Healthy mouths for all

Buckinghamshire oral health improvement strategy

2015 -2020

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1.

1. Foreword

Buckinghamshire County Council recognises the importance of addressing the issue of oral health. A healthy mouth is an integral part of overall health and wellbeing. Oral health has improved substantially over the last few decades however; many children and adults in Buckinghamshire experience oral diseases that impact on their everyday life. This can range from acute pain and hospitalisation for treatment to a limited ability to eat, speak and socialise.

While the causes of oral diseases are well understood, tackling them is complex. This means that oral diseases cannot be addressed by a single intervention. This strategy provides an integrated approach as well as a targeted approach for vulnerable adults and children, following the latest guidance set out by NICE, PHE and the LGA.

The new strategy will contribute to the delivery of the Health and Wellbeing Strategy and form part of the prevention programme for the Care Act.

The success of the strategy is reliant upon the engagement and commitment of all stakeholders working in partnership to integrate oral health.

Dr Jane O’Grady
Director of Public Health

2. Why are we focusing on oral health?

2.1. Rationale

A healthy mouth promotes a healthy body by helping us enjoy a variety of foods. A healthy mouth also promotes wellbeing by enabling us to speak, communicate and therefore participate in society. By enabling a healthy mouth we help our children to learn, thrive and develop and our adults live a full and healthy life.

Our ability to eat, speak, smile and socialise is disturbed by oral diseases (including tooth decay, gum disease and oral cancers). Oral diseases are largely preventable but are still very common. Poor oral health can contribute to neglect, in both children and vulnerable adults.

In Buckinghamshire just over 1 in 5 children have 3 to 4 decayed teeth at 5 years old. In adults around 1/3 of adults in the 25-34 and over 75 age groups have experience of tooth decay with 2-3 decayed teeth on average.[1] Dental extractions, as a result of tooth decay, was the most common reason for hospital admissions in children aged five to nine years old nationally in 2012-13.[9]

Oral diseases are not evenly spread throughout Buckinghamshire. Some population groups are more vulnerable to developing oral health problems, including older people, people living in poverty, people with lifestyle issues and those who are dependent on others for support.

This means that people who are vulnerable or disadvantaged are at higher risk of poor oral health. Improvements in oral health mean that in general adults are keeping their natural teeth into older age. However for adults with poor oral health they are likely to develop more complex needs in older age. Oral health also has

wider impacts. For example problems such as pain and problems eating can result in absences and poor performance at school and work and gum disease has recently been linked to cardiovascular disease.

An overview of the impacts of oral diseases is provided in Figure 1.

