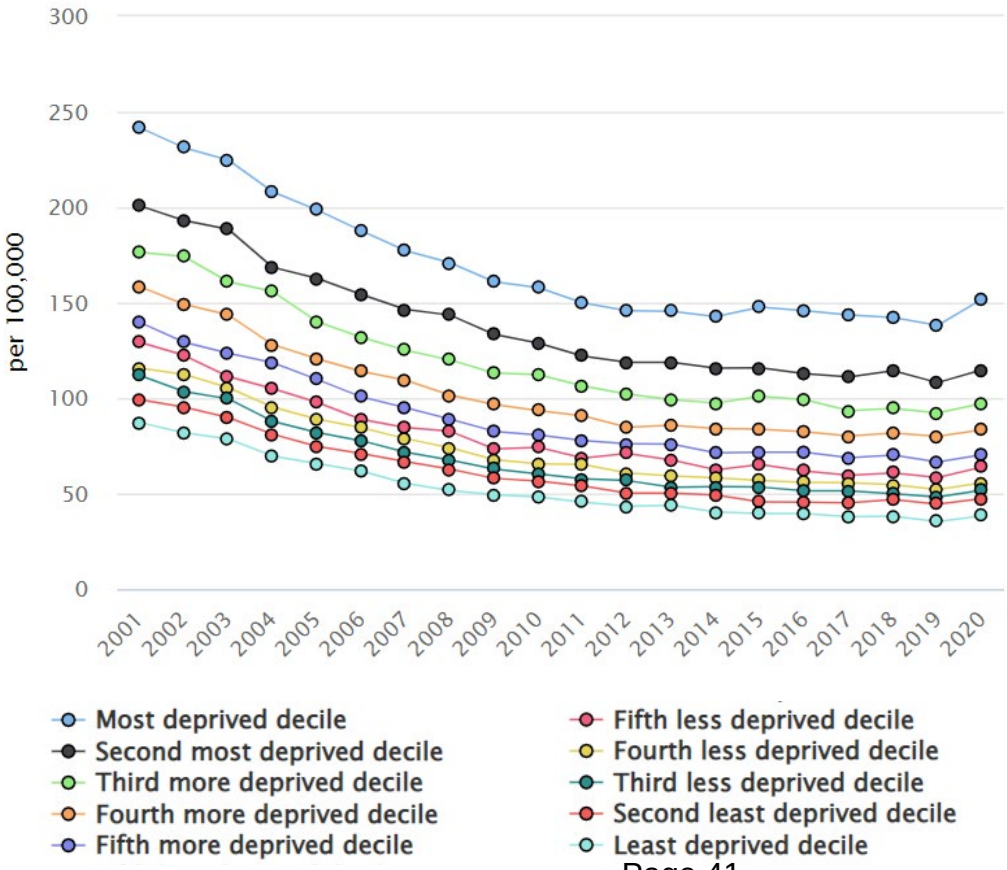
Adults who live in more deprived areas or have lower paid or manual jobs are more likely to be smokers.

Physical activity

People living in less deprived areas have higher physical activity levels. In 2020, 73% of people living in the least deprived areas were active compared with 57% in the most deprived areas.[72]

National data show that in 2020/21 adults in routine/semi-routine occupations and people that were long-term unemployed/had never worked (managerial, administrative and

Figure 2: ENGLAND under-75 mortality for cardiovascular disease



professional occupations, e.g. chief executive, doctor, or journalist) were 19% less likely to be active (52%) compared with those in the most affluent employment groups (71%).

Overweight and obesity

The likelihood of being overweight or obese is greatest in the most deprived areas. In 2019, 39% of women in England in the most deprived fifth of the population were obese, compared with 18% in the least deprived fifth. 30% of men in the most deprived quintile were obese compared with 22% in the least deprived.[73] This gap has increased since 2014.

Inequalities in overweight and obesity begin in childhood and more children in deprived areas are overweight and obese than those in the least deprived areas.

Between 2006/7 and 2020/21 the gap in the prevalence of obesity between children attending school in the most and least deprived areas of England has widened.[74]

The drivers of obesity are wide ranging and linked to the area we live in. For example, the availability of affordable and high-quality food is likely to influence what we eat and evidence from Scotland and England found that the density of outlets from four major fast-food chains was most concentrated more deprived areas.[75] There are many other features of the place we live that influence the risk of being overweight or obese, such as access to safe places to play, uncluttered clean pavement and access to green spaces.[76]

Alcohol

People living in more deprived areas have a greater risk of harmful drinking behaviours or being dependent on alcohol.[77]

3.1.2 Inequalities in clinical/ biological risk factors

National analysis shows that people living in the most deprived communities are 30% more likely to have high blood pressure.[78]

Living in a more deprived area of England is also associated with increasing risk of developing diabetes (both diagnosed and undiagnosed).[79] The Health Survey for England in 2016 showed that people in the most deprived fifth of the population were more than twice as likely to have a diagnosis of diabetes, compared with the least deprived (7% vs 3% with diabetes). People living in the most deprived fifth of areas were twice as likely to have diabetes that had not been diagnosed compared with the least deprived (2.2% vs 1.0%).

Atrial fibrillation is a heart rhythm disorder that is believed to cause 20% of strokes.[80] People living in more deprived areas of the UK are more likely to develop atrial fibrillation and more likely to die from it.[81]

3.1.3 Social and economic factors

Poorer quality jobs, poorer quality housing and poorer quality environments are linked to an increased risk of cardiovascular disease as highlighted in a previous section. These are often more common in more deprived areas and in people on low income.

3.1.4 Access to effective treatment

Research has indicated that there may be inequalities in access to specialist care for people living in more deprived areas, including longer waiting times and poorer access to cardiac interventions and acute stroke care.[82] However, for some interventions in primary care, for example provision of NHS Health Checks (which detect some key cardiovascular disease risk factors) has been found to be higher in deprived areas.[83]

3.2 Differences between ethnic groups

A note on terminology: This section summarises what the evidence tells us about cardiovascular disease and ethnicity.

*This report has used the UK Government guide to writing about ethnicity. However, the ways that ethnicity has been defined and analysed by researchers varies for some studies. Where this is the case, we have used the same language, so that we are accurate in our description of the evidence but have noted the variation with a *.*

Many studies use aggregated ethnic groups - in particular South Asian and black groups, for whom the risks are higher - as a whole. Recognising that these South Asian[84] and black ethnic categories include diverse groups of people, where studies have analysed ethnic groups that refer to nationalities, they are provided below.

Different ethnic groups have different risks of cardiovascular disease. Asian and black groups in the UK have a higher risk of cardiovascular disease but the type of cardiovascular disease underlying this risk differs between different ethnic groups. There is less evidence available for European groups living in the UK, although Central and Eastern European countries have the highest death rates from cardiovascular disease in Europe (defined as WHO's European Region) once the age of the population has been considered[85] (for this reason, much research uses 'white British' people as a comparator group). Gypsy, Romany and Traveller groups are known to have worse health outcomes compared to other ethnic minorities,[86] but there is little specific evidence available to understand the contribution that cardiovascular disease plays. The reason for these differences is complex and not always well understood, however, by working with people from ethnic minority backgrounds to identify and address known risk factors, we can reduce their risk of cardiovascular disease.

3.2.1 South Asian ethnic groups

People from South Asian groups are more likely to develop cardiovascular disease and are more likely to die from cardiovascular disease compared to white groups. *South Asian ethnicity applies to people whose ethnic roots originate from India, Pakistan, Bangladesh, Sri Lanka, Nepal and Bhutan.[87]

South Asian people have the highest risk of death from heart disease of any ethnic group, a 50% higher risk than the population of England and Wales.

South Asian people also tend to develop heart disease at a younger age. South Asian groups are also more likely to have a stroke and to die from stroke, compared to white British groups.[87]

South Asian men develop cardiovascular disease, on average around eight years younger than white men (60.4 years vs. 68.2) and South Asian women develop cardiovascular disease an average of around 11 years earlier than white women (62.9 vs. 74.2).[88]

Death from ischaemic heart disease was highest for men and women in the Bangladeshi, Pakistani and Indian ethnic groups, compared to other ethnic groups.

Inequalities in clinical/biological risk factors

The primary clinical conditions that drive the difference in risk of death from cardiovascular disease for immigrant South Asian groups are ischaemic heart disease and type 2 diabetes.

Diabetes

People from South Asian groups are up to six times more likely to develop diabetes than people in white groups.[89]

British South Asian (this paper uses the term 'Indian Asian', defined as from the Indian subcontinent) groups are more likely to develop

diabetes at a younger age than European* groups (age 62 years vs 67).[90] By the age of 80, close to half (40-50%) of South Asian people will have diabetes – this is twice the prevalence in Europeans*.[91]

Obesity (defined as a BMI of 30.0kg/m^2 or above) is associated with an increased risk of developing diabetes. For South Asian ethnic groups, the risk of diabetes increases at a lower BMI. The same risk of developing type 2 diabetes as is found in white populations at a BMI of 30kg/m^2 or over is found at a much lower BMI of 23.9 kg/m^2 for South Asian populations.[92]

Ethnic differences in cardiovascular disease risk persist and are more pronounced in people with diabetes.[93] Death from heart disease in people from South Asian groups with diabetes is around three times higher compared to people from white groups with diabetes.[94]

South Asian adults do not have higher total cholesterol overall compared to white people, but they have lower levels of HDL ('good') cholesterol and higher levels of triglycerides (associated with poorer heart health).[95]

Blood pressure

The prevalence of high blood pressure varies between South Asian ethnic groups.[96] There is evidence that for some South Asian ethnic groups (in particular, Indian ethnic groups), levels of high blood pressure are slightly higher than is seen in the white population. In other South Asian groups, levels of high blood pressure are moderately lower for Pakistani people and markedly lower for people from Bangladeshi ethnic groups. However, this pattern is not found in children - South Asian children have been found to have higher blood pressure compared to white children.[97] The proportion of people from Asian groups with controlled blood pressure (defined as mean systolic BP <140 mm Hg and diastolic BP <90 mm Hg, among people who reported previously being informed of a hypertension diagnosis by a health professional as well as use of antihypertensive medication) is higher (44.4%) than for white groups (38.0%) in the UK, although this is not statistically different when adjusted for factors such as age and sex.[98]

Health behaviours

National data show that adults in Asian (8.3%) ethnic groups are less likely to smoke when compared with people of white ethnic groups (14.4%). Asian men (13.9%) are more likely to smoke compared with Asian women (2.9%) but less likely to smoke than white men (15.8%).

National survey data show that fewer Asian people (*in this research, the formal ethnic category used is 'Asian, excluding Chinese') have a 'physically active' lifestyle (defined as 150 minutes or more of activity per week) than any other ethnic group. The COVID-19 pandemic has had a negative impact on activity levels across all ethnic groups but has disproportionately affected Asian adults.

Asian women are less active (46%) than Asian men (50%) and have the lowest level of activity of all gender and ethnicity categories.[99]

There is some evidence that physical activity levels may have increased from first to second generation South Asian people living in the UK.[100] Research suggests that there is variation in participation in vigorous physical activity for children from certain ethnic minority groups – children from mixed ethnicity groups spent more time doing vigorous exercise compared to white children, whilst Pakistani and Bangladeshi children on average performed less.[101]

Adults from South Asian ethnicities tend to have lower weight compared with white groups, but their risk from cardiovascular disease and diabetes increases at a lower body mass index.[102] Weight distribution is also associated with cardiovascular disease risk and particularly fat around the waist increases the risk of cardiovascular disease and this weight distribution is known to be higher in South Asian people.[103]

Data from the National Child Measurement Programme indicate that in 2020/21, the proportion of children in Reception year and Year 6 at school that were obese was higher than average for children from Asian groups.

People from Asian groups are less likely to consume alcohol to a hazardous, harmful or dependent level[104] and South Asian people are more likely to abstain from drinking alcohol.[105]

Access to treatment

There is evidence that although incidence, morbidity and mortality rates from cardiovascular disease are higher for people of South Asian ethnicity, once people from South Asian ethnic groups have a diagnosis of coronary disease, they have better outcomes compared to white people. Therefore, it has been suggested that to address inequalities for South Asian groups, efforts should focus on stopping cardiovascular disease developing in the first place, i.e., primary prevention.[106] However, people from Pakistani, Indian, and Bangladeshi groups also report a poorer experience of using health care services.[107] There is some evidence of variation in the management of cardiovascular disease risk specifically for people from ethnic minorities with diabetes - analysis of GP records from selected practices in UK suggested that people of South Asian ethnicity with type 2 diabetes were 9% less likely to receive a statin compared with European* people, where guidelines indicated they should be prescribed.[108]

3.2.2 Black ethnic groups

People from black ethnic groups tend to have a lower risk of heart disease but are more likely to have, and die from, high blood pressure and stroke than other ethnic groups.

They are also more likely to have a stroke at a younger age than white groups.[109] Black men develop cardiovascular disease, on average, five years earlier than white men (62.8 years vs. 68.2) and black women develop cardiovascular disease an average of around 13 years earlier (61.4 years vs. 74.2).[110]

Inequalities in clinical/biological risk factors

High BP (blood pressure)

Prevalence of high blood pressure in black people in the UK may be up to three or four times higher than in white people.[111]

There is evidence that blood pressure is less likely to be controlled[4] in black groups compared to all other ethnic minorities (e.g., 35.7% of all hypertensive patients controlled to target vs. 38.0% white groups) and this difference was statistically significant after adjustment for age, sex, and other factors.[112]

Diabetes

People from black ethnic groups are up to three times more likely to develop diabetes and have a higher risk of dying from diabetes compared with the white population.[113]

Obesity levels are higher in black groups[115] and the risk of diabetes increases at a lower body mass index.[116] Obesity (defined as a BMI of 30.0 kg/m2 or above) is associated with an increased risk of developing diabetes. For black ethnic groups the risk of diabetes increases at a lower BMI. The same risk of developing type 2 diabetes as is found in white populations at a BMI of 30kg/m2 or over is found at the lower BMI of 28.1kg/m2 for black populations.[117]

People of African Caribbean heritage have lower cholesterol levels than Europeans*,[118] higher levels of HDL ('good') cholesterol and lower levels of triglycerides than white people.[119]

Health behaviours

National data show that adults in black (9.6%) ethnic groups are less likely to smoke when compared with people of white ethnic groups (14.4%). Black men (13.0%) are more likely to smoke than black women (7.0%) but less likely to smoke than white men (15.8%).

Data from the National Child Measurement Programme indicate that in 2020/21, the proportion of children in Reception year and Year 6 at school that were obese was higher than average for children from black ethnic groups.

People from black ethnic groups are less likely to consume alcohol to a hazardous, harmful or dependent level.[120]

Access to treatment

Black populations tend to have lower than expected rates of healthcare use.[121]

Analysis of GP records from selected practices in UK suggested that people of African/African Caribbean ethnicity with type 2 diabetes were 24% less likely to receive a statin compared with European people where guidelines indicated they should be prescribed.[122]

3.2.3 Social and economic factors

Some ethnic groups are more likely to live in more deprived areas and it is likely that this is an important part of a complex relationship between biological, environmental and behavioural factors driving the increased risk of cardiovascular disease in some groups. For example, more ethnically diverse areas are more likely to have higher levels of air pollution.[123]

In addition, experiences of structural racism are known to affect health and may play a role through other mechanisms, for example racial discrimination has been associated with increased stress at work[124] and stress at work has been associated with an increased risk of cardiovascular disease.

3.3 Differences by gender

Men are more likely to have cardiovascular disease than women and more likely to die from cardiovascular disease.[125]

One in eight men and one in 15 women die from coronary heart disease.[126]

In the years before the pandemic cardiovascular disease was the leading cause of death in men.[127]

3.3.1 Inequalities in biological/ clinical risk factors

Women have a lower risk of cardiovascular disease than men. However hormonal changes associated with the menopause lead to a decrease in the production of a hormone that is protective against heart disease and the risk of cardiovascular disease increases in women after the menopause. This risk increases in women that have an early menopause before the age of 40.[128]

Before the age of 65, women have a lower risk of high blood pressure but this risk reverses after the age of 65.[129]

Men aged 25-54 are twice as likely to have diabetes as women the same age.[130]

Certain pregnancy complications are associated with an increased future risk of cardiovascular disease for the mother – these include pre-eclampsia, pregnancy induced high blood pressure and gestational diabetes (the latter likely because of the increased risk of type 2 diabetes).[131]

3.3.2 Health behaviours

Men are more likely to smoke than women.[132]

Men are slightly more likely than women (62.3% vs 59.8%) to be physically active.[133] Women are slightly more likely to be inactive (27.8% vs. 26.8%) than men.[134]

Physical activity levels decreased during the pandemic for both men and women but as men's activity levels have seen a partial recovery, women's activity levels have remained consistently lower and may require more support to return to previous levels.[135]

A greater proportion of men (41% vs. 30%) are overweight compared to women, but a higher proportion of women (29% vs 26%) are obese compared to men in England.[136]

Being overweight or obese increases the risk of developing high blood pressure – for men this increases the risk by three times and for women by four times.[137]

Men are more likely to consume more than twice the daily limit of alcohol than women.[138] Alcohol dependence is more common in men (6%) than in women (2%) in England.[139]

3.3.3 Access to treatment

International evidence shows that women are less likely to correctly identify the symptoms of a heart attack, that they are slower to seek treatment, that they are 50% more likely to receive the wrong initial diagnosis and that when a heart attack is diagnosed, they received unequal care.[140] Prompt treatment is critical to reduce complications and damage after a heart attack.

