

# **NHS Orthodontic Services in Wales - Orthodontic Workforce Distribution and Primary Care Commissioned Activity in 2021**

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## **Abstract**

### **Objectives**

- 1) To ascertain the volume of primary care orthodontic activity commissioned within Wales and compare this to the 12-year-old population.
- 2) To ascertain the orthodontic workforce undertaking NHS orthodontic provision within Wales and their distribution

### **Methods**

Information was gathered between September to November 2021 from multiple sources within Wales, including: Freedom of information requests; Welsh Government Statistics; orthodontic professional networks; orthodontic provider websites; health boards; and directors of primary care/contracting/commissioning.

### **Results**

The HBs had varying levels of orthodontic need and commissioned activity with a significant amount of cross border activity in South Wales. Overall, it indicated that Wales was only commissioning orthodontic activity to meet 76% of the annual orthodontic need.

97.9% of commissioned primary care orthodontic activity was being used to provide treatment for 9,500 patients per year.

112 GDC registered clinicians provide NHS Orthodontic care within Wales - 52 orthodontic specialists; 32 Orthodontic therapists; 24 DwSIs; and 4 Orthodontic trainees (StR 1-3).

NHS Orthodontic care is provided at 47 sites within Wales – 32 sites in the GDS/Specialist Practice, 6 sites within the CDS and 9 Secondary care settings.

### **Conclusions**

- 1) NHS Commissioned Primary Care Orthodontic activity within Wales is 76% of the potentially orthodontic annual need.
- 2) Primary care orthodontic services are efficient with 97.9% of commissioned activity being used to provide treatment.
- 3) 112 GDC registered clinicians provide NHS orthodontic care across 47 sites within Wales, with 29.5% of clinicians working at multiple sites.
- 4) The distribution of the of orthodontic providers is predominately in areas of high population density resulting in some rural communities being a significant distance from any orthodontic provider.

## Introduction

Over the last 15 years there have been a number of national inquiries and reviews into orthodontic provision within Wales. The first of these was the National Assembly for Wales Health, Wellbeing and Local Government Committee's Review into Orthodontic Services in Wales, the results of which were published in February 2011<sup>1</sup>. This review was undertaken due to the increasing number of concerns raised by constituents regarding the availability of, and time to access, appropriate orthodontic care.

While it was recognised that the amount of commissioned activity was similar to that when the "New Contract", along with Units of Orthodontic Activity (UOAs), was introduced in 2006, it was felt that there were steps that could be taken to reduce inappropriate referrals and increase the efficiency of the service to allow more patients to be receive care in a quicker timeframe.

The Committee produced 17 recommendations which aimed to gather more evidence regarding relative clinical need and contracted provision; improve the efficiency and quality of the care provided; reduce waste; develop the workforce; and establish local Orthodontic Managed Clinical Networks throughout Wales.

The results of a follow up inquiry were published in July 2014 by the National Assembly for Wales Health and Social Care Committee<sup>2</sup>. The Committee welcomed the progress which had been made but concluded that there was still work to do in order to address the inherent inefficiency within the service and the resultant significant waiting times across the country. 6 further recommendations were made.

In response, the Office of the Chief Dental Officer of Wales, commissioned three major pieces of research by Professor Richmond. The first was a "Review of the Orthodontic Services in Wales 2013-14"<sup>3</sup>. It found that there had been a significant reduction in the number of "Assessment & Review" claims, which in part, had resulted in an increase in treatment provision by over 500 cases per year since 2011. It was concluded that the resources which were currently commissioned within Wales should be sufficient to manage the orthodontic need on an annual basis. Professor Richmond made a series of recommendations for the Welsh Government and Orthodontic Providers. His second follow on report entitled "Review of the Orthodontic Services in Wales 2008-09 to 2015-16"<sup>4</sup>, had a wider scope and also investigated the effects of the retendering of orthodontic services – which demonstrated an increase in case starts; an equalisation and reduction in UOA value; and a reduction in the number orthodontic contracts across Wales from 133 to 82.

Professor Richmond's third report was a "Review of the Orthodontic Waiting List in Wales, 2017"<sup>5</sup>. His subsequent recommendations included: a centralised waiting list within each Health Board; reprioritisation of waiting list based on clinical need rather than time of referral; and review of smaller contracts to determine if they are fit for purpose.

Some of the "efficiencies" which were envisaged were based on several assumptions including the benefits of economies of scale and maximising the use of the whole clinical team with particular focus on Orthodontic Therapists. Although this approach may be very effective for locations with large population densities, it may not be as appropriate for rural areas where the allocation of orthodontic provision to "regional centres" could result in accessibility issues for patients accessing orthodontic treatment every 6-8 weeks over a 2 year period. It is also noted that although "it was felt that the current commissioning was sufficient to meet the need annual" it did not take into account the historic cohort of patients who had been referred, but were still waiting to access treatment e.g. the "waiting list".

