



Evaluating Enhanced Continuing Professional Development Final Report

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This report presents independent research conducted by the team at Cardiff Unit for Research and Evaluation in Medical and Dental Education (CUREMeDE) at Cardiff University. Views and opinions expressed in this report are those of the participants who engaged in the research project and are not necessarily shared by the General Dental Council.

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Abbreviations

10/2 rule	The requirement for 10 hours of CPD over two years
BDA	British Dental Association
CDS	Community Dental Service
CET	Continuing Education and Training
CPD	Continuing Professional Development
DCP	Dental Care Professional
DTA	Dental Technologist Association
Enhanced CPD	Enhanced Continuing Professional Development Scheme 2018
EDI	Equality, Diversity and Inclusion
GDC	General Dental Council
NHS	National Health Service
PDP	Personal Development Plan
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta- Analyses.
PSA	Professional Standards Authority
REA	Rapid Evidence Assessment
RQ	Research Question

Glossary

10 hours over two years (10/2 rule)	The 10/2 rule refers to the requirement that registrants complete at least 10 hours of CPD within every consecutive two-year period.			
ABCD	The four learning outcomes in the Enhanced CPD guidance: A. Effective communication with patients, the dental team and others across dentistry, including when obtaining consent, dealing with complaints, and raising concerns when patients are at risk; B. Effective management of self and effective management of others or effective work with others in the dental team, in the interests of patients providing constructive leadership where appropriate; C. Maintenance and development of your knowledge and skills within your field(s) of practice; D. Maintenance of skills, behaviours and attitudes which maintain patient confidence in you and the dental profession, and put patients' interests first.			
Continuing Education and Training	Job related training and education to maintain or learn new skills or knowledge. CET is sometimes used interchangeably with CPD.			
Continuing Professional Development	Learning activities professionals undertake in order to maintain and improve their skills, knowledge, and practice.			
Equality, diversity and inclusion	Concerns fairness and the elimination of discrimination related to protected characteristics described in The Equality Act 2010.			
Locum	A professional who temporarily fulfils the role of another.			
Non-verifiable CPD	In the previous CPD scheme, CPD hours were classified as verifiable or non-verifiable. Non- verifiable CPD (such as journal reading) required no evidence of aims, outcomes, or completion.			
Personal Development Plan	A personal development plan is a documented plan or framework which is used to record reflections on areas for development or improvement and associated actions and goals.			
Standards for the dental team	Standards for the dental team is a GDC document that sets out the standards of conduct, performance and ethics that govern dental professionals.			
Verifiable CPD	In the previous CPD scheme, CPD hours were classified as verifiable or non-verifiable. In the Enhanced CPD scheme, only verifiable CPD can be counted, which requires evidence of the subject, aims and objectives, the anticipated development outcome(s) of the CPD activity, evidence of quality assurance, and completion by the participant is needed.			

Executive summary

Aims and objectives

The intention of this study, commissioned by the General Dental Council (GDC), was to evaluate, understand, and learn from how the Enhanced Continuing Professional Development (Enhanced CPD) scheme is working. The objectives were to:

- 1. assess compliance levels with current Enhanced CPD requirements and the efficacy of the Enhanced CPD process (from both registrant and GDC perspectives)
- 2. capture registrant perspectives on the effectiveness of Enhanced CPD in developing and enhancing the sense of individual ownership of CPD among dental professionals
- 3. explore dental professionals' perspectives on the effectiveness of Enhanced CPD in supporting career and professional development of dental professionals
- 4. assess the effectiveness of Enhanced CPD in identifying gaps in dental professionals' skills and knowledge
- 5. understand all the types and full range of CPD undertaken by dental professionals
- 6. provide the GDC with robust evidence and insight to inform the GDC's future development of CPD approaches and systems.

Study design and methods

This report presents the results of the project which was conducted in 2022 in three strands. The first comprised a rapid evidence assessment (REA) and scoping interviews with GDC staff and was used to refine the focus of the second strand of the project and ensure it was founded on a solid understanding of regulatory approaches to continuing professional development (CPD). Findings from the REA and scoping interviews are included here. The second strand of the study comprised (i) an analysis of an anonymised, Enhanced CPD dataset containing information on 165,983 registrants; (ii) an online survey of dental registrants which elicited responses from 2,817 registrants; and (iii) one-to-one online interviews with 33 registrants. The third (overlapping) strand focused on analysis and included two learning exchange events held with GDC staff to facilitate two-way exchange and transfer of learning.

Findings

This executive summary is presented to address the objectives of the evaluation.

Compliance and processes (Objective 1)

Across the dental professional population compliance with the five-year requirements of verifiable CPD hours was 94.6%. Of those who were dental nurses or dental technicians, 93.1% met requirements, the lowest rate. The five-year compliance rate for younger dentists (aged 22-30) was notably higher (99.7%) than that for older dentists (aged 66+; 83.0% compliance). Compliance with the 10/2 rule (at least 10 hours every two years) ranged from 91% to 95% of registrants across four two-year periods; it was highest for dentists for three of the four two-year periods and highest for Other DCPs for one two-year period. Neither role nor any of the equality, diversity and inclusion (EDI) characteristics were predictors of compliance. Most survey respondents indicated that they did not find it difficult to meet the requirements of the Enhanced CPD scheme although difficulty in obtaining the required documents to evidence verifiable CPD was noted and during interviews and learning events GDC staff commented that incomplete submissions were not uncommon.

Barriers to compliance reflected the varied circumstances of registrants. These included problems securing appropriate certification identified by some based in hospitals and by those in non-clinical roles or rare specialties whose CPD providers did not supply adequate

certificates. Compliance was also affected by life circumstances such as maternity or long-term illness.

In terms of processes, only a small proportion of survey respondents reported that their experience of recording and submitting CPD information had been poor. There was a lack of awareness of some compliance options, specifically the possibility of submitting a zero-hours return one year and requesting a grace period at the end of a five-year cycle. In the interviews, there were reports of unintentionally failing to comply with the 10/2 rule. A minority (32%) agreed that removal from the register was an appropriate response to CPD requirements not being met.

CPD undertaken (Objective 5)

Hands-on clinical training or workshops, and lectures were the most common forms of verifiable CPD reported by survey respondents. In-person attendance was preferred for hands-on CPD and online was preferred for lectures. The increased availability of online learning was identified in the interviews as one of the legacies of the pandemic. Online learning was more favourably viewed by DCPs in comparison with dentists.

Although high proportions of both dentists and DCPs recognised the value of most recommended CPD topics, evidence from free text comments and interviews revealed that some who were not in patient-facing roles questioned the relevance of topics. COVID-19 changed training needs and survey responses indicated the area of greatest unmet need was undertaking remote consultations.

Common barriers to CPD cited in the literature included course costs, quality, and time. Reference to these barriers was echoed by the registrants in this study. CPD costs were noted by DCPs in particular, and undertaking CPD outside working hours was more challenging for those with caring responsibilities. Employers' support for CPD was variable and it was suggested that DCPs were likely to be more dependent on their employer's discretion in granting release for CPD which could also be more challenging to secure in smaller practices. For others, attending courses in the daytime required forward planning to manage clinical time, workload, and associated loss of income. Those based in geographically isolated areas had to build in travel time for in-person attendance.

Registrant experience and perspectives on Enhanced CPD (Objectives 2,3,4)

There was widespread support for the current length of the scheme (five years) and the requirement of at least 10 hours every two years.

Many survey respondents and interviewees indicated that their participation in CPD was driven less by the GDC's directive to undertake CPD and more by their sense of professionalism and personal interest, but the picture was complex. There were also indications that registrants sometimes avoided activities that would not count as verifiable CPD, and they could be mechanistic in choosing activities to secure the hours rather than to address learning needs. In interviews, GDC staff were unsure whether the Enhanced CPD scheme could assure the quality of dental professionals' learning without collecting further data. However, from the survey responses of registrants, there was little enthusiasm for informing the GDC either about the quality of the CPD undertaken or about the difference it made.

There was some confusion about whether the recommended topics for CPD were mandatory. Narrowly focusing on these topics for some registrants resulted in a tick-box approach with limited time for CPD more relevant to learning needs, while others better understood the flexibility of the Enhanced CPD scheme and were able to tailor their CPD choices to their learning needs. A professional development plan (PDP) is designed to assist relevant CPD choices, however, around a third of registrants responding to the survey found it difficult to create a PDP. Furthermore, over a third found it difficult to maintain one and about half of the respondents agreed that more guidance would enable them to make best use of the PDP.

Suggested improvements (Objective 6)

Registrants indicated that they would like:

- communications to be tailored to role and generally more succinct
- greater clarity on what was expected of them in terms of their engagement with the recommended topics
- the GDC to provide courses on some of the recommended topics or at least a list of verifiable CPD from suggested providers
- flexibility on the required wording on certificates for verifiable CPD.

Our analysis suggests that registrants would benefit from:

- guidance, education and training on how to make best use of the PDP and how to reflect on learning (see survey responses)
- greater awareness of the option to request a grace period or make a zero-hours return and other means of support for registrants struggling to meet the requirements (see survey responses and interviews with registrants)
- greater diversity of verifiable CPD to mitigate the unintended consequence of registrants avoiding non-verifiable CPD options (see survey responses and interviews with registrants)
- aligning the annual declaration with the timing of the indemnity declaration to help minimise confusion about the timings of each submission (see interviews with GDC staff and with registrants).

We suggest that the CPD database could:

- be used to monitor age group differences in compliance among dentists
- integrate data quality assurance processes to check the inclusion of abnormally large numbers of CPD hours.

It is our suggestion that consideration be given to a future scheme that requires no monitoring of hours or declarations, rather the maintenance of evidence by registrants of their learning. Such a scheme could include sample auditing by the GDC.

Conclusion

On the basis of the data we analysed, we suggest there is room to improve registrant compliance rates and provide further communications about aspects of the scheme including engagement with recommended topics, how to make best use of a PDP, zero-hours return and grace periods. Greater flexibility on the wording of the CPD verification certificates would be welcomed. Much more radically, the scheme could move to an outcomes-based model, focused on reflection, the PDP and CPD impact and away from counting CPD hours (which would address registrants' avoidance of non-verifiable CPD).

Note

Key messages boxes are used to summarise findings throughout the results section in the main report. The concluding section of the main report presents a response to each of the research questions posed by the GDC. Supplementary material is presented in Annexes.

1. Introduction and aims

Reflecting a philosophy of life-long learning, continuing professional development (CPD) is both an ethical and regulatory obligation for most health professionals. In dentistry, clinical members of the dental team (dentists, dental therapists, dental hygienists, dental nurses, dental technicians, clinical dental technicians, and orthodontic therapists) are required to be registered to practise and engagement with CPD is mandatory for continued registration. In the UK, the General Dental Council (GDC) is responsible for the regulation of around 114,000 dental professionals (General Dental Council 2019a). As set out in The Dentists Act 1984, alongside registering qualified professionals, the GDC is also responsible for providing guidance about the standards of conduct, performance and practice expected of dental professionals, assuring the quality of dental education, monitoring whether dental professionals are meeting their CPD requirements, and investigating fitness to practise concerns and taking enforcement action where necessary (UK Government 1984).

All dental professionals are regulated by the GDC and are required to maintain their professional knowledge and competence, achieved through engaging in CPD activities. The intention of this study, commissioned by the GDC, was to evaluate, understand and learn from how the Enhanced CPD scheme is working. The objectives were to:

- 1. assess compliance levels with current Enhanced CPD requirements and the efficacy of the Enhanced CPD process.
- 2. capture registrant perspectives on the effectiveness of Enhanced CPD in developing and enhancing the sense of individual ownership of CPD.
- 3. explore dental professionals' perspectives on the effectiveness of Enhanced CPD in supporting career and professional development.
- 4. assess the effectiveness of Enhanced CPD in identifying gaps in dental professionals' skills and knowledge.
- 5. understand all the types and full range of CPD undertaken by dental professionals.
- 6. provide GDC with robust evidence and insight to inform GDC's future development of CPD approaches and systems.

