“National Action Plan for Improving Oral Health and Modernising NHS Dental Services in Scotland”

2005 - 2010 NHS Ayrshire and Arran Strategic Local Implementation Review

Public Health Department
NHS Ayrshire and Arran

Prepared by Ailsa Morrant and Maura Edwards, Consultants in Dental Public Health with the assistance of the members of the Oral Health Strategy Steering Group
Table of Contents

1. Foreword ......................................................................................................................... 3
2. Background ..................................................................................................................... 3
3. Data Monitoring Sources for 5 year Strategic Review .................................................. 4
4. Funding 2005-2010 ........................................................................................................... 4
   4.1. Ring Fenced Funding ............................................................................................... 4
   4.2. Non Cash Limited Primary Care Funding ............................................................... 4
4.3 Capital Funding .............................................................................................................. 5
   4.3.1. National Capital Funding 2005/6 ........................................................................ 5
   4.3.2. National Capital Funding 2008/9 ....................................................................... 5
   4.3.3. Scottish Dental Access Initiative (SDAI) Scheme ............................................... 5
   4.3.4. National NHS GDS Practice Improvement grant funding .................................. 5
4.4 Other Sources of Oral Health Improvement Funding .................................................. 5
5. Work Force Capacity ....................................................................................................... 6
   5.1. Dentist Capacity ....................................................................................................... 6
   5.2. Oral Health Promotion Capacity ............................................................................. 6
   5.3 Dental Public Health and Research Capacity ............................................................ 7
   5.4. Managerial and Administration Capacity in Salaried Primary Care Dental Service .... 7
6. Primary Care Dental Premises Development .................................................................. 7
7. Services and Programmes ............................................................................................... 8
   7.1. Universal Dental Services ....................................................................................... 8
      7.1.1. Emergency Dental Services ............................................................................ 8
      7.1.2. Primary Care Dental Services .......................................................................... 9
      7.1.3. Specialist Dental Services .............................................................................. 9
   7.2. Oral Health Services and Programmes for National Topic Groups ....................... 11
      7.2.1. Children ......................................................................................................... 11
      7.2.2 Older People .................................................................................................... 15
      7.2.3. Adults with special needs ................................................................................ 16
      7.2.4 Homeless People .............................................................................................. 17
      7.2.5 Prisoners .......................................................................................................... 17
8. Oral Cancer ..................................................................................................................... 18
9. Oral Health Outcomes .................................................................................................... 19
   9.1 Dental Health Outcome of pre 5 programme ............................................................ 19
   9.2 Dental Health Outcome of 5-12 year old programme ............................................... 19
   9.3. Adult Dental Health Outcome ................................................................................ 20
10. Summary .................................................................................................................... 21
11. 2010 and beyond .......................................................................................................... 21
1. Foreword

This report has been prepared for the NHS Ayrshire and Arran’s Director of Public Health to submit to the Board in May 2011.

The authors, Ailsa Morrant and Maura Edwards, Consultants in Dental Public Health, NHS Ayrshire and Arran, wish to thank the members of the Oral Health Strategy Steering Group for their support in compiling the report and all the NHS staff and other stakeholders that have contributed to the achievements documented in the report.

2. Background

In 2002, the NHS Ayrshire and Arran Department of Public Health developed a local Oral Health Strategy and Action Plan with key stakeholders. The Strategy produced and the adoption of a strategically led approach to improving the local population’s oral health was then supported and approved by the NHS Ayrshire and Arran Board in March 2003. In the same month the Board also appointed a 0.5 WTE Consultant in Dental Public Health (CDPH) within the Department of Public Health to lead the implementation of this local strategy.

The CDPH established an Oral Health Strategy Implementation Group (OHSIG) of key NHS stakeholders in June 2003 to support, facilitate, co-ordinate and monitor the local implementation of the strategy. Under the umbrella of the OHSIG, between 2005-2008, each of the Board’s Community Health Partnerships (CHP) hosted a local Oral Health Action Plan Implementation (OHAPI) Group of key local interagency stakeholders chaired by the CHP Lead Public Health Practitioners. In 2008/9 OHSIG was reviewed and renamed the Oral Health Strategy Steering Group (OHSSG) and the CHP interagency OHAPI Groups ceased. Continuation of the local CHPs implementation of the strategy was undertaken by the Officer Locality Groups.

In March 2005 the Scottish Executive published a “National Action Plan for Improving Oral Health and Modernising NHS Dental Services in Scotland” and since then local progress has been rapid. The National Action Plan document outlined the national framework changes that would be implemented, a set of 10 key principles underpinning the way ahead and a 3 year timetable for the national framework components’ development and implementation. It also stated specific targets to be achieved by 2008-2010, some nationally and others by Boards.