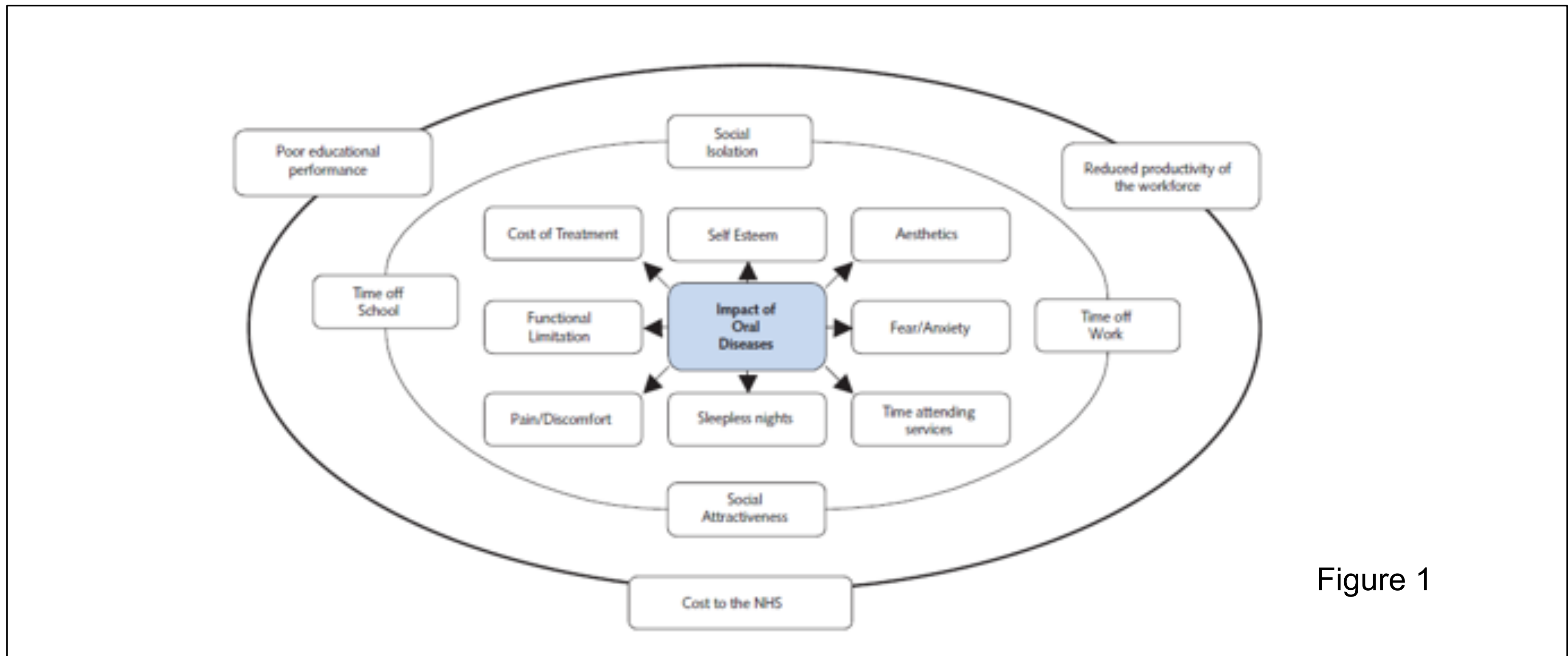

Figure 1

(Source: Department of Health, Choosing Better Oral Health 2005 Available here)

The cost of NHS dentistry is significant: in England the NHS spends £3.4 billion per year on dental care (with an estimated additional £2.3 billion on private dental care).[7] In 2011-2012 the mean cost of extracting multiple teeth in hospital was £673 per child with a total NHS cost of almost £23 million.[2]

2.2.The benefits of improving oral health

The impact of poor oral health is much wider than is first apparent. Improving oral health and reducing related inequalities would realise benefits for wider society as well as for us as individuals. The benefits of having a healthy mouth for both individuals and wider society are summarised in Figure 2.

Summary of individual and wider benefits of good oral health

	Physical Benefits	Emotional Benefits
Benefits of good oral health for individuals	• Improved ability to eat, speak, smile and socialise. • Improved nutrition as a result of the ability to have a varied diet. • No pain, discomfort and related sleepless nights from mouth problems • Older people with good oral health are less likely to be frail. This is because poor oral health limits food choices leading to malnutrition and resulting physical problems. Poor oral health also creates lower satisfaction levels in older people and reduces their participation in everyday activities.	• Improved psychological wellbeing • Improved social confidence • Improved self-esteem
	Economic Benefits	**Educational Benefits**

Wider benefits of good oral health	• Improving oral health will reduce time taken off work due to dental problems (due to adults taking time off to manage their own, or their children's dental problems). • Good oral health helps older people remain healthy and potentially help them live independently without need for social care support • Improving oral health may improve employment prospects for those receiving benefits • The cost to society of treating dental problems is substantial (including NHS charges, private costs and commissioning of NHS services)	• Good oral health children's performance at school: fewer absences, better performance and better social interactions.

Figure 2.

2.3.National context

It is increasingly acknowledged that investment in prevention promotes health and wellbeing and is preferable to treating diseases. Local authorities are statutorily required to commission oral health promotion surveys and to ensure the provision of a local health promotion programme to the extent which is appropriate to their local area.[3] The government has made a commitment to improve the oral health of the population, particularly for children.[4]

Two evidence-based guidance documents for local authorities on improving oral health have recently been released:

1. **Local authorities improving oral health: Commissioning better oral health for children and young people. An evidence-informed toolkit for local authorities**[5]

2. **NICE Guidance on - Oral health: approaches for local authorities and their partners to improve the oral health of their communities**[6]

These documents make a number of recommendations for local authorities that include:

- Developing an oral health strategy to ensure that oral health is a key health and wellbeing priority, addresses oral health across the life course and promotes an integrated approach to oral health improvement
- Developing action on oral health which targets children and adults at the highest risk of poor oral health and incorporating oral health promotion in existing services for these groups.
- Including oral health promotion in specifications for all early years services
- Ensure frontline health and social care staff can advise on oral health
- Engage with the public and gather views on oral health

These documents acknowledge that the risk factors for poor oral health are the same as other key health risks and that action to improve oral health should be part of a wider programme to address the wider determinants of health.

These documents are supported by the Local Government Association who published '***Tackling poor oral health in children'*** to support local government with including oral health in the Healthy Child Programme for 0-5 year olds.[7]

There is a specific oral health indicator (Outcome 4) in the health improvement domain of the national Public Health Outcomes framework on which each local authority area will have to report progress. This focuses on oral health in five year olds who, by convention, are used as a proxy for the whole population.

3. Overview of the oral health improvement strategy

Oral health is improved through action to improve the circumstances in which people live and work and through reducing risk factors like smoking and poor diet. This strategy is based on the principles of addressing key points in the life course as well as providing universal support alongside targeted actions for those who are at higher risk (proportional universalism).

