# Advancing Dental Care Interim Evidence Report



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### **1.Foreword from the Chair**

I am delighted to share this report with you at a time when so much change is happening across the NHS and wider health system. The publication of the NHS Long Term Plan and Interim NHS People Plan recognise the critical role of the dental care workforce in supporting the oral health of the population and reducing health inequalities across England over the next 10 years.

Dental workforce education and training must be responsive to the changing needs of patients and demands on dental services as well as recognising the career aspirations of our workforce. To do this, we will need to continue to create innovative training opportunities to enhance recruitment and retention, consider different delivery models, and address geographical and specialty shortages.

In Spring 2018, Health Education England (HEE) published the 'Advancing Dental Care: Education and Training Review' (ADC Review). This report laid out a series of recommendations based on a programme of work that considered the need for potential future training pathways for the oral healthcare workforce in England with the aim of increasing flexibility and efficacy. This initial phase (Phase I), led by my predecessor Nicholas Taylor, provided an excellent platform to carry out further work (Phase II) with support from stakeholders, to build more evidence about the future direction for dental education and training, and to explore flexible dental training pathways that allow registrants to work their full scope of practice.

Over the past two years, the Advancing Dental Care (ADC) programme team and workstream groups, led by HEE Dental Deans, have worked hard to gather data on patient needs, modelling the workforce, views on training experiences and career aspirations, new and existing innovative training approaches and understanding leadership and development requirements of the existing workforce. There is some further work to be done but we are keen to share our findings on what we have found so far in this interim evidence report.

The development of future training pathways for the dental workforce can only be done with the support of, and input from, stakeholders across the dental and wider health system. We are hugely appreciative to the many people who have offered their time to contribute to workstream groups and share data with us or take part in research. Without this support, we would not be in a position to share this report with you. I believe the work we are doing on Advancing Dental Care will lead to a range of benefits and opportunities for the current and future dental care workforce who have a key role to play in the future of our health service.

Thank you for taking the time to read this interim evidence report and supporting HEE's Advancing Dental Care programme.

#### Malcolm Smith Chair of Advancing Dental Care and North East Postgraduate Dental Dean

# **2. Executive Summary**

#### This interim evidence report summarises the evidence gathered to date in Phase 2 of the ADC Review.

Extrapolating recent trends, the oral health of the population in England is expected to continue to improve – but there will be particular demand for dental treatment in deprived areas of the country and among older people. The delivery of oral health care will therefore need to shift towards a focus on prevention, whilst allowing people the ability to access treatment, including complex treatment, when needed.

In line with the NHS Long Term Plan and Interim People Plan, there is a view that future population needs may well best be met by a multidisciplinary model at the heart of the system, where dentists work in conjunction with Dental Care Professionals (Therapists, Hygienists and Nurses) in primary and secondary care. Other complementary models focusing on target groups or particular ways of working are also considered in this document.

However, the present workforce and dominant delivery method are some way from this vision. The delivery system has been designed with dentists at the centre, and with less emphasis put on the role of DCPs; and in the typical general practice employing DCPs, those DCPs are often unable to fulfil their full scope of practice.

The distribution of dental services and, by implication, the dental workforce does not match the demand for services, with supply concentrated in metropolitan areas. Counterbalancing this, dentists in London and the South East tend to work fewer hours in the NHS on average than those in other parts of the country, with commitment increasing towards the north. This may be a result of greater commitment by some dentists to the private sector, but it has not been possible to obtain data on that sector.

The DCP workforce is predominantly female, and while the gender split among dentists is approximately 50/50, the trend is towards an increasing ratio of women to men. Understanding this gender split is important because the evidence shows that female dentists tend to work fewer hours than their male counterparts.

About 1750 dentists graduated in England in 2017, compared with about 250 therapists and 370 hygienists. Between 4,500 and 5,000 dental nurses enter the workforce each year, but the turnover of these professionals is very high.

One innovative approach to increasing the acceptance of dental therapists using their full scope of practice is the Dental Therapy Foundation Training (DTFT) programme.

Most graduate dentists (84%) go on to work in general practice. Their usual route to doing so is by undertaking one year of Dental Foundation Training (DFT) after graduation, but other models exist, including two-year courses combining DFT with the first year of Dental Core Training (DCT1).

The principal factor affecting trainees' choice of DCT post is the suitability of geographical location in relation to their other personal commitments. In England, about 300 dentists undertake the first year of DCT (DCT1), and half step away from DCT at this stage to enter

general dental practice. Of the 150 or so who undertake a second year (DCT2), only about onequarter undertake a third year (DCT3) and those who do are usually looking to a career in a dental specialty. DCT is the main route to Dental Specialty Training (DST), and there were nearly 500 DST trainees in England in 2018/19. DST programmes are normally of three to five years duration, depending on the specialty.

In considering how to redesign education and training, it is important to recognise trainees' expectations and preferences. Many postgraduate trainees look for flexibility in their future career, seeking the option to work part-time or 'step on, step off' models enabling them to have a good work/life balance. At the present time, a number of younger dentists state that they expect to work in the NHS for a few years and then transfer to private practice. One of the challenges facing NHS dentistry is the creation of training pathways and career structures which encourage dental practitioners to continue working within the NHS system.

The training of the workforce of the future depends on a sufficient supply of clinicians with the skills to train and this includes clinical academics. The clinical academic group is needed also to conduct the research necessary to keep improving patient care. It is important that DCPs as well as dentists have the opportunity to move into roles that include an academic element. It would also be valuable to provide opportunities for dental professionals to undertake research experience prior to applying for academic training so that they could assess its suitability for them.

Leadership in dentistry and oral health is necessary to enable successful cultural change. At present, most leaders in dentistry are dentists rather than DCPs; and hygienists and therapists are less likely than dentists to see themselves as potential leaders. To 'level the playing field', the evidence suggests that leadership development should be included in all registrants' personal development plans (PDPs).

Current pathways into and within dentistry do not appear sufficiently flexible to meet either patients' future needs or trainees' preferences. We are considering a range of different future pathways and have already obtained useful stakeholder feedback on some of them. We continue to engage closely with stakeholders as we progress through the Review work.

# 3.Introduction – Review aims, questions and deliverables

The nation's oral health has improved significantly in recent decades, despite there being sections of the population – such as those living in deprived areas – who still have significant levels of tooth decay and gum disease. These factors have led to changes in the demand for dental treatment and public health approaches to prevention.

However, the supply side of the equation has not kept up with these changes – at least, in the NHS. The number of dentists and other dental care professionals (DCPs) – such as therapists, hygienists and nurses in practice and being trained – no longer necessarily matches the need, and this is particularly acute in certain parts of the country. Moreover, the way in which dental care is delivered by the team/workforce with different skills may no longer be appropriate to current and future need.