Although the reports highlighted above looked at the number of “orthodontic providers” undertaking NHS orthodontic activity, this was based in on the number of Orthodontic contracts the HBs has issued, rather than the number of individuals undertaking the provision of orthodontic care. As such, they did not identify the type of provider, working profile, or their location. The Report of The Orthodontic Workforce Survey of The United Kingdom February 2005<sup>6</sup>, provided some useful data on a UK wide basis, but as it amalgamated England and Wales, it did not provide detailed information on the orthodontic workforce in Wales. Also, this survey was undertaken prior to the establishment of the “New Contract”, the Welsh Government Inquires and modernisation programme.

This lack of detailed information regarding the NHS Orthodontic workforce within Wales means it is difficult to ensure that the training requirements can be identified to ensure workforce sustainability for the future.

It was with this in mind that this project was instigated with the following objectives:

- 1) To ascertain the volume of primary care orthodontic activity commissioned and compare this to the 12 year old population.
- 2) To ascertain the orthodontic workforce undertaking NHS orthodontic provision within Wales and their distribution

## **Methods**

The project was devised and instigated by the lead investigator (BRKL), who also acted as the data controller, in his capacity as Chair of the North Wales & Powys Orthodontic Managed Clinical Network (OMCN). The aim was to produce accurate, quantifiable information on the orthodontic workforce across the whole of Wales This was done in response to a request to the Welsh OMCNs for information on local training requirements by Health Education and Improvement Wales (HEIW). Consultant Orthodontists across Wales were recruited as local data collectors as it was felt that they would have the best overarching knowledge of the orthodontic service provision within both their own Health Board (HB) as well as neighbouring ones. In additional to their own personal professional networks, it allowed access to the three Orthodontic Managed Clinical Networks operating within Wales.

Data were also obtained from publicly available resources, such as “statswales.gov.wales”<sup>7</sup> and orthodontic provider websites; Freedom of Information Requests; Primary Care Directors & Contract managers within the Health Boards. This allowed improved data collection as well as providing a method of cross checking the various data streams to ensure they was both accurate and complete.

The amount of primary care commissioned orthodontic activity was obtained for each Health Board as Units of Orthodontic Activity (UOAs). This was then divided by 22.5 to produce the nominal number case starts expected. The figure of 22.5 was used as this is one of the primary Key Performance Indicators utilised in monitoring Orthodontic contracts across Wales as equating to an individual “case start”.

The number of 12 year olds within Health Board was obtained via the Welsh Government statistics office<sup>8</sup> and this divided by three to produce the nominal “orthodontic need” within Wales and also within each Health Board. Although this is results in a reduced “need” when compared to the “Stephens’ formula” as used in the Report of the Orthodontic Workforce Survey of The United Kingdom, 2005<sup>6</sup>, it was felt to be more applicable to Wales as the Needs Assessments undertaken prior to the retendering exercises within Wales generally use a “third of 12 year olds” as a

measurement of expected orthodontic need when calculating the required amount of orthodontic activity to be commissioned.

This enabled us to create a ratio of “perceived orthodontic need” to “orthodontic commissioned activity”, with a score of 1 meaning that they were in balance, a score of less than 1 meaning that insufficient activity was being commissioned, and a score of greater than 1 indicating potential over commissioning of orthodontic services.

A workforce data collection sheet agreed by the investigating team and was piloted within North Wales. Modifications were made to ensure the robustness and clarity of the form which recorded the provider; the name and grade of the clinician; the total number of sessions (based on 3.75 hours) spent undertaking NHS orthodontic activity, along with the breakdown of the number of clinical and non-clinical sessions within this total. Workforce data was gathered across Wales between September to November 2021. This was only collected for those individuals undertaking their NHS orthodontic practice within Wales and not for any Welsh NHS orthodontic activity performed in England. Each Provider and Performer were allocated a unique reference number to ensure anonymisation during data analysis, but which enabled identification of any performers working in multiple environments within a single Health Board and within different Health Boards. The data were transferred into an Excel document for analysis and the results tabulated. Only Wales and Health Board level data will be presented to ensure the anonymity of the clinicians due to the small perceived risk that working patterns could identify a particular individual.

The addresses of the orthodontic providers which are commission to provide NHS orthodontic activity were provided by each of the seven Health Boards within Wales and this allowed them to be plotted on a map of Wales to visually demonstrate the distribution of clinical services.

## **Results**

The number of 12 year olds within Wales; the commissioned activity; and the ratio between “need” to “activity” is shown in Table 1. This indicated that there is significant variability between the Health Boards, both with regard to the number of individuals who would potential benefit from orthodontic treatment as well as the amount of commissioned Orthodontic activity. Overall, it indicated that Wales was only commissioning orthodontic activity to meet 76% of the annual orthodontic need as of June 2021.