In 2005, the CDPH proposed to the Board that their approval of the existing 5 year local Oral Health Strategy should be extended until 2010, but the associated strategic action plan should be reviewed and rewritten by the CDPH and the membership of OHSIG reviewed in the light of the new National Action Plan. The Board approved this approach and a new local strategic 5 year action plan was developed and implemented by the CDPH supported by OHSIG between 2005 - 2010. To support this work, the local CDPH establishment in the Department of Health was increased in 2006 by 0.5 WTE. This report summarises the strategic outcomes that have been achieved over the last 5 years.
3. Data Monitoring Sources for 5 year Strategic Review

- National Dental Inspection Programme of Scotland Reports of Primary 1 and Primary 7 children published by Scottish Dental Epidemiological Co-ordinating Committee 2004 - 2010
- ISD GDS dental registration reports
- Adult Dental Health Survey 1998, OPCS
- The Scottish Health Survey 2008, The Scottish Government

4. Funding 2005-2010

NHS Ayrshire and Arran has received significant national funding to facilitate the implementation of this local strategic action plan over the last 5 years.

4.1. Ring Fenced Funding

There has been annual ring fenced national funding allocated to the Board since 2005 to support the local development of several areas of National Action Plan (NAP) development. Initially this funding was received in topic specific, separately named allocations, but in 2010/11 all allocations, with the exception of the funding for Priority Groups, were amalgamated into one ring fenced annual allocation of £775,000. A further national ring fenced allocation of £40,000 for 2010/11 was received for Priority Groups.

This national allocation has been utilised over the last 5 years to fund or contribute to the creation of the posts and resources required to secure the short and long term local implementation of the NAP.

The local Community Dental Services funding released between 2005-2010 by the changing staff profile of this service, has also been reinvested in the development of a modernised local salaried dental service.

NHS Ayrshire and Arran has been one of the national pilot Boards for the development of several aspects of Childsmile modernised service model and oral health improvement programmes for children. It was designated the lead Board for the national co-ordination of the development of the Older People’s oral health improvement programme by the Equally Well Implementation Plan (December 2008). The Board’s ring fenced allocations between 2005-10 have benefitted from the inclusion of additional funding for both these purposes.

4.2. Non Cash Limited Primary Care Funding

The NAP required Boards to develop a strengthened salaried service targeted at improving access to those most in need. Within the new national framework, this
objective was underpinned by the recommendations of The Review of Primary Care Salaried Dental Services in Scotland, Scottish Executive 2006, which devolved to NHS Boards the decision making for creation of local Primary Care Salaried Dentist posts, funded by the national GDS non cash limited funds.

The local implementation of this aspect of the NAP has resulted in an increase in local utilisation of the national non cash limited GDS funding for provision of salaried GDS from £647,000 in 2005/6 to £2,269,000 in 2009/10. In addition to an improved provision of salaried GDS care, the level of independent NHS General Dental Services provision has also increased, which has also resulted in a greater local utilisation of the national non cash limited funding during the same time period from £17,361,000 to £25,447,000.

4.3 Capital Funding

4.3.1. National capital funding of £1.5 million was received by the Board in 2006 which was used to:
- build the Teach and Treat North West Kilmarnock Dental Centre to increase access in this area and also support under graduate outreach dental teaching from Glasgow Dental School
- extend Kilbirnie Health Centre to create a two surgery dental clinic to increase access to NHS dental services leased by a GDP Practice.

4.3.2. A further national allocation of £9.6 million was received in 2008/9 to improve access in other locations and to facilitate the creation of Local Decontamination Units within dental practices. This funding is now being used to:
- build Cumnock Dental Centre within East Ayrshire Community Hospital, Cumnock.
- put Local Decontamination Units in GDP practices
- build South Ayr Dental Centre

4.3.3. A revised Scottish Dental Access Initiative (SDAI) Scheme was also introduced for independent NHS GDS, through which they could apply for capital funds to support relocation, expansion and purchase of premises. Several local practices have made use of this SDAI grant scheme.

4.3.4. National NHS GDS Practice Improvement grant funding was also available for decontamination and Local Decontamination Units and several practices have also utilised this funding.

4.4 Other Sources of Oral Health Improvement Funding

Between 2005 - 2008 the Modernisation and Innovation Committee allocated local funding to support the Oral Health Improvement Development Project for 0-12 year old children in North West Kilmarnock. This project piloted the use of the community development approach to improve child oral health and support Childsmile. This
approach has now been adopted across the Board area for all oral health promotion initiatives.

5. Work Force Capacity

5.1. Dentist Capacity

National Target: by 2010 a 20% increase in total NHS dentists working in Scotland headcount based on September 2004

- In 2005/6 NHS Ayrshire and Arran had a minus one % difference in headcount compared with 2004 baseline
- By 2009/10 a 20% increase compared with 2004 baseline was achieved

National Target: By 2010 achieve a ratio of 1 dentist per 1750 population

- In 2005/6 the ratio achievement was 0.85
- By 2009/10 the target ratio was achieved

To promote and maintain ongoing, future local dental capacity, particularly in areas of high dental health need, the undergraduate outreach dental teaching centre was developed in the North West Kilmarnock Centre.

Local NHS GDP participation in the provision of dental post graduate vocational training was also promoted.

National Target: By 2010 20% of dental practices involved in VT training

- In 2005 14% of dental practices involved in VT training
- By 2011 20% of dental practices involved in VT training

5.2. Oral Health Promotion Capacity

The integrated, community development approach to oral health improvement and the development of new models of service delivery for children and priority groups described in the NAP has required an increase in the local oral health promotion capacity.