While the causes of oral diseases are well understood, tackling them is complex. This means that oral diseases cannot be addressed by a single intervention. A multi-stranded and multi-agency strategy is needed to improve oral health by tackling the causes of diseases at multiple levels. Like the pieces of a jigsaw a number of interventions together will have an impact.

A wide number of partners can contribute to improving the oral health of the population by integrating action on oral diseases into the strategies that tackle the root causes of oral diseases and by targeting the most vulnerable groups. Maximising these opportunities requires a focus on the following priorities:

1. Enabling people to choose healthy, sugar free foods and drinks: making environments healthier and making healthy choices easier
2. Enabling people to change their behaviour around lifestyle factors like alcohol misuse and tobacco use
3. Enabling people to keep their mouths clean while strengthening their teeth (e.g. brushing twice a day with fluoride toothpaste)
4. Identifying where provision or promotion of services does not match the needs of specific population groups, and put that right where we can (e.g. improving access to dental care for older people)

The strategic aims of this strategy are summarised below in figure 3 and explained in greater detail in later sections.

The strategic aims of the Buckinghamshire oral health improvement strategy

A healthy mouth from birth
- Good oral health in childhood, especially the early years

A healthy lifestyle for a healthy mouth
- Improve oral health alongside general health in adults

Promoting good oral health in high risk groups
- Good oral health for vulnerable adults

Figure 3

This Buckinghamshire oral health improvement strategy identifies specific focus areas within the 3 aims and is summarised in Figure 4

