Health, Social Care and Sports Committee, National Assembly for Wales

Call for Evidence: One Day Inquiry on Dentistry in Wales

Public Health Wales welcomes the opportunity to contribute to the Committee's inquiry on Dentistry in Wales. Oral health is an important part of overall health and well-being. Tooth decay and 'gum diseases' (periodontal diseases) are highly prevalent but potentially preventable conditions. Relentless focus on prevention through services and public health programmes, together with a greater focus on the wider determinants of health, is required to reduce the burden of dental diseases in Wales.

Despite consistent improvements in the oral health of children in Wales, around 7,000 children per year still undergo dental extractions under general anaesthesia as a result of tooth decay. This situation highlights the need for further and continuing efforts to reduce sugar consumption, more effective prevention in the community and primary dental care to reduce true demand for dental general anaesthesia. It also highlights the need to develop appropriate care pathways and a broader range of dental services such as conscious sedation services to reduce unnecessary use of general anaesthesia in dentistry.

We have structured our response in line with the Terms of Reference (TOR) of the inquiry.

1. NHS General Dental Service (GDS) Reform Programme (also known as Dental Contract Reform)

1.1. In 2017 Welsh Government published *Taking oral health improvement and dental services forward in Wales*. This document highlighted that NHS GDS dental contract reform was one of three national priorities for dental care in Wales. More recently, an oral health policy document was published, *The Oral Health and Dental Services' response, A Healthier Wales: Our plan for health and social care* which re-iterated Welsh Government's commitment to the NHS GDS reform programme.

1.2. Why is NHS General Dental Service reform needed?

1.2.1. The limitations and challenges of the current NHS GDS system in Wales are well known. The current contract requires the delivery of Units of Dental Activity (UDAs), as proxy for counting dental treatments. Current system provides no incentives for dental teams to deliver preventive care or to take on patients with high needs. The remuneration for providing ten or more fillings is the same as the remuneration for providing a single filling. Tooth decay and 'gum diseases' (periodontal diseases) are highly prevalent, but potentially preventable, chronic conditions. Focussing on treatment of diseases without prevention is an inefficient use of NHS resources. Dental services should adopt the principles of chronic disease management with emphasis on person-centred, co-ordinated care and supporting patient self-management through a co-production approach. Health Boards also need to evolve in terms of how they monitor and performance manage dental contracts, with a greater focus on markers of quality dental care (including prevention) and patient outcomes.

1.2.2. There should also be consideration of how to allocate dental resources in order to provide care for individuals and groups with the greatest dental need. A substantial proportion of NHS GDS resources are spent providing routine 'check-ups' every 6-9 months for patients who are at low risk of dental disease. Currently dentally 'healthy' patients are advised to attend for a 'check-up' every 6 months, while many people who need and want dental care cannot access it. This is an example of the Inverse Care Law in action and arises because current NHS GDS arrangements do not incentivise the provision of dental care to high need patients. This has implications for all ages including the future generations of Wales. In 2016/17, 15.5% of 12 year olds in Wales had active tooth decay. Without prevention and access to effective treatment, these children are at risk of becoming a generation of young people whose oral health, quality of life, and possibly economic productivity are negatively impacted by dental disease. Changes in the GDS need to focus on reducing the inequity in 'dental access' across socio-economic groups and to incentivise dental providers to prioritise and provide quality care for high need patients.

1.2.3. The most prudent use of public healthcare resources requires the full utilisation of the skills of all members of the dental team, and not rely on dentists to provide all preventive care and treatment. It is important to learn from international experience as well as national initiatives that have made better use of 'skill-mix'[1] as we reform the GDS in Wales. Many countries have utilised skills of dental therapists to provide dental care to children and such model of care has had positive impact in increasing access to a large number of children and in reducing amount of untreated tooth decay in children.[2]

[1] Skill-mix' is a term that is used within dentistry to describe a model of care where the whole of the clinical team is fully utilised in delivering dental care.
[2] Nash et. al. (2014). A review of the global literature on dental therapists, Community Dentistry Oral Epidemiology, 42;1-10.

1.3. Public Health Wales and the NHS GDS Reform Programme

1.3.1. Public Health Wales (PHW) provides dental public health expertise to Welsh Government, health boards and other key stakeholders in Wales. Public Health Wales' Dental Public Health team hosts the NHS GDS Reform Programme. We are working closely with the Welsh Government (Dental Policy), dental services (teams), health boards and other stakeholders to develop a NHS GDS Reform Programme. A multi-stakeholder steering group has been established to ensure programme development and improvement is informed by a pooled expertise from multiple oral health stakeholders.

1.3.2. The current objectives of the NHS GDS Dental Reform Programme are to:

I. Involve key dental stakeholders to develop a NHS GDS Dental Reform Programme and adopt a continual improvement model.

II. Ensure dental services undertake an assessment of the oral health risks and needs of individual patients at least once a year using a standardised toolkit and utilise the information to:
   a. Understand what matters to patients
   b. Effectively communicate level of risk and need to patients (or their carers) and work with patients in making them understand changes they can make to prevent dental diseases
   c. Agree on the oral health outcomes patients want to achieve over a period of time or after a course of dental care.
   d. Utilise the principles of shared decision making in formulating a preventive dental care plan
   e. Monitor changes in the 'risk and need' of patients who receive ongoing care from the service.

III. Improve the delivery of evidence-based prevention and treatment.

IV. Support the implementation of dental recalls intervals based on oral health risk and need

V. Increase the use of skill-mix in NHS General Dental Services in Wales

VI. Encourage clinical teams to develop a culture of continuous quality improvement to ensure enhanced patient quality and safety.

VII. Encourage dental teams to establish productive working relationships with other primary and social care services

VIII. Evaluate and understand the changes in key activities, outcomes, and establish quality indicators to inform ongoing improvement of NHS GDS and development of primary dental care.

IX. Understand the changes that are required to reduce inequity in dental care use, and improve dental access amongst individuals who have high dental need but currently cannot /do not access dental care

X. Inform any changes required in the national dental contracts, associated legislations and other relevant programmes (e.g. workforce training and planning) or systems in place to facilitate ongoing quality improvement.

1.4. One of the lessons learned from the introduction of the current NHS GDS Contract in April 2006 is that wholesale 'big bang' national changes often have unforeseen adverse consequences, many of which only become apparent in the years following the change, as new patterns of working become embedded in the system. There is a history of wholesale changes in the GDS, many of which have had unanticipated negative sequelae including impact on access and/or type of treatments provided. It is important for the NHS GDS Reform Programme in Wales to be given sufficient time to test, evaluate changes and understand their impact on different, interconnected elements of the system.

2. How 'clawback money' from health boards is being used

2.1. Under the current NHS GDS system, dental contract holders are given total annual contract value in twelve instalments and in return are required to deliver their contracted annual Units of Dental Activity (UDAs) targets. As a general rule, practices will have to deliver at least 95% of their contracted annual UDAs target to avoid 'claw back

of money'. There are multiple reasons why dental practices fail to deliver their contracted annual UDA targets. Delivery of UDA target does not mean good access and/or good quality care. We have already highlighted limitations of the current UDA based system in the previous section and why we need to move away from total focus on delivery of UDAs.

2.2. Instead of looking at 'clawback money' from dental practices in isolation, it is important to analyse and interpret the overall primary dental care budget made available, actual expenditure, trends in spending over the years and trends in the level and equity of dental access. It is also important to understand what happens to dental underspend/'claw back money' and if any General Dental Services funding has been used to develop other dental services especially intermediate and specialist dental services in primary care.

3. Issues with the training, recruitment and retention of dentists in Wales

3.1. The development and ongoing improvement of NHS GDS cannot be considered in isolation without comprehensive dental workforce planning. The national NHS GDS Reform Programme and local integrated dental service planning within health boards need to be closely aligned with planning and training the dental workforce.

3.2. Difficulty in recruiting and retaining dentists able to provide high quality care is a problem for dental providers in some areas of Wales, especially in remote and rural communities. This has a negative impact on access to dental services in these areas. These difficulties are expected to be made more intense if the arrangements following Britain's departure from the European Union limit the inward migration of dentists from these areas. In 2017, there were 6,689 European Economic Area (EEA) qualified dentists registered in the UK General Dental Council. In 2012, EEA

graduates accounted for 15% of dentists in Wales but a substantially higher proportion in Powys and Hywel Dda.[3]

3.3. We know a significant proportion of the prevention and treatment activities[4] currently provided by dentists, especially those for children, could be delivered by the wider dental workforce, collectively known as Dental Care Professionals (DCPs). Current dental contractual arrangements and associated legislations restrict and/or discourage full use of the dental skill-mix, especially relating to dental therapists.

