National Assembly for Wales
Health and Social Care Committee
Inquiry into Orthodontic Services in Wales
Evidence from Cardiff and Vale University Health Board – OS 17

Cardiff and Vale University Health Board Response to the Short Inquiry Into Orthodontic Services In Wales (Health & Social Care Committee of the National Assembly for Wales) April 2014

The National Assembly for Wales' Health and Social Care Committee is undertaking a **short inquiry into orthodontic services in Wales**. The terms of reference are to inquire into the provision of appropriate orthodontic care in Wales including:

- Access for patients to appropriate orthodontic treatment, covering both primary and secondary care orthodontic services, and whether there is regional variation in access to orthodontic services across Wales.
- The effectiveness of working relationships between orthodontic practices and Local Health Boards in the management of local orthodontic provision, and the role of Managed Clinical Networks in helping to deliver more effective orthodontic services in Wales (e.g. effective planning and management, improvement in the appropriateness of referrals and performance management, workforce arrangements).
- Whether the current level of funding for orthodontic services is sustainable with spending pressures facing the NHS, including whether the current provision of orthodontic care is adequate, affordable and provides value for money.
- Whether orthodontic services is given sufficient priority within the Welsh Government's broader national oral health plan, including arrangements for monitoring standards of delivery and outcomes of care within the NHS and the independent sector.
- The impact of the dental contract on the provision of orthodontic care.

The following response has been collated from both Dental and Primary, Community & Intermediate Care (PCIC) Clinical Boards and relates to the 3 areas of provision: Primary care, Community Dental and Hospital Dental Services

Section 1 - Primary, Community & Intermediate Care (PCIC) Clinical Board

1. The PCIC Clinical Board of Cardiff & Vale UHB are responsible for commissioning Primary Care Dental Services, including Primary Care Specialist Orthodontic practices, which provide care for patients in Cardiff & Vale, Cwm Taf and some parts of Aneurin Bevan Health Boards. We work closely with the UHB's Clinical Board for Dentistry which provides Community & Hospital orthodontic services along with training of orthodontists and general dentists, and we are a core member of the South East Wales Managed Clinical Network for Orthodontics. The PCIC Clinical Board's views have been fed into the

response of the MCN but may not be distinct or in their fullest and so a separate response has been created to reflect our views.

2. The PCIC Clinical Board will respond to each of the five specific areas as outlined in the letter of 10th February 2014, from the Chair of the Committee (David Rees AM).

Access For Patients To Appropriate Orthodontic Treatment, Covering Both Primary And Secondary Care Orthodontic Services, And Whether There Is Regional Variation In Access To Orthodontic Services Across Wales.

3. Much of the access to primary care orthodontic services is based on historical location and practice resulting from the previous (pre-2006) contractual arrangements, whereby practices were allowed to set up and practice where they wished and where it was most economically advantageous to do so. Therefore, much of the NHS orthodontic treatment for South East Wales was centred on three very large specialist practices in Cardiff and this has continued with Cardiff & Vale UHB holding and managing the contracts for these three practices on behalf of all of the LHBs. There is no breakdown of 'allocations' per LHB as there is no geographical restriction on patients accessing the primary care specialist services.

4. The PCIC Clinical Board is closely involved in the work of the South East Wales Managed Clinical Network for Orthodontics to ensure that service provision and planning is appropriately managed and equitable across the area. The three MCNs communicate regularly as well as being part of the All-Wales Strategic Advisory Forum on Orthodontics to ensure we are not out of sync with the rest of Wales.

5. Cardiff & Vale UHB currently invests in excess of £4 million into primary care orthodontics which provides good access for all patients who fit the criteria for NHS treatment as outlined in the Index of Orthodontic Treatment Need (IOTN).

6. On the introduction of the new standardised Referral Form, the UHB worked with the Local Dental Committee in 2012 to train General Dental Practitioners on how to make a basic assessment of IOTN to help reduce inappropriate referrals into the specialist practices, the community dental service or the University Dental Hospital. This helps to give patients realistic expectations of what is and is not available.

The Effectiveness Of Working Relationships Between Orthodontic Practices And Local Health Boards In The Management Of Local Orthodontic Provision, And The Role Of Managed Clinical Networks In Helping To Deliver More Effective Orthodontic Services In Wales (e.g. Effective Planning And Management, Improvement In The Appropriateness Of Referrals And Performance Management, Workforce Arrangements).