In 2005/6 the establishment was

- 1.0 WTE Senior Oral Health Promoter
- 0.5 WTE Oral Health Promoter
- 2.7 WTE Toothbrushing Assistants
- 0.8 WTE Administration support

By 2009/10 this establishment was increased to

- 1.0 WTE Senior Oral Health Promotion Co-ordinator
- 1.0 WTE Childsmile Co-ordinator
- 0.83 WTE Assistant Childsmile Co-ordinator
- 1.00 WTE Priority Group Co-ordinator
- 2.30 WTE Senior Oral Health Promoters
- 5.20 WTE Oral Health Promoters?
- 5.70 WTE School Oral Health Assistants
- 9.60 WTE Childsmile Dental Health Support Workers
- 2.00 WTE Administration support

5.3 Dental Public Health and Research Capacity

The level of strategic development and implementation over the last 5 years and in the longer term has required an increase in the CDPH capacity. Over the last 5 years this workload has also been supported by a temporarily increased research capacity in the Public Health Department for specific pieces of work.

- In 2005 the CDPH establishment was 0.5 WTE
- By 2009/10 the CDPH has increased to 1.0 WTE

5.4. Managerial and Administration Capacity in Salaried Primary Care Dental Service

The increased operational delivery of the Salaried Primary Care Dental Services over the last 5 years has required an increase in the management and administration capacity to support it

In 2005 there were
- 1 WTE Service Manager
- 1 WTE Project Officer
- 2 WTE Administration Support Staff

By 2009/10 this has increased to
- 1 WTE Service Manager
- 3 WTE Assistant Managers
- 5 WTE Administration Support Staff
- 7 WTE Dental Reception Staff
- 3 WTE Local Decontamination Unit Operators.

6. Primary Care Dental Premises Development

In 2005/6 the availability and standard of primary care dental premises required review and development to ensure that demand was met and premises complied with new decontamination requirements and the Disability Discrimination Act 2005.

This review was undertaken and a local premises strategy for Primary Care Dental Premises was developed. This has been integrated with the Board’s overall Primary Care Operational Premises Plan and a rolling programme of developments has commenced e.g. creation and further expansion of Ayrshire Central Dental Suite, development of dental premises in Girvan Hospital and Patna Resource Centre.

The strategic information has guided the premises development of the NHS General Dental Services through the grant applications for SDAI and decontamination funding.
By 2010, although there has only been an increase of one NHS GDS practice from 62 to 63, this figure does not reflect the fact that since 2005/6 many of the current Primary Care Dental Premises (both NHS GDS and CDS) have been relocated over this 5 year time period to develop capacity and deliver fit for purpose premises.

In 2010 there are now, not only more surgeries in many of the current practice locations, as has been demonstrated by achievement of the 2010 national target dentist to population ratio, but there has also been a change in the distribution and quality of the premises. Both these factors have lead to an increase in access, equity and capacity to meet need and demand. This increase in premises will continue beyond 2010 e.g. ongoing Cumnock development.

The quality of the existing premises has and is also continuing to improve. In 2010-12 there are 14 NHS GDS practices developing local decontamination units and 7 NHS GDS practices relocating or extending their premises.

**National Target: 100% of practices conforming to practice inspection criteria**

**% of practices with completed practice inspection in latest 3-year, rolling programme**

In 2005 the current 3-year practice inspection programme had already been introduced.

Over the last 5 years the criteria have nationally evolved to reflect the quality improvements required in the practice setting.

In 2010 the 3-year practice inspection programme continues and 100% of practices are inspected and conform to criteria by the end of the inspection process.

7. Services and Programmes

7.1. Universal Dental Services

7.1.1. Emergency Dental Services

**National Target: NHS board population served by participation in SEDS (Scottish Emergency Dental Service).**

In 2005 it was the responsibility of individual dentists to provide emergency out of hours emergency care for their own patients.

In May 2006 a local Emergency Dental Service (EDS) was developed and launched to support the emerging standards for this aspect of care. This EDS is staffed by local NHS GDPs (both independent contractor and salaried) and Dental Nurses at weekends and public holidays. The EDS is accessed by the public through NHS24. A weekday EDS for those not registered with an independent contractor NHS GDP is staffed by salaried GDPs.
A Quality Improvement Scotland (QIS) review of this new service was carried out in November 2008 and the outcome of this assessment published by QIS in May 2009. The overall performance of this first benchmarking QIS review for this service was rated using the four QIS assessment categories i.e. aware, focusing, practising and optimising. The service was found to be performing well and in 23 standards achieved a “practising” category and a further five were in the “focusing” category.

In 2010 this service continues to be reviewed, developed and delivered locally to the NHS Ayrshire and Arran residents.

7.1.2. Primary Care Dental Services

In 2005/6 the level of NHS Primary Care Dental Service provision was inadequate to meet need and the public demand.

From 2005 onwards the capacity of this service has been increased. However, as development of this service required both new and extended premises and an increased availability of dental team capacity, a temporary transition service model was required. This was provided through three Dental Access Centres which were established to ensure that patients who could not find an NHS dentist to register with could obtain a check up and a single course of dental care.