3.4 People with severe mental illness

People with a severe mental illness (schizophrenia, bipolar disorder, and major depressive disorder) have more than a 50% higher risk of having cardiovascular disease and an 85% higher chance of dying from cardiovascular disease compared with people of similar age.[141]

People with SMI are more likely to develop cardiovascular disease at an earlier age.[142] Certain risk factors for cardiovascular disease are more common in people with SMI, such as smoking and alcohol consumption.[143] In addition, obesity and diabetes are more common and some (but not all) of this association may be explained by metabolic effects of some medication.[144]

3.5 People with learning disabilities

Some evidence suggests that people with learning disabilities may be at higher risk of cardiovascular disease and of developing cardiovascular disease earlier but the risk by type of cardiovascular disease varies. Rates of heart disease may be lower for people with learning disabilities, but the risk of heart failure, stroke and TIA are higher. Activity levels may be lower and obesity levels higher for this population.[145]

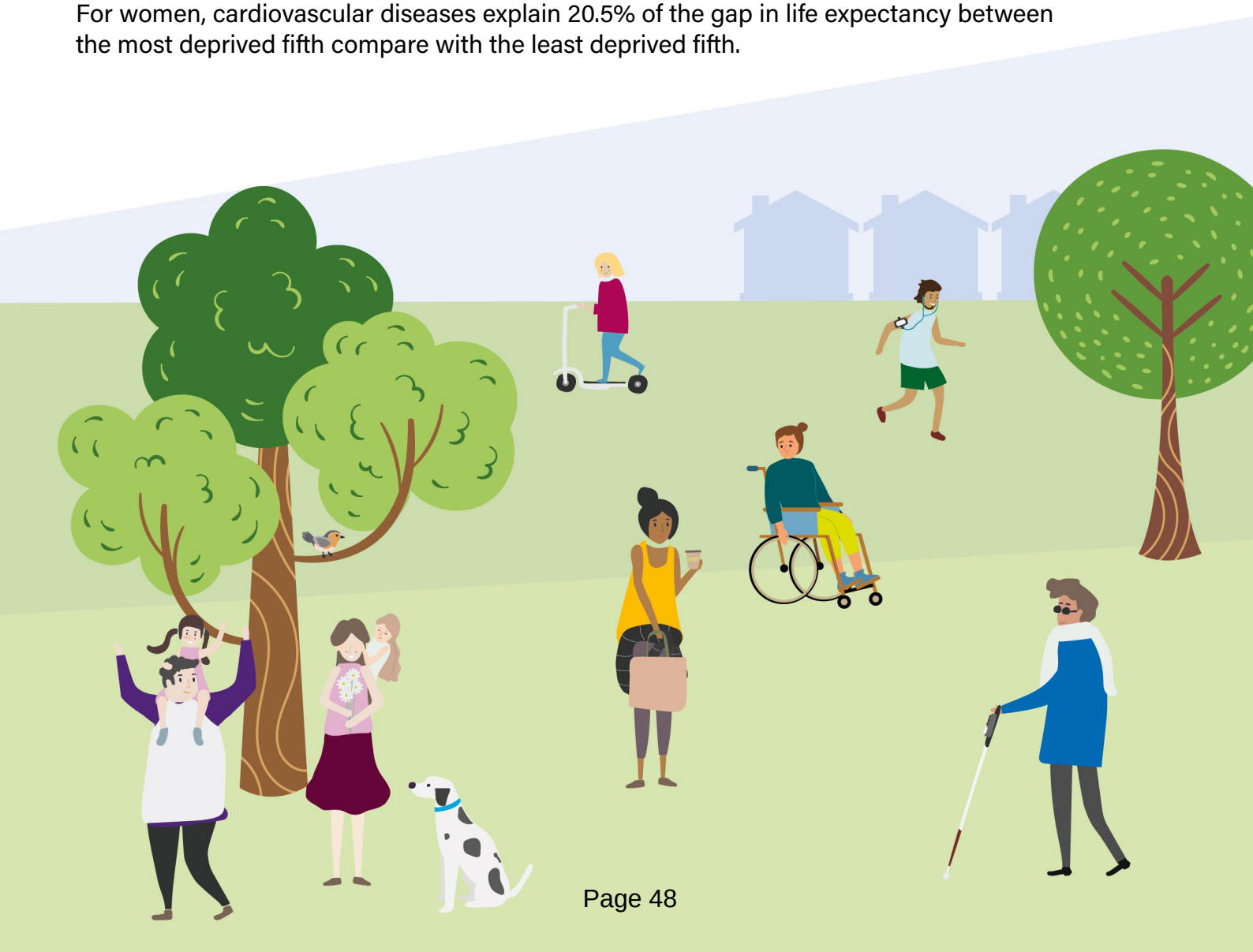
4. The Buckinghamshire Picture

Cardiovascular disease is a significant cause of ill health and death in Buckinghamshire and is the largest contributor to the gap in life expectancy between the most and least deprived areas is Buckinghamshire.

Men born today in the least deprived area of Buckinghamshire can expect to live for 6.5 years longer than men born in the most deprived areas.[146] For women, the gap in life expectancy is 6.4 years.

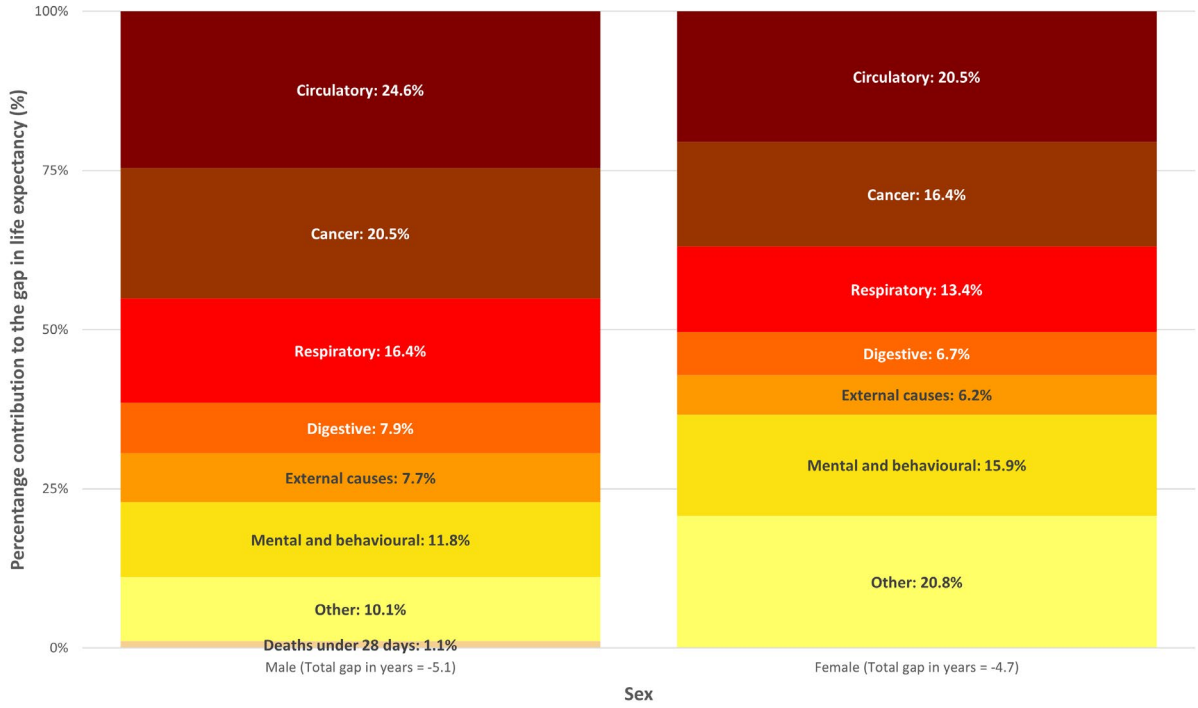
Cardiovascular diseases (called circulatory diseases in the chart on the next page) explain a quarter (24.6%) of the gap in life expectancy between men living in the most deprived fifth (quintile) of areas of Buckinghamshire and those living in the least deprived fifth (Segment Tool Update 2017-19 - OHID South East).

For women, cardiovascular diseases explain 20.5% of the gap in life expectancy between the most deprived fifth compare with the least deprived fifth.



The chart below shows the breakdown of the life expectancy gap in Buckinghamshire by cause of death 2017-19 (see Figure 3).

During the pandemic COVID was a significant contributor to the gap in life expectancy but cardiovascular disease remained very important (see Figure 4).



Source: Public Health England based on ONS death registration data and mid-year population estimates, and Ministry of Housing, Communities and Local Government Index of Multiple Deprivation, 2019

Figure 3: Chart showing the breakdown of life expectancy gap between the most deprived and least deprived quintiles of Buckinghamshire by broad cause of death for 2017 to 2019.

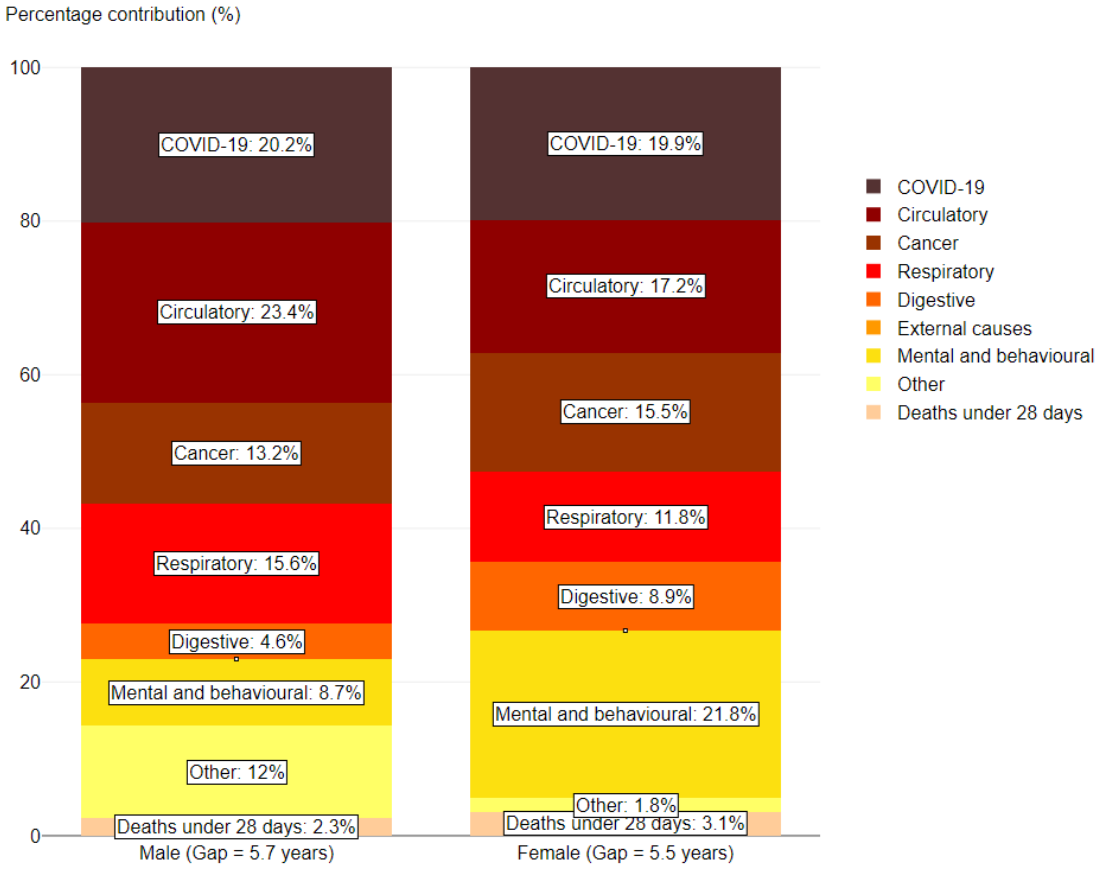


Figure 4: Chart showing the breakdown of life expectancy gap between the most deprived and least deprived quintiles of Buckinghamshire by broad cause of death for 2020 to 2021 (provisional).

4.1 Prevalence of conditions recorded in primary care

Local primary care data are available as a snapshot taken in April 2022 for adults aged 18 and over resident in Buckinghamshire who are also registered with a Buckinghamshire CCG practice (424,446 individuals). Data from some nationally published sources refer to earlier time periods and have also been included to allow comparison with the national average.

4.1.1 Smoking

Smoking status has been recorded in primary care for 86.5% of Buckinghamshire adults. 13.7% (50,358) adults are identified as a current smoker, with a further 24.4% (89,503) being ex-smokers. Nationally, data from the Annual Population Survey estimate that 13.5% of adults (aged 18 and over) were current smokers in 2019 (due to methodological changes during the pandemic, the latest year of comparable data for the Annual Population Survey is for 2019). The most recent data available for Buckinghamshire is 2018. The prevalence of smoking is falling – it has fallen at a similar pace in Buckinghamshire (a 31% fall between 2011 and 2018) to nationally (a 27% fall over the same period).

The prevalence of current smoking is 2.7 times higher in the most deprived quintile than the least deprived and rises with deprivation from 8.1% in the least deprived quintile to 21.8% in the most deprived quintile in Buckinghamshire.

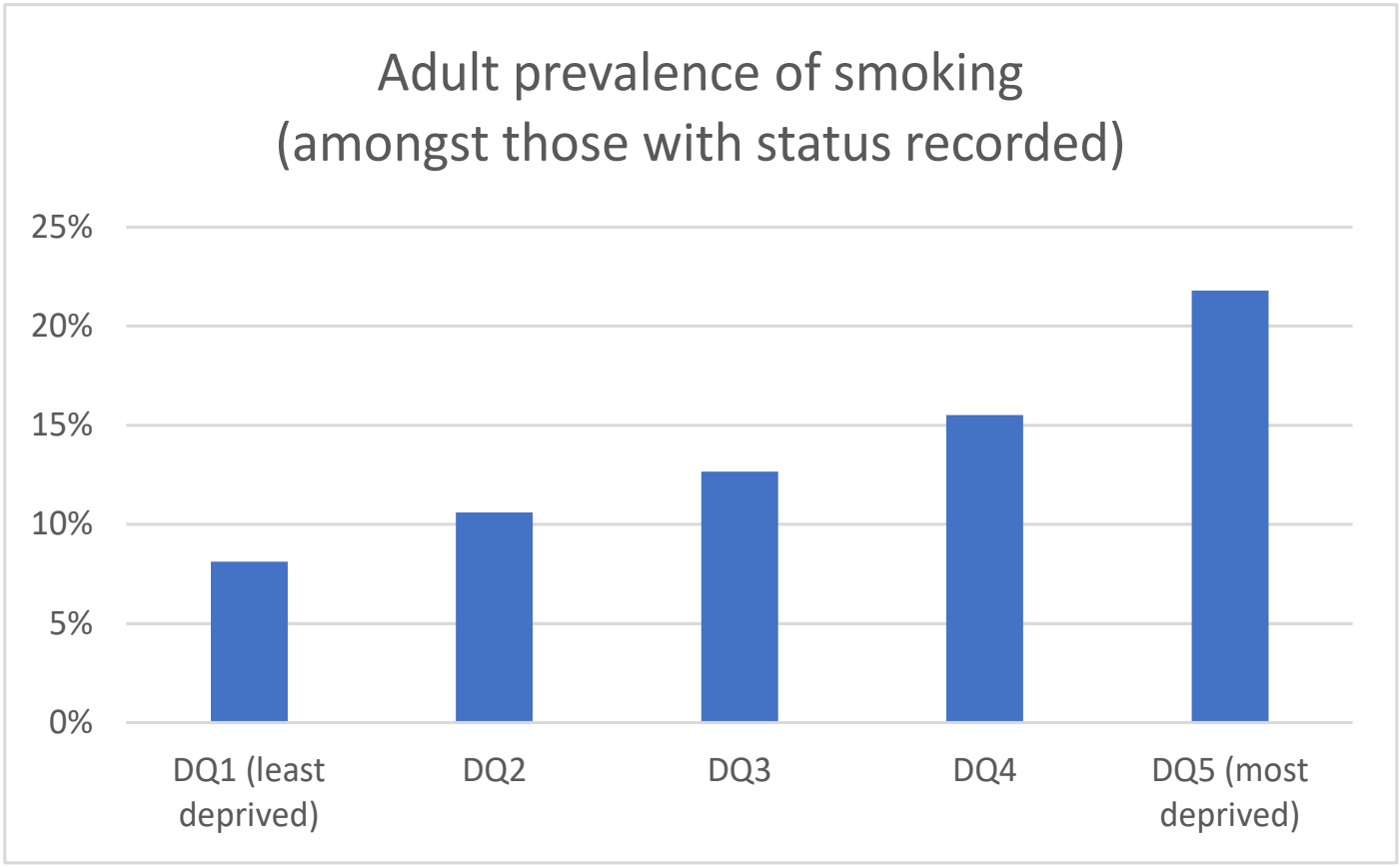


Figure 5: Adult prevalence of smoking by deprivation quintile for Buckinghamshire.

4.1.2 Diabetes

Local primary care data show that 6.0% (25,287) of Buckinghamshire adults aged 18 and over have a recorded diagnosis of diabetes. Buckinghamshire has a lower prevalence of recorded diabetes than nationally in the Quality and Outcomes Framework (QOF) data for 2020/21: the prevalence in adults aged 17 and over was 6.3% in Buckinghamshire compared to 7.1% nationally. The QOF prevalence of diabetes is rising – it has risen at a similar rate in Buckinghamshire (a 16% rise between 2012/13 and 2020/21) to nationally (18% over the same period). The prevalence of diabetes is 1.6 times higher in the most deprived quintile than the least deprived quintile, rising with each deprivation quintile from 4.8% in the least deprived quintile to 7.5% in the most deprived.