7. Cardiff & Vale UHB have a strong and positive working relationship with all of the practices providing orthodontic treatment in our area. The three large specialist practices are supplemented by a smaller specialist contract attached to a General Dental Practice in the Vale of Glamorgan, intended to ensure more local provision in the central/western Vale area for those who may find it difficult to attend one of the Cardiff

practices. The UHB also makes use of some Dentists with Enhanced Skills (DwES) for a limited amount of less complex orthodontic work. The DwESs are General Dental Practitioners who have proven to senior clinicians that they are competent to carry out orthodontic treatment. DwES are particularly useful in much more rural areas, where it would be both impractical and undesirable to attempt to set up a specialist practice. This is not especially relevant for the Cardiff & Vale UHB area and so there are only four very small contracts for DwES in Orthodontics.

8. The provision of orthodontic treatment is via time-limited Personal Dental Services (PDS) agreements. At the outset of the new contractual arrangements in 2006, providers were awarded a three year PDS agreement (2006-2009). These were then renewed for a further three years (2009-2012). As there was agreement within the UHB that these contracts provided high quality specialist care and were good value for money within the current contracting model, it was agreed that the next renewal would be for five years (2012-2017), which brings Cardiff & Vale UHB in line with both NHS England and most other LHBs. These five year contracts allow practices to plan sensibly for income levels and treatment planning, as well as investment in technology and equipment. It also gives the UHB both stability for provision of services but also fixed term contracts to enable some ability to redesign services if necessary.

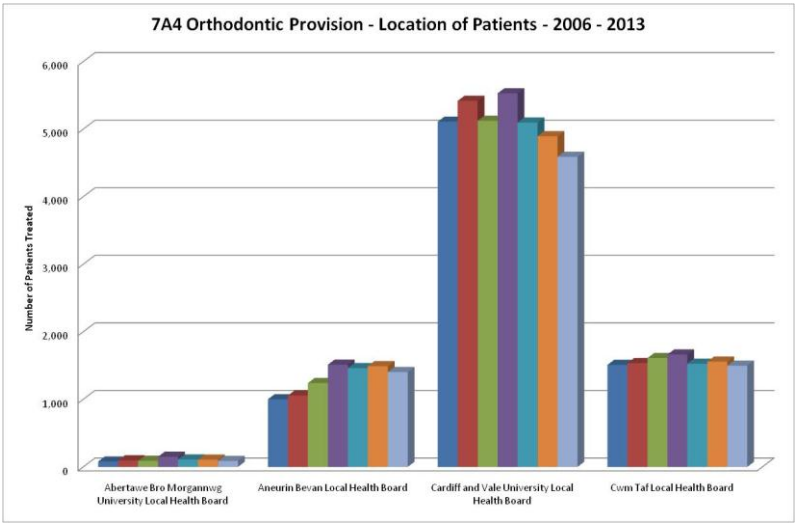
9. The contract model for orthodontics is not ideal for providing robust performance management and ensuring the best value for money for treatment provided. The concept of paying for a full two year's worth of treatment up-front to the provider makes it more difficult to ensure that the treatment is robustly provided and recorded through to completion. There are also issues with patients who move during their treatment. In these circumstances, the original provider is paid the full treatment fee (approx £1,500) and the new orthodontist who picks up the work is also paid a full treatment fee. The Welsh Government's Strategic Advisory Forum on Orthodontics is undertaking work to review the current contract model and suggest changes which could improve care and cost effectiveness.

10. In 2011 the Welsh Government issued guidance on improving the performance management of orthodontic contracts which looks at issues beyond simply the achievement of activity targets. This guidance now forms an appendix to all Cardiff & Vale UHB orthodontic agreements and is being used to start to performance manage the contracts in a much broader manner. Early signs are that they will help give a more nuanced approach to performance management of these contracts.