BOX 1: Objectives

The specific research questions (RQs) were:

- What in the Enhanced CPD scheme helps the GDC to meet its objectives in The Dentists Act (including levels of compliance) (RQ1)?
- What have been the impacts of COVID-19 on CPD activity and what are the resulting implications for the Enhanced CPD scheme? (RQ2)
- What works to ensure Enhanced CPD processes are accessible and inclusive, and how can this be improved? (RQ3)
- What are the views about and experiences of the current Enhanced CPD process? (RQ4)
- What do the experiences of those involved in the Enhanced CPD processes tell us about the underpinning principles and how they work? (RQ5)
- What do the views of dental professionals and GDC staff tell us about how we can improve Enhanced CPD processes and requirements? (RQ6)
- What can the GDC learn from others' research into CPD? (RQ7)
- How do the findings link to connected research at GDC? (RQ8)
- What factors are associated with CPD needs and meeting needs? (RQ9)
- What do dental professionals need from the Enhanced CPD scheme in future? (RQ10)
- How can the GDC best collect and analyse data from dental professionals to develop and sustain monitoring and evaluation of CPD processes? (RQ11)

BOX 2: Research questions

2. Background context

2.1. The former CPD scheme and need for change

Prior to the introduction of the Enhanced CPD scheme (General Dental Council 2019b) described below, dental professionals were obliged to complete a greater number of hours of CPD in a set time period. For dentists this requirement was at least 250 hours in a five-year cycle and for dental care professionals (DCPs), 150 hours. Acceptable forms of CPD included activities such as reading journals, conference attendance, or engaging in peer review. Of the hours required, at least 75 hours (dentists) or 50 hours (DCPs) were required to be 'verifiable'. The choice of topics was up to the dental professional to determine, but the GDC provided highly recommended topics to encourage CPD related to the maintenance of patient safety. The GDC also encouraged individuals to consider the Standards for the Dental Team (General Dental Council 2013) and to use a personal development plan (PDP) when making choices. CPD declarations were recorded online and submitted to the GDC at the end of the individuals' five-year cycle.

Research exploring the value of quantified (typically counting hours) 'input based' models of CPD had cast doubt on the impact on performance and patient care in several occupations (Wallace and May 2016; Bullock et al. 2020). In dentistry, evidence suggests that impact on practice is greater when CPD targets a dentist's learning needs (Bullock et al. 2003; Eaton et al. 2011). While some select learning opportunities based on reflection of need, internationally, dentists have also been shown to place emphasis on convenience factors such as location, the speakers, a need to fulfil CPD requirements, or on topics of personal interest (Hopcraft et al. 2008; Barnes et al. 2013). CPD selected for these reasons may lead to increased knowledge but may not transfer to improved practice. To enhance impact on practice, it had been recommended that learning involves some form of reflection, both on the individuals' own learning needs and on the learning activities (Bullock et al. 2003; Wallace and May 2016) and should be 'outcome based' (Bullock et al. 2003).

The GDC introduced an amended CPD scheme that sought to enhance the dental professionals' ownership of their development by bringing reflection on learning and learning needs to the forefront.

2.2. The Enhanced CPD scheme

The Enhanced CPD scheme introduced a more flexible, personally tailored approach to ongoing learning with each dental professional needing to develop a PDP (General Dental Council 2019b). The intention was that by using the PDP, decisions regarding CPD needs are planned by individuals reflecting on their professional and practice needs and the four development outcomes (ABCD):

"A. Effective communication with patients, the dental team and others across dentistry, including when obtaining consent, dealing with complaints, and raising concerns when patients are at risk.

B. Effective management of self and effective management of others or effective work with others in the dental team, in the interests of patients providing constructive leadership where appropriate.

C. Maintenance and development of your knowledge and skills within your field(s) of practice.

D. Maintenance of skills, behaviours and attitudes which maintain patient confidence in you and the dental profession, and put patients' interests first." (General Dental Council 2019b)

The number of verifiable hours was increased for many dental professionals (from 75 to 100 for dentists; from 50 to 75 for DCPs apart from dental nurses and dental technicians who complete 50). In contrast to the former CPD requirements, non-verifiable CPD no longer needs to be declared which in effect, reduces the overall hours requirements as only verifiable hours are recorded. Dental professionals must, however, complete at least 10 hours of CPD within every consecutive two-years period, including when they stop one cycle and start another (the 10/2 rule). Dental professionals must submit annual CPD statements of activity, even if recording zero hours that year, and keep a CPD record that include: an activity log; evidence of completed CPD; a PDP; and some form of reflection on learning. The GDC does not prescribe the format for recording reflection.

Alongside enhancing dental professionals' ownership of their own CPD, the GDC had sought to gather evidence and knowledge from dental professionals to give them a voice in informing change. For example, an extensive consultation allowed dental professionals and dental organisations to respond to the GDC's Corporate Strategy (2016 – 2019) (General Dental Council 2016) and the document entitled 'Shifting the Balance: a better, fairer system of dental regulation' set out the GDC's position on dental regulation reform and invited feedback on the proposals (General Dental Council 2017). The comments and the GDC's responses were published in 2019 (General Dental Council 2019a). A review of evidence on different forms of CPD and learning activities was also commissioned by the GDC and published in 2019 (ADEE/Cowpe et al. 2019). In 2018, the findings were discussed in a series of workshops organised by the GDC and an advisory group to support future CPD development was formed. Further insight into views on outcomes-based CPD were also sought in 2019 through a discussion document 'Shaping the Direction of Lifelong learning' (General Dental Council 2019c) which built on findings from previous discussions and data athering. Further feedback from dental professionals and organisations was published in 2021 in 'Shaping the direction of lifelong learning for dental professionals; Discussion Document Outcome Report' (General Dental Council 2021). The feedback presented in that report is echoed in the findings we outline.

2.3. Impact of COVID-19

In 2020, the GDC commissioned research into the impact of COVID-19 on dentistry (Palmer et al. 2021). Among other findings, an increased need for emergency care and declining oral health of patients were reported. The oral health of patients most vulnerable to COVID-19, those unable to afford dental care, and older adults, particularly those in residential care, were noted to be most at risk. Respondent confidence in their ability to meet care demands varied (around half confident, one third not confident). While most dental professionals were confident in their ability to do their job safely, 16% were not confident and desired more information and guidance. A later survey commissioned by the GDC (Pye Tait Consulting 2022), reported that the anticipated increase in patient demand in both regular and emergency care had been borne out in the period following March 2020. While almost all respondents (98%) indicated that they had the necessary skills to carry out their role and over 90% were confident in their ability to do their job safely and that they had the necessary training to do their job safely, there was less consensus regarding their ability to meet increased patient demand.

The pandemic influenced how dental professionals worked, and therefore their learning needs. Adjustments to practise such as remote consultations, the use of protective equipment, changes to working patterns, and online training may become long-term changes (Coulthard et al. 2020). Future graduates also entered the workforce following some disruption to their training and some had concerns about their skills and their future employment (Farrokhi et al. 2021).

The impact of the pandemic, together with other developments, underscores the value of finding out how the Enhanced CPD scheme is being experienced and what this means for future policy and practice.

3. Methods

We conducted a mixed-methods study in three strands: an exploratory (scoping) stage comprising a rapid evidence assessment (REA) and interviews with key GDC staff; the main data gathering stage entailing analysis of the GDC's Enhanced CPD database, an online questionnaire survey of registrants, and interviews with a sample of registrants; the third (overlapping) strand focused on analysis and included two learning exchange events (see Figure 1). A mixed-methods approach enhances the robustness of the findings by offering opportunities for triangulation and so limiting bias. Ethical approval was sought and granted by Cardiff University School of Social Sciences research ethics committee in two stages: firstly, for the scoping interviews (2 March 2022) and then for the main data collection (analysis of the Enhanced CPD database, the survey of registrants and the interviews with registrants) (11 August 2022). All work was undertaken in consultation with the GDC.



FIGURE 1: An overview of the study design and methods

3.1. The rapid evidence assessment

The nature of a REA indicates a more stream-lined approach to review compared with a systematic review (Wallace and May 2016). The REA search strategy was designed to be comprehensive, systematic and efficient in the retrieval of the most relevant literature and conform to the Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) guidelines (Moher et al. 2009). The electronic databases Scopus, Ovid Medline(R), CINAHL Plus and Cochrane Database of Systematic Reviews plus Google Scholar were searched for peer reviewed journal articles. Predefined keywords and combinations were employed in the searches. Broadly these related CPD, learning and the dental team and are detailed in Appendix 1. The search was limited to literature published in the English language between 2017 and 2022. Additional papers were identified by reviewing the reference lists of key articles and hand-searching the European Journal of Dental Education, the British Dental Journal, and the Journal of Dental Education. To elicit

relevant work undertaken by the other healthcare professions, the websites of regulators and the Professional Standards Authority (PSA) were individually searched. The websites are listed in Appendix 1.

The process and outcomes of selection (and elimination) of information gathered through the search methodology is summarised in the PRISMA diagram in Appendix 1. The search returned 2,512 papers (2,501 from database searches plus 11 from other sources). These were accompanied by 22 reports / policy documents sourced from regulator websites. Following a three-step screening process, 29 papers were included in the review (six from the UK, 23 international) plus 20 reports / policy documents from regulators. References were managed in Endnote. Papers included in the review are listed in Appendix 1.

3.2. The scoping interviews

Scoping interviews with GDC staff were used to inform the research team's understanding of the Enhanced CPD scheme, the data held by the GDC, and to gather broad perspectives on Enhanced CPD, including: the process of implementation, monitoring and quality assurance, perspectives on what works well and areas of concern, COVID-19 impacts, and thoughts on improvements. The GDC identified 13 participants covering different operational roles relevant to CPD and registration. Five small group interviews and one individual interview were conducted remotely using Microsoft Teams. Interviews lasted between 48 minutes and 1 hour 55 minutes. Interviews were recorded, with permission, and transcribed (using the Teams auto-transcription function). Transcriptions were checked for accuracy. Notes taken during and after the interviews formed the basis of the coding and thematic analysis which was undertaken using NVivo software.

3.3. The analysis of Enhanced CPD administrative database

The GDC supplied an anonymised Excel Spreadsheet that provided a snapshot of the full GDC Register for the years 2018 to 2022. The cut-off date for the data was 5 September 2022. The analysis used the key variables: dentist or dental care professional (dental nurse, dental technician, clinical dental technician, dental hygienist, dental nurse, dental technician, dental therapist, orthodontic therapist); CPD scheme (Enhanced CPD scheme or former scheme, prior to 2018); required verifiable hours; cycle start date; verifiable hours reported (for year 1, 2, 3, 4 and 5 of each cycle); sexual orientation; gender identity; ethnic group; sex; disability; and year of birth. The purpose of the analysis was mainly to assess levels of compliance with requirements (Objective 1). To explore the accessibility and inclusivity of Enhanced CPD processes, analysis of compliance according to registrant characteristics was undertaken. Registrant compliance with the Enhanced CPD scheme was assessed using two criteria:

- 1. completion of the minimum number of verifiable hours of CPD required for their role over a five-year cycle.
- 2. completion of a minimum of ten hours of verifiable CPD every two consecutive years (the 10/2 rule).

The dataset comprised 165,983 registrant CPD cycles. The analyses were based on unique CPD cycles rather than unique registrants and some registrants appear more than once, but according to different CPD cycles¹. Thus the total number of registrant CPD cycles was greater than the 114,397 individuals listed on the GDC register as of October 2022 (General

¹ We appreciate that this is complex and for simplicity we use the term 'registrant CPD cycle'. We note that when reporting data on compliance with the 10/2 rule, this term does not refer to a full, five-year CPD cycle.

Dental Council 2022). Full details of the manipulation and analyses of the Enhanced CPD data are provided in Technical Annex 1.

Of the total registrant CPD cycles in the dataset, just over half (54.4%, n=90,317) had data spanning a full five-year cycle. The majority (78.9%) were on the Enhanced CPD scheme; the others (21.1%) began their CPD cycle before the introduction of the Enhanced scheme and so they were subject to transition arrangements. These registrant CPD cycles were retained in the dataset in order to explore CPD tendencies of registrants both before and after the introduction of the Enhanced CPD scheme.

Statistically significant variations in compliance among registrants were explored through chi-squared tests of independence. Given that statistically significant outputs (based on p value) are commonly yielded with large datasets (such as this one), the effect size (ϕ) is of greater importance as this describes the magnitude of the difference between groups (Kaplan et al. 2014). Characteristics among registrants that demonstrated statistically significant differences and at least small effect sizes ($\phi \ge 0.2$) (Cohen 1988) were further explored in regression models. Full details on statistical analyses are reported in Technical Annex 1. For this main report, all reported differences are statistically significant unless otherwise stated.

3.4. The survey of registrants

The survey was designed using JISC Online Surveys (formally Bristol Online Surveys). Following feedback from the GDC, the survey was piloted with 22 dental professionals from the UK nations and representing a range of professional roles. A full breakdown is provided in Technical Annex 2.

The link to the survey was distributed via the GDC to all registrants. Email communication was distributed to all registrants on 28 September 2022 with a reminder on 3 October 2022.

Data from the online survey was exported to Excel and SPSS for the analysis of closed questions. In total we received 2,817 responses². As the split between DCPs and dentists did not reflect the GDC population (because of non-response bias) the data were weighted³. The number and proportion of registrants by role, the unweighted responses to the survey by role, the weighting factor and weighted totals are given in Table 1, Technical Annex 2. Unless otherwise stated, the reported figures are weighted data. For presentation purposes, percentages in the figures are rounded to the nearest whole number. Rounding can result in the total percentage not equalling 100%.

The open comments data were analysed thematically. In the presentation of quoted extracts, we provide detail on registrant role.