An overview of the Buckinghamshire oral health improvement strategy

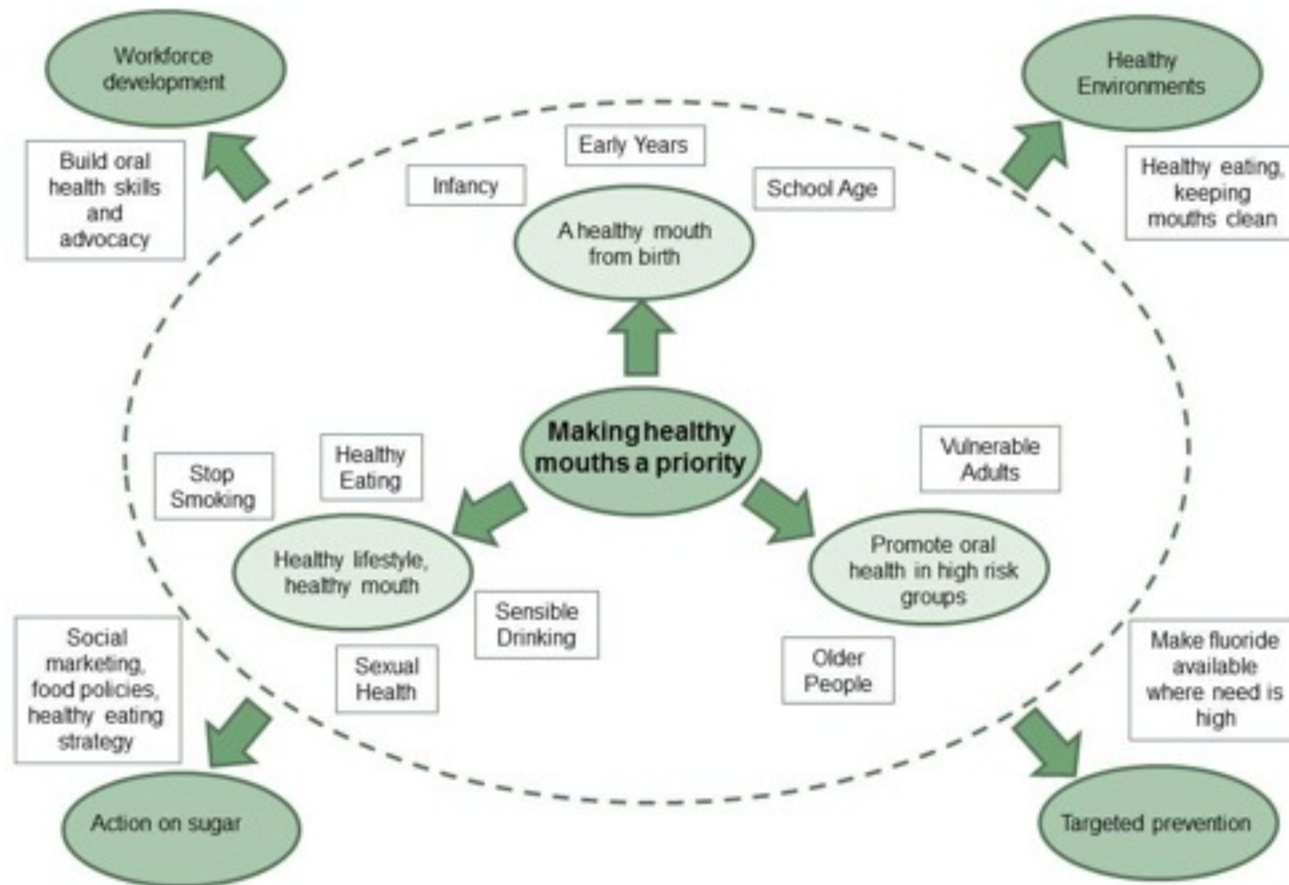

Figure 4

4. A healthy mouth from birth

4.1.Oral health in children – Who is affected

Tooth decay is a preventable disease yet in Buckinghamshire almost a quarter of five-year-olds have decay (figure 5).

Figure 5

The Oral health of children Buckinghamshire is relatively good. There are fewer children with decay in Buckinghamshire, on average, than in England.[8]

Oral diseases are however; associated with deprivation.[7] Tooth decay is concentrated in 23% of the Buckinghamshire population with the most vulnerable carrying most of the disease burden.

In the least disadvantaged 20%, around a third of five-year-olds have no experience of tooth decay at all. This compares with the most disadvantaged 20% for who only one tenth have no experience of tooth decay (figure 6).

Prevalence of caries by Index of Multiple Deprivation 2010 quintiles for Buckinghamshire local authority
Source: Buckinghamshire Dental Health Profile, 2014

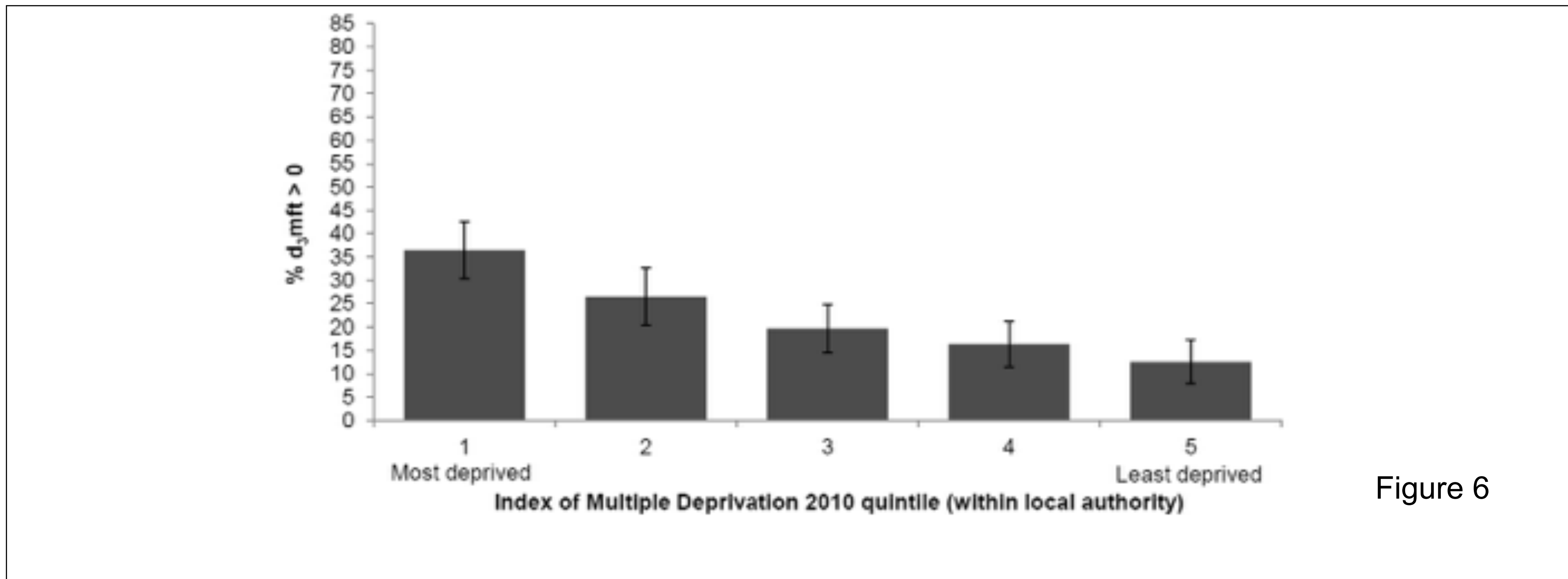

Figure 6

- Each child with decay has approximately 3 to 4 decayed teeth each at 5 years old.
- The proportion of children from Buckinghamshire who have recently attended an NHS dentist is around 60-70% overall, similar to the national average.[1] However there are no statistics available on the use of private dentistry which may increase this figure.
- Uptake of NHS dental services in children in Buckinghamshire is very low in children aged 0-2 years. Uptake is highest in 6-12 year olds and moderate in children aged 3-5 years-old. Again it is not possible to assess the impact of the uptake of private dental services.