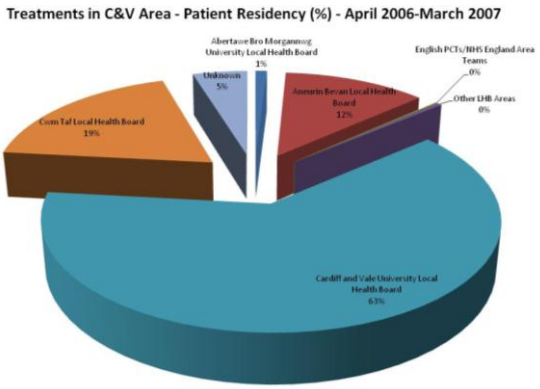
11. Since the creation of the SE Wales Managed Clinical Network for Orthodontics, much work has been achieved in terms of creating a standardised referral system (including criteria and paperwork), establishing an accreditation process for Dentists with Enhanced Skills (DwES), improvements in the ability to audit and monitor orthodontic treatment outcomes and discussions to bring recommendations on issues such as orthodontic appeal panels, and the transfer of orthodontic care.

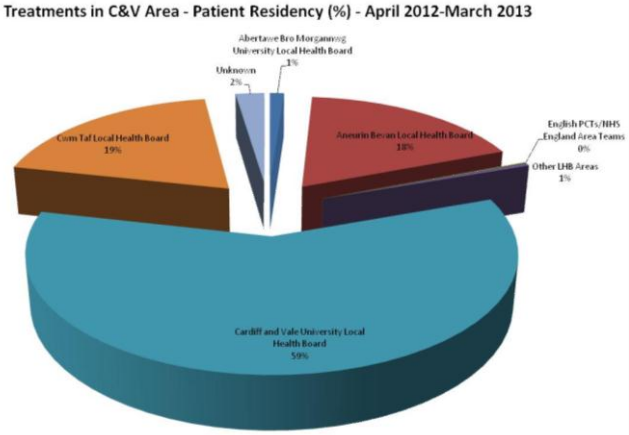
Whether The Current Level Of Funding For Orthodontic Services Is Sustainable With Spending Pressures Facing The NHS, Including Whether The Current Provision Of Orthodontic Care Is Adequate, Affordable And Provides Value For Money

12. With no specific intervention from any of the South East Wales LHBs, there has been little change in the proportion of patients seen at the three major orthodontic practices in Cardiff from each of the LHB areas. The three major practices in Cardiff are located with good access to road and public transport enabling patients within the surrounding LHB areas to access care.



13. Approximately five years ago, Cardiff & Vale UHB was requested by a neighbouring LHB to investigate the feasibility of relocating some of the finances to that LHB to provide orthodontic services more locally. It was decided that patients were better served by creating centres of excellence within primary care and that larger specialist practices were more appropriate than smaller, less competent mixed practices. Therefore, it was agreed to maintain the larger specialist practice contracts and to continue to monitor the percentage of patients per UHB area.

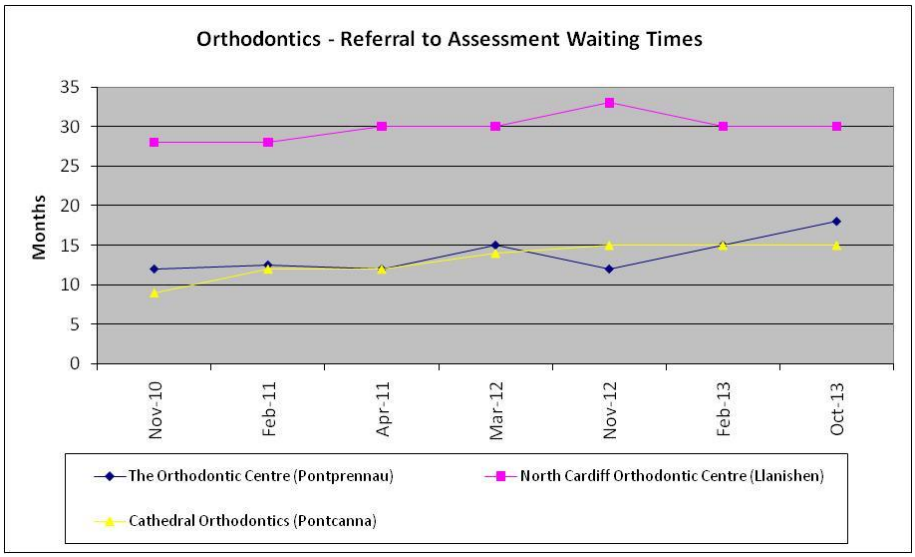




14. In terms of performance management, quality, effectiveness and referrals, the three large specialist practices in Cardiff are benchmarked against one another.