3.5. The interviews with registrants

Participants for interview were recruited from survey responses where those willing to be considered for interview were invited to leave their contact email (which was subsequently removed from the database to retain the anonymity of the responses). We used purposive sampling to recruit a diverse group reflecting key variables including type of dental professional, UK nation, sex and ethnic group (see Table 1). The sample included those

² The total numbers reported vary as they reflect the total numbers responding to specific questions, excluding missing values.

³ We considered weighting the data by DCP role but were deterred from this by the consequential loss of some data for those in dual roles.

working in a range of geographical and business / employment settings (NHS, private, corporate, hospital, community). We interviewed 33 registrants in total.

Criteria	England	Scotland	Wales	Northern Ireland	Outside UK	TOTAL
Sex						
Male	7	2				9
Female	19	1	2	1	1	24
Prefer not to say						0
Ethnic group						
White	16	3	2	1		22
Asian or Asian British	3					3
Other	5					5
Prefer not to say	2				1	3
Region						
England	26					26
Norther Ireland				1		1
Scotland		3				3
Wales			2			2
Outside UK					1	1
Role						
Dentists	9	3	1		1	14
DT/DHs	2					2
Dental nurses	11		1	1		13
Others	4					4

TABLE 1: Interviews

Interviews were conducted remotely (via Teams or telephone depending on interviewee's preference) and were semi-structured in format. Interviews were recorded and transcribed, coded and analysed thematically using NVivo software. We recorded over 22 hours of interview time. Interviews lasted 40 minutes on average, with a range of 18 to 66 minutes. Where quoted extracts are included, we provide detail on registrant role.

3.6. The learning events

The co-produced learning events were integral to the study and undertaken on 27 July and 7 December 2022. The primary purpose of the events was two-way exchange designed to assist the transfer of project learning into potential improvements in the GDC's approach to Enhanced CPD. The invitees were determined by the GDC.

3.7. Limitations and caveats

There is an abundance of data to report and the presentation of results in this report is necessarily selective. Only pertinent findings from the REA and scoping interviews are included here. In reporting the survey data we note differences between two groups - dentists and DCPs. There is convention for this in the wider literature but we acknowledge that neither group is homogeneous and presenting data in this way masks within-group differences, for example, between different DCP roles. This limitation is in some measure addressed by including detail of role where quoted extracts are presented. The manipulation of the Enhanced CPD database was a complex undertaking. Our approach to the analysis was discussed and agreed with the GDC. The reported figures present a snapshot of compliance rates across registrant CPD cycles between 2013 and 2022. The parameters of the database that was shared with us meant that we were unable to report compliance rates by calendar year. Furthermore, we note that the compliance rates we report may not always match those published by the GDC for several reasons: we did not have information on

grace period exemptions for CPD; although those in the transition period were required to complete a set number of general hours as well as verifiable hours, in our analyses compliance was determined only on the basis of verifiable hours; the proportions we report relate to CPD cycles rather than registrants; and only registrants with at least five years of CPD records were included in some analyses.

The reader is referred to supplementary material in Technical Annexes 1 and 2 which include further detail and analyses relating to both the Enhanced CPD database and the survey data.

4. Results

The results section begins by setting out a profile of the anonymised data contained in the Enhanced CPD database and the responses to the survey data (section 4.1). The presentation of results is organised around groupings of the objectives and research questions where findings are drawn from across relevant data sources. Section 4.2 on compliance with the Enhanced CPD requirements addresses objective 1 and research questions 1 and 3 (as set out in the introduction and aims). The primary data source for this section is the analysis of the Enhanced CPD database, supplemented by findings from the survey of registrants and registrant interviews plus insights gained from the scoping interviews with GDC staff.

Section 4.3 focuses on findings related to CPD undertaken and objective 5 and research questions 2 and 9. This section draws largely on the survey data, supplemented by findings from the interviews with registrants, the interviews with GDC staff and insights from the REA. We report data on forms and topics of CPD undertaken, comparisons between online and inperson activity in terms of registrant preference and views on quality, influences on decisions to take up CPD opportunities and impact of COVID-19.

This is followed by a report of findings related to registrant experience and perspectives on Enhanced CPD (section 4.4) which again draws largely on the survey data, supplemented principally by the interview data. These findings relate to objectives 2, 3 and 4 and research questions 4 and 5. Registrants' perspectives and experiences of the Enhanced CPD scheme are reported and it includes a sub-section on personal development planning and reflection.

The final section of the results (section 4.5) relates to objectives 1 and 6 and research questions 6, 7, 8, 10 and 11. It reports suggested improvements, drawing across the data sources but with an emphasis on the open comments data from the survey and the interviews with registrants.

4.1. A profile of the numerical data

4.1.1. The Enhanced CPD database

Key Messages
The database contained information on 165,983 registrant CPD cycles: 31% (51,014) dentists (100 hours verifiable CPD per five-year cycle), 60% (98,706) dental nurses or technicians (50 hours requirement) and 10% (16,263) Other DCPs (75 hours requirement).
During a transition period, the total number of required verifiable CPD hours was adjusted for those who were partway through their CPD cycle when the new scheme was introduced. About a fifth of registrants within the dataset fell into the transition period.

Registrants within the dataset are summarised in Table 2, grouped according to the minimum number of verifiable CPD hours they are required to complete for every five-year cycle.

CPD Role	Percentage of dataset % (n)	Minimum hours of verifiable CPD per five-year cycle
Dentist	30.7% (51,014)	100
Dental nurse or dental technician	59.5% (98,706)	50
Other DCP (dental therapist, dental hygienist, orthodontic therapist, or clinical dental technician)	9.8% (16,263)	75

 TABLE 2: Registrants according to Enhanced CPD Role Requirements (database)

The CPD requirements for DCPs vary by role: dental nurses and dental technicians need to complete 50 hours of verifiable CPD; and dental therapists, dental hygienists, orthodontic therapists and clinical dental technicians (here referred to collectively as 'Other DCPs'⁴) complete 75 hours of verifiable CPD. However, many registrants, predominantly among the Other DCPs, had multiple roles (see Annex 1 for further detail). Registrants with multiple roles with different CPD requirements are required to complete the higher number of hours of verifiable CPD.

4.1.1.1. Transition period between CPD schemes

Given that a single CPD cycle spans across five consecutive years, the new Enhanced CPD scheme was introduced when many registrants were part-way through a five-year cycle. For these individuals, the new requirement to complete a set number of verifiable hours of CPD (100 verifiable hours for dentists, 50 verifiable hours for dental nurses and dental technicians and 75 verifiable hours for Other DCPs) over their five-year cycle was adjusted pro-rata.

Of those with a single role, 20.8% (n=32,606) of registrant CPD cycles within the dataset fell into the transition period⁵. Among dentists, 56.1% (n=28,603) experienced this transition period, and were required to complete between 80 and 95 hours of verifiable CPD. As required CPD hours remained the same for dental nurses and dental technicians, there was no reduction during the transition period. Among Other DCPs within the dataset, 54.0% (n=3,952) experienced the transition period. Other DCPs on the transition period were required to complete between 55 and 70 verifiable hours of CPD. Although those in the transition period would have been required to complete a set number of general hours as

⁴ Throughout the report, when this group is referred to, a capital O is used for Other to distinguish this specific group.

⁵ To remind, the analyses are based on registrant CPD cycles rather than unique registrants.

well as verifiable hours, in our analyses only verifiable hours were used to determine registrants' compliance.

4.1.2. The survey respondents

Key Messages Most DCP respondents were female (90%); responses from dentists were evenly divided between male and female (482 female, 480 male). 38% of DCPs and 40% of dentists responding to the survey did not work full-time. Part-time work was more prevalent amongst women. 28% of respondents worked in more than one practice at the time of the survey. Most dentists were self-employed (69%) and most DCPs were employees (75%). Survey responses were received from across the age groups and from all four nations.

In line with expectations, the majority of DCP respondents were female (90%, n=1,541); responses from dentists were evenly divided between male (n=480) and female (n=482) (Figure 2).



FIGURE 2: Sex of registrant (survey data)

Over a third of both the dentists (n=387) and DCPs (n=648) who responded to the survey indicated that they did not work full-time (39% overall). When hours worked was explored by sex, proportionally more men worked full-time (74% compared to 57% for women).

Overall, 28% (n=565) of survey respondents commonly worked in more than one practice; the proportion was slightly higher for DCPs (29% compared to 26% for dentists). The majority of dentists responding to the survey were self-employed (or worked for an agency / locuming) (69%, n=704); most of the DCPs worked as an employee (75%, n=1210).

Survey responses were received from across the age groups (see Figure 3). Most commonly, respondents were born in the 1960s, 1970s or 1980s (79% dentists; 77% DCPs). Compared to the dentists responding to the survey, a larger proportion of DCPs were younger (born in the 1990s); more dentists were older (born in the 1950s) (see Figure 3).



FIGURE 3: Age group by decade (survey data)

Survey responses were received from all four nations (see Figure 4), with the majority from England (78% overall, n=2015).



FIGURE 4: Where do you work? (survey data)

Most respondents identified as white (72% overall, n=1984). Further breakdown is provided in Technical Annex 2.

4.2. Compliance with the Enhanced CPD requirements

4.2.1. Five-year cycle requirements compliance rate

Key Messages

94.6% of registrants completed their minimum number of verifiable CPD hours. Highest rates of compliance were shown for those with the dual role clinical dental technician and dental technician (98.0% compliance). Lowest rates of compliance were seen for dental nurses and dental technicians (93.1% compliance rate for both groups)⁶.

The compliance rate for all registrant CPD cycles was 94.6%. Thus, 5.4% of registrants did not complete their required minimum number of hours.

4.2.1.1. Five-year cycle compliance rate according to CPD scheme

Compliance with the five-year CPD requirements was explored according to whether registrants were on the former or Enhanced CPD scheme. This revealed a compliance rate

⁶ Our compliance figures may differ from those published by the GDC for the reasons outlined in 3.8.

of 97.0% for registrants on the former CPD scheme and a rate of 93.1% for registrants on the Enhanced CPD scheme (see Figure 5). Statistical analysis demonstrated a difference in compliance between these two groups (see Table 7 in Technical Annex 1).



FIGURE 5: Compliance with Five-Year Cycle Requirements according to CPD Scheme (database)

4.2.1.2. Five-year cycle compliance rate according to role

Compliance with the five-year CPD requirements was also explored according to the role of registrants. Compliance rates ranged from 93.1% to 98.0% (see Figure 6). In this Figure, data on the left-side of the dotted line represents registrants with one role, and on the right-side registrants with a dual role. Among registrants with just one role, the group with the highest rate of compliance was the Other DCP group (97.6% compliance rate). The equally lowest rate of compliance was evident for dental nurses and dental technicians (a 93.1% compliance rate for both groups). Among registrants with dual roles, the group with the highest rate of compliance was clinical dental technician and dental technician (98.0% compliance).

Statistical analysis revealed a difference in rates of compliance with the five-year CPD requirements according to role (see Table 7 in Technical Annex 1 for full statistical analysis results).



FIGURE 6: Compliance with five-year CPD requirements by role (database)

4.2.2. 10/2 rule compliance

Key Messages

The proportion of registrants on the Enhanced CPD scheme that fulfilled the 10/2 hours ranged from 90.7% to 95.3% for the four two-year periods within each five-year cycle. The compliance rate was greatest for dentists for three of the four two-year periods⁷.

Although not a requirement prior to the introduction of the Enhanced CPD scheme, over 90% of registrants were already following this pattern.

From the survey results, fewer dental nurses and dental technicians indicated exceeding the CPD requirements in the last two years compared with dentists or Other DCPs.

Only small proportions indicated that they found it difficult to meet the requirements of the Enhanced CPD scheme. The majority (at least 62%) found it easy or very easy to spread their CPD across the five-year cycle, make an annual or end of cycle statement, find and complete verifiable CPD, and obtain the required documentary evidence.

Although relatively few experienced difficulties, the problems that some had were notable and were reflected in the open comments and the interviews. This included difficulty in obtaining the required documents to evidence verifiable CPD. This difficulty could result in duplication of learning or lead to avoiding CPD that might be difficult to verify.

For registrants on the Enhanced CPD scheme we explored compliance with the 10/2 rule. Compliance rates ranged from 90.7% to 95.3% for the four two-year periods within each five-year cycle⁸ (see Figure 7).

The 10/2 rule was not a requirement of the former CPD scheme (prior to 2018), however exploration of this provided insight into whether registrants were already meeting this rule prior to its introduction. Even before the 10/2 rule was instigated, at least 90% of registrants were already following this pattern (see Figure 7). Statistical analysis revealed negligible differences in compliance with the 10/2 rule between those on the Enhanced CPD scheme and those on the former scheme. Full results from the analysis are summarised in Table 14 in Technical Annex 1.



FIGURE 7: 10/2 Rule compliance according to CPD scheme (database)

⁷ Our compliance figures may differ from those published by the GDC for the reasons outlined in 3.8. ⁸ Calendar year is not accounted for in these calculations. That is, one registrant's year one of their cycle may be 2019, while another registrant's year one may be 2020.