Tables 2-8 shows the Orthodontic workforce within each of the Health Boards. The different grades of clinician have been colour coordinated to enable easier comparisons to be made. The number of sessions have been used to calculate the number of Whole Time Equivalent (WTE) and the anonymised labelling have allowed a total Head Count to be produced within each Health Board as well as a location Head Count. The results show that Cardiff and Vale UHB have the greatest number of clinicians, specialists, and WTEs with Powys Teaching Health Board having the least. This roughly equates to the associated commissioned level of activity within each Health Board. Betsi Cadwaladr UHB have the highest number of DWSIs and Swansea Bay UHB had the highest number of orthodontic therapists. Understandably Cardiff and Vale UHB have the greatest number of orthodontic trainees as this is the location for the University of Cardiff’s Dental Hospital which is Wales’s main orthodontic training establishment.

The breakdown of the orthodontic workforce practicing within Wales is shown in Table 9. The “Total Headcount” is calculated for each grade of clinician, however, there will be overlap due to the fact

that some clinicians work in a number of different settings and as a different “grade”. As the term “consultant” is an honorary NHS title, when these individuals are working in primary care they are included under the term “Specialist”. This is clarified at the bottom of Table 9 which highlights that the total number of clinicians registered with the General Dental Council (GDC) providing NHS orthodontic care within Wales is 112. This includes 52 clinicians on the GDC’s Orthodontic Specialist List (which for the purpose of this review included Specialists working in primary care, the CDS or secondary care, Orthodontic Consultants and StR 4-5); 32 Orthodontic therapists (either qualified or in training); 24 DwSIs; and 4 Orthodontic Specialty trainees (StR 1-3). These clinicians are working across 47 sites within Wales – 32 sites in the GDS or Specialist Practice, 6 sites within the CDS and 9 Secondary care settings.

The locations of the orthodontic providers which are commissioned by the Health Boards is visually represented in Figure 1. This shows the distribution of the of orthodontic providers in predominately areas of high population density such as major towns and cities. However, it appears to result in vast swathes of the country a being large distance from any orthodontic provider.

## **Discussion**

The results of this investigation appear to show that the level of orthodontic commissioned activity is only around three quarters of that which is required according the “third of 12 year olds” metric. However, this will not be the whole picture. The long border between Wales and England results in bilateral cross-border activity in all aspects of life. This includes accessing healthcare services generally and orthodontic provision in particular. This is due to a number of factors including location of patients’ General Dental Practitioner, historic referral pathways and transportation networks. This historic activity will have been entrenched within established orthodontic contracts when the “New Contract” came into effect in 2006 as the level of activity was based on the previous two years’ worth of submissions to the Dental Practice Board when orthodontics was funded on a “fee per item” basis.

In addition to this, the amount of primary care funding will not include any activity within the Community Dental Service (CDS) where they operate in Betsi Cadwaladr UHB and Cwm Taf Morgannwg UHB. It will also exclude the clinical caseload which is undertaken within the Secondary care services as these are funded by each individual Health Board where they are located along with “block” contracts with neighbouring Health Boards or providers in England for those who do not directly provide secondary care based orthodontic services such as Powys THB and Hywel Dda UHB. Betsi Cadwaladr UBH also holds a “block” contract with the Countess of Chester hospital for a range of services including some orthodontic provision.

Another feature which was initially surprising was the discrepancy between the level of orthodontic activity commissioned between the different Health Boards with Cardiff & Vale UHB and Swansea Bay UHB appearing to over commission and the remaining Health Boards under commissioning, some significantly, like Cwm Taf Morgannwg UHB, which only appears to provide 23% of the level of activity required. However, it is likely that this apparent discrepancy is again due to the legacy of when the “New Contract” was introduced. South East Wales has a high population density as a result of its industrial past with the areas of Cardiff, Newport, Bridgend, Neath and Swansea forming the major populations centres, so it would be expected that these areas have the greatest concentration of clinical services, and the associated high quality transport infrastructure enabling those from the surrounding areas to gain access to these services. As such, it is likely that the historic orthodontic

service provided by the Health Commissioning entities which preceded the formation of Cardiff & Vale UHB and Swansea Bay UHB have continued.

Welsh Government statistics (30<sup>th</sup> September 2021)<sup>9</sup> indicates that around 9,500 treatments were undertaken each year between 2015-16 and 2019-20. The “Delivery of Orthodontics in Primary Care for 2021 and 2022 in response to the Covid-19 pandemic”<sup>10</sup> showed that, for Primary Care Orthodontic Services, in 2019/20 201,393 UOAs were completed and 97.9% was utilised on providing treatment, 1.4% on “Assessment & Review” and 0.6% on “Assess & Refuse Treatment”. Data from the National Health Service Business Services Authority (NHSBSA) regarding the orthodontic treatment undertaken within contracts based in Wales, in the 2018/2019 reporting year,<sup>11</sup> shows the number of clinical cases who had their treatment episode closed. This indicated that 94.3% of treatment was completed, 3.4% abandoned and 2.3% discontinued. These results are much more favourable when compared with previous published results regarding failure to complete treatment results<sup>12</sup>. These figures demonstrate that as a result of the Welsh Governments interventions and the lead taken by the Chief Dental Officer of Wales, the Health Boards and the Orthodontic Managed Clinical Networks, Wales now has a greatly more efficient Primary Care Orthodontic Service.