Not all cases of diabetes present in the population will be detected and recorded. The prevalence of diabetes (both diagnosed and undiagnosed) for Buckinghamshire local authority was estimated to be 8.4% (for adults aged 16 and over) in 2020. This figure is 2.4 percentage points higher than the primary care recorded prevalence, which could equate to an additional 10,000 adults with unrecorded or undiagnosed diabetes who therefore may not be receiving treatment.

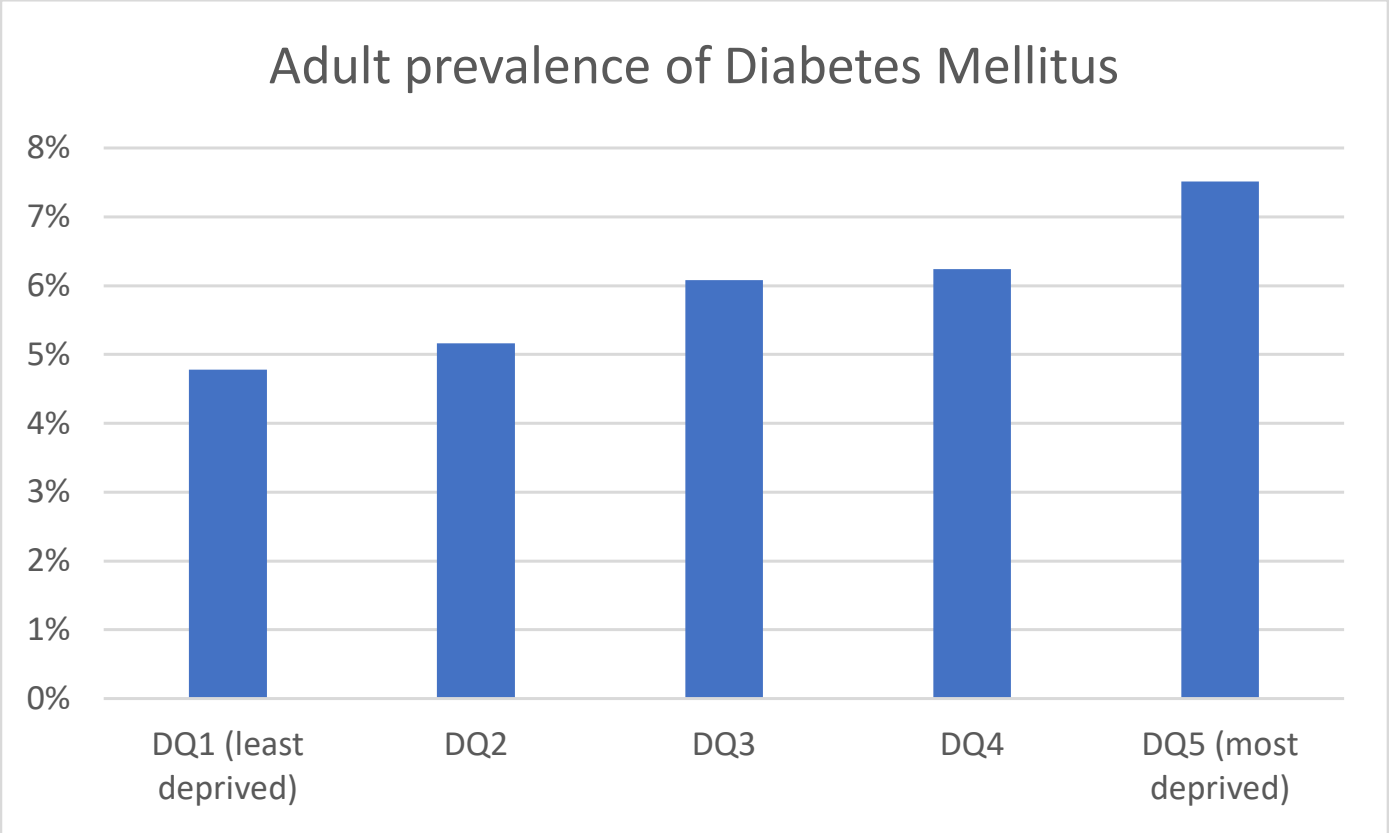


Figure 6: Adult prevalence of diabetes mellitus by deprivation quintile for Buckinghamshire.

4.1.3 Hypertension (high blood pressure)

Local primary care data show that 15.9% (67,280) of Buckinghamshire adults have a diagnosis of high blood pressure. Buckinghamshire has a higher prevalence of recorded hypertension than the national average. This may be due to better detection or recording. The QOF prevalence of high blood pressure is rising, and it is rising faster in Buckinghamshire (8% between 2012/13 and 2020/21) than nationally (2% over the same period), such that it overtook the national level in 2019/20.

Not all cases of high blood pressure present in the population will be detected and recorded. Public Health England estimated that 26.9% of Buckinghamshire adults had high blood pressure in 2017. This figure is 11 percentage points higher than the primary care recorded prevalence, which could equate to an additional 47,000 adults with unrecorded or undiagnosed high blood pressure in Buckinghamshire.

4.1.4 Coronary heart disease

Local primary care data show that 3.4% (14,220) of Buckinghamshire adults have coronary heart disease (CHD). Buckinghamshire has a similar prevalence of coronary heart disease to the national average – in the QOF 2020/21 the prevalence was 2.9% in Buckinghamshire compared to 3.0% nationally. Although the QOF prevalence of coronary heart disease has been falling, it has not fallen as quickly in Buckinghamshire (a 2% fall between 2012/13 and 2020/21) as it has done nationally (9% fall over the same period).

4.1.5 Stroke/transient ischaemic attack

Local primary care data show that 1.9% (7,877) of Buckinghamshire adults have a history of stroke or transient ischaemic attack (TIA). Buckinghamshire has a similar prevalence of stroke to the national average – in the QOF 2020/21 the all-age prevalence was 1.7% in Buckinghamshire compared to 1.8% nationally. The QOF prevalence of stroke is rising and it is rising faster in Buckinghamshire (9% between 2012/13 and 2020/21) than nationally (6% over the same period).

The prevalence of high blood pressure, coronary heart disease and stroke/transient ischaemic attack do not show a clear relationship between deprivation and prevalence. This could be partly due to the younger age profile of the more deprived areas as these conditions are more commonly found in older age groups and these primary care datasets do not take the age of the practice population into account. Alternatively, this could potentially reflect under-recording or under-detection especially of high blood pressure as this often has no symptoms.

4.2 Gender differences in cardiovascular conditions recorded in primary care

The prevalence of coronary heart disease is over twice as high in men (4.7%) than in women (2.0%). For all risk factors analysed the prevalence is greater in men than in women – most notably smoking being 1.6 times higher in men (of those with a status recorded) and diabetes 1.4 times higher. However, high blood pressure is only recorded as being 6% higher in men than in women. Given the knowledge that high blood pressure is a key driver of cardiovascular disease, this could represent under recording, and therefore undertreatment, in men.

4.3 Hospital admissions and trends

The rate of emergency admissions for cardiovascular disease in Buckinghamshire has been 25% lower than England between 2010/11 and 2020/21. Over this period there has been a 7% rise in emergency admissions in Buckinghamshire, compared to a 2% fall nationally (the latter being predominantly driven by a fall during the pandemic).

The rise in emergency admissions appears to be driven by heart conditions (a 34% rise in heart failure and a 15% rise in heart attacks and angina), with the rate of admissions for stroke/transient ischaemic attack falling by 20% between 2010/11 and 2020/21 in Buckinghamshire. These are all more pronounced than the national trends which have seen a 12% rise in heart failure, a 15% fall in heart attacks and angina and a 13% fall in stroke/TIA.

Despite the much lower death rates and emergency admission rates for cardiovascular disease, the rate of planned admissions for cardiovascular diseases in Buckinghamshire has been higher than the national average in recent years. Pre-pandemic the rate of planned admissions was falling faster nationally than locally (28% nationally versus 15% locally between 2011/12 and 2019/20), but during the pandemic the planned admission rates have fallen similarly (35% nationally and 36% locally).

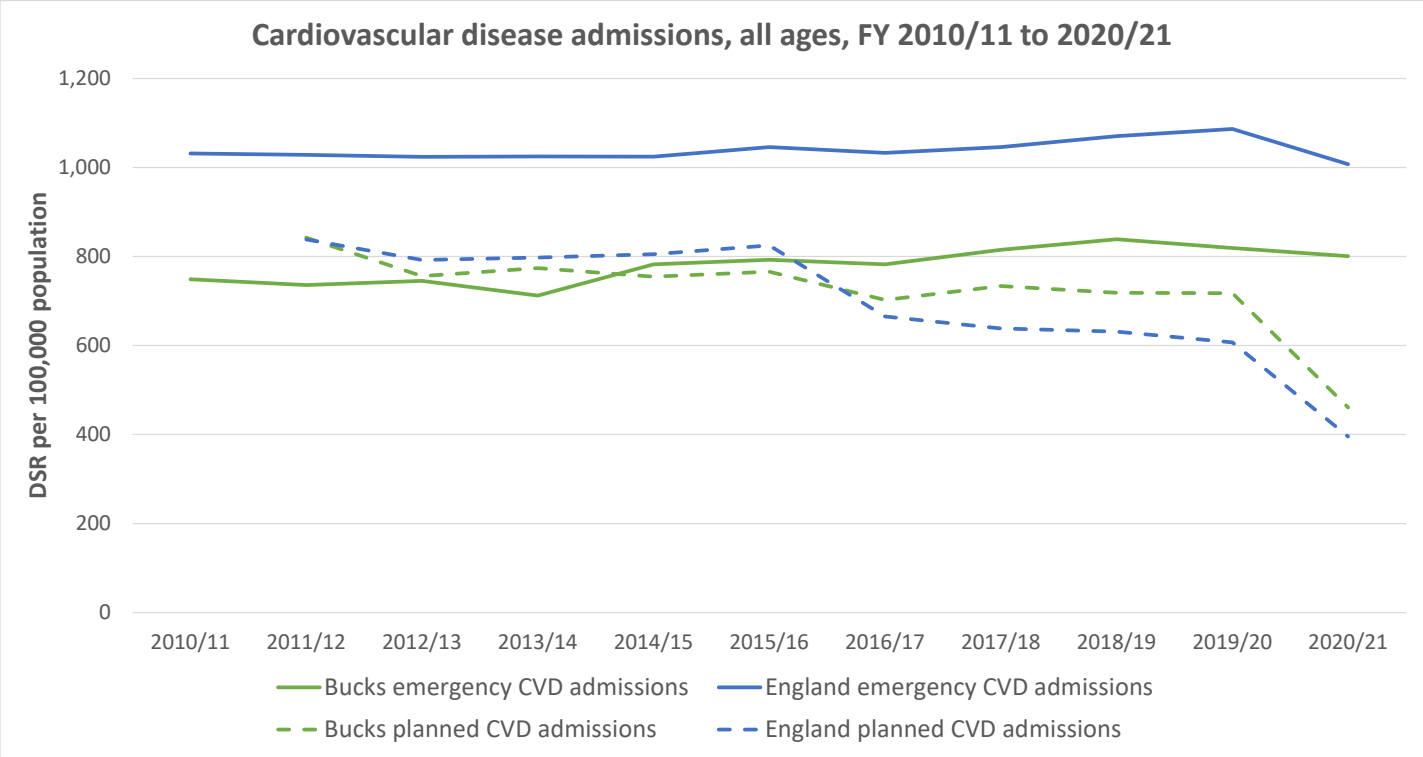


Figure 7: Cardiovascular disease admission rates (emergency and planned) for Buckinghamshire and England, from 2010/11 to 2020/21.

The rate of emergency admissions for cardiovascular diseases is consistently significantly higher in more deprived areas than in less deprived areas within Buckinghamshire – between 2011/12 and 2020/21 it was on average 1.6 times higher in the most deprived than the least deprived quintile. Acute myocardial infarction/angina and heart failure are both 1.9 times higher and stroke is 1.7 times higher in the most deprived than the least deprived quintile between 2011/12 and 2020/21.

For most of the cardiovascular conditions analysed, the gap between the least and most deprived areas in Buckinghamshire has remained similar over the past 10 years. However, the gap in admission rates between deprivation quintiles has widened for stroke and transient ischaemic attack. The admission rate for stroke/transient ischaemic attack is now 1.9 times higher in the most deprived than the least deprived quintile, compared to an average of 1.7 times higher over the last ten years.

The rate of planned cardiovascular disease admissions was on average 1.2 times higher in the most deprived than the least deprived quintile between 2011/12 and 2020/21. This is despite emergency cardiovascular disease admission rates being 1.6 times higher, all-age cardiovascular disease death rates being 1.5 times higher and premature cardiovascular disease death rates being 2.6 times higher in the most deprived compared to the least deprived quintile in Buckinghamshire. The reasons for this need to be explored.

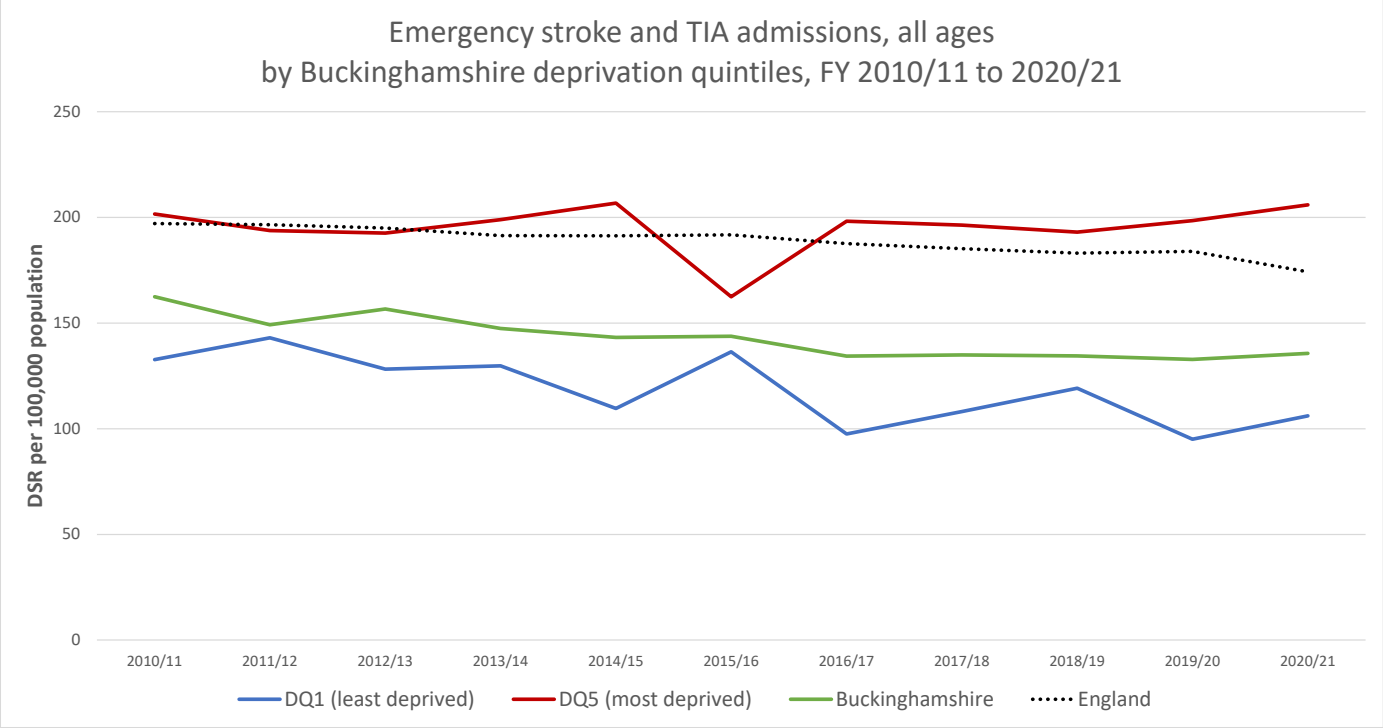


Figure 8: Emergency Stroke and Transient Ischaemic attack admission rates for the most and least deprived quintiles in Buckinghamshire from 2010/11 to 2020/21.

4.3.1 Gender

The rate of emergency admissions for cardiovascular diseases is consistently significantly higher in men than in women – averaging at 1.6 times higher in men in Buckinghamshire which is similar to the national picture. For both men and women rates of cardiovascular disease emergency admissions are lower in Buckinghamshire than nationally.

However, despite having lower emergency admission rates than the national average, Buckinghamshire men have had a 13% higher rate of planned admissions for cardiovascular disease in Buckinghamshire than the national average in 2020/21. Buckinghamshire women have generally lower or similar rates of planned admissions than the national average. During this time the rate of planned admissions in men has been 2.6 times higher than in women in Buckinghamshire in 2020/21.

4.3.2 By community board

The rates of emergency cardiovascular admissions over the three years pre-pandemic (2017/18 to 2019/20) were highest for High Wycombe, Aylesbury and Beeches Community Boards at 1016, 988 and 943 per 100,000 per year – all statistically significantly higher than the Buckinghamshire average of 824 per 100,000 per year.

High Wycombe also has the highest rate of elective cardiovascular disease admissions over the three years pre-pandemic (2017/18 to 2019/20) at 869 per 100,000 per year compared to a Buckinghamshire average of 723 per 100,000. However, during the pandemic the rate of elective cardiovascular disease admissions fell more for High Wycombe to below the Buckinghamshire average during 2020/21 (457 versus 461 per 100,000).