Compliance with the 10/2 rule was also explored according to role. Across the four two-year periods and roles, compliance with the 10/2 rule for registrants on the Enhanced CPD scheme ranged from 80.2% to 98.6% (see Figure 8 and full results from statistical analyses in Table 13, Technical Annex 1). For three of the four two-year periods, dentists demonstrated the highest rate of compliance. Registrants with the single role of dental technician had the lowest rate of compliance for years two and three, and years three and four of the CPD cycle. Registrants with the dual role of dental nurse and dental technician had the lowest rate of compliance for years one and two, and years four and five of the CPD cycle. Statistical analyses demonstrated only negligible differences between compliance with the 10/2 rule according to role for three of the four two-year periods. For the year 3 and year 4 two-year period, dentists had the highest rate of compliance (80.2%). Despite this difference, further statistical analyses revealed that the role of registrants was not able to improve the prediction of their compliance with the 10/2 rule in years 3 and 4 of their CPD cycle.

Most registrants in the interviews spoke favourably about the 10/2 rule and recording and logging these hours was not an issue for most. The requirement was noted to help some avoid leaving CPD to later in their cycle and having to rush to complete it at the last minute.

I think my very first cycle I did have loads of hours left to do in the final year. ... Nobody was checking, so it was like, alright, we can wait and tomorrow never comes ... So, it does make you structure yourself. (Dental technician, Interview)

Others explained that they were organised in spreading out their CPD hours and so they always had more than enough hours to declare each year. As a result, the requirement had not affected them. There was praise for the flexibility of the rolling two-year requirement which accommodated differing amounts of CPD engagement over the time period:

I think [10/2 rule] gives you that bit of flexibility, you know for example if you're ill or on maternity leave. You've got that flexibility, or paternity leave anything. It still gives you that little bit of autonomy to think 'well, actually, I can't do that now, but I could do it later'. (Dentist, Interview)



FIGURE 8: Compliance with 10/2 rule according to role (database)

In the scoping interviews, the GDC staff observed that incomplete applications or submissions occurred across all professional roles, with the cause being attributed to a lack of ownership of their CPD activity rather than role. The GDC staff acknowledged that it was hard to judge if compliance varied by professional role as they only saw the cases that encountered problems, and that dental nurses made up the largest group of dental professionals. However, they had observed greater numbers of dental nurses and dental technicians failing to meet the requirements, including failing to declare. This accords with the database analysis which identified dental nurses and dental technicians as having the lowest compliance rates. Some of the GDC staff interviewed had the impression that dental nurses were the group most likely to complete their CPD in a hurry at the end of the cycle with a minority becoming non-compliant as a result. Furthermore, the timing of the annual declaration was said to cause confusion for some DCPs. As DCPs' annual statements are mid-year (28 August), some DCPs were said to lose track of which year of the cycle they

were in. Aligning the timing with the indemnity declaration was suggested by GDC staff as a way of lessening confusion. GDC staff also recounted how dentists tended to correct any notifications of non-compliance quickly before it progressed to the hearing stage. In contrast, dental nurses and dental technicians were said to progress to the appeal hearing before taking corrective action.

GDC staff reflected that had it not been for the pandemic, dental professionals may have had better chance to get used to the Enhanced CPD. They drew attention to how the pandemic had impacted engagement with CPD beyond the immediate effect on educational activities. They noted the financial implications of the pandemic: as dental professionals often pay providers for CPD, those who were furloughed or were working reduced hours may have faced financial challenges which may have impacted their ability to engage with CPD. Dental professionals were offered some discretionary leniency if they could demonstrate that their ability to access CPD had been impacted by the pandemic, or if they were furloughed, or had experienced COVID-19 wellbeing issues. In May 2020, the GDC reassured dental professionals that they would not be removed from the register if they did not meet their CPD requirements for that cycle year (i.e., the 10/2 rule) as a consequence of COVID-19 (General Dental Council 2020).

As the analysis of the Enhanced CPD dataset indicated, typically more than 90% of registrants complied with the 10/2 rule (see Figure 7). Respondents to the survey were asked if in the last two years they had *exceeded* the required CPD hours. The proportions ranged from 48% (dental nurses and dental technicians) to 65% (dentists) (see Figure 9). The survey responses were in line with the GDC dataset in that fewer dental nurses and dental technicians indicated exceeding the CPD requirements in the last two years compared with dentists or Other DCPs.



FIGURE 9: In the last 2 years, have you exceeded the number of hours the GDC requires for CPD? (survey data)

When survey respondents were asked how easy or difficult they found it to meet the Enhanced CPD requirements, no more than 16% indicated some difficulty (see Figure 10); the majority found it easy or very easy to spread their CPD across the five-year cycle, make an annual or end of cycle statement, find, and complete verifiable CPD, and obtain the required documentary evidence. However, the results do mean that a minority were challenged by one or more of these aspects of the Enhanced CPD process and requirements. This might account for the observation made by GDC staff that incomplete applications or submissions occurred across all professional roles.



FIGURE 10: All registrants - considering the following, how easy or difficult is it for you to meet the GDC's Enhanced CPD requirements? (survey data)

When the responses were looked at by role, 64% of dentists and 67% of DCPs indicated that they found it easy or very easy to spread CPD across their five-year cycle (at least 10 hours every two years. Similar proportions found it easy or very easy to find verifiable CPD (60% dentists; 63% DCPs), complete verifiable CPD activities (61% dentists; 64% DCPs) and make an annual or end of cycle statement through their eGDC account (65% dentists; 69% DCPs). Most had little difficulty in obtaining the required documentary evidence (e.g., certificate) to confirm verifiable CPD although 20% of dentists and 14% of DCPs found it difficult or very difficult. These are relatively small proportions but the problems that some had were notable and were reflected in the open comments and the interviews. For example, some interviewees who worked in hospitals had to complete employer-mandated training on topics also recommended by the GDC but they could not secure appropriate certification. They described completing mandatory CPD from the Care Quality Commission and the NHS Electronic Staff Record and then duplicating the CPD with a dental provider just to acquire the certification that would be recognised by the GDC. They also told of chasing providers to use a GDC-supplied template, sometimes without success:

I find it very frustrating that I do a lot of mandatory training in my Trust which is not recognised as CPD because the Trust will not issue the verification to meet GDC requirements. (Dentist, Survey)

This certification issue could result in registrants avoiding CPD that cannot be readily verifiable:

It engenders a mercenary attitude to CPD - if there is no certificate or its hard / marginal to prove then don't bother. (Dentist, Survey)

In discussion with GDC staff, it was noted that submitting an annual declaration of CPD was sometimes a hurdle for dental professionals, even if it was for zero hours. GDC staff (Group 4, GDC staff interviews) explained that otherwise compliant dental professionals seem to have "just forgotten" to submit their annual declaration. GDC staff also reported that changes in certification rules were very rigid about what needed to be included and sometimes they

had to refuse recognition of some verifiable CPD because the certificates did not meet the requirements. This had led to some frustration with the new rules:

We had people saying, 'I work in such a niche area. I travel overseas for my CPD. Are you telling me that I can't access the best CPD in the world for my microbiology, or whatever? Are you telling me that I can't count that?' (Group 2, GDC staff interviews)

Dentists who worked in non-clinical roles or rare specialties explained how they could only find relevant CPD being offered by providers who do not issue adequate certificates. They described the dilemma of either undertaking worthwhile CPD that would not count towards their hours or CPD of little benefit purely to tick a box.

I do not feel it would be professional of me to choose courses that are not relevant to me simply to gain certificates (like clinical courses), so I end up taking the risk. I don't think I should feel like I'm taking a risk when I'm actually doing the right thing. (Dentist, Survey)

Mapping documents were drawn up by the GDC to clarify the certificate requirements but where certificates were older or generated by overseas providers, applying these was a difficult process. In the interviews we heard of experiences of difficulty in getting CPD providers to "sign off" on the mapping documents and CPD hours not being counted. In interviews with GDC staff, resistance was reported from some big providers who did not understand why they had to change their certificates for one professional group when they were still suitable for other professional regulators. They also noted that most providers were starting to make changes to their certificates but that they may have already trained several hundreds of dental professionals before making them. Certification problems were judged by the GDC staff to be "a laborious bureaucracy" (Group 3, GDC staff interviews) that generated a large amount of extra work for the staff members and a lot of communication with the dental professional concerned.

4.2.3. Compliance rates and equality, diversity, and inclusion

Key Messages

Statistical analyses demonstrated only negligible differences in compliance rates according to equality, diversity, and inclusion (EDI) characteristics. When the four registrant groups (dentists, dental nurses, dental technicians, and Other DCPs) were explored in turn, there were either no or negligible differences. The exception was age within the dentist group where a small difference was observed: the oldest dentists (aged 66+) had the lowest rate of compliance and the youngest (aged 22-30) had the highest rate of compliance. However, when explored further, accounting for the age group of dentists did not improve the overall prediction of the number of dentists who comply with their five-year requirements.

Registrant demographic data and EDI characteristics were explored in relation to CPD compliance to investigate potential patterns or trends. The variables and their categories are given in Table 7 in Technical Annex 1. Statistical analyses demonstrated negligible differences in compliance rates according to registrant demographics. Therefore, none of the EDI characteristics of registrants were deemed necessary for further investigation. Full results from statistical analyses are reported in Table 7 in the Technical Annex 1.

As well as exploring the compliance rate according to EDI characteristics among all registrants as a single group, the three registrant groups (dentists, dental nurses or dental technicians) and Other DCPs were explored individually in terms of variability in compliance rates according to the EDI characteristics.

4.2.3.1. Compliance among dentists according to EDI characteristics

Dentists demonstrated an overall five-year compliance rate of 96.6% with their required verifiable hours of CPD every five-year cycle. Statistical analyses were computed to determine whether dentists' compliance rate differed according to characteristics of the dentists. The compliance rate of dentists only differed according to their age. Dentists within the 66+ age group had the lowest rate of compliance (83.0%) and dentists within the 22-30 age group had the highest rate of compliance (99.7%) (see Figure 11). Despite this difference, further analyses revealed that the age of dentists was not able to improve the prediction of dentists' compliance with their five-year requirements.



FIGURE 11: Compliance rate among dentists with five-year CPD requirements according to age group (database)

4.2.3.2. Compliance among DCP roles according to EDI characteristics

Dental nurses demonstrated an overall five-year compliance rate of 93.1%. Statistical analyses revealed no differences in their compliance according to EDI characteristics, therefore, none of the characteristics of dental nurses were deemed necessary for further investigation.

Dental technicians demonstrated an overall five-year compliance rate of 93.1%. Statistical analyses revealed no differences in their compliance according to EDI characteristics, therefore, none of the characteristics of dental technicians were deemed necessary for further investigation.

Other DCPs demonstrated an overall five-year compliance rate of 97.6%. However, as highlighted previously, 95.0% of registrants within the Other DCP group with just one role were dental hygienists. Statistical analyses revealed no differences in their compliance according to EDI characteristics, therefore, none of the characteristics of dental hygienists were deemed necessary for further investigation.

4.3. CPD undertaken

4.3.1. Forms or modes of CPD activity

Key Messages

Some regulators specify certain learning activities, such as peer review or peer learning. The GDC (2021) found that participants viewed the "demise" of peer review as an unintended consequence of the Enhanced CPD schemes' removal of non-verifiable CPD.

From the survey data, the most common form of verifiable CPD undertaken in the last 12 months was hands-on clinical training or workshops. Attendance at some form of lecture (in-person or online) was also commonplace. The overall pattern of responses for dentists was similar to those of DCPs, although the comparison suggested DCPs were more open to online activities. Preference for in-person or online / remote attendance varied depending on type of activity. Although the majority of both DCPs and dentists preferred in-person clinical training or workshops, the proportion of dentists was greater (78% dentists; 59% DCPs). Differences were most notable for conferences where 63% of dentists preferred in-person attendance compared to 46% of DCPs. The preferences of dentists and of DCPs for other forms of CPD were similar: more preferred attending lectures and clinical audit online but more preferred in-person attendance at peer learning events.

When asked to compare the quality of their online learning with similar in-person training the most common response was to indicate that the quality was neither higher nor lower. However, the response of dentists was less positive.

Some regulators specify certain learning activities, such as peer review or peer learning (General Osteopathic Council 2018; General Optical Council 2021), and reflection (General Medical Council 2012; General Pharmaceutical Council 2017; The Nursing and Midwifery Council 2019; General Optical Council 2021). Per CPD cycle, professionals with the General Optical Council are required to participate in at least one peer review activity, alongside engaging in reflective discussion with a colleague about their learning plan. In an analysis of the previous CPD cycle data, peer review activities were prioritised over other activities early in the cycle by optical professionals with a mandatory peer review requirement (General Optical Council 2019). The GDC (2021) found that participants viewed the "demise" of peer review as an unintended consequence of the Enhanced CPD schemes' removal of non-verifiable CPD.