The NHS Long Term Plan sets out a new service model, where more action is taken on prevention and health inequalities. To help achieve this, the Interim People Plan calls for 'different people in different professions working in different ways'<sup>1</sup>. It sees multiprofessional clinical teams as the foundation of the future workforce, to provide patients and service users with a more joined-up service, to allow health professionals to have more flexible careers and a better work/life balance, and to enable healthcare to be more affordable for society as a whole.

As the body with a statutory responsibility for dental education and training<sup>2</sup>, Health Education England (HEE) established the ADC Review in 2017, with these opportunities and challenges in oral health in mind. A core ADC objective is to align dental education and associated funding with population need. A report on Phase 1, which identified new options and models for training, was published in 2018<sup>3</sup>, and Phase 2 followed.

The objectives of Phase 2 are to:

- 1. Collate a robust evidence-base on the population's oral health needs in a technology enabled, prevention-oriented system, and model the most appropriate dental workforce for meeting those needs.
- 2. Identify and evaluate new and existing innovative training approaches, and develop or upscale exemplars within the available funding envelope.
- 3. Understand the Continuing Professional Development (CPD) requirements of the existing workforce, and identify best practice.

Five workstreams were established to tackle different elements of this brief, all based on the premise that designing new training pathways will contribute towards correcting the future imbalance between supply and demand in the NHS and towards changing the way that oral health is perceived within healthcare as a whole. It is recognised that other factors also play a

<sup>&</sup>lt;sup>1</sup> Interim NHS People Plan, NHS, June 2019, Page 2.

<sup>&</sup>lt;sup>2</sup> HEE commissions and funds postgraduate training and undergraduate placements in dentistry as well as some pre-registration training for DCPs. HEE is not responsible for funding all dental education and training for the workforce. See section 6.2 on funding.

<sup>&</sup>lt;sup>3</sup> Advancing Dental Care: Education and Training Review, HEE, April 2018.

part, including the NHS primary care dental contract and non-NHS dental activity which, while outside the scope of this review, are integral to the future development of dental services and the skill mix necessary to deliver those services. HEE aims to begin to implement and evaluate alternative training pathway pilots from 2020.

HEE has liaised widely with system partners to access information on dental services and oral health needs in England today and in the future. However, much of the available information is currently incomplete or of insufficient quality to draw conclusions regarding the workforce and its activity; to fully understand patient need; or to make assertions about the most effective delivery models for providing high quality oral healthcare. This interim evidence report is nevertheless based on such reliable data as HEE could obtain, and we want to continue to engage with stakeholders on further evidence to establish a more comprehensive picture. HEE recommends that a national adult oral health survey and a national dental workforce survey be commissioned to bolster the evidence base.

What we do know from the data we have been able to obtain is that change is necessary and inevitable, based on health profiles and population trends alone. On this basis, we strongly believe that we could do more to build greater resilience and flexibility into our training structures to deliver the right workforce to respond to changing needs.

The purpose of this document is to share with stakeholders the evidence that has been collected and analysed so far to inform a wide debate about the direction that dental education and training should take.

# 4. Changing population needs

#### Adults

The most recent survey of adult oral health in England, undertaken in 2009, showed that only 6% of adults had no natural teeth at that time, compared with 28% in 1978<sup>4</sup>. Other measures also show a marked improvement in adult oral health over that period, with younger people generally having less tooth decay than older people.

However, in recent years, the number of adults seen by an NHS dentist in England has fallen. The latest data on patients seen by an NHS dentist reveals that 22 million adults (50.7%) saw an NHS dentist in the 24 months to 30 June 2018. This figure was 98,445 fewer than the 24-month period to June 2017. This has, in part, been attributed to labour shortages in NHS dentistry<sup>5</sup>.

There is significant evidence of inequalities in oral health related to socio-economic factors. For example, the 2009 survey found that about one-third of adults in households defined as 'routine and manual occupations' had experienced urgent conditions, such as dental pain, in the previous 12 months, compared with about one-fifth of those in households from 'managerial and professional occupations'<sup>6</sup>.

Age and gender also play a part. In the 2009 survey, women were more likely than men to say that they had good or very good dental health (73% compared with 68%). 79% of dentate adults aged 16 to 24 reported that they had good or very good dental health compared with 71% of those aged 75 to 84. The Care Quality Commission in 2019<sup>7</sup> concluded that too many people living in care homes are not being supported to maintain and improve their oral health. Once people enter a care home, it is common for them to stop receiving routine dental check-ups and having attention paid to their overall oral health. The CQC recommended that care home staff be supported to help ensure that day-to-day oral hygiene was regarded as of equal priority to other personal care tasks.

A fresh survey of adult oral health would be valuable, but there appears to be no evidence that the trends observed over recent decades have not continued; therefore, extrapolating from the 2009 results can provide a realistic picture for today. Regional variations are likely to become more acute without any changes in the care systems, given that population increases are forecast in metropolitan areas which already contain areas of high deprivation and that the elderly population in rural areas is expected to grow at a greater rate (see Figure 1).

<sup>&</sup>lt;sup>4</sup> A Summary of Oral Health Data for England, Public Health England, September 2019.

<sup>&</sup>lt;sup>5</sup> NHS Dentistry Services, House of Lords Briefing, 2019.

<sup>&</sup>lt;sup>6</sup> Idem

<sup>&</sup>lt;sup>7</sup> Smiling Matters – Oral Health Care in Care Homes, CQC, June 2019





Fig. 1: Forecast population changes 2018-20418

#### Children

For children, there is more recent oral health data, with the latest national survey undertaken in 2013<sup>9</sup>. This demonstrated a continuing decline in dental decay in the permanent teeth of 12and 15-year-old children. Among three-year old children, there was wide variation in the prevalence of dental decay regionally and at local authority level. For example, 34% of children in Leicester had experienced dental decay compared with less than 2% in South Gloucester. Dental decay experience was related to deprivation, and this factor alone contributed to 19% of the prevalence and 25% of the severity of the disease.

#### Overall

Public Health England, in its report for this Review<sup>10</sup>, concluded that the improvement in the population's oral health in recent decades masks significant inequalities between population groups and geographies.

People from lower socio-economic groups, those living in the Midlands and North of England, older populations and those from vulnerable groups are more likely to have poorer oral health. For example, among older people living in supported housing, poorer oral health was associated with age, increased length of time since the last dental visit, being restricted in their ability to attend a dental practice or the limited range of treatments that can be delivered in their

<sup>&</sup>lt;sup>8</sup> Data modelling based on ONS population statistics

<sup>&</sup>lt;sup>9</sup> Child Dental Health Survey 2013, NHS Digital, March 2015.