15. Waiting times for assessment at all orthodontic practices have been monitored since November 2010. The three main

practices have shown a slight overall increase in the waiting time for an NHS assessment but it suggests that the demand for NHS orthodontic treatment is not increasing significantly and this would suggest that the level of funding in orthodontics is appropriate to meet the current demand but would require a large 'one-off' investment to reduce this waiting time significantly. Cardiff, especially, has seen a significant population increase over the last 10 years and yet the waiting time increase suggests that the current funding level is absorbing any increase in demand caused by population increase.



Whether Orthodontic Services Is Given Sufficient Priority Within The Welsh Government's Broader National Oral Health Plan, Including Arrangements For Monitoring Standards Of Delivery And Outcomes Of Care Within The NHS And The Independent Sector.

16. The National Oral Health Plan outlines the need to improve the performance of orthodontic contracts to maximise the amount and quality of patient care available within the existing financial envelope. As outlined in paragraph 10, the guidance issued by Welsh Government has provided a starting point for the development of more robust performance management of the quality of the outcomes for primary care specialist practices.

17. Given the pressures on the funding of all parts of dentistry and the difficulties caused by this in developing new primary care services such as conscious sedation, minor oral surgery, domiciliary dental care, the committed investment in primary care orthodontics is quite substantial and the UHB both does not have the funds to invest additional sums into orthodontics and cannot justify the need, given that the supply of care seems to meet the demand for it.

18. The significant population increase in Cardiff especially (approx 3 times the average growth in Wales according to the 2011 census), means that providing access to general dental services and emergency/urgent dental care may well take priority on increasingly pressured budgets (the primary care dental allocation has seen no increase since the introduction of the new contract models in 2006).

The Impact Of The Dental Contract On The Provision Of Orthodontic Care.

19. The orthodontic contract introduced in 2006, use a very crude core performance management tool of measuring achievement against a target of Units of Orthodontic Activity (UOAs). This does not take into account the quality of care, complexity of treatment or any other quality indicators. This meant that for the early years of this contract, it was relatively easy to achieve the contract targets with minimal effort. The introduction of the Guidance by Welsh Government in 2011 has allowed LHBs to start to introduce other tools into the performance management of the contracts. It is still early days in using this guidance to understand the long term quality and performance impacts it could have.

20. The current orthodontic contract also does not allow flexibility in payment mechanisms. This includes being able to transfer part payment of the fee from one provider to another one in another part of the country when a patient relocates. This would save LHBs and Area Teams from paying twice for treatment on the same patient.

21. Also, the contract does not have the flexibility to look at different operational models for providing care. There is move towards the greater use of orthodontic therapists, who provide a more cost effective method of providing the ongoing care of patients whilst remaining under the supervision of an orthodontic specialist. However, the contract will still pay the practice the same amount whether they use an expensive orthodontic specialist or the less expensive orthodontic therapist. This does not encourage LHBs to seek to develop these skill mixes which may ultimately provide a more comprehensive service for more patients within the same financial envelope. There is a need for the orthodontic contract to be able to recognise this shift.

Section 2 – Community Dental Service

Background

The Community Dental Service covering both Cardiff and Vale and Cwm Taf LHBs, operates orthodontic sessions from 4 sites: Merthyr Tydfil, Aberdare and Pontypridd north of the M4, and Barry Hospital in the Vale of Glamorgan. Two orthodontists, equating to 1.4wte, operate the sessions with one of the posts being a joint collaboration with the Dental Hospital and the University. This partnership ensures that the individual is not isolated in their professional work, enriching their position with commitment to the undergraduate teaching programme.

The CDS is responsible for the dental care of a large cohort of paediatric patients throughout its geographical area of responsibility and having a CDS managed orthodontic service ensures seamless treatment for the patients. The immediate advice that is available for the dental officers and to the GA Assessment service is invaluable.

Both positions have recently experienced the retirement of the orthodontists and on each occasion the Dental Clinical Board, the University and Cwm Taf LHB have supported the continuation of the service.