There was some evidence from the REA that preference for the form of CPD was related to personal characteristics, specifically, male practitioners were reported to attend more conferences and dental fairs than female practitioners (Nayak et al. 2017).

The survey data gave an indication of the most common forms of verifiable CPD undertaken in the last 12 months (see Figure 12). Nearly 80% of the respondents indicated that they had undertaken hands-on clinical training or workshops. Attendance at some form of lecture (inperson or online) was commonplace as well. The most common forms of verifiable CPD noted in 'other' included reading journals, in-house training and online courses. Interviewees also reported using professional bodies or subscription services as their main source of CPD. The ease of access and flexibility of verified learning (from online activities or reading journal / magazine articles) along with the variety of role-relevant topics were given as benefits of using such services.



FIGURE 12: All registrants - what forms of verifiable CPD have you taken in the last 12 months? (survey data)

When the responses of dentists were compared with those of the DCPs, the overall pattern was similar, both rating hands-on clinical training or workshops and lectures (in-person or online) as their top three. A larger proportion of dentists had engaged in hands-on clinical training or workshops relative to DCPs (83% compared to 77%). A dentist we interviewed commented:

I'm a practical guy. That's why I'm a dentist. I have a practical mind. I'm practical with my hands. That's what I want. (Dentist, Interview)

Relative to dentists, larger proportions of DCPs indicated having engaged in online lectures (72% DCPs; 63% dentists), higher education qualifications (57% DCPs; 51% dentists), online clinical training or workshops (46% DCPs; 34% dentists), online peer learning (43% DCPs; 27% dentists), online clinical audit (33% DCPs; 18% dentists) and in-person clinical audit (26% DCPs; 18% dentists) in the last 12-months. The proportions of DCPs and dentists engaging in the other activities were similar (within 3%). The comparison suggests DCPs were more open to online activities than dentists. Although we cannot be certain of the reasons for this, data reported in section 4.3.2. suggests reasons related to the ease of access and lack of travel costs. The convenience and accessibility of online CPD was highlighted as positive by those with caring commitments:

As a single parent, ... not all dentists can travel widely due to family commitments, yet we are just as eager to keep up to date. I still continue to attend in-person events as you do learn lots in between lectures talking to other specialists but online takes the pressure off to travel in the evening. (Dentist, Survey) However, for parents with small children the timing of evening online learning activities could conflict with caring responsibilities, scheduled at the "bedtime of little ones". (Dentist, Interview)

The survey included questions seeking respondents' preference for in-person or online / remote attendance (see Figure 13). Preference varied depending on type of activity. There was a clear preference for in-person attendance at clinical training or workshops (67% indicating in-person preference) and for conference attendance (53%). Preference for inperson attendance at peer learning events was greater than preference for online attendance (43% in-person; 32% online). In contrast, more respondents preferred online attendance at lectures (51% online; 31% in-person) and clinical audit (41% online; 25% inperson), although 34% expressed no preference. The results were reviewed by role: equal proportions of dentists (51%) and DCPs (52%) expressed a preference for online lectures. The preferences were similar for clinical audit (38% of dentists and 43% of DCPs preferred online) and peer learning (47% of dentists and 40% of DCPs preferred in-person). Although both the majority of DCPs and dentists preferred in-person clinical training or workshops, the proportion of dentists was greater (78% dentists; 59% DCPs). Differences were most notable for conferences where 63% of dentists preferred in-person attendance compared to 46% of DCPs. The differences were statistically significant for both clinical training and workshops, and conferences.



FIGURE 13: All registrants - preference between online / remote attendance and in-person attendance (survey data)

4.3.1.1. Comparing the quality of online and in-person CPD

Respondents were asked to compare the quality of their online learning with similar inperson training (see Figure 14). The most common response was to indicate that the quality was neither higher nor lower, however for all the five forms of learning presented to the survey respondents, greater proportions indicated that the quality of the online learning was higher or much higher than those rating the quality as lower or much lower. 21% of dentists and 6% of DCPs rated online clinical audit to be of lower quality. When the results were examined separately for dentists and DCPs, in all cases, the proportion of dentists rating the quality of the online activities to be lower or much lower was greater than the proportion of DCPs making such ratings.



FIGURE 14: All registrants - how would you rate the quality of your learning compared with similar inperson training? (survey data)

The quality of online learning was also discussed with GDC staff. They noted that during the COVID-19 pandemic all in-person activities were suspended, and this had changed ways of thinking about CPD delivery and had forced providers to be creative. This shift was also noted in the REA, although the vast majority of papers focused on the impact of COVID-19 on *undergraduate* dental education and the impact of COVID-19 on dental *students*' educational needs. Liu et al. (2020) reported significant changes to CPD provision for dentists in China during COVID-19. Significantly more live online courses, predominantly lectures, were offered by educational institutions than previously and the number held during working hours increased. The authors suggest that Chinese dentists embraced the opportunity to engage in professional development during their reduced working hours imposed by COVID-19 restrictions. In the opinion of some of the GDC staff we spoke to in the scoping interviews, the replacement online activities did not always provide the same quality of learning although this seemed to depend on the nature of the activity; there was a belief that topics that were usually taught hands-on may not have transferred well online.

4.3.2. Influences on decisions to take up CPD opportunities

Key Messages

The REA showed that requirements or recommendations for certain activities or topics that were made by the profession's regulator drove the CPD choices of the registrants. In interview, GDC staff saw regulation as a mechanism that helped ensure patient safety and patient trust. Registrants described two groups: those driven by need to meet requirements and those whose participation in CPD was motivated by their professionalism.

Common barriers to CPD cited in the literature included course costs, quality and time. Reference to these barriers was echoed by the registrants in the interviews and survey. The affordability of CPD was particularly noted by DCPs (all professional roles) and undertaking CPD outside working hours was more challenging for those with caring responsibilities. For others, attending courses in the daytime required forward planning to manage clinical time, workload and associated loss of income. The survey responses showed that personal interest in the topic was a factor influencing participation in CPD activity for 94% of the respondents and this concurred with findings from the REA. Dentists and DCPs shared similar influences and in both groups relatively higher proportions were discouraged by activities of long duration and / or high cost. Although the patterns were similar, there was further evidence of DCPs seeming more open to online activities (68% of DCPs expressed being encouraged by this compared to 53% of dentists).

From discussions with GDC staff, the workplace context was posited as particularly influential for DCPs whose engagement with CPD may be dependent on their employer's discretion. It was apparent from comments made by survey respondents that support from employers was variable.

It was noted by GDC staff we interviewed that dentistry is ever evolving, and as a result, dental professionals need to engage in lifelong learning to ensure that their skills are kept up to date. Dental professionals were said to view CPD as a marker of professionalism and that patients expected dental professionals to keep their skills up to date. CPD was discussed in terms of maintaining patient safety and providing a good service, but also in terms of professional development for dental professionals.

Regulator requirements or recommendations for certain activities or topics drive the CPD choices of the registrants. Insights into factors influencing CPD take-up can be drawn from the international literature, although here differences in dental care systems should be noted. Kelsch et al. (2017) reported that USA-based dental hygienists were significantly more likely to meet required infection control guidelines and to complete more CPD in states where CPD is mandatory. Years of experience was also a factor: a survey of dentists in hospitals and private practice (n=402) in Pakistan identified that those with the least clinical experience reported the least frequent attendance at CPD events, while those with between three to eight years of experience attended most frequently (Hassan et al. 2020). Course costs and quality were the two most commonly reported barriers to CPD attendance. In Malaysia, Hamid et al. (2018) surveyed dentists attending one of three CPD programmes and found that lack of time was as an obstacle.

While it was acknowledged in both interviews with GDC staff and registrants that some dental professionals would undertake CPD in the absence of regulatory requirements, the GDC staff we spoke to saw regulation as a mechanism that helped ensure patient safety and patient trust. Some GDC staff observed that they encountered two types of dental professionals; those who saw CPD schemes as a system to be navigated just so that they could get on with their practice, and those who seemed to take learning from CPD more seriously.

Registrants themselves reflected similar perspectives. Many survey respondents and interviewees felt the GDC's directive to undertake CPD was not a motivational factor that drove their decision to participate in CPD, but rather their participation was driven by their sense of professionalism and a personal desire to keep up to date and learn.

I do not view CPD as something that has to be done to maintain my registration. I engage in CPD because after 33 years I still love my job and want to continue to excel at it. (Dentist, Survey)

Opinions were divided over whether CPD schemes would encourage people with little interest in CPD to engage in a meaningful way with learning. Some interviewees felt that there needed to be a "stick as well as a carrot" to motivate reluctant learners. However, others commented that those who did not value CPD would find a way to play the system to maintain their registration, often through focusing their CPD on what one described as "inadequately regulated" online CPD.

Within dentists there's probably about two main groups, one group that has no problem doing CPD, does a lot of it anyway and is hitting the hours without any problem at all. Then you've got another group who really aren't interested and will do whatever they can to get points. Usually by going on, you know, pretty lousy online or all-day core courses that aren't really teaching anything, simply so that you've got a certificate at the end of it. (Dentist, Interview)

These comments reflected other concerns about evidencing learning on the basis of points, certificates or hours completed and highlight how individual variation influenced dental professionals' engagement with CPD.

The survey asked respondents about what influenced their decisions to take up a CPD activity. A set of 14 potential influences were listed and respondents were asked to indicate the extent to which each item encouraged or discouraged take up of the activity (see Figure 15).



FIGURE 15: All registrants - for each of the following, please indicate whether it influences your decision to take up an activity. (survey data)

Personal interest in the topic was shown to be a key driver with 94% of respondents indicating that it at least somewhat encouraged their participation in CPD. This accords with findings from international literature reported in the REA: in a survey of Khartoum dentists, perceived knowledge gap and an interest in the topic were the most frequently reported motivations for choice of CPD activity (Gabani 2019).

When the results were looked at by registrant group, they shared the same top four items (although activity in my local area was number two for DCPs and number three for dentists). In both groups, relatively higher proportions of registrants were discouraged by activities of long duration and / or high cost. The greatest differences were for activity held during protected time (which was an encouraging influence for 75% of DCPs in comparison to 57% of dentists) and online activity (where 68% of DCPs expressed being encouraged by this compared to 53% of dentists)⁹. This accords with the findings reported above in relation to forms of verifiable CPD undertaken in the last 12-months and the data on preferences for online and in-person attendance which suggested DCPs are more open to online activity. DCPs in interview cited the convenience of online learning, the lack of travel time and cost, and the option to view recordings after the event:

I do not attend in person things. It's just it's too awkward. Why do I want to drive 45 miles each way? You know, wasting my time doing that, to sit and listen to somebody. (Dental technician, Interview)

From discussion with GDC staff, workplace was posited to have an impact on CPD activities. GDC staff explained how the NHS, Community Dental Service (CDS), and some larger companies tended to be very supportive of learning and well-organised with regards to CPD. In contrast, some smaller practices may struggle to allow dental professionals to engage in CPD during the workday owing to time or management issues. As a result, dental professionals had to complete CPD outside work hours so were said to choose cheap and quick options¹⁰. The workplace contexts were said to be particularly influential for DCPs. It was highlighted that different dental roles had different levels of professional autonomy, and DCPs may be particularly dependent on the practice manager or their employer's discretion. In these situations, having mandated CPD could offer some protection for DCPs learning.

Ease of access and reduced time and financial costs were determining factors for those who did not have such courses provided by their employers. Online courses and all-day events that allowed completion of several topics at once were positively viewed.

You have the option of doing a whole day of radiography and radiology. ... I would find that immensely helpful because I can be like I'm going to get this subject done within a day. (Dental nurse, Interview)

The employment setting appeared to have an impact on reaching the required hours of CPD for both survey respondents and those we interviewed. For example, in the interviews some dental nurses in general dental practices had to secure their own CPD and complete it outside working hours while others were given access to a paid subscription service by their employer and encouraged to complete it during quiet periods in the practice or had inpractice team CPD provided. The management approaches of different employers also influenced experiences of CPD; we were told of practice managers who took control of their

⁹ Although some of the differences between dentists and DCPs were statistically significant, the effect sizes were negligible. Within each of the groups (dentists and DCPs) we explored differences by sex, ethnic group and age. Although some differences were statistically significant, effect sizes were negligible.

¹⁰ Survey responses to the influence of protected time and ability to fit CPD around the working day were explored by size of practice (1 dentist, 2-3 dentists, 4-5, and 6 or more). There were no significant differences.

practice's CPD and certification whereas other employment settings required the registrant to organise and pay for all their CPD. Registrants' experiences relating to having protected time to undertake CPD and / or employers enabling access or provision of CPD courses was very variable in both the survey and interviews. Many survey respondents reported never having protected time to complete CPD activities. Compliance was easier to achieve for those where mandatory training was provided. However, some survey respondents cautioned that the training may be of low quality:

I work for a corporate dental practice, and they insist on certain topics to be completed every year. These are all done online ... I can't say I learn a huge amount - it is just a matter of getting them done and getting the certificate - it is all verifiable, so I accumulate a lot of hours - of what I feel is very poor CPD. (Dental hygienist, Survey)

The personal cost of accessing CPD, as well the financial burden of other requirements as a clinician (registration fees, indemnity fees etc) were raised in the open comments and interviews with registrants. The affordability of CPD was particularly noted by DCPs and some felt they were paying a large amount of money solely to be allowed to do their job.