3.4. Some Community Dental Services (CDS) and GDS providers have successfully tested greater utilisation of dental therapists in Wales. The Designed to Smile national child oral health improvement programme delivered by the Community Dental Services also uses the additional skills of dental nurses in to provide preventive treatment. There is a huge potential for the utilisation of the additional skills of dental nurses, hygienists and therapists in dental services in Wales which should help to increase access to prevention and dental care. There is some evidence that practices with dental therapist provide a more preventive-focused approach to oral health-care delivery, with dentists left to complete more complex work, and that patients are equally happy after seeing a dentist or dental therapist.[5]

3.5. In parallel with the contractual and legislative changes needed to remove the barriers preventing the full use of 'skill-mix' in the GDS, there also needs to be a plan to train greater numbers of highly skilled DCPs in Wales. NHS Wales and bodies responsible for education also need to ensure access to additional skills training for

[3] National Leadership and Innovation Agency for Healthcare, An analysis of the dental workforce in Wales, 2012
[4] General Dental Council, Scope of Practice, September 2013.
[5] Barnes *et.al*. (2018), General Dental Practices with and without a dental therapist: a survey of appointment activities and patient satisfaction with care, The British Dental Journal, 225;53-58.

existing DCP workforce in line with the planned changes in the GDS and CDS. There is also an ongoing need to communicate with patients and the public about the role of DCPs in the dental team, particularly as their skills are utilised more widely within the dental system.

3.6. Health boards will need to be innovative when planning dental care for their local population, especially in rural areas. Some health boards have tested a model of salaried practitioners in areas where they have been unable to attract GDS providers. Additional incentives may be required to recruit and retain dentists and DCPs in those parts of Wales where dental services need to be developed and/or where recruitment and retention has been an issue. Measures should be explored to attract more local students to the dental training courses in Wales and retain them following undergraduate and postgraduate training.

3.7. There is also need for workforce planning for specialist dentists and dentist with enhanced skills (DES). Availability of funding for the training of specialist dentists and DES should be aligned with local and national dental workforce planning. This workforce planning needs to include the recruitment and retention of locally trained highly competent specialists. The changing population (older adults with complex dental and medical needs) means that the specialist workforce also needs to work together within a team using the skill-mix model.

3.8. There is also need for specialist and consultant-led services currently delivered from secondary care settings, to work more closely with primary dental care, so that patients receive seamless care when they require services from both general dental practices and specialists/consultants in secondary care. The recruitment (and training) of specialist dentists in certain dental specialties needs to be considered a high priority. We understand that there are currently

unfilled posts in key roles (eg. Consultant in Restorative Dentistry in Betsi Cadwaladr University Health Board, Specialist in Paediatric Dentistry in Aneurin Bevan Health Board).

4. The provision of orthodontic services

4.1. It is important to consider provision and utilisation of intermediate and specialist/consultant dental services (including orthodontics) alongside the provision of urgent and routine general dental care available for the population of Wales. Consideration of the whole dental system and integrated planning at local, regional and national level is important to avoid fragmented dental speciality specific planning and provision.

4.2. In a resource limited system, prioritisation is a reality, and integrated planning is important to improve value of dental care.

4.3. Some of the questions to consider are:

4.3.1. What is the level of access to urgent dental care (including Out of Hours) and routine general dental care for children and adults including for those with dental anxiety and phobia?

4.3.2. What is the variation in level of dental access for urgent and routine dental care) across socio-economic groups and vulnerable groups in the society (the Inverse Care Law)?

4.3.3. What is the provision of intermediate (provided by dentists with enhanced skills in different clinical specialities) and specialist dental services (e.g. paediatric dentistry, endodontics, periodontics, prosthodontics, orthodontics, oral medicine, oral surgery etc) in each heath board and does it meet the need of the population?

4.3.4. What are the trends in service utilisation (primary and specialist care) in each health board?

4.3.5. What outcomes (patient reported and clinical) do dental services achieve for the patient population they serve and

what is the variation in patient outcomes between health boards?

4.4. The majority of NHS orthodontic treatment is provided to 12-17 year old children. Assessment of need and the provision of orthodontic services should be considered as part of the overall dental services planning, and within the context of high prevalence of untreated active tooth decay in the child population in Wales. In 2016/17, almost 30% of 12 year olds had at least one permanent tooth that was decayed, missing (extracted due to tooth decay) or filled, which indicates missed opportunities for prevention or dental care. Access to effective prevention and remedial dental care for these children should be prioritised.

4.5. The orthodontic speciality has well understood evidence-based acceptance criteria for NHS orthodontic treatment (based on Index of Orthodontic Treatment Need) and agreed standards in treatment outcomes. Various factors impact on the waiting time for orthodontic treatment e.g. treatment of mild malocclusion (i.e those who do not qualify for the NHS orthodontic treatment), inappropriate and misdirected referrals, referral of a child to multiple orthodontic service providers, repeat orthodontic treatments, transfer of orthodontic care in middle of treatment from one practice to another practice etc. Local waiting times for orthodontic treatment in primary care are also dependent on referral acceptance criteria of both primary care-based orthodontic services and consultant-led services delivered through hospital settings.

4.6. Currently primary care-based orthodontic services are not able or do not provide reliable information on:

- number of patients waiting for assessment ,
- number of children who have been assessed, qualify for NHS treatment and motivated to undergo long orthodontic treatment,

- referral to assessment waiting times and
- assessment to ‘treatment start’ waiting times.
- reasons for incomplete/abandoned courses of orthodontic treatments

4.7. It is important for General Dental Practitioners to have access to the information outlined above so that they can have an informed discussion with parents (and children) regarding waiting time variation between service providers, alongside information on current oral health status, NHS treatment eligibility criteria, risks and benefits of orthodontic treatment, availability of local orthodontic services, and travelling time involved.

4.8. A recent study carried out in South East Wales found that primary care-based specialist orthodontic services in the area overall achieved good clinical outcomes. However, 4% of the patients in the study sample who received orthodontic treatment should not have received NHS orthodontic treatment based on NHS orthodontic treatment criteria. Some children go through a second course of treatment while others are waiting for the first course of treatment.

4.9. The system should not have to rely on ad hoc audits/studies to understand the outcomes achieved by dental services. Collection of information on treatment outcomes (clinical and patient-reported) should be integrated into the existing information system. Claim forms submitted by NHS orthodontic services could be modified to collect information on the clinical outcomes achieved by the service providers.

4.10. An E-referral system for dentistry has been funded by the Welsh Government and has recently been procured by the NHS Wales Informatics Service (NWIS). When health boards fully implement the E-referral system, it is expected that it will help health boards will

have information to improve on many challenges outlined above. The E-referral information system should be designed to provide reliable information to parents/patients, referring practitioners, specialist service providers. The data generated through this system could also be analysed to understand equity in use of specialist dental services, patient experience, outcomes, and identify potential areas improvement for each service/health board.

4.11. National orthodontic contract changes and outcome focussed commissioning with emphasis on greater utilisation of skill-mix (e.g role of orthodontic therapists) will be required to improve value of orthodontic care. Workforce supply of orthodontic therapists needs to be considered as a part of wider dental workforce planning.

5. The effectiveness of local and national oral health improvement programmes for children and young people.

5.1. The Dental Surveillance Programme collects information on dental health of five and twelve year olds, as part of a regular cycle of dental surveys.[6] Whilst recent surveys have shown that dental health of children in Wales is improving (Fig 1 and 2), tooth decay is still highly prevalent. National survey results showed that 34% (2015/16) of five year olds and 29.6% (2016/17) of twelve year olds in Wales had experienced of tooth decay.[7]

[6] Results of these surveys can be obtained from http://www.cardiff.ac.uk/research/explore/research-units/welsh-oral-health-information-unit

[7] Experience of tooth decay = At least one tooth has obvious active tooth decay or has dental filling or is missing (extracted due to tooth decay)

Figure 1: Trend in experience of tooth decay in five year old (school year 1) children in Wales.

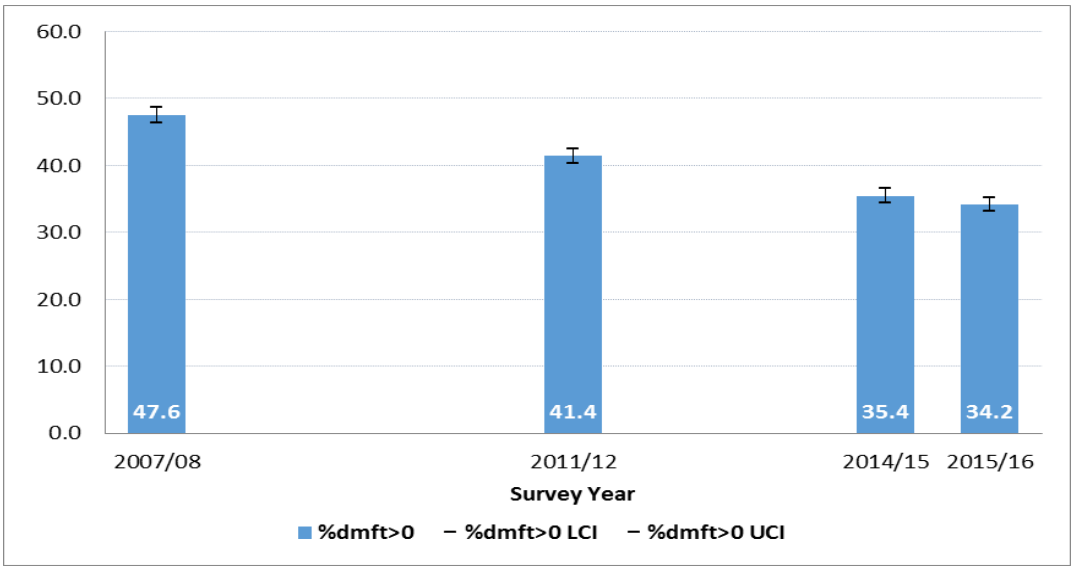
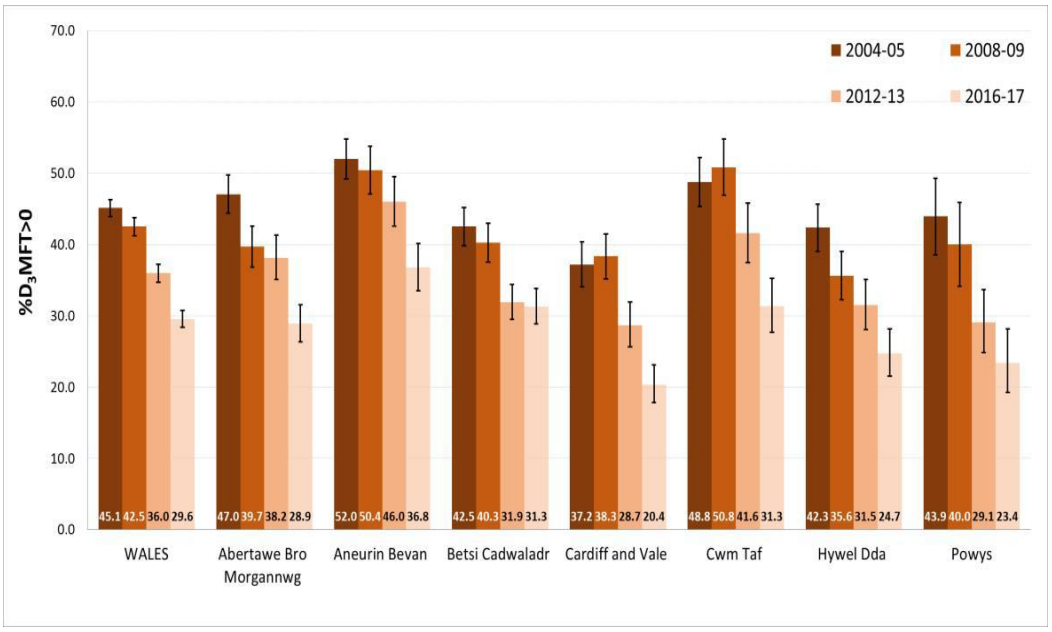


Figure 2: Trend in experience of tooth decay in 12 year old children in Wales.