Access for Patients

CDS receives referrals from GDS – Pontypridd 39.5% and Barry Hospital 58.6%.
Aberdare and Merthyr do not currently take referrals from GDS

Waiting Times

Clinic	New assessment		Treatment	
Pontypridd	6 months		24 months	
Barry Hospital	2 months		20 months	
Merthyr Tydfil	2 months		18 months	
Aberdare	3 months		18 months	

Working Relationships – Ortho practices, the LHBs and the role of the MCN

CDS ortho service is supported by the LHBs with good collaborative working and understanding. Recent MCN referral form has improved the way the service is accessed, minimising inappropriate referrals, and providing dentists with clearer understanding of the criteria for referral to assist their conversations with patients.

Funding

Despite the present financial difficulties, the CDS orthodontic service is key to its plans, regarding the delivery of a holistic dental service to the vulnerable patients that it is responsible for. Orthodontics is essential for the complete delivery of a 21st century dental service where debilitating malocclusions are treated based on need rather than demand and access.

National Oral Health Action Plan

Adequate emphasis placed in the plan – focuses on reducing inappropriate referrals and ensuring treatment is provided for those with the most need and therefore most health gain. However mention should be made of the long waiting times for initial assessment and treatment and an action plan to reduce this.
Action plan needs more focus on secondary care services such as Maxillofacial Surgery as patients who require surgical extractions or exposure have to wait up to 12 months, which then impacts on orthodontic care.

The impact of the dental contract

Only those patients with an IOTN (Index of Orthodontic Treatment Need) of 5, 4 or 3 with and aesthetic grade 6 receive treatment as agreed in the dental contract. This has ensured that only those cases with the greatest need receive orthodontic treatment

Section 3 - University Dental Hospital's (UDH)

1. *Access for patients to appropriate orthodontic treatment, covering both primary and secondary care orthodontic services, and whether there is regional variation in access to orthodontic services across Wales.*

Access to orthodontic services at the University Dental Hospital (UDH) is aligned with the Welsh Government's National Oral Health Plan (NOHP) (2013). This follows a regionally agreed referral pathway allowing the GDS, CDS and HDS to work together and ensures that residents can access specialist orthodontic services using an integrated approach through delivery of the aforesaid services.

Referrals to UDH for an orthodontic consultant opinion are requested for adults and children from across Wales. The number of orthodontic referrals to UDH over the last 4 years is shown in Table 1.

Table 1 Number of orthodontic referrals to UDH by Health Board of patient residence

		2010/11	2011/12	2012/13	2013/14
ABM ULHB	Adult	23	15	14	19
	Child	3	5	8	7
ANEURIN BEVAN LHB	Adult	103	98	91	62
	Child	73	56	67	84
BETSI CADWALADAR ULHB	Adult	-	-	1	1
	Child	-	-	-	-
CARDIFF AND VALE ULHB	Adult	329	261	255	284
	Child	276	235	267	454
CWM TAF LHB	Adult	86	65	66	57
	Child	63	61	60	113
HYWEL DDA LHB	Adult	2	1	2	1
	Child	-	1	1	-
POWYS TEACHING LHB	Adult	6	1	1	2
	Child	1	-	1	1
NO LHB INFO AVAILABLE	Adult	1	1	3	4
	Child	2	2	2	2
	TOTAL	**968**	**802**	**839**	**1091**

The UDH fulfils its role as the largest centre in Wales for specialist orthodontic consultations. The majority of patients (68%) seen for orthodontic consultations are from C&V UHB but significant numbers of patients are also seen from neighbouring Aneurin Bevan and Cwm Taf LHBs. Unfortunately the current data does not indicate whether referrals from outside of C&V UHB are from primary, secondary or tertiary sources. Overall there has been a 13% rise in orthodontic referrals to UDH over the last 4 years (22% decrease in adult referrals and a 58% increase in child referrals).

The UDH currently has 166 new referrals waiting for assessment. The longest wait from referral to assessment is currently 8 weeks (correct as of 11.03.2014). Table 2 shows the current demographics of new referrals.

Table 2 Number of new orthodontic referrals to UDH waiting for assessment (grouped by Health Board of patient residence)

	Total
ABM ULHB	2
ANEURIN BEVAN LHB	17
CARDIFF AND VALE ULHB	131
CWM TAF LHB	16
TOTAL	**166**

Acceptance for orthodontic treatment is based on the following criteria:

- Patients under 18 with a score on the Index of Orthodontic Treatment Need (IOTN) of 3.6 (DHC = 3, AC = 6), 4 or 5
- Patients over 18 requiring multidisciplinary care that specifically requires hospital management, e.g. those that require orthodontic treatment in combination with corrective jaw surgery or complex hypodontia cases requiring orthodontic and restorative input
- Requirement for student teaching

The UDH referral guidelines are freely available on the UHB website and can accessed using the link below:
http://www.cardiffandvaleuhb.wales.nhs.uk/opendoc/209978

There is a wide range of clinical skill mix providing orthodontic services in UDH. Our current staffing levels are outlined below:

- Year 3 and Year 4 undergraduate students (n=160) see new routine child orthodontic referrals, child orthodontic reviews and carry out simple removable treatments, e.g. interceptive orthodontics, under specialist orthodontist supervision
- Specialty Doctors (WTE n=0.4) treat all levels of patient care
- Training grades within the speciality (WTE: 1.6 StR's, 3.6 overseas postgraduate students and 0.6 Post-CCST) treat all levels of patient care
- Orthodontic Consultants (WTE n=3) conduct multidisciplinary clinics, manage orthodontic service within department and treat all levels of patient care

The longest wait for orthodontic treatment from assessment is 26 months. There are currently 903 patients on our waiting lists-496 on the Fixed Appliance waiting list and 402 on the Secondary waiting list for MDT consultations (correct as of 11.03.2014) which is an 11% increase compared to 2010 (n=816). The UDH treatment waiting list is cyclical and reduces considerably during the new intake of training grades in October each year. Further reasons for long treatment waiting times are discussed in Point 3.

UDH cannot comment on the regional variation in access to orthodontic services across Wales although a significant number of patients are being seen at the UDH who reside outside the C&V UHB.

2. The effectiveness of working relationships between orthodontic practices and Local Health Boards in the management of local orthodontic provision, and the role of Managed Clinical Networks in helping to deliver more effective orthodontic services in Wales (e.g. effective planning and management, improvement in the appropriateness of referrals and performance management, workforce arrangements).

The South East Wales Orthodontic Managed Clinical Network (MCN) was established in January 2009. UDH has representation on the MCN Executive Committee and MCN clinician meetings both held quarterly. The MCN has improved working relationships between orthodontic providers and LHBs and helped to deliver more effective orthodontic services. The benefits to UDH are outlined below:

- Referral management: early referrals and multiple referrals to different providers had previously been recognised by the MCN as challenges in this area. A common referral form for South East Wales has been established and in use since April 2012. The UDH only accepts referrals from primary care (GDS and CDS) on this form, which has simplified the process of vetting and ensures patients are allocated onto the most appropriate clinics for their consultation. An audit is currently being planned to assess the impact of the common referral form on the appropriateness of referrals to UDH
- Treatment outcome monitoring: all completed cases at UDH are independently scored to assess quality of treatment outcome using the Peer Assessment Rating (PAR). Annually, the treatment outcomes of 50 cases at UDH are submitted to the LHB via the MCN to compare outcome against regional providers.

3. Whether the current level of funding for orthodontic services is sustainable with spending pressures facing the NHS, including whether the current provision of orthodontic care is adequate, affordable and provides value for money.

- Current Funding level

The provision of specialist orthodontic services is funded as part of the Dental SIFT allocation which has not been uplifted for a number of years. Recent cost reduction schemes are impacting on the Hospital services as a whole including orthodontic provision. The long wait for complex multidisciplinary treatment partly outlined above reflects this. The overall situation is unlikely to improve given the increase in referral numbers to UDH.

- Adequacy of current provision of care:

Provision of orthodontic care for all patients is identified by objective orthodontic treatment need (IOTN), in addition acceptance of adults who require multi-disciplinary care only. As a number of patient referrals reside outside the C&V UHB it would be helpful that some formal SLA could be agreed with other LHB's.

- Value for money:

It has already been shown that clinicians working in the hospital service provide cost-effective orthodontic treatment (Richmond 2005).