- Uptake of NHS dental services for children is below the national average in Wycombe and Aylesbury Vale and above the national average in Chiltern and South Bucks.[1]

Certain groups of children are at greater risk of oral diseases and these are summarised in Figure 7 below.

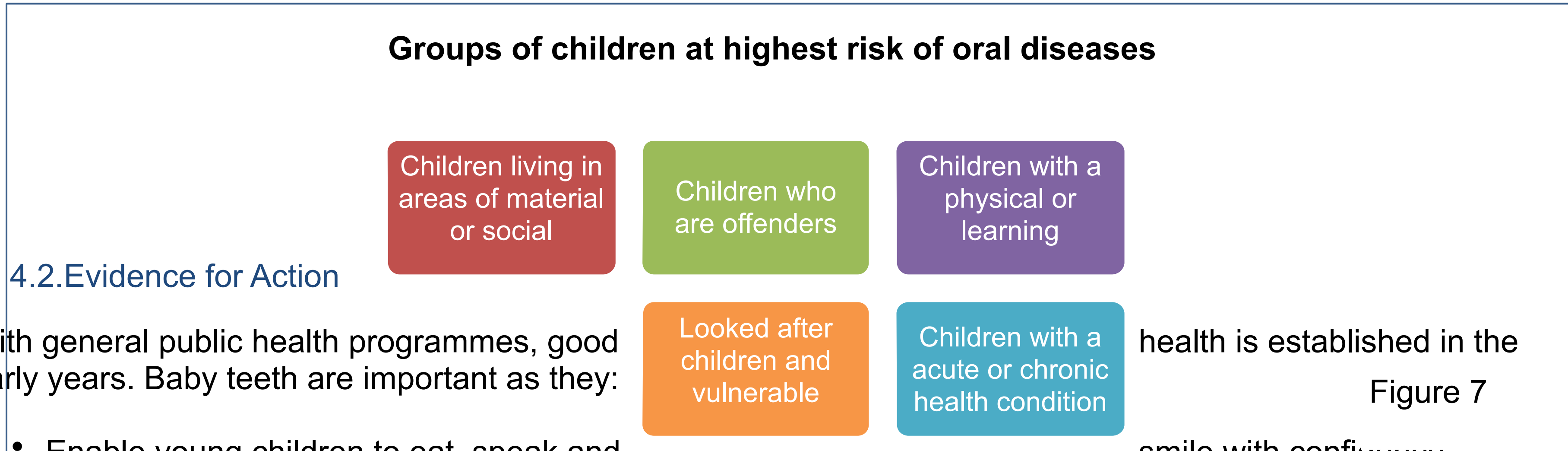

Figure 7

4.2. Evidence for Action

With general public health programmes, good health is established in the early years. Baby teeth are important as they:

- Enable young children to eat, speak and smile with confidence.
- Need to last until they are replaced by adult teeth (most come through between 6 and 12 years old).
- Hold the space for adult teeth to grow in to. If this space is lost the teeth become overcrowded and the child may need braces.
- Having baby teeth removed, even under general anaesthetic, is a traumatic experience for any child.
- Having dental problems affects growth, sleep, ability to thrive and cause children to have time off school.

Early life is well recognised as the foundation for later health and wellbeing.[9] Early years interventions are important to improve health and reduce avoidable health inequalities.

Actions aimed at improving health and reducing inequalities must be universal, but with a scale and intensity that is proportionate to the level of disadvantage (proportional universalism).[7] So universal actions (like developing supportive oral health environments for young children) will reach everyone while targeted actions (like fluoride interventions such as toothpaste programmes) support those that are more vulnerable.[10]

The evidence around the effectiveness of topical fluoride in preventing decay is firmly established based on a sizeable body of evidence (Cochrane systematic reviews).[11,12] Fluoride can be delivered in a community setting, in a variety of ways, to strengthen teeth, e.g. free toothpaste to troubled families.