5.2. Whilst the provision of evidence-based preventive interventions and dental care by dental professionals should form a central tenet of

GDS, without population-level public health interventions, it will be challenging to achieve large scale improvement in the oral health of the Welsh population.

5.3. Designed to Smile (D2S) is a national targeted child oral health improvement programme which delivers evidence based interventions to young children (0-5 years) in Wales. It is essentially a programme that brings children's teeth in contact with fluoride through supervised toothbrushing and application of high strength fluoride (fluoride varnish) in nursery and primary school settings in deprived areas in Wales. Data show that not only are children living in deprived areas more likely to have tooth decay, they are also least likely to regularly attend dental services.

5.4. The target population of Designed to Smile is these children. Designed to Smile provides a 'safety net' for these children by delivering evidence-based preventive interventions e.g. fluoride varnish applications out with traditional dental services settings to reduce dental health inequalities and reduce the effect of the Inverse Care Law.

5.5. Welsh Government has committed to the continuation of Designed to Smile programme (Oral Health and Dental Services' Response, A Healthier Wales) and Public Health Wales is fully supportive of continuation of the programme and will continue to provide Dental Pubic Health expertise to the programme. In the years since Designed to Smile was first piloted (national roll out in 2010/11), tooth decay in children living in deprived areas has declined for all quintiles of deprivation and inequality in prevalence of tooth decay has not widened. It is worth remembering that the benefits of public health interventions such as this will incrementally increase with its ongoing delivery. The impact of Designed to Smile on children's

dental health will continue to be monitored through planned dental surveillance programme.

5.6. A social gradient still persists in childhood tooth decay experience, with 42.2% of 5 year old children in the most deprived areas having decay, compared to 22.3% of 5 year old children in the most affluent areas. In 2013/14, 20.2% of three year old children in the most deprived quintiles already had tooth decay experience. These children from deprived areas are further disadvantaged due to their low access to dental services (of which there could be a number of barriers). The Designed to Smile budget has to remain ring-fenced and focussed on targeting children who are at high risk of tooth decay with provision of oral health promotion to all children through the health visiting service and other services/programmes targeted to the same population.

5.7. Tooth decay is also associated with social and commercial determinants of health. Hence, the success of preventive efforts delivered through dental services and oral health programmes like Designed to Smile is also dependent on social and commercial determinants of health. In simplistic terms, preventive efforts of dental services and Designed to Smile programme can be negated by high consumption of sugary diet and drinks (which also affects childhood obesity in Wales).

5.8. Improvement in dental health of children will also require a broad programme of measures to reduce sugar consumption in the population:

- lowering the amount of free sugars in food and drinks including through use of taxation and levies;
- restricting the marketing and promotion of sugar-containing products;

- reducing the amount of sugar-containing food and drinks sold;
- advising, educating and helping people to consume less sugar;
- reducing the amount of sugar produced

5.9. Health Boards, working with their Public Service Board and Regional Partnership Board partners, will need to ensure they have a comprehensive programme to reduce sugar consumption in their area. There should be some actions with urgency in this area, starting with commitment from the Public Service Board and Regional Partnership Board partners to ban/reduce sale of unhealthy high sugary drinks and food (including food high in salt and saturated fat) in their premises and adopting healthy food catering and healthy workplace policies.

5.10. There is evidence that sugar consumption is higher among people from more deprived communities in the UK. Reducing sugar consumption therefore has a key part to play in reducing oral health inequalities between different communities and population groups. Healthy food choices for those in food poverty are often restricted due to their higher cost and large number of promotions on high sugar foods. This leads to greater price differences between healthy and high sugar foods[8]. Governmental (Welsh Government and UK) policies and appropriate legislations will be required to reduce sugar consumption so that the average population intake of free sugars does not exceed 5% of total dietary energy for age groups from 2 years upwards as recommended by the Scientific Advisory Committee on Nutrition.

[8] British Association for the Study of Community Dentistry (BASCD) Position statement on recommended actions to reduce the consumption of free sugars and improve oral health.