UDH is a teaching institution and the service model is centred on the education of training grade groups. There are currently 3.6 WTE overseas postgraduate students - unpaid by the C&V UHB - who provide orthodontic treatment from the department's waiting lists. Each trainee will treat approximately 120 patients during their 3-year training period.

Measures have also been taken by the orthodontic department to make savings. Since 2011 UDH have been charging patients for lost appliances and retainers. Retainer boxes and oral health aids are now purchased by the patient rather than given 'free of charge'. Fluoride was routinely prescribed to prevent decalcification during orthodontic treatment. In line with Cardiff and Vale Health Board policy (2011), prescriptions for 'over the counter medicines' were stopped–since this change in policy, fluoride mouthwash can no longer be prescribed. It is now 'advised' rather than prescribed. This has had a detrimental effect on the decalcification rates for patients undergoing fixed appliance treatment at UDH as shown by a recent audit. This may have service provision implications for other specialties within UDH such as restorative dentistry.

The department has been involved in the Clinical Board Development sessions to encourage clinical engagement with financial planning. Clinicians have been encouraged in identifying 'blue sky' opportunities to make financial savings and income generation.

4. Whether orthodontic services is given sufficient priority within the Welsh Government's broader national oral health plan, including arrangements for monitoring standards of delivery and outcomes of care within the NHS and the independent sector.

- Priority within the Welsh National Oral Health Plan (NOHP):

The delivery of the NOHP (March '13) has a small section relating to orthodontic services. It appears to broadly accept the recommendations from the previous orthodontic review (Health, Wellbeing and Local Government Committee, Orthodontic services in Wales, February 2011)

Good practice recommendations from the above review included the development of an Orthodontic MCN-this has already been delivered.

- Monitoring standards of delivery and outcomes of care:

Orthodontics is one of the few dental specialties that routinely use objective measures of treatment outcome – the Peer Assessment Rating (PAR) and Index of Complexity Need and Outcome (ICON).

UDH current protocol includes:

- PAR scoring every completed orthodontic case.
- Registration with the European Federation of Orthodontic Specialists Association (EFOSA) and use of their database to record, maintain and update PAR scores.
- A rolling audit project undertaken by an orthodontic training grade to report PAR results locally and undertake root cause analysis for cases scoring 'worse/no different'.
- Submission of PAR scores of 50 consecutively completed cases to Cardiff and Vale LHB on an annual basis.

5. The impact of the dental contract on the provision of orthodontic care.

Since the introduction of the 'new' orthodontic contract in 2006 orthodontic care has been provided when the orthodontic threshold of IOTN has been reached (DHC 4&5 and DHC 3 and AC >5). This has helped to prioritise delivery of services based on a treatment need and a health gain.

There is a perception there may have been an increase in referrals for a second opinion following the introduction of the contract, but this has not been fully quantified.

References

Richmond, S., Dunstan, F., Phillips, C., Daniels, C., Durning, P., & Leahy, F. (2005). Measuring the cost, effectiveness, and cost-effectiveness of orthodontic care. *World journal of orthodontics*, *6*(2).

Welsh Assembly Government, Task and Finish Report, Orthodontic Subgroup, September 2010. http://wales.gov.uk/docs/phhs/publications/101109reporten.pdf

List of Abbreviations Used

ABM	Abertawe Bro Morgannwg
AC	Aesthetic Component
AM	Assembly Member
CCST	Completion of Certificate of Specialist Training
CDS	Community Dental Service
DHC	Dental Health Component
DwES	Dentists with Enhanced Skills
EFOSA	European Federation of Orthodontic Specialists Association
GA	General Anaesthesia
HDS	Hospital Dental Service
ICON	Index of Complexity Need and Outcome
IOTN	Index of Orthodontic Treatment Need
LHB	Local Health Board
MCN	Managed Clinical Network
MDT	Multi Disciplinary Team
NHS	National Health Service
NOHAP	National Oral Health Plan
PAR	Peer Assessment Raring
PCIC	Primary, Community & Intermediate Care
PDS	Personal Dental Service
SIFT	Service Increment for Teaching
SLA	Service Level Agreement
StR	Specialist Training Registrar
UDH	University Dental Hospital
UHB	University Health Board
UOA	Unit of Orthodontic Activity
WTE	Whole Time Equivalent