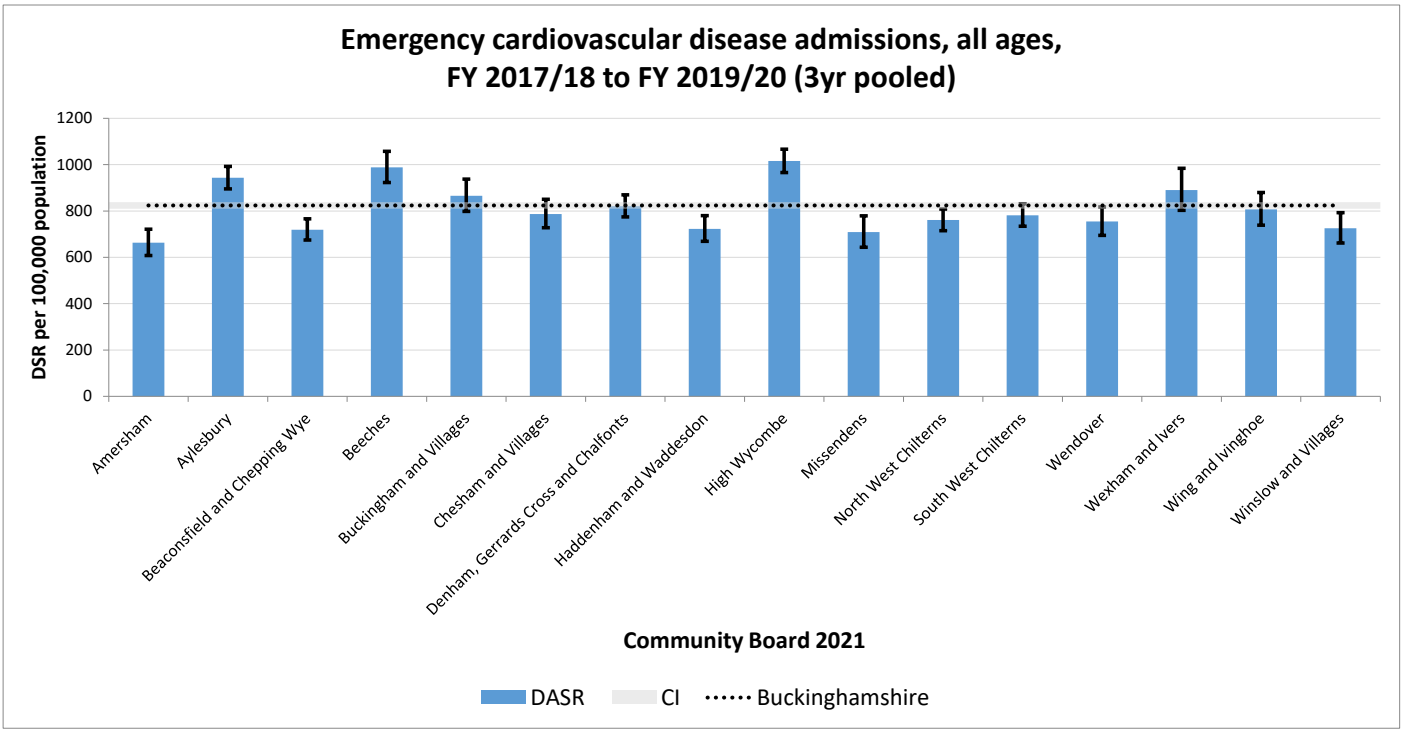


Figure 9: Emergency cardiovascular disease admission rates for Buckinghamshire's Community Boards from 2017/18 to 2019/20.

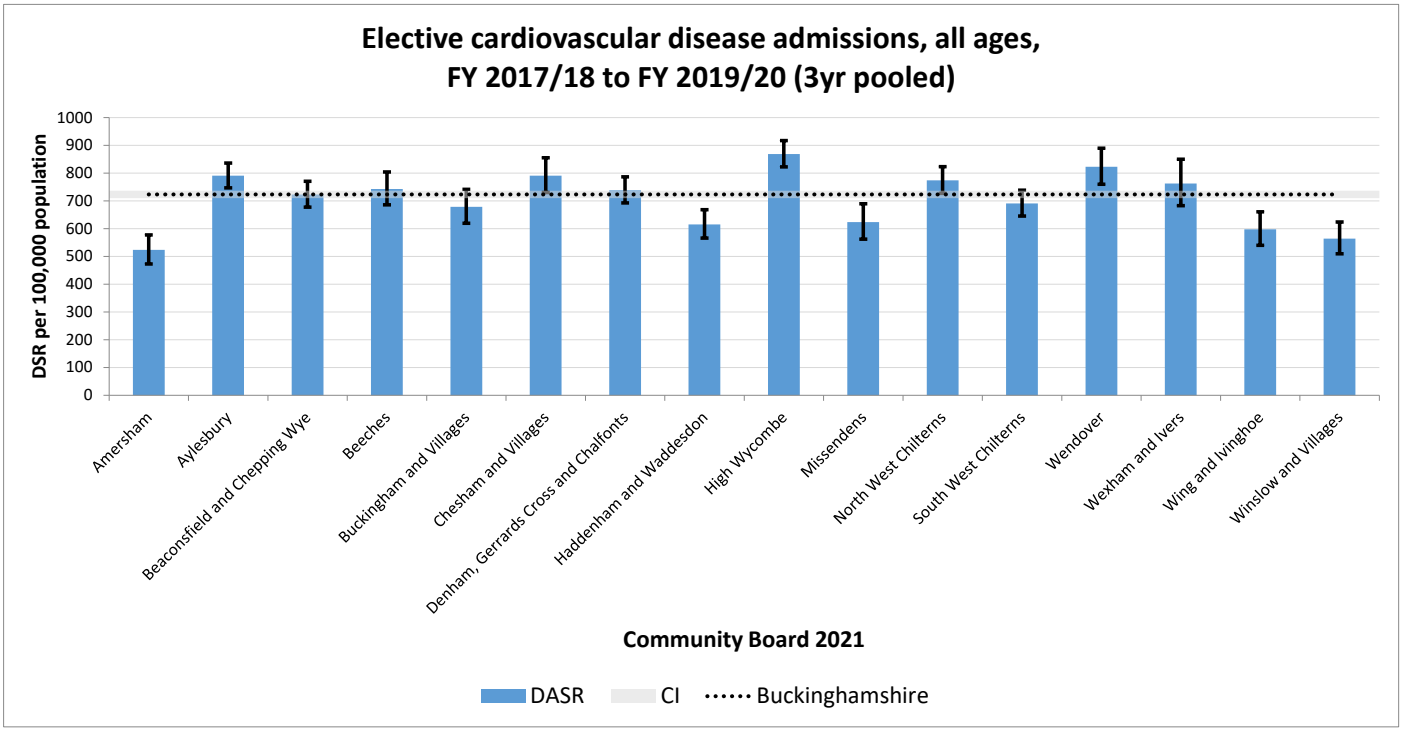


Figure 10: Elective cardiovascular disease admission rates for Buckinghamshire's Community Boards from 2017/18 to 2019/20.

4.4 Death rates and trends

There were 1,070 deaths of all ages due to cardiovascular disease in 2020 and cardiovascular disease accounted for over one in five of all deaths in Buckinghamshire.

More than one in five deaths from cardiovascular disease occurred in people under 75 years of age in 2020.

The all-age death rate due to cardiovascular disease in Buckinghamshire is 17% lower and the premature cardiovascular disease death rate is 29% lower than the national average in 2020.

The all-age death rates from cardiovascular disease fell by more than half (57% reduction) between 2001 and 2019. The reduction in cardiovascular disease death rates has accounted for the majority (69%) of the fall in all cause all age death rates in Buckinghamshire over this period. Premature mortality due to cardiovascular disease has also more than halved, with a 58% reduction between 2001 and 2019.

However, provisional data reveal the downward trend in deaths from cardiovascular disease reversed in Buckinghamshire during the pandemic, with a 10% increase in all age cardiovascular disease mortality between 2020 and 2021 – the largest year-on-year increase in both relative and absolute terms since comparable data started being published in 2001. The increase in premature deaths from cardiovascular disease has shown an even greater increase with a 22% rise in premature cardiovascular disease death rates between 2020 and 2021.

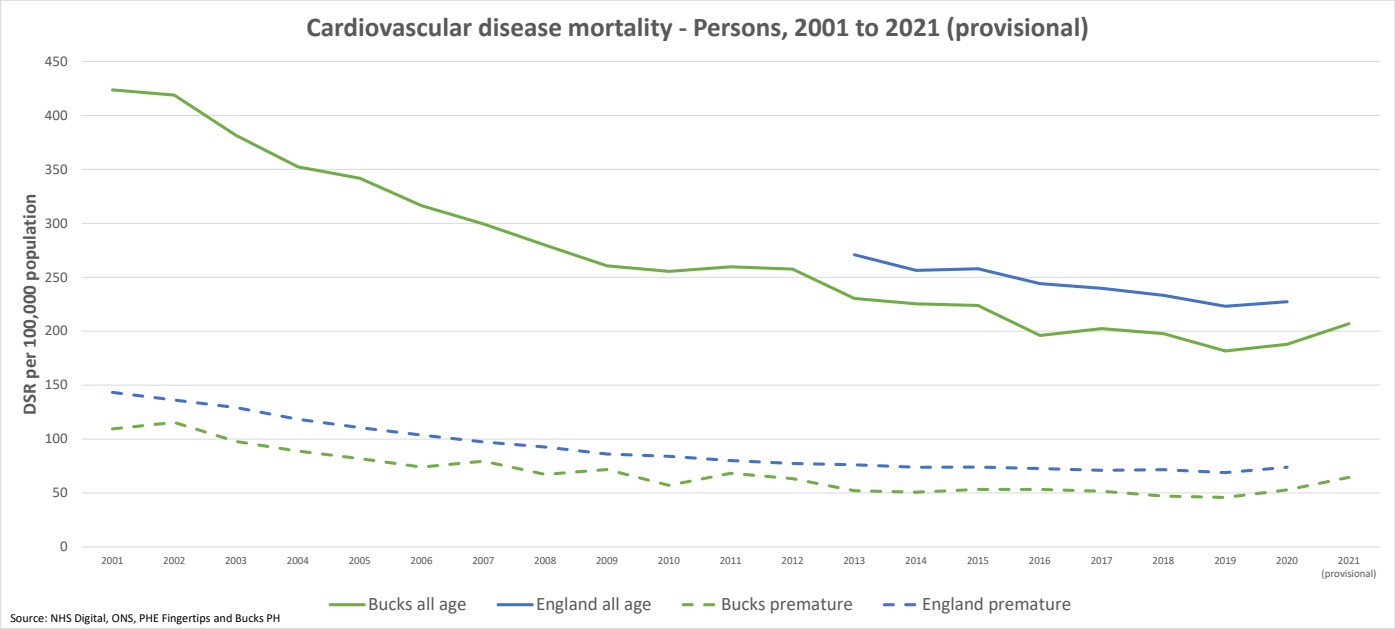


Figure 11: Premature and all age death rates from cardiovascular disease for Buckinghamshire and England, from 2001 to 2021.

On average over at least the last 20 years (2001-2021) all-age death rate due to cardiovascular disease has been 1.5 times higher in the most deprived than in the least deprived quintile, and the premature death rate 2.5 times higher in the most deprived than in the least deprived quintile. Provisional data (2020 to 2021) reveal greater increases in cardiovascular disease mortality in the most deprived quintile (23% all age increase) than in the least deprived quintile (7% all age increase).

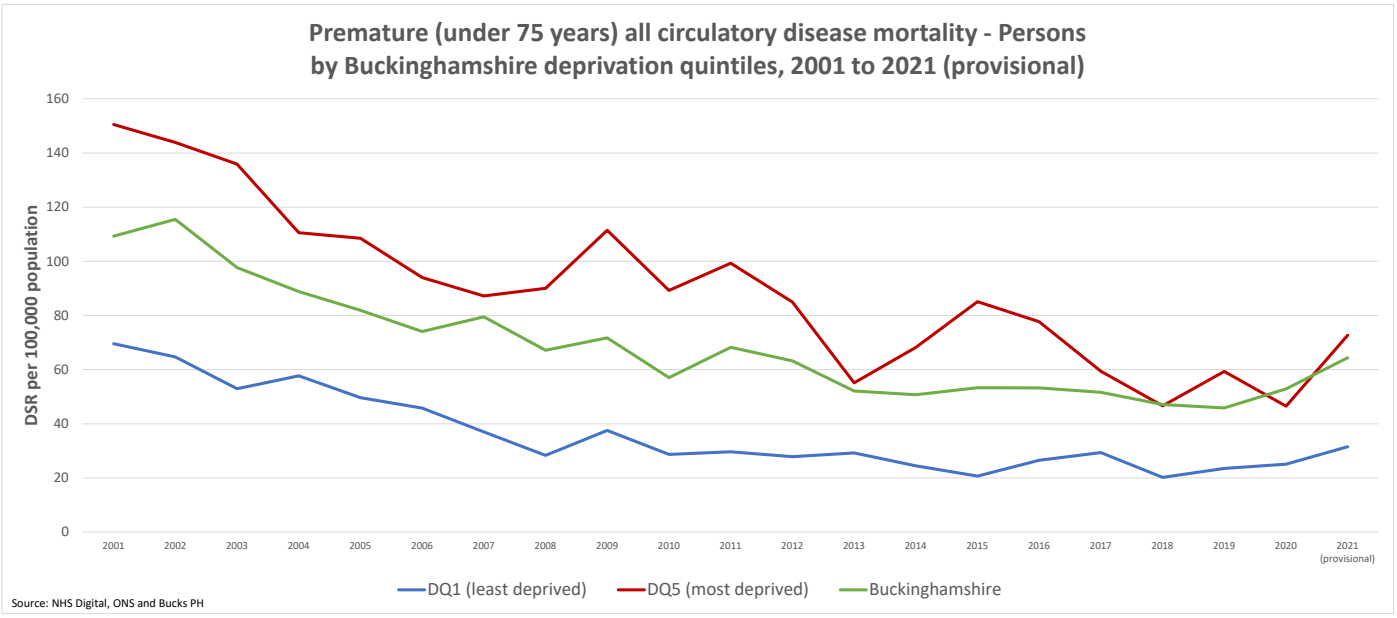


Figure 12: Premature death rates due to cardiovascular disease for Buckinghamshire for the most and least deprived quintiles, from 2001 to 2021 .

4.4.1 Differences by gender

Both all-age mortality rate and premature mortality rate due to cardiovascular disease have been consistently significantly higher in men than in women over the last 20 years – on average the all-age rate in men has been 1.5 times higher than in women and the premature death rate has been 2.3 times higher in men than in women (2001 to 2019). Pre-pandemic the cardiovascular disease all-age and premature mortality rates fell by similar proportions in both men and women (men 59% and 59%, women 56% and 55%).

However, over the last two years (2019-2021) mortality rates have risen more in men than in women. The male all-age cardiovascular disease mortality rate has risen by 24%, and the premature mortality by 53%. In women, the all-age mortality rate has risen by 3% and the premature mortality by 15%.

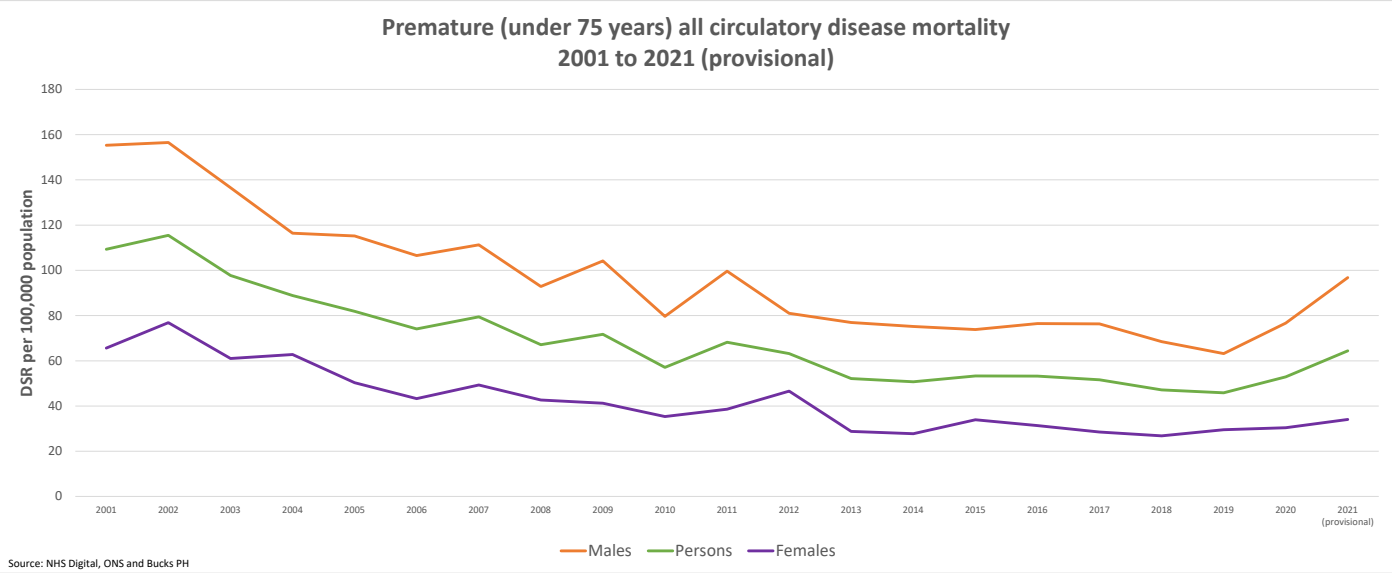


Figure 13: Premature mortality rate due to cardiovascular disease for Buckinghamshire by gender, from 2001 to 2021 (provisional).