<sup>&</sup>lt;sup>10</sup> A Summary of Oral Health Data for England, Public Health England, September 2019.

home. Those with a reduced cognitive recall and those with a lower level of education also tended to have poorer oral health<sup>11</sup>.

The inequalities in oral health and oral health improvements mean that dental services that meet the needs of the population, for example, in the South East of England will not necessarily meet the needs of the population in the North East of England. This needs to be taken into consideration when planning services and the dental workforce needed to deliver those services.

Looking forward, the picture is one of a population needing more support with prevention in the management of oral disease and, for people most at risk, the ability to access appropriate treatment in a location convenient to them.

<sup>&</sup>lt;sup>11</sup> A Summary of Oral Health Data for England, Public Health England, September 2019.

## 5.Workforce

Changing population need is likely to require a workforce skill mix different from today, and in turn this will help shape thinking about appropriate education and training. We therefore look in this chapter at the composition of the NHS dental workforce, at how it is changing, and the challenges now being faced. This leads to conclusions about a mismatch between demand and supply.

#### 5.1 Current composition

There were 111,000 dentists and DCPs registered with the General Dental Council in 2017. Five-eighths (62.5%) of these were DCPs and the remainder were dentists.<sup>12</sup>



Figure 2: Composition of the dental workforce

GDC data for 2017 shows that, while dentists are roughly split half and half between men and women, the vast majority (92%) of Dental Care Professionals (DCPs) are female.

There is little difference in age profile between dentists and DCPs (see Table 1), except at the ends of the age ranges, with a greater proportion of dentists than DCPs in work over the age of 60.

<sup>&</sup>lt;sup>12</sup> Annual Report and Accounts 2017, General Dental Council. Note: UK, rather than England.

Age Groupings	Dentists	% of Dentists	DCPs	% of DCPs	GRAND TOTAL
16-21	0	0%	2,106	3%	2106
22-30	8304	20%	19,435	28%	27,739
31-40	12,384	30%	20,634	30%	33,018
41-50	9,936	24%	14,585	21%	24,521
51-60	7,968	19%	10,170	15%	18,138
61-65	1,837	4%	1,896	3%	3,733
Over 65	1,276	3%	677	1%	1,953
TOTAL	41,705		69,503		111,209

Table	1: Age	composition	of	workforce
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#### 5.2 New registrants (UK)

In terms of the supply pipeline, of those added to the dental register at the end of 2017, dentists represented just under one-quarter, with the rest made up of dental nurses, dental hygienists and therapists, and other DCPs – see Table  $2^{13}$ .

Registrant type	Gross	%
Dentists	1751	24%
Dental nurses	4686	64%
Dental hygienists	370	5%
Dental therapists	264	4%
Other DCPs	255	3%
TOTAL	7326	100%

However, while the gross number of new dental nurses joining the register each year is comparatively high, so too is turnover. In 2017, nearly 3,000 dental nurses left the register, meaning that the net addition was only 1,689<sup>14</sup>.

Since departures of other dental professionals are relatively low, it can be estimated that the number of net new dental nurses joining the register is about the same as the number of dentists; but the number of hygienists, therapists and other DCPs joining is approximately only half of the number of net new dentists.

As shown in Table 3, two-thirds of new dentists joining the register in 2017 were from the UK, with the remainder coming from the European Economic Area (EEA) and from other areas

<sup>&</sup>lt;sup>13</sup> Annual Report and Accounts 2017, General Dental Council.

<sup>&</sup>lt;sup>14</sup> Future Funding for Dental Nurse Training in England: Options Analysis, HEE July 2019

beyond the EEA, entering the register either via the GDC's Overseas Registration Examination (ORE) or directly as a result of the recognition of their home country qualification.<sup>15</sup>

Regions of Qualification	Number of registrants	% of total
UK Qualified	1,145	65%
EEA Qualified	409	23%
ORE (UK overseas registration exam)	170	10%
Overseas Qualified	27	2%
TOTAL	1,751	

Table 3: New additions to the register in 2017 by region of qualification

As regards the EEA component of supply, it is notable that 32% of EEA-qualified dental registrants surveyed by the GDC are considering leaving the UK in the next few years.<sup>16</sup>

#### 5.3 Workforce challenges

Supply is and will be affected not only by the number of practising dental professionals, but also by the proportion of time which they work in the NHS.

#### Gender

Gender is a significant factor in NHS commitment (see Table 5). Overall, on average, males devote more working hours to NHS dentistry than women: 26.8 hours compared to 24.7 hours.<sup>17</sup>

This is broadly corroborated by information from a medical defence agency (indemnity provider), which showed that just over three in five of its female dentist members were covered for working full time, compared with just over four in five of male dentists.

The new registrant data in Table 4 suggests that the dental workforce is becoming increasingly feminised, and therefore that a potential decrease in workforce availability may be expected unless circumstances change.

Role	Female	Total	% Female
Dentist	1077	1751	62%
Dental nurse	4583	4686	98%
Dental hygienist	343	370	93%
Dental therapist	239	264	91%
Other DCP	145	255	57%
TOTAL	6387	7326	87%

Table 4: Gender split of new registrants by role

<sup>&</sup>lt;sup>15</sup> Annual Report and Accounts 2017, General Dental Council.

<sup>&</sup>lt;sup>16</sup> Survey of European Qualified Dental Professionals, General Dental Council, January 2019.

<sup>&</sup>lt;sup>17</sup> ADC calculations based on data from NHS Digital.

#### Age

While a workforce survey is unavailable, the existing high-level evidence suggests that age is also a factor in dentists' NHS commitment – at least, for male dentists. In 2017/18, males under the age of 35 devoted an average of 30.9 hours to NHS dentistry, whilst males over the age of 55 performed 21.5 dental hours – an average difference of 9.4 hours weekly, or 30.4% (see Table 5). As age increases for male dentists, there is a tendency for NHS commitment to reduce.<sup>18</sup>

Males		Females		
Age	NHS hours	Age	NHS Hours	
<35	30.9	<35	27.5	
35-44	28.2	35-44	23.9	
45-54	25.6	45-54	21.9	
55+	21.5	55+	23.7	
All	26.8	All	24.7	

Table 5: NHS commitment by age and gender

#### Geography

In 2017/18, the average NHS commitment of dentists in the North was 27.8 hours, compared to 22.5 hours in the South East (Table 6)<sup>19</sup>.

Location	<b>NHS Hours</b>
North of England	27.8
Midlands & East of England	26.3
London	24.8
South West	24.1
South East	22.5
England	25.7

Table 6: Average NHS commitment by location (all dentists, 2017/18)

#### **NHS working conditions**

Beyond these factors, the perceived attractiveness of the NHS as an employer appears also to be affecting clinical commitment.