Many DCPs are on a low income. I also feel that the GDC should provide registrants with some core verifiable CPD as part of the registration fee. (Dental nurse, Survey)

A minority of interviewees received funding to engage in training that conferred CPD hours or had access to CPD with their workplace (e.g., those who had roles in universities). For others, the direct costs (course fees) and indirect costs (travel, time off work) were noted as factors influencing decisions to attend a specific CPD activity.

I have to find the money to be able to do my CPD, which will allow me to stay registered, on top of having to pay a retention fee once a year to stay on a register. And at the moment with the way things are financially, you have to make sure you've got that £114, you then have to make sure you've got your money for your CPD. We give out a lot to not get a lot in return. It's just quite difficult. (Dental nurse, Interview)

Some of the dentists interviewed also reported time and financial cost barriers to CPD within working hours: the need to plan CPD well ahead of time to manage clinical time and how attending a daytime CPD course meant losing income. The requirement to complete CPD in personal time was raised as a barrier, especially for those who had a caring role. One dental technician explained how the cognitive load of managing these competing commitments restricted their capacity for exploring CPD opportunities:

I know it's really bad but generally this whole CPD thing is a real pain because you're at work and then obviously when you leave work, I've got a family, a lot of commitments and it's just like, I don't have that sort of amount of time to just do CPD for pleasure. I only do it because it's a necessity. I don't have that kind of capacity for 'oh, I wonder what's out there, I wonder what's happening?' I haven't got that capacity to do that, and I think a lot of people are the same. (Dental technician, Interview).

Dental technicians working in small businesses also spoke of restricted options for CPD (beyond remote learning) owing to their inability to take time off during work hours.

I'm the only technician here. It's a small lab. There are other staff but if I walk out this door, nothing gets made. So, my opportunity to go and get CPD outside of this magazine world is pretty limited. (Dental technician, Interview)

Geographical location of the registrant was also a factor that reduced accessibility to relevant CPD. Interviewees reported a lack of face-to-face courses offered locally sometimes meant a choice between travelling some distance to attend a particular course or choosing alternative learning formats such as online learning or journal / magazine-based activities.

Being in the relatively far North of Scotland means a significant financial burden for certain CPD that would be beneficial.... It's not always possible to access good quality, relevant courses from here. I feel that the GDC should be providing certain core training as part of its remit, that can be accessed by all. (Dentist, Survey)

4.3.3. CPD topics

Key Messages

It is common for regulators to recommend or set requirements in relation to certain topics or domains of knowledge.

High proportions of both dentists and DCPs (in each case at least 73%) agreed or strongly agreed that CPD in medical emergencies and CPR, cross infection control, safeguarding, clinical and technical areas and consent supported them in their work as dental professionals. Effective practice management attracted the lowest level of agreement by both dentists and DCPs.

There was evidence of some confusion about whether completion of GDC recommended training was mandatory. Those in certain roles (notably those not patient-facing) questioned the relevance of some recommended topics. Focusing CPD on recommended topics could result in little time remaining for CPD more relevant to learning needs. Furthermore, regularly repeating recommended topics could be demotivating. However, others better understood the flexibility of the Enhanced CPD scheme and tailored CPD choices to their needs.

It is common for regulators to recommend or require learning topics or domains of knowledge. For example, the General Medical Council (2017) recommends demonstrating appropriate training across nine domains, which relate not only to skills, knowledge and patient safety but also professional values and behaviours, leadership and team working, and quality improvement as well as more specific areas including safeguarding vulnerable groups, health promotion and illness prevention, research and scholarship, and education and training. A number of these areas resonate with the General Optical Council (2021) requirements for their registrants to complete at least one CPD activity in each of four domains: professionalism, communication, clinical practice, leadership and accountability. The General Osteopathic Council (2018) also identifies "four 'themes": communication and patient partnership, knowledge, skills and performance, safety and quality in practice, and professionalism. As part of these themes, professionals are required to complete at least one CPD activity in the areas of patient communication and consent. The Pharmaceutical Society NI (2021b) does not outline any required topics or areas of CPD but their registrants are required to complete learning that reflects their current scope of practice.

While the choice of CPD topic is up to the individual registrant, the GDC's Enhanced CPD scheme recommends that CPD should address broad learning outcomes (ABCD, outlined in Section 2.2.) (General Dental Council 2019b) which incorporate topics such as communication, both with patients and in working as a dental team, as well as maintaining knowledge and skills and enhancing patient confidence. Like the General Medical Council (2017), specific topics are also recommended (legal and ethical issues, complaints handling, oral cancer: early detection, safeguarding children and young people, and safeguarding vulnerable adults), or highly recommended (medical emergencies, disinfection and

decontamination, and radiography and radiation protection) but no topics are mandatory (General Dental Council 2019d).

As well as questions about mode or form of CPD, the survey included questions about CPD topics. Respondents were presented with a set of 16 CPD subjects and asked to indicate the extent to which they agreed or disagreed that the CPD subject had supported them in their work as a dental professional. At least 60% of the respondents agreed or strongly agreed that each of these topics, bar one (effective practice management), supported them in their work as a dental professional (see Figure 16). Over 90% agreed or strongly agreed that their work as a dental professional was supported by CPD in medical emergencies and CPR.



NOTE: results are ordered by the percentage of respondents who indicated that they strongly agreed.

FIGURE 16: All registrants - to what extent do you agree or disagree that the following CPD subjects have supported you in your work as a dental professional? (survey data)

The results were looked at separately for dentists and for DCPs. The patterns of agreement were similar although the proportions agreeing tended to be notably higher for DCPs relative to the dentists responding to the survey. This was a general trend across the survey responses. Effective practice management attracted the lowest level of agreement by both dentists (45%) and DCPs (62%). Fewer than 60% of the dentists also agreed or strongly agreed that CPD in equality and diversity (46%), team working (52%), leadership (51%) and professional behaviours (53%) supported them in their work as a dental professional. Levels of agreement for some subjects were notably higher for DCPs: equality and diversity (73%), professional behaviours (73%), team working (72%). Raising concerns was also a CPD topic that attracted different levels of agreement: 59% for dentists and 79% for DCPs.

Both dentists and DCPs shared the same top four items in terms of strength of agreement. High proportions of both groups agreed or strongly agreed that CPD in medical emergencies and CPR (89% of dentists and 93% of DCPs agreed / strongly agreed), cross infection control (73% of dentists and 90% of DCPs), safeguarding (73% dentists, 88% DCPs), clinical and technical areas (82% dentists, 81% DCPs) and consent (77% dentists, 85% DCPs) supported them in their work as dental professionals. Although following the general pattern of top items, we note differences between the DCPs and the dentists, particularly in levels of agreement with cross infection control and safeguarding¹¹.

Confusion about requirements to complete GDC recommended topics was clearly evident in both the survey comments and the interviews. Although the topics are no longer mandated for every dental professional, the classification of "recommended" was seen as "woolly":

What does that mean? Do I have to do it, or do you just think I should do it? If I don't do it, what's the penalty for not doing it? (Dentist, Interview)

Some of those we interviewed argued that the recommended topics were not relevant for certain roles. They were criticised as too dentist-focused and suited more to patient-facing roles. One interviewee who worked in a non-clinical role completed the recommended topics out of uncertainty and worry that it would affect their registration even though the topics had no relevance to their work.

I know that you still can get away with not doing them, but you kind of do feel the pressure that you should cover them. (Dental technician, Interview)

The dental technicians interviewed commented that there was not enough CPD relevant to their particular role.

Dental technicians tend to work remotely from the dental practice, and they need also specific CPD that is specific to their job role and not linked to the clinic all the time. (Dental technician, Interview)

According to one participant, achieving the minimum required CPD hours would be difficult for dental technicians without the professional body's magazine. Dental nurses interviewed also reported that CPD was often not targeted towards dental nurses' learning needs.

So there's a lot of things like conferences for dentists, hygienist, therapists where they'll be able to get a whole day of CPD and interaction and I think that would be really helpful, like if you could have a day where you could, you know, knock out your CPD and do it as a group. (Dental nurse, Interview)

¹¹ Although some differences between dentists and DCPs were statistically significant, the effect sizes were negligible. Within each of the groups (dentists and DCPs) we explored differences by sex, ethnic group and age. Although some differences were statistically significant, effect sizes were negligible.

Required hours may be readily met just by completing recommended topics regardless of the relevance of those topics to role. This could leave little time to engage in activities more pertinent to registrants' learning needs. This situation was exacerbated for those in roles whose employer required completion of specific training. Most of those we interviewed accepted that refreshing their knowledge was important and that the recommended and highly recommended topics were relevant to dental practice. However, they also pointed out that where information rarely changed, it could be demotivating to, as one dentist put it, "just repeat what we've done last year because we have to tick those boxes again". Free text comments and interviews reflected the view that registrants wanted to develop professionally by undertaking meaningful, relevant, high-quality CPD and were keen to refresh their knowledge, but that repetitive CPD may act as barrier to pursuing further (more relevant) learning opportunities. While some survey participants saw the scheme as restrictive, we heard from others that it provided them with the freedom to plan their learning. For example, in the interviews with registrants some explained that they much preferred the Enhanced CPD scheme because it enabled them to tailor their CPD choices to their needs:

I quite like the freedom to be able to tailor my CPD It's not a prescriptive list.... So I think it enabled me to tailor it to what I actually need and write a personal development plan that actually works for me. (Dental therapist, interview)

My experience of the old scheme was that some of the core topics weren't as relevant to my practice and now ... I find that the new scheme allows me to tailor my CPD more towards my practice. (Dentist, Interview)

Although these comments indicate that some registrants seemed to understand and appreciate the greater autonomy of the Enhanced CPD scheme, responses were not homogeneous.

4.3.4. Impact of COVID-19 on CPD activity and needs

Key Messages

COVID-19 had a negative financial effect on dental professionals, increased disinfection and decontamination and personal safety procedures, and had an anticipated increase in demand for services following the easing of restrictions.

The survey responses showed high proportions of respondents indicating that their needs in relation to managing emergency care had been fully or at least partially met. Small proportions of respondents (higher amongst respondents who were dentists) indicated that their needs had not been met at all. Undertaking remote consultations was the area of greatest unmet need. Although some differences were statistically significant, effect sizes were negligible except for CPD needs related to encouraging good self-care of patients' oral hygiene where more dentists had needs that were not fully met.

The reviews of the impact of COVID-19 on dental professionals (Palmer et al. 2021; Pye Tait Consulting 2022) found adverse financial effects reported by professionals, increased provision of private care, greater attention to disinfection and decontamination and personal safety procedures, greater demand for services leading to an longer waiting lists following the easing of restrictions. As a result, it was anticipated that dental professionals' CPD needs may also change.

In the post COVID-19 context, the current survey included a set of potential CPD needs which respondents were asked to indicate if they had been fully or partially or not met at all. High proportions of respondents considered that their needs in relation to managing emergency care had been fully met (66%) or at least partially met (a further 27%; see Figure 17). For all other items, at least 10% indicated that their needs had not been met at all.

Undertaking remote consultations looked to be the area of greatest need where only 39% indicated that their needs had been fully met.



FIGURE 17: All registrants – following COVID-19 to what extent do you feel your CPD needs are being met in the following areas? (survey data)

The responses were considered by registrant group. Of the areas listed, managing emergency care was the only area where at least half of the dentist respondents indicated that their needs were fully met. In relation to undertaking remote consultations, fewer than 30% of the dentists felt their needs were fully met. In addition to managing emergency care, more than half of the DCPs felt their needs were fully met for encouraging good self-care of patients' oral hygiene (66% of DCPs indicating needs fully met; 46% of dentists), personal safety procedures (63% of DCPs indicating needs fully met; 45% of dentists), team-working (57% DCPs; 42% dentists) and managing complex care needs (52% DCPs; 34% dentists)¹². Statistical analyses demonstrated only negligible differences, except for CPD needs related to encouraging good self-care of patients' oral hygiene where more dentists had needs that were not fully met.

4.4. Registrant experience and perspectives on Enhanced CPD

The Enhanced CPD scheme was seen by GDC staff as an attempt to encourage dental professionals to take seriously the planning and management of their own learning. Rather than seeing CPD as a box-ticking exercise where a set number of hours needs to be completed, the focus on reflection and creating and maintaining a PDP aims to encourage dental professionals to engage in high quality CPD most suited to their learning needs. The Enhanced CPD scheme was described as involving a level of trust in professional motivation and dental professionals' ability to judge their own learning needs, with the GDC "nudging" dental professionals in the "right" direction: a system of "trust but verify" that included

¹² Within each of the groups (dentists and DCPs) we explored differences by sex, ethnic group and age. Although some differences were statistically significant, effect sizes were negligible.

reflection on learning and practice. The scheme was seen as an attempt to meet the needs of a diversity of professional and personal roles, recognising that dentists, dental nurses and other members of the dental team have different CPD needs and expectations. The 10/2 rule was introduced to encourage dental professionals to spread their learning across the cycle.

4.4.1. Registrants' perspectives on the Enhanced CPD scheme

Key Messages

The survey results indicated that registrants thought the length of the scheme (five years) and the 10/2 rule of at least 10 hours every two years was appropriate.

GDC staff described the Enhanced CPD scheme as involving a level of trust in dental professionals' ability to judge their own learning needs and many registrants (56% of dentists and 61% of DCPs) agreed that the ability to determine their own learning needs enhanced learning from CPD.

From the survey responses, registrants were unsure about telling the GDC either about the quality of the CPD undertaken or about the difference the CPD makes and more than half the dentists and DCPs were discouraged from doing non-verifiable CPD.

Registrants who commented thought that an automatic removal from the register for failing to comply with CPD requirements was unfair and review should be case-by-case where mitigating circumstances could be considered.

Survey respondents were asked to indicate their level of agreement with a set of statements about the Enhanced CPD scheme. High proportions strongly agreed or agreed both that the length of the current scheme (five years) and the 10/2 rule of at least 10 hours every two years is appropriate (see Figure 18). Respondents were unsure whether they would like to be able to tell the GDC either about the quality of the CPD undertaken (43% neither agreed nor disagreed with the statement) or about the difference the CPD makes (44% neither agreed nor disagreed).

Although the proportions agreeing tended to be higher for DCPs relative to the dentists responding to the survey, the patterns of agreement were very similar. The lowest levels of agreement shown by both dentists and DCPs were for the statements about telling the GDC either about the quality of the CPD undertaken (where 26% of dentists and 32% of DCPs agreed or strongly agreed) or about the difference the CPD makes (where 17% of dentists and 28% of DCPs agreed or strongly agreed). Lower levels of agreement were also shown for the statement "removal from the register is an appropriate response to CPD requirements not being met" (21% of dentists and 39% of DCPs agreed or strongly agreed) and the statement about the PDP enhancing learning from CPD (28% of dentists and 41% of DCPs agreed to strongly agreed)¹³. High proportions of both dentists (53%) and DCPs (54%) agreed or strongly agreed that they were discouraged from doing activities they believe would be valuable if they did not count as verifiable CPD.

Both dentists and DCPs also shared the same top four items in terms of strength of agreement. High proportions of both groups agreed or strongly agreed in the appropriateness of the five-year cycle length (68% of dentists and 73% of DCPs agreed or strongly agreed) and the 10/2 rule (63% of dentists and 71% of DCPs agreed or strongly agreed). High proportions also agreed that the requirements for an annual statement was appropriate (57% of dentists and 62% of DCPs agreed or strongly agreed) and that the

¹³ Although some of the differences between dentists and DCPs were statistically significant, the effect sizes were negligible.

ability to determine their own learning needs enhanced learning from CPD (56% of dentists and 61% of DCPs agreed or strongly agreed).



NOTE: results are ordered by the percentage of respondents who indicated that they strongly agreed.

FIGURE 18: All registrants - to what extent do you agree or disagree with the following statements about the current Enhanced CPD (survey data)

The greatest difference between the response of the dentists and the DCPs was for the statement about the CPD scheme helping to ensure patient safety (41% of dentists and 58% of DCPs agreed or strongly agreed) and the statement that the CPD scheme benefits the individual as a dental professional (42% of dentists and 57% of DCPs agreed or strongly

agreed); in both cases the percentage agreeing or strongly agreeing was at least 15% greater amongst the DCP respondents¹⁴.

Data from the interviews and the free-text responses to survey questions provided further insights, particularly views on whether removal from the register was an appropriate sanction for failure to meet CPD requirements. The overwhelming majority of registrants who commented were of the view that an automatic removal was unfair and that failure to comply should be considered in context, and on a case-by-case basis. Mitigating factors identified included illness, maternity leave, or additional personal circumstances.

There could be multiple factors into why someone hasn't reached their required hours of CPD. It could be that they've had a bereavement, or they've not been able work because illness, you know, or life in general. ... It can't just be a blanket thing of 'that person hasn't done it, that person's coming off to register'. We are people behind our registration numbers. And I think sometimes that gets missed. And it should take an individual to like, 'What's going on? Why haven't you met this? How can we help? What's been the problem?'. (Dental nurse, Interview)

One interviewee also suggested that failure to meet their CPD requirements should take the registrant's professional role and level of responsibility for patient care into account.

4.4.2. Registrants' experiences of the Enhanced CPD scheme

Key Messages

Although only a small minority of respondents had a poor experience of recording and submitting CPD information, issues were noted in the survey comments and interviews, including access to a computer for online submission and mapping CPD across the four learning objectives (ABCD) (General Dental Council 2019b). Some were unaware of the option to submit a zero-hour return one year and others reported colleagues accidentally failing to meet the 10/2 rule.

GDC staff were aware that life circumstances (such as maternity or long-term illness) can impact on a dental professional's ability to engage with CPD. However, a notable percentage of respondents, and significantly more dentists, were unaware that they could request a grace period at the end of a five-year cycle.

Some survey respondents seemed to have difficulty creating a PDP (42% of dentists; 29% of DCPs) and maintaining it (45% of dentists; 31% of DCPs). Many made negative comments on the survey about the PDP: having to complete a PDP was seen as an administrative burden, an additional time-consuming task with no added value. The results suggest that some registrants do not use the PDP in a way that supports their professional development as relatively few agreed that reviewing the PDP annually helped them as a professional or that the PDP helped them identify the CPD activities needed to meet their learning needs. GDC staff reported that some dental professionals misunderstood the intention of the PDP. Reflection on learning needs is a key part of developing a PDP and studies reported in the REA suggested that dental professionals may be uncertain about reflection on learning. GDC staff noted that the quality of PDPs varies. Around half of respondents (49% overall) indicated that they would benefit from guidance on best use of the PDP.

¹⁴ Although some the differences between dentists and DCPs were statistically significant, the effect sizes were negligible. Within each of the groups (dentists and DCPs) we explored differences by sex, ethnic group and age. Although some differences were statistically significant, effect sizes were negligible.

Respondents were also asked about their recent experience of recording and submitting CPD information. Overall, only a small proportion of respondents had experiences that were poor or very poor (Figure 19). At least 58% rated their experiences of recording and submitting CPD information as good or excellent. The notable exception is the response to requesting a grace period at the end of a five-year cycle where 43% indicated that they were unaware of this. The percentage was greater for dentists, 53% of whom indicated being unaware of this compared to 37% of DCPs. Statistical analysis demonstrated this difference to be small but significant. When we spoke to GDC staff, the impact of life circumstances on a dental professional's ability to engage with CPD was noted as a reason for some dental professionals appealing non-compliance decisions. Maternity was given as an example of a life circumstance that affected ability to engage with CPD and where dental professionals may need to request a grace period. Dental professionals may become unexpectedly ill or experience an exacerbation of an existing illness which could trigger a disability. Such circumstances suggest the importance of enhancing awareness of the option to request a grace period.



FIGURE 19: All registrants - please rate your recent experience of things related to recording and submitting your CPD (survey data)

When the survey responses were looked at by role, similar patterns were shown for dentists and DCPs, although in all cases, compared to dentists, higher proportions of DCPs gave ratings of good and excellent. For both groups, the most positive responses were given to submitting an annual CPD statement (71% of dentists and 79% of DCPs rated their recent

experience as good or excellent), confirming the number of hours completed during the year (68% of dentists and 80% of DCPs rated their experience as good or excellent) and completed during their five-year cycle (63% of dentists; 73% of DCPs).

The greatest differences in ratings provided by dentists and DCPs were shown in their responses to: confirming that the CPD completed was relevant to field of practice (50% of dentists and 68% of DCPs rated good or excellent); making adjustments to end-of-cycle CPD statement (51% of dentists and 64% of DCPs rated good or excellent); and information and guidance on the scheme (49% of dentists and 66% of DCPs rated good or excellent). These responses accord with the general pattern of more favourable responses from DCPs compared to dentists.

Greater insight into these general responses was gained from the interviews and from analysis of the free text comments on the survey. Interviewees varied in their responses to scheme guidance and support from the GDC. Some did not recall reading the guidance when the Enhanced CPD scheme was introduced while others read it in detail. Of those who had read the guidance, views were mixed with some recalling that it was overly complicated and not particularly helpful. The volume of emails and other information sent by the GDC was said to make it easy to miss important announcements. The GDC's website was also a source of information but some interviewees complained that what they perceived as frequent updates to web content and navigation had made findings what they were looking for more difficult.

The online submission process seemed to work well for most although it was noted that some dental nurses did not have access to a computer and resorted to using their mobile phone for the submission. We heard reports in the interviews of difficulty using the website formatted for a mobile screen (for example, needing to scroll sideways, not just downwards). Interviewees described older dental nurse colleagues who may not be as familiar or comfortable with electronic submissions.

Some of our nurses to be fair, they can be a bit technophobic, so they don't want to go online. Like one of the nurses, she's like, 'I can't. I don't know how to register with the GDC. I can't put those hours in', you know, 'I've lost my password again. It won't let me in.' (Dental technician, Interview)

The interviews with registrants revealed other challenging experiences with the Enhanced CPD scheme. Not all were aware of the option to submit a zero-hour return for one year of the two-year period:

I didn't [know about the zero-return option] until very recently, somebody had said that on a forum and I didn't know that. When they said it, I didn't believe them. I thought 'I don't think that's right'. (Dental nurse, Interview)

Issues with the annual declaration of hours were also raised. An example was recounted where a DCP colleague had accidentally fallen short on meeting the 10/2 rule by one hour despite being over their five-year cycle hours:

This is causing her an enormous amount of stress and anxiety. She spoke of having anxiety attacks and being concerned about losing her job. She was unaware of the 10/2 rule and thought dental nurse colleagues were also unaware. (Dental nurse, Interview)

Respondents to the survey were invited to indicate how easy or difficult they found it to meet certain of the Enhanced CPD requirements. More than one-in-three respondents had difficulty creating and / or maintaining a PDP (see Figure 20). In contrast, over half found it

easy or very easy to retain documentary evidence for verifiable CPD, ensure CPD is relevant to field of practice and maintain an activity log.

In the interviews, registrants commented on valuing online CPD services that kept records of all learning and certificates as this made tracking their CPD manageable and helped with PDP completion and reflection by providing an online proforma and prompt questions. Some interviewees also expressed appreciation for course suggestions from these services, based on their job role or previous learning.



FIGURE 20: All registrants - considering the following, how easy or difficult is it for you to meet the GDC's Enhanced CPD requirements? (survey data)

When the responses were looked at by dentist and DCP, the patterns were similar: both dentists and DCPs had most and least difficulty with the same items. That said, a greater proportion of dentists expressed difficulties compared to the DCPs. Of the requirements listed in Figure 20, creating a PDP and maintaining a PDP had the highest proportion of respondents rating it either very difficult or difficult: 42% of dentists and 29% of DCPs expressed difficulty creating a PDP and 45% of dentists and 31% of DCPs indicated difficulty maintaining one¹⁵. At least 19% of the dentists responding to the survey and 12% of the DCPs had some difficulty with the other requirements listed (maintaining an activity log, linking activities to at least one development outcome, ensuring CPD is relevant to field(s) of practice, and retaining documentary evidence for verifiable CPD). Mapping CPD across the four learning objectives (ABCD) (General Dental Council 2019b) received a mixed response in the interviews. While some found it "logical", others found it confusing and difficult to manage a balance across the groups. It was also suggested by some registrants we interviewed that while it was not overly constraining, the objectives were better tailored to dental professionals working in direct patient contact roles and that those working outside those roles found it more of a struggle to achieve a spread.

¹⁵ Although some of the differences between dentists and DCPs were statistically significant, the effect sizes were negligible.

4.4.2.1. Experiences of Personal Development Planning and Reflection

Responses to the statements in Figure 20 (above) suggest that a number of respondents had difficulty creating and maintaining a PDP. This finding was corroborated in the REA where authors reported that dental professionals may have some uncertainty about engaging in reflection on learning (Brindley 2018; Nasseripour et al. 2022). As reflection on learning needs is a key part of developing a PDP, Nasseripour et al. (2022) explored how UK-based dental professionals understood the concept (and practice) of reflection on practice and learning needs and how this might be supported by a training course. The authors reported that while most agreed that reflection was part of their professional practice (94%), and many practised it daily (55%), the majority had not received any formal training on reflection (88%) and did not identify a particular method that they employed (80%). The participants in that study indicated finding daily reflection useful as a way of coping with the challenges of their work but also identified time pressures in their daily schedule as a barrier to reflection. Preferences regarding reflecting with a peer (38%) were identified over reflecting on their own or meta-reflection (25%). As noted in the background context, while the GDC's requirements and guidance aim to enhance professional ownership and personalisation of learning, there may be a disconnect between these aims and dental professionals' experiences (Nasseripour et al. 2022). Nasseripour et al. (2022) outlined the benefits of a training course on reflective behaviour in assisting dental professionals to improve their reflective practice. The participants expressed preference for reflecting with a peer rather than on their own. This finding was reinforced in 'Shaping the direction of lifelong learning for dental professionals', where several participants suggested that reflection should be informal and carried out in groups (General Dental Council 2021).