4.3.Priority actions

Actions are aimed at keeping teeth healthy from birth by keeping sugar intake to a minimum, strengthening teeth with fluoride and setting the foundations for good oral hygiene for life. This will be provided through universal support with a particular focus on the early years and vulnerable children. Specific actions are:

- Train the Early Years workforce to give oral health advice, e.g. going to the dentist, how to keep mouths clean, how to use fluoride, safeguarding, and healthy diet including sugar free drinks.
- Integrate action on oral health into service specifications, prevention policies and strategies for early years, e.g. Healthy Child Programme, healthy eating strategy, children's centre commissioning
- Support early years and children focussed environments to promote oral health as part of a wider health promotion approach
- Provide fluoride for families at risk, e.g. tooth brushing or fluoride varnish schemes in schools and/or nurseries
- Work with NHS England to ensure good access to dental services and to promote registration with an NHS Dentist

Example of good practice: Accreditation programme for early years' settings

To improve the oral health of early years children and their families, Buckinghamshire County Council have commissioned a programme that supports oral health improvement through the development and accreditation of health promoting environments within early year's settings. Accredited settings will:

5. A healthy lifestyle for a healthy mouth

5.1. Who is affected?

The risk factors for oral diseases, like poor diet, smoking, alcohol and stress – are the same as for many other chronic conditions, such as obesity, cancers, diabetes and heart disease. This means that habits like smoking, alcohol misuse, and especially eating and drinking sugar, have contributed to the persistence of, largely preventable, oral diseases.

Some oral health problems are life threatening, particularly oral cancers, such as cancers of the lip and tongue. Oral cancers are becoming more common and are now the 15th most commonly occurring cancer (accounting for 2% of all new cases in the UK). Experience of oral cancer varies by age, gender, geography and socio-economic deprivation.

- Oral cancers have traditionally been associated with age but recently young males have been getting the disease. This is thought to be related to HPV infection and people smoking and drinking earlier in life.
- Oral cancers are more common in men than women as men are more likely to chew tobacco (particularly among BME groups), smoke and have a high alcohol intake.[13]
- There are an estimated 65,000 smokers in Buckinghamshire and 90,000 adults who drink alcohol at levels that are a risk to their health[14]

Oral cancer is strongly related to socioeconomic deprivation, and those living in deprived areas, with the highest rates occurring in the most disadvantaged groups. [15,16] This is independent of lifestyle factors.[17]

In between 2008-10 there were 7.6 cases of oral cancer for every 100,000 people in England (crude incidence rate). Rates in Buckinghamshire varied between 6 and 10 per 1000,000 but were not statistically significantly different from the England rate.

A summary of the links between oral diseases and wider lifestyles is provided in Figure 8.

The links between oral diseases and wider lifestyle factors

Risk factor associated with poor oral health	Oral diseases associated with risk factor	Other diseases associated with risk factor
Adverse social environments	Social conditions are important in shaping individual health behaviours that contribute to poor oral health, e.g. dietary choices, tobacco use	Chronic diseases, e.g. diabetes, heart disease
Diet	Frequent consumption of sugary drinks or foods causes tooth decay, e.g. soft drinks and cereals. Poor diet, e.g. low in fruit and vegetables, increases the risk of oral cancers	Obesity, other cancers, heart disease
Alcohol	Alcohol consumption above recommended levels increases the risk of oral cancers. Alcohol misuse is associated with significant levels of decay, gum disease and tooth erosion. Smoking and drinking alcohol together multiplies the risk of oral cancers	Other cancers, heart disease

Tobacco use	Smoking or chewing tobacco increases the risk of oral cancers and periodontal (gum) disease Smoking and drinking alcohol together multiplies the risk of oral cancers	Other cancers, heart disease, respiratory disease
Drug misusers	People who use (or have a history of) drug use tend to have poor oral health, particularly tooth decay and gum disease.	Mental health problems, blood borne viruses, sexually transmitted diseases, cardiovascular and respiratory conditions
Unprotected sexual health practices	Contracting Human Papilloma Virus through unprotected sexual activities increases the risk of oral cancers	HPV and other sexually transmitted diseases

Figure 8

As outlined in figure 8 the adults most at risk of poor oral health are identified in Figure 9.

Figure 9

5.2.Evidence for action

Interventions that tackle the shared risk factors for oral diseases and other common chronic conditions will improve general health as well as oral health. This is known as the 'common risk factor approach'. [17,18]

Partnership working to tackle the social and environmental conditions in which people live and work will help to minimise common risk factors. This can be supported by behaviour change interventions that target these factors. This approach is more efficient than disease specific approaches.[11]

Major initiatives are needed to reduce the consumption of dietary sugars as no other measure will markedly reduce tooth decay.[19]

Oral health is integral to general health and quality of life but is easily forgotten when integrated health improvement services are being developed.[20]

5.3.Priority Actions

- Build oral health into existing or developing programmes tackling tobacco, healthy eating and obesity, health promotion, alcohol and sexual health through partnership working, e.g. Campaign for Hospital Food, Health Trainer Service
- Social marketing on sugar swaps
- Create healthy environments by reducing availability of sugar in workplaces, hospitals, supermarket checkouts and in-store promotions, leisure centres, care homes, in and near schools, vending machines and early years' settings

- Work with NHS England to engage dentists in promoting general health, e.g. smoking cessation
- Train workforce to advise on oral health and encourage regular dental attendance
- Work with NHS England to encourage people to attend a dentist regularly, e.g. through social marketing

Example of good practice: Integration of oral health into the Buckinghamshire Healthy Eating Strategy

6. Promoting good oral health in high risk groups

6.1. Oral health in adults

Over the past few decades an increasing proportion of people are enjoying improved oral health. This experience however, is not universal. For many people pain, functional problems and psychological discomfort is still an issue. The intention of this aim is to support vulnerable adults by supporting them to have healthy mouths throughout their lives.

