



# **ORAL HEALTH IMPROVEMENT STRATEGY FOR KNOWSLEY 2009 – 2013**

Prepared by  
Lesley Gough  
May 2009

<b>CONTENTS</b>	<b>PAGE NUMBER</b>
1. Introduction	3
2. Oral Health in Knowsley	5
3. Other Considerations Influencing the Knowsley Strategy	7
4. Improving Oral Health Through Fluoride Based Interventions	9
5. Improving Oral Health Through Primary Dental Care	12
6. Improving Oral Health Through the Local Community	14
7. Workforce and Resources to Deliver Improvements in Oral Health	19
8. Links to Other Strategies	20
9. Action Plan for Oral Health Promotion in Knowsley 2009-13	22
10. References	26

## 1. INTRODUCTION

The oral health improvement strategy supports the dental commissioning strategy by outlining a more detailed view of the actions and programmes required to bring about improved oral health in Knowsley. Significant elements of this strategy link to the commissioning of primary dental care services however much of the strategy relates to activity taking place in community settings, working with a broader range of key agents other than the dental workforce and requiring effective linkages to other public health activity, targeting diet and nutrition and smoking for example.

The aims of the oral health improvement strategy are:

- To reduce the population prevalence of dental disease – and specifically levels of dental decay in young children
- To reduce the inequalities in dental disease
- To ensure that oral health promotion programmes are evidence informed and delivered according to need.

The policy drivers for the oral health improvement strategy for Knowsley are:

### **Choosing Better Oral Health**

Choosing Better Oral Health (1) was published by the Department of Health in 2005 and draws on the evidence of the causes and consequences of poor oral health. The plan emphasises the potential improvements that can be made to oral health by integration of the dental health messages into an integrated health promotion programme. The plan emphasises the need for oral health to be targeted as part of a common risk approach – particularly around diet and smoking, and the need to work across agencies and professional boundaries. The plan identifies six key areas for action:

- Increasing exposure to fluoride
- Improving diet and reducing sugar intake
- Encouraging provision of preventive dental care
- Reducing smoking
- Increasing early detection of mouth cancer
- Reducing dental injury

## **Valuing Peoples Oral Health**

'Valuing People's Oral Health' (2) was published as a supplement to Choosing better oral health: An oral health plan for England. The document provides guidance to PCTs and providers of dental services as to how oral health and access to dental care could be improved for people with disabilities given the inequalities they experience.

## **Delivering Better Oral Health**

'Delivering better oral health' (3) was published in September 2007 in order to support Primary Care Trusts and dental teams in the delivery of a more preventive approach to dental care. The document provides clear advice and recommendations around effective prevention interventions that may be provided to all groups of patients in the primary dental care setting.

## **Healthy Lives, Brighter Futures: The Strategy for Children and Young People's Health**

The strategy (4) sets out plans for universal, targeted and specialist support across three stages: early years and pregnancy, school age children and young people. In addition it identifies additional support for children with more complex needs and the most vulnerable groups and the need to reduce inequalities. The strategy highlights the need for services for children and young families to work together more effectively and with families. These principles are incorporated into this oral health improvement strategy.

## **Transforming Community Services**

Transforming Community services (5) has three key elements:

- Transforming clinical practice – disseminating best practice and developing clinical and leadership skills
- Ensuring commissioners are equipped to drive through service improvement
- Ensuring providers of services are fit for purpose.

Central to the successful implementation of the strategy will be effective dissemination of evidence based and best practice, development of skills and leadership and rigorous monitoring and evaluation of interventions. This will be undertaken by the PCT dental team which brings together commissioning and public health expertise (includes the Dental Commissioning Lead, Consultant in Dental Public Health and Dental Adviser). In addition to reporting back to the NHS Knowsley Board and Executive Leadership Team, they will also report

on progress to the Dental Health Steering Group. Capacity for discharging these responsibilities, in addition to development and monitoring of clinical service delivery across Knowsley may require review. The strategy identifies a broad range of deliverers of oral health programmes across Knowsley. This includes a key role for a small team of dedicated oral health promotion officers, primary care and community workers and the primary dental care team who have a significant role in delivering oral health improvements in the future.

## 2. ORAL HEALTH IN KNOWSLEY

### 2.1 Child Dental Health

Child dental health surveys are carried out on an annual basis as part of a rolling programme co-ordinated nationally through the British Association for the Study of Community dentistry (BASCD) and through the North West Dental Observatory. Nationally, the picture for child dental health demonstrates overall improvements in the levels and prevalence of dental decay. Unfortunately, child dental health in Knowsley does not reflect this national improvement and BASCD surveys have consistently shown child dental health in Knowsley to be amongst the poorest nationally.