4.5 Differences by ethnic group

4.5.1 Conditions recorded in primary care

Ethnicity is recorded for 82% of all Buckinghamshire adults in Buckinghamshire CCG. 80% of current smokers, 89% of patients with a diagnosis of high blood pressure and 91% of patients with either diabetes, coronary heart disease or stroke/TIA have their ethnicity recorded.

The three ethnic groups with the highest prevalence of coronary heart disease are Pakistani (4.7%), white British (4.1%) and 'Other' ethnicity (3.3%). The three ethnic groups with the highest prevalence of stroke/TIA are white British (2.4%), Other (1.8%) and Pakistani (1.6%).

It appears that different risk factors may be at play for these ethnic groups. For example, the Pakistani population have the highest prevalence of diabetes (14%), but below average prevalence of recorded high blood pressure (12%). In comparison, the white British population has the highest recorded prevalence of high blood pressure (19%), but below average diabetes (6%). Overall, the prevalence of coronary heart disease is recorded as being highest in the Pakistani (4.7%) and white British (4.1%) ethnicities. Stroke/TIA is highest in the white British (2.4%) ethnicity.

	Population size	Smoking	Hypertension	Diabetes	CHD	Stroke
White - British	240895	13%	19%	6%	4%	2%
White - Other	44120	18%	13%	4%	3%	1%
Asian - Pakistani	16963	13%	12%	14%	5%	2%
Asian - Indian	12927	5%	12%	9%	3%	1%
Asian - Other	9320	9%	13%	9%	3%	1%
Other	7823	15%	16%	7%	3%	2%
Black	5931	14%	18%	10%	2%	1%
Mixed	8729	18%	10%	7%	2%	1%

Table 1: Primary care recorded cardiovascular disease risk factors and conditions in Buckinghamshire, by ethnic group.

The prevalence of coronary heart disease is lowest in black groups (1.7%) and people from the mixed ethnic group (1.9%). However, these data do not take age into account so given that these are conditions increase with age some of the difference may be explained by differences in the age of these ethnic groups.

4.5.2 Admissions and trends

To enable sufficient numbers for analysis, three years of admissions data have been pooled (2018/19 to 2020/21).

Ethnicity was known for 84% of emergency cardiovascular disease admissions during this period. For emergency cardiovascular disease admissions when an ethnicity was recorded, 84% in Buckinghamshire were white British, which is in line with 81% of the population being listed as white British in Buckinghamshire at the last Census in 2011.

Ethnicity was known for a lower proportion of elective cardiovascular disease admissions at 76%, compared to 84% for emergency cardiovascular disease admissions. The proportion of cardiovascular disease admissions being for white British patients (of those with an ethnicity recorded) was 85%. We are awaiting more recent data from the 2021 census to update our analysis comparing admission rates for different ethnic groups.There appears to be over-recording of individuals having 'Other' ethnicity in Buckinghamshire hospital data. 2% of emergency cardiovascular disease admissions and 1.6% of elective cardiovascular disease admissions were recorded as being for patients of 'Other' ethnicity in comparison to representing 0.5% of the population at the last Census.

Conversely, there appears to be under-recording of individuals having 'Mixed' ethnicity in Buckinghamshire hospital data. 0.5% of emergency cardiovascular disease admissions and 0.6% of elective cardiovascular disease admissions were recorded as being for patients of 'Mixed' ethnicity in comparison to representing 2.4% of the population at the last Census. This could suggest that some individuals who are recorded on the Census as being of Mixed ethnicity are being recorded as 'Other' ethnicity by acute NHS Trusts for Buckinghamshire residents.

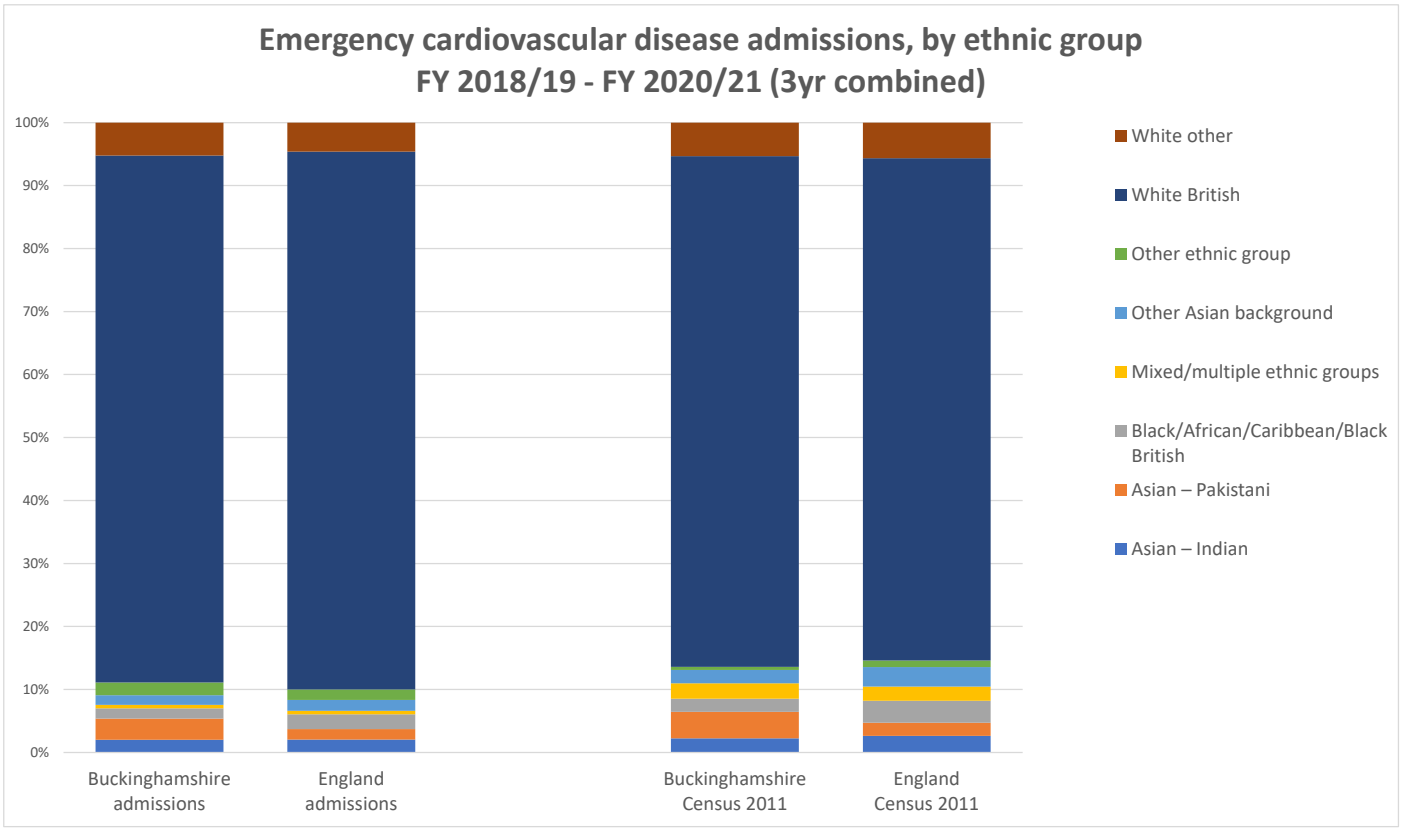


Figure 14: Proportion of Emergency cardiovascular disease admissions by ethnic group from 2018/19 to 2020/21 for Buckinghamshire and England.

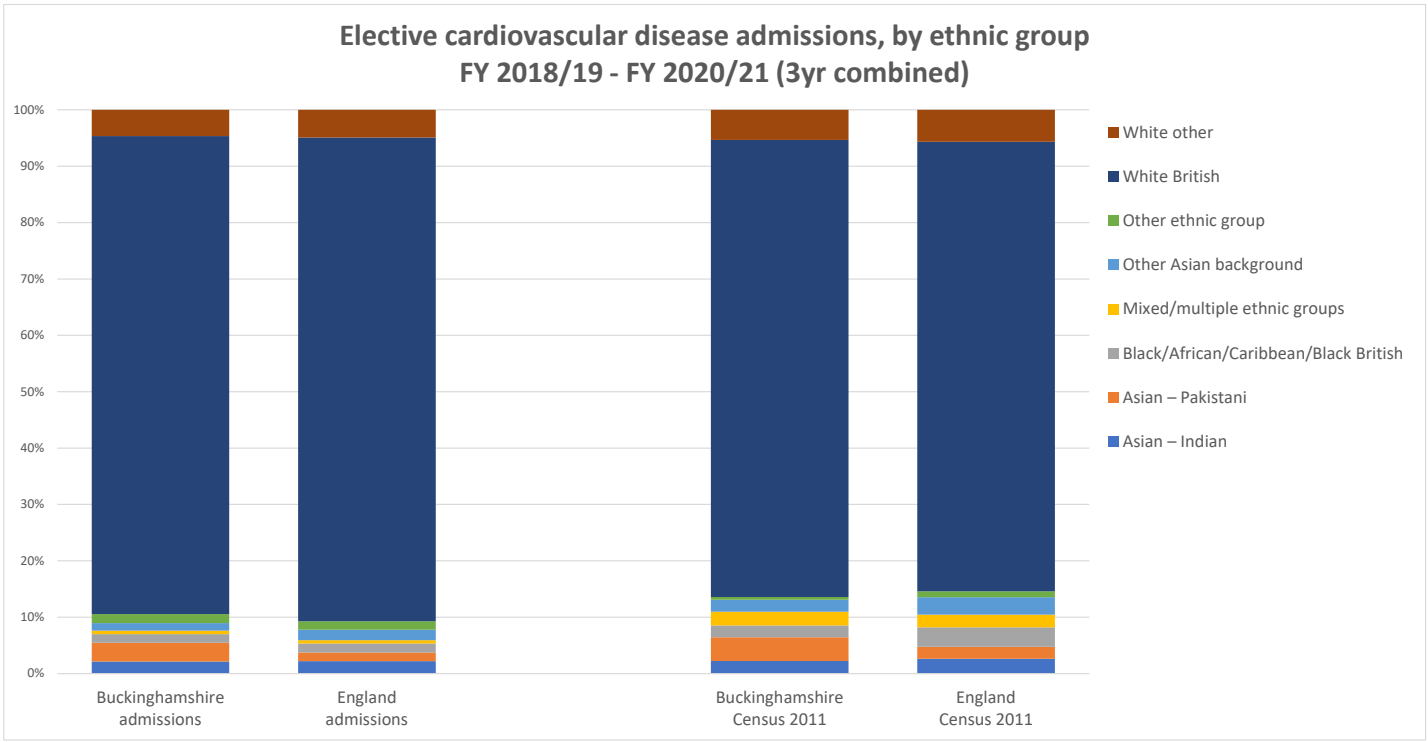


Figure 15: Proportion of Elective cardiovascular disease admissions by ethnic group from 2018/19 to 2020/21 for Buckinghamshire and England.

5. Summary and Recommendations

Cardiovascular disease is a major cause of ill health, disability and death in Buckinghamshire. It causes heart disease, strokes and the second commonest type of dementia. It is the major driver of the inequalities in death rates between people living in our most deprived and least deprived areas. Cardiovascular disease is also more common in our black and Asian populations and people with serious mental illness. Tackling cardiovascular disease and its risk factors is a top priority for reducing inequalities in health in Buckinghamshire and increasing life expectancy and healthy life expectancy.

The good news is that a sizeable proportion of cardiovascular disease can be prevented or delayed by tackling the risk factors identified in this report and ensuring uptake of effective treatments.

5.1 What should we do?

We need a renewed focus on preventing cardiovascular disease in Buckinghamshire. This needs to address the key social, economic and environmental risk factors for cardiovascular disease, alongside the behavioural and clinical risk factors to keep our residents healthy and narrow inequalities. Tackling the key risk factors will also improve health in a variety of other ways, including reducing the risk of cancer, diabetes, dementia, musculoskeletal problems and poor mental health, and produce many other societal and economic benefits, making Buckinghamshire an even better place to live.

To tackle cardiovascular disease and reduce inequalities in illness and premature death in Buckinghamshire we need a multilevel approach that addresses risks at the individual, community and Buckinghamshire-wide level that will impact over the short, medium and long term.

We need to work together with partners and communities across Buckinghamshire to:

1. Act on the broader determinants of health, such as income, debt, good quality employment, high quality education and healthy environments to level up outcomes across Buckinghamshire. Tackling these issues is an essential component of reducing inequalities in health.

2. Support a systematic large-scale improvement in behavioural risk factors by:

- Ensuring the physical, social, commercial and economic environments in which people live, work and learn support healthy behaviours.
- Increasing the understanding and the skills required to design effective behaviour change interventions across Buckinghamshire Council, the NHS and partners, including rolling out the behaviour change Making Every Contact Count programme. This enables people to have 'healthy conversations' to support behaviour change in their day-to-day interactions.
- Working with communities to understand what would support them to reduce their risk of cardiovascular disease and co-design and evaluate appropriate approaches.
- Supporting NHS trusts to implement the NHS Long Term Plan smoking cessation support requirements as smoking is the single biggest modifiable driver of health inequalities.
- Working together with partners and communities to develop a whole system approach to healthy eating and physical activity to combat the rise in unhealthy weight and obesity.
- Working together to tackle smoking via the Tobacco Control Action Plan.
- Working together to address harmful alcohol misuse through development of our new drug and alcohol strategy.

3. Increase detection and management of modifiable risk factors in people at higher risk of cardiovascular disease, including those living in more deprived areas, ethnic groups at higher risk of cardiovascular disease and those with mental illness by:

- Increasing capacity in primary care in more deprived areas to undertake NHS health checks and detect and manage clinical risk factors, such as high blood pressure and diabetes, and refer to appropriate interventions, such as smoking cessation.
- Working with people from ethnic minority groups to design effective, culturally competent approaches to increase detection of risk factors and management of risk factors.
- Working with NHS and local authority partners to develop and implement the whole system plan to tackle inequalities in cardiovascular disease.

4. Improve data collection and monitoring to track progress.

- Improve data collection in primary and secondary care to enable monitoring of outcomes by ethnicity and areas of deprivation and improve the quality, accuracy and completeness of ethnic monitoring data.
- Undertake equity audits to determine access to and uptake of prevention and treatment initiatives of cardiovascular disease by different groups.

6. Glossary

Body Mass Index (BMI)

BMI is a measure of whether you're a healthy weight for your height. You can calculate your BMI by dividing your weight (in kilograms) by your height in metres squared, or alternatively visit the NHS BMI calculator.

- 18.5 to 24.9 means you're a healthy weight
- 25 to 29.9 means you're overweight
- 30 to 39.9 means you're obese
- 40 or above means you're severely obese

The scores mentioned above generally apply to people with a white background. If you have an ethnic minority background, the threshold for being considered overweight or obese may be lower. BMI is not used on its own to diagnose obesity because people who are very muscular can have a high BMI without much fat. But for most people, BMI is a useful indication of whether they're a healthy weight.

Cardiovascular disease

Cardiovascular disease (CVD) is an overarching term that describes a family of diseases (including stroke, heart attack and peripheral vascular disease) sharing a common set of risk factors.

Cholesterol

Cholesterol is a fatty substance found in your blood. Your body needs cholesterol to build healthy cells, but high levels of cholesterol can increase your risk of heart disease.

Coronary heart disease

Coronary heart disease (CHD) (also known as coronary artery disease or heart disease) is a disease in which a waxy substance called plaque builds up inside the coronary arteries. These arteries supply oxygen-rich blood to your heart muscle.

Directly age standardised rate

The rate that we would expect to find in the populations (groups) under study if they all had the same age composition.

Deprivation

Deprivation in England is measured using the Index of Multiple Deprivation (IMD). It is an official measure of relative deprivation and defines deprivation to include a wide range of an individual's living conditions. There are seven distinct domains of deprivation:

- Income
- Employment
- Health Deprivation and Disability
- Education, Skills and Training
- Crime
- Barriers to Housing and Services
- Living Environment

Deprivation quintile
Within Buckinghamshire, the population for our county is split into five even groups (quintiles) containing 20% of the population each, based on the deprivation score of the areas they live in.

When the term 'least deprived' is used, it means the 20% of the Buckinghamshire population who live in the least deprived areas within the county using the Index of Multiple Deprivation. The 'most deprived' means the 20% of the Buckinghamshire resident who live in the most deprived areas within the county using the Index of Multiple deprivation.

Diabetes
A condition that arises when the pancreas does not produce enough insulin or when the body cannot effectively use insulin. The three most common types of diabetes are: type 1, type 2, and gestational (during pregnancy).

Elective admissions
Hospital inpatients admissions that were planned in advance and are not an emergency. Sometimes referred to as 'planned admissions.'

Emergency admission
An admission where the clinician admits the individual to the hospital due to a sudden and unexpected change in the individual's physical or mental condition which is severe enough to require immediate admission as an inpatient in a hospital.

HDL cholesterol
High-density lipoprotein is sometimes called 'good' cholesterol. High levels of HDL cholesterol can lower your risk for heart disease and stroke.