However, even taking these aspects into consideration, it is still appears that NHS Orthodontic primary care commissioning, across Wales as a whole, is insufficient to meet the needs of the child population on an annualised basis. This is also not taking into consideration the historic cohort of patients who have been referred for orthodontic assessment and possible treatment, but are yet still waiting to be seen.

Figure 1 visually demonstrates the locations of the orthodontic providers across Wales. Understandably the location of providers tends to be around centres of high population density such as the north and south coasts of Wales. However, this does result in some rural communities being a considerable distance from an orthodontic provider. This is further complicated by the topography of Wales and the resulting transportation networks which can be variable and convoluted. For one off medical appointments, a significant travelling distance may not be a barrier to access care, however, for orthodontic treatment to be successful it requires visits every 4-8 weeks over a 2+ year period. This is likely to put a significant burden on those travelling a large distance to access care, both with transportation costs as well as time off education/work.

This investigation has, for the first time, provided a complete summary of the NHS orthodontic workforce practicing in Wales along with their locations. It has shown that 5 orthodontic consultants also undertaken orthodontic treatment for NHS patients within Primary Care which equates to 29.4% of the orthodontic consultant body and 13.2% of the primary care specialists. It has also been revealed that within Wales 29.5% of clinicians work on multiple sites, for different employers, across different Health Boards (Table 9).

These are very important aspects to consider when looking at workforce planning as each area within orthodontic service provision can not be viewed in isolation. Loss of a “performer” could affect multiple “providers”, especially if this clinician was a specialist and providing treatment planning and supervision roles for other members of the orthodontic team. For the service to operate efficiently and effectively all the various providers need to be working symbiotically. Failures of provision in one area will have knock on consequences on neighbouring providers. This isn’t just limited to orthodontic intervention. Challenges experienced in associated disciplines will also have an impact, such as waiting times for minor oral surgery in secondary care or delays in restorative work and orthodontically related extractions in primary care<sup>13</sup>.

The results tables demonstrated the time spent by each performer on NHS orthodontic activity. Within Wales (Table 9) this equated to 7.4 sessions per consultant, 5.7 sessions per primary care specialist, 3.2 sessions per DwSI, and 7.2 sessions per orthodontic therapist. As mentioned above there will be cross over between the consultant body and primary care specialists and the lower number of average sessions undertaken by DwSI is understandable as many will also be undertaking general dental sessions. This study also shows the variation within the orthodontic workforce practicing within each Health Board (Tables 2-8). These variations provide an insight into the difference operating models which each Health Board has commissioned to meet their individual needs, e.g. use of DwSIs in geographically remote areas; as well as highlighting potential vulnerabilities with regards to future recruitment and retention. However, it must be noted that this investigation only looked at NHS Orthodontic activity and, by nature of the methodology utilised, was unable to determine other clinical and non-clinical activity, which may be being undertaken outside the NHS or in areas not related to orthodontics.

Potential limitations of this study are that, due to the methodology used, it was not possible to ascertain working patterns or what proportion of the workforce work full time, less than full time or greater than full time, as this may include aspects not related to NHS orthodontic activity. In addition, the data collection was collected over a 3 month period during which time there is the possibility that the workforce could change following initial data submission. The time period could have been shortened, however, working with multiple agencies across the whole of Wales meant the data collection was dictated by the response time of those external bodies.

Future work would be beneficial in helping to gain an appreciation of the working patterns of the workforce, anticipated time to ceasing orthodontic clinical activity and also general perceptions regarding their working life, as this would help identify potential risks to service provision and enable improved workforce planning. This would be best achieved with a direct survey of the orthodontic workforce within Wales.

## **Conclusions**

- 1) The amount of NHS Commissioned Orthodontic activity within Wales is 76% of what is potentially required to meet the annual need as determined by the percentage of the 12 year old population.
- 2) Primary Care orthodontic services are efficient with 97.9% of commissioned activity being used to provide treatment.
- 3) There 112 clinicians provide NHS orthodontic care within Wales – 52 specialists, 24 DwSI, 32 orthodontic therapists and 4 Orthodontic trainees (StR1-3), providing 694.4 sessions of NHS orthodontic activity per week.
- 4) 30% of clinicians provide their NHS orthodontic care at multiple sites.
- 5) NHS Orthodontic care is provided at 47 sites within Wales – 32 sites in the GDS or Specialist Practice, 6 sites within the CDS and 9 Secondary care settings.