In 2010 this Access Dental Service is under review as current NHS Primary Care Dental Service capacity appears to be meeting demand in NHS Ayrshire and Arran.

In 2005 15 practices were accepting new NHS patients

By 2010 this has now risen to 39 practices accepting new NHS patients.

A local centralised Dental Helpline has also now been established.

In 2010 lifelong dental registration was introduced nationally.

By 2010
- The all ages NHS GDS dental registration rate for NHS Ayrshire & Arran was the highest in Scotland
- The NHS GDS dental registration rate for adults was 75.7%, which was the second highest in Scotland
- The NHS GDS dental registration rate for children was 84.9%, which was the second highest in Scotland.

National Targets: By 2010, increase adult registrations (18-64 years) to 65%

- In 2005 57% adults (18-64 years) were registered with a dentist
- By 2010 81% adults (18-64 years) were registered with a dentist (the highest rate in Scotland)

7.1.3. Specialist Dental Services
In 2005 the level of local and regional specialist dental services available was not meeting need or demand, particularly for the length of waiting time for treatment.

Within NHS Ayrshire and Arran NHS specialist dental services are provided in
- The local secondary care setting i.e. Orthodontics, Oral Surgery and Restorative Dentistry, although the latter is limited to tertiary consultant referral only
- The local primary care setting i.e. Orthodontics

The regional centre for provision of the full range of dental specialist services is Glasgow Dental Hospital.

Since 2005/6 the national 18 week Referral to Treatment target has been introduced and there has been considerable local and regional work undertaken to review and develop the delivery of these Specialist Dental Services.

By 2010 this work has led locally to
- The development of a revised local model of delivery of the Secondary Care Consultant led Orthodontic Service. One of the NHS Ayrshire and Arran employed Orthodontic Dental Nurses was the first in Scotland to qualify as an Orthodontic Therapist and a second local Orthodontic Dental Nurse has just successfully completed her training. The creation of these posts and the collaborative working of the hospital consultants, the associate specialist, the specialist practitioners and the local GDPs has resulted in a reduction of waiting list for treatment from 3 years in 2005/6 to no waiting list for orthodontic treatment by Dec 2010 and 70% compliance for 18 week RTT. In 2010 the Consultant led service also started to provide outreach services from the Ayrshire Central Hospital Dental Suite in addition to the outreach provided for several years to the Isle of Arran.

- A local Dental Specialities 18 week RTT Group being established in 2010. This Group will facilitate ongoing service review and redesign of local specialist dental services. In 2011 this will include undertaking a review and the consideration of options for development of local oral surgery services. In December 2010 there was a 12 week maximum wait for oral surgery out patient treatment and a 9 week maximum wait for oral surgery inpatient/daycase, with 18 week RTT compliance of 60%.

- A reduction of waiting times since 2005 for the majority of Dental Specialities in Glasgow Dental Hospital and improved compliance with 18 week RTT being achieved. However, the level of regional and local Restorative Dentistry Services provision continues to be unable to meet the increasing need and demand as population oral health improves and the population ages.

- In 2009/10 a regional review of the current model and provision of this service was being proposed. The regionally led work will facilitate development and appraisal of options for regional/local Restorative Dentistry Services and will report these to the
West of Scotland Regional Dental Planning Group in August 2011. In the meantime the local part time Restorative Dentistry Consultant post is staffed by a locum.

7.2. Oral Health Services and Programmes for National Topic Groups

7.2.1. Children

In 2005 the national model of delivery of primary care NHS GDS for children was not
- preventively orientated from birth
- universally available
- integrated with other stakeholder services

From 2005 NHS Ayrshire and Arran has participated in the national Childsmile pilots and has undertaken the Oral Health Improvement Development Project for 0-12 year old children in North West Kilmarnock.

By 2010 the majority of the components of this pathway have been developed nationally and locally and roll out in some aspects is ongoing.

The development and implementation of a child dental health surveillance process to support this pathway is continuing in 2010 and beyond through Childsmile integration with the Pre 5 national and local Child Health Programme.

The components of the child dental health pathway are
- Childsmile Core Programme - key stage resources programme
- Childsmile Practice Programme
- Childsmile Nursery tooth brushing and fluoride varnish programmes
- Childsmile Primary School tooth brushing and fluoride varnish programmes
- Oral Health Community Development and Resources for children
- Child Dental Health Surveillance Programme
- Universally available Primary Care Dental Services
- Universal Local EDS
- Universal Specialist Dental Services

**Childsmile Core Programme**

- In 2005 most pre 5 year olds in deprived localities received dental health advice, support and resources.
- From 2005 onwards there has been a nationally funded core programme that distributes resources at key stages throughout early years to reinforce and support the Childsmile dental health pathway.

The **Childsmile Practice Programme** involves the Health Visitor/Public Health Nursing Service

Prior to 2005 Health Visitors/Public Health Nurses (HV/PHNs) received local training on the key oral health messages to support their work. Through the local child health programme a baby’s first birthday “dental health promotion” card was issued.
From 2005 onwards NHS Ayrshire and Arran has participated in the national Childsmile Practice Programme development. In 2005 this pilot was initially focused in the North West Kilmarnock locality. This Programme involves HV/PHNs, trained to use dental health needs assessment guidance, undertaking this as an integral part of the universal Child Health Programme assessment of a baby at 6-8 weeks. Following this assessment, if required, the parents are offered a dental health support programme tailored to their child’s requirements throughout the early years. This dental health support is provided by a Dental Health Support Worker who works collaboratively with the child’s HV/PHN, the child’s parents and the primary care dental practice team.

By 2010 this programme
- has been rolled out across NHS A&A, is supported by 50% of the NHS GDS practices
- employs 9.6 WTE DHSWs
- is universal at 6-8 weeks
- is embedded in the child health programme from 2010
- is supported by a developing child dental health surveillance framework.

One of the outcomes of this programme is the uptake of primary dental care services in early years
- In 2005 there were 44% of 0-2 and 69% of 3-5 year olds registered for dental care
- In 2010 there were 46.5% of 0-2 and 87.7% of 3-5 year olds registered for dental care

**Childsmile Nursery Tooth Brushing and Fluoride Varnish Programme**

**National Target: All nursery schools to offer supervised tooth brushing schemes**

NHS Ayrshire and Arran had already developed a local nursery tooth brushing programme before 2005
- in 2005 98% nursery pupils participated in nursery tooth brushing
- by 2010 100% nursery pupils participated in nursery tooth brushing

**National Target: 100% of primary schools in most deprived quintile to participate in toothbrushing schemes**

NHS Ayrshire and Arran had already developed primary school tooth brushing programme before 2005
- in 2005 39% primary schools in most deprived areas participated in nursery tooth brushing
- by 2010 100% primary schools in most deprived areas participated in nursery tooth brushing

The much earlier introduction of toothbrushing programmes in NHS Ayrshire and Arran prior to the national requirement in 2005, combined with the local wider reach of the programmes compared with the national minimum requirement, resulted in NHS Ayrshire and Arran’s 5 year olds achieving a significant improvement dental health a
few years earlier in 2008 than it has occurred in the majority of the other NHS Boards. This population improvement has now levelled off in NHS Ayrshire and Arran and the improvement achieved by participation in this has been maintained in the subsequent 5 year old cohorts up to 2010.

**National Target: 100% of nurseries in most deprived quintile to participate in fluoride varnish programmes by 2010**

In 2005: no fluoride varnish nursery programme  
By 2010: The original programme nursery targeted roll out has been achieved.

In 2007/8 NHS Ayrshire and Arran began the development and incremental, annual roll out until 2010 of a nursery fluoride varnish programme using specifically trained extended duty dental nurses for the varnish application. The initial national requirement was that 20% of nurseries (i.e. 34 local nurseries) in the most deprived localities were to be targeted for roll out. However, in 2009/10 the national 2013 H.E.A.T. performance target for 60% of 3 and 4 year olds in each population SIMD quintile to have received twice yearly fluoride varnish application was introduced. Therefore, the reach of the targeted nursery fluoride varnish programme to the most deprived SIMD quintile was audited in 2010. This audit found that due to the nursery distribution of children from the most deprived SIMD quintile, targeting 34 nurseries did not produce a programme reach of 60% to the most deprived quintile and inclusion of a further 15 nurseries would be required to achieve this. As the fluoride varnish application rate through the NHS GDS to all SIMD quintiles is low, the planned expansion of the programme is to commence in the 2011/12 school year to ensure that the 2013 H9 target will be achieved for the most deprived quintile. The delivery of this clinical intervention programme in an educational setting is a significant investment of NHS resource. Therefore, the level of NHS GDS level of provision of fluoride varnish application to children in all SIMD quintiles and the need for this programme to support the ongoing reduction in early year’s dental health inequality will be monitored and reviewed annually from 2011 onwards.

**National Target: as a minimum, primary one and primary two pupils in primary schools in most deprived quintile to participate in fluoride varnish programmes by 2010**

In 2005: no fluoride varnish primary school programme was available.  
By 2010: The original primary school P1 and P2 targeted roll out was 100% achieved and by 2010 41% of them have also extended the programme up to P3 and 18% up to P4.

The methodology for targeted primary school fluoride varnish programme development and roll out from 2007/8 onwards and subsequent monitoring in 2010 was the same as for the targeted nursery fluoride varnish programme. Similarly, the programme reach in 2010 was also found to require expansion to ensure enough children from the most deprived quintiles will receive the intervention. Currently there is not enough capacity and resources available in the salaried dental service to take forward this development but if resources become available this development will be undertaken beyond 2010.
Oral Health Community Development and Resources Programme for children

This programme comprises of work that promotes and supports the uptake, engagement and sustainability of the intervention components of the child dental health pathway e.g.

Provision of education support resources
- In 2005 there were oral health leaflets and resources available to educational establishments and carers such as childminders
- In 2010 a new resources programme was launched called “Search for a Smile”. It was developed by children, for children, to support and reinforce the key Childsmile messages and programmes
- In 2005 the model for resources development was a traditional “education” one
- In 2010 the community development approach is now used in the development of dental health resources for children by children, where possible through delivery of the Curriculum for Excellence e.g. Elliot Visits the Dentist photographic comic, the White Tooth Rap DVD, 3 Dental Health Board games, Magical Mouths drama, Gleam for the teens.