Heart failure
Heart failure (also known as congestive heart failure) is a condition in which the heart can't pump enough blood to meet the body's needs.

Hypertension
Hypertension (also known as high blood pressure) is a common condition which increases the risk of stroke and heart disease.

LDL cholesterol
Low-density lipoprotein is sometimes called 'bad' cholesterol. High levels of LDL cholesterol raise your risk for heart disease and stroke.

Mortality rate
Also called 'death rate' is a measure of the number of deaths in a population over a specific time period. It is usually reported as a number of deaths for a given number of people, e.g. per 1,000 individuals per year.

Myocardial infarction
A myocardial infarction (also known as a heart attack) happens when the flow of oxygen-rich blood to a section of heart muscle suddenly becomes blocked and the heart muscle can't get enough oxygen. If blood flow isn't restored quickly, the section of heart muscle begins to die.

Obesity
For adults obesity is defined as having a BMI of 30 or greater. If you have an ethnic minority background, the threshold for being considered obese may be lower.

Prevalence
The proportion of individuals in a population who have a particular disease or characteristic at a given time.

Quality and outcomes framework (QOF)
A system designed to remunerate general practices in England for providing good quality care to their patients, and to help fund work to further improve the quality of health care delivered.

Quintile
One of five equal groups in a population. For example, the Buckinghamshire population is split into five equal sized groups for deprivation.

Stroke
A stroke occurs if the flow of oxygen-rich blood to a portion of the brain is restricted or stopped. Without oxygen, brain cells start to die after a few minutes. The majority are caused by a clot blocking the flow of blood, but others are caused by a blood vessel bleeding.

Transient ischaemic attack
A transient ischaemic attack (TIA) or 'mini stroke' is caused by a temporary disruption in the blood supply to part of the brain. The effects of a TIA fully resolve within 24 hours.

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Director of Public Health Annual Report 2022

Hearts and Minds

Preventing heart disease and stroke in Buckinghamshire

SHORT READ VERSION

1. Introduction

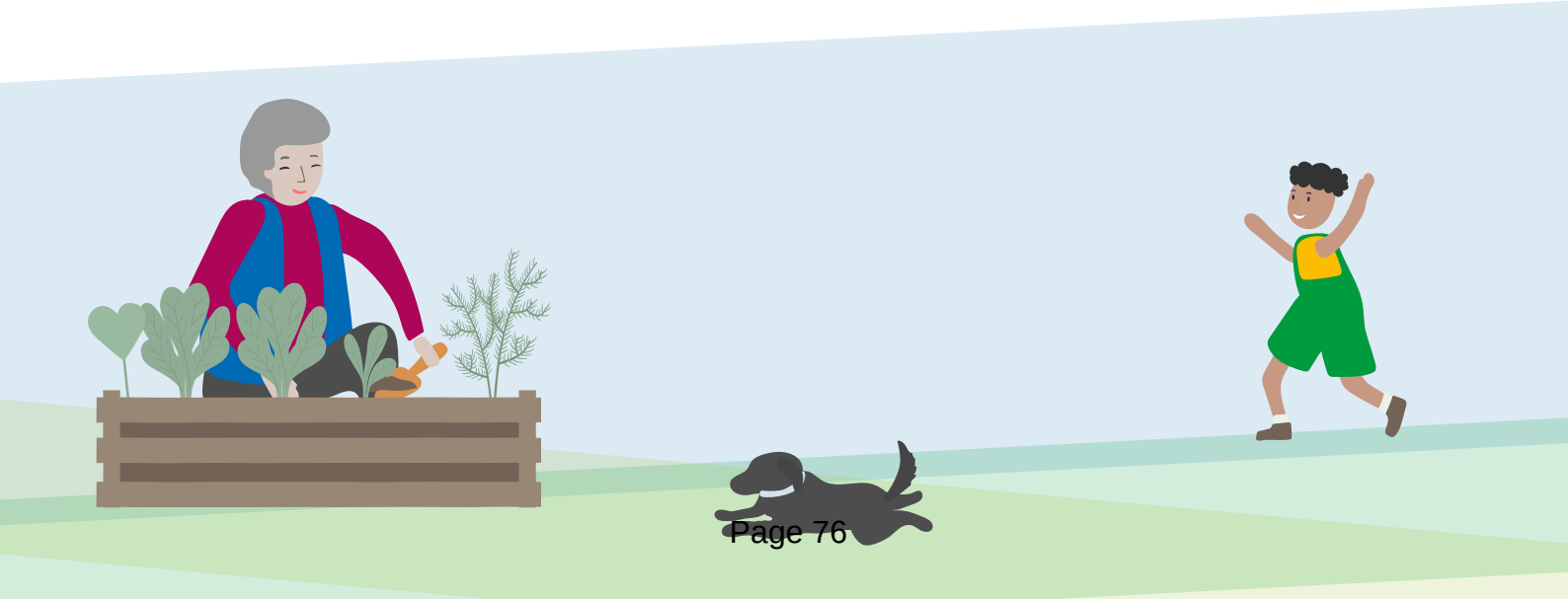
Cardiovascular disease describes diseases of the heart and blood vessels. It includes heart disease, stroke, transient ischaemic attacks (mini-strokes) and vascular dementia, which is the second commonest type of dementia. Cardiovascular disease costs the NHS in England £7.4 billion and the wider economy £15.8 billion every year. It is responsible for one in four premature deaths in the UK and is the biggest contributor to the gap in life expectancy between those living in the most and least deprived areas.

Buckinghamshire is one of least deprived and consequently healthiest counties in England. However, our residents still suffer from a significant burden of preventable diseases, including cardiovascular disease. Although our death rate is lower than the national average, cardiovascular disease is a significant cause of ill health and disability in Buckinghamshire. It causes more than one in five deaths in Buckinghamshire and is the biggest contributor to the gap in life expectancy between people living in our most and least deprived areas.

Death rates from cardiovascular disease had been falling in Buckinghamshire over the last 20 years but progress has been slowing and premature death rates have plateaued recently. Risk factors for cardiovascular disease, such as obesity and diabetes, are rising nationally and locally and could lead to rising rates of cardiovascular disease again.

The COVID pandemic has also had an impact on cardiovascular disease risk by increasing unhealthy behaviours and affecting other cardiovascular disease risk factors. Provisional data covering the pandemic period also revealed a rise in cardiovascular disease death rates between 2020 and 2021. The rise in the cost of living may also have an adverse impact on the development of cardiovascular disease in our residents. We need to act now to reduce the burden of ill health experienced by our communities.

The good news is that the majority of cardiovascular disease can be prevented. Many of the risk factors for cardiovascular disease also cause other diseases, such as cancer, lung and liver disease. Acting on these risk factors will reduce these diseases too and bring many benefits to individuals and communities. It can improve people's health, quality of life and independence as well as the quality of our environment, help mitigate the impact of climate change and increase the economic and social success of Buckinghamshire.



2. Risk factors for cardiovascular disease

We understand a lot about what increases peoples risk of developing cardiovascular disease so we can act effectively to prevent it developing in the first place. It is estimated that up to 80% of cardiovascular disease is preventable.

The risk factors for cardiovascular disease are a mix of personal characteristics, such as age and ethnicity, which cannot be changed and factors that are modifiable, such as the environments and circumstances in which people live, people's opportunities to adopt healthy behaviours and exposure to chronic stress.

The modifiable risk factors can be categorised as behavioural risk factors, clinical risk factors and environmental risk factors and these are discussed below. These factors are often inter-related and therefore we need a multi-agency and multi-level approach to address them. This approach combines actions people can take themselves, actions at a community level and a Buckinghamshire-wide level. National action is also required to help address some of the risk factors.

2.1 Behavioural risk factors

Smoking, being physically inactive, drinking too much alcohol and eating an unhealthy diet increase the risk of cardiovascular disease. The greater the number of risk factors a person has the greater the risk of developing cardiovascular disease. In Buckinghamshire, 13% of adults smoke but this rises to 22% in the most deprived areas of Buckinghamshire according to primary care data.

Changing behaviour is not just a matter of will power. Most health related behaviours are shaped in childhood and adolescence and are influenced by a wide range of factors when we are at an impressionable age. The health behaviours of young people are strongly influenced by the people they see around them, including parents, other adults and their peers. For instance, we know that children who have parents who smoke are more likely to become smokers themselves.

The conditions in which people live also profoundly influences their ability to adopt healthy behaviours. For example, to eat healthily or keep homes warm requires a sufficient level of income. Studies show the poorest 10% of UK households would need to spend 75% of their disposable income on food to meet the recommendations for healthy eating compared to just 8% for the richest 20%. The density of fast food outlets is higher in more deprived areas increasing the availability of unhealthy food. The ability to build physical activity into daily routines is supported by safe cycling or walking routes and safe places to play and be physically active. The pricing, advertising and availability of food and alcohol affect consumption significantly and the food and alcohol industry spend many millions on advertising their products to influence cultural norms and consumption. For all these reasons the prevalence of health promoting or health harming behaviours varies across the population and over time.

Changing behaviour requires much more than a focus on the individual and their behaviour but a whole system approach that supports the individual to make healthy choices and makes healthy choices the easy choices. Interventions that introduce structural changes and require less effort on the part of the individual often have a larger health impact and reduce health inequalities more effectively. The most effective approaches combine population level interventions and individual support. Smoking provides a good example of this combined approach. National action helps produce an environment that discourages smoking through legislation, taxation and advertising and individual support is offered to help people stop smoking.

2.2 'Clinical' risk factors

High blood pressure, being overweight or obese, having high levels of cholesterol in the blood and diabetes increases the risk of cardiovascular disease. The health behaviours described above often contribute to the risk of developing these conditions and addressing health behaviours can help reduce the risk of developing these conditions and help treat them. There are also effective treatments for these clinical conditions that reduce the risk of developing cardiovascular disease.

It is estimated that more than half of cases of type 2 diabetes can be prevented or delayed. The risk factors for type 2 diabetes are an unhealthy diet, being overweight and lower levels of physical activity. In Buckinghamshire, 6% of adults are recorded as having diabetes which is lower than the national average of 7%.

In Buckinghamshire, 16% of adults are recorded as having high blood pressure and the prevalence is higher than the national average, which may reflect better detection or recording. The risk of developing high blood pressure is increased by being overweight, an unhealthy diet ,including eating too much salt, lack of physical activity and higher levels of alcohol consumption.

People often do not know they have high blood pressure, high cholesterol or diabetes as clinical tests are required to detect them. The recorded prevalence of both high blood pressure and diabetes has increased by 8% and 16% respectively in Buckinghamshire since 2012 according to GP data. However, estimates suggest that in Buckinghamshire there may be 10,000 people who have diabetes and 47,000 people who have high blood pressure but it has not yet been recorded or diagnosed. The longer any of these conditions remain undetected and untreated the greater the risk of developing serious complications, such as heart attacks and strokes.

The prevalence of obesity is increasing both in children and adults in Buckinghamshire. More than six in ten adults in Buckinghamshire are overweight or obese and one in three 10-11 year olds are overweight or obese. The prevalence of obesity in 10-11 year olds in Buckinghamshire is highest in the most deprived areas where 26% of children are obese and 14% are overweight.

Some people may not be aware that their weight is putting them at risk. People with a Body Mass Index (BMI) over 30 are classed as obese and have an increased risk of diabetes, high blood pressure, heart disease and dementia. People from South Asian and black ethnic groups have a higher risk of diabetes and cardiovascular disease at lower BMI than people from white groups. Waist circumference is also an indicator of cardiovascular disease risk - a waist measurement of more than 102cm for a man and 88cm for a woman increases the risk of cardiovascular disease.

2.3 Environmental risk factors

Certain types of stress at work have been found to be associated with an increased risk of death from cardiovascular disease. Stressful jobs are particularly damaging to health, and these can be either jobs that make high demands of employees but offer little control, or those that ask for a great deal of effort but provide little reward in the form of pay, recognition or status. These jobs are associated with worse physical and mental health, including higher risks of obesity, heart disease and diabetes. In addition, international evidence has shown that people who work more than 55 hours per week are more likely to die from heart disease and stroke than people working 35-40 hours per week.

Very high and very low temperatures are associated with increased risk of death from cardiovascular disease. Without mitigation climate change will lead to increased summer deaths. Cold homes are also associated with an increased risk of cardiovascular disease and other health problems. Before the COVID pandemic one in five excess winter deaths were due to cardiovascular disease.

Poor outdoor air quality is responsible for up to 36,000 deaths per year in the UK, the majority of which are from heart disease and stroke.

3. Who is more at risk of cardiovascular disease?

While anyone can develop cardiovascular disease, some people are more likely to develop it than others. It is important to understand who is at greater risk of cardiovascular disease to ensure that initiatives to prevent and treat cardiovascular disease are reaching those who need it most and are effective. Increasing people's awareness of their increased risk also enables people to take appropriate steps to reduce their risk by acting on the risk factors that they can change themselves.

Cardiovascular disease increases with age and is more common in men, people living on lower incomes or living in more deprived areas and people from certain ethnic groups, especially black and South Asian ethnic groups. It is also more common in people living with severe mental illnesses, such as schizophrenia or bipolar disease and people with certain inherited conditions, such as familial hypercholesterolaemia. Although cardiovascular disease increases with age it occurs at a younger age in certain groups at risk.

Differences in cardiovascular disease between different groups are a significant driver of health inequalities across Buckinghamshire. Cardiovascular disease is the largest contributor to the gap in life expectancy between people living in our most and least deprived areas.

3.1 People living in deprived areas

People living in the most deprived areas of England are four times more likely to die early from cardiovascular disease compared with people who live in the least deprived areas. This is due to the complex inter-relationship of factors, such as income, employment and environment, their impact on the opportunity to adopt healthy behaviours and the development of conditions such as diabetes. Nationally, people living in deprived areas have higher levels of smoking, physical inactivity and harmful alcohol consumption. They also have higher levels of clinical risk factors such as high blood pressure, diabetes and overweight. They are more likely to live in poorer quality housing and areas with lower environmental quality, have lower incomes and poorer quality jobs, all of which increase the risk of cardiovascular disease.

In Buckinghamshire, data shows that people living in our most deprived areas have a premature death rate from cardiovascular disease which is 2.6 times higher than those living in the least deprived areas. Emergency admission rates to hospital for cardiovascular disease are 60-90% higher from our most deprived areas compared to our least deprived areas but rates of planned admissions are only 20% higher from these areas.

People living in our more deprived areas have higher rates of smoking, overweight and diabetes than in other areas of Buckinghamshire. The frequency of these conditions shows a stepwise increase as area deprivation increases.

3.2 Differences in cardiovascular disease risk between ethnic groups

South Asian ethnic groups

National data shows that people from South Asian groups are more likely to develop and die from cardiovascular disease than white groups and have the highest risk of death from heart disease of any ethnic group. South Asian people also tend to develop cardiovascular disease at a younger age than their white counterparts. South Asian men have been found to develop cardiovascular disease on average at around 60 years of age which is eight years younger

than white men. South Asian women develop cardiovascular disease around 63 years of age which is 11 years earlier than white women. This reflects the complex mix of environmental, social, behavioural and clinical risk factors highlighted above and is not inevitable.

The increased prevalence of diabetes in South Asian groups is a significant driver of increased cardiovascular disease risk. People from South Asian groups are up to six times more likely to develop diabetes than people from white groups and develop diabetes at a younger age at around 62 years compared to 67 years for white European groups. The risk of developing type 2 diabetes increases from age 25 in South Asian groups compared to age 40 in white groups.

By the age of 80 years 40-50% of South Asian people will have diabetes which is twice the prevalence in Europeans.

Being a healthy weight, having a healthy diet and being physically active help prevent or delay the onset of diabetes. Although adults of South Asian ethnicity tend to be a lower weight than white groups, they develop diabetes and cardiovascular disease at a lower weight as measured by Body Mass Index than white groups.

Other risk factors, such as smoking and drinking harmful levels of alcohol, are lower in South Asian groups than white groups which helps protect their health.

In Buckinghamshire, people of Pakistani ethnicity have the highest prevalence of coronary heart disease and diabetes.

Black ethnic groups

People from black ethnic groups appear to have a lower risk of heart disease but are more likely to have high blood pressure and die from stroke than other ethnic groups and more likely to have a stroke at a younger age. Black ethnic groups in the UK may be three to four times more likely to have high blood pressure than white groups and there is some evidence to suggest when blood pressure is detected it is less likely to be well controlled in these groups.

People from black ethnic groups are also up to three times more likely to develop diabetes and have a higher risk of dying from diabetes than the white population. People from black ethnic groups also tend to develop diabetes at a lower weight than white groups.

People from black ethnic groups are less likely to smoke or consume alcohol to harmful levels than white groups which helps protect their health.

In Buckinghamshire, according to primary care records, black ethnic groups have the second highest prevalence of diagnosed high blood pressure (white British groups have highest prevalence) and the second highest prevalence of diagnosed diabetes. People from black ethnic groups have the lowest prevalence of diagnosed heart disease.

Social and economic factors

Social and economic factors are also likely to play a role in the increased risk of cardiovascular disease in black and South Asian groups. Some ethnic groups are more likely to live in deprived areas and it is likely that this is a marker for other social factors, such as income, experience of work related stress and environmental quality, that are important components of the increased risk of cardiovascular disease in these groups. Experience of racism is also known to affect health by increasing stress levels and may also play a role.

The accuracy and completeness of ethnic recording of hospital health care data for Buckinghamshire residents is incomplete making assessment of access and outcomes by ethnicity more difficult. In addition, death certificates do not currently record ethnicity to allow analysis at local level.