- Information on oral health in adults is not collected at a local level. Thames Valley and national data can give an indication of the local picture. This data suggests that inequalities in oral health are consistently seen in relation to tooth decay, gum disease, and oral cancer varies with age, geography and socioeconomic status[1]. In particular: 35% of 25-34 year olds, and 34% of 74+ year olds have tooth decay[1]
- 9% of adults suffer from severe gum disease putting them at high risk of tooth loss. Prevalence increases with age[1]
- 31% adults report impacts on their daily lives from oral problems. 41% reported poor oral health. 27% adults in south Central experienced dental pain in the last year[1]
- Urgent dental problems are more likely to be experienced by older people, irregular attenders, smokers, people with dental anxiety and people from lower socio-economic groups[1]
- Oral cancer incidence rates are rapidly rising. Oral cancers have traditionally been associated with age but recently young males have been getting the disease. This is thought to be related to HPV infection[1]

- People in socio-economic deprivation are more likely to suffer from decayed teeth, no teeth, gum disease, oral cancer, urgent dental problems, impacts on their daily life[1]
- NHS dental service usage by adults varies by district: 38% in Wycombe, 39% in Chiltern, 44% in Aylesbury Vale and 48% in South Bucks. [1] In affluent areas where uptake of NHS services is low people may be using private dental services however, there is no data collected on private dental care activity.
- NHS dental service usage varies by age and is highest in the 18-24 age range and lowest in the 75 and over age range. [1]
- Gum disease, tooth decay and oral cancers are more common with age. Older people are increasingly keeping their own teeth, which makes them more likely to have complex dental needs.
- Older people living in care homes have poorer oral health than other adults.[25] An assessment of oral health needs of older people living in nursing homes in London found around 40% had a reduced quality of life due to oral health problems and 75% had an unmet need for dental treatment.[21]
- Older people are less likely to access NHS dental services.[1]
- At both a local and national level, people from lower socioeconomic groups tend to have poorest oral health and poorer uptake of NHS dental services.[20,22]
- Other vulnerable adults, along with frail older people and young children, are at greatest risk of oral diseases. These include people with physical or mental disabilities, people who are homeless, people with a chronic medical condition, people who are substance misusers and people in care. People living in a deprived area, from a lower socioeconomic group or living with a family in receipt of income support are also at higher risk.[23]

- There are some data to suggest a links between the prevalence of oral diseases and conditions and ethnicity, particularly in people of Asian origin however, the research findings are complicated and often confounded by socio-economic status.[24]
- Data suggests that tooth decay in adults is more common in Wycombe and Aylesbury Vale than in Chiltern or South Bucks.[1]