**Ethical Declaration:**

This study was devised to calculate the volume of primary care orthodontic activity commissioned and comparing this to the 12 year old population; ascertain the orthodontic workforce undertaking NHS orthodontic provision within Wales along with their distribution. The information gathered was via the use of publicly available information, Freedom of Information Requests, liaising with Primary Care Directors and Contractor Managers within Health Boards, along with the established Orthodontic Clinical Networks within Wales. All received data was anonymised to ensure that is non identifiable, only summary data at an All Wales and Health Board level is presented within this article. As such, the study did not require ethical approval as it was not considered research as per the Medical Research Council/NHS Health Research Authority assessment tool ([hra-decisiontools.org.uk](http://hra-decisiontools.org.uk)).

## **References:**

1 National Assembly for Wales Health, Wellbeing and Local Government Committee Report on Orthodontic Services in Wales (February 2011)

<https://senedd.wales/Laid%20Documents/CR-LD8423%20-%20Health,%20Wellbeing%20and%20Local%20Government%20Committee%20Report%20on%20Inquiry%20into%20Orthodontic%20services%20in%20Wal-17022011-210599/cr-ld8423-e-English.pdf>

2 National Assembly for Wales Health and Social Care Committee Report on Orthodontic Services in Wales (July 2014)

<https://senedd.wales/Laid%20Documents/CR-LD9848%20-%20Report%20by%20the%20Health%20and%20Social%20Care%20Committee%20on%20orthodontic%20services%20in%20Wales/CR-LD9848-e.pdf>

3. Richmond S. (2015) Review of the orthodontic services in Wales 2013-14. Technical Report. Feb 2015

4. Richmond S. (2016) Review of the Orthodontic Services in Wales 2008-09 to 2015-16. 14/12/2016

5. Richmond S. (2017) Review of the Orthodontic Waiting Lists in Wales , 2017. Technical Report, Oct 2017. DOI:10.13140/RG.2.2.16531.53282.

6. Robinson P.G., Willmot D.R., Parkin N.A., Hall A.C. (2005): Report Of The Orthodontic Workforce Survey Of The United Kingdom February 2005. Sheffield: University of Sheffield

7. <https://statswales.gov.wales/Catalogue> (First accessed 1<sup>st</sup> December 2021)

8. <https://statswales.gov.wales/Catalogue/Population-and-Migration/Population/Estimates/Local-Health-Boards/populationestimates-by-lhb-age> (First accessed 1st December 2021)

9. Statistics. NHS dental services: April 2020 to March 2021. Number of patients receiving NHS dental treatment, the type of treatments provided and the numbers of NHS dentists for April 2020 to March 2021. Published 30/09/2021

10. Welsh Government – Delivery of Orthodontics in Primary Care for 2021 and 2022 in response to the Covid-19 pandemic. Published 01/04/2021

11. Data refers to Orthodontic treatment for contracts based in Wales, in the 2018/2019 reporting year. Data provided via direct communication with NHSBSA. Dental Insight dated 09/06/2022.

12. Eaton KA, Stephens CD, Heesterman RA. Discontinued orthodontic treatment in the general dental service and community dental service in England and Wales during the summer of 1991. Br J Orthod. 1996 May;23(2):125-8. doi: 10.1179/bjo.23.2.125. PMID: 8771336.

13. Sabbagh Y, Lewis BRK, Chadwick SM, Abu Alhaji ES (2022). The Covid-19 Experience of Orthodontists in the UK. Journal of Orthodontics. Online access ahead of print. 1-14. 13th January 2022. <https://doi.org/10.1177%2F14653125211068046>

## Tables and Figures

Board	No. of children aged 10-18	No. of 12 year olds	Third of 12 year olds	No. of UOA	No. of Case Starts	Ratio of Case Starts : third of 12 year olds
Aneurin Bevan University Health Board	55,932	7,342	2,447.3	31,445	1,397.6	0.57
Betsi Cadwaladr University Health Board	64,046	8,436	2,812	38,504	1,711.3	0.61
Cardiff and Vale University Health Board	45,321	6,087	2,029	64,558	2,869.2	1.41
Cwm Taf Morgannwg University Health Board	41,127	5,349	1,783	9,135	406	0.23
Hywel Dda University Health Board	34,495	4,521	1,507	26,500	1,177.8	0.78
Powys Teaching Health Board	11,314	1,487	495.7	7,691	341.8	0.69
Swansea Bay University Health Board	34,118	4,454	1,484.7	37,943	1,686.4	1.14
Total	286,353	37,676	12,558.7	215,776	9,590	0.76

Table 1 – Child population and commissioned orthodontic activity per Health Board (June 2021)