3.3 Differences in cardiovascular disease risk by gender

Men are more likely to have cardiovascular disease and more likely to die from it than women. Before the menopause female hormones have a protective effect on cardiovascular disease in women but after the menopause the prevalence of cardiovascular disease increases in women. In Buckinghamshire, men are 2.3 times more likely to die prematurely from cardiovascular disease than women. Between 2019 and 2021 death rates from cardiovascular disease increased in both men and women but much more markedly in men.

Men are more likely to have diabetes than women at the same age and more likely to smoke and drink to harmful levels.

However, international evidence shows that women are less likely to correctly identify the symptoms of a heart attack, that they are slower to seek treatment, that they are 50% more likely to receive the wrong initial diagnosis and that when a heart attack is diagnosed, they received unequal care. Prompt treatment is critical to reduce complications and damage after a heart attack.

3.4 People with severe mental illness

People with a severe mental illness (such as schizophrenia or bipolar disorder) have a greater risk of developing cardiovascular disease and dying from it than people without a serious illness of a similar age. Some risk factors are more common in people with severe mental illness, such as smoking and alcohol consumption. Diabetes and obesity are also more common in people with severe mental illness and some of this increase may partly be due to the side effects of some medication.

4. Cardiovascular disease and COVID

People with cardiovascular disease or the risk factors for cardiovascular disease, such as high blood pressure, diabetes or obesity ,tended to experience more serious outcomes from infection with COVID.

The COVID pandemic has also increased the risk of cardiovascular disease both directly and indirectly. The pandemic has had an indirect impact on cardiovascular disease by worsening some people's mental health and economic circumstances and increasing the proportion of people with unhealthy behaviours, such as eating unhealthily, being less active, drinking more alcohol and gaining weight.

The pandemic also reduced access to routine health care and preventive interventions, such as NHS health checks and management of blood pressure and diabetes. COVID infection has had a direct impact on cardiovascular disease and led to an increase in cardiovascular disease events after infection, even in those who were not admitted to hospital.

COVID will continue to impact on society and we are still learning about the impact COVID has on long-term health. There is some emerging evidence that COVID itself may increase the risk of cardiovascular disease in people who get infected. COVID will continue to circulate and will impact more severely on those with pre-existing cardiovascular disease or its risk factors, which gives us added incentive to tackle cardiovascular disease now.

5. What are we doing now?

We have a range of programmes in Buckinghamshire designed to address the main behavioural and clinical risk factors for cardiovascular disease. These are highlighted in the main report. We are also developing and implementing a multi-agency plan to address inequalities in cardiovascular disease across Buckinghamshire, overseen by the Buckinghamshire Health and Wellbeing Board.

5.1 Addressing behavioural risk factors

Smoking is addressed through the multi-agency Buckinghamshire Tobacco Control Strategy and implementing the NHS Long Term Plan for smoking cessation. The council provides free smoking cessation support to those who wish to quit smoking through the Live Well Stay Well service.

Physical activity is addressed via the multi-agency Buckinghamshire Physical Activity Strategy 2018-2023 and action plan. Examples of successful programmes include Active Communities, a pilot project taking a whole community approach to reduce sedentary behaviour in two communities, and an Active Movement in Schools programme to reduce sedentary behaviour in children and families. Other programmes support Active Travel and Play Streets.

Healthy eating and a healthy weight are addressed through several programmes, including the Buckinghamshire 'Whole Systems Approach To Healthy Weight'. The approach brings together partners, including housing, planning, transport, leisure and schools and local communities, to develop and agree on a shared action plan that addresses the wider environmental factors that make it easier for people to maintain a healthy weight.

Healthy eating activities include increasing access to healthy affordable food through community growing schemes such as Grow It Cook It Eat It, which supports communities to grow their own food and offers cookery courses, including basic cookery skills and healthy meals on a budget. Grow to Give encourages people to grow more food in their gardens and allotments and donate the surplus to food banks and community fridges. In 2021 the community of growers donated 3.22 tonnes of produce for food parcels that supported over 600 families, that's the same weight as 403 baskets of fruit and vegetables, three giraffes or two family sized cars.

Buckinghamshire Council commissions some weight management services, including through our integrated lifestyle service, Live Well Stay Well. The NHS also offers some weight management support and programmes to prevent the development of diabetes.

5.2 Detecting and managing clinical risk factors

The free NHS health check is offered to eligible adults aged 40-74 and is designed to spot risk factors such as high blood pressure and high cholesterol or early signs of heart disease, type 2 diabetes, stroke, kidney disease or dementia.

It offers opportunities for people to be tested and be given advice about reducing their risk of cardiovascular disease and referred on for treatment if required. The NHS health check was paused during the pandemic but has now restarted and we are working to increase uptake in groups at greatest risk of cardiovascular disease. The NHS is also working to support management of high blood pressure and diabetes as we adapt to living with COVID.

5.3 Addressing environmental risk factors

Buckinghamshire Council and partners have a variety of plans to improve the wider environmental risk factors for cardiovascular disease, including action on climate change, air quality, active travel, employment and housing.

6. Recommendations

We need a renewed focus on preventing cardiovascular disease in Buckinghamshire. This needs to address the key social, economic and environmental risk factors for cardiovascular disease, alongside the behavioural and clinical risk factors to keep our residents healthy and narrow inequalities. Tackling the key risk factors will also improve health in a variety of other ways, including reducing the risk of cancer, diabetes, dementia, musculoskeletal problems and poor mental health, and produce many other societal and economic benefits, making Buckinghamshire an even better place to live.

To tackle cardiovascular disease and reduce inequalities in illness and premature death in Buckinghamshire we need a multilevel approach that addresses risks at the individual, community and Buckinghamshire-wide level that will impact over the short, medium and long term.

We need to work together with partners and communities across Buckinghamshire to:

1. Act on the broader determinants of health, such as income, debt, good quality employment, high quality education and healthy environments to level up outcomes across Buckinghamshire. Tackling these issues is an essential component of reducing inequalities in health.

2. Support a systematic large-scale improvement in behavioural risk factors by:

- Ensuring the physical, social, commercial and economic environments in which people live, work and learn support healthy behaviours.
- Increasing the understanding and the skills required to design effective behaviour change interventions across Buckinghamshire Council, the NHS and partners, including rolling out the behaviour change Making Every Contact Count programme. This enables people to have 'healthy conversations' to support behaviour change in their day-to-day interactions.
- Working with communities to understand what would support them to reduce their risk of cardiovascular disease and co-design and evaluate appropriate approaches.
- Supporting NHS trusts to implement the NHS Long Term Plan smoking cessation support requirements as smoking is the single biggest modifiable driver of health inequalities.
- Working together with partners and communities to develop a whole system approach to healthy eating and physical activity to combat the rise in unhealthy weight and obesity.
- Working together to tackle smoking via the Tobacco Control Action Plan.
- Working together to address harmful alcohol misuse through development of our new drug and alcohol strategy.

3. Increase detection and management of modifiable risk factors in people at higher risk of cardiovascular disease, including those living in more deprived areas, ethnic groups at higher risk of cardiovascular disease and those with mental illness by:

- Increasing capacity in primary care in more deprived areas to undertake NHS health checks and detect and manage clinical risk factors, such as high blood pressure and diabetes, and refer to appropriate interventions, such as smoking cessation.
- Working with people from ethnic minority groups to design effective, culturally competent approaches to increase detection of risk factors and management of risk factors.
- Working with NHS and local authority partners to develop and implement the whole system plan to tackle inequalities in cardiovascular disease.

4. Improve data collection and monitoring to track progress.

- Improve data collection in primary and secondary care to enable monitoring of outcomes by ethnicity and areas of deprivation and improve the quality, accuracy and completeness of ethnic monitoring data.
- Undertake equity audits to determine access to and uptake of prevention and treatment initiatives of cardiovascular disease by different groups.

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Report to Health & Adult Social Care Select Committee

Date: Thursday 17th November 2022

Title: Buckinghamshire Healthcare NHS Trust Strategy update

Author: Andrew McLaren, Chief Medical Officer and Ali Williams, Chief Commercial Officer, Buckinghamshire Healthcare NHS Trust

Officer support: Owen O'Sullivan, Director of Strategy, Buckinghamshire Healthcare NHS Trust

Recommendations/Outcomes: To note progress on delivery of the Trust's 2025 Strategy and the outcome of the CQC visit this year.

1. Background

Buckinghamshire Healthcare NHS Trust (BHT) presented its Trust Strategy, a main part of which is its Clinical Strategy, to the Health and Adult Social Care Select Committee (HASC) in November 2021. This report provides the Committee with an update on progress. Since then, the development of both the Buckinghamshire, Oxfordshire & Berkshire West (BOB) Integrated Care System (ICS) strategy and the Place Buckinghamshire Health and Wellbeing strategy has commenced. BHT is in the process of ensuring its strategic choices and resources align with the evolving priorities in the System and Place.

The Trust was visited by the Care Quality Commission (CQC) in February and March 2022 and a brief summary of the visit and outcomes of the report is included.

2. Main content of report: Our clinical strategies and CQC visit

The clinical strategy for BHT has five key strands:

1. Urgent and Emergency Care:

Our vision is to work with our partners to provide highly responsive urgent care services close to home. For more serious or life-threatening emergency care needs we will offer centralised care with the very best expertise, from the best facilities to maximise the chances of survival and a good recovery.

Progress to date:

- Partnership with FedBucks to deliver an urgent treatment centre at the front door of the Emergency Department at Stoke Mandeville Hospital
- Started the implementation of virtual wards (where patients can remain at home but be admitted to the care of the hospital)
- Introduced Red phones (which GPs use to access rapid info)
- Developed our Same Day Emergency Care unit to provide care for people with medical needs that do not need admission
- Implemented a new digital management system for Intensive Care Unit improving access to real-time data to better manage patient care

Next steps:

- Improving our Emergency Department estate to improve patient experience with refurbishment completing this week
- Opening our new Paediatric Emergency Department and Paediatric Decision Unit in December 2022
- Continuing to increase referrals to our Urgent Community Response service that provides a 24/7 community-based response within 2 hours

2. Planned Care:

Our vision for planned care services is to use technology to deliver outpatient care that is convenient and only ask people to come to hospital when they need to see an expert. We will work with other planned care providers to perform procedures that deliver the best outcomes in a timely way.

Progress to date:

- Met national standards on 104 and on track for 78-week targets for reducing the length of time people need to wait for surgery
- A regional provider collaborative has been set up which enables:
    - Understanding the current position and pressures across the system within the particularly challenged areas
    - Collaboration and system transformation, through learning from best practice and system successes
- A new and larger Hydrotherapy Pool has now opened for clinical use in Amersham Community Hospital

- New skin centre (dermatology and plastics) has opened in Amersham
- Introduced a new digital pre-operative assessment for patients and clinicians – reducing the time taken to complete assessments
- Ensuring people are fit for surgery when they come in for a procedure (pre-habilitation)

Next steps:

- Launch robotic surgery in Wycombe Hospital
- Create the pathways and capacity to deliver rapid cancer diagnosis and treatment in the face of rising demand whilst taking opportunities to highlight prevention to reduce the future demand

3. Integrated Communities:

Our vision is to simplify the health and social care system and support people to live long, independent and healthy lives at home. When people need support, you will get it from the right person, at the right place and at the right time.

Progress to date:

- Collaborative with the Council joining up pathways
- Action plan developed with partner services for children with Special Educational Needs and Disabilities (SEND) and their families
- Development of an integrated health and care model at Chalfont & Gerrard's Cross Community Hospital that will bring together a range of services that meet the needs of the local community, involving all parts of the system including the voluntary sector
- Development of a midwifery model 'one-stop shop' bringing together a range of services for women and young children
- Published our net zero strategy and introduced an environmentally friendly waste facility to reduce carbon footprint on the Stoke Mandeville site, turning waste to flock to energy

Next steps:

- Focus on ensuring all care that can be, is delivered in the community, rather than in the acute setting
    - Work through the clinical models for both Chalfont & Gerrard's Cross Community Hospital and the midwifery one-stop shop

- Integrate pathways across community including virtual and with social services

4. Diagnostics and Medicine Management:

Our vision for diagnostics is to have access to tests that can be performed close to home as well as central capacity for more complex testing. By working in networks and investing in digital technology we will be able to provide rapid test results that improve outcomes by contributing to early diagnosis and treatment.

Progress to date:

- Invested in additional clinical capacity in diagnostic services across our main hospital sites
- Development of the concept of a Community Diagnostic Centre in Amersham
- Engaged in progressing the strategy for the pathology/radiology network across the region
- Implemented radiology image sharing across the Trusts in the system and developed the ability to allow radiologists to work at home (home reporting)

Next steps:

- Develop a diagnostics strategy which includes wearable devices at home and remote monitoring, to create a fully integrated diagnostic solution
- Consider how to procure imaging equipment collaboratively across the system

5. National Spinal Injuries centre and rehabilitation:

The National Spinal Injuries Centre (NSIC) at Stoke Mandeville is the birthplace of the Paralympic movement and the largest and most recognised spinal cord injury centre in the UK and beyond. At the heart of Buckinghamshire's Local Industrial Strategy is the contribution we can make to our region's economic growth and development. We will build on our heritage and develop a centre of excellence for rehabilitation with an international reputation for care, research and innovation.

Progress to date:

- This concept is being developed jointly by BHT and sports disability charity Wheelpower
- Initial thinking for the vision is "an integrated community sports and therapeutic rehabilitation village which builds on and celebrates the heritage of the Paralympics at Stoke Mandeville and the legacy and ambition of Professor Sir Ludwig Guttmann". The principles the project will seek to adhere to include:

- To provide equity of access for all to help people integrate and re-integrate into society post traumatic or neurological injury
- To provide world-class facilities that will support disabled people to move more, be physically active and play sport and help develop future Paralympians
- To foster healthy and active communities

The project known as “the Village” will seek to engage and leverage expertise from several external partners.

Next steps:

- Working groups have commenced to scope the vision, the clinical model and early consideration of what the concept could look like

CQC visit and outcomes from the report

BHT had an unannounced inspection by the Care Quality Commission (CQC) at Stoke Mandeville Hospital and Wycombe Hospital in February 2022, followed by a Well-led inspection in March 2022. Medical and Surgical core services were included in the inspection. The report was published on 1st July 2022.

We were delighted to be informed that the overall rating for the Trust remained Good. There were changes to two domains: the ‘safe’ domain dropped from Good to Requires Improvement, whereas the ‘well-led’ domain improved from Requires Improvement to Good.

The report highlighted positive feedback, specified outstanding practices observed and advised on areas for improvement. More details on the feedback from the CQC can be found in Appendix A.

3. Next steps and review

The HASC is asked to note and discuss progress on Buckinghamshire Healthcare NHS Trust’s strategy and the outcome of the CQC visit.

APPENDIX A: Summary of CQC report comments

A number of positive comments were highlighted in the report, which have been summarised below:

- Staffing levels were carefully monitored, and steps were taken to **maintain safe staffing levels**. Although at times, staff felt stretched. Staff understood how to **protect patients from abuse**. Medicines were managed well, in general. The Trust managed safety incidents well and learned lessons from them.
- Staff provided **good care and treatment**, gave patients enough to eat and drink, and gave them pain relief when they needed it. Managers monitored the effectiveness of the service. Staff worked well together for the benefit of patients and supported them in making decisions about their care. Key services were available seven days a week
- The staff treated patients with **compassion and kindness**, respected their privacy and dignity, took account of their individual needs, and helped them understand their conditions. They provided emotional support to patients, families and carers.
- The service planned care to **meet the needs of local people,** took account of patients' individual needs, and made it easy for people to give feedback.
- In most areas, **leaders were visible and approachable,** and staff were supported to develop their skills. Staff understood the Trust's **vision and values**. In general, staff felt **respected, supported and valued**. The Trust promoted **equality and diversity** in daily work and provided opportunities for career development. The Trust **engaged well** with patients and the community to plan and manage services, and staff were committed to **improving** services continually. There were **established governance systems** with clear reporting lines from the ward and units to the trust board. The Trust collected data and analysed it. Data was used to understand performance and make decisions.
- The Trust had worked to maintain some of its elective services during the COVID-19 pandemic, and **recovery plans** were being implemented to ensure that the backlog was addressed.
- Patients were complimentary about the care they received and felt they were treated with respect and kindness.
- There was a general recognition that staff were busy and at times appeared to be short of staff, which meant sometimes patients waited a little longer than they would have liked but did get the help they needed.

<u>Outstanding practices noted in the report:</u>

- **Learning disability liaison team:** The Trust's learning disability liaison team supported patients through their pathways. They supported with consent and

mental capacity assessment processes and supported patients through any procedures or interventions. They also supported staff in making any reasonable adaptions to support the well-being of patients with learning disabilities.

- **E-Stroke Suite:** In July 2020, the Trust adopted a third-party e-Stroke Suite imaging platform at Wycombe and Stoke Mandeville Hospitals. Created in Oxford, with expert clinical input from frontline NHS stroke physicians, the award-winning e-Stroke Suite leveraged cutting-edge Artificial Intelligence & Deep Learning methodology to help stroke physicians make life-saving decisions.
- **Contact with families:** The Trust staff worked hard to support patients and carers throughout the pandemic by introducing several initiatives such as the purchase of iPads and tablets, which enabled patients to keep in touch with their families via video calls and a 'Letter to a Loved One' service which allowed friends and family to email letters and photos which were colour printed and hand-delivered to patients.
- **Patient support and communication:** The Patient Advice and Liaison Service was extended to the weekend, and the Chaplaincy service offered a phone service to friends, family and carers.
- **SDEC:** The Same Day Emergency Care Service was launched in November 2020. Following a GP referral or triage in the emergency department reception, patients could be admitted to the new unit to be rapidly assessed, diagnosed and treated by a team of doctors, nurses and therapists without the need for a hospital admission or waiting to be seen in the emergency department.

<u>Areas for improvement:</u>

- Staff adherence to infection control guidance, and engagement in and understanding of quality improvement was variable.
- Staff were not always supported to develop through yearly, constructive appraisals of their work.
- Training in working with people living with dementia and those with learning disabilities was not mandated.
- Substances that were subject to COSHH regulations were not always managed safely.

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Report to Health & Adult Social Care Select Committee

Date: Thursday 17th November 2022

Title: Health & Care Integration Programme

Author: Neil Macdonald, Chief Executive, Buckinghamshire Healthcare NHS Trust

Officer support: Jo Baschnonga, Programme Director

Recommendations/Outcomes: Paper for information

1. Background

- This is an update following the presentation of the community hubs programme in February 2022 and the committee's request to understand more about developments in intermediate care.
- This paper presents a summary of the Health & Care Integration Programme, which was launched in June 2022 to deliver a new model for hospital discharge and intermediate care in Buckinghamshire.
- The background for this programme of work is presented in Section 1 – it summarises the expansion of our 'discharge to assess' model in Buckinghamshire during the Covid pandemic, which has contributed to rising numbers of Buckinghamshire residents waiting for long periods to be discharged from hospital.

2. Main content of report

– The report details the ambition, deliverables and timescales of the Health & Care Integration Programme (Sections 3 and 4).

– In summary, the programme is seeking to improve the flow of patients through the Buckinghamshire health and care system, in particular reducing long waits for discharge from hospital – so that Buckinghamshire residents can return home (or to the setting that best meets their needs) as soon as they are able. It will also demonstrate optimum capacity and usage of non-acute hospital beds across the

intermediate and longer-term care sector. This in turn will drive better value for money and improved staff wellbeing.

3. Next steps and review

- The programme will continue to be governed through the Integrated Care Partnership Executive Board, reporting delivery against programme plans and performance targets on a monthly basis.
- A new medium-term operating model is expected to be implemented by the end of March 2023; transformational deliverables are expected to be delivered between January and Summer 2023 (indicative timescales, pending full business cases).

Buckinghamshire Health & Care Integration Programme

1) Background

The flow of patients through health and care systems is critical to the quality of care received, and the effective management of capacity and resources. In line with the national average, around 70% patients attending Accident & Emergency (A&E) in Buckinghamshire are admitted, transferred or discharged within 4 hours (against a target of 95%). Nationally, this target was last met in 2015. Although this is a crude indicator, it gives a sense of the deeper challenges in moving patients onto hospital wards and through to the point of discharge.

From a patient perspective this can be critical, particularly for older frail patients. It is often said that for every 10 days of bed rest in hospital, the equivalent of 10 years of muscle ageing occurs (in people over 80 years old). We also know that frail elderly patients are more likely to need long-term bedded care after a period of deconditioning in hospital. For staff, poor patient flow creates pressure across the system, which can impact on working relationships and staff wellbeing.

During the Covid pandemic, optimising flow through health and care systems became even more critical in order to reduce risk of infection and enable systems to manage the unprecedented demand. Nationally, a model called 'discharge to assess' (D2A) was mandated (with a funding stream) to enable systems to move patients out of hospital quickly where they required social care support to return home. In Buckinghamshire, like many other places, this funding was invested in additional temporary bedded and home care. This additional D2A capacity enabled patients to be moved out of hospital while their social work and continuing health care assessments took place to determine their onward care provision. At the peak of the pandemic there were 180 D2A beds (spread across care homes in Buckinghamshire), and 11,000 hours of temporary home care.

Patient flow through the system today can be slow, particularly through our D2A bedded pathway. Here, the average length of stay in a D2A bed is 85 days. The average length of time spent receiving D2A temporary home care is 45 days. The reasons for this are complex – a high-level summary is provided in Appendix A. The impacts are significant – contributing to high numbers of patients waiting to be discharged ('medically optimised for discharge' – often exceeding 100 across the acute hospitals). The resulting pressure on hospital beds can result in patients not receiving the care they require and in some cases residing on trolleys for long periods (rather than in beds on wards). This also has the consequence of delaying ambulances whilst offloading at the hospital, with the corresponding pressures on how quickly they can respond to 999 calls.

2) Health & Care Integration Programme – what is it?

A key underlying challenge impacting on patient flow is the journey many patients take through multiple, fragmented health and care services. This has been amplified by the increasing complexity of health and care needs as our population ages – patient needs and journeys are more complex now than 30 years ago. Integrated Care Systems (ICSs) were implemented across the UK from 2016 to help address this challenge by supporting better integration of services. In July of this year these partnership arrangements became statutory.

Buckinghamshire is gripping the challenges around patient flow through a new programme of work called the Health & Care Integration Programme (herein the 'integration programme'). This programme is currently focused on implementing a new hospital discharge model for the county to reduce the length of time patients wait to be discharged. Alongside this, the Urgent & Emergency Care Transformation Programme at Buckinghamshire Healthcare NHS Trust is focused on improving flow through the hospital, including how alternative pathways to admission can help reduce the number of people having to attend hospital unnecessarily.

The new integration programme is managed by a small team of staff seconded from the partnership organisations, and reports into the Integrated Care Partnership Executive Board. It comprises of ten workstreams: five delivering long term transformation; four 'enabler' workstreams which provide support to the programme (functions like HR and IT); and an 'operational control' workstream which aims to grip current operational challenges and deliver improvement in the short to medium term.

3) Health & Care Integration Programme - ambition

Our programme vision is:

'Working together to keep the people of Buckinghamshire healthy, and ensure safe and timely discharge from hospital – wherever possible back to their home'

Our objectives are to improve patient outcomes and value for money by:

- Collaboratively driving better flow through the system
- Reducing the length of time Buckinghamshire residents wait to be discharged from hospital

Our programme principles are outlined below; they reflect the way we have agreed to work in partnership with each other across organisational boundaries. Relationships and behaviours are crucial to driving action and achieving our objectives in such a complex partnership environment.

- Open, honest communication
- Strong collaboration and focus on people – design things together, communicate regularly, support each other
- Evidence-based, what works, pragmatic
- Pace
- Customer-focus

4) Deliverables and timescales

The expansion of D2A during the Covid pandemic was not expected to be a long-term sustainable position. The retraction of national D2A funding earlier this year has sharpened our focus on moving away from this model, which is not working well for Buckinghamshire residents in its current configuration.

4.1 D2A beds and assessments

Earlier in the year, the Integrated Care Partnership Executive Board made the decision to start decommissioning the county's D2A bedded capacity (at that point in time approximately 140 care home beds spread across Buckinghamshire). Importantly, this process was not intended to remove capacity from the system, rather enable the care home beds to be used differently (to support long-term care), and address the long length-of-stay in this pathway that was impacting on patient outcomes. During the initial phase of the integration programme over summer, the number of D2A beds was almost halved (from 140 to 70 beds), while the flow through temporary home care was steadily improved.

We are now seeking to decommission all but 20 of our remaining D2A beds and return to a model where the majority of social work assessments (for ongoing care after leaving hospital) happen within the hospital setting (see key deliverables 1 and 2 below). This reflects the level of risk for patients currently within the D2A bedded pathway (with long average stays), and the cost which is no longer supported by a national funding stream. D2A beds will be decommissioned on a gradual trajectory ending in March 2023, and a risk-based approach will be used to manage the transition of assessments from the community to the hospital, ensuring clinical risk to patients is minimised. It should be noted that

approximately 50 Community Hospital Beds are available in the county to support rehabilitation and timely discharge (an increase from approximately 30 in spring), and an additional 22 beds in community surge capacity to help manage demand over winter.

The remaining 20 D2A beds will include an appropriate rehabilitation offer and will form part of Buckinghamshire's short-term post-discharge support offer. We are co-designing a new medium-term operating model with staff and patients to deliver this (to include a transition plan and system performance framework for all partners to sign up to).

4.2 Transformational deliverables

Deliverables 3-6 below refer to longer term transformational outputs which will deliver a more integrated approach to managing patient flow, supporting a further reduction in delays, improved patient outcomes, and better value for money.

In summary, the key deliverables of the programme, with timescales, are:

1. Reducing D2A beds to no more than 20 (with appropriate rehabilitation offer) – timescales to be determined through development of operating model, but no later than end of March 2023.
2. Transitioning majority of social care assessments into hospital (from community D2A pathways) – as above, timescales to be determined through development of operating model, but no later than end of March 2023.
3. Implementing a transfer of care hub (an integrated team with clinicians, therapists, social workers, and case managers working together to plan discharge effectively and manage the patient journey end-to-end) – indicative timescale to be delivered summer 2023.
4. Implementing an integrated digital offer (including a shared system to manage and track the flow of patients through the system) – phase 1 indicative timeline 8 months (pending agreement of proposed way forward at November Integrated Care Partnership Executive Board).
5. A business case for our future intermediate care offer (which will provide the right type of temporary post-discharge support to re-able patients and determine any onward care quickly, so that they can return home as soon as possible, or to the setting that best meets their needs) – delivery TBD (workstream being rescoped as a result of decisions made at October Integrated Care Partnership Executive Board).
6. Trusted Assessor (implementing a new model for assessing patients that increases assessment capacity and improves efficiency through building trust in the assessment process / quality) – initial roll-out January 2023.

5) Appendix A – summary of challenges impacting on patient flow

Rising demand and stretched capacity

- Hospital admissions increasing year on year (particularly older people), and higher than average in Buckinghamshire
- Increasing complexity of patient needs as population ages
- Social work and therapy capacity is thinly stretched across D2A care home beds spread across a wide geography county
- Capacity of local care market to provide the right type of care in the right area of the county – challenging to find long-term care for patients with more complex needs / specific health conditions; some geographies within Buckinghamshire are challenging to source care (more rural areas)

Stability of system

- Current system has been developed at pace in response to the Covid pandemic – as a result, processes, resourcing and workforce are temporary which has created instability. Our ability to influence and shape the care market has been constrained as a result.
- Partnership governance, resourcing and communications have needed to adjust to substantial and sustained change over the last 2 years – this has been a national challenge for health and care systems

Information, systems and processes

- No single IT system for case management / tracking flow of patients through the system; some parts of the system using Excel spreadsheets to manage patients
- Assessment and referral information not always high quality – can result in ineffective / inefficient management of patients. This issue can impact on relationships with long-term care providers.
- Processes are not always efficient – this issue is linked to the wider instability of the system and capacity deficits referenced above

Culture and partnership working

- Integrated Care Systems across the UK are still relatively immature, and it takes time to develop the right culture and behaviours to operate effectively across complex partnership environments

Healthwatch Bucks update

October 2022

This paper summarises recent project work we have undertaken in relation to health and social care services, as aligned with the priorities of the Joint Health & Wellbeing strategy.

Live Well

Social Prescribing

Buckinghamshire, Oxfordshire and Berkshire West Integrated Care Board (BOB ICB) has issued a positive response to our report on awareness of social prescribing in Buckinghamshire.

In her letter to Healthwatch Bucks, Dr Rachael De Caux, Acting Chief Executive, BOB ICB, said:

We are very grateful for the findings and recommendations from this piece of work. Your findings confirm to us that there is a lot of work to be done to raise the awareness of social prescribing to our population… Your results present a clear need to ensure that our residents know how to access the support available to them.

Report and response

You can read them **here**.

Community Opportunity Enter and View visits

Between September 2021 and March 2022, Healthwatch Bucks visited ten community providers.

We wanted to hear what people who attend these services gain from the experience and find out how they promote well-being and self-reliance. We also wanted to identify good practice and ways to improve service delivery.

As with all our enter and view visits, we asked each provider to respond to our draft report. These responses were then included in our **published reports**.

We caught up with some of these services in autumn 2022 to see what difference our recommendations have made since we first shared them. You can read the update **here**.

Young Onset Dementia

We're currently working on a research project focused on young onset dementia. We want to find out about people's experiences of living with this condition in Bucks, and also gather the views of their families and carers.

Our mission is to help improve health and social care services for the people who use them. We'll collect answers to our questions on young onset dementia anonymously, then add them to other peoples' responses to form a report. This will contain a set of recommendations that we hope will improve care.

What we want to know

For this project, we particularly want to know about the support that people with young onset dementia have received. For example:

- What information they were given
- Where or who they first went to for advice on living with young onset dementia
- Whether the information and support on offer was age-appropriate and felt personal to them (and / or their family)
- Whether the right support was made available at the right time.

Overall, we want to know what has worked well for people with this condition, and also what hasn't.

Get in touch

If you were diagnosed with dementia before the age of 65 (even if you are now over that age), or if you know someone else who was, please get in touch.

We'd also like to hear about your experiences if you live with (or have lived with) someone with young onset dementia in Buckinghamshire.

You can **register your interest to take part using our online form**.

Health and Adult Social Care Select Committee (Chairman: Jane MacBean, Scrutiny officer: Liz Wheaton)

Date	Topic	Description & Purpose	Lead Presenters	Contributors
17 November 2022	Buckinghamshire Healthcare NHS Trust's (BHT) Clinical Strategy and Estates Strategy	The Committee reviewed BHT's clinical strategy in its early stages in February 2022. Five themes are identified in this strategy – the services under each theme are due to start the reconfiguration process in early 2023. This item provides an opportunity for Members to hear more about the plans under each theme. This item to also include an update on BHT's Estates Strategy.	Neil Macdonald, Chief Executive, Buckinghamshire Healthcare NHS Trust	Ali Williams, Chief Commercial Officer Owen Sullivan, Interim Director of Strategy Andrew McLaren, Chief Medical Officer
	Buckinghamshire Healthcare NHS Trust's Business Case for Supporting Sustainable Intermediate Care	At its February 2022 meeting, the Committee reviewed the progress in the development of the community hubs in Marlow and Thame. As part of this review, Members remain concerned about the provision of services for people who are fit to be discharged from Hospital but need further support services. The Committee will hear more about the business case for supporting intermediate care.	Neil Macdonald, Chief Executive, Buckinghamshire Healthcare NHS Trust	Jo Bashnonga, Health & Care Integration Programme Director Elaina Quesada, Service Director (Adult Social Care Operations)

	Director for Public Health Annual Report	For the Committee to review and discuss the Director for Public Health Annual Report.	Dr Jane O'Grady	Health representatives
9 February 2023	South Central Ambulance Service	A recent CQC inspection report rated the overall service as "inadequate" (published in August 2022). An improvement plan has been developed and the Committee will review this plan and evaluate the service improvements.	TBC	
	Maternity Services	Following the publication of the Ockenden report, the Committee received assurances from Buckinghamshire Healthcare Trust in relation to the findings. This item provides an opportunity for Members to receive an update on this service.	TBC	
20 April 2023	Adult Social Care – Quality Assurance Framework	The Committee will hear from adult social care colleagues about the quality assurance framework which underpins service delivery.	TBC	
	Dementia	This issue has already been identified as part of Adult Social Care's refreshed Better Lives Strategy. The Committee will hear about the progress made in developing services to meet the needs of people with dementia and their carers and review how this	TBC	

		delivers against the national agenda.		
	PCN Inquiry – 6 month recommendation monitoring	For the Committee to receive a progress report on the implementation of the recommendations made in the HASC's Inquiry into Primary Care Development in Buckinghamshire.	ICB representatives	TBC

ADDITIONAL NOTES

Potential items to be scheduled:

- SCAS – progress following latest CQC inspection (August 2022)
- End of Life Care;
- Progress in implementing the specific projects identified in the refreshed Better Lives Strategy;
- Maternity services (following publication of more findings, Ockenden reports);
- Whole system approach to obesity;
- Infection Control support for care home providers.

Potential pieces of joint work:

- With Children's SC – Young people with eating disorders (including childhood obesity);
- With Children's SC - Transitions from Children's to Adult's services (Preparing for Adulthood)
- With Growth, Infrastructure and Housing SC – Infrastructure considerations when planning housing developments (including use of S106 to develop local health services);
- With Growth, Infrastructure and Housing SC - Provision of key worker housing;
- BOB JHOSC - Health and Social Care Workforce – recruitment and retention across the system.

Possible Inquiry/Rapid Review items:

- Access to primary and secondary healthcare, including GPs, Dentists and Emergency Departments;
- Mental Health – focus on accessing services;

- Patient Transport services.

Work undertaken outside Committee meetings by small working groups:

- Review and prepare a statement for BHT's Quality Account (submitted June 2022);
- Possible working group to review BHT's "themes" from their clinical strategy.

Issues to keep under review and to update Members on but not necessarily items for the Committee meetings:

- Pharmaceutical Needs Assessment – going to Health & Wellbeing Board in September for sign-off;
- Progress with developing the community-led health centre in Long Crendon;
- Progress with the Lace Hill development in Buckingham;
- Progress in further developing the community hubs in Marlow and Thame;
- South Central Ambulance Service – review the action plan following CQC inspection (Feb 2022) – see above;
- SEND Written Statement of Action (due in August 2022) – sits with the Children's SC but certain aspects relate to health.

Issues to keep an eye on via Health & Wellbeing Board:

- Reducing health inequalities;
- Development of primary care services;
- Maternity services;
- ICS/ICB/ICP updates.

Member visits

- Stoke Mandeville and Wycombe Hospitals;
- Whiteleaf Centre, Aylesbury;
- South Central Ambulance Service – control centre in Bicester.