Healthy eating and drinking water provision
- In 2005 there was no collaborative oral health financial contribution
- Between 2005-2008 there was oral health joint funding of nursery fruit scheme and some funding allocated to support development of nursery drinking water policy in Oral Health Improvement Development Project for 0-12 year old children in North West Kilmarnock.

Multiagency working
- Oral health promoting pharmacies
- Locality based community stakeholder oral health improvement group in North West Kilmarnock

Child Dental Health Surveillance Framework

0-5 years:

In 2005 there was no pre 5 dental health surveillance framework.

By 2010 the development of a national model for child dental health surveillance framework and its ongoing integration and development within the national Pre 5 child health surveillance programme has been achieved. This national development was facilitated by the development and introduction of the Childsmile Practice programme from birth onwards.

This national development work has been led for the national Childsmile Board by one of the NHS Ayrshire and Arran CDPHs. Locally and nationally this collaborative service development work for Pre 5 dental health assessments and surveillance
processes has the potential to ensure that dental health feedback will be received by a child’s named Health Visitor/Public Health Nurse to support and inform the child’s welfare and protection needs from birth onwards. NHS Ayrshire and Arran child health department, the child protection unit, the HV/PHNs, the primary care dental services and IT have contributed to this work. The first stage of the universal dental health surveillance framework from 6-8 weeks was completed in 2010/11 and will be rolled out locally and nationally after April 2011. Subsequent universal stages, e.g. the 2 year old universal assessment will be developed nationally as an integral component of the national Hall 4 programme development in 2011/12. A tailored, personal surveillance feedback process for individual children, to supplement the national universal feedbacks, is also under development locally and regionally for those vulnerable children failing to attend for dental prevention and care once registered and those who experience significant dental events such a dental general anaesthesia.

5-12 years:
Prior to 2005 a new National Dental Inspection Programme (NDIP) for 5 and 11/12 year olds was developed and introduced in 2003.

In 2010 the NDIP continues locally.

In 2010 the NDIP outcome supports the National Action Plan implementation and monitoring as it has two purposes.

- Firstly, to provide universal feedback to parents about their child’s dental health status and where required, promote the uptake of dental care for a child.
- Secondly, to provide the Scottish Government, the NHS Board, CHPs and educational establishments with anonymised dental health epidemiology to monitor and evaluate oral health strategic progress.

In 2009/10 a national NDIP – Childsmile Practice Interface Group was established to investigate, review and integrate these two programmes nationally to develop a 5-12 year old dental health surveillance framework similar to that developed for the Pre 5s. It is anticipated development work on this topic area will be progressed nationally which will direct subsequent local development from 2011 onwards.

7.2.2 Older People

In 2005 the specific oral health needs of older people in the local population had not been identified, especially the most dependent and vulnerable older people in care homes.

In 2007 an oral health needs assessment for older people in care homes was undertaken. This showed that care home staff:

- did not know who to contact for dental treatment,
- had received no training in oral health
- did not have any standard paperwork for assessment oral health or daily oral care.
Therefore a service development pilot project was established in North Ayrshire within all 25 care homes to deliver training to 348 carers through a rolling, six month programme from 2008-9. Paperwork for oral health assessments and daily care were developed as well as resources and the signposting process to direct users to the Salaried Dental Services.

This was evaluated in 2010 and showed that care home managers and staff had embraced the oral health messages and felt better equipped to care for the oral health of their residents. Following the first training session, changes in practice were recorded and over the course of pilot period:

- the routine of carrying out an initial oral assessment rose from 40% to 72%
- the percentage of homes using the Salaried Dental Service rose from 64% to 88%

Since 2008/9 an oral health training programme was also undertaken in long stay Pavilions at Ayrshire Central Hospital and this is now rolling out other hospitals. To make this development sustainable:

- oral health training is now embedded within the induction training for hospital nursing and care staff
- oral health is part of the annual training lecture
- an oral health assessment is included in the NHS Ayrshire & Arran in-patient booklet

One of the NHS Ayrshire & Arran CDPHs established and chaired the National Older People’s Oral Health Improvement Group. To support this national lead role NHS Ayrshire and Arran received Priority Group funding from the Chief Dental Officer and this was used to appoint a National Public Health Researcher in December 2008. The CDPH worked with the researcher and NHS Health Scotland to develop a national resource for trainers, “Caring for Smiles”.

“Caring for Smiles” was launched in May 2010, and is a guide for trainers on the issues to be covered when undertaking oral health training in care homes. This is now being rolled out in the care homes in South Ayrshire.

Dental registrations for older adults in Ayrshire and Arran have also risen.

**National Target:** by 2010 Older Peoples dental registration: 50% of older adults aged 65+ years; 60% of 65-74 years; 40% of 75+ years

Between 2005 and 2010 the NHS Ayrshire and Arran 65+ year old population registered rose from 42% to 60%.

By 2010 local 65-74 year olds dental registration was 66% and for 75+ year olds it was 55%.

7.2.3. Adults with special needs
A local oral health needs assessment in 2007 had been carried out with this vulnerable group and identified staff training as an issue. A pilot project, “Open Wide,” for carers was established in January 2009 in the eight care homes for adults with additional needs in East Ayrshire.

This involved:
- Training of staff in oral care
- Providing oral health paperwork

To date, 86 carers have been trained and staff feedback has been very positive.

The “Open Wide” pilot is being evaluated and will be rolled out in due course. These patients access much of their dental care through the Salaried Dental Services. As a result of interdisciplinary working, the Community Learning Disability Team has delivered learning disability awareness training to dental staff and frontline reception & administration staff, and the Oral Health Promotion Team undertakes oral health training with Learning Disability staff.

7.2.4 Homeless People

In 2006 the Public Health Department undertook a general health and homelessness needs assessment which identified various dental issues. Further work was then undertaken to complete an oral health needs assessment, including Patient Focussed Public Involvement. This gave insight into the dental requirements of homeless people. They requested a drop in service, which was subsequently established using the Dental Access Centres.

As a result:
- Homeless people are now given an appointment on the day they call, at their nearest centre
- Oral health promotion teams have undertaken oral health training for hostel staff and tenancy support workers
- These staff are now key to the distribution of toothbrushes and toothpaste to people who present as homeless

This local development work has also contributed to the development of the National Oral Health Improvement Programme for Homeless People.

7.2.5 Prisoners

In 2007 an oral health needs assessment was conducted at HMP Kilmarnock in which established good links with the prison healthcare staff and as a result:
- The Oral Health Promotion Team contributes to the prison health and wellbeing days.
- Annual oral health training of prison staff is carried out.
- An oral health question is now included in the prisoner induction and any experiencing dental pain are referred to the prison dentist
This local development work has also contributed to the development of the National Oral Health Improvement Programme for Prisoners. One of the local CDPHs is currently working with the researcher from this national group to develop a peer education model which will be piloted at HMP Kilmarnock.

8. Oral Cancer

**National Target: Improve oral cancer survival in males by 2010**

% 5-year survival of those diagnosed with oral cancer

This target is monitored at national level. Due to small numbers it is inappropriate to report this at the NHS Board level.

The 5 year survival of those diagnosed with oral cancer has been improving in recent years after a lack of improvement over the past 30 years. Even with this improvement though the 5 year survival for males was 42% for the time period 2003-2007 and 56% for female for the same period.

In 2005 regional centralisation of the local Oral Cancer surgical treatment services was proposed.

By 2010 a model and the details of this centralisation have been developed and costed. However, the feasibility of implementing this proposal is under consideration.

5 year oral cancer survival prognosis is dependant on many factors (e.g. tumours type, site, degree of spread at diagnosis), not simply the effectiveness of the procedure carried out to treat it. Early diagnosis is one factor that can improve survival from the disease.

In 2006 free adult checkups were introduced nationally to help promote the uptake of opportunistic oral cancer screening as part of a routine dental check up.

In 2005 the West of Scotland NHS Boards collaboratively participated in a Regional Oral Cancer Awareness Campaign. This comprised of a public awareness media and resources campaign, NHS professional awareness raising, signposting and training events, as well as a fast track referral service.

Since 2005 this approach has been continued and there has been ongoing annual local support of the national oral cancer awareness events.

In 2010 new local oral cancer awareness raising resources were developed and distributed.

Nationally, oral cancer incidence rates are also being monitored to track changes in oral cancer prevention. Several lifestyle factors contribute to the development of oral cancer, smoking and alcohol consumption are the most prevalent ones in the West of Scotland.

By 2010 the Public Health Department’s first line priority areas for action included alcohol and tobacco i.e. “ATOM”. The ongoing local implementation of effective local prevention
programmes for alcohol and tobacco is essential to contribute to a future reduction in the incidence of oral cancer, e.g. smoking cessation team links with oral health promotion team.

The preventive outcome of local action in this area over the last 5 years can not be monitored locally but the action will contribute to and be monitored in the longer term by the reported national survival and incidence rates therefore all local strategic actions should be continued until their effectiveness can be ascertained.

9. Oral Health Outcomes

9.1 Dental Health Outcome of pre 5 programme

The national target for 2010 was that 60% of 5 year olds would have no obvious decay experience
- In 2004 52% of 5 year olds had no obvious decay experience
- In 2010 63% of 5 year olds had no obvious decay experience

The rate of improvement has been greater in the more deprived CHP areas. North Ayrshire CHP area in 2010 did not achieve 60% with no obvious decay experience but it had improved from 44.5% in 2006 to 56.4%. East and South Ayrshire did achieve the target with 64.1% and 68.8% respectively.

Therefore the development and implementation of an integrated, multiagency Childsmile dental health improvement pathway that uses the community development approach for implementation has, in a 5 year period, produced a significant improvement in the dental health of the local population of 5 year olds and under. Dental health inequality still persists but the rate of improvement over the last 5 years has been greater in the more deprived sections of the pre 5 population. Continuation of a population and targeted approach has the potential to significantly reduce the social gradient of dental health further.

9.2 Dental Health Outcome of 5-12 year old programme

The national target for 2010 was that 60% of 11/12 year olds would have no obvious decay experience
- In 2005 54% of 11/12 year olds had no obvious decay experience
- In 2009 70.4% of 11/12 year olds had no obvious decay experience

The rate of improvement has been greater in North Ayrshire CHP area over this time period. In 2009 all three CHPs achieved the national target with more than 60% of 11/12 year olds with no obvious decay experience. Between 2005 -2009 the improvement in North Ayrshire has been from 48% to 67.7%, in East Ayrshire from 56.5% to 70% and South Ayrshire from 59.3% to 72.4%.

The development and implementation of an integrated, multiagency Childsmile dental health improvement pathway that uses the community development approach for implementation has, in a 5 year period, produced a significant improvement in the dental health of the local population of 11/12 year olds and
under. Dental health inequality still persists but the rate of improvement over the last 5 years has been greater in the more deprived sections of this child population. Continuation of a population and targeted approach has the potential to significantly reduce the social gradient of dental health further.

9.3. Adult Dental Health Outcome

**National Target: 90% adults with some natural teeth by 2008**

In 2005 it was decided nationally not to commission a baseline NHS Board national clinical adult dental health outcome survey. The baseline national adult oral health outcomes used was that of the Adult Dental Health Survey 1998 which reported that 82% of adults in Scotland had some natural teeth therefore 18% had no teeth.

In 2008 The Scottish Health Survey was conducted which found that 88% of adults had all or some of their own natural teeth.

By 2008 a similar improvement in the NHS Ayrshire and Arran population is likely to have occurred. This assumption is supported by the findings of a 2009 survey of the NHS Ayrshire and Arran employees which was undertaken to support the monitoring and development of an Oral Health in the Workplace Programme being piloted with the NHS Ayrshire and Arran employees from March 2011. Although some employees will not be local residents and being in employment is an indicator for better oral health, given that NHS Ayrshire and Arran is one of the largest employers locally, this survey may give a glimpse into the current oral health status of the local population, as well as providing more detail about their oral health and contributory lifestyle factors.

This self reported survey of NHS Ayrshire and Arran employees in 2009 found that 97.1% had all or some of their own natural teeth and the majority, 85.7%, had 20 or more natural teeth.

Whilst this finding was encouraging as the majority of employees had enough teeth to constitute a functional dentition, there were other findings that were still of concern e.g. 2.9% reported having toothache at the time and 25% of employees said taking time off work made it difficult to visit the dentist. Similarly, whilst 86.3% reported brushing twice a day, 22.6% thought that if they attended the dentist the next day they would need dental treatment and 11.6% thought they had decay present.

The proportion of employees who claimed to be registered with an NHS dentist was 73.7%, which is lower than the 81% of local population aged 18-64 years that were actually registered with an NHS dentist in 2010. However, 19.8% of employees claimed to be registered for private dental care so overall the level of registration amongst employees was 93.5%.

Lifestyle factors which contribute to oral health were also surveyed e.g. 15.9% were smokers, 11.7% drank fizzy drinks several times a day and 31% consumed alcohol a few times a week.
These local findings highlight that
- dentist registration rates have improved
- people are keeping more of their teeth
- there remains an unmet oral health need in some of the population
- lifestyle choices that support good oral health are not practiced by some of the population

In the last 5 years local access and availability of primary care dental services has improved. This improvement now appears to be meeting demand and will have contributed to the improvement of oral health of adult population in terms of ongoing maintenance and therefore retention of their teeth.

However, as adults are living longer, the resulting potential burden of oral disease in the population will increase in the shorter term. This is because many of the current adult population’s retained teeth are likely to have experienced decay and its restoration. Inequality in adult oral health also still persists.

The continuation of the current strategic approach has the potential to deliver ongoing improvement in adult oral health i.e.
- ongoing development and delivery of universal and targeted oral health improvement and related programmes such as the Oral Health in the Workplace Programme and Fresh Ayrshire
- ongoing monitoring and development of service capacity and premises to keep pace with potentially increasing need and demand, especially for restorative dentistry
- ongoing development of preventively orientated dental care

10. Summary

This report has documented the local areas of strategic progress and targets that have been achieved between 2005 and 2010 to improve the oral health of the NHS Ayrshire and Arran population and modernise their NHS dental services.

The outcomes achieved locally by 2010 are
- The population’s oral health has improved, significantly so for children.
- There is a more stable NHS dental service with greater capacity, better distribution and quality of premises, as well as more local involvement in post graduate vocational and undergraduate dental training.
- There is a better uptake of integrated dental services and the newly developed local preventive oral health programmes for children and vulnerable groups
- There is more integration of dental services with other primary care services
- An Emergency Dental Service is locally available
- There is a local dental helpline

11. 2010 and beyond
To continue and maintain the strategic achievements made over the last 5 years, NHS Ayrshire and Arran needs to develop a revised local Oral Health Strategy and a new Action Plan that will

- Complete and embed as core business all new areas developed in the last 5 years
- Establish monitoring processes to ensure the implementation continues
- Progress new areas of work e.g.
  - Implementation of new Adult Priority Groups Strategy anticipated in 2011/12
  - Pilot Oral Health in the Workplace programme
  - Develop 2 year old Child Dental Health Surveillance Assessment
  - Develop specialist services redesign and progress shift of care between secondary and primary care
  - Develop and introduce further quality indicators