Grade of Clinician	Total Headcount	Location Headcount	WTE	Total	Clinical	Non-Clinical	Number of locations
Consultant	3	4	2.1	21	15	6	2
Specialist	12	13	4.45	44.5	39.5	5	8
Accredited DwSI	1	1	0.1	1	1	0	1
DwSI	0	0	0	0	0	0	0
Orthodontic Therapist	2	2	0.5	5	5	0	2
STR4-5	1	1	0.2	2	2	0	1
STR1-3	0	0	0	0	0	0	0
Trainee DwSI	0	0	0	0	0	0	0
Trainee OT	0	0	0	0	0	0	0
Total	19	21	7.15	73.5	62.5	11	10
<b>Note:</b> 3 secondary care consultants also work as specialists in primary care, 2 within the HB, 1 in a neighbouring HB The StR 4-5 is split between this HB and a neighbouring HB							
<b>Locations:</b> Primary Care – 8 CDS – 0 Secondary Care - 2							

Table 2 - Aneurin Bevan University Health Board Orthodontic workforce summary

Grade of Clinician	Total Headcount	Location Headcount	WTE	Total	Clinical	Non-Clinical	Number of locations
Consultant	5	6	3.9	39	29.1	9.9	3
Specialist	5	5	2.65	26.5	23.5	3	4
Accredited DwSI	9	14	3.05	30.5	28	2.5	12
DwSI	1	1	0.05	0.5	0.5	0	1
Orthodontic Therapist	7 (8)	9	4.6	46	44	2	5
STR4-5	1	1	0.35	3.5	3.33	0.17	1
STR1-3	1	1	0.5	5	4.5	0.5	1
Trainee DwSI	2	2	0.4	4	4	0	1
Trainee OT	1	1	0.8	8	8	0	1
Total	32 (33)	40	16.7	163	144.93	18.07	14
<b>Note:</b> One orthodontic therapist on maternity leave with clinical sessions covered by existing staff One primary care specialist who also works in a neighbouring HB Commissioned activity also provided by Countess of Chester Hospital One orthodontic therapist on maternity leave with clinical sessions covered by existing staff							
<b>Locations:</b> Primary Care – 7 CDS – 4 Secondary Care - 3							

Table 3 - Betsi Cadwaladr University Health Board Orthodontic workforce summary

Grade of Clinician	Total Headcount	Location Headcount	WTE	Total	Clinical	Non-Clinical	Number of locations
Consultant	6	6	4	40	29	11	1
Specialist	11	13	7	70	67	3	4
Accredited DwSI	0	0	0	0	0	0	0
DwSI	3	4	1.6	16	15	1	2
Orthodontic Therapist	6	6	4.3	43	43	0	2
STR4-5	1	1	0.4	4	3	1	1
STR1-3	3	3	0.9	9	6	3	1
Overseas Trainee	9	9	6.3	63	54	9	1
Trainee DwSI	0	0	0	0	0	0	0
Trainee OT	0	0	0	0	0	0	0
<b>Total</b>	<b>39</b>	<b>42</b>	<b>24.7</b>	<b>245</b>	<b>217</b>	<b>28</b>	<b>5</b>
<p><b>Note:</b>  2 secondary care consultants also work as specialists in primary care, 1 within the HB, 1 in a neighbouring HB  2 primary care specialists work across 3 separate HBs  1 orthodontic therapist works across 2 separate HBs  The StR 4-5 is split between this HB and a neighbouring HB  The three StR 1-3 are split between this HB and a neighbouring HB</p>							
<p><b>Locations:</b>  Primary Care – 4  CDS – 0  Secondary Care - 1</p>							

Table 4 - Cardiff & Vale University Health Board Orthodontic workforce summary

Grade of Clinician	Total Headcount	Location Headcount	WTE	Total	Clinical	Non-Clinical	Number of locations
Consultant	1	1	0.9	9	8	1	1
Specialist	3	3	1.4	14	14	0	3
Accredited DwSI	2	4	0.5	5	4.3	0.7	3
DwSI	1	2	0.2	2	1.75	0.25	2
Orthodontic Therapist	3	3	1.5	15	15	0	1
STR4-5	0	0	0	0	0	0	0
STR1-3	3	3	1.2	12	9	3	1
Trainee DwSI	0	0	0	0	0	0	0
Trainee OT	0	0	0	0	0	0	0
<b>Total</b>	<b>13</b>	<b>16</b>	<b>5.7</b>	<b>57</b>	<b>52.05</b>	<b>4.95</b>	<b>7</b>
<b>Note:</b>							
1 primary care specialist works across 3 separate HBs							
1 DwSI works across 2 separate HBs							
2 orthodontic therapists work across 2 separate HBs							
The three StR 1-3 are split between this HB and a neighbouring HB							
<b>Locations:</b>							
Primary Care – 4							
CDS – 2							
Secondary Care - 1							

Table 5 - Cwm Taf Morgannwg University Health Board Orthodontic workforce summary