The 2005-6 survey of 5 year old children ranked Knowsley 305 out of 311 PCTs / Health Boards with the average 5 year old having 3.14 decayed, missing or filled teeth (dmft) and only 35.5% of our 5 year olds being free from any dental decay experience at 5 years old. Across the borough of Knowsley there are variations in dmft at 5 years old with the lowest levels of dental decay in Halewood North and West, Roby and St Gabriel's Wards and the highest levels in Northwood and Stockbridge wards.

**Table 1: variations in child dental health across Knowsley at 5 years old and in Year 6**

<b>Ward</b>	<b>Average Decayed, Missing and Filled Teeth (dmft) at 5 Years Old</b>	<b>Average Decayed, Missing and Filled Teeth (DMFT) at Year 6</b>
Halewood North	1.84	0.76
Halewood West	2.07	0.88
Roby	1.3	1.02
St Gabriel's	1.78	1.00
Northwood	4.39	2.02
Stockbridge	4.95	1.41

The consequences of dental decay in children may be toothache, dental sepsis and the possibility of dental extractions – frequently under general anaesthetic for young children.

Recent research has indicated that a child with dental decay has a 20% chance of experiencing an episode of acute dental pain per year and a 10% chance of requiring a dental extraction. (6) Data for local hospitals show that during 2005-6 approximately 2000 young children from Liverpool, Knowsley and Sefton attended for dental extractions under general anaesthetic at Liverpool Dental Hospital, Whiston Hospital or the Royal Liverpool Childrens Hospital. Extraction of teeth under general anaesthetic is consistently shown to be the most commonly performed paediatric procedure under general anaesthetic in the North West.

Despite the variations in child dental health across Knowsley, and with some wards having significantly poorer dental health than others, it should be noted that all wards have child dental decay levels which are above the national average. All of Knowsley will receive the oral health improvement programmes identified in this strategy. However, those localities with the poorest oral health will be prioritised and where appropriate additional measures will be deployed to support the delivery of oral health improvement programmes. A social marketing approach will be adopted with the very high need communities to support the tailoring of programmes and interventions to increase successful uptake.

## **2.2 Adult Dental Health**

Detailed dental health data on the adult population is not readily available; however the decennial adult dental health surveys repeatedly confirm that the North West has the worst dental health in England.(7) The national adult surveys also describe some significant changes to the picture of adult dental health which will provide particular challenges in the future. The adult dental health survey (1998) showed that amongst the whole adult population, 87% had some natural teeth. The next national adult dental health survey will take place in 2009-10.

Based on previous survey results, it is predicted that by 2028, 96% of adults will have some natural teeth. Expectations around dental health have changed and increasingly people expect to retain their natural teeth into older age - the preference is increasingly towards problematic teeth being filled rather than extracted. The trend towards retaining some natural teeth is welcomed; however it is important that this is accompanied by the delivery of appropriate preventive care and advice. This will be particularly relevant for vulnerable adults and frail older people who may be dependant on others for their day to day dental care and access to dental treatment services. This changing pattern in adult dental health will also present

challenges to the dental team in terms of skills required to manage dental care provision for older people.

### **3. OTHER CONSIDERATIONS INFLUENCING THE KNOWSLEY STRATEGY**

#### **3.1 Population Demographics**

The total population in Knowsley in 2007 was 150,800. A 2.9% increase in population is predicted by 2017. Between 2007 and 2017 the number of people aged 85 or over is predicted to increase from 2,100 to 3,200. Increases will also occur in the majority of age-groups except those aged 10-14, 35-49 and 70-74. Despite these changes, when compared to England as a whole, Knowsley continues to have a younger population structure than England as a whole.

The age spread across the geographic area is not uniform with Tower Hill and Southdene (Kirkby), north Huyton and north Halewood having a relatively high child population and South Huyton, Roby, Knowsley Village, Cronton and west Halewood having a relatively high population of retirement age. (This reflects the relatively large concentration of nursing homes in Roby and South Huyton).

#### **3.2 Attitude to and Uptake of Dental Care**

For Knowsley as a whole, the uptake of dental care is relatively low with 52.65% unique patient attendances over a 24 month period. For the child population, approximately 20,000 children (app. 50% of the child population) attended a dentist over a 24 month period. As the focus of primary dental care moves towards evidence based preventive care (as set out in the Prevention toolkit), there is a need to increase the numbers of patients attending a dentist on a regular basis.

Within Knowsley, generally there are few reported problems with access to dental care. However, dental health is poor and there is relatively low demand for services. Following a recent 'Gap analysis' of dental attendance, a target of increasing attendance rates to 63% has been set for Knowsley. This equates to approximately an extra 11,000 individuals attending a dentist over a 24 month period.

NHS Knowsley has given a commitment to increase the size of the local dental workforce by four dentists over the next four years - this investment is over and above any further increases that may be made possible by growth in the PCT dental budget allocation (which have yet to be confirmed).

This planned growth in the workforce will have to be complemented by outreach work to stimulate demand for dental care and raising expectations around dental health. It is proposed that work should be undertaken to test innovative models to promote dental attendance - so that in turn patients may have access to evidence based preventive care as well as treatment where appropriate.

### **3.3 Vulnerable groups and those with disabilities**

Although the majority of dental diseases are preventable, it is recognised that certain circumstances do mean that some individuals are more susceptible to developing oral health problems. There is evidence that children with disabilities have higher dental disease rates and higher levels of untreated dental disease compared to the rest of the child population.

A wide range of acute and chronic medical conditions can adversely affect oral health and medically compromised children and adults are often at greater risk of developing dental disease. Factors which may affect individuals' ability to access dental care and respond to preventive measures are:

- Social environment
- Healthcare overload – where many different appointments for health care have to be juggled and can compete against each other
- Specific advice and assistance may be required in order for individuals with disabilities and their carers to enable them to implement preventive care measures and advice.
- The dependence on others to implement preventive care and advice and incorporate this into daily routines and the dependence on others to facilitate provision of dental care. Effective working partnerships are essential to provision of both treatment and preventive programmes for these groups
- The challenges of providing dental care for some children and adults with disabilities can lead to services not being as easily accessible. Not all dentists may feel confident about providing care for patients with certain disabilities. Furthermore, either sedation or general anaesthetic may be required in order to provide adequate treatment which can further limit access.
- Knowsley has a relatively high proportion of its local population with a disability compared to the national average. In 2005, 15,810 people in Knowsley were claiming disability living allowance - this is 10.5% of the population compared to the national average of 5.3%. Currently there are 24 nursing and residential homes in Knowsley. Many elderly whether

living at home or in residential care, will be dependent on others to maintain their dental health – the effectiveness of their support in turn affects ability to communicate and eat well.

- Additionally, carers of those with complex needs frequently face barriers to accessing care themselves. Their commitments as carers frequently compromise their own ability give priority to dental care.

There are approximately 310 Looked After Children in Knowsley and statistics consistently show that these children are more likely to experience physical health and mental health problems compared to other children. Dental checks (plus subsequent treatment and preventive care and advice) should form part of the package of health care measures available to these children. Provision of an appropriate level of dental care and advice for these children is variable. Work with key stakeholders to ensure adequate access to dental assessment, advice and treatment is ongoing. Given the high needs of this group, it is important that access to dental health advice and preventive care is part of a care pathway. There is limited understanding of the reasons for poor uptake and attendance for dental care amongst this group and further work is needed locally to identify barriers so that services can be re-designed appropriately.

People in socially excluded, vulnerable and hard-to-reach groups are often at increased risk of inequalities in oral health and inequitable access to dental services. These include homeless people, substance abusers, refugees and asylum seekers, travellers and prisoners. Local data on the oral health status, access to services and uptake of services is not routinely collected although in general they are known to have high levels of unmet need and can be a difficult group to reach with prevention and treatment services due to chaotic lifestyles. The most recent estimate of the size of this group within the population was that there were 1400 drug users in Knowsley with 900 in treatment programmes.

#### **4. IMPROVING ORAL HEALTH THROUGH FLUORIDE BASED INTERVENTIONS**

Fluoride has made an enormous contribution to the decline in dental caries over the past 60 years since research in the United States discovered that people living in an area of naturally fluoridated water had much better dental health than those who did not and, furthermore, water fluoridated at a concentration of 1 part per million did not cause significant mottling of the teeth (dental fluorosis) nor any other health related adverse effects. Fluoride produces an effect on the teeth in a number of ways that combine to slow and help prevent the decay process.

Carefully measured, controlled and safe amounts of fluoride can be provided through a number of means:

#### **4.1 Water Fluoridation**

There is compelling evidence that fluoride is effective in reducing decay and that water fluoridation is the most effective way of using fluoride to reduce decay. Other fluoride interventions, such as fluoride toothpaste and fluoride varnish, are also important, effective ways of reducing tooth decay and there is an even greater reduction in decay levels when, for example, fluoride toothpaste is used together with water fluoridation. Consequently this oral health improvement strategy for Knowsley includes due consideration of water fluoridation as part of a series of oral health promotion initiatives – including other fluoride based interventions and initiatives aimed at improving diet and nutrition.

Preliminary discussions with local stakeholders following receipt of the report of the North West Fluoridation Evaluation Group indicated support for the SHA to undertake further work with United Utilities with the aim of developing a definitive scheme for PCTs to consider and which, with PCT support, would be publicly consulted on in due course. Once this work has been completed and published, North West PCTs will determine if they wish the SHA to initiate formal public consultation. If such a consultation should take place, it is likely to take place during 2009.

#### **4.2 Fluoride Toothpaste Schemes**

The use of fluoride toothpaste has been shown to reduce levels of dental decay by 37% and the increased use of fluoride toothpaste has been largely responsible for the reductions in dental decay that have been observed over the last 20-30 years.

The 'Brushing for Life' fluoride toothpaste programme was originally established by the Department of Health in 2000 as a scheme to promote the use of family fluoride toothpaste for young children at home. The programme is now an integral part of the dental health promotion strategy aimed at improving young children's dental health. The programme is delivered by the child health team (esp health visitors) and supported / monitored by oral health promotion officers.

Published research has indicated that supervised toothbrushing schemes are effective in reducing levels of dental decay and that there remains a significant reduction in decay levels between children in test and control groups at 30 months after the programme ended. (Refs 8,9,10,11). Supervised

toothbrushing schemes have been established in all early years day care facilities in Knowsley and in special schools and it is proposed that these should be continued. It would be appropriate to link this to an enhanced scheme aimed at promoting supervised brushing with fluoride toothpaste in the home.

### **4.3 Fluoride Milk Schemes**

Fluoridated milk schemes operate in 15 countries ranging from Russia to Chile and including the United Kingdom. Currently over 41,000 children in over 500 schools (including Knowsley) drink fluoridated milk as part of a programme that began in St Helens in 1993. Fluoridated milk depends on schools already providing milk, preferably at a supervised break time. Clinical trials in countries where the scheme runs indicate that it is effective in reducing caries. However, maintenance of adequate dose can be a problem and high absenteeism rates, or reliability of distribution and consumption can dilute the expected benefits.

Research into the effectiveness of fluoride milk schemes is ongoing and it is proposed that at this stage the current fluoride milk scheme should be maintained and reviewed as further evidence becomes available.

### **4.4 Fluoride Varnish**

There is a good evidence base to support the effectiveness of fluoride varnishes in reducing levels of dental decay. Regulations state, fluoride varnishes must be applied to teeth by appropriately trained personnel – this includes dentists, dental therapists, dental hygienists and most recently dental nurses who have received appropriate extended duties training. Promoting the increased use of fluoride varnishes in primary dental care is an essential element in the dental teams' role in improving dental health. In Knowsley, innovative service models should be piloted and evaluated to increase dental attendance – particularly for families with young children, so that fluoride varnishes, alongside other dental advice can be provided.

As with all aspects of the oral health improvement strategy, new evidence around the effectiveness of fluoride varnish schemes in community settings (particularly schools) will be reviewed and considered for implementation as this comes available.

Children attending special schools currently have the opportunity of taking part in a toothbrushing /fluoride toothpaste scheme and also have the option of taking fluoride milk. These programmes will be reviewed and may be replaced or supplemented by an outreach fluoride varnish scheme. The link between outreach

oral health promotion programmes and provision of a pro-active clinical care service will also require review to ensure that all children have an agreed oral health care plan and ready access to dental care services.

#### **4.5 Output measures for fluoride programmes in Knowsley:**

- Number of settings implementing each scheme:
- Number (and %) of children involved:
- Audit reports
- Additional output measures for delivery of prevention programmes through primary dental care are given in section 5

#### **4.6 Outcomes**

Dental epidemiology for 5 year olds % improvement: child population averages for decayed, missing and filled teeth, proportion of children with no decay experience

### **5. IMPROVING ORAL HEALTH THROUGH PRIMARY DENTAL CARE**

Local commissioning of dental services provides the opportunity for the primary dental care setting to be a key setting for the delivery of preventive interventions:

The evidence based toolkit, 'Delivering better oral health', provides clear guidance to dentists and dental care professionals around effective prevention for their patients. However, practices will require support if they are to deliver a service with an increased emphasis on prevention. This will be achieved through the following measures:

- Education events for the whole dental team to ensure there is familiarisation with the dental messages and appropriate interventions for all groups of patients.
- Extended duties training for dental nurses so that they may provide some preventive treatments (i.e. fluoride varnish and information to patients where appropriate).
- Ongoing support for dental practices: for example, physical resources, update training, facilitation of links to smoking cessation services, so that they can be effective settings for the delivery of preventive care. This would also support the development of a larger workforce who can work in local community settings (e.g. schools, early years) delivering dental health information.

- To provide support to practices for increased preventive care provision through the local contracting process. This includes:
  - Reimbursement of the costs of fluoride varnish to practices.
  - Recognition of increased provision of preventive care. This would require monitoring and performance management of the dental contracts to move away from a UDA based monitoring system, but would take into account other evidence.
- The use of piloting and evaluation of outreach measures to promote new attendance in local dental practices. In the first instance families with young children will be the target group. Local Children's Centres or shopping facilities will be piloted as a setting for a simple outreach intervention (such as a fluoride varnish application) and dental health information and this will be linked to local practices where new attendances can be recorded.
- The profile of new patients attending primary dental care as a result of outreach interventions will require close monitoring: new patients could have significant treatment needs as well as preventive care needs.
- In addition to using dental practices as the setting for dental health promotion, there is scope for dental practices and dental teams to support the delivery of wider public health interventions. In particular there is a role for dental practice teams in promoting smoking cessation services since smoking has a significant detrimental affect on oral health. Smoking is a risk factor for oral cancer, gum disease and delayed healing after surgical procedures as well as having aesthetic affects. The potential for the primary dental care setting for effective smoking cessation interventions has been well researched and documented. (12)
- A service evaluation of dental care provision for older looked after children will be undertaken. This will aim to identify the barriers that lead to the attendance rates for this group of children being poor and inform re-design of service to overcome barriers. The views of young people, carers and primary dental care providers will inform this work.

## **5.1 Outputs to Record Increased Prevention Through Primary Dental Care**

- Number of fluoride varnish applications reported on FP17s:
- Breakdown of dental attendances by age which will indicate increased visits amongst children for preventive care
- Claims for fluoride varnish costs from PCT
- Evidence of preventive sessions in dental practices
- Number of trained dental care professionals to deliver preventive care (i.e. dental nurses with extended duties training)
- Numbers of looked after children attending for a dental health assessment and having a dental care plan agreed.
- Referrals to smoking cessation services

## **5.2 Outcomes**

- Dental epidemiology
- Statistics for numbers of Knowsley children attending for dental general anaesthetics.
- Children attending primary dental care who are decay free

## **6. IMPROVING ORAL HEALTH THROUGH THE LOCAL COMMUNITY**

Oral health improvement programmes will be delivered in the context of community settings as well as primary dental care settings. The aims of these programmes will be:

- Promotion of the dental health messages to the local community through key individuals. This will allow dental health to be promoted in the context of other health messages health particularly around common risk factors such as diet and nutrition, smoking and personal care. Many of these key individuals will be crucial to the delivery of fluoride based interventions: health visitors (brushing for life), early years staff (supervised toothbrushing) and teachers (fluoride milk). Provision of training and updates for them, not only ensures they have up to date and accurate information around the dental health messages, but also supports effective relationships

between them and the oral health promotion service who lead on implementation and monitoring of the fluoride programmes.

- To develop environments that support the maintenance of good oral health (for example through development of snacking and tuck shop policies in schools and nurseries).
- To ensure that prevention programmes (such as the fluoride toothpaste schemes) are delivered to a consistently high standard across Knowsley and that fluoride based prevention programmes are not undermined by non-oral health promoting practices. For example continued provision of sugary snacks and drinks in nurseries implementing a supervised fluoride toothpaste scheme would not be acceptable.

These aims will be achieved by working in partnership with health, social care and voluntary agencies using a common risk approach particularly around diet, smoking, alcohol and accidents. The role of oral health promotion officers will be to provide training and specific advice as well as inputting oral health into policy and programme development.

These aims will be achieved by:

### **6.1 Embedding Oral Health Promotion Across the Health, Social Care and Voluntary Workforce:**

We will aim to ensure that promoting good oral health practice is included within the role of health, social care and voluntary agencies who work directly with the local community.

A small team of dedicated oral health promotion officers will be responsible for provision of appropriate training and resources to support this.

### **6.2 From Infancy:**

Advice about diet and mouth care should form part of the information and advice given to new parents and in the first few months. This will be achieved by:

- Ensuring oral health is integrated into infant nutrition policies
- Ensuring that the health workforce working with families with infants understand the dental health messages and that these are integrated into the information and guidance given to families.

### **6.3 Through Early Years Settings.**

Early years settings are key to the oral health improvement plan. They provide a setting where oral health programmes (such as supervised fluoride toothbrushing) can be implemented and also provide opportunities for working with families to promote positive oral health behaviours in the home.

As part of the oral health improvement strategy we will:

- Support the delivery of fluoride based prevention programmes – specifically supervised toothbrushing with fluoride toothpaste in all early years day care across Knowsley. The programme will be revised to ensure that it also promotes parental responsibility for ensuring brushing with fluoride toothpaste takes place in the home.
- Continually review the evidence base for the effectiveness of fluoride based interventions and review/ develop the current programmes accordingly. Specifically the potential for a fluoride varnish programme in an appropriate community setting will be considered in the light of new research findings and the communities with the poorest oral health highlighted previously will be prioritised for such programmes,
- Include oral health in the development of policies to create a supportive environment for health improvement for example diet and nutrition policies, policies for creating safe play environments to reduce accidents.
- Ensure that front line staff working in early years settings receive training in oral health and that they have the knowledge and resources to enable them to integrate the oral health messages into general health promotion around diet, hygiene, accidents.
- Pilot the use of community settings used by young families for outreach work aimed at increasing the uptake of primary dental care services (particularly preventive care) for families with young children. A social marketing approach will be used to inform these pilots.

### **6.4 Through Schools**

The school setting provides an opportunity for oral health improvement through a range of oral health promotion and prevention programmes.

These are:

- Maintaining the existing fluoride milk scheme across all primary schools in Knowsley and ensure that the scheme is adequately supported and monitored. It is recognised that the success of the fluoride milk scheme depends on an effective working relationship with schools and this is achieved by working with them on a range of health promotion programmes including other oral health education programmes.
- As the evidence base for prevention programmes develops, the scope for early years and schools to be used as a setting for the delivery of preventive programmes should be reviewed. In particular, the effectiveness of additional fluoride based interventions in a community setting (e.g. fluoride varnishes) should, given the poor record for child dental health, be considered for Knowsley if current research demonstrates significant benefits.
- Inclusion of oral health in the development of appropriate policies for the school environment (diet and nutrition/ personal hygiene, smoking, safe play environments).
- Ensuring that key staff working directly with children and their families receive appropriate training in oral health and that they have the knowledge and resources they need to effectively include oral health into broader health promotion programmes.

## **6.5 For Vulnerable and Disadvantaged Groups**

Oral health programmes in community settings (such as the fluoride milk scheme) will include those with additional needs. However, additional measures or specific tailoring of programmes will be required to ensure that those at greatest risk of poor oral health have the opportunity for improvement.

Improvements in oral health and reduction in inequalities in oral health experienced by vulnerable and disadvantaged groups will be achieved through:

- Provision of training in oral health for the workforce who provide direct care to vulnerable groups (for example those with learning disabilities, complex medical histories, limiting physical disability, frail older people, etc) so that the day to day living environments for these groups support oral health and general health improvement.

- Provision of tailored dental health advice for those with the most complex needs and ensure that oral care is integrated into care plans.
- Tailoring of mainstream programmes to meet the requirements of those with additional needs (for example the supervised toothbrushing scheme).
- Facilitation of access to quality dental services and identification of specific requirements / potential barriers to adequate service provision that can inform the redesign and commissioning of dental care.
- Development of care pathways for vulnerable groups

This is a significant area of development and prioritisation will be required.

## **6.6 Other Community Settings**

A variety of other community settings can provide an opportunity for promoting the oral health messages and giving advice on day to day mouth care and signposting dental services. These include community pharmacists, health centres, GP practices, leisure centres,

## **6.7 Outputs and Outcomes**

A framework for the monitoring and evaluation framework for each community setting will be developed. In addition to the monitoring of specific elements of the fluoride based programmes highlighted in section 4, this will include an audit of programmes against agreed standards, evidence of policy development and implementation, care pathway development and implementation for vulnerable groups and service user satisfaction surveys.

Outcome measures will be:

- Changes to dental decay levels and prevalence in children through dental epidemiological surveys.
- Changes to numbers of children attending for dental general anaesthetics.
- Increasing the percentage of Looked After Children receiving oral health assessments and having an oral care plan
- Reported improvements in service responsiveness for vulnerable groups of patients going through care pathways.

## **7. WORKFORCE AND RESOURCES TO DELIVER IMPROVEMENTS IN ORAL HEALTH**

Successful implementation of the oral health improvement strategy will require leadership and support both from public health and primary care commissioning. Within the public health directorate in addition to dental public health support, effective working across the children and families directorate and links to other wellbeing public health programmes will be required to deliver the oral health improvement strategy. Some public health support from key officers within these functions within the wider public health team will be required to achieve this integration of oral health appropriately.

The oral health improvement strategy will be reported on regularly both to the Knowsley Dental Health Steering Group and the Executive Leadership Team.

### **7.1 The Oral Health Promotion Service**

A dedicated oral health promotion service is currently commissioned from Halton and St Helens PCT to provide oral health promotion programmes in Knowsley.

The service was reviewed as part of the NHS Northwest review of salaried primary care dental services in Merseyside and Cheshire undertaken in 2007. (13) The reviewers' recommendations around the oral health promotion service were that:

- Fluoride based interventions were in a minority and this focus should be increased in view of the evidence base for fluoride interventions.
- Non-fluoride-based OHP activities could reasonably be incorporated into general health promotion programmes under a common-risk factor approach and could be commissioned as such.

The current service specification for the service will require updating to reflect the priorities within the oral health improvement strategy with an increased emphasis on fluoride based programmes including the support of delivery of evidence based prevention in primary dental care and improved integration of oral health promotion into general health promotion.

The role of the service will therefore be:

:

- Overseeing, monitoring and audit of fluoride delivery schemes

- Supporting the development of the primary dental care team so that they can effectively deliver preventive care
- Provision of training and support for others who will deliver oral health information to the local community and monitoring progress and integration of oral health into general health promotion around common risk factors.
- Development of local policy – including gathering relevant information to support the development of care pathways and service re-design for vulnerable groups
- The Principal Oral Health Promotion Officer will support the Consultant in Dental Public Health in the implementation and review of the oral health improvement strategy in partnership with the wider Knowsley Public Health Directorate.

## **7.2 The Primary Dental Care Team**

The primary dental care team have potential to deliver effective preventive care to a significant proportion of the local population – this has been described in section 5. As part of the oral health improvement strategy we will aim to develop the skill base within primary dental care teams to deliver an increased focus on preventive care in all dental practices. Over time there may be potential for appropriately trained primary dental care staff to have an increased input into oral health promotion activity within their local communities (linked back to the dedicated oral health promotion services).

We will aim for each dental practice in Knowsley to have at least one dental care professional trained to provide preventive care and oral health education to patients by the end of 2010. An oral health network will be established by the dedicated oral health promotion team to support this group to ensure a 'joined up' and consistent approach across Knowsley

## **7.3 Community Health Workers:**

The following groups will play a key role in the delivery of oral health improvement programmes directly to the local communities in Knowsley. They will be supported by the oral health promotion officers as described in 7.2:

- health visitors and assistants,
- school nurses,
- community pharmacists

- the potential role of midwives will be evaluated

#### **7.4 Others Working with the Community:**

In the same way that health workers will be responsible for direct delivery of oral health interventions, the following individuals will play a key role in their community settings:

- teachers,
- early years staff,
- community cooks,
- nursing and residential care staff

### **8. LINKS TO OTHER STRATEGIES**

#### **Infant Nutrition Strategy**

Knowsley's Infant Nutrition Strategy (2008 – 2011) sets standards for supporting optimal nutrition for all infants and young children. Throughout this strategy, breastfeeding and timely weaning are strongly recommended and are hugely influential in achieving good dental health.

#### **Smoking Cessation**

Smoking cessation also has a significant influence on oral health; particularly the risks to oral health in children and young people which are highlighted through prevention work of the Young Persons' Smoking Cessation Service. We are also engaging with our dentists to promote their active involvement in warning of the consequences of smoking and referral on to stop smoking services

#### **Healthy Weight Strategy**

Diet – specifically consumption of sugar, is a major factor in the development of dental decay as well as the obvious association between diet and healthy weight. It will be important that when implementing a healthy weight strategy the links with the benefit of a good diet to oral health is recognised and vice versa.

#### **Child Health Promotion Strategy**

Underpinning all of the above strategies is the National Child Health Strategy, Healthy Lives, Better Futures (DH 2009) which places the Healthy Child Programme central to the well being of pre-school children. Within this programme, a standard is set for universal and targeted interventions aimed at promoting optimal health and wellbeing for all children. Oral health promotion is a theme that runs through the programme from birth to five years and will be embedded into Knowsley's Healthy Child Programme as it is reviewed during 2009.



## 9. ACTION PLAN FOR ORAL HEALTH PROMOTION IN KNOWSLEY 2009-13

### Workstream 1: development of fluoride based programmes

Action	Notes	Timescale	Lead
Water fluoridation	<ol style="list-style-type: none"> <li>1. Consideration of proposal from SHA and decision to request public consultation</li> <li>2. Public consultation and SHA decision</li> </ol>	<p>Proposal to PCTs June 2009 for consideration</p> <p>Commencing October 2009 at earliest (dependant on South Central SHA possible judicial review)</p>	Lesley Gough/ Diana Forrest (CDPH)
Addition of home fluoride toothpaste scheme to supervised brushing scheme	Will need additional funding – app £600 per annum	Dependant on agreement of funding	Lesley Gough / Annette Mercer (CDPH and dental health promotion lead)
Feasibility of other early years settings for supervised fluoride toothpaste /brushing (childminders)	Background research to identify possible numbers, costs, training implications etc to be undertaken leading to proposal	Background work by end October 2009	Annette Mercer / Lesley Gough
Review of effectiveness of community based fluoride varnish schemes and service development proposal if appropriate	<p>Review Lancashire research project results</p> <p>Proposal for Knowsley scheme (if appropriate)</p>	<p>September 2009</p> <p>October 2009 for 2010 commencement</p>	Lesley Gough

## Workstream 2: Delivery of prevention through primary dental care settings

Action	Notes	Timescale	Lead
Training for dental nurses in fluoride varnish application and basic oral health	To increase capacity in the dental workforce to deliver evidence based preventive care. Joint training programme with Liverpool	2 courses to be planned for 0910 Sept- Nov 2009  Jan – March 2010	Annette Mercer
Financial support for fluoride varnish in dental practices	Reimbursement of costs of fluoride varnishes agreed.	Commenced already	Kirk Benyon (Commissioning lead)
Supporting dental access pilot: Stockbridge Village (outreach intervention linked to local dental practice)	Aim to promote dental attendance in young families and increase provision / uptake of preventive care. Based on social marketing research	Commence July 2009 for 3 month pilot period	Lesley Gough / Kirk Benyon
Roll-out of Stockbridge model to other Knowsley settings	Dependant on outcome of initial pilot	From January 2010	Lesley Gough / Kirk Benyon
Oral health training for dental nurses	To increase oral health education capacity in Knowsley. Linked to Liverpool OHP team initially	From April 2010	Annette Mercer
Provision of oral health promotion support to local dental practices:	Informal training, resources, facilitating links to smoking cessation	From June 2009	Annette Mercer

### Workstream 3: Improving oral health in the local community

Action	Notes	Timescale	Lead
Facilitating access of Looked After Children into primary dental care to increase % receiving oral health assessment and oral care plan	<p>Systems for collecting information from primary dental care required</p> <p>Focus group work to identify barriers to service (young people, carers, dental staff) to inform service development</p>	<p>July 09</p> <p>Completed by December 2009</p>	<p>LGough / Oral health promotion team</p>
Development of monitoring and evaluation framework for community oral health programmes	<p>To be included in service level agreement for oral health improvement</p>	<p>Agreed by June 09</p>	<p>L Gough</p>
Prioritisation of settings and target groups for programme review	<p>Potentially many settings / groups to work with. (nursing / res homes, community pharmacies, spec schools, childminders etc). Prioritise those areas where there is good evidence base for interventions. Exit strategies for interventions with poor evidence. Needs effective links between health promotion interventions and clinical services – esp for vulnerable</p>	<p>Report to dental steering group Sept 09</p> <p>Then 3 year plan for priority target groups / settings</p>	<p>L Gough/A Mercer</p>

**Workstream 4: Workforce development to deliver improved oral health**

<b>Action</b>	<b>Notes</b>	<b>Timescale</b>	<b>Lead</b>
Dental practice teams	See workstream 2		
Development of oral health promotion team to deliver training and support service re-design work (facilitating access)	To support re-focus of the oral health promotion service required to deliver the strategy	Establishment of stand alone Knowsley based training end 2010	Annette Mercer
Provision of training to key workers in community settings	Will be linked to prioritisation work for community settings and target groups	3 year plan referenced in Workstream 3 to include workforce development plan	L Gough/ A Mercer

## 10. REFERENCES

1. Choosing Better Oral Health: An oral health plan for England. Department of Health, November 2005
2. Valuing Peoples Oral Health: A good practice guide for improving the oral health of disabled children and adults. Department of Health, November 2007
3. Delivering Better Oral Health: An evidence based toolkit for prevention. Department of Health, September 2007
4. Healthy Lives, Brighter Futures – The strategy for children and young people’s health. Department of Health, February 2009
5. Transforming Community Services: Enabling new patterns of provision. Department of Health, January 2009
6. The occurrence of dental pain and extractions over a 3 year period in a cohort of children aged 3-6 years. M. Tickle, A Blinkhorn, K Milsom. Journal of Public Health Dentistry vol 68 2008
7. Adult Dental Health Survey 1998. Office of National Statistics 2000
8. A randomised controlled trial of the efficacy of supervised toothbrushing. Curnow, Pine et al, Journal of Caries Research 36(4):294 – 300 July / August 2002. This study demonstrated a 32% reduction in decay levels of permanent teeth for those in a study group compared to a control group
9. Caries Preventive Effect of Fluoride Toothpaste – a systematic review. Twetman, Axelsson et al, 2003 Acta Odontologica Scandinavica 61:6 347-355
10. Caries prevalence four years after the end of a randomised controlled trial Pine, Curnow et al, caries research, 41(6) 431-6
11. Fluoride toothpastes for preventing dental caries in children and adolescents Marinho et al Cochrane database of systematic reviews 2003 Issue 1
12. Smokefree and Smiling: helping dental patients to quit tobacco. Department of Health, May 2007
13. Report of the Review of Salaried Primary Care Dental Services. C Jones, K Milsom, M Tickle, NHS North West, December 2007