PDPs were discussed in the scoping interviews with GDC staff. Despite providing templates to follow, GDC staff reported that some dental professionals misunderstood the intention of the PDP. Some pushback was reported from dental professionals who saw it as a requirement to reflect on their own practice – something they were reluctant to share with the GDC. However, dental professionals are only required to confirm that they have completed a PDP. GDC staff reflected that while the scheme encouraged compliance with requirements, the quality of dental professionals' PDPs varied and there was limited evidence that it enhanced CPD.

A set of statements was included in the survey on aspects of the PDP (see Figure 21). The results suggest that some registrants do not use the PDP in a way that supports their professional development. Lowest levels of agreement were given for the statements reading 'reviewing the PDP annually has helped me as a professional' and 'the PDP has helped me identify the CPD activities I need to meet my learning needs' (26% of dentists and 39% of DCPs agreed or strongly agreed with the former statement and 28% dentists, 40% DCPs with the latter)¹⁶. Fewer dentists agreed with these statements compared with DCPs although for both groups these statements attracted the lowest levels of agreement.

In line with the apparent difficulty that many seemed to face in making good use of the PDP, comparatively high proportions agreed that more guidance would enable best use of the PDP (49% overall). Of all the statements listed, this attracted the highest level of agreement from both dentists (41% agreed or strongly agreed) and DCPs (54% agreed or strongly agreed). There were indications of the use of PDP templates: half the DCPs agreed or strongly agreed that the GDC's template is helpful although the proportion of dentists agreeing was lower at 34%. Similar proportions of dentists and DCPs found other templates helpful (38% of dentists and 39% of DCPs agreed or strongly agreed).

Relative to DCPs, the proportion of dentists agreeing or strongly agreeing was lower for some of the other statements, most notably their responses to the statement about linking

¹⁶ Although some of the differences between dentists and DCPs were statistically significant, the effect sizes were negligible.

CPD activity to development outcomes (28% of dentists and 45% of DCPs agreed / strongly agreed), having a plan of CPD activities (29% of dentists and 45% of DCPs agreed / strongly agreed) and timeframes in which to complete CPD (31% of dentists and 46% of DCPs agreed / strongly agreed).



FIGURE 21: All registrants - to what extent do you agree or disagree with the following statements about aspects of your personal development plan (PDP)? (survey data)

Further insight into registrants' reactions to the PDP were revealed in survey comments and in the interviews. Many survey comments expressed negative views about the PDP. For a notable number of registrants, having to complete a PDP was seen as an administrative burden, an additional time-consuming task with no added value.

The PDP is extremely confusing and time consuming, I find it of no benefit and have heard the same opinion discussed by colleagues. Linking your CPD to outcomes such as A.B.C etc I also feel is of no benefit, takes up more time on paperwork which is unnecessary. (Dental therapist, Survey) In contrast, a few of the registrants we interviewed told us how the PDP was useful in planning their CPD by relating activities to the different learning outcomes and identifying training gaps:

I do think it is good, you know, because you can sort of assess yourself as you're going along. (Dental nurse, Interview)

However, the PDP's effectiveness as a vehicle to identify gaps in learning and knowledge was questioned by many in both the survey and interviews. For some it was considered as "bean counting", "box ticking", "anxiety creating" or for other people (line managers, employers) to use as a "stick to beat them with".

You have to fill out these really important forms that are pretty much pointless, because it depends how you do it. You can do it properly and take the time and do a really good job and it will be a lovely piece of homework. Or you can just quickly do it as fast as you can. Give them the sort of answers that they want to hear and basically, it's just an exercise that you've got to get through. (Dental technician, Interview)

Some of the registrants we interviewed who had experience of completing development reviews reported more positive views on the PDP process. For example, participants employed in workplaces where they completed personal development reviews explained how the information was easily transferred to the GDC's PDP template. Completing the PDP was seen as challenging for other registrants who reported finding the process "confusing". There was a suggestion that the PDP in practice can actually "confine" or "restrict" learning and limit the registrant to only undertaking activity identified in their PDP. The concept that a registrant's learning requirement evolves over time and is influenced by external factors (change of role, availability of CPD etc) can conflict with the planning ahead element of the PDP, which was viewed as static and inflexible. In contrast, dental nurses and dental technicians sometimes reported having both limited capacity for role expansion and limited access to role relevant CPD, so their PDPs did not change much each year. Older dental professionals also highlighted how they were unlikely to undertake major career developments and so their PDP was also limited and unlikely to change.

When discussing the reflective aspect of the PDP, those we interviewed often reported that they reflect on their CPD informally, thinking about what they have learned after a course and how it relates to their work. There were mixed responses to the need to record these reflections in their PDP.

It's really just putting down on paper what you would think anyway, isn't it? I think most people reflect subconsciously anyway. (Dentist, Interview)

Some interviewees reported being initially unsure how to write a reflective account as it was not something that they had much experience of doing in their role.

Difficult to start with. I've had to go away and sort of find out how to do a reflective account. I think if you're from an academic background, you're probably used to doing reflective accounts. (Dental nurse, Interview)

How much information they were expected to write was also discussed:

I always look at my reflection and think, well, I haven't written enough. (Dental nurse, Interview). This interviewee elaborated that in their role they had limited capacity to implement change. The perceived repetitiveness of completing recommended topics was also said to limit what they could write.

4.5. Suggested improvements

4.5.1. Suggestions informed by the literature

Key Messages

The wider literature (as reported in the REA) provides good evidence of the benefits of interactive learning and peer learning. This suggests that the CPD scheme might encourage participation in such activity.

Personal development planning and reflection support schemes that are responsive to individual learning needs. Reflective practice can develop through education and training.

Future development of CPD approaches and systems can benefit from insights from the wider literature. There is good evidence of the value of interactive and peer learning. Best practice suggests that more formal models of peer learning (such as the critical friend model) and sustained relationships between peers (potentially with those from other healthcare professions) can enhance the beneficial effects of CPD.

Reflection can help practitioners cope with daily challenges, but most practitioners have not been formally trained in approaches to reflection. Reflective practice can be developed through appropriate CPD and mandating the use of a PDP may encourage reflection on learning but there are risks in making reflective approaches too rigid. Preference for reflection with peers was also noted.

There is recognition of the importance of personal development planning and schemes that are responsive to individual learning needs. Although appraisal processes can provide opportunity to review practice and identify areas for improvement, the paperwork can result in the experience being seen more as a "tick-box" exercise.

The importance of assessing the potential effect of CPD requirements on protected characteristics was noted. There are different ways to evaluate impact on practice and argument for including both quantitative and qualitative measures.

4.5.2. Suggestions informed by views shared by GDC staff in the scoping interviews

Key Messages

There is scope to enhance CPD providers' awareness of how to make peer-learning verifiable and some of the other non-variable activities they offer. This might then enhance engagement with such CPD.

GDC staff were not sure whether the Enhanced CPD scheme went far enough in assuring the quality of dental professionals' learning and some suggested the place of the PDP in the scheme could be strengthened, and more attention given to the impact of CPD on practice. Greater emphasis on the PDP would have implications for how registrants are supported in the creation and maintenance of a PDP and reflective practice. Equipping undergraduate students and trainees with skills in planning their own learning would support a CPD scheme in which personal development planning and reflective practice is important. Improved communication was put forward as one way of improving the Enhanced CPD scheme in the future. For example, organisers of CPD can design activities such as peer-review or peer-learning to be verifiable but awareness of this was not widespread. This could lessen the impact of dental professionals avoiding learning activities classed as non-verifiable. In terms of communication with registrants, the GDC staff we consulted commented that they thought the GDC's work with soon-to-qualify students at university was evidence of good communication. Others suggested increasing preparation for CPD in pre-registration training by providing students with the skills to help them plan their own learning. Greater information and clarification about what the GDC does and why it is important was also suggested to help dental professionals value CPD.

The GDC staff affirmed that the Enhanced CPD scheme worked well as a system, but also questioned whether it went far enough in meeting the expectations of the GDC's role as a regulator. While it was fairly straightforward to assess whether the required number of CPD hours had been met, GDC staff were not sure whether the Enhanced CPD scheme assured the quality of dental professionals' learning. Additionally, the hours allocated to CPD activities may not reflect actual learning hours. Examples were given of dental professionals completing a 10-hour course but finding it only qualifies for two hours CPD, while another course may accrue 20 CPD hours but be completed in five hours. The role of the GDC in quality assuring CPD was discussed. The volume of CPD provision, the associated costs and the training and skills of the current staff members were said to be practical barriers to increasing the GDC's role in quality assurance of CPD and a view was expressed that it was better to encourage dental professionals to take ownership of the quality assurance of their learning.

GDC staff suggested that PDPs could become the centrepiece of the CPD process, particularly if future schemes move away from a focus on completion of a set number of hours. Suggested amendments to the PDP process included increasing the importance of reflection on learning and on changes to dental professionals' practice. For example, reflection on what skills dental professionals currently use, what skills are not used, and the skills (and knowledge) that needs updating. GDC staff also commented on the benefit of gathering more information on the quality and difference that the learning made for dental professionals. Rather than just looking at learning outcomes, they suggested that attention is given in the PDP to the difference the learning had made for the registrant. Such greater attention on the PDP would have implications for how registrants are supported in the creation and maintenance of a PDP and reflective practice.

Alternative approaches, such as revalidation and appraisal were discussed. Revalidation was seen to be too much of a change for dental professionals so soon after the introduction of the Enhanced CPD scheme and there was a danger of replacing one system with another that might be more bureaucratic and cumbersome. Also, although a revalidation process might provide strong incentive for dental professionals to engage in CPD, an unwelcome consequence could be that CPD becomes a by-product of the process rather than the focus.

An appraisal model with a supervisor to help guide a dental professional's learning and practice was also discussed. This was suggested as a way to address the lack of focus on practice in the Enhanced CPD scheme; although a registrant may be compliant with the CPD requirements, there is no guarantee that they have done any clinical work over the cycle. An appraisal, potentially co-signed by another dental professional, could re-focus the scheme onto both learning and practice.

Enhancing the PDP requirements was suggested as a compromise between the current scheme and revalidation or appraisal. It was speculated that including a minimum required number of practice hours, service-related feedback, and reflective accounts on the impact of learning on their practice, would encourage ownership, and the planning of meaningful learning.

The GDC taking a lighter touch and relying on the professionalism of dental professionals was also discussed. In such a scheme, the GDC would not monitor dental professionals' CPD activity or demand declarations but instead require dental professionals to maintain evidence of their learning in case of an audit. This would enable dental professionals to take complete ownership of their learning. However, it was suggested that many would not be comfortable with such a scheme and that public protection issues may arise if recommended topics, often interpreted as mandatory, were no longer included.

Another suggestion was a scheme more tailored or responsive to the career stage of the dental professional. Expectations could be set to reflect, for example, the stages of novice, advanced beginner, competent, proficient, and expert. CPD plans could then be designed to meet performance expectations of the various stages.

4.5.3. Suggestions arising from the analysis of the Enhanced CPD administrative dataset

Key Messages

Providing a monthly account of verifiable CPD hours completed would enable review of trends across the year.

The inclusion of apparently excessive numbers of verifiable CPD hours logged in a 12month period suggested the presence of anomalies in the database. Quality assurance processes may need review.

The dataset summarised the total number of verifiable CPD hours submitted in each 12month period according to cycle start date (1 January or 1 August). If the dataset provided a monthly breakdown of each registrant's completed verifiable CPD hours per calendar month, this would have permitted exploration of trends throughout the calendar year. It would also have enabled exploration of the impact of the COVID-19 pandemic on registrants' CPD activity.

Interrogation of the dataset indicated potential issues in terms of the quality assurance process in recording verifiable CPD hours. Yearly recorded CPD hours ranged from 0 to 4,500 hours. Even if a registrant completed eight hours of CPD every day of the year, they would only be able to complete 2,920 hours of CPD. Upon further investigation it was apparent that there were 5,348 occasions where registrants logged more than 100 verifiable CPD hours for a 12-month period, and 674 occasions whereby registrants logged more than 200 verifiable CPD hours for a 12-month period. Unless captured by a compliance audit, such registrants would not alert attention. The values submitted indicate potential inaccuracies and should be further investigated. Depending on the level of inaccuracies in such values, it could indicate that the compliