



Llywodraeth Cymru  
Welsh Government

# Taking Oral Health Improvement and Dental Services Forward in Wales

A Framework outlining priorities for  
dentistry and a future work programme

March 2017

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**A Framework outlining priorities for dentistry and a future work programme**

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## **Foreword**

This document sets out the key priorities for oral health improvement and dentistry in Wales in the short to medium term. A future work programme is outlined, which will inform an update of a National Oral Health Plan for Wales by 2018. This framework offers direction now so that progress in oral health and dental services improvement continues for the benefit of the population of Wales. It supports dentistry to align with and respond to the Programme for Government.

## 1. Framework - Purpose and Summary

This framework sets out the key priorities for oral health improvement and dentistry in Wales in the short to medium term. It outlines a future work programme that will inform an update of *Together for Health: A National Oral Health Plan for Wales, 2013 - 2018* <http://gov.wales/topics/health/nhswales/plans/oral-plan/?lang=en> and make progress now. Its purpose is to identify what is required to update the strategic vision, establish structural cohesion, and strengthen clinical leadership. It offers clarity of direction in dentistry to make a difference at pace and scale, and align national direction with best practice locally.

Dentistry can contribute to *Taking Wales Forward*, the Welsh Government's programme for the next 5 years <http://gov.wales/about/programme-for-government/?lang=en>. There are also opportunities to make a greater impact for patients and the population, such as contributing to well-being and therefore the employability of young adults.

We know how to capture patient need and understand population need. However a complex set of challenges in oral health inequalities, disease experience and access to services exist across all age groups. Common diseases of the mouth are almost entirely preventable. The causes are understood and we have shown that prevention works. Excellent progress has been made improving the oral health of young children through the Designed to Smile (D2S) child oral health improvement programme.

Dental services need to be more responsive, equitable, effective and preventive. They need to be planned and performance managed, with a focus on population need not just on those who currently attend, and outcomes could be measured more inventively. We require better integration and collaboration with other professionals and wider Welsh Government and NHS work programmes. The principles of prudent healthcare means supporting patients and the public to gain greater understanding of the dental disease process and have better self care skills and knowledge. Improving oral health for all and eradicating preventable decay in young children remain the overall goals. We recognise there is still a treatment burden, which impacts on patients and clinical teams, that needs to be addressed by delivering quality, responsive dental care to those who need it most.

This framework outlines priorities and intentions for the short to medium term which will also inform the planned update of the National Oral Health Plan by 2018. The three key areas for action are:

- i) Designed to Smile refocus;
- ii) Contract Reform and expanding new ways of working within primary care general dental services; and
- iii) Connectivity e-referrals implementation.

## 2. Population Oral Health

Oral Health has improved in recent decades although dental disease experience and access to NHS dental services remain variable across Wales with stark inequalities linked to deprivation. Good oral health is about more than teeth. It impacts on wellbeing as the mouth is an important part of the body. Oral health is a barometer of poverty, parenting, hygiene, nutrition, lifestyle choice and reflects the impact of common risk factors. It impacts on school readiness and absenteeism, employability, sickness rates, obesity, self-esteem and well-being.

We need to engage the wider health and social care professions so they too understand the value of good oral health and recognise it is a sensitive proxy indicator for other non-communicable diseases and conditions. Oral health protection and care will increasingly involve a range of professionals beyond the dental team.

More than a third of children in Wales are affected by dental decay by the time they reach school age. A significant burden of dental disease persists in adults and poor oral health impacts on daily life for many young adults and timely access to care correlates with material deprivation. Wales has an aging population with many older people now retaining natural teeth. Some have complex medical needs with co-morbidities and many will become dependent on others for aspects of daily living that others take for granted – such as brushing teeth. There is an opportunity to address disease levels and risks within adult population groups with the focus and effort which has been shown to be effective in young children.

Within dental services there is a need to shift the emphasis from treatment intervention and too frequent 'check ups and scale & polish' for those with comparatively good oral health, to a more needs-led preventive-focussed approach following prudent healthcare principles. There needs to be greater self-care and dental disease understanding in the population, and in other health, social care and education professionals, of how to protect and maintain oral health.

A strengthened and expanded programme of NHS contract reform within primary dental care is required. This will accelerate necessary change and better align dental services to patient and population need by facilitating clinical teams and providers to embrace new ways of working.

## 3. Context - wider policy and current status

### Wider Policy

*Taking Wales Forward* acknowledges new ways of working are required to meet the challenges of the next five years. It recognises that improving health and well-being underpins Welsh Government ambitions. Improving oral health and effective preventive dental services contributes to wider policy: in the first 1000 days of life; to

better school readiness and attendance of young children; to employability of young adults; well-being; positive behaviour change; and hygiene and nutrition for all, including dependent older people.

*Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales* (Public Health Wales, 2016)

<http://www.wales.nhs.uk/sitesplus/888/page/87106> offers research evidence and expert opinion in support of preventing ill health and reducing inequalities to achieve a sustainable economy, thriving society and optimum health and well-being for the present and future generations in Wales. The principles are relevant to oral health and dentistry.

*Rebalancing Healthcare - Working in partnership to reduce social inequity* (Chief Medical Officer for Wales Annual Report 2015/16)

<http://gov.wales/topics/health/professionals/cmo/reports/?lang=en> highlights the social gradients that are apparent in health and the use of services. Social gradients exist in childhood experience of tooth decay, and in deprived areas adults have poorer oral health but are less likely to see a dentist routinely (see infographics summarising needs in Annex 1). With unique access to the 'apparently well' population in Wales, dental teams are in contact with large numbers of the public every day and at key points during their lifetime. Cluster working is progressing in primary care, however, there is a need for dental clinicians to engage and a need to develop clinical dental leaders to integrate messages and action. Allowing more dental practices to work in new ways would facilitate this.

*Our Plan for a Primary Care Service for Wales up to March 2018* (Welsh Government 2015) <http://gov.wales/docs/dhss/publications/150218primaryen.pdf> is about securing success of primary care services and developing a responsive health system to provide preventative and ongoing care to meet individuals' need closer to home. There is scope to develop new ways of working within dentistry. Dentistry needs to contribute more actively and effectively within clusters locally; to better meet population need and maximise outcomes for patients. Taking part in contract reform projects and strengthening a preventive approach within their own general dental practice teams will support development of clinical leadership skills within dental professionals. Delivering services through re-modelled workforce and building relationships with wider primary care practitioners will equip dentists to actively contribute to cluster working.

*Together for Health: A National Oral Health Plan for Wales 2013-18* set the direction for oral health and dental services improvement. It consolidated Designed to Smile and acknowledged the current contracting system can leave patients disempowered and dentists disengaged. The Welsh Government is committed to continue to pilot systems which move away from the current model to one which focusses on tailored patient dental care - based on prevention and need/risk assessment. It is supportive of contract reform to increase the value and quality of primary dental care. This framework will inform the update of the National Oral Health Plan by 2018.

#### 4. Priority 1: Designed to Smile – Strengthen and refocus the programme

Since surveys of child oral health in Wales began in the mid-1980s the prevalence of tooth decay remained constant at 47% with just under half of all young children affected. Since 2008 there has been a steady reduction in levels of tooth decay with the latest survey *Picture of Oral Health 2016*

[http://www.cardiff.ac.uk/\\_data/assets/pdf\\_file/0006/218589/Picture-of-Oral-Health-2016.pdf](http://www.cardiff.ac.uk/_data/assets/pdf_file/0006/218589/Picture-of-Oral-Health-2016.pdf) showing that 35% of 5 year old children were affected. This 12% reduction is the first significant improvement and is attributed to the focus and effort of Designed to Smile (D2S), the national oral health improvement programme that began in 2008-9 <http://gov.wales/topics/health/professionals/dental/smile/?lang=en>.

##### What is intended for Designed to Smile?

- Re-focus programme resources on 0–5 year olds. Align with Welsh Government policy to concentrate on the first 1000 days and respond to evidence about dental health of 3 year olds. We know that dental decay starts early, therefore primary prevention will have most impact before the age of 3.
- Restate the overarching aim of the programme to keep children decay free by 5. This will mean shifting programme resource from older children activity to expand and refocus efforts on the first 1000 days of life.
- Further develop links with Health Visitors; align with Healthy Child Wales strategy; and introduce components of “lift the lip” programme from New Zealand that can be adopted and adapted for Wales.
- Transfer the Fissure Sealant programme to primary care delivery within general dental services (GDS) and Community Dental Services (CDS). Fissure Sealants are provided to children aged 6 and over, often as a secondary prevention measure and whilst it is a valuable component of individual patient care, the emerging evidence does not support its effectiveness or return on investment within a population public health programme. Children accessing care in general and Community dental services should have this intervention within preventive clinical pathways as per guidance in Delivering Better Oral Health [http://www.designedtosmile.co.uk/delivering\\_better\\_oral\\_health.html](http://www.designedtosmile.co.uk/delivering_better_oral_health.html).
- Step down other elements of the D2S programme that provide for children age 6 and above. Ensure those schools who want to continue daily tooth brushing for children age 6+ are supported to do so as part of health boards’ oral health strategies.
- More active engagement with ‘high street’ dental practitioners and their teams is required. D2S should be everyone’s business. As disease levels fall, experience of decay becomes more polarised into ‘pockets’ of severity so that targeting at

community/school level becomes more difficult and disease experience for high risk children can be masked by reporting of average/mean levels. Dental practice teams will be supported to identify children at risk and be up-skilled to link with other health and care professionals to provide preventive care and establish a pattern of attendance for these children. D2S teams and resources can be directed to support this as appropriate. The reduced input to older age group children will free up D2S team time to engage with general dental practice teams and other health and social care professionals.

### **System change is required to:**

- Reduce the burden of data collected for monitoring of D2S whilst ensuring the Welsh Oral Health Information Unit, Public Health Wales and health board teams have sufficient data to evaluate and report impact.
- Agree and develop robust measures going forward – what data collection components should be retained and are there any gaps in measurement that needs to be considered and improved?
- Embed the improvement of oral health as everyone's business in Wales. There is a need to do more to expand knowledge and skills in others. D2S should not be viewed as solely a CDS programme, rather it needs to evolve to be a national programme integrated with other Public Health Wales and Welsh Government activity and action for very young children, and in time other age groups.
- Ensure an effective structure is in place. Establish a national steering group to support the programme and the D2S national forum. Review evidence and set clear direction. Re-energise and direct D2S teams to engage locally with clusters to respond to changing and identified needs.
- Horizon scan and discuss plans for population oral health improvement action in other age and vulnerable groups.

### **Most recent report (Dec 2016) confirmed progress to date and demonstrated:**

- An increased focus on the youngest age groups with reduction in activity with older children (age 7 to 10).
- A reduction in oral health promotion/education provided outside direct participation in the tooth brushing/Fluoride Varnish/Fissure Sealant elements of the programme.
- An increase in the number of children having Fluoride Varnish applications.
- Distribution of home packs focus on children participating in the tooth brushing/Fluoride Varnish/Fissure Sealant elements of the programme (reduction in distribution outside this).



- Proactive engagement with the wider health and teaching professions – especially Health Visitors.
- More focus on use of Quality Assurance processes.

### **Next steps**

- Public Health Wales have appointed a locum Consultant in Dental Public Health to work closely with Welsh Government, establish a national steering group and lead action on refocus which will also involve health, education and social care leads as appropriate.
- The Welsh Oral Health Information Unit and academics are fully engaged and supportive of the proposed intentions. They will collate and share evidence. Continued involvement is secured to shape refocus using evidence and report on impact.
- Communicate an ethos of going from ‘good to great’ in this work to ensure D2S teams know how valued their work is and offer support for continued improvement.
- Hold a symposium to communicate impact of D2S and celebrate success in Summer 2017 (the current national D2S Forum may evolve into an annual learning event).

## **5. Priority 2: Primary Care Contract Reform Options**

We want to develop an approach which has a focus on slowing disease process rather than chasing treatment targets by providing multiple courses of treatment and filling teeth that may rapidly decay again, or scaling teeth without gaining patient commitment to good oral hygiene.

### **a) What is the current NHS dental contract for General Dental Services?**

The current contract for general dental services was introduced in 2006 although it is often still referred to as the ‘new contract’. It changed individual ‘fee for item’ payment claims to an agreed annual contract value with stable monthly payments. The contract measurement used since 2006, the Unit of Dental Activity (UDA), has origins in treatment activity provided before the new contract. The introduction of this contract resulted in a marked reduction in treatment intervention. UDAs are allocated to the total annual contract value and are claimed in 3 bands of care, attracting 1, 3 or 12 UDAs. Individual practice UDA values are usually based on activity prior to 2006, and the value varies from practice to practice. At present the highest average health board UDA value in Wales is £26.25 and the lowest is £23.84. This is perceived to be unfair.

The UDA as a measure does not overtly incentivise nor reward increasing access, quality or prevention. Health boards monitor performance in general dental services delivery by the percentage of UDAs delivered (from the total number assigned to a given total contract value).

In England and Wales the NHS contract administration, reporting and monitoring is supported by the NHS Business Services Authority - Dental Service (NHS BSA).

There are almost 500 NHS dental practices in Wales. Total Welsh Government investment in primary care dental services and oral health programmes in 2015-16 was £137.3 million - plus £33.2m revenue from patient charges. This was 2.14% of total NHS spend. Some 55% of the population access NHS primary care dentistry (this percentage does not include those seen in the Community Dental Service). The majority of NHS practices are General Dental Service contract providers working within the 2006 contract and monitored by UDAs. The British Dental Association report dental teams are demotivated by the current system and want change.

#### **b) What has been tried to date? Piloting a new contract in Wales 2011 - 2016**

To test new ways of working and support development of a new contract, eight pilot sites ran in Wales from April 2011 to end March 2016

<http://gov.wales/topics/health/professionals/dental/dentalpilot/?lang=en>.

At the end of the pilot programme the majority of the pilot practices reverted to the current contract and most report this has been detrimental to teams and patients. Two prototype practices continue to operate new ways of working in a high trust relationship with Abertawe Bro Morgannwg University Health Board. Neither practice is monitored by UDAs but the teams are part of a learning network. Their patients, the dental teams and health board are positive about the experience and are willing to share learning. There is a need to expand this approach within a supportive contract reform programme that increases value and quality, is robust in measurement and evaluation but is fair to providers, patients and the taxpayer.

The clinicians involved have adopted a needs led preventive approach to care provision. Access and delivery of care to higher need patients has increased; patients and the health board are happy with the transformation in care. This approach needs to be expanded and the experience shared with other practices. However, it is necessary that robust measurement, beyond UDAs, that will incentivise excellence in primary care delivery is developed. It is therefore expected that prioritising contract reform work will facilitate the development of appropriate need and outcome measures, worked up jointly with clinicians and contract managers. This will engage clinicians in shaping change, and develop options and understanding in dental contracting teams in health boards of how to exploit flexibility in the current contract, whilst giving assurance to Welsh Government and making better use of existing resources to benefit patients.

After a long period of piloting it is clear new ways of working benefit patients and dental teams. We now want to use flexibility in the current contracting system to share and implement learning from pilots and prototypes with other practices and health boards. This work will develop, test and implement need and outcome measures for general dental services and prototypes.

### **c) Why is contract reform needed now?**

The current contract does not focus on patient need nor the importance of prevention.

The use of UDA measurement does not encourage clinical teams to:

- adopt preventive approach to care;
- extend the use of skill mix as part of prudent healthcare;
- provide care to new patients with higher needs;
- prompt 'well patients' to attend at longer intervals thereby opening access to other patients who may have active treatment need; and
- deliver high quality evidence based care according to need.

The 'well' patient who attends frequently helps a practice to meet UDA targets. This may explain why more than 80% of NHS dental patients in Wales attend every 6-9 months. Rigid application of regulation and contracting rules, without a full understanding of perverse incentives, is occurring in some health boards. This has led to stagnation in access and dissatisfaction with the system. Recruitment and procurement to attract more dentists is also challenging in some areas. It has been reported that one provider handed back a NHS contract.

Dentists see UDA allocation as a target. For example they can claim 3 UDAs for a Band 2 course of treatment whether a patient requires one filling or needs multiple treatments, and whether all necessary preventive care and advice is delivered or not. There is evidence of claims for UDAs being 'maximised'. The reasons for this are complex but are due in part to the fact that funding is clawed back by the contracting health board if providers of NHS dental care do not meet the contract UDA target.

Although there is no tangible 'new' dental contract on the table, there is flexibility within the existing contract that can be exploited to expand and offer contract reform within current contract regulations. Such an approach must be underpinned by robust need and outcome measurement. Substituting a percentage of UDAs with other measures in a blended approach to contracting diminishes the negative aspects of UDAs, whilst offering assurance and remaining within current regulations. Relaxing the UDA target driven system to accelerate transformational change is possible. It can be introduced by describing what good looks like and outlining the expectations in a patient journey within agreed care pathways that include need and outcome measures.

This approach will:

- engage clinical dental teams and local health boards to embrace change;

- actively involve patients;
- increase patient access to NHS dentistry;
- make more effective use of current resources;
- facilitate a preventive and prudent healthcare approach to care in more dental practices; and
- provide opportunity for more specialised service provision in primary care which would relieve the burden on secondary care services.

Contract reform will be delivered with greater dental team involvement by ensuring that teams understand the requirement for change and help to shape it. The work will be underpinned through improved IT connectivity, e-referrals to secondary and specialist care and by establishing action learning sets to develop skills and clinical leadership within dental clinical teams. This should also facilitate dentistry to better engage with primary care clusters and the wider patient care agenda, for example care of people with diabetes, smoking cessation, alcohol abuse and mouth cancer.

#### **d) What will support contract reform?**

For a contract reform programme to be effective it requires that clinical, dental public health and dental contracting managers are working collaboratively. It will need to involve focussed work with health boards and several are poised to initiate the work.

Abertawe Bro Morgannwg University Health Board are currently managing the prototypes and therefore already have a number of trusted, engaged dentists and contract managers willing to take part and influence change. The step from prototype contracting to expanding this way of working to other practices will be relatively straightforward for the health board and contract reform is welcomed by them. Other health boards need to identify practices and contracting managers willing to take part.

Contracting and clinical peers from these health boards will then influence spread. They can support expansion of the contract reform programme to other health boards in time. They can communicate the reform process and any tools (SLAs, care pathways and KPIs) developed to allow more practices and health boards to take part.

Increasing capacity in dental clinical leadership will be supported by ensuring that dentists contribute to 'action learning sets' established by a Public Health Wales Consultants in Dental Public Health and the current prototype project manager assigned to this work. It is intended that the emerging primary dental clinical leads from this contract reform programme will not only influence and shape contract reform in dentistry but will also in the medium term offer dental clinical leadership capacity to integrate with the wider primary care and cluster agenda in Wales. This proposal has the capacity to engage the whole dental team so that dentists and their wider team will be in a position to promote and share new ways of working.

## **e) Options for Contract reform, within current regulations**

The aim is to explore options to develop, test and refine a contract reform approach that mirrors the positive change witnessed in the 2 prototype practices in order to expand the experience and impact within more practices and health boards.

Contract reform will:

- be influenced by learning from the prototypes and pilots;
- promote positive change and improvement;
- offer new ways of working to more practices in a safe controlled and measured approach;
- allow evaluation of impact;
- allow development of need and outcome measures; and
- support risk identification and management.

The components of dental contracting that can be measured and weighted in a blended approach include:

- the total contract value (i.e. resources available);
- the unique number of patients attending (capitation);
- the complexity of a patient's medical and dental clinical findings (need and risk);
- the preventive intervention and the volume and complexity of treatment provided (activity);
- adherence to care pathways and quality of treatment provided (evidence informed practice and quality); and
- impact of service (outcomes) on patients, dental teams and health boards.

Measures of each of these components of a dental contract can replace UDAs in a menu of contracting options. Routinely available and newly developed measures will give options for contract reform that can be tested and reduce risk of 'getting what you measure' i.e. UDAs.

For example:

- a percentage reduction in UDAs for a given total contract value can be substituted by other measures to encourage a change in care delivery;
- practices may have a portion of their existing contract value rebased from UDAs to patient numbers to increase access and rebalance the tendency to see well patients too frequently; and
- ground rules must apply, such as no decrease in total number of patient seen.

This approach can also be used to release clinical team time without additional investment e.g. rebase 10% of a practices UDAs to release one session in a 10 session week. This clinical time can then be directed to agreed activities such as offering open access to new patients without financial or UDA penalty to the practice or health board. A health board can also uplift a contract by 10%, not assign UDAs to 'the new' and additional session and specify service required by using other measures.

Another example would be to 'cost' a pathway of care such as a child with 'low risk and no clinical need' who would require an examination and follow up prevention and fluoride varnish application. This currently attracts 2 x band 1 treatment (i.e. 2 UDAs) and requires the dentist to do two examinations and claim two courses of treatment. Therefore the current cost per annum is understood. In contract reform the practice would receive an agreed income for a given number of such care pathways in a given year. Therefore they can make use of the skills of the dental team, assuming the risk profile does not change (and DCP can confirm this), to provide the 6 month follow up preventive advice and fluoride varnish application appointment. The dentist will not need to repeat a second unnecessary examination (in a low risk patient) in order to claim a second UDA as the funding would have been allocated to the practice for the annual care pathway delivery. This will facilitate better use of skill mix within teams and free up dentist time that could be directed to new patient access and/or more complex cases.

### **Some worked examples**

A practice's total contract value is £100,000 with a UDA value of £25 (that is 4000 UDAs) and say the practice currently has 1500 patients in a 24 month period.

**Example 1:** 90% of UDAs 3600 becomes target for whole contract instead of 4000. TCV remains same at £100,000. 10% - one session free of UDAs.

That means a practice can offer new access/time to higher needs patients without penalty but patient numbers must not fall below 1500 and will be expected to increase. The 400 UDAs the practice would previously have generated, perhaps with 6 month check ups, are not now required. Therefore, the time released from that can be used on new patients. Of course existing patients on 6 month check ups will need to be counselled to come at 9 or better still 12 months as appropriate to their needs not demands. As need and risk measures will also be in place the opportunity to do this will be known and understood by the health board. If the practice is in a very high need area then perhaps no increase in access would be expected. The practice would have 10% more time to care for higher need patients

**Example 2:** 5% of total contract value is £5,000  
10% relates to one session per week of clinical team time released.

The sum could be used as payment for sessional time for a dentist to attend cluster / contract reform events. A practice could offer one open access session per week and, for example, see the veterans and armed forces families on Anglesey. They could deliver what is needed without an eye on how many UDAs are being generated that may previously have influenced clinical decision making. To do this would also require the remaining UDAs to cover the existing practice list of patients. In other words intervals will again need to be pushed from

6-9 months to one year for those patients with no need/low risk as appropriate. Given that 65% children are now decay free at 5 there is opportunity for change in many practices. Health boards can increase a total contract value by 10% within current regulations so this sessional time approach could also be used to expand well performing practices to offer particular projects.

**Example 3:** 200 UDAs @ £25 are released.

The sum could be used to allow 100 patients to be seen in a year if a care pathway is known to cost £50.00 per annum to deliver. Then 200 UDAs x £25 = £5000. Therefore 100 care pathways @ £50 to be delivered to specified standard.

There are a number of options and ways to administer this without having to invest additional resources. The health board would reconcile the UDAs in contract reform practices via the current Payments on Line system in collaboration with NHS BSA as part of our Service Level Agreement with them.

Annex 2 includes further detail of the potential impact, benefits and risk of contract reform/change.

## **6. Priority 3: Increased Connectivity Implement e-referrals**

An NHS e-mail connectivity project was established in 2011 in collaboration with NHS Wales Informatics Service (NWIS) to increase connectivity in dentistry. One of the aims was to develop, and implement, an e-referral system for dentistry across Wales. However progress has been slow. Although 80% of dental practices in Wales now have NHS.uk email address they are not making use of the system. There are a number of reasons for this including the complex process required by practices to connect to the NHS system on every occasion it is used.

In Wales referrals from dentists to secondary care, and other specialist providers remain paper based. It had been envisaged that email connectivity would facilitate e-referrals in dentistry. However, a proof of concept of e-referrals involving only 4 practices has not yet been tested. Given that 4 years and considerable resources have already been invested there is a need to pause, reflect and make progress. Elsewhere in the UK e-referrals are facilitated via an interactive web site system. The Chief Dental Officer in Wales was involved in its development and implementation.

### **Why are e-referrals needed in dentistry?**

We know:

- there are issues with the quality and appropriateness of some referrals;
- e-referral is secure and underpinned by sound information governance systems;

- some dentists are referring care that should be delivered within primary care dental services;
- there is pressure on secondary care services and a lack of information on need;
- there is recognition that many patients could be seen safely, effectively and promptly in a primary care with a shift of specialist led care to primary care settings;
- dentistry needs to engage with wider NWIS systems; and
- better data capture and reporting of referrals will support need assessments and intelligence on referral flows will inform health board planning to support evidence informed decision making.

### **An effective e-referral service in Greater Manchester**

Over a three year period from 2009, Greater Manchester developed, tested, and improved an online referral system. It now covers a population size similar to Wales and has been operating successfully for 5 years.

- The provider has engaged with NHS Digital and others to ensure compliance including the linkage to NHS numbers and other Spine services.
- It involves an interactive website accepted and used by more than 500 dental practices in Greater Manchester.
- Covers all dental specialties and has been adopted by other areas of England.

This established and functioning website and referral system:

- offers a fully integrated directory of services, provider finder and patient information;
- respects patient choice and can be adapted immediately;
- has fully interactive dashboards for health board managers and other stakeholders.
- resulted in a significant increase in referral quality – full medical histories, radiographs now included to support specialist decision making;
- has the capacity to process all expected referrals per month;
- offers online training and intuitive packages that deliver in surgery training; and
- has capability to share images and radiographs (X-rays) via a picture archiving and communication system (PACS) solution.

Many referral systems fail due to poor imaging quality which means that some patients need to be exposed to repeat X-rays in the specialist centre. The PACS solution, used by Greater Manchester and which will be available for Wales, brings real benefits to patients and providers:

- it enables 'see and treat' appointments to be booked with confidence;
- radiographs taken in hospital can be shared with providers in primary care;
- 3D imaging and integrated reporting solutions enable treatment planning in primary care in advance of the patient's appointment; and
- orthodontic radiographs can be shared between providers, referrers and hospital.



The PACS system is integrated into the referral management process for providers, referrers and triage team. The system could also be available for integration with Cardiff Dental Hospital; who offer an all-Wales service for some dental specialties.

Wales can adopt and adapt this system by working in partnership with Greater Manchester provider and dovetailing this system, that works for dentistry, into the NWIS architecture. A clinical advisory group would need to be convened for Wales to assist in the design of proforma and implementation of the system. Members need to be Consultants or Specialists registered with the General Dental Council or General Medical Council and be based and delivering clinical care in Wales.

### **Technical Information**

The online service is hosted in a N3 approved facility with 99.9% uptime. Any maintenance is scheduled out of hours facilitating constant access to the system. The system employs a strong two factor authentication to enable access for dentists (NHS and private) and has access to NHS numbers via the spine for demographic reporting. The provider has also developed a unique PReSS system providing discharge letters, patient self-care advice and assists clinical service contract managers to understand the entire patient journey from referral to discharge.

Referral management data is anonymised and sent to an interactive dashboard so that service contract managers (health boards) can access real time data on volume, complexity and type of referral by dental provider and individual clinician. This supports service planning and training needs identification. Triage can be used to ensure consistency of decision making and GIS (geographic information system) module can plot referral to street level allowing equity audits. These data also support needs assessment and service planning.

The Dental Imaging Exchange (PACS) is unique and this is the only provider employing such a system. FDS supported by Greater Manchester Consultant in Dental Public Health procured and developed a PACS system specifically designed for dentistry. It is a cloud based solution that enables high quality image interchange between primary care, secondary care and community services. Based on DICOM and HL-7 standards the system enables radiographs, clinical images and 3D scans (including cone beams) to be shared between clinicians no matter what their setting. This will be particularly useful in Wales given the geography and distances some patients have to travel to appointments.

### **How can this be adapted for implementation in Wales?**

Welsh Government approves the adoption and adaptation of this unique system. It is necessary that NWIS engage with the FDS team as a collaborative partner. FDS will build the website and will be supported to establish the concept in Wales via a set contract term. Welsh Government requires that a bespoke website and 'mirror' of FDS Greater Manchester approach and system is developed for Wales. There is considerable work to undertake with health boards, primary dental care, specialist

providers and hospital consultants which Public Health Wales Consultants in Dental Public Health will lead on. It is therefore worth considering a development period.

The system will need to integrate with the NWIS platform and dovetail to existing national NIWS structures and processes in Wales, while offering a workable solution (soon) for dentistry. A period of one year would provide time and space to socialise the scheme and allow production of a detailed service specification that would take account of technical details required by NWIS. This solution would allow dentistry to engage and make progress in adopting an electronic referral management process health board by health board - it has been promised for some time - ahead of any procurement.

The bespoke interactive website, branded as per NHS Wales/NWIS requirements, could be built within 2 months and implementation could be rolled out during 2017-18 beginning with two health boards in April 2017 and extending to all seven by 2018.

### **What are the likely costs?**

The costs of building and testing using learning from existing systems and templates can be met from within the dental contract budget.

A number of health boards have clinical triage in place. This clinical time could be substituted into the new system without additional cost pressures. Given that implementing the system reduces inappropriate referrals by approximately 30%, health boards should be able to manage modest on-going costs within their existing dental budgets, and the majority will make a saving from year 1. A number of health boards are also sitting on unspent ring-fenced dental resources.

### **What are the next steps?**

- Scope what sort of interface is needed to work with the various components of the National Architecture. NWIS agreement to work and collaborate as a partner with FDS. FDS to build interactive website.
- The establishment of a clinical advisory group and a national steering group will be required.
- Public Health Wales have appointed a locum Consultant in Dental Public Health (Jan-June 2017) and this e-referral project will be a lead area for that individual to work in conjunction with Welsh Government.
- NWIS to work with FDS to dovetail system into Wales established WAP/ WCCG (Welsh Administration Portal/Welsh Clinical Communications Gateway).

# In Wales, in one year, because of dental problems

Among  
5-year  
old  
children

3196  
  
Had cried and  
were upset

1074  
  
Had lost sleep

1365  
  
Were unable  
to eat



826  
  
Had time off  
school



7908  
Children  
had General  
Anaesthetic



Parents  
took 19,770  
days off  
work

To have  
dental  
treatment



To look after  
children for dental  
General  
Anaesthetics

# Mouth Cancer

ICD10 codes C00-C06 and C10



GIG  
CYMRU  
NHS  
WALES

Iechyd Cyhoeddus  
Cymru  
Public Health  
Wales

The latest Welsh statistics

Mouth Cancer Action Month  
November 2016

Find out more about Welsh cancer statistics at  
[www.wcisuwales.nhs.uk](http://www.wcisuwales.nhs.uk)

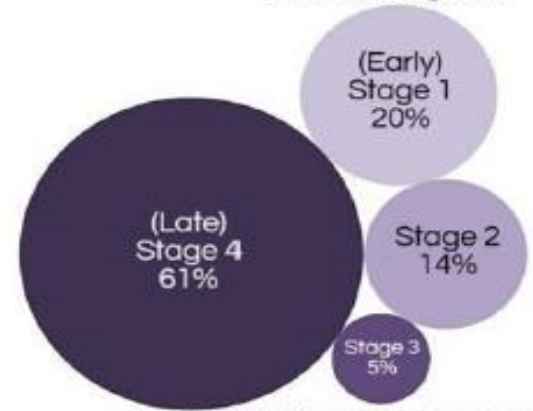
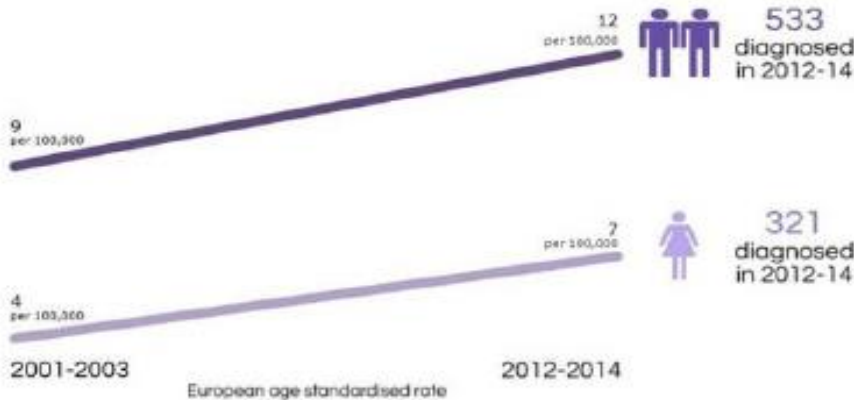
Uned Gwybodaeth a Gwylidwriaeth  
Cancer Cymru

Welsh Cancer Intelligence  
and Surveillance Unit

Produced in collaboration with the  
Dental Public Health Team

## IS MOUTH CANCER INCREASING?

Most people have late stage  
cancer at diagnosis



\*2012-2014 data, excluding unknown stage

## TACKLING RISK FACTORS



smoking is the main risk factor  
for mouth cancer in Wales

Get NHS support at [www.stopsmokingwales.com](http://www.stopsmokingwales.com)  
0800 085 2219

## OTHER RISK FACTORS



Smokeless  
tobacco and/or  
betel nut



Alcohol

HPV

Human  
papilloma  
virus



Poor diet

## IS SURVIVAL IMPROVING?

One year  
survival  
improving

81%

of people diagnosed in  
2009-2013

Five year  
survival  
hardly changing

55%

of people diagnosed in  
2005-2009

76%  
of people diagnosed in  
2000-2004

56%  
of people diagnosed in  
1996-2000

## SIGNS & SYMPTOMS

- Unexplained lump or swelling
- Unexplained red or red & white patches
- Ulcer or soreness that does not heal within 3 weeks
- Loose teeth with no history of gum disease
- Not healing after tooth extraction
- Persistent numbness in the mouth
- Pain & difficulty swallowing

**A dentist or doctor can carry out a full mouth and neck examination and make an urgent referral if necessary**

Source: Welsh Cancer Intelligence and Surveillance Unit's National Cancer Registry [www.wcisuwales.nhs.uk](http://www.wcisuwales.nhs.uk) for incidence and survival data  
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### **Potential impact of change**

- Increase and/or change in the numbers of patients attending for a given total contract value that is moderated by need and complexity.
- Delivery of agreed care pathways that describe in detail what treatment and preventive activity is expected to be delivered. The annual cost of a pathway can be calculated depending on need and complexity and on the use or not of dental team skill mix – particularly true for the no need/low risk group.
- Change to the service releasing efficiencies directed to more access for a given total contract value.
- Changes in treatment activity to allow staging of care that promotes prevention, stability and self-care to improve outcomes particularly in higher needs disease active patients.
- Decrease in treatments of limited value undertaken solely to generate UDAs.

### **Benefits of contract reform**

- Increase and/or change in the numbers of patients offering improved access, flexibility and dental team understanding of practice population need.
- Two prototype practices can continue to thrive and test a fully capitated system where patients, clinical teams and health boards are positive about new ways of working. They are perfectly placed to test any new measures before roll out, and to use learning from previous piloting in Wales.
- Patient Charge Revenue is maintained due to increased access off-setting less frequent visits. There is a potential risk if new patients include a higher proportion from groups exempt from paying for dental care. However, the step approach to contract reform, the current position whereby health boards continue to exceed their patient revenue targets, and the flexibility in setting the targets, helps offset this risk and allows time for further consideration on the possible future impact.
- Enhanced clinical dental practice and preventive focus to improve clinical effectiveness, patient outcomes and use of whole team in prevention – aligned with the learning from D2S.
- Use of care pathways improves quality of care and joint working with the Community Dental Service and secondary care hospital dental services.
- Informed patients with improved self care and appropriate check up intervals.
- Academic partnership strengthened and integrated through associated National Institute for Health Research (NIHR) application.

### **Risk of not proceeding with contract reform:**

- Stagnation in access to NHS dentistry continues or situation worsens.
- Recruitment and procurement challenges increase in health boards and dental resource not utilised for intended and needed purpose.

- Ineffective use of resources to meet UDA targets.
- Demotivated dentists leave NHS and push private offer that many patients cannot afford denying access to dental care for many in population.
- Former pilot practices in Wales reduce preventive focus, are no longer motivated and voice dissatisfaction overtly.
- Adverse media reports damaging reputation.
- Dental neglect and oral health deteriorates for those unable to access timely preventive care placing pressure on secondary and out of hours urgent/emergency services.
- Health board contracting teams not engaging and continuing to monitor UDA targets in isolation to drive down value below safe level without understanding impact.
- Dental representatives including the British Dental Association and Welsh Dental Committee become vocal critics rather than engaged and supportive professionals.

### **Proceeding with contract reform:**

The ethos of this proposal is to make sure that the drivers in the system are fair and balanced. It will:

- rely on close collaboration at a local level between dental contracting teams, Consultants in Dental Public Health and clinicians;
- allow more dentists to open access to NHS dentistry;
- offer a structured approach for health boards;
- remove the threat of contractual claw back when a team is doing the right thing well;
- facilitate increased use of skill mix, allowing clinical teams to look after the health of patients according to need. For example, to manage periodontal disease appropriately and encourage self care; and
- allow clinicians to take a patient on a 'journey'. For example, provide staging of care, allowing timely intervention to address active disease and decay and/or replacement of fillings within a care pathway.

Contract reform must demonstrate making more effective and efficient use of available resources so that health boards are assured that people who most need active and complex treatment can get it, and that existing activity measures will continue to be reported and benchmarked. Academic and research partners are already linked and a National Institute for Health Research proposal bid has been drafted to support robust evaluation and reporting.

Change and improvement can be challenging and difficult but these options are about making progress now in a stepped approach to reform. Dentists and contracting teams are ready and asking for change. They can embrace this at a pace that enables timely local progress and supports transformational change by building on success. It will be facilitated and underpinned by peer support, dental

public health and clinical leadership capacity building. A project plan is being developed following tacit approval to proceed.

Contract reform milestones and a timetable have been drafted. The first action learning set was convened in January 2017.

Phase 1: First two months - Engagement events with health boards, dental practitioners and Public Health Wales. Develop: project monitoring document; professional forum; SLA with health boards; guidance for health boards.

Phase 2: April-September 2017 – Training programme for dental teams; handbook for health boards; soft launch in 10 practices.

Phase 3 September 2017-March 2018 – Wales-wide promotion events; expansion of programme.