Grade of Clinician	Total Headcount	Location Headcount	WTE	Total	Clinical	Admin	Number of locations
Consultant	Secondary Care Orthodontic services contracted to Morriston Hospital (Swansea Bay UHB)						1
Specialist	4	6	2.4	24	24	0	3
Accredited DwSI	0	0	0	0	0	0	0
DwSI	0	0	0	0	0	0	0
Orthodontic Therapist	3	4	1.9	19	19	0	2
STR4-5	0	0	0	0	0	0	0
STR1-3	0	0	0	0	0	0	0
Trainee DwSI	0	0	0	0	0	0	0
Trainee OT	0	0	0	0	0	0	0
Total	7	10	4.3	43	43	0	5
<b>Note:</b> 2 primary care specialists work across 3 separate HBs 1 additional orthodontic contact held with a specialist practice in a neighbouring HB							
<b>Locations:</b> Primary Care – 4 CDS – 0 Secondary Care - 1							

Table 6 - Hywel Dda University Health Board Orthodontic workforce summary

Grade of Clinician	Total Headcount	Location Headcount	WTE	Total	Clinical	Non-Clinical	Number of locations
Consultant	Secondary Care Orthodontic services contracted out to neighbouring areas: Royal Shrewsbury Hospital (England) Brecon War Memorial Hospital (Outreach service provided Prince Charles Hospital, Merthyr Tydfil - Cwm Taf Morgannwg UHB) & Wrexham Maelor Hospital (Betsi Cadwaladr UHB)						3 (1xEngland & 2x Wales)
Specialist	2	2	0.34	3.4	3.4	0	2
Accredited DwSI	0	0	0	0	0	0	0
DwSI	1	1	0.2	2	2	0	1
Orthodontic Therapist	0	0	0	0	0	0	0
STR4-5	0	0	0	0	0	0	0
STR1-3	0	0	0	0	0	0	0
Trainee DwSI	0	0	0	0	0	0	0
Trainee OT	0	0	0	0	0	0	0
Total	3	3	0.54	5.4	5.4	0	7
<b>Note:</b> In addition to the data above, 2 commissioned primary care specialist providers operating from England 1 primary care specialist works across 2 separate HBs							
<b>Locations (England &amp; Wales):</b> Primary Care – 4 CDS – 0 Secondary Care – 3							

Table 7 - Powys Teaching Health Board Orthodontic workforce summary



Grade of Clinician	Total Headcount	Location Headcount	WTE	Total	Clinical	Non-Clinical	Number of locations
Consultant	2	2	1.7	17	9.5	7.5	1
Specialist	7	7	3.5	35	35	0	2
Accredited DwSI	0	0	0	0	0	0	0
DwSI	5	5	1.6	16	14.8	1.2	4
Orthodontic Therapist	12	12	8.65	86.5	79.5	7	4
STR4-5	2	2	1.6	16	13	3	1
STR1-3	0	0	0	0	0	0	0
Trainee DwSI	0	0	0	0	0	0	0
Trainee OT	0	0	0	0	0	0	0
Total	28	28	17.05	170.5	151.8	18.7	6
<p><b>Note:</b>  1 secondary care consultant also work as a specialist in primary care  One StR 4-5 also works as a specialist in primary care  1 primary care specialist works across 2 separate HBs  1 DwSI works across 2 separate HBs  1 orthodontic therapist works across 2 separate HBs</p>							
<p><b>Locations:</b>  Primary Care – 5  CDS – 0  Secondary Care - 1</p>							

Table 8 – Swansea Bay University Health Board Orthodontic workforce summary

Grade of Clinician	Total Headcount	Location Headcount	WTE	Total Sessions	Clinical Sessions	Non-Clinical Sessions	Number of locations
Consultant	17	19	12.6	126	90.6	35.4	8
Specialist	38	49	21.74	217.4	206.4	11	26
Accredited DwSI	12	19	3.65	36.5	33.3	3.2	16
DwSI	10	13	3.65	36.5	34.05	2.45	10
Orthodontic Therapist	30 (31)	36	21.45	214.5	205.5	9	17
STR4-5	4	5	2.55	25.5	21.33	4.17	4
STR1-3	4	7	2.6	26	19.5	6.5	2
Overseas Trainee	9	9	6.3	63	54	9	1
Trainee DwSI	2	2	0.4	4	4	0	1
Trainee OT	1	1	0.8	8	8	0	1
Total	127 (128)	160	75.74	757.4	676.68	80.72	47
<p><b>Note: NHS Workforce working within Wales =112</b>  <b>Orthodontic Performer Headcount within Wales</b>  <b>Orthodontic Specialists (working in primary care, CDS, and secondary care) – 52</b>  <b>DwSI – 24</b>  <b>Orthodontic therapists – 32 (one orthodontic therapist on maternity leave)</b>  <b>StR (1-3) – 4</b></p> <p>Practitioners providing orthodontic services across multiple sites <u>within Wales</u>: 31 (27.7%)  DwSI – 8 (33.3%)  Orthodontic Therapists – 6 (19.4%)  StR 1-3) – 2 (66.6%)  Orthodontic Specialists – 15 (28.8%)</p> <p><b>Locations with Wales = 47, comprising of:</b>  <b>Primary Care – 32</b>  <b>CDS – 6</b>  <b>Secondary Care - 9</b></p>							