Dentists' overall clinical commitment reduced between 2006/7 and 2017/18 – from 31.4 hours to 28.2 hours per week. Dentists are also now working slightly fewer hours in the NHS than 10 years earlier: 25.7 hours in 2017/18 compared with 26.1 hours in 2006/ $7^{20}$ .

<sup>&</sup>lt;sup>18</sup> ADC calculations based on data from NHS Digital.

<sup>&</sup>lt;sup>19</sup> Idem

<sup>&</sup>lt;sup>20</sup> ADC calculations based on data from NHS Digital.

Comparing dentists who spend most of their time on NHS activity and those who spend more time on private activity, dentists who mainly undertake NHS work<sup>21</sup>:

- work longer weekly hours
- take fewer weeks' annual leave
- spend more time on clinical work private practitioners spend approximately a third of their time on non-clinical activity
- tend to be younger than those with a higher private commitment.

Morale has dropped significantly: in 2012/13, 27.3% of provider performer dentists rated their morale as 'very high 'or 'high', with only 20.1% doing so in 2017/18. Morale has reduced more significantly amongst associate dentists – with 42.1% rating their morale as 'very high 'or 'high' in 2012/13 and only 24.9% doing so in 2017/18.<sup>22</sup>

The most common factors contributing to low morale are increasing expenses and/or declining NHS income, the risk of litigation and the cost of indemnity and professional fees. Regulations are also cited as a major cause of low morale amongst principal dentists.

Nearly two-thirds of principal dentists and over half of all associate dentists across the UK often think of leaving dentistry<sup>23</sup>.

#### **Scope of Practice**

In a survey of 283 Dental Hygienists and Dental Therapists (DHDT)<sup>24</sup>, Dental Therapists, in particular, reported that they do not regularly utilise their full scope of practice (SoP). 70% of dental therapists rarely or never conducted pulpotomies on primary teeth, and 67% rarely or never placed pre-formed crowns on primary teeth, even though both procedures fall within their SoP.

This does not appear to be a question of confidence in their own abilities. 66% of respondents carried out direct restorations on primary and secondary teeth every day or most days, and 84% ranked their confidence in conducting the procedures at 7/10 or higher. 63% extracted primary teeth some days or more frequently – and 75% ranked their confidence 7/10 or higher.

#### **Dental care provision**

There are major variations in the average number of dentists per head of population<sup>25</sup> across England (see Fig.3). In 2018, the average population size per NHS dentist in North West London was 797 at one end of the scale, while at the other it was 3,853 in Shropshire, Telford, and Wrekin, with a weighted average for England of 1,701. These figures have also increased over time (from 1,742 across England in 2014 for example), indicating a reduction in the number of NHS dentists relative to population. The picture is similar in relation to Dental Care Professionals per head (see Fig. 4).

<sup>&</sup>lt;sup>21</sup> Idem

<sup>&</sup>lt;sup>22</sup> ldem

<sup>&</sup>lt;sup>23</sup> Idem

<sup>&</sup>lt;sup>24</sup> Research carried out by ADC Review team

<sup>&</sup>lt;sup>25</sup> This data takes account of appointments across all specialities across the whole population



Fig. 3: Dentists per 1,000 population (2018)<sup>26</sup>



Fig. 4: DCPs per 1,000 population (2018)27

 $<sup>^{\</sup>rm 26}$  Based on ONS population statistics and on GDC registrant data (2019)  $^{\rm 27}$  ldem

The lack of access to dentists offering NHS dental services in parts of England has often left patients with no access to an NHS dental practice, consequently leading to patients having to visit hospitals, general medical practitioners or perform their own treatments to manage dental pain.<sup>28</sup>

Across STPs, there are instances in which some of the more deprived areas of the country (e.g. South West England; see Figure 5) have fewer dentists per 1000 population than the national average, and this relates to some extent to higher volumes of outpatient attendances for dental treatment (see Figure 6).



Fig. 5: Index of Multiple Deprivation, by STP region<sup>29</sup> (2015)

<sup>28</sup> NHS Dentistry Services, House of Lords Briefing, 2019.

<sup>29</sup> Ministry for Housing and Local Government (MHCLG) -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/467764/File\_1\_I D\_2015\_Index\_of\_Multiple\_Deprivation.xlsx accessed 2 October 2019

Outpatient Attendances per 1000 capita - STP





#### Activity

The Review's statistical analysis of units of dental activity in England shows that NHS activity as measured by Units of Dental Activity (UDAs) has fallen in the last five years. This is particularly true for Band 2 and Band 3 (i.e. more complex) treatment, but activity has risen slightly for Band 1 treatment – see Figure 7. As overall declared incomes to HMRC have remained fairly stable during the same period<sup>31</sup>, this may indicate that a greater proportion of complex treatment is being conducted in the private sector, but further investigation, which is outside the scope of ADC, would be required to confirm this.



Fig. 7: UDA base activity, 2012/13-2017/18

<sup>30</sup> NHS Digital (2018) Hospital Episode Statistics

<sup>31</sup> ADC calculations based on data from NHS Statistics

Our analysis shows that gender, age, and geography all affect NHS supply, and that perceptions about NHS working conditions also play a part. Another factor affecting supply is the extent to which professionals fulfil their full SoP. All these variables are considered below.

#### 5.4 Mismatch of supply against need

A key ambition of the ADC Review is to secure a system where the right professionals with the right skills, values and behaviours are in the right place at the right time to meet the population's oral health needs. Some new models of care piloted for this purpose are described in Annexe I.

Our analysis suggests that, in keeping with the direction of travel indicated by the NHS Long Term Plan and Interim People Plan, more multi-disciplinary working will be desirable in future. There is evidence to suggest that dentists could be released for more complex work if other members of the dental team (DCPs) were working to the limit of their full scope of practice.

A literature review identified a paper claiming that 73% of clinical time in England's NHS primary dental care was spent on tasks which could be delegated to DCPs. Further searches demonstrated that DHDT have levels of clinical competence, within their scope of practice, that match or, in some areas, even surpass those of GDPs<sup>32</sup>. The Association of Dental Groups (ADG) reported that its members were generally supportive of the multi-disciplinary model but felt that culture remains a barrier.

This implies both a changed balance in the numbers of different types of dental professionals that will be required and a change in culture. In turn, this affects the required provision of education and training.

<sup>&</sup>lt;sup>32</sup> Skills for Health Dental Nurse Apprenticeship Standard Survey

# **6.Education and Training**

#### 6.1 The current system

# The various pathways to enter and progress in the dental workforce are many and complex.

An attempt to map them is presented in the 'tube map'<sup>33</sup> below – Figure 8 – which is nonetheless a simplified version of the status quo.



Fig. 8: Current system training pathways for dentists and DCPs

<sup>&</sup>lt;sup>33</sup> All tube maps can be found on the ADC website: <u>https://www.hee.nhs.uk/our-work/advancing-dental-care-phase-ii</u>

#### **DCPs**

Figure 8 provides a broad overview of current pathways for dentists and DCPs. For example, at the top right of the diagram, the purple line shows the route that dental nurses can currently take to develop their skills, while the red and teal coloured lines extending left from there illustrate the journey that hygienists and therapists can take.

A tube map specifically for DCP pathways was also created (Figure 9) to better illustrate training pathways for DCPs and complement Figure 8.



Fig. 9: DCP training pathways 'tube map'

#### **Dentists**

Figure 8 illustrates the pathway for dentists who complete four to six years of study to earn a Bachelor or Master of Dental Surgery (BDS or BChD/MChD) degree. On successful completion of their degree, dentists are eligible for full registration with the UK General Dental Council (GDC). There is subsequently a range of other training pathways that can be undertaken.

#### **Dental Foundation Training**

As shown by the right-hand end of the bright green line in Figure 8, graduates may then either take Dental Foundation Training (DFT; previously known as Vocational Training) alone or pursue the DFTDCT route (also known as GPT).

The primary purpose of DFT is the development of "competent, caring, reflective practitioners who can consistently provide safe and effective care for patients in a primary care setting". This 12-month period of training combines experiential learning within primary dental care, with a

minimum of 30 study days, targeting specific areas of the DFT curriculum. The majority of DFT training posts are based within one dental practice, with the trainee providing NHS General Dental Services (GDS) under the supervision of an educational supervisor.<sup>34</sup>

Completion of DFT is required for UK graduates to gain an NHS performer number. This allows them to practise in NHS primary dental care in England and this route is illustrated by the blue line on the left of the tube map.

#### **Dental Core Training (DCT)**

However, as illustrated by the yellow line of Figure 8, Dental Core Training (DCT) is an optional postgraduate training programme that dentists can pursue to further their skillset. For many years, DCT was known as a Senior House Officer (SHO) post based mainly in Oral & Maxillofacial Surgery (OMFS) departments. These posts have been renamed several times in recent years until the current term, DCT, was adopted.<sup>35</sup>

Until 2016, there was no formal curriculum for DCT and the design of training posts was ad hoc dependent on the type of post and setting. DCT now has a curriculum, an educational programme with study days, assessment, portfolio, and dedicated supervisors.<sup>36</sup>

Dentist trainees can undertake one, two or three years of DCT. DCT is a training period that dentists normally choose to pursue immediately following completion of DFT but does not necessarily need to be undertaken at that point.

Some dentists will complete the first year of DCT before typically pursuing general dental practice (taking the light green hatched line, in Figure 8, to become dentists with enhanced skills); others will undertake a second or third year that will set them on the pathway to pursue specialist training – the orange line..

#### **Dental Specialty Training (DST)**

To meet the need for safe, more complex care, a wide range of postgraduate training has evolved in the UK and elsewhere, and a wide range of dental specialties are now recognised by the General Dental Council (GDC). At the end of 2018, nearly 10% of all UK dentists were listed in one or more of the GDC's specialist lists (GDC 2019). The route on to these lists is shown by the pale orange line and the maroon line on the tube map diagram in Figure 8.

The concept of three levels of treatment need, has also been developed in the UK. DFT is designed to allow dentists to reach the competence to deliver Level 1 care – the blue line on the left of Figure 8.

Level 2 implies that dentists have developed a special interest in one area of dentistry as defined by the Commissioning Standards<sup>37</sup> and are competent enough in this area to receive referrals from other dentists – illustrated by the turquoise line at the bottom left of Figure 8.

<sup>&</sup>lt;sup>34</sup> Coleman A & Finn G. (2019). Post-qualification dental training. Part 1: perceptions of different dental foundation and dental core training pathways. British Dental Journal. 227 (10) 915-921.

Coleman A & Finn G. (2019). Post-qualification dental training. Part 2: Is there value of training within different clinical settings? British Dental Journal. 227 (11) 989-99

<sup>&</sup>lt;sup>35</sup> Idem

<sup>&</sup>lt;sup>36</sup> Idem

<sup>&</sup>lt;sup>37</sup> <u>https://www.england.nhs.uk/primary-care/dentistry/dental-commissioning/dental-specialities/</u> (accessed 5 March 2020)

Level 3 implies that dentists have successfully completed an externally assessed training pathway and been awarded a certificate of completion of specialist training (CCST), which enables them to have their names added to a specialist list by the GDC, or that they can demonstrate equivalent skills and knowledge<sup>38</sup>. The main route is illustrated by the orange lines on the tube map diagram in Figure 8, but, as indicated by the light blue line on the bottom right of the diagram, another existing pathway is available to hospital staff grade/speciality dentists.

Illustrated by the darker orange and blue lines at the bottom right of the diagram are the pathways to become an NHS consultant or senior NHS leader.

#### 6.2 Funding

HEE supports the education, training, and development of dentists and DCPs via:

- Pre-registration tariff payments for dental and some DCP clinical placements
- Funding DFT schemes in dental practices
- Salary contributions, on-costs, and curriculum support costs for national postgraduate dental training in DCT and DFTDCT/GPT
- Local commissioning arrangements for upskilling General Dental Practitioners in specialist (Level 2) skills
- Local commissioning arrangements for DCP development

HEE spends £121.3 million per year on commissioning postgraduate dental training. This comprises £88.7 million on 848 DFT commissions, an average of nearly £105,000 per trainee; and £32.6 million on 984 core and specialty dental training commissions, an average of over £330,000 per trainee. For the majority of DCT posts, HEE splits salaries 50/50 with the employing Trust, and funds a placement tariff. In some cases, however, the DCT post is 100% funded by either the Trust or HEE.

Despite understanding some elements of funding training programmes and the potential income generated by trainees, we are aware that this information is limited and, in some areas, lacking. There also appears to be variation geographically as to how these programmes are funded in terms of cost to HEE. Understanding the true cost and income from dental training activities can inform and forecast the economic impact of implementing new training models. A cost collection exercise is therefore being conducted to understand the true cost and income from training a newly qualified dental graduate within both primary (GDS) and secondary care settings and reasons for any variation in cost geographically.

#### 6.3 Academic training

The training of the workforce of the future depends on a sufficient supply of clinicians with the skills to train and this includes clinical academics. A review<sup>39</sup> was conducted to explore motivators and barriers to academic training. Findings suggest that:

- Dentist graduates are often not aware of the possible academic career pathway and that it can be embarked on at any time in a dental career
- The training pathway is long typically seven years longer before becoming a consultant senior lecturer

<sup>&</sup>lt;sup>38</sup> Note that level 3a – Specialist is distinct from level 3b – Consultant.

<sup>&</sup>lt;sup>39</sup> See publication: <u>https://www.hee.nhs.uk/our-work/advancing-dental-care/advancing-dental-care-phase-ii</u>

- There are perceived financial barriers
- The opportunity to escape the 'insularity' of life as a GDP can be appealing

It is important that DCPs, as well as dentists, can move into roles that include an academic element. While an academic post can be attractive, our research suggests that there are a number of factors inhibiting applications, and it would be valuable to provide opportunities for dental professionals to undertake research experience prior to applying for academic training, so that they could assess its suitability for them. An overview of academic training pathways and clinical fellowships was developed and is presented in Figure 10, as an overlay on top of Figure 8, showing other current pathways.



Fig. 10: Academic training pathways and clinical fellowships 'tube map'

#### 6.4 Training exemplars and existing innovation

The ADC Review is aware of a number of examples of innovative training practice, such as:

- Dental nurse apprenticeships
- Return to therapy programmes
- Academic dental foundation training
- Two-year programmes combining DFT and DCT1
- Dental Therapy Foundation Training (DTFT)

Information on the last two of these is set out below, while Annexe II contains details of international comparisons explored by the ADC Review.

#### **DFTDCT and General Professional Training (GPT)**

Previously known as Longitudinal Dental Foundation Training (LDFT), DFTDCT is currently the term used for the two-year integrated training pathway provided by HEE across Yorkshire & Humber, based within both primary and secondary care settings, and combining elements of both DFT and DCT1. This will be known as Joint Dental Foundation and Core Training (JDFCT) from September 2021. Another two-year scheme model is run by HEE across the North East and is referred to as General Professional Training (GPT). This GPT scheme provides a more in-depth approach to postgraduate training, combining primary and secondary training in both a training practice and at Newcastle Dental Hospital. Rotating between one week in general dental practice and one week in a hospital environment provides a challenging and unique experience. Whilst not the same as the longitudinal foundation training year, with the week divided across three days within General Dental Services as a Foundation Trainee, one day's attendance at an HEE-commissioned DFT study day and one day in a secondary (Dental Hospital) provider.

The need to fully scope and evaluate the two-year training models was identified in Phase 1 of the ADC Review. A qualitative study exploring the two-year training programme in Yorkshire & Humber in comparison to the 1-year DFT and 1-year DCT1 training programmes was conducted in 2018<sup>40</sup>. Its key findings include:

- A two-year programme is appealing to many trainees in terms of job security and not having to change location between DFT and DCT1.
- An integrated training programme within different clinical settings allows development of transferrable skills that be can be utilised across both primary and secondary care settings.
- Training within different settings with different teams provides opportunities for interprofessional collaboration, appreciation of patient care pathways and a broad base of experience. These opportunities appear to be enhanced within a two-year integrated programme combining both DFT and DCT1.
- The national recruitment process and location of posts can influence training pathway choice particularly if it impacts upon personal factors such as finance and family commitments.

#### Dental Therapy Foundation Training (DTFT)

One programme seen as innovative is Dental Therapy Foundation Training (DTFT). While the course is designed primarily for newly qualified Dental Therapists, it is felt that elements<sup>41</sup> of the programme may also be able to play a part in upskilling the significant number of qualified

<sup>&</sup>lt;sup>40</sup> Coleman A & Finn G. (2019). Post-qualification dental training. Part 1: perceptions of different dental foundation and dental core training pathways. British Dental Journal. 227 (10) 915-921.

Coleman A & Finn G. (2019). Post-qualification dental training. Part 2: Is there value of training within different clinical settings? British Dental Journal. 227 (11) 989-995

<sup>&</sup>lt;sup>41</sup> It is not suggested that deskilled DTs would need to undertake the whole of the DTFT programme.

dental therapists who have deskilled through not using their full scope of practice. Although there is no national model, schemes are established or being piloted in all seven HEE areas. In some models, trainees can obtain experience of work in community and primary dental care, and there are some similarities across the schemes in terms of salary, study days and overall structure. Assessment frameworks are generally like those for Dental Foundation Training, encompassing clinical communication, professionalism, management, and leadership. Some of the variations are in the placements and capacity.

London and KSS is planning a comprehensive evaluation of the course it introduced in 2019, which includes the following:

- Impact on access
- Effectiveness, efficiency, sustainability, acceptability, and affordability of therapists working in NHS primary care settings
- The implications for workforce modelling
- The impact on paediatric referrals
- Impact of training on the Foundation Dental Therapists

The ADC Review intends to encourage further research into DTFT, including:

- Further evaluation of assessment strategies and teaching models
- The patient perspective in primary care: awareness of who they are being treated by and how important this is to them
- Appropriateness of recruitment criteria
- Destination survey which includes current employment, role, and location
- Further clarity on the true costs of training per trainee, including hidden costs

#### 6.5 Trainees' feedback

The newly qualified workforce are key stakeholders in future training, and it is essential that HEE begins to develop training proposals that align with the career aspirations of young dentists and DCPs, who we would expect to be providing the service for the next 30 years.

The Review conducted research with postgraduate dentistry trainees to gain insight into their motivations for choosing their training programmes; their preferences for course design; and their future career aspirations.

#### Career choices

Focus groups with a national sample of 60 DFT trainees found:

- Some newly qualified dentists feel that "gold standard dentistry" cannot be provided on the NHS, and they therefore lack job satisfaction in the NHS.
- Many expect to work in the NHS for the first few years to further develop their skills and then work in private practice.
- Many want to work part time and are happy to take a salary sacrifice to accommodate a better work/life balance.
- Many are interested in part time or modular training.
- The national recruitment process puts some off applying for further training.
- Some have other interests outside dentistry which they want time to accommodate.

- Some express interest spending part of a week teaching and/or in a hospital setting alongside being a general dental practitioner, to give them both a varied working week and to offer a portfolio career.
- Overall, they have a feeling of being let down by the career opportunities on offer, and not experiencing what they expected when they applied.

#### **Dental Core Training (DCT)**

Research on attitudes towards DCT identified three broad groupings of trainees based on what seemed to be their primary motivation for pursuing that training:

- Group 1 are individuals who know they want to work in general dental practice but feel they would benefit from a bit more experience and training before doing so.
- Group 2 want to pursue speciality training and recognise that DCT is an important step on this pathway.
- Group 3 are the individuals who are less certain about their career path and see DCT as an opportunity to explore some of the options that are available to them.

Groups 1 and 2 therefore have a relatively clear career direction and make an "active decision" to pursue DCT. Those in the third group seem to enter DCT with a more uncertain career trajectory, but they expect their experience will either help to them to identify what they would like to pursue or rule out certain options.

Geography was commonly reported as a key influencer when preferencing DCT posts, although trainees also sought particular training and experiences.

#### Conclusion

The main themes emerging across the studies are:

- 1. Geography (i.e. proximity of training post location to family / other commitments) is the most important factor affecting choice of where to study.
- 2. Job security from training posts which offer 'run-through' is also attractive.
- 3. Trainees envisage a 'portfolio' career, giving them wider variety.
- 4. Greater clarity about the recruitment process and a more streamlined approach would be popular.
- 5. The desire for a better work/life balance and to provide the possibilities of affordable change of career direction, permitting training alongside paid work.

#### 6.6 **Options for reform**

Given the perceived benefits of multi-disciplinary working (see section 5.4) and the desire of the workforce for more flexible training options, consideration will need to be given to the provision of future training programmes that address these areas.

If there is to be a new focus on prevention alongside treatment targeted at vulnerable groups, with more care provided in primary care, the changes in commissioning and overall care structures will require significant cultural change and therefore effective leadership. At present, there appears to be no shortage of leaders in general – but most are dentists, and their leadership is often focused on running their own business in general practice. It will be important to equip a wider range of dental professionals, including dental therapists, hygienists,

and nurses, for leadership roles. Raising awareness of this need and the inclusion of more leadership development in registrants' PDPs could make a significant difference.<sup>42</sup> Uptake of leadership training could be encouraged by flexible programmes that fit around existing commitments together with funding being made available to support the training element.

The ADC Review has developed a range of training options for consideration, designed to stimulate conversations with stakeholders. Alternative models to meet perceived needs, representing amendments to the existing 'tube map', have been proposed, and are illustrated in Annexe III. A series of stakeholder engagement events considering the different tube maps these models was held in the autumn/winter of 2019, and a summary of the feedback on these is presented in section 6.6.

#### 6.7 Feedback from engagement events on training pathways

A strong message from the stakeholder events was the need to **raise awareness** of the different education and training pathways available to dentists and DCPs. Many existing pathways may not be known.

A barrier noted was the **availability of funding to learners** to support study and skills development. Student debt was seen by stakeholders as a growing problem and this may drive potential learners to work without pursuing further education and training, because of the financial incentives.

More options for **part-time / less-than-full-time, flexible training opportunities** throughout the full range of training pathways were called for, especially in relation to DCT and DST. Some also pointed out the opportunities of 'hop-on, hop-off' training opportunities to offer more flexibility in completion of training.

Related to this was mention of options for GDPs to undertake **modular training** alongside practice to develop enhanced skills that could support transitioning to DCT, DST or Academic posts, as well as gain Tier 2 accreditation. Some participants stressed the importance of accommodating GDPs to pursue training in this manner as they represent the majority of the dental workforce. This linked with a broader point made by some participants about where private practice fits in amongst the training pathways.

Many stakeholders highlighted the importance of **recognising previous experience and skills** gained through employment to support entry into training pathways. Primary Care dentists moving into specialty training or DNs moving into Dental Therapy training were cited as examples.

Some stakeholders noted that professionals increasingly wish to pursue more diverse **portfolio careers** in which they combine practice with other pursuits such as clinical / academic research, lecturing or areas of personal interest not directly linked to their main role. Participants noted that a career approach can improve job satisfaction, workforce retention and transfer of knowledge and skills across different settings.

Stakeholders felt there was a need to **improve consistency of academic training** across all institutions and to address concerns about funding and accessibility of ACF posts. It was also felt that more access to PhD funding for dental research would be valuable. Some stakeholders

<sup>&</sup>lt;sup>42</sup> See <u>https://www.hee.nhs.uk/our-work/advancing-dental-care/advancing-dental-care-phase-ii</u>

also noted the importance of employers recognising the relevance and utility of academic skills, to support the uptake of these posts and the transfer of academic skills into practice.

Whilst some examples of mentoring were noted by stakeholders, many felt that there was a missed opportunity to **embed better systems of mentoring** for less experienced trainees/professionals by more experienced practitioners. This was recognised as a very good way to foster skill development, share learning and best practice and raise more awareness of training and development opportunities. Some participants noted that there should be more **opportunities for DCPs to develop into leadership roles**.

Stakeholders noted the importance of **cultural and attitudinal** shifts to increase openmindedness to the skillsets that different professions bring to the team, and hence to more multiprofessional working. Many stakeholders also felt that patients' lack of familiarity with DCP roles and capabilities exacerbates the problem, and that changes in perception among the public of their skills could contribute to greater multiprofessional working. The findings from our patient focus groups corroborated this lack of understanding among the public.

Some stakeholders highlighted issues with the **distribution of training posts**, particularly in relation to DCT and DST, as an area of concern. This may contribute to a workforce that is not in the right place at the right time with the right skills. Some stakeholders questioned whether the right numbers were being recruited into the right specialities and that attention should be given to how commissioning is done in speciality training.

During undergraduate pre-registration training of both dentists and DCPs, more exposure to primary care and community settings would be valuable, as most professionals practise outside secondary care.

# ANNEXES

### I. New delivery models

In view of the population's changing oral health needs, there are strong reasons to believe that delivery in the future should focus on targeted treatment for those most at risk, alongside promotion of the importance of prevention in the management of oral disease.

A range of delivery models and initiatives seek to address this, including those described below.

# Targeting population oral health as well as managing disease: General Dental Service Contract Reform

In 2016, as part of the General Dental Services (GDS) contract reforms, the NHS rolled out prototype contracts to 79 NHS dental practices in England, with an aim of creating a "prevention-focused" model. To do this, the prototype contracts incentivise dentists to offer "full oral health assessments and self-care plans", in addition to traditional treatments. In July 2018, the Department of Health and Social Care announced that up to an extra 50 practices in England would also test out the prototype contract. The Department stated that in the first year of piloting the prototype contracts, dentists reported that:

- 90% of patients had reduced or maintained levels of tooth decay.
- 80% of patients had reduced or maintained levels of gum disease.
- 97% of patients said they were satisfied with the dental care they received<sup>43</sup>.

Research identified by the ADC Review assessing the 79 prototype practices on the original prototype contracts suggested that, although there were changes to the use of team skills, the main factor influencing a practitioner's decision whether or not to utilise DCPs was sufficiency of physical space, and the majority of practitioners felt their space did not permit them to use more DCPs. However, the research also concluded that there is not yet enough evidence to indicate the future skill mix balance of the dental team, and what evidence is available is of low quality.

#### Targeted intervention with the potential for great impact: Starting Well

Aiming to promote early years dental access to preventative care in England, NHS England launched the Starting Well framework as a dental practice-based initiative in 2018. This includes a commissioning approach (called the Starting Well Core) aimed at reducing oral health inequalities and improving oral health for children aged 0–2 years old by:

- Increasing dental access and attendance.
- Delivering evidence-based preventative care in practice, such as preventive advice and support for behavioural change.

<sup>&</sup>lt;sup>43</sup> NHS Dentistry Services, House of Lords Briefing, 2019.

 Raising public and professional awareness to promote early-years dental attendance and supporting the British Society of Paediatric Dentistry's campaign for a Dental Check by One.<sup>44</sup>

# Raising awareness and improving care of the most vulnerable: Mouth Care Matters

Responding to evidence that oral health can deteriorate when people are in hospital, HEE set up the Mouth Care Matters (MCM) programme, focusing on four core principles:

- Knowledge provide staff/carers with knowledge of why mouth care is so important
- Skills ensure staff/carers are skilled to provide good mouth care
- Access patients have access to effective mouth care products
- Support Staff/carers/patients have support from staff with enhanced oral health skills

In 2015/16, MCM was implemented in 13 trusts across Kent, Surrey, and Sussex, and in 2018 HEE were able to offer 30 trusts in England a two-day 'train the trainers' programme. In 2019, MCM was able to provide one day training for leads from another 30 trusts.

The initial project has been evaluated through a series of audits, surveys, case reports and focus groups and found significant financial benefits as a result of improving oral health<sup>45</sup>.

MCM is working in partnership with the Royal Hospital of Neuro-disability to develop an oral health training programme to support staff and families caring for people with a neuro-disability.

For children, a 'Mini MCM' model is being funded by Health Education England, which aims to empower medical and allied healthcare professionals to take ownership of the oral health care of any paediatric in-patient with a hospital stay of more than 24 hours.

#### Alternative business model: Community Dental Services CIC

Community Dental Services CIC delivers clinical dental and oral health promotion services in and around the East Midlands and is aiming to develop specialist and other services within a community setting.

It is established as an employee-owned social enterprise and Community Interest Company, combining a public service ethos with the innovation and dynamism of a business. It believes that being a competitive, well-run and profitable business is the best way to achieve social aims.

It currently employs five Foundation Dentists and wishes to increase Dental Foundation Training across all its sites. It has also expressed interest in Dental Core Training or longitudinal programmes that combine elements of dental foundation and dental core training.

<sup>&</sup>lt;sup>44</sup> NHS Dentistry Services, House of Lords Briefing, 2019.

<sup>45</sup> https://www.hee.nhs.uk/our-work/oral-health

#### Multi-disciplinary team culture

As noted in section 5.4, it appears that multi-disciplinary teams could achieve a more effective, and more holistic delivery model, particularly in primary care.

Career-long culture and attitudes can be shaped at dental school, and the GDC guidance, 'Preparing for Practice', emphasises multi-professional learning to the benefit of all dental registrants.

A survey carried out among dental schools in 2019 found that all schools taught their students the scope of practice of Dental Therapists, while most taught their students about the scope of practice of Dental Nurses, Dental Hygienists, Dental Technicians and Clinical Dental Technicians. The majority of schools reported that they were considering making changes to their curricula around intra-professional team-work related training, i.e. towards more integration in the training of dentists and DCPs.

## **II.** International comparison

To inform work on developing appropriate training pathways to meet future needs of the population in the UK, the ADC Review commissioned a survey to gather information on dental postgraduate and specialist training in EU Member States.

In the current 28 Member States of the European Union, the recognition of dental specialties varies widely. Only two dental specialties (oral surgery and orthodontics) are recognised by the European Commission (EC 2005). However, they are not necessarily recognised in all 28 member States and the Dental Competent Authorities (Registration Bodies) and/or Health Ministries of individual Member States may recognise many others.

The main conclusions<sup>46</sup> of the survey were:

- In a number of EU Member States, as in the UK, there is a requirement for some years of experience after completion of undergraduate education before entry to dental specialist training.
- Nearly all three-year full-time courses have a substantial academic, as well as a clinical component, often resulting in a publication in a peer reviewed journal and/or the award of a Master's degree.
- In at least half of the Member States and in all dental specialties, those undergoing training receive pay.
- In a number of EU Members States, as was the case in the UK prior to 1997, dentists complete three-year full-time training in a number of dental specialties and then take referrals from other dentists and doctors but are not officially recognised on a list held by their competent authority.
- A number of EU Member States appear to be considering adding additional specialties to the list of those that they recognise, or, in the case of Spain, recognising a number of dental specialties for the first time.

<sup>&</sup>lt;sup>46</sup> ADC commissioned internal survey – see <u>https://www.hee.nhs.uk/our-work/advancing-dental-care/advancing-dental-care-phase-ii</u>

### **III.** Alternative 'tube map'

#### 1. Baseline plus flexible LTFT

One model introduces new pathways for dentists as illustrated by the yellow and ochre lines in Figure 11, overlaying the baseline diagram of Fig. 8 presented on page 20.



Fig. 11: Baseline plus flexible LTFT overlay

# **IV. Glossary**

ACF	Academic Clinical Fellow
ADC	Advancing Dental Care
ADC Review	Advancing Dental Care: Education and
	Training Review
ADG	Association of Dental Groups
CL	Clinical Lecturer
CPD	Continuing Professional Development
DCP	Dental Care Professional
DCT	Dental Core Training
DCT/DFT	Dental Core Training + Dental
	Foundation Training combined
DFT	Dental Foundation Training
DH	Dental Hygienist
DHDT	Dental Hygienist and Dental Therapist
DHSC	Department of Health and Social Care
DN	Dental Nurse
DSC	Dental Schools Council
DST	Dental Specialty Training
DT	Dental Therapist
DTFT	Dental Therapy Foundation Training
EEA	European Economic Area
GDC	General Dental Council
GDP	General Dental Practitioner
GDS	General Dental Services
GMC	General Medical Council
GPT	General Professional Training
HEE	Health Education England
HEI	Higher Education Institution
JDFCT	Joint Dental Foundation and Core
	Training
KSS	Kent, Surrey, and Sussex
LDFT	Longitudinal Dental Foundation Training
MCM	Mouth Care Matters
NETS	National Education and Training Survey
NHS	National Health Service
NIHR	National Institute for Health Research
OMFS	Oral & Maxillofacial Surgery
PDP	Personal Development Plan
SoP	Scope of Practice
SHO	Senior House Officer
TIS	Trainee Information System
UDA	Unit of Dental Activity