Figure 10 Identifies the Adults at Greater Risk of Poor Oral Health

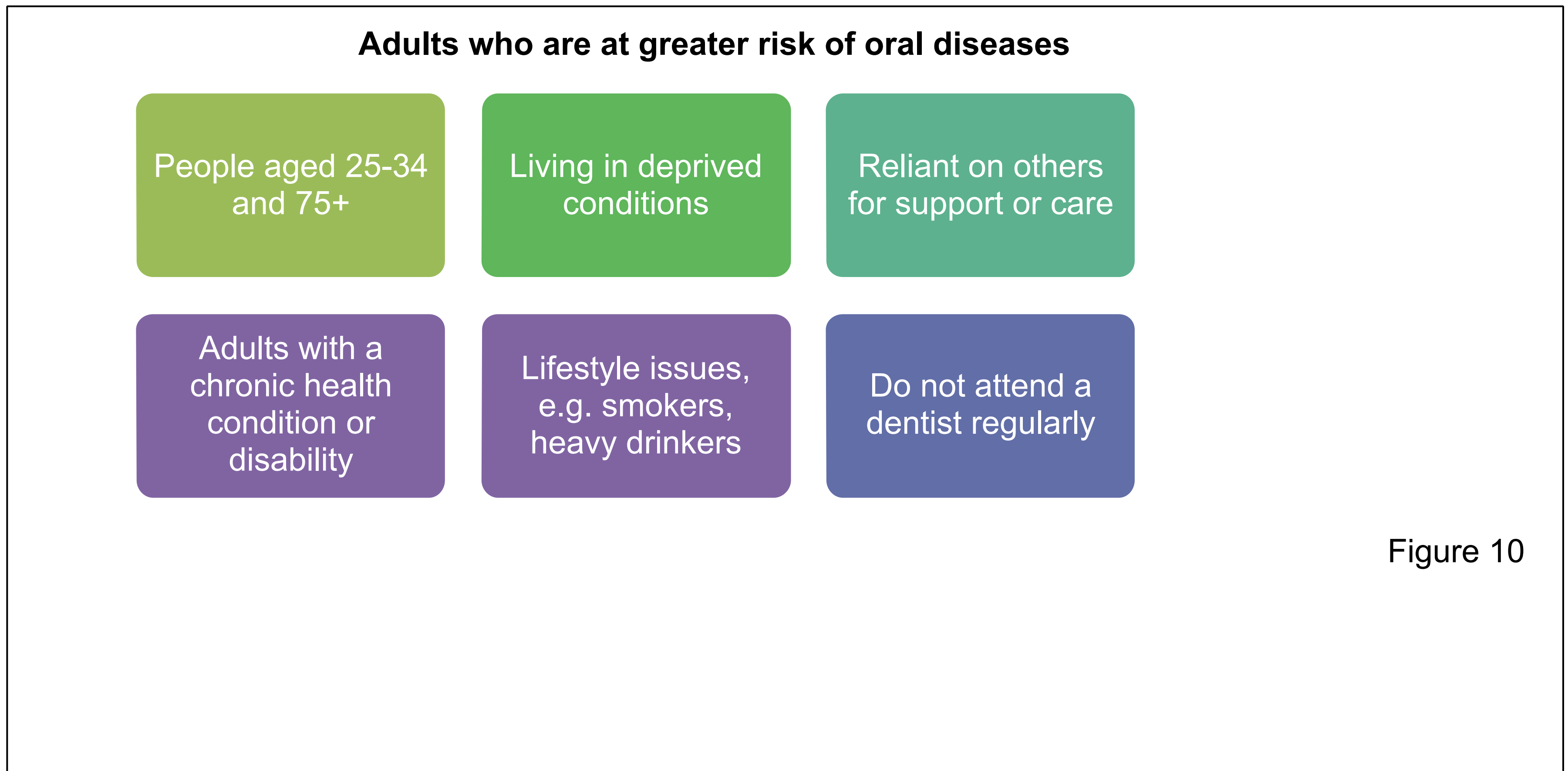

Figure 10

6.2.Evidence base for action

People suffering from oral diseases are more likely to be from lower socioeconomic groups.[25] Other factors that increase the risk of having mouth problems are people with physical or mental disabilities, people who are homeless, have a chronic medical condition, substance misusers and people in care.[26]

Older people have specific oral health needs as oral health problems increase with age. At the same time they are more likely to suffer from other health problems that can make cleaning their mouths difficult, e.g. Parkinson's. Taking medications often causes a dry mouth which exacerbates the issue as it increases risk of decay.[27]

Visiting a dental practice is important for prevention and treatment of oral diseases. There are currently NHS dentists across bucks accepting new patients without a waiting list.[28]

In older people, there is a clear and consistent relationship between retention of natural teeth, a healthy diet and good nutrition.[29]

There are a number of barriers to accessing care for older people, particularly for those in institutional care: poor general health, not knowing how to access care, patterns of mobility, physical access to buildings (e.g. stairs) and available modes of transport.[30]

Developing supportive oral health environments for vulnerable adults is an important element of oral health improvement.[31] Tailored interventions should be provided to help people at high risk of poor oral health who live independently in the community. This could include outreach services, for example, for people who are homeless or who frequently change location, such as traveller communities.[17]

The evidence around the effectiveness of topical fluoride in preventing decay is firmly established based on a sizeable body of evidence (Cochrane systematic reviews).[32,33]

6.3.Priority actions

- Train workforce for vulnerable adults to Make Every Contact Count and promote healthy food and drink, visits to the dentist, how to keep mouths clean, how to use fluoride, safeguarding.
- Integrate action on oral health into service specifications, prevention policies and strategies for vulnerable adults e.g. oral health care plans, low sugar environment, healthy hospital food, older peoples commissioning, healthy eating policies
- Provision of fluoride for groups at risk, e.g. high concentration fluoride toothpaste programme in care homes
- Work in partnership with CCGs, voluntary sector, e.g. Age Concern to encourage integration of oral health with existing or developing programmes

Example of good practice: Accreditation programme for residential and day care settings

To improve the oral health of vulnerable adults, Buckinghamshire County Council has commissioned a programme that supports oral health improvement through the development and accreditation of health promoting environments. Accredited settings will:

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