Table 9 – All Wales Orthodontic workforce summary

**Health Boards Within Wales**

- Aneurin Bevan University Health Board
- Betsi Cadwaladr University Health Board
- Cardiff and Vale University Health Board
- Cwm Taf Morgannwg University Health Board
- Hywel Dda University Health Board
- Powys Teaching Health Board
- Swansea Bay University Health Board

**NHS Orthodontic Providers Commissioned by Welsh Health Boards**

- Community Dental Service Orthodontic Services
- Primary Care Provider - DwSI Led
- Primary Care Provider - Specialist Led
- Secondary Care Provider
- Border between Wales and England

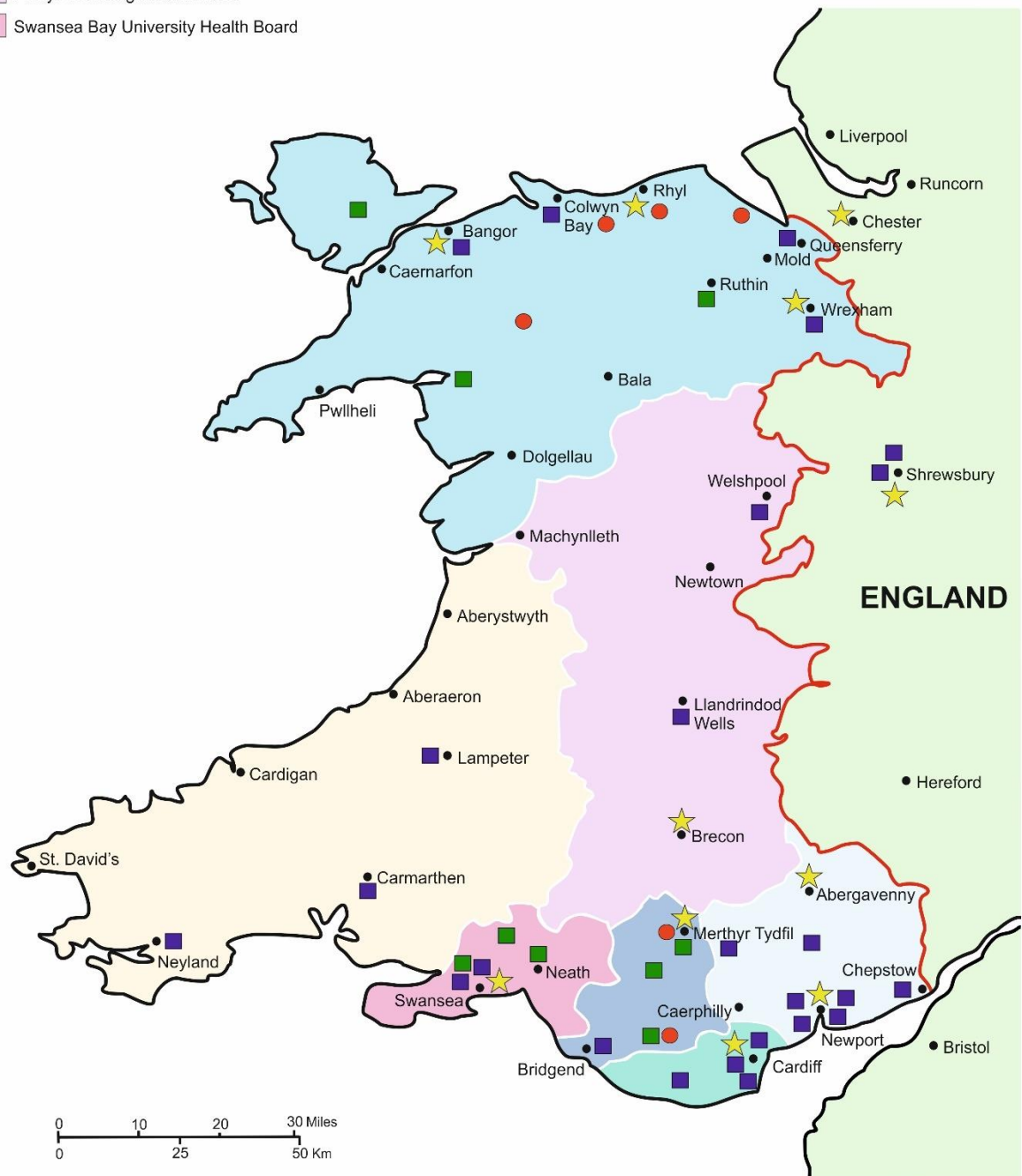


Figure 1 - Distribution of the NHS Orthodontic Providers commissioned by the Welsh Health Boards