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The Impact of COVID-19 on Dental Professionals

A report for the General Dental Council

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Acknowledgements

We would like to thank all the dental professionals who took part in this research at such a challenging time. We would also like to thank the General Dental Council (GDC) for commissioning this research and their support and advice.

Analysis of responses by job role

Sub-group analysis of responses for different roles was initially undertaken at the level of dentist and dental care professionals (DCP). DCP is an umbrella term which includes six of the seven GDC registrant roles including clinical dental technicians, dental hygienists, dental nurses, dental technicians, dental therapists and orthodontic therapists. Where notable differences in responses at dentist/DCP level occurred, further analysis was undertaken to examine responses by specific role. Notable differences were found in responses to questions relating to the economic impact of COVID-19, the demand and supply of specific treatments and to expectations in relation to changing jobs and roles. Focus groups were organised by registrant role to allow relevant issues to be raised in more depth.

Definition of sector

In the report we refer to those working in predominantly NHS, predominantly private and mixed practise. Respondents were categorised based on their response to either the sources of their personal income from dentistry, or where unknown, the income of the business they worked in. The categories were defined as predominantly private (over 75 per cent of income from private sources), predominantly NHS (over 75 per cent of income from NHS sources) and mixed (those in between).

Supplementary material

Full data tables will be published and made available on the GDC website.

Glossary

AGP	Aerosol Generating Procedures
ARF	Annual Retention Fee
CDO	Chief Dental Officer
DCP	Dental Care Professional
Fallow time	A period of time to allow infectious particles to settle
GDC	General Dental Council
HTM 01-05	Health Technical Memorandum 01-05
IAG	Information Advice and Guidance
IC	Infection Control
PPE	Personal Protective Equipment
SOP	Standard Operating Procedure
UDC	Urgent Dental Care

1.0 Executive summary

1.1 Research overview and methodology

In August 2020, the General Dental Council (GDC) commissioned Ecorys UK to undertake a study to explore the impact and future implications of COVID-19 on dental professionals.

From March 2020 the dental industry and dental care services were severely affected by the COVID-19 pandemic. During the tightest period of lockdown starting from 23 March 2020, only urgent or emergency dental care was available, mainly through regional hubs and centres. Dental practices began to reopen for face-to-face care from 8 June 2020 in England and 22 June in Scotland. In Northern Ireland and Wales most practices remained open during the lockdown period. Measures and guidelines were put in place to make dentistry as COVID-secure as possible.

Research was conducted during September and October 2020, before much of the UK moved into a second lockdown, and as dental professionals adapted to the new requirements for, and restrictions on, practise to minimise the risk of transmission of COVID-19 in dentistry. The research sought to understand how the pandemic had affected the dental sector (NHS, private and mixed) and dental professionals across the United Kingdom (UK). The study also explored dental professionals' views on how COVID-19 was expected to impact on the delivery of dentistry over the coming year, and how the GDC and other organisations involved in the leadership of the sector could best provide support through the crisis.

The study included a national online survey of dental professionals and supplementary online focus groups. In total, 9,388 responses to the survey were received[1], with data subsequently weighted according to whether respondents were dentists or dental care professionals (DCPs) to ensure the final proportions of each matched those of the GDC's registrant population. After weighting, the seven registrant roles[2] were represented in line with the registrant database.

Survey data presented in this report highlights differences across sub-groups which are of statistical significance, unless stated otherwise[3]. Six online focus groups were undertaken with 54 dental professionals from across the UK and Channel Islands to explore the issues raised in the survey in more depth. The focus group analysis should not be interpreted as representative of all dental professionals.

1.2 Economic impact

Impact on business income

A large majority of dental businesses and dental professionals reported that they had experienced, and expected to continue to experience, adverse financial effects as a result of COVID-19.

- **Over three-quarters (78 per cent) of dental business owners reported a decrease in current income** when compared to the same period last year, and **almost two-thirds (63 per cent) expected income to decrease over the next year** when compared to the twelve months prior to lockdown.

[1] In total, 12,953 responses to the survey were received. Of these 3,565 (28 per cent) of respondents exited the survey before completing 75 per cent of the survey. After checks, these responses were excluded from the final analysis.
[2] The seven registrant roles are clinical dental technician (CDT), dentist, dental hygienist, dental nurse, dental technician, dental therapist and orthodontic therapist.
[3] For most results reported, the margin of error at the 95 per cent confidence interval is less than +/-2 per cent. Further details are provided in the Technical Appendix.

- Amongst dental business owners who reported a decrease in business income, **current mean income was reported to have decreased by 45 per cent and projected mean income was expected to decrease by 41 per cent**.
- Owners of predominantly private and mixed dental businesses were more likely to report that they had experienced a decrease in income (predominantly private 86 per cent, mixed 80 per cent) than predominantly NHS businesses owners (72 per cent).
- A small number (2 per cent) of dental business owners reported that current income had increased, or that they expected income to increase over the next twelve months (5 per cent).
- Owners of predominantly private dental businesses were more likely to anticipate an increase in income (4 per cent) compared to predominantly NHS/mixed dental business owners (1 per cent).

Within the dental appliances sector, almost all (98 per cent) **of laboratory owners reported a reduction in their current income**. Predominantly NHS laboratories reported the largest decrease in their current income (predominantly NHS mean decrease of 73 per cent) when compared to predominantly private/mixed laboratories (mixed mean decrease of 57 per cent, predominantly private mean decrease of 48 per cent).

Impact on costs and business models

Four-fifths (80 per cent) of dental business owners expected to make changes to their business model to mitigate the financial effects of COVID-19.

- **More than one-third (35 per cent) of business owners expected to employ fewer staff in twelve months' time, under one fifth (17 per cent) expected to make redundancies**, almost one-fifth (19 per cent), expected to make changes to employment contracts for dental nurses, while under one-fifth (16 per cent) expected to make changes to employment contracts for dentists and dental hygienists/therapists.
- **Within the dental appliances sector (dental laboratories), just over two-fifths (41 per cent) of business owners expected to make redundancies**.
- **Other changes** that business owners reported they were likely to make in the next twelve months **included increasing patient charges** (41 per cent), **borrowing money** (37 per cent) **and increasing opening hours** (25 per cent). Over one-tenth (14 per cent) expected to make no specific changes. A small number of business owners (4 per cent) expected to close their dental business.
- For all business model change options, predominantly private business owners were more likely to make changes than mixed or predominantly NHS practices.

Impact on personal income from dentistry

More than half (58 per cent) of dental professionals expected their personal income from dentistry to reduce over the next twelve months when compared to the twelve months prior to lockdown.

- **Four-fifths (80 per cent) of dentists and hygienists anticipated their dental income would reduce over the next twelve months**, **compared to just under three-quarters (72 per cent) of dental technicians and just under one-third (30 per cent) of dental nurses**.
- **Across all roles, the mean projected decrease in income was 43 per cent** (dental technicians 52 per cent, dental hygienists/therapists 48 per cent, dentists 40 per cent, dental nurses 34 per cent).

In the focus groups, a range of different changes to working patterns were noted which were reported to have impacted on personal income, cited by self-employed dentists and dental hygienists. These changes included **reduced clinical working hours and therefore capacity to treat patients** as a result of reductions in surgery

availability[4], **changes to associate contracts** (reduced share in the income generated by self-employed professionals), **limitations on aerosol generating procedures** (AGPs) both to comply with regulations and to reduce the costs of enhanced personal protective equipment (PPE), **being asked to work without chairside assistance** (dental hygienists) and **clinics being cancelled at short notice** due to increased rates of staff absence.

1.3 Protecting safety

Knowledge, skills and training to practise safely

Just over three-quarters (77 per cent) of dental professionals agreed that they had the necessary confidence to do their job safely, whilst notably, less than one fifth (16 per cent) disagreed. Nine-tenths (90 per cent) of dental professionals agreed that they had the necessary skills to practise safely. Around four-fifths of dental professionals agreed that they had the necessary information, advice and guidance (IAG) (80 per cent), training (78 per cent) and equipment (78 per cent) to do their job safely. Dentists and DCPs provided similar levels of response to these questions.

Guidance on PPE and infection control

High proportions of dental professionals had accessed the guidance on PPE (dentists 96 per cent, DCPs 88 per cent) **and infection control** (IC) (dentists 96 per cent, DCPs 89 per cent). The **most commonly accessed sources** of guidance on PPE and IC, as reported by around two-thirds of respondents **were from the NHS in England, Scotland and Wales**, **or the Health and Social Care Board** in Northern Ireland. The Chief Dental Officers (CDOs) and health protection agencies in each of the nations also provided guidance to notable proportions (around half) of respondents. The Scottish Dental Clinical Effectiveness Programme (SDCEP) was accessed by two-thirds (66 per cent) of professionals who worked in Scotland, and more than one-third (36 per cent) of respondents who worked in Northern Ireland.

Dental professionals were asked their views about ease of access, clarity and ease of application of the guidance for PPE and IC.

- **More than two-thirds of dentists considered the guidance was easy to find (PPE 70 per cent, IC 69 per cent), whilst less than two-thirds thought that the guidance was clear** (PPE 60 per cent, IC 59 per cent). **Notably, only around half of dentists thought the guidance was easy to apply** (PPE 48 per cent, IC 53 per cent).
- **DCPs were more positive in their responses than dentists**, with around three-quarters considering the guidance to be easy to find (PPE 77 per cent, IC 76 per cent), clear (PPE 75 per cent, IC 76 per cent) and easy to apply (PPE 70 per cent, IC 73 per cent).

During the focus groups, participants discussed the **challenges they had faced in relation to protecting patient safety in the context of COVID-19**, focusing on both the guidance issued when dental care resumed in summer 2020, and subsequent updates to publications. Participants highlighted that the **guidance was issued later than was needed**, that the **scheduling of publication caused confusion**, that there were **inconsistencies across different sources** of guidance and that **too much was left to local discretion.** This according to participants led to notable differences in practise across the sector which added stress on professionals working in the sector.

[4] This was because fallow time meant that clinicians carrying out Aerosol Generating procedures (AGPs) were working across two or more surgeries, which reduced capacity across a practice.

Queries were also raised about the **strength of the evidence base used to determine specific measures, in particular fallow time**[5].

Unintended consequences of new measures on the provision of dentistry

Some dental professionals involved in the focus groups (in particular dentists and some dental hygienists) highlighted their concerns about how, on occasion, **the quality of their care had been affected by measures in place to manage the risk of transmission of COVID-19**. A challenge of particular concern related to the **requirement to practise in enhanced PPE** for relevant procedures and the impact this had on their visibility, dexterity and confidence when carrying out particularly intricate procedures. Focus group participants also raised concerns about **a marked increase in the provision of interim solutions for patients** (non-AGP treatments), contradictions between the guidance on COVID-19 and HTM 01-05, and concerns about increased lone working (dental hygienists) due to staff absence.

Some focus group participants and survey respondents suggested that **the GDC should provide leadership to mitigate a complex situation**, both as they regarded the GDC as the one organisation able to directly communicate with the whole profession, and as the GDC were the organisation who would ultimately uphold the professional standards required of dental professionals.

1.4 Patient confidence and access to care

Patients' confidence in dental services

Dental professionals considered that their patients' confidence in their ability to provide dental services was largely unchanged as a result of COVID-19. Just less than half (49 per cent) of dental professionals thought that patient confidence had stayed the same, with similar proportions thinking that patient confidence had improved (20 per cent) as to those who thought confidence had worsened (18 per cent). Respondents from predominantly NHS practices were most likely to think patient confidence had worsened (predominantly NHS 24 per cent, mixed 16 per cent, predominantly private 14 per cent) whilst respondents from predominantly private/mixed practices were most likely to think patient confidence had improved (predominantly private/mixed 23 per cent, predominantly NHS 16 per cent). Focus group participants felt access to care and availability of treatments was a key factor contributing to any perceived decline in patient confidence.

Changes to the provision of dental services

Just over three-quarters (77 per cent) of dentists and over half (58 per cent) of DCPs thought there would be a decrease in the number of patients they expected to provide dental services to in the next twelve months due to COVID-19. Those who thought that patient numbers would decrease, estimated an **average decrease of 45 per cent**. When analysed by sector, dental professionals providing predominantly NHS care expected a slightly larger decrease in the number of patients they provide services to compared to predominantly private dental professionals (predominantly NHS 51 per cent decrease, mixed 45 per cent decrease, predominantly private 38 per cent decrease).

Changes in demand for dental services and emergency care

Just under two-thirds (64 per cent) of dental professionals anticipated an increase in demand for dental services over the next twelve months. Respondents from predominantly NHS/mixed practices were most likely

[5] At the time most of the primary research was conducted, fallow time recommend in most guidance sources was 60 minutes following an AGP. On 20 October 2020, updated guidance (COVID-19: infection prevention and control dental appendix) was issued jointly by the Department of Health and Social Care (DHSC), Public Health Wales (PHW), Public Health Agency (PHA) Northern Ireland, Health Protection Scotland (HPS), Public Health Scotland, Public Health England and NHS England allowing this to be reduced in particular conditions.

to anticipate an increase in demand (predominantly NHS 73 per cent, mixed 68 per cent, predominantly private 50 per cent). Less than half (45 per cent) of respondents were confident that they would be able to meet demand for services, with this least likely to be the case for those working in predominantly NHS services (predominantly NHS 26 per cent, mixed 38 per cent, predominantly private 53 per cent).

Demand for emergency care was expected to increase in all sectors (predominantly NHS 87 per cent, mixed 83 per cent, predominantly private 74 per cent), with **more than half (55 per cent) of dental professionals across all sectors confident they could meet demand**. One-third (33 per cent) stated they were not confident and just over one tenth (12 per cent) did not know.

Changes in demand and supply of specific treatments

Dental professionals[6] were asked how they expected demand for certain treatments to change over the next twelve months and how confident they were that they would be able to meet demand in the same period. The 'net' figures presented below were calculated from the sum of those who responded positively (increased demand, confidence to be able to meet demand), minus the sum of those who responded negatively (decreased demand, unconfident that they could meet demand).

The treatments that most dental professionals expected **increased demand for** were **extractions** (net 75 per cent of professionals expected increased demand), **restorative treatments without laboratory work** (net 58 per cent), **denture repair or reconstruction** (net 47 per cent) and **periodontal treatment with AGP** (net 40 per cent). The sole exception was elective cosmetic procedures for which more dental professionals expected demand to decrease than those who expected demand to increase (net 12 per cent of professionals expected a decrease).

Overall, dental professionals were **confident that they could meet demand for extractions** (net 49 per cent of professionals were confident they could meet demand) **denture repairs** (net 42 per cent), **non-AGP preventative care** (net 16 per cent). Dental professionals were **unconfident that they could meet demand for periodontal treatment with AGP** (net 25 per cent were unconfident they could meet demand), **restorative treatments with laboratory work** (net 13 per cent unconfident) **and routine dental care** (net 10 per cent unconfident). Respondents from the predominantly NHS sector were more likely to expect increased demand and less likely to expect that they could meet demand for all services, when compared to both mixed and predominantly private practice.

Specific concerns about **reduced capacity in hospital and community were raised by** focus group participants who worked in these settings (dentists and dental nurses), in particular the challenges faced with managing the backlog of patients waiting for treatment since before lockdown in March 2020. Availability of treatments requiring general anaesthetic was reported to be much reduced when compared to before March 2020 and remained a major barrier to being able to meet some patients' needs. Some participants also raised concerns about the provision of dental and oral health care in residential homes and the growing unmet needs of older people as visits from dental professionals had been severely restricted to minimise the transmission of COVID-19.

Groups likely to experience reduced access to care

Over the next twelve months, **large proportions of respondents expected a range of adverse effects** on the delivery of the services they provide, linked to a reduction in capacity. Around nine-tenths (92 per cent) of respondents reported that **increased waiting lists and emergency care** were likely. Around four-fifths of dental professionals expected a **decline in oral health standards** (82 per cent) and **reduced access to care for non-registered patients** (81 per cent). Dental professionals felt that Dental professionals felt the patient groups who were particularly likely to experience a decrease in access to their dental services over the next year were those

[6] Respondents were routed to answer questions which related to the treatments they directly provide. As such, base numbers are lower for questions related to demand and supply.

who were extremely clinically vulnerable to COVID-19 (54 per cent agreed), people unable to afford dental treatment (48 per cent) and older people (43 per cent).the patient groups who were particularly likely to experience a decrease in access to their dental services over the next year were those who were extremely clinically vulnerable to COVID-19 (54 per cent agreed), people unable to afford dental treatment (48 per cent) and older people (43 per cent).

Key drivers of reduced capacity

Focus group participants highlighted the challenges they faced with regards to reduced capacity to treat patients whilst adhering to restrictions on practice related to COVID-19. **Fallow time was a particular concern**, with those taking part in focus groups estimating this had cut capacity by between one-third and three-quarters. Secondary factors affecting capacity included the time required for enhanced procedures for IC, complying with PPE requirements and managing social distancing amongst staff and patients. Requirements to work within the new requirements were felt to add to the stress and requirements of the dental role, and that further guidance, communication and transparency were required to support the profession through the crisis.

Personal employment intentions

Analysis which combined data on those who expected to be economically inactive, working outside of dentistry, or not registered as a dental professional, found that around one-third of dentists (32 per cent) and DCPs (38 per cent) do not expect to be practising in twelve months' time. There were no significant differences in the data when analysed by sector, ethnicity or UK nation. However, there were differences when considered by role, and age.

- Dental therapists (49 per cent), dental hygienists (43 per cent) and dental technicians (43 per cent) were most likely to expect a change in their role or career, whilst dental nurses (35 per cent) and dentists (32 per cent) were least likely[7].
- Career change was least likely for those aged 41-50 (30 per cent), and most likely for those over the age of 61 (45 per cent), which for the latter could reasonably be assumed was related to retirement plans. For all other groups, response patterns were similar (16-30: 38 per cent, 31-40: 35 per cent, 51-60: 35 per cent).

Changes to the blend of NHS/private dental care

A little more than one-quarter (28 per cent) of dental professionals were likely to increase provision of private care over the next twelve months (most frequently amongst mixed professionals), whilst a little more than one-tenth (12 per cent) expected to increase provision of NHS care (most frequently amongst professionals working predominantly in NHS practices).

1.5 Looking forward

The dental profession has made wide-ranging changes to the provision of dental care and services as a result of COVID-19. In this context, the research asked respondents to provide suggestions on:

- what further **guidance, support or training** is required to improve staff and patient safety?
- what **changes are most needed to help dental professionals and businesses recover** from COVID-19 and/or prepare for the future?
- **what the GDC could do** to support the sector in recovery from COVID-19?

These questions were initially asked of respondents through open questions included in the survey. A sample of 500 (around 10 per cent) responses were selected and coded to assess the prevalence of the suggestions made.

[7] All results reported are statistically significant. The margin of error for each role is provided in the Technical Appendix

The six focus groups provided opportunity to explore these suggestions in more depth. The issues and suggestions raised are presented in line with the frequency of response to the open questions of the survey. However, findings should be interpreted as showing the range of different issues as opposed to proving prevalence.

Guidance, support and training

When asked what further guidance, support or training was needed to support recovery, **the most commonly cited** themes raised in the sample of survey responses analysed and discussed in the focus groups, focused on:

- **improved communication of guidance related to practising dentistry safely** in the context of COVID-19;
- **strengthening the evidence base on which existing guidance had been issued**, in particular related to **fallow time**;
- the provision of **accessible and practical support** to ensure guidance could be applied correctly and consistently.

Professionals who responded to the survey and participated in the focus groups strongly suggested a more coordinated approach to communication, more research to strengthen the evidence base to justify specific IC measures in place, and clear assessment of the impact that the measures had on the sector prior to implementation. Whilst respondents recognised that this required coordination across the profession, and most commonly cited the Chief Dental Officer (CDO) as having ultimate responsibility, some made the case that the GDC had an important role to play in leading the profession, being the organisation who would ultimately uphold the professional standards required of the sector.

Support for business recovery

Fallow time was highlighted as the key barrier to business recovery, having reduced capacity and business income (in particular for mixed and predominantly private practices). As a result, professionals stressed the need for continued review of the evidence and justification of the requirement for fallow time. Respondents also highlighted other areas in which additional support would be beneficial, including:

- localised access to affordable, high quality PPE and fit testing;
- financial support from the government to support future business viability;
- specific support for NHS/mixed dental laboratories where NHS referral work had drastically reduced.

GDC's role in supporting recovery from COVID-19

Within the focus groups and in responding to the survey, some dental professionals suggested that the pandemic provided an opportunity to develop a more positive relationship between the GDC and the dental profession. Various suggestions were made for the GDC covering:

- improved communication with both dental professionals and the public about the impact of COVID-19 on dentistry and the implications for dental care;
- changes to registration processes and review of the scope of practise in particular for dental nurses and dental technicians;
- acknowledgement of the impact of COVID-19 on achieving verifiable CPD and preparedness for practise, the latter in particular for those in trainee roles;
- calls for reform of fitness to practise processes;
- reduction in the Annual Retention Fee (ARF).

2.0 Introduction

The GDC is a United Kingdom (UK) wide statutory dental regulator of over 110,000 dentists and dental care professionals (DCPs). The GDC is independent of the Government and has the purpose of protecting dental patients and maintaining public confidence in dental services. The GDC sets standards for dentists and DCPs, investigates complaints about dental professionals' fitness to practise and works to ensure the quality of dental education.

In August 2020, the GDC commissioned Ecorys UK to undertake a study to explore the impact and future implications of COVID-19 on dental professionals. Research was conducted during September and October 2020 as dental professionals adapted to the new requirements for, and restrictions on practice to reduce the risk of transmission of COVID-19 in dentistry. This research included a national online survey of dental professionals supplemented with online focus groups to explore some of the issues raised in the survey in more depth.

2.1 Context

From March 2020 the dental industry and dental care services were severely affected by the COVID-19 pandemic. During the tightest period of lockdown starting from 23 March 2020, only urgent or emergency dental care was available, mainly through regional hubs and centres. Dental practices began to reopen for face-to-face care from 8 June 2020 in England and 22 June in Scotland. In Northern Ireland and Wales most practices remained open during the lockdown period.

Measures and guidelines were put in place to make dentistry as COVID-secure as possible. These included restrictions for certain treatments, requirements for enhanced Personal Protective Equipment (PPE), face mask fit testing for all chair-side dental practitioners, new approaches to managing the patient journey, and enhanced Infection Control (IC) procedures including the requirement for a fallow period following Aerosol Generating Procedures (AGP). With the GDC's remit to protect, promote and maintain the health, safety and well-being of the public; to promote and maintain public confidence; and to promote and maintain professional standards and conduct, the organisation had a critical role to play in supporting the profession as it responded to the crisis.

2.2 Study objective and methods

The research objectives set by the GDC were to understand the impact of COVID-19 on:

- dental professionals' financial circumstances;
- dental professionals' confidence, skills, training, guidance, support, and equipment to protect staff and the public;
- dental professionals' perceptions of the public's confidence in and demand for dental services;
- dental professionals' views on their capacity to provide services to the public;
- dental professionals' views on what would support recovery.

The research sought to understand how the pandemic had affected the dental sector (NHS, private, mixed) and dental professionals across the UK. The study also explored dental professionals' views on how COVID-19 was expected to impact the delivery of dentistry over the coming year, and how the GDC and other organisations involved in the leadership of dentistry could best support the sector.

The methodology involved two programmes of research: an online survey completed by 9,388 dental professionals[8]; and six online focus groups conducted with 54 dental professionals. The survey responses were weighted by role, to reflect the overall registrant population. The focus groups provided additional qualitative data to explore specific issues raised in the survey and consider how the GDC can best support the sector through the COVID-19 pandemic.

Online survey of dental professionals

The GDC sent an email (between 22 and 28 September 2020) to all 112,794 dental professionals registered with the GDC in that month, inviting them to complete a survey on the impact of COVID-19 on dental professionals[9]. This was a census approach, with the survey open to all dental professionals with a valid email address. Reminder emails were sent from 1 to 7 October 2020, and the survey was closed to respondents on 12 October 2020. An overall response rate of 8 per cent was achieved. Response rates varied by registrant role, with dentists most likely to respond (12 per cent) and dental nurses least likely (5 per cent). Further details are provided in the Technical Appendix.

Responses were subsequently weighted at the level of dentist and DCP[10]. Table 2.1 shows the composition of the GDC registrant population, the unweighted responses by role, the weighting factors applied and the final weighted response rate.

Table 2.1 Responses by dentist and DCP in comparison to registrant population

Role	GDC registrant role Oct 2020		Responses by role Oct 2020 (unweighted)		Responses by role Oct 2020 (weighted)		Weighting factor
	Total	Percent	Total	Percent	Total	Percent	
Dentists	42,944	38%	4,941	53%	3,578	38%	0.72
DCP	69,737	62%	4,447	47%	5,810	62%	1.31
Total	**112,681**	**100%**	**9,388**	**100%**	**9,388**	**100%**	

After weighting, roles were represented in line with the GDC registers. Further details for each role are presented in the Technical Appendix.

Due to the large number of responses, the margin of error when interpreting the results for job role (dentist or DCP) is low (1.5 per cent at the 95 per cent confidence interval). For other sub-group analysis presented in this report, the margin of error is less than 2 per cent, with the exceptions being Scotland (3 per cent), Wales (5 per cent) and Northern Ireland (6 per cent). The data presented in this report highlights differences across sub-groups which are of statistical significance, unless stated otherwise. Due to rounding, total figures in certain tables may not always sum to 100 per cent. Further information on the margin of error for each dental role is provided in the Technical Appendix.

Focus groups with dental professionals

To supplement the survey, six online focus groups were undertaken with 54 dental professionals from across the UK and Channel Islands to explore the issues raised in the survey and consider how the GDC could best support the professions. These took place between 15 and 29 October 2020. Participants were recruited from those who completed the survey and agreed to be contacted. Participants were sampled to represent a mix of registrant roles,

[8] In total, 12,953 responses to the survey were received. Of these 3,565 (28 per cent) of respondents exited the survey before completing 75 per cent of the survey. After checks, these responses were excluded from the final analysis. Further information is provided in the Technical Appendix.
[9] The database is a live database and therefore the number of professionals registered varies by month.
[10] Further detail on the weighting strategy is included in the Technical Appendix.

gender, ethnicity, nation and sector. The focus groups included dental nurses (19); two groups of associate dentists (16); technicians, clinical dental technicians (CDTs) and laboratory owners (7); principal dentists/practice owners (6), dental hygienists/therapists and orthodontic therapists (6). Further information on the focus groups is provided in the Technical Appendix.

Data limitations

As noted, the survey was completed by 8 per cent of dental professionals. Although data is weighted by role, there is the potential for non-response bias, particularly as those responding may have more polarised viewpoints than those not taking part. It should also be noted the survey was conducted during a rapidly changing context due to the pandemic, with results representing views in September/October 2020. The method of distribution may also have affected results, if views were associated with levels of online access (for example, if certain types of respondent with particular views may have overlooked the email invitation).

The focus groups were designed to supplement the survey data. The results should not be interpreted as suggesting prevalence of opinion, but as illustrating potential areas for further investigation.

3.0 Economic impact

- **Four-fifths (78 per cent) of dental business owners reported a decrease in current income** compared to the same period last year. Amongst those who reported a decrease, **current income was reported to have decreased by a mean of 45 per cent**.

- **Around two-thirds (63 per cent) of dental business owners expected income to decrease over the next twelve months** when compared to the twelve months prior to lockdown. Amongst those who projected a decrease, **future income was expected to decrease by a mean of 41 per cent**.

- **Four-fifths (80 per cent) of dental business owners expected to make changes to their business model to mitigate the financial effects of COVID-19**. A little more than one-third (35 per cent) of business owners expected to employ fewer staff in twelve months' time and under one fifth (17 per cent) to make redundancies. Other common expected changes included increasing patient charges for private treatments (41 per cent) and borrowing money (37 per cent).

- **Almost all (98 per cent) laboratory owners reported a reduction in current income**. Laboratories predominantly servicing the NHS sector reported the largest decrease in current income (mean decrease of 73 per cent) when compared to mixed (mean decrease of 57 per cent) and predominantly private laboratories (mean decrease of 48 per cent).

- **More than half (58 per cent) of dental professionals expected their personal income from dentistry to decrease** over the next twelve months when compared to the twelve months prior to lockdown. Across all roles, the **mean projected decrease was 43 per cent**.

- **Four-fifths (80 per cent) of dentists and dental hygienists anticipated their dental income would reduce over the next twelve months**, compared to just fewer than **three-quarters** (72 per cent) **of technicians** and **just under one-third** (30 per cent) **of dental nurses**. Projected decreases varied by role with technicians most affected and dental nurses least affected (dentists 40 per cent, dental hygienists 48 per cent, dental nurses 34 per cent, dental technicians 52 per cent decrease).

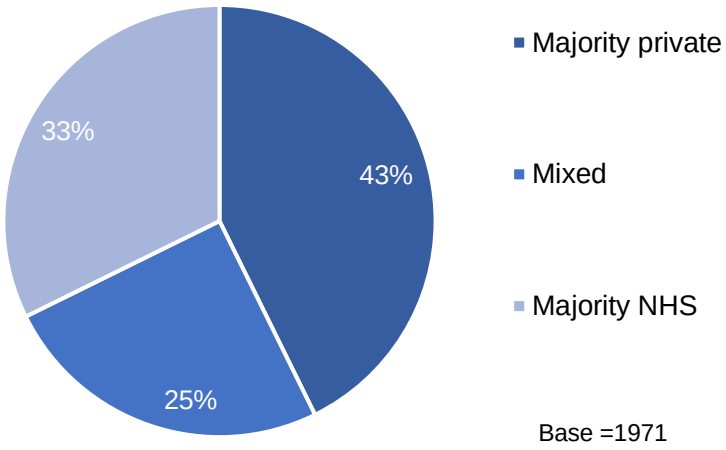
This section examines the economic impact of COVID-19 on dental businesses and dental professionals, combining data from the survey and the focus groups. Data is presented on the profile of the businesses, how business income was affected, and expected changes by business owners to mitigate the financial effects of COVID-19. Changes to personal income amongst dental professionals is also reported.

3.1 Profile of business owners

Respondents were asked if they were an owner or principal of a dental practice or laboratory. A total of 21 per cent of respondents reported that they were business owners or principals. Amongst this group, 61 per cent were dentists or specialists, 18 per cent were dental technicians or clinical dental technicians (CDTs), 16 per cent were dental nurses, 4 per cent were dental hygienists or dental therapists and 1 per cent were non-clinical practice owners.

Figure 3.1 shows the profile of businesses reflected amongst respondents. Amongst business owners/leaders, **43 per cent owned predominantly private businesses, 25 per cent owned mixed businesses and 33 per cent were predominantly providers of NHS services**. Most business owners/leaders worked in a single independent practice (79 per cent), with smaller groups who owned or led a small group of independent (11 per cent) or corporate (8 per cent) practices and a further 2 per cent who worked within a large group of independent practices.

Figure 3.1 Sector profile of business owners



79 per cent of business leaders worked in a single independent practice/laboratory

11 per cent of business leaders worked in a small group of independent practices/laboratories

8 per cent of business leaders worked in corporately owned practices/laboratory

2 per cent worked in a large group of independent practices/laboratories

3.2 Impact on business income

Impact on current income

Business owners were asked how current average monthly business income had changed due to COVID-19 compared to the same period last year. **A total of 78 per cent reported that business income had decreased**, 7 per cent reported that income had stayed the same, and **2 per cent reported that business income had increased**. A total of 9 per cent did not know, whilst 2 per cent preferred not to say**. Of those who reported a decrease in income, a mean decrease of 45 per cent** was reported in comparison to the same period last year. For those who reported an **increase in income**, **a mean increase of 34 per cent** was reported in comparison to the same period last year.

Impact on future income

Business owners were asked how average monthly business income was anticipated to change over the next twelve months due to COVID-19 when compared to the twelve months prior to lockdown. **Just under two-thirds (63 per cent) reported that they anticipated business income to decrease,** 13 per cent expected it to stay the same, and 5 per cent to increase. A total of 18 per cent did not know, 1 per cent preferred not to say or were not in business prior to lockdown. **Of those who reported a decrease in income, a mean decrease of 41 per cent was anticipated.** For those who anticipated an increase in income, a mean increase of 27 per cent was expected.

Differences by sector

The impact on current and future income varied according to the sector in which business owners operated:

- **Owners of predominantly private businesses** were **most likely to report that current income had decreased** when compared to other sectors (predominantly private 86 per cent, mixed 80 per cent, predominanntly NHS 72 per cent).
- **Owners of predominantly NHS businesses were most likely to report that income had stayed the same** (predominantly NHS 13 per cent, mixed 3 per cent, predominantly private 5 per cent).
- **Owners of predominantly private businesses were most likely to expect future income to increase** (predominantly private 4 per cent, mixed 1 per cent, predominantly NHS 1 per cent).

Focus group participants recognised that the financial impact of COVID-19 was not part of the GDC's remit, but considered that the future financial viability of the sector was vitally important context for protecting public safety and maintaining patient confidence. During the focus groups, business owners highlighted some of the financial challenges they had faced both during lockdown and as they adapted to the new requirements.

> *"We had to start re-building as soon as we could, both for our patients and to ensure we had a business to come back to. It was very stressful trying to decipher what was allowed, and whether we could make the business viable again. We felt very vulnerable, wanting to do the best for our patients but feeling like we didn't have the clarity we needed." (Business owner, mixed)*

Owners from predominantly private and mixed dental practices highlighted that business income had *"fallen off a cliff edge"* during lockdown and that whilst they had been able to use the furlough scheme for employed staff, and government backed loans had contributed to managing some fixed business costs, many self-employed dental professionals and business owners had received little in the way of government support for personal income. For this group, there was a strong financial imperative to resume work at the earliest opportunity with most reporting that they had resumed care in mid-June 2020.

Impact on laboratories

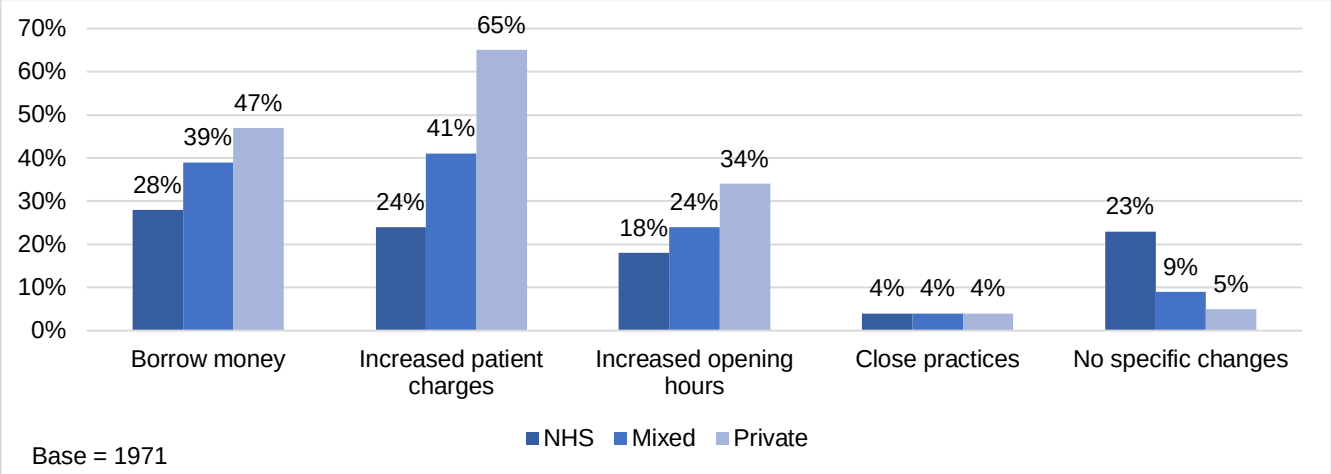
Owners of laboratories highlighted the major financial challenges they had faced and continued to face related to a **reduction in the income that had particularly affected the NHS part of the dental appliances sector**. Participants described how their businesses had been affected by the considerably reduced volume of patients being treated by NHS dentists post-lockdown. This had been exacerbated by the restrictions on AGPs and consequently affected the flow of work through to laboratories. There was a consensus amongst the group that the industry faced a major crisis. As one laboratory owner explained:

> *"The industry is on a knife edge. Half of our business is private, and we can probably last for another six months. NHS laboratories are laying technicians off and closing down at a rapid rate. The business is just not sustainable. There is no work coming through and the money ear-marked is sat within the NHS somewhere… We've been forgotten." (Laboratory owner, mixed)*

3.3 Impact on costs and business models

Business owners/leaders were asked if they agreed or disagreed that the increased costs related to PPE and infection control could be absorbed within their current business models. **Two-thirds (65 per cent) of business owners/leaders disagreed or strongly disagreed that the increased costs could be absorbed within their business mode**l, with response patterns similar across sectors. Figure 3-2 shows the changes business owners expected to make to mitigate the economic impacts of COVID-19 on their business.

Figure 3.2 Anticipated changes to business model by sector



Most commonly, business owners/leaders indicated that they expected to increase income by:

- **borrowing money** (predominantly private 47 per cent, mixed 39 per cent, predominantly NHS 28 per cent);
- **increased patient charges** (predominantly private 65 per cent, mixed 41 per cent, predominantly NHS 24 per cent); and
- **extending opening hours** (predominantly private 34 per cent, mixed 24 per cent, predominantly NHS 18 per cent).

A small number of business owners (4 per cent in each sector) expected that practices would close. A total of 23 per cent of predominantly NHS practice owners, 9 per cent of mixed practice owners and 5 per cent of predominantly private practice owners expected not to make 'no specific changes' to mitigate the economic impacts.

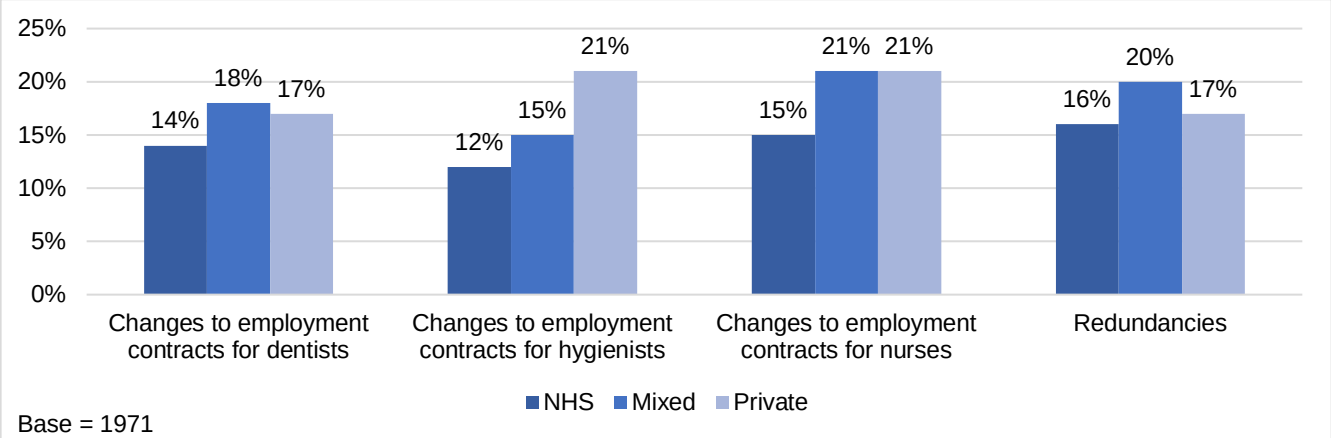
During the focus groups, business owners and associates felt that **the most important factor** causing continued financial challenges **was fallow time**, followed by the requirements for social distancing and managing the patient flow. Some participants from predominantly private and mixed practices reported that their place of work had recently invested in technology (air exchange units) to reduce fallow time. This had had allowed them to increase capacity, extend treatment options and enhance income. As one associate reported:

> *"We had air exchange units installed a few weeks ago which cut fallow time from an hour to 20 minutes. We still have all the policies for managing the patient flow which restrict numbers, but they have been a game changer. It was expensive but our principal thought it was worth it." (Associate dentist, predominantly private)*

3.4 Impact on employment

Business owners were also asked to consider how COVID-19 was likely to affect employment in their dental business. **Over one-third** (35 per cent) of business owners responded that they **expected to employ fewer staff in twelve months' time** with **just under one fifth (17 per cent) expecting to make redundancies**. Figure 3.3 shows how employment contracts were expected to change across the sectors.

Figure 3.3 Anticipated changes to employment by sector

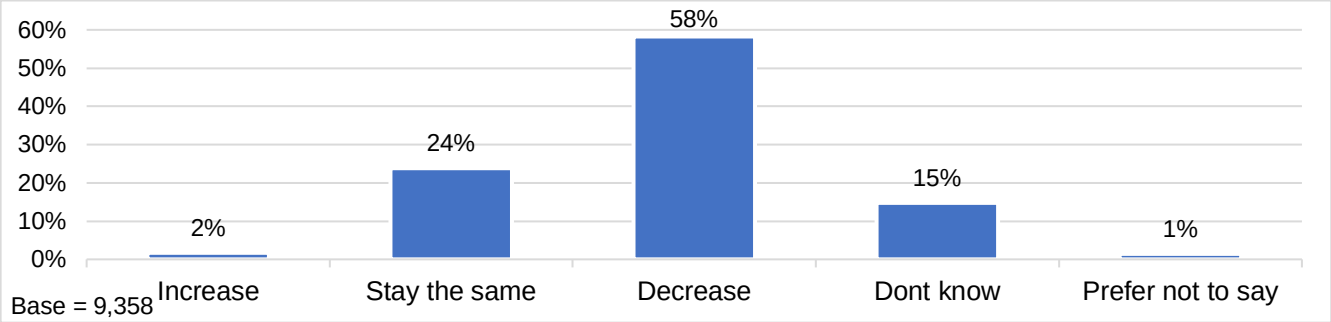


Around one-fifth (predominantly private/mixed 21 per cent, predominantly NHS 15 per cent) of dental practice owners expected to make changes to employment contracts for dental nurses, with similar proportions saying the same for associate dentists (predominantly private 17 per cent, mixed 18 per cent, predominantly NHS 14 per cent) and dental hygienists (predominantly private 21 per cent, mixed 15 per cent, predominantly NHS 12 per cent). Differences by sector were small and for most comparisons, not statistically significant.

3.5 Impact on personal income from dentistry

All respondents were asked if they anticipated average monthly personal income from dentistry to change over the next twelve months due to COVID-19 when compared to the twelve months prior to lockdown. The results are shown in Figure 3.4.

Figure 3.4 Anticipated changes to personal income from dentistry over the next 12 months



More than 58 per cent of respondents indicated that they expected to see a reduction in personal income, 24 per cent expected income to stay the same, 2 per cent anticipated an increase and 16 per cent either did not know or preferred not to say. Analysis by role and sector showed:

- Four-fifths (80 per cent) of dentists and dental hygienists anticipated their dental income would reduce over the next twelve months, compared to just under three-quarters (72 per cent) of technicians and just under one-third (30 per cent) of dental nurses.
- Across all roles, the mean projected decrease was 43 per cent (CDTs 54 per cent, technicians 52 per cent, dental therapists 50 per cent, dental hygienists 48 per cent, specialists 41 per cent, dentists 40 per cent, orthodontic therapists 35 per cent, dental nurses 34 per cent).
- Those working in predominantly private dentistry (74 per cent) were more likely to expect a decrease than mixed (56 per cent) and predominantly NHS practice (51 per cent).

- Self-employed dental professionals were most likely to expect future income to decrease (86 per cent) compared to those employed (34 per cent).

Self-employed professionals in focus groups, particularly dentists and dental hygienists who worked in general dental practice, noted a number of ways their income had been affected as a result of COVID-19. These included a reduction in clinical working hours as a result of reductions in surgery availability[11], changes to associate contracts (reduced share in the income generated by self-employed professionals), limitations on AGPs both to comply with regulations and to reduce the costs of enhanced PPE, being asked to work without chairside assistance (dental hygienists) and having clinics cancelled at short notice due to staff absence. A dentist explained:

> *"We [dentists/dental hygienists] have had to reduce our hours from four days per week to three to give all clinicians access to surgery time. Opening hours are longer at the practice but we can't all be in at the same time as we rotate around surgeries to work around fallow time." (Associate dentist, predominantly private)*

[11] Primarily as fallow time meant clinicians carrying out AGPs were working across multiple surgeries reducing capacity across a practice

4.0 Protecting safety

- **Around three quarters (77 per cent) of dental professionals agreed that they had the necessary confidence to do their job safely whilst notably**, **under one-fifth (16 per cent) disagreed**. Nine-tenths (90 per cent) of dental professionals agreed they had the necessary skills to practise safely. Around four-fifths of dental professionals agreed that they had the necessary information, advice and guidance (IAG) (80 per cent), training (78 per cent) and equipment (78 per cent) to do their job safely.

- **Almost all dental professionals had accessed the guidance on PPE** (dentists 96 per cent, DCPs 88 per cent) **and IC** (dentists 96 per cent, DCPs 89 per cent). The **most commonly accessed sources** of guidance on PPE and IC, as reported by around two-thirds of respondents, **were from the NHS in England, Scotland and Wales**, **or the Health and Social Care Board** in Northern Ireland. The Chief Dental Officers (CDOs) and health protection agencies in each of the nations also provided guidance which was accessed by a notable proportion (around half) of respondents. The Scottish Dental Clinical Effectiveness Programme (SDCEP) was accessed by two-thirds (66 per cent) of professionals who worked in Scotland and more than one-third (36 per cent) of respondents who worked in Northern Ireland.

- **Only around half of dentists thought the guidance was easy to apply** (PPE 48 per cent, IC 53 per cent). **DCPs were more positive in their responses than dentists**, with around three-quarters considering the guidance to be easy to apply (PPE 70 per cent, IC 73 per cent).

- When discussing the impact of COVID-19 on patient safety in the focus groups, a common theme emerged relating to the challenges associated with the publication of guidance. Participants commented that **guidance was issued later than was needed**, that the **scheduling of publication caused confusion**, that there were **inconsistencies across different sources of guidance** and that **too much was left to local discretion**, leading to notable variances in practice across the sector and added stress on professionals working in the sector.

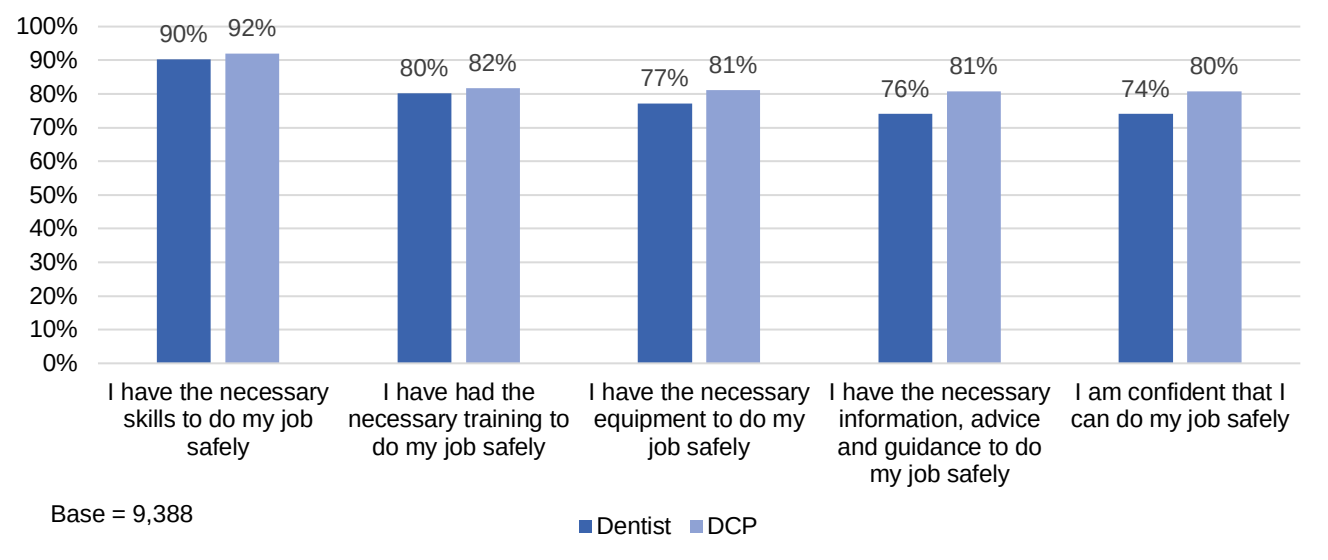
- Some dental professionals (in particular dentists and some dental hygienists) involved in the focus groups also reported **concerns about how the quality of their dental care had been compromised by the additional infection control measures** implemented to manage the risk of transmission of COVID-19. Challenges raised included practising in enhanced PPE and the impact this had on their visibility, dexterity and confidence when carrying out particularly intricate procedures and the marked increase in the provision of interim solutions and the avoidance of AGPs.

This section of the report presents survey and focus group data on respondents' views on their confidence, ability and capacity to be able to practice safely and views on the guidance related to PPE and IC.

4.1 Knowledge, skills and training to practice safely

Dental professionals were asked their views on whether they considered they had the **necessary information, advice and guidance (IAG), equipment, skills, training, and confidence to do their job safely**. Figure 4.1 shows the results by dentists and DCPs.

Figure 4.1 Knowledge, skills, training, equipment, and confidence to practise safely



- **Skills:** Similar proportions of dentists (90 per cent) and DCPs (92 per cent) agreed that they had the necessary skills to do the job safely;
- **Training:** Similar proportions of dentists (80 per cent) and DCPs (82 per cent) agreed that they had the necessary training to do the job safely;
- **Equipment:** Similar proportions of dentists (77 per cent) and DCPs (81 per cent) agreed that they had the necessary equipment to do their job safely;
- **Information, advice and guidance**: DCPs (81 per cent) were more confident than dentists (76 per cent) that they had received the necessary IAG to do their job safely;
- **Confidence**: Three-quarters of dentists (74 per cent) and four-fifths (80 per cent) of DCPs agreed that they were confident that they could do their job safely.

Small differences were found in respondents' views (in the region of two to three per cent) when data was analysed by sector, nation and ethnicity. Detailed sub-group analysis is provided in the Data Tables which accompany this report. Focus group participants commented that whilst there had been an initial nervousness when resuming care, they were now more confident that they were able to practise safely, albeit at a much reduced capacity.

4.2 Guidance on PPE and Infection Control

Guidance on Personal Protective Equipment (PPE) and Infection Control (IC) was accessed by 95 per cent of dentists and 88 per cent of DCPs.

- A slightly higher percentage of DCPs than dentists reported that guidance was easy to find, both for PPE (77 per cent and 71 per cent respectively) and IC (76 per cent and 69 per cent);
- There were small differences when analysed by sector, ethnicity or nation (in the region of two to three per cent).

Guidance sources for PPE and IC

Figure 4.2 shows the most common sources of guidance accessed by dental professionals for PPE.

Figure 4.2 Sources of guidance for PPE by nation

England (n=5483)	Scotland (n=779)	Wales (n=313)	Northern Ireland (n=239)
•NHS England - 67%	•NHS Scotland - 71%	•NHS Wales - 71%	•Health and Social Care Board NI - 73%
•CDO England - 51%	•SDCEP - 66%	•CDO Wales - 70%	•SDCEP - 36%
•PHE - 40%	•CDO Scotland - 48%	•HEI Wales - 50%	•Regulation and Quality Improvement Agency (RQIA) - 22%
•GDC - 29%	•HPS - 31%	•PHE - 23%	•GDC - 16%
•CQC - 25%	•HIS - 20%	•SDCEP - 23%	•PHE - 11%
•HSE - 23%	•GDC - 16%	•GDC - 21%	•HSE - 10%

- In all four nations**, the most common source of guidance for PPE was the NHS or** in the case of Northern Ireland (NI)**, the Health and Social Care Board** with between two-thirds and almost three-quarters of respondents accessing their guidance (England 67 per cent, Scotland 71 per cent, Wales 71 per cent, NI 73 per cent).
- **A further common guidance source for PPE accessed across each nation was the CDO** with around half of respondents in England (51 per cent) and Scotland (48 per cent) accessing guidance from them, rising to more than two-thirds (70 per cent) of respondents in Wales.
- **Other commonly accessed sources of guidance were the health protection agencies operating across the UK**. Public Health England (PHE) (England 40 per cent, Wales 23 per cent, NI 11 per cent), the Health and Safety Executive (HSE) in England (23 per cent), Health Protection Scotland (HPS) (31 per cent) and Health Improvement Scotland (HIS) (20 per cent) and Health Education and Improvement Wales (HEIW) (50 per cent).
- The Scottish Dental Clinical Effectiveness Programme (SDCEP) was accessed by two-thirds (66 per cent) of dental professionals who worked in Scotland, 36 per cent of professionals who worked in Northern Ireland and 23 per cent of professionals who worked in Wales.
- The GDC was a source of guidance for more than one-quarter (29 per cent) of respondents in England, one fifth (21 per cent) of respondents in Wales and less than one-fifth (16 per cent) of respondents working in Scotland and Northern Ireland.

Figure 4.3 shows the most common sources of guidance for infection control for each of the four nations.

Figure 4.3 Sources of guidance for IC by nation

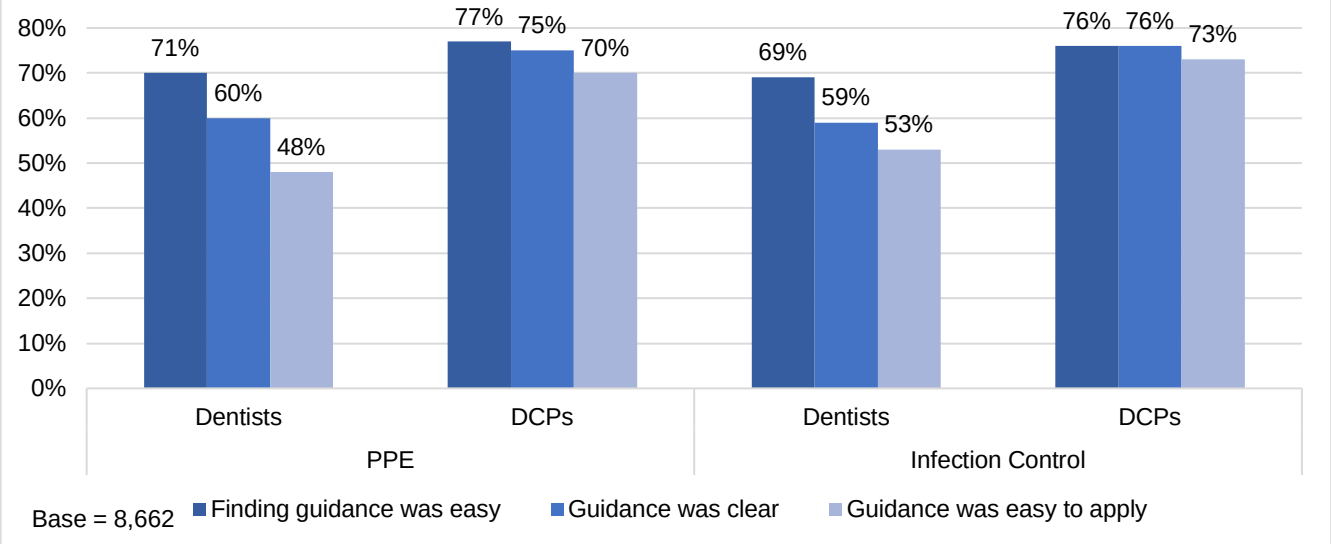
England (n=5483)	Scotland (n=779)	Wales (n=313)	Northern Ireland (n=239)
• NHS England - 59%	• SDCEP - 65%	• NHS Wales - 62%	• HSCB NI - 65%
• CDO England - 41%	• NHS Scotland - 63%	• CDO Wales - 60%	• SDCEP - 31%
• PHE - 32%	• CDO Scotland - 36%	• HEI Wales - 44%	• RQIA - 18%
• GDC - 21%	• Health Protection Scotland - 24%	• SDCEP - 19%	• GDC - 12%
• CQC - 24%	• Health Improvement Scotland - 18%	• GDC - 15%	• PHE - 12%
• HSE - 20%	• GDC - 10%	• HSE - 11%	

Similar response patterns were provided for guidance sources for IC as for PPE although slightly lower returns were provided for all organisations.

Ease of access, clarity and application of guidance

Dental professionals were asked their views on the ease of access, clarity and application of guidance on PPE and IC. Figure 4.4 shows the proportions of those stating they found the guidance easy to find, clear, and easy to apply.

Figure 4.4 Accessibility of guidance on PPE and IC



- For all questions related to the guidance, DCPs returned slightly more positive responses than dentists; respondents from predominantly NHS practices were slightly more positive than those from mixed and predominantly private practices; and respondents from white backgrounds were slightly more positive than respondents from minority ethnic backgrounds. There were no significant differences by the nation in which the respondent worked. Detailed sub-group results are provided in the Data Tables which accompany this report. For each difference identified, whilst the results are statistically significant, the differences were relatively small (in the region of one to four per cent).

With regards to respondents' perceptions of the ease of **finding guidance on PPE and Infection Control:**

- **more than three-quarters (**PPE 77 per cent, IC 76 per cent) **of DCPs** and just over **two-thirds** (PPE 71 per cent, IC 69 per cent) **of dentists** reported it was easy to find guidance;
- respondents from predominantly NHS practices were slightly more positive (PPE 79 per cent, IC 77 per cent) than those from mixed (PPE 74 per cent, IC 74 per cent) and predominantly private practices (PPE 70 per cent, IC 69 per cent).

In terms of the **clarity of guidance on PPE and infection control**:

- **three-quarters** (PPE 75 per cent, IC 76 per cent) **of DCPs** and less than **two-thirds** (PPE 60 per cent, IC 59 per cent) **of dentists** reported that they found the guidance clear;
- respondents from predominantly NHS (PPE 70 per cent, IC 71 per cent) and mixed (PPE 71 per cent, IC 72 per cent) practices were slightly more positive than respondents from predominantly private practices (PPE 63 per cent, IC 63 per cent).

Around half (PPE 48 per cent, IC 53 per cent) **of dentists** and almost **three-quarters DCPs** (PPE 70 per cent, IC 73 per cent) **of** reported that guidance on PPE and infection control was easy to apply. Differences by sector were not significant.

A particular theme in focus group interviews was that the **guidance was delivered later than was needed**. Professionals also highlighted how the **approach to publication and dissemination caused confusion**, whilst some felt that there were **inconsistencies across different sources of guidance** and that too much was left to the interpretation of practice owners and dental professionals.

> *"The CDO and the GDC really let us down. We were going from guidance from the American Dental Council where things were set up in days. No guidance was available, and nobody would provide it." (Business owner, mixed)*

> *"There is a lot of confusion. People are not sure if they are doing the right thing. It comes from all different sources and people interpret as suits their business needs." (Dental hygienist, mixed)*

Focus group respondents typically agreed that since resuming care, they were confident that they were practising safely. However, inconsistencies continued to occur as new pieces of guidance were issued. Dental professionals reported that **the guidance, in particular on fallow time, was being interpreted differently depending on context**.

> *"As a fairly newly qualified nurse, I can't challenge the business owner on decisions being made but it's not clear what is and isn't allowed." (Dental nurse, mixed)*

Some associate dentists and DCPs reported that this was leading to tensions between business owners and associates/employees, whilst some dental nurses reported that they felt unable to challenge changes to practises that had recently been introduced. Focus group participants reported:

> *"There have been changes to guidance on fallow time with the air exchange units. Now the guidance is cut from one hour to half an hour... what's the evidence behind it...? It's been released but not approved by the CDO…How do I know that the advice that's been issued can be acted on?" (Dental hygienist, mixed)*

Dental professionals from all sectors raised concerns about how **the focus on COVID-19 was negatively impacting the quality of some aspects of dentistry** they provided. Challenges were noted in relation to working in enhanced PPE. As one respondent remarked:

> *"It's really tiring wearing full PPE when you're breathing in recirculated air all day and trying to communicate difficult clinical decisions through a mask." (Associate dentist, predominantly NHS)*

Others noted **a marked increase in the provision of interim solutions for patients** (non-AGP treatments):

> *"At the moment, we're patching people up and hoping the solution works until we can provide the treatment they need. These aren't the clinical decisions I'd normally make." (Associate dentist, predominantly NHS)*

Further concerns were raised about the **contradictions between the guidance on COVID-19 and HTM 01-05** specifically with regard to protocols for cleaning down at the end of the day, after an AGP and wearing gowns with full length sleeves. Some dental hygienists also raised concerns about increased requests to work without a nurse.

4.3 Implications for the operation of dentistry

The new requirements introduced to manage the risk of the transmission of COVID-19 have been adopted across the profession with most reporting they are confident that they can provide care safely but an important minority reporting they are not. The requirements relating to fallow time and managing patient flow mean dental care is currently provided at a much reduced capacity. In some circumstances the quality of care was reported to have been compromised as a result of compliance with new guidance. A further theme in the focus groups was that some dental professionals felt vulnerable to future investigation relating to some of the clinical decisions they have had to make, with a lack of clear guidance on how to deal with commonly occurring dilemmas. Some focus group participants and survey respondents suggested that the GDC should provide leadership to mitigate a complex situation, regarding the GDC as the one organisation able to directly communicate with the whole profession, and that they were the organisation who would ultimately uphold the professional standards required of the sector.

> *"There has to be a recognition from the GDC about the increased stress and challenge we face in delivering dentistry… We're taking the brunt of this and there is very little support coming from those who govern us… We can't be judged on pre-COVID standards when we're working in full PPE and our vision is obscured. I can say it's my best effort, but it's not my best dentistry… I'm working across three surgeries in one day. Mistakes are much more likely." (Associate dentist, predominantly private)*

5.0 Patient confidence and access to care

- **Dental professionals considered that patient confidence in their ability to provide services was largely unchanged as a result of COVID-19.**

- **Two-thirds** (66 per cent) of dental professionals **thought that the number of patients they delivered care to would decrease in the next twelve months** due to COVID-19**, with a mean projected decrease of 59 per cent**.

- Just under **two-thirds (64 per cent)** of respondents **anticipated an increase in demand for dental services over the next twelve months**. **Less than half (45 per cent) of respondents were confident that they would be able to meet demand for services**, with this least likely to be the case for respondents from predominantly NHS services (predominantly NHS 26 per cent, mixed 38 per cent, predominantly private 53 per cent).

- Overall, **an increase in demand[12] was expected for most treatments** in the next twelve months, with the exception of elective cosmetic procedures (12 per cent of respondents expected demand to decrease). **Overall, dental professionals were confident that they could meet demand for extractions, denture repairs, preventative care (non-AGP), orthodontics and elective cosmetic procedures**. **Dental professionals were unconfident that they could meet demand for periodontal treatment with AGP, restorative treatments with laboratory work and routine dental care**.

- Feedback from the focus groups highlighted **specific concerns about reduced capacity in hospital and community settings**, in particular the challenges faced with managing the backlog of patients who had waited for treatment since before the lockdown in March 2020.

- Dental professionals felt that the patient groups who were particularly likely to experience a decrease in access to their dental services over the next year were those who were extremely clinically vulnerable to COVID-19 (54 per cent agreed), people unable to afford dental treatment (48 per cent) and older people (43 per cent).

- More than two-thirds (69 per cent) of dental professionals anticipated that they would be in a similar dental professional role in twelve months' time. Almost one-fifth (18 per cent) of respondents felt it was likely that they would no longer be a registered dental professional.

This section of the report presents survey respondents and focus group participants views on the impact of COVID-19 on patient confidence in dentistry and the implications for the demand and supply of care.

[12] The change in demand was determined by calculating the difference between the sum of those who expected an increase in demand and the sum of those who expected a decrease in demand. The same approach was taken to calculate overall confidence in ability to meet demand.

5.1 Patients' confidence in dental services

Dental professionals were asked to what extent they thought patients' or service users' confidence in their ability to deliver their services had changed since COVID-19. **Around half (48 per cent) of dental professionals thought that patient confidence had stayed the same, with similar proportions of respondents who thought confidence had improved (20 per cent) as those who thought confidence had got worse (18 per cent)**. A further 14 per cent reported that they did not know if patient confidence had changed.

- Respondents from predominantly NHS services were most likely to think patient confidence had got worse (predominantly NHS 23 per cent, mixed 16 per cent, predominantly private 14 per cent).
- Respondents from predominantly private/mixed services were most likely to think patient confidence had improved (predominantly private/mixed 23 per cent, predominantly NHS 16 per cent).

Focus group participants felt the main factor contributing to **any decline in patient confidence was reduced access to care** which was largely attributed to the impact of fallow time. Participants reported that registered patients who were able to access dental services had confidence in the IC procedures put in place. **Non-registered patients were most likely to have reduced access** and therefore confidence. As one practice owner commented:

> *"The patients we are treating are really grateful for the care and recognise what we've put in place to keep them safe. It's those who are trying to be seen but are being turned away where confidence is affected. There is nowhere to send the unregistered patients." (Business owner, predominantly NHS)*

5.2 Changes to the provision of dental services

Dental professionals were asked how the number of patients they provide dental services to was expected to change due to COVID-19 over the next twelve months.

- **Two-thirds (66 per cent) of professionals thought the number of patients treated would decrease,** around one tenth (11 per cent) anticipated an increase, whilst similar proportions (11 per cent) anticipated that numbers would stay the same or did not know (12 per cent).
- Dental professionals from the predominantly NHS sector were most likely to expect a decline in patient numbers (72 per cent) when compared to those in mixed (63 per cent) or predominantly private (66 per cent) provision. More than three-quarters (77 per cent) of dentists were more likely to expect a decrease in the number of patients they were likely to treat compared to DCPs (58 per cent).
- Those who thought that patient numbers would decrease in the next twelve months estimated an **average decrease of 45 per cent**. When analysed by sector, professionals from predominantly NHS dental services expected a slightly larger decrease in the number of patients they provided services to compared to those from predominantly private dental services (predominantly NHS 51 per cent decrease, mixed 45 per cent decrease, predominantly private 38 per cent decrease).

5.3 Changes in overall demand and emergency care

Dental professionals were asked how they expected **overall demand for dental services to change** over the next twelve months.

- **Just under two thirds (64 per cent) of dental professionals anticipated an increase in overall demand**, just under one-fifth (18 per cent) expected a decrease in demand, one-tenth (10 per cent) thought demand would stay the same and just under one-tenth (9 per cent) did not know.

- Professionals from predominantly NHS/mixed services were most likely to anticipate an increase in demand (73 per cent, 69 per cent respectively) when compared to those from predominantly private services (51 per cent).

Dental professionals were asked how confident they were that they would be able to meet demand.

- Over one-third (38 per cent) of respondents were confident that they could meet demand for dental services, whilst almost half (45 per cent) were not confident, and just over one-tenth (13 per cent) did not know.
- DCPs (44 per cent) were more confident that they could meet demand than dentists (30 per cent).
- Respondents from predominantly private services were most confident that they could meet demand (53 per cent), followed by those from mixed services (38 per cent) and those from predominantly NHS services (26 per cent).

Dental professionals were asked how they expected demand for **emergency dental services** to change over the next twelve months.

- **More than four-fifths (86 per cent) of respondents anticipated an increase in overall demand for emergency care**, one-tenth (8 per cent) expected no change in demand, whilst a small proportion expected a decrease in demand (2 per cent) or did not know (5 per cent).
- Those most likely to anticipate an increase in demand for emergency care were working in either predominantly NHS (87 per cent) or mixed provision (83 per cent) compared to those in the predominantly private sector (75 per cent).

Dental professionals were asked how confident they were that they would be able to meet demand for emergency dental care.

- **Half (50 per cent) of respondents were confident that they would be able to meet demand for emergency services**, one-third (33 per cent) were unconfident, and just over one tenth (12 per cent) did not know.
- There were no significant differences in confidence to meet demand for emergency care when examined by sector.

5.4 Changes in demand and supply of specific treatments

Summary of changes

Dental professionals[13] were asked how they expected demand for certain treatments to change over the next twelve months and how confident they were that they would be able to meet demand in the same period. Figure 5.1 shows the expected change in demand for each treatment type and dental professionals' confidence that they will be able to meet demand[14]. Net change (i.e., the number remaining when the negative responses were deducted from the positive responses) was calculated from the sum of those who anticipated an increase, minus the sum of those who anticipated a decrease. Those who responded 'don't know' or 'not applicable' were excluded.

[13] Respondents were routed to answer questions which related to the treatments they directly provide. As such, base numbers are lower for questions related to demand and supply.
[14] Net change was calculated from the sum of those who anticipated an increase minus the sum of those who anticipated a decrease in demand. Those who responded 'don't know' or 'not applicable' were excluded. The same calculation is used to calculate net confidence. See Table 5.1 for the data.

Figure 5.1 Changes in demand for treatments and confidence to meet demand over next 12 months - primary

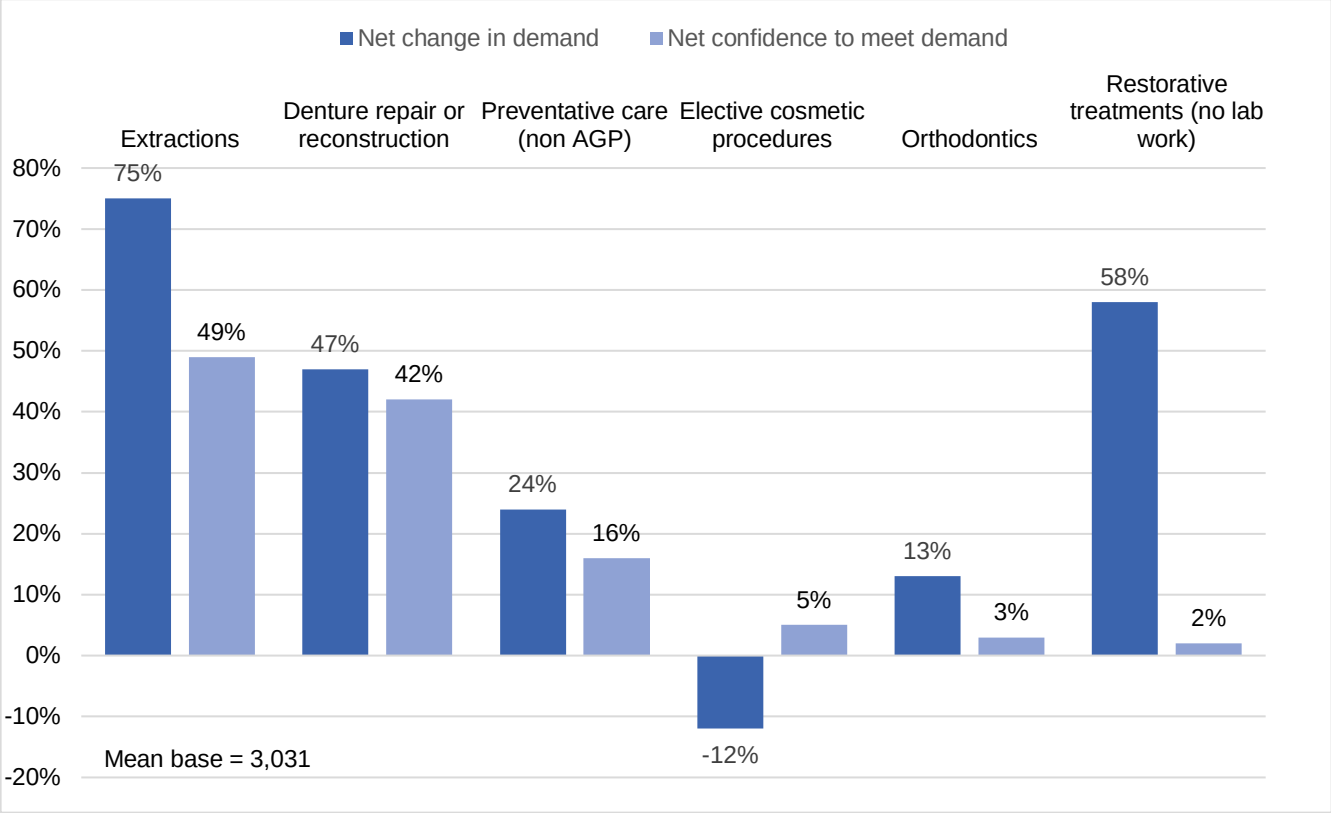


Figure 5.2 Changes in demand for treatments and confidence to meet demand over next 12 months - secondary

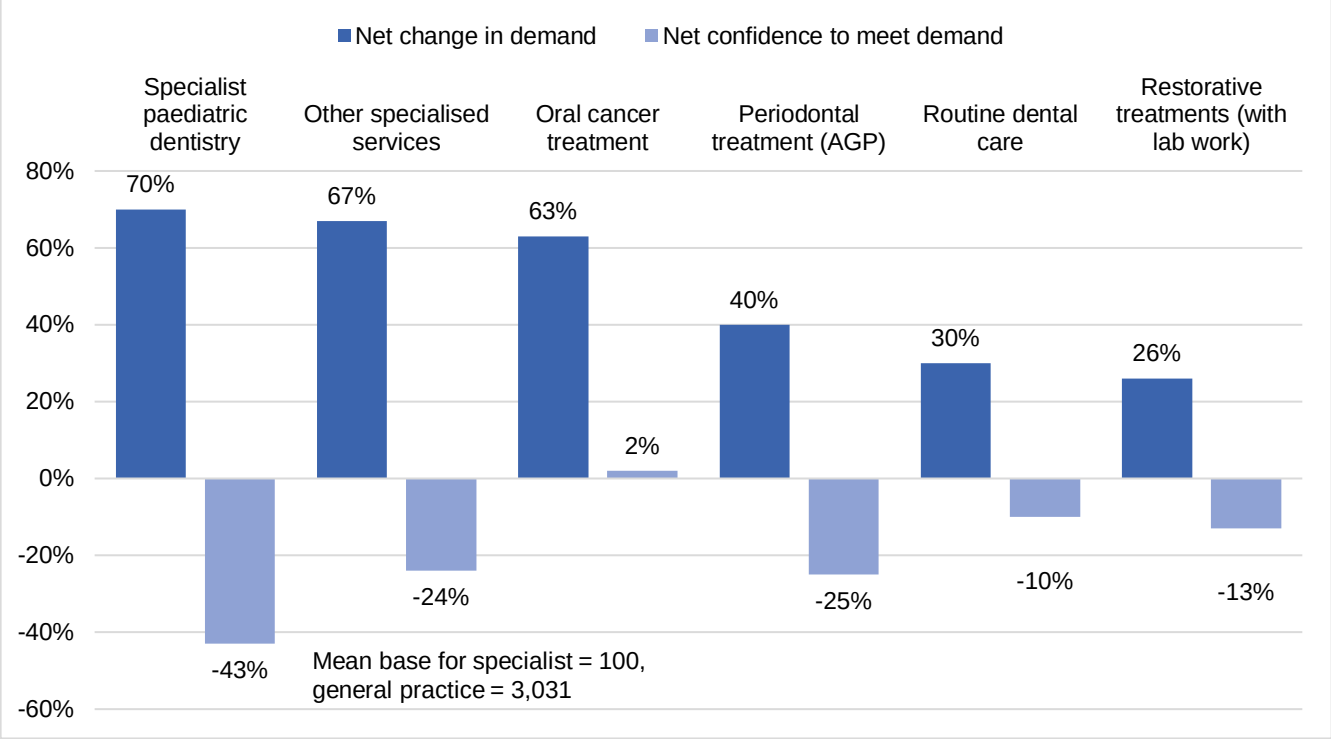


Table 5.1 provides a summary of the responses. The response base excludes those who said that a particular service did not apply to them.

Table 5.1 Changes to the demand and supply of dental services over the next 12 months

	Anticipated change to demand						Confidence that can meet demand				
	Base	Increase	Same	Decrease	Don't know	Net change	Base	Confident	Not Confident	Don't know	Net confidence
General dental practice											
Extractions	3,025	77%	17%	1%	5%	**75%**	2,842	71%	22%	7%	**49%**
Restorative treatments (no lab work)	3,030	66%	19%	9%	6%	**58%**	2,847	47%	45%	7%	**2%**
Denture repair or reconstruction	2,982	52%	35%	5%	8%	**47%**	2,739	67%	25%	8%	**42%**
Periodontal treatment (AGP)	3,308	59%	17%	19%	5%	**40%**	3,244	34%	59%	7%	**-25%**
Routine dental care	3,107	54%	17%	24%	5%	**30%**	2,943	41%	51%	8%	**-10%**
Restorative treatments (with lab work)	2,994	49%	21%	23%	7%	**26%**	2,772	39%	52%	9%	**-13%**
Preventative care (non AGP)	3,322	45%	28%	21%	6%	**24%**	3,247	55%	39%	6%	**16%**
Elective cosmetic procedures	2,965	25%	28%	37%	9%	**-12%**	2,612	45%	40%	16%	**5%**
Specialist services											
Specialist paediatric dentistry	93	71%	8%	1%	20%	**70%**	69	16%	59%	25%	**-43%**
Other specialised services	108	74%	13%	7%	6%	**67%**	95	31%	55%	15%	**-24%**
Oral cancer treatment	104	68%	19%	5%	8%	**63%**	83	43%	41%	16%	**2%**
Orthodontics	2,547	29%	41%	16%	14%	**13%**	1,634	40%	37%	23%	**3%**
Dental technician services											
Dental appliances											
Denture repair	464	45%	29%	17%	8%	**28%**	391	76%	15%	9%	**61%**
Removable appliances (private)	438	45%	16%	26%	12%	**18%**	371	73%	14%	13%	**60%**
Direct patient enquiries	256	31%	17%	24%	28%	**7%**	252	62%	16%	22%	**45%**
Fixed prosthesis (private)	429	32%	16%	33%	19%	**-1%**	332	68%	17%	14%	**51%**
Orthodontic appliance (private)	351	25%	26%	25%	25%	**-1%**	238	55%	17%	27%	**38%**
Removable appliances (NHS)	423	23%	12%	52%	13%	**-29%**	353	65%	19%	15%	**46%**
Fixed prosthesis (NHS)	404	21%	10%	50%	19%	**-29%**	306	58%	22%	20%	**37%**
Orthodontic appliances (NHS)	361	15%	21%	37%	27%	**-22%**	255	55%	20%	25%	**36%**

Table 5.1 and Figures 5.1 and 5.2 show that **net increases in demand were expected for all treatments most commonly provided in general dental practice in the next 12 months**, **with the exception of elective cosmetic procedures,** which was expected to decrease by net 12 per cent. Treatments most expected to increase (in net demand) were:

- extractions (net 75 per cent expected demand to increase);
- restorative treatments without lab work (net 58 per cent expected demand to increase);
- denture repair or reconstruction (net 47 per cent expected demand to increase);
- periodontal treatment with AGP (net 40 per cent expected demand to increase).

Dental professionals were most confident that they could meet demand for extractions (net 49 per cent) denture repairs (net 42 per cent) and preventative care (non-AGP) (net 16 per cent). However, dental professionals were unconfident that they could meet demand for periodontal treatment with AGP (net 25 per cent unconfident), restorative treatments with laboratory work (net 13 per cent unconfident) and routine dental care (net 10 per cent unconfident).

Across all treatments, respondents from the predominantly NHS sector were more likely to expect a net increase in demand and less likely to expect that they could meet demand for all services, when compared to both mixed and private practice. A dentist in the focus groups commented that:

> *"We have dealt with all our emergency and urgent care and have almost cleared the open courses of treatment. We have a huge list of unregistered patients wanting care referred from 111 but we don't have capacity to see them. We're calling patients in based on oral health needs and risks to COVID-19. We're operating at about fifteen per cent of pre-COVID capacity. We're months behind on routine re-calls and providing lots of temporary solutions to those needing AGPs." (Dentist, predominantly NHS)*

Routine, preventative and restorative treatments

> *For all these years we've been trying to get patients to understand about prevention. Now we're having to say we can't give you the appointments." (Dental hygienist, predominantly NHS)*

Survey response data showed:

- Net 30 per cent of respondents reported an increase in demand for **routine care including check-ups and recalls**. Net 10 per cent of respondents were unconfident that they would be able to meet demand. Respondents from predominantly NHS services were most likely to expect increased demand (61 per cent) compared to those from mixed (54 per cent) and those from predominantly private services (39 per cent). Respondents from predominantly private services were most confident they could meet demand (49 per cent) compared to those from mixed (30 per cent) and those predominantly NHS services (23 per cent).
- Net 24 per cent of respondents expected an increase in demand for **preventative care that does not include AGPs**. Net 16 per cent of respondents were confident that they would be able to meet demand. Respondents from predominantly NHS services were most likely to expect increased demand (52 per cent) compared to those from mixed (45 per cent) and predominantly private services (37 per cent). Respondents from predominantly private services were most confident they could meet demand (64 per cent) compared to those from mixed (49 per cent) and predominantly NHS services (40 per cent).
- Net 40 per cent of respondents expected an increase in demand for **periodontal treatment that does include AGPs**. Net 25 per cent of respondents were unconfident that they would be able to meet demand.

Respondents from predominantly NHS services were most likely to expect increased demand (52 per cent) compared to those from mixed (45 per cent) and predominantly private services (37 per cent). Respondents from predominantly private services were most confident they could meet demand (64 per cent) compared to those from mixed (49 per cent) and from predominantly NHS services (40 per cent).

- Net 58 per cent of respondents expected an increase in demand for **restorative treatments that do not require lab work**. Respondents were fairly evenly balanced between those who were confident that they would be able to meet demand (47 per cent) and those who were not (45 per cent). Respondents from predominantly NHS services were most likely to expect increased demand (73 per cent) compared to those from mixed (61 per cent) and from predominantly private services (46 per cent). Respondents from predominantly private services were most confident they could meet demand (46 per cent) compared to those from mixed (37 per cent) and predominantly NHS services (33 per cent).
- Net 26 per cent of respondents expected an increase in demand for **restorative treatments that require lab work**. Net 13 per cent of respondents were unconfident that they would be able to meet demand. Respondents from predominantly NHS services were most likely to expect increased demand (55 per cent) compared to those from mixed (44 per cent) and predominantly private services (32 per cent). Respondents from predominantly private services were most confident they could meet demand (41 per cent) compared to those from mixed (28 per cent) and predominantly NHS services (23 per cent).

Extractions

> *"We are doing more extractions than we ever have before. Post-lockdown we had a surge in cases of unregistered patients with unresolved issues." (Dentist, predominantly private)*

Amongst dental professionals, net 75 per cent of respondents expected an increase in demand for extractions. Net 49 per cent of respondents were confident that they would be able to meet demand. Respondents from predominantly NHS services were most likely to expect increased demand (82 per cent) compared to those from mixed (68 per cent) and predominantly private (57 per cent) services. Respondents from predominantly NHS services were most confident they could meet demand (65 per cent), compared to those from mixed and predominantly private services (57 per cent).

Dentures and dental appliances

> *"Because NHS dentists are treating far fewer patients, the NHS work coming to us has declined massively to about 10 per cent of pre-Covid." (Laboratory owner, mixed)*

Amongst dental professionals, net 47 per cent of dentists and net 28 per cent of technicians expected an increase in demand for denture repair or reconstruction. Net 42 per cent of dentists and 61 per cent of technicians were confident that they would be able to meet demand. Those respondents from predominantly NHS services were most likely to expect increased demand (60 per cent) compared to those from mixed (48 per cent) and predominantly private services (32 per cent). Respondents from predominantly NHS services were most confident they could meet demand (57 per cent), compared to those from mixed and predominantly private services (52 per cent). With regards to services provided by dental technicians, increases in demand were expected for some private prescriptions, but most NHS services were expected to experience a net decrease in demand. This sector was confident they could meet demand for the range of services they provide.

Elective cosmetic procedures

Amongst dental professionals, net 12 per cent of respondents expected a decrease in demand for elective cosmetic procedures. Net 5 per cent of dentists were confident that they would be able to meet demand. Respondents from predominantly private services were most confident they could meet demand (44 per cent), compared to those from mixed (33 per cent) and predominantly NHS services (23 per cent).

Orthodontics

Amongst dental professionals, net 13 per cent of respondents expected an increase in demand for orthodontics. Net 3 per cent of respondents were confident that they would be able to meet demand. Increased demand was expected by 25 per cent of respondents from predominantly NHS services, 26 per cent of those from mixed and 18 per cent of those from predominantly private respondents. Respondents from predominantly private services were most confident they could meet demand (23 per cent), compared to those from mixed (20 per cent) and predominantly NHS services (12 per cent).

Hospital and community care

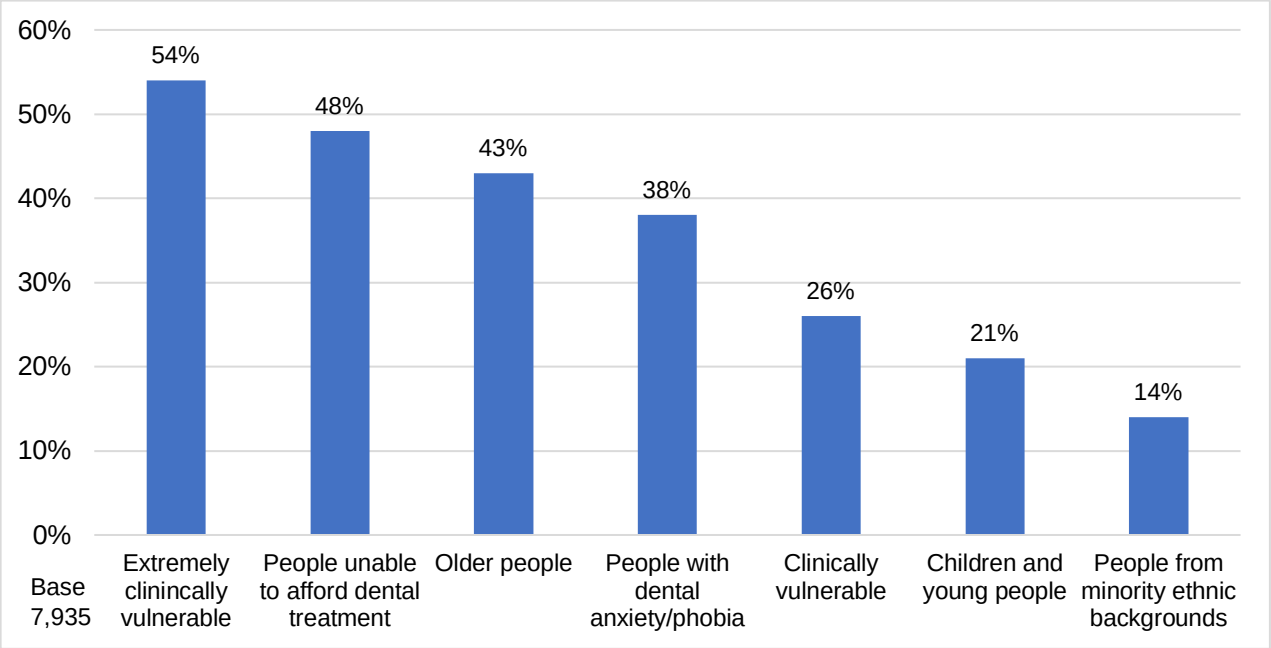
> *"Most of our care was on hold until late August. We have a five-month waiting list, and we can see around quarter of patients each day." (Dentist, community)*

Specialists and dentists working in hospital settings expected an increase in demand for specialist paediatric dentistry (net 70 per cent), oral cancer treatment (net 63 per cent) and other specialised services (e.g. oral medicine and oral and maxillofacial surgery) (net 67 per cent). Overall, respondents were not confident that they could meet demand for specialist paediatric dentistry (net 43 per cent unconfident), and other specialised services or treatments, e.g. oral medicine, oral and maxillofacial surgery (net 24 per cent unconfident). For oral cancer treatment, responses were evenly balanced between those who were confident that demand could be met (43 per cent) and those who were not (41 per cent).

5.5 Groups most likely to experience reduced access to care

Respondents were asked which groups (from a pre-defined list) were particularly likely to experience reduced access to their services due to COVID-19. The results of those who agreed are shown in Figure 5.3.

Figure 5.3 Groups particularly likely to experience reduced access to dental care



Around half of dental professionals considered that **the patient groups who were particularly likely to experience reduced access to care were patients who were those who were extremely clinically vulnerable to COVID-19 (54 per cent), those unable to afford dental treatment (48 per cent) and older people (43 per cent).** Focus group participants reported that this caused specific issues in terms of access to their services in particular for those with diverse needs.

> *"There is a real challenge in community dental services… We see the most vulnerable patients… There are far fewer appointments available than before lockdown and we're getting more FTAs [Failures To Attend] because people are being asked to self-isolate because they have developed COVID-19 symptoms. Our backlog is huge." (Dentist, community)*

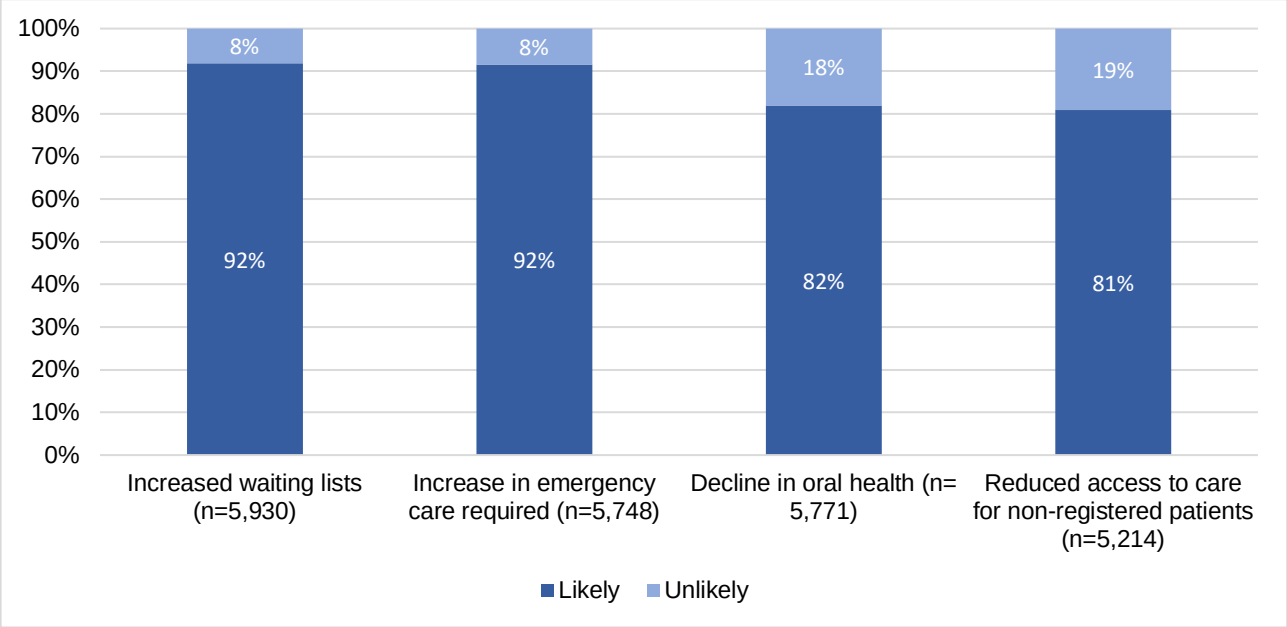
> *"We're getting lots of enquiries from new patients who are registered with an NHS dentist but are being told they can't be seen because their problem isn't urgent. They're coming to us for care because we can fit them in. It's awkward in the appointment when we're being asked why their usual dentist can't see them, but that we can." (Dentist, predominantly private)*

Impact on patients and delivery of services

Respondents[15] were asked how likely or unlikely it was that certain changes would occur in their work setting in the next twelve months. Figure 5.4 shows the proportions of those who agreed the outcome was likely or unlikely.

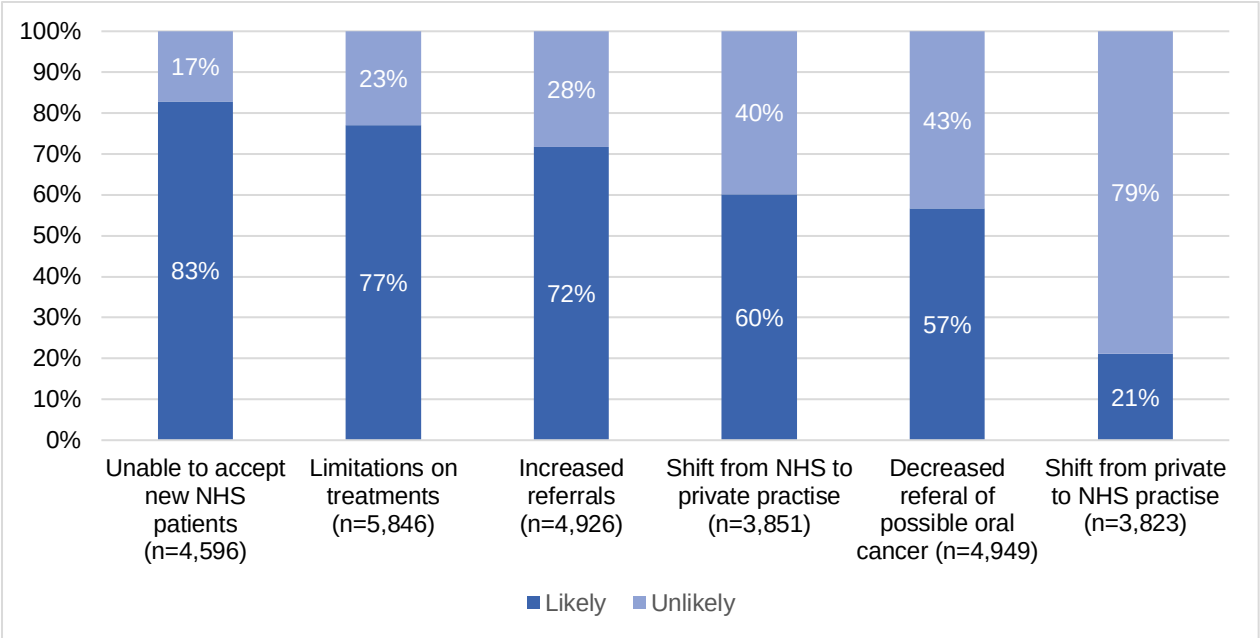
[15] Note that base numbers are lower in later sections of the survey due to respondent drop off. However, margin of error is largely unchanged because of the large number of responses.

Figure 5.4 Expected impact on patients' experience of dental services



Large proportions of respondents were expecting a range of adverse effects on the delivery of the services they provide over the next 12 months, linked to a reduction in capacity. **Nine-tenths (92 per cent) of respondents reported that increased waiting lists and emergency care were likely. Around four-fifths of dental professionals expected a decline in oral health standards (82 per cent) or reduced access to care for non-registered patients (81 per cent)**. Respondents were also asked to state how likely certain situations were to apply to their practise in the next twelve months. Figure 5.5 shows the proportion stating the outcome was likely or unlikely for each option. Those who marked 'don't know' or 'not applicable' are excluded from the analysis.

Figure 5.5 Expected changes to practise in the next 12 months



Four-fifths (83 per cent) of respondents reported that it was likely they would be unable to accept new NHS patients, with a similar proportion (77 per cent) agreeing limitations on the treatments they provided where they worked were likely. Three-quarters (72 per cent) agreed that they expected to make increased referrals, whilst just over half (57 per cent) of respondents expected to make decreased referrals of possible oral cancer. Feedback from the focus groups highlighted some concerns about the impact of changes to funding of NHS dentistry:

> *"There are a lot of NHS dentists doing a good service, but some are abusing the system. They get NHS payments, but stop once they reach the 20 per cent target. You feel a little bit annoyed about it. Why are these practices not seeing patients on the NHS?" (Dental hygienist, mixed)*

> *"We have to adhere to the most stringent rules, and there are restrictions on treatments imposed by the NHS… Capacity within my (NHS practice) is around 15 per cent of what it was and I only have space for two AGPs each day. The backlog of patients is growing, and we've shifted to providing more urgent and emergency care and less prevention." (Business owner, predominantly NHS)*

Three-fifths (60 per cent) of dental professionals thought a shift from NHS to private practice was likely, whilst one-fifth (20 per cent) thought a shift from private to NHS practise was likely.

5.6 Personal employment intentions

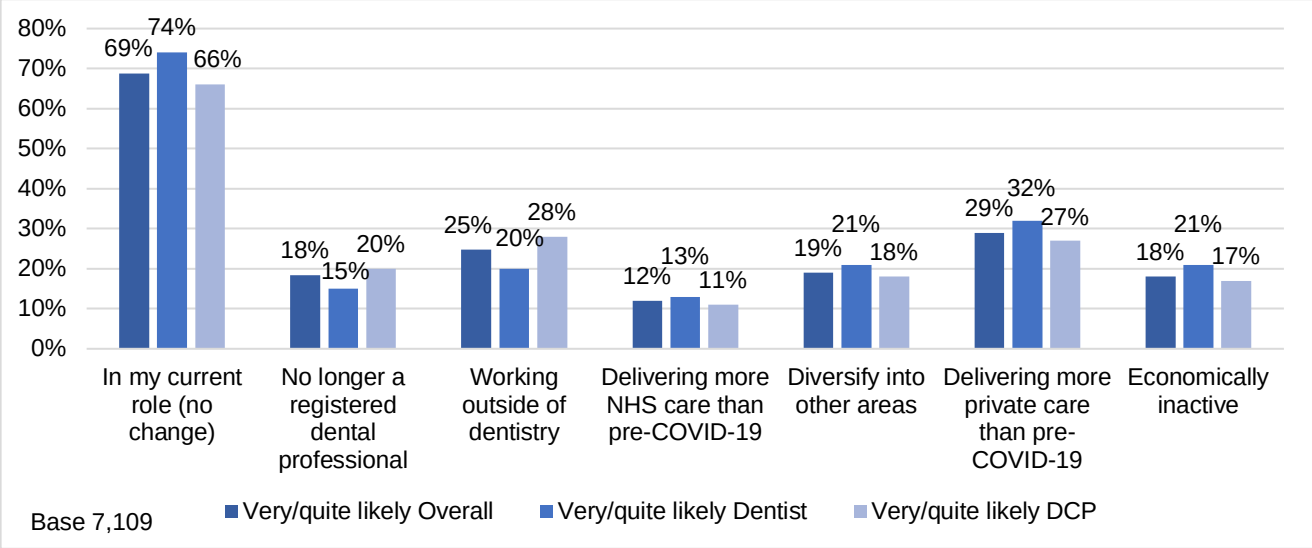
Changing jobs and roles

Dental professionals were asked how likely or unlikely a range of options related to their job or role were likely to apply to them in twelve months' time. Two approaches were taken to analyse the responses to this question:

- first, the very/quite likely responses to each option were grouped to assess the frequency of response to each option; and
- second, further analysis was conducted which combined the data of those who indicated that one of the career change options (no longer a registered dental professional, working outside of dentistry, economically inactive) was very/quite likely.

Figure 5.6 show the responses for all respondents, dentists and DCPs.

Figure 5.6 Expected changes to jobs and roles in the in the next 12 months



Over two-thirds (69 per cent) of respondents expected to be in their current role, using their current title in twelve months' time. DCPs (66 per cent) were less likely than dentists (74 per cent) to expect to be in the same role. When asked if they expected to no longer be a registered dental professional, almost one-fifth (18 per cent) of respondents indicated this was likely, with DCPs (20 per cent) more likely than dentists (15%). Similarly, one-quarter (25 per cent) of respondents reported that it was likely that they would be working outside of dentistry in twelve months' time with DCPs (28 per cent) more likely than dentists (20 per cent) to report this to be the case. Around one-fifth (18 per cent) of respondents reported that it was likely they would be economically inactive.

Additional analysis combining data on those who said they were likely to be economically inactive, or working outside of dentistry, or not registered as a dental professional found that around one-third of dentists (32 per cent) and DCPs (38 per cent) considered some form of change to their role was likely within twelve months' time. (Note that it's possible that respondents indicated that it was likely they would still be within dentistry and considering a career change option at the same time). There were small differences in the data when analysed by sector, ethnicity or UK nations. There were more notable differences when considered by role and age.

- Dental therapists (49 per cent), dental hygienists (43 per cent) and dental technicians (43 per cent) were most likely to expect a change in their role or career, whilst dental nurses (35 per cent) and dentists (32 per cent) were least likely[16].
- Career change was least likely for those aged 41-50 (30 per cent) and most likely for those over the age of 61 (45 per cent). For all other groups, response patterns were similar (38 per cent for 16-30, 35 per cent for 31-40, and 35 per cent for 51-60).

Changing practise between NHS and private care

Almost one-third (32 per cent) of dentists and one quarter (27 per cent) of DCPs expected to be delivering more private care in twelve months compared to pre-COVID-19. Dental professionals from the mixed sector were most likely to increase private care (37 per cent) compared to respondents from predominantly private services (31 per cent) and those form predominantly NHS services (21 per cent). Conversely, **one in ten (12 per cent) respondents indicated that it was likely that they would be delivering more NHS care than prior to COVID-19**. Respondents from NHS/mixed services were most likely to be expecting to increase NHS care (NHS

[16] All results reported are statistically significant. The margin of error for each role is provided in the Technical Appendix.

18 per cent, mixed 14 per cent), when compared to those from predominantly private services (3 per cent). Just under one fifth (19 per cent) of respondents expected to diversify into other areas.

Dental professionals were asked how important different factors were when making decisions about their role in the next twelve months. Figure 5.7 and Figure 5.8 shows the results for each of the factors with responses for dentists and DCPs.

Figure 5.7 Importance of factors in decision making related to job role in next 12 months - personal

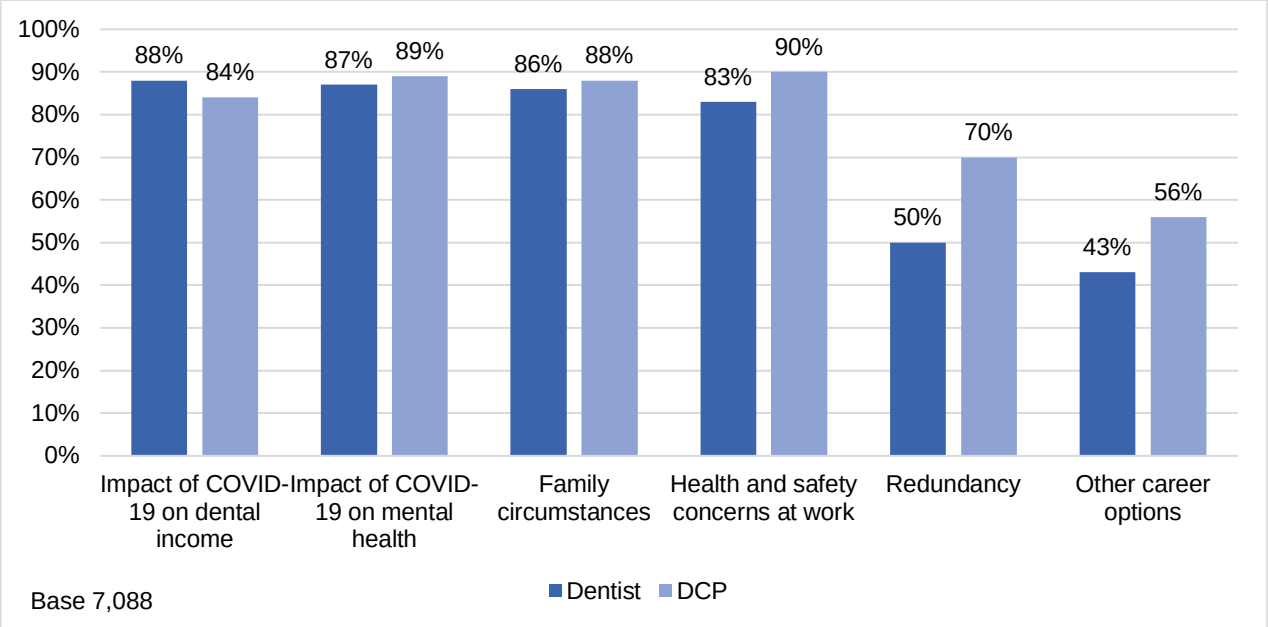
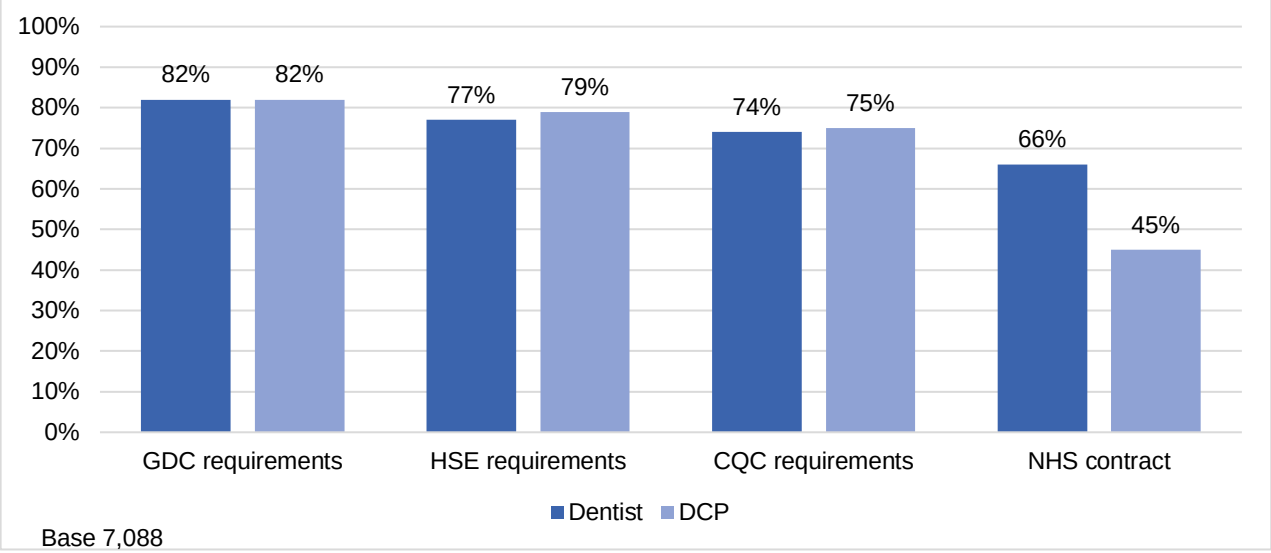


Figure 5.8 Importance of factors in decision making related to job role in next 12 months - external



For dentists, the most important factors in deciding in the next twelve months about their role were the impact of COVID-19 on dental income (88 per cent) and on mental health (87 per cent), family circumstances (86 per cent) and health and safety concerns at work (83 per cent). For over three-quarters of respondents, the requirements of regulatory bodies (GDC 82 per cent, HSE 77 per cent, CQC 74 per cent) and for two-thirds, the NHS contract (66 per cent) were also important considerations. Redundancy (50 per cent) and other career options (43 per cent) were less of a concern for dentists than other considerations.

For DCPs, the most important factor was health and safety concerns at work (90 per cent), the impact of COVID-19 on mental health (89 per cent), family circumstances (88 per cent) and impact on income (84 per cent). Similar to dentists, around four-fifths (80 per cent) noted the importance of requirements of the regulatory bodies. **Redundancy (70 per cent) and opportunities outside of dentistry (56 per cent) were more commonly reported concerns for DCPs than dentists**, although these were not as frequently noted as the aforementioned responses.

6.0 Looking forward

The dental professions have made wide ranging changes to the provision of dental care and services as a result of COVID-19. In this context, the study was commissioned to provide evidence of the views on future steps that would support the sector to recover, that are relevant to both the GDC and other organisations leading the dental professions. Suggestions were made to: improve the coherence, consistency, and evidence base of the guidance on managing the risk of transmission of COVID-19 in dentistry; provide financial support for businesses struggling because of the impact of restrictions on dental care; and to use the crisis as an opportunity to develop a more positive relationship between the GDC and the sector.

From the initial crisis caused by the cessation of almost all dental services, the sector has now largely re-opened and resumed delivery of care under a new and evolving standard operating procedure and, in the case of the NHS, a changed approach to funding the delivery of dental care. In this context, the research asked respondents to provide suggestions on:

- what further **guidance, support or training** is required to improve staff and patient safety?
- what changes are most needed to help dental professionals' and **businesses recover from COVID-19** and/or prepare for the future?
- **what the GDC could do to support the sector to recover** from COVID-19?

These questions were initially asked of respondents through open questions included in the survey. The responses were analysed using electronic software built into the survey software to identify the most common phrases made by professionals, which were used to develop a coding frame. Subsequently, a random sample of 500 (10 per cent) responses were selected and coded to assess the prevalence of the suggestions made. The focus groups provided further opportunity to explore the suggestions in more depth. Response feedback was coded to key themes, linked to the research objectives, to allow areas of agreement or difference to be easily identified. This included a focus on key factors, which continued to affect the sector, and mechanisms that the GDC and other organisations could use to support the sector through the crisis. The issues and suggestions raised are presented in line with the extent that each was stressed within the responses to the open questions of the survey[17]. Findings should be interpreted as showing the range of different issues, as opposed to proving prevalence.

6.1 Guidance, support and training

When asked what further guidance, support or training was needed to support recovery, **the most commonly cited** themes raised in the sample of survey responses analysed and subsequently discussed in the focus groups, focused on:

- **improved communication of guidance related to practising dentistry safely** in the context of COVID-19;
- **strengthening the evidence base on which existing guidance had been issued**, in particular related to fallow time; and

[17] Full analysis and coding of all 20,000 open text responses was not possible within the study timeframe.

- the provision of **accessible and practical support** to ensure guidance was applied correctly and consistently.

Coherent and consistent communication strategy

The most commonly cited challenges raised in the survey were that the guidance for dentistry was issued by multiple organisations, that there were inconsistencies across sources and different restrictions based on geographical location within the UK and by sector. Dental professionals involved in the focus groups reported that different guidance was not interpreted consistently, with this adding to confusion and stress.

> *"Every aspect of this has been poorly managed by the GDC and the CDO. The guidance is poor, confusing and neither concise nor practical." (Dental hygienist, predominantly private)*

Professionals who responded to the survey strongly suggested a more coordinated approach to communication, more research to strengthen the evidence base to justify specific IC measures in place, and clear recognition of the impact of the changes on the sector. Whilst respondents recognised that this required coordination across the sector, and most commonly cited the Chief Dental Officer (CDO) as having ultimate responsibility. Some made the case that the GDC had an important role to play, being the organisation who would ultimately uphold the professional standards required of the sector.

> *"We need continuity and clarity. Something that is seriously missing. I don't care where it comes from, but it needs to all be singing from the same hymn sheet. We are all doing our best with the conflicting rules and regulations being imposed." (Dentist, mixed)*

Strengthening the evidence base for new IC practices

Dental professionals responding to the survey, and involved in the focus groups, cited the urgent need for further research and evidence to understand the transmission of COVID-19 in dentistry. This included the justification for, and impact of, the new PPE and IC measures introduced, the consequences for access to dental care, and the impact on oral health. Whilst they recognised that initial re-opening required a cautious approach, they felt that the guidelines should be reviewed and based on up to date research and evidence. Fallow time was repeatedly raised as a particular area that required further research, with a number of participants reporting that there was insufficient justification for the measures, when balanced with the impact this had on reduced capacity and access to care. Other suggested areas for further research included publishing data on infection rates amongst dental professionals and of transmission of COVID-19 within dental settings.

> *"[We need].. clearer cut guidance and evidence for the necessity of a fallow period and whether AGPs contribute to the spread of COVID. Current guidance especially regarding fallow period and extensive PPE usage is hampering our ability to do our jobs like our patients expect us to." (Dentist, practice owner, mixed)*

Training and practical support for dental professionals

Given the unprecedented changes introduced as a result of COVID-19, some survey respondents and focus group participants suggested organisations leading the professions should provide practical training and accessible support on the guidance to accompany key written documents. Suggestions were made that the GDC had a role to play in delivering online webinars and tutorials to support local interpretation of the guidance and clarify

application in different settings. Recommendations were also made for the development of an overarching, practical document (similar to HTM01-05) and an online support portal based on frequently asked questions providing clear direction to relevant documentation and practical examples of acceptable solutions. Some research participants considered that this was within the GDC's remit for ensuring professionalism and upholding standards.

Some DCPs and associate dentists made suggestions for the GDC to ensure patient safety, by providing a support service to enable them to challenge changes introduced interpreted in their workplace, which they felt did not adhere to the guidelines.

6.2 Support for business recovery

When asked what three changes were most needed to help business recovery, **fallow time** was highlighted as the key barrier, having resulted in reduced capacity to provide dental care to patients and the resulting impact this had on business income (in particular for mixed and predominantly private practices). As a result, professionals stressed the need for **continued review of the evidence and justification of the requirement for fallow time**[18] with some calling for the guidance on fallow time to be removed.

Respondents also highlighted other areas in which additional support would be beneficial, most of which are outside of the remit of the GDC:

- localised access to affordable, high quality PPE and fit testing;
- financial support from the Government to support future business viability; and
- specific support for NHS/mixed dental laboratories.

Localised access to affordable, high quality PPE and fit testing

Availability and access to affordable, in date, PPE was a further issue that some professionals reported as an ongoing challenge. Respondents highlighted that whilst the initial challenges of access had been addressed, they were now receiving different and, on occasion, out of date products, which required professionals to be re-fit tested. Continued support with access to PPE and fit testing were suggested as ongoing requirements by some survey respondents.

> *"[We need]. good access to PPE supplies. NHS England subsidised PPE initially for NHS practices, but the supply has not been reliable or of the same products i.e. masks." (Dentist, predominantly private)*

Financial support for dental businesses

A further area of ongoing concern was the impact of reduced income on the financial viability of some businesses and the need for ongoing financial support whilst capacity was restricted, in particular for the mixed/predominantly private sector. Most commonly, business owners were looking for restrictions to be reviewed so they could resume delivering care at closer to normal levels. Suggestions were also made for financial support from the Government, including continued support for the costs of employment (the furlough scheme) and business rate and tax relief. Other suggestions were made to reduce the cost of regulation, including reducing the Annual Retention Fee (ARF). Other NHS survey respondents raised concerns about the likely expectations on them to meet previous Unit of Dental Activity (UDA) targets and requested further clarity on potential expectations of NHS dentists and the timing of any planned changes.

[18] Guidance issued in the later stages of fieldwork reduced fallow time in certain circumstances following research publication of research by SDCEP.

Support for NHS dental laboratories

Owners of dental laboratories who responded to open questions in the survey highlighted the considerable reduction in work and business income, as a result of reduced NHS laboratory work being sent from dental practices, in particular crown and bridge work. Those taking part in focus groups reported major concerns about business viability and future redundancies across laboratories[19]. Suggestions for support included the provision of financial support, as had been provided to NHS dental practices[20]. Focus group participants felt this required urgent attention if the sector was to survive the impact of the pandemic.

6.3 Specific recommendations to the GDC

Within the focus groups and in responding to the survey, some dental professionals suggested that the pandemic provided an opportunity to develop a more positive relationship between the GDC and the dental professions. Various suggestions were made for the GDC, covering:

- improved communication with both dental professionals and the public about the impact of COVID-19 on dentistry and the implications for care;
- changes to registration processes, and to review of the scope of practice, in particular for dental nurses and technicians;
- acknowledgement of the impact of COVID-19 on achieving verifiable CPD and preparedness for practice, the latter for those in trainee roles;
- calls for reform of Fitness to Practise processes; and
- reduction in the ARF.

Communication to dental professionals and the public

Some dental professionals felt that the GDC had an important role in communicating with dental professionals and the public about the changes to dentistry caused by COVID-19. Focus groups participants suggested the GDC could:

- provide regular communication to the professions about recent developments and implications for practice (see earlier);
- communicate with patients about changes to dentistry and manage patients' expectations around access to care and restrictions which affected NHS and private dentistry; and
- provide recognition and reassurance in relation to potential future investigations and use an empathetic tone in line with the severity of current challenges.

[19] These concerns were raised prior to the announcement by the Chancellor of the extension of the furlough scheme
[20] NHS dentists have been remunerated at or close to normal levels but with a requirement to deliver 20% of pre-COVID-19 Unit of Dental Activity (UDA) targets.

"I think the communication of the GDC to the profession has been extremely poor and has relied almost solely on links to other organisations for guidance. There needs to be a comprehensive update that is clear, concise and aimed at the dental profession which is unique in the pandemic for [the] risk [it faces]. Dentists are a hardy group of professionals and yet the last few months has found them frustrated with lack of empathy and guidance throughout this crisis. There has been very little to convey this to the public, our patients, either." (Dentist, mixed)

Registration, professionalism, and preparedness for practice

Focus group participants made practical suggestions to streamline processes and reduce burden, namely to:

- **Streamline the process for restoring DCPs** (in particular dental nurses). Some owners of dental business reported that dental nurses were leaving the profession and changing roles due to the pandemic. At the same time, former dental nurses were looking to re-join the profession. A review of the registration process was suggested to speed up the process and broaden the pool of potential applicants.
- **Review the scope of practice of technicians**. Dental technicians suggested that the GDC should consider extending their scope of practice to allow them to provide adjustments to dental appliances without a prescription. This would support the survival of the NHS aspect of the profession by improving patient access to care and reduce waiting lists at NHS dentists.
- **Amend CPD targets.** Focus group respondents suggested updating verifiable CPD targets to take account of increased pandemic related requirements, including webinars, in-work training and reading. An alternative suggestion was to reduce the verifiable CPD target for one year.
- R**eview impact of COVID-19 on Foundation and Vocational Dentists and trainee DCPs**. Focus group attendees involved in training dental professionals were concerned about the impact of the pandemic on the practical experience of trainees, suggesting extending the training period to provide additional breadth of experience.
- **Regular testing of dental professionals**. Some survey respondents suggested that dental professionals should be given priority and/or regular testing for COVID-19.

Calls for reform of Fitness to Practise processes

In both the focus groups and surveys, some dental professionals felt the pandemic provided an opportunity to develop a more positive relationship between the GDC and the dental professions. A suggested step towards this was reform of fitness to practise investigations, this being increasingly important due to the challenge of delivering care during COVID-19. Dentists felt added pressure because they were making different clinical decisions (because of the restrictions on practice) and difficulties associated with practising in PPE (compromised visibility and dexterity) meant that mistakes were more likely. Possible further amendments to the Fitness to Practise processes included:

- develop alternative pathways to resolve low-level complaints with patients;
- increase opportunity for mediated in-house resolution; and
- appoint a dental professional to chair all the GDC committees and investigations.

7.0 Conclusions

The aim of the research was to understand the impact of COVID-19 on:

- dental professionals' financial circumstances (economic impact);
- dental professionals' confidence, skills, training, guidance, support, and equipment (protecting safety);
- perceptions of the public's demand, supply, and confidence in dental services (patient confidence);
- dental professionals' ability to provide services to the public (access to care); and
- dental professionals' views on what will support recovery (looking forward).

The research sought to understand how the pandemic had, and continued to, affect the different dental sectors (NHS, private and mixed) and dental professionals across the four nations.

7.1 Economic impact

Business finance

Dental professionals reported that COVID-19 has had, and will continue to have, a major impact on business finances. Four-fifths (80 per cent) of business owners stated that current business income had reduced, and almost two-thirds (65 per cent) estimated that business income will decrease over the next twelve months, with those in predominantly private dental practise and predominantly NHS laboratories expected to be affected most. Four-fifths (80 per cent) of business owners expected to make changes to their business model to mitigate the financial effects of COVID-19. This will affect the employment conditions for some dental professionals, with one-fifth of business owners expecting to make changes to employment contracts for dentists, dental hygienists or dental nurses and under one-fifth (17 per cent) expecting to make redundancies, increasing to two-fifths for those who owned a laboratory. Other changes expected by business owners included increased borrowing, increased private treatment fees and extended opening hours. Around one-tenth of private practices expected income to increase over the same period, potentially related to increased demand for private care, as some patients struggle to access care within the NHS.

Personal income from dentistry

Future economic changes were reported by those working in dentistry. More than half (58 per cent) of dental professionals expected their personal income to reduce over the next twelve months. Four-fifths (80 per cent) of dentists and dental hygienists expected income to decrease by between two-fifths and half (dentists 40 per cent, dental hygienists 48 per cent) in the next twelve months.

7.2 Protecting safety

Most dental professionals (dentists 74 per cent, DCPs 81 per cent) reported that they were confident that they can do their job safely and have accessed the relevant information, advice and guidance to achieve this. Importantly around under one-fifth (16 per cent) of dentists were not confident that they can do their job safely, with both survey and focus respondents noting this as an area requiring particular attention and improvement. Research participants (both to the survey and in the focus group) highlighted challenges with the scheduling of the publication, the coherence across different sources, and inconsistent messages being delivered. They felt this affected their clinical judgements on some fundamental aspects of care and left them vulnerable to future challenge and investigation by the GDC. Suggestions were made for increased coherence and visibility of the leadership of the profession to provide greater clarity, direction and reassurance to the sector, alongside clear recognition of the implications that changes to guidance have for practise.

7.3 Patient confidence and access to care

Patient confidence

At a total level, dental professionals reported that patient confidence in dental services was largely unchanged as a result of COVID-19. Where patient confidence was expected to decrease, this was related to patients' ability to access care, with over two-thirds (66 per cent) of dental professionals anticipating a decrease in the number of patients they will treat over the next twelve months. Amongst this group, capacity was expected to decrease by more than two-fifths (45 per cent). A majority of dental professionals reported concerns related to increased waiting lists and demand for emergency care (92 per cent) and declining oral health (82 per cent). The treatments with the greatest potential for unmet demand were routine care, periodontal treatments requiring AGP and restorative treatments requiring AGP. Within hospital settings, survey respondents reported that they expected increased demand for specialist care, with the majority of respondents reporting that they were unconfident they would be able to meet demand. Groups considered by dental professionals to be most likely to experience reduced access to care were those extremely vulnerable to COVID-19 (54 per cent), people unable to afford dental treatment (48 per cent) and older people (43 per cent). Residential care was also reported to be particularly affected by a decrease in the provision of care, with implications for the oral health of those living in these settings.

Changes to jobs and roles

The survey found that more than two-thirds (69 per cent) of dental professionals anticipated being in a similar job or role in twelve months' time, but around one-third expected to make some form of change. Younger and older professionals were most likely to see themselves in different work, with DCPs (dental therapists, dental hygienists and dental technicians) most likely to report a change. Around one-fifth (21 per cent) of dental professionals who worked in predominantly NHS practise expected to increase their provision of private care over the next twelve months, with a similar proportion reporting that they expected to diversify into other areas, such as cosmetic dentistry.

7.4 Looking forward

The dental profession has made wide ranging changes to the provision of dental care and services as a result of COVID-19. From the initial crisis caused by the cessation of almost all dental services, the sector has now largely re-opened and resumed delivery of care under a new and evolving standard operating procedure and, in the case of the NHS, a changed approach to funding the delivery of dental care. In this context, dental professionals made suggestions to improve the coherence, consistency and evidence base of the guidance on new practices introduced to manage the risk of transmission of COVID-19 in dentistry and provide financial support for businesses struggling because of the impact of restrictions on dental care. Some research participants suggested that the crisis presented an opportunity to develop a more positive relationship between the GDC and the sector based on a more empathetic tone in line with the severity of current challenges.

8.0 Technical appendix

The technical appendix presents:

- the methodological approach;
- the profile of survey respondents;
- the professional role, sector and place of work of survey respondents; and
- the research instruments (questionnaire and focus group topic guide).

8.1 Methodological approach

This study was based on an online survey of dental professionals and focus groups of survey respondents. The former was used to provide data that represented the views of the registrant population as a whole, while the latter provided an opportunity to explore issues in more detail. Details on each are included in the following sub-sections.

Online survey of dental professionals

Research tool design

The questionnaire was developed by Ecorys in collaboration with the GDC, linked to key research questions set for the study. A draft version was piloted by eleven dental professionals, sampled to include the seven professional roles and three sectors. Final amendments were made after piloting, incorporating feedback in relation to both the technical functionality of the online tool and questionnaire wording. The key recommendation was that the survey was too long and that there was a risk of respondent attrition part way through completion. The GDC accepted this as a potential risk and agreed to add routing to ensure questions were used which were of direct relevance to each of the professions. The final version included 60 questions in total.

Online fieldwork

The GDC sent an email (between 22 and 28 September 2020) to 112,794 dental professionals inviting them to complete the survey on the impact of COVID-19 on dental professionals. Reminder emails were sent from 1 to 7 October 2020, and the survey was closed to respondents on 12 October 2020. Data showed the survey took around 25 minutes to complete.

Overall, 12,848 dental professionals responded to the survey, 54 per cent of whom completed in full and 73 per cent of whom partially completed (at least 75 per cent of the survey). All 9,388 responses that were at least partially completed were included in the final analysis. A total of 1,623 respondents (23 per cent of those who fully completed the survey) provided their email address and consent to be contacted to participate in the qualitative elements of the study. The full anonymised data set was sent to the GDC at the end of the study.

Response rate and respondent profile

Table 8.1 shows the number of respondents to the survey by role, the composition of the GDC registrant population, and the response rate for each role.

Table 8.1 Responses by role in comparison to registrant population

Role	GDC registrant role Aug 2020		Responses by role Oct 2020		Response rate
	Total	Per cent	Total	Per cent	Per cent
Dentist	42,462	36%	4,941	53%	12%
Dental nurse	57,239	49%	2,817	30%	5%
Dental hygienist	7,600	7%	851	9%	11%
Dental technician	5,472	5%	452	5%	8%
Dental therapist	3,802	3%	234	2%	6%
Orthodontic therapist	704	1%	52	1%	7%
Clinical dental technician	365	0%	41	0%	11%
Total	**117,644**	**100%**	**9,388**	**100%**	**8%**

Response rates varied by registrant role, with dentists most likely to respond (12 per cent response rate) and dental nurses least likely (5 per cent). Following discussion with the GDC, survey data was weighted at the level of dentist and DCP.

Weighting strategy

The GDC registrant data notes that a DCP registrant may have registered for more than one role, and that the sum of DCP roles registered will be greater than the actual number of individual DCP registrants. The GDC registration report also includes counts for dentists and DCPs which are corrected to account for individuals who are registered with more than one role. These figures were used for weighting. Table 8.2 shows the weighted responses by registrant role (dentist or DCP) and the composition of the GDC registrant population. Table 8.3 shows the weighted responses by registrant role.

Table 8.2 Responses by dentist and DCP in comparison to registrant population

Role	GDC registrant role Oct 2020		Responses by role Oct 2020 (unweighted)		Weighting factors	Responses by role Oct 2020 (weighted)	
	Total	Per cent	Total	Per cent		Total	Per cent
Dentists	42,944	38%	4,941	53%	0.72	3,578	38%
DCP	69,737	62%	4,447	47%	1.31	5,810	62%
Total	112,681	100%	9,388	100%		9,388	100%

Table 8.3 Responses by role

Role	Responses by role Oct 2020 (weighted)	
	Total	Per cent
Dental nurse	3,680	39%
Dentist	3,578	38%
Dental hygienist	1,112	12%
Dental technician	591	6%
Dental therapist	306	3%
Orthodontic therapist	68	1%
Clinical dental technician	54	1%
Total	**9,388**	**100%**

After weighting, disaggregated roles were represented in line with the registrant population.

Data cleaning and preparation

Data was checked and cleaned prior to analysis. This involved ensuring that respondents answered the questions intended for them (according to the routing) and that any mistakes were corrected (e.g., when a decrease in income was reported but the subsequent value provided was a positive number or that the postcode data provided matched with data on region provided in a subsequent question).

Additional coding

Additional coding was undertaken prior to analysis, including:

- sector – respondents were categorised based on their responses to either personal income, or where data was not provided, the income of the business they worked in. This used three categories: predominantly private (over 75 per cent of income from private sources), predominantly NHS (over 75 per cent of income from NHS sources) and mixed (those in between);
- ethnicity – in order to provide sufficient base size for the purposes of this report, respondents were coded according to whether their response to ethnicity was that they were white or from a minority ethnic background. Further specific analysis will be conducted by the GDC to identify trends according to more granulated data on ethnic background; and
- age – respondents were asked to provide their year of birth and were subsequently assigned to a specific age group.

Margin of error

The data presented in this report highlights differences across sub-groups which are of statistical significance[21], unless stated otherwise. Table 8.4 and Table 8.5 show the margin of error by role and nationality.

Table 8.4 Margin of error on responses reported by role

UK nation	Responses (weighted)	GDC registrant database Aug 2020	Margin of error 95% CI
England	5,483	95,535	1.3%
Scotland	779	6,257	3.3%
Wales	313	5,305	5.4%
Northern Ireland	239	3,996	6.2%
Non-UK	NA	1,483	
Channel Islands	NA	468	
Total	**6,813**	**113,044**	

[21] A result being statistically significant should not be interpreted as necessarily suggesting it is meaningful

Table 8.5 Margin of error on responses reported by nation in which respondent works

UK nation	Responses (weighted)	GDC registrant database Aug 2020	Margin of error 95% CI
England	5,483	95,535	1.3%
Scotland	779	6,257	3.3%
Wales	313	5,305	5.4%
Northern Ireland	239	3,996	6.2%
Non-UK	NA	1,483	
Channel Islands	NA	468	
Total	**6,813**	**113,044**	

Generally, the margin of error is low, below 2 per cent for most sub-groups. Those with relatively high margins of error are 12.3 per cent for CDTs, 11.3 per cent for orthodontic therapists, 5.4 per cent in Wales, and 6.2 per cent in Northern Ireland.

Focus groups

Recruitment and composition

The aim was to deliver six focus groups with six to eight participants included in each group (36–48 participants in total). Six focus groups were conducted online between 15 and 29 October 2020, including survey respondents who had given permission to be contacted for this purpose. We took a purposive sampling approach to ensure that group participants included a spread across different countries, ethnicities, diversity and inclusion (EDI) characteristics, place of work and nation.

Respondents who provided their email address (1,623) were matched to a specific focus group and sample criteria (sector, place of work, gender, ethnicity and nation) and 581 were invited to attend. Only one date was available for each group and consequently it was expected that many would not be available to attend. Further, a relatively high level of attrition was expected given the voluntary nature and short notification period for the events (one to two weeks). Incentives were not paid for attendance. In the event, almost 100 respondents confirmed their availability and 54 joined the online groups. The sole group where recruitment posed a challenge was amongst dental nurses. In the event, a partner of the GDC facilitated access to a group of dental professionals who worked in dental nursing which proved to be successful. Table 8.6 shows the sub-groups and number of participants in each.

Table 8.6 Focus groups and participant numbers

Role	Sub-group	Number of focus groups	Number of participants
Dentists	Mixed group of principals / business owners (includes majority NHS, majority private and mixed)	1	6
	Private/majority private (associates)	1	8
	NHS/majority NHS (associates)	1	8
DCPs	Dental hygienists, dental therapists and orthodontic therapists – mixed group	1	6
	Dental nurses – mixed	1	19
	Dental technicians and clinical dental technicians	1	7
Total			**54**

Format

Focus groups lasted between 40 and 75 minutes and were moderated by a researcher from Ecorys. Groups were hosted using Microsoft Teams and recorded. The topic guide was structured around the core GDC remit and organised into three sections:

- protect, promote, and maintain the health, safety, and wellbeing of the public;
- to promote and maintain public confidence in the regulated dental professions; and
- promote and maintain proper professional standards and conduct.

Analysis

Survey data

Analysis was conducted in line with an analysis plan agreed with the GDC. Statistical analysis was conducted in using a specialist software package known as 'R', which enables the use of confidence intervals and conducting t-tests as required.

Focus groups

Qualitative data analysis was based on an agreed analysis framework which mapped themes to project requirements. Respondent feedback was coded to key themes, allowing areas of agreement or difference to be easily identified. This included a focus on key factors which continued to affect the sector, and mechanisms by which the GDC and other partners could support the sector through the crisis. Finally, using a convergence framework, data was triangulated by identification of key trends in the survey and looking for areas of convergence and divergence within focus group data.

8.2 Survey respondent profile

This section shows the EDI characteristics of survey respondents (unweighted data) in comparison to data on the registrant population[22,23] drawn from the GDC's database on 31 December 2019 and reported in August 2020. Data is also presented on the employment status, sector and main place of work of survey respondents.

EDI characteristics of respondents

Nationality

Respondents were asked to provide information on the UK nation in which they practised. Table 8.7 shows the total registrants and survey respondents by nation[24].

Table 8.7 Home nation of GDC registrants and survey respondents

UK nation	GDC registrant role		Survey respondents	
	Total	Percentage	Total	Percentage
England	95,535	85%	5,483	78%
Scotland	6,257	6%	779	11%
Wales	5,305	5%	313	4%
Northern Ireland	3,996	4%	239	4%

[22] https://www.gdc-uk.org/docs/default-source/registration-reports/reg-report-august-2020.pdf?sfvrsn=2748c5b3_4
[23] https://www.gdc-uk.org/docs/default-source/registration-reports/gdc-registration-statistical-report-2019---final-30-09-2020.pdf?sfvrsn=53215636_12
[24] Due to rounding, total figures in Table 8.7 do not sum to 100 per cent.

UK nation	GDC registrant role		Survey respondents	
	Total	Percentage	Total	Percentage
Non-UK	1,483	1%	NA	NA
Channel Islands	468	0%	NA	NA
Total	**113,044**	**101%**	**6,813**	**100%**

In total, 73 per cent of respondents reported relevant details. Analysis showed that the survey respondents were broadly representative of the profile of the registrant population. There was a slightly smaller proportion of dental professionals from England responding to the survey than in the registrant population (78 per cent of respondents, 85 per cent of registrants), and a larger proportion of respondents from Scotland (11 per cent of respondents, 6 per cent of registrants)[25]. Respondents from Wales and Northern Ireland were proportionately represented.

Gender

Respondents were asked with which gender they most identified. A total of 71 per cent of respondents provided this data. Table 8.8 shows the gender of registrants and respondents. Almost three-quarters (74 per cent of respondents, 77 per cent of registrants) of respondents identified as female and just over one-quarter (26 per cent compared to 23 per cent) as male. Dentists were almost equally likely to be female (51 per cent) or male (49 per cent), whilst a majority of DCPs were female (89 per cent compared to 11 per cent male), similar to the proportion of the registrant population.

Table 8.6 Gender of GDC registrants and survey respondents

Gender	GDC registrant role		Survey respondents	
	Total	Percentage	Total	Percentage
Female	86,037	77%	4,889	74%
Male	26,199	23%	1762	26%
Total	**112,236**	**100%**	**6,651**	**100%**

Age

All survey respondents were asked to state their year of birth, with this being used to calculate age. In total, 71 per cent of respondents provided this information. Two-thirds (67 per cent) of respondents were over the age of 40, whilst one-third (33 per cent) were aged 40 or younger. DCP respondents tended to be younger than dentists, with 16 per cent aged 16–30 (compared to 9 per cent of dentists) and 14 per cent aged 61 or older (compared to 21 per cent of dentists). This is broadly consistent with the age distribution of the registrant population.

Ethnicity

Survey respondents were asked which ethnic background best reflected their identity. In total, 74 per cent of respondents provided this information. In both dentist and DCP categories, registrants from a white background were over-represented in the sample. Respondents identifying as White accounted for 68 per cent of dentists responding to the survey (compared to 52 per cent in the population) and 86 per cent of DCPs (compared to 75 per cent). Asian and Asian British dentists were under-represented in the sample accounting for 16 per cent of survey respondents (compared to 23 per cent in the population). Asian and Asian British DCPs respondents broadly reflected the registrant population (4 per cent and 5 per cent respectively). All other ethnic backgrounds were broadly reflective of the registrant population.

[25] In the survey, respondents were not able to select Channel Islands and Non-UK and their response is not represented.

Religion

All survey respondents were shown a predefined list (with an "other" option) and asked to state their religion. In total, 74 per cent of respondents provided this information. Christians were over-represented amongst survey respondents. A total of 44 per cent of dentists and 50 per cent of DCP respondents identified as Christian (compared to 36 per cent and 40 per cent in the registrant population). Those who reported they had no religion were over-represented amongst dentists (26 per cent in the respondent sample, 16 per cent of the registrant population) and under-represented amongst DCPs (34 per cent and 40 per cent respectively). Religions which were similarly represented in the respondent sample and the registrant population were Buddhism (1 per cent in both), Judaism (1 per cent) and Sikhism (2 per cent). Religions which were under-represented compared to the registrant database were Hinduism and Islam.

Marital status

Survey respondents were asked about their marital status, with two-thirds (67 per cent) providing this information. The majority of respondents (58 per cent) were married, 20 per cent were single, 6 per cent were divorced, 4 per cent were in a civil partnership, whilst 1 per cent were either separated or widowed. A total of 10 per cent preferred not to say. A higher proportion of DCPs (24 per cent) were single than dentists (14 per cent), and a higher proportion of dentists were married (66 per cent) compared to DCPs (53 per cent). Survey respondents were more likely to be in a relationship than the profile of the registrant population.

Sexual orientation

Survey respondents were asked about their sexual orientation. In total, 74 per cent of respondents answered this question. A total of 84 per cent of survey respondents identified as heterosexual (compared to 78 per cent of the registrant population), 1 per cent identified as a gay man or a gay woman, 2 per cent identified as bi-sexual (similar to the registrant population). The remaining 13 per cent preferred not to say (compared to 21 per cent of dentists and 22 per cent of DCPs in the registrant population).

Vulnerability to COVID-19

Respondents were asked about the vulnerability to COVID-19. In total, 73 per cent of respondents answered this question, with two-thirds (67 per cent) of respondents reporting being at a normal risk from coronavirus, 21 per cent at a moderate risk (clinically vulnerable) and 7 per cent at a high risk (clinically extremely vulnerable). A further 4 per cent stated they did not know. Proportions were similar across dentists and DCPs.[26]

8.3 Professional role, sector and place of work of survey respondents

This section shows data on the professional role of respondents, the sectors they work in, and their main place of work. Changes to employment status since lockdown are also shown, along with respondents' experience of being re-deployed. The analysis presented below is based on unweighted data.

Professional role

Respondents were asked about their primary field of practice prior to the suspension of normal dental services, with this being answered by all respondents. Just over one-third (35 per cent) of respondents were dentists and a further 3 per cent were specialist dentists. Over one-third (39 per cent) of respondents were dental nurses whilst dental hygienists, dental therapists and orthodontic therapist comprised 16 per cent of respondents. Dental technicians (7 per cent) and CDTs were relatively smaller sub-groups (1 per cent). Table 8.1 earlier in this section shows the data for each role.

[26] The registrant database does not capture this information and therefore comparison to the registrant populations is not possible

All respondents provided details on their employment status, with 41 per cent self-employed or freelance, 41 per cent employed, 4 per cent working for their own or their families' business, 4 per cent not currently employed and 1 per cent studying or training. A further 10 per cent reported an 'other' employment status. Employment status varied by role with dentists (76 per cent), and dental hygienists (69 per cent) most likely to be self-employed, whilst a large majority of dental nurses (78 per cent) and orthodontic therapists (79 per cent) were employed. Around half of CDTs, dental technicians and dental hygiene/therapists were employed with a similar proportion reporting that they were self-employed.

A total of 4 per cent of respondents were specialists. More specialists worked in orthodontics (36 per cent of all specialists), than in oral surgery (19 per cent), special care or restorative dentistry (both 10 per cent).

Sector

Respondents were asked to provide details on the sector in which they work, with responses received from a total of 92 per cent of respondents. Amongst the group, 33 per cent were categorised as 'predominantly private' (at least 75 per cent of income from private sources); 37 per cent were 'predominantly NHS' (at least 75 per cent of income from NHS sources)[27]; and 30 per cent were categorised as 'mixed' (less than 75 per cent of income from either private or NHS sources). Analysis of the job role of those who did not answer this question (8 per cent) found that they were most commonly not currently working, or worked in other dental roles including education, consultancy and dental marketing.

Place of work

Respondents were asked to state their main place of work prior to the suspension of normal dental services due to COVID-19, with all respondents providing data for this question. Two-thirds (67 per cent) of respondents worked in general dental practice with 5 per cent working in each of specialist dental practices, community dental services, dental hospitals or other hospital settings, and laboratories. Finally, 1 per cent reported that they were working in education, 3 per cent worked in other settings and 7 per cent were not working (at the time of the survey).

Re-deployment and 'not working'

Respondents were asked if they were re-deployed from their usual job role for any period due to COVID-19 (answered by all respondents). A total of 9 per cent stated they were redeployed, with professionals from all dental roles similarly affected.

Respondents were asked about their main place of work at the time of completing the survey, with this being used to show the proportion who moved from being in work before lockdown to not working at the time of survey completion. A total of 6 per cent of respondents had moved from working to not working, with similar proportions of dentists (5 per cent) and DCPs (7 per cent). Analysis by workplace showed the highest proportion of those moving to 'not working now' were those who had worked in laboratories (15 per cent), with a relatively low proportion among those who worked in hospital settings (3 per cent) and in community dental services (2 per cent).

8.4 Questionnaire

Survey _COVID-19-impact on dental prof

[27] including those who worked in hospital and community

8.5 Focus group topic guide

GDC_COVID_Focus group topic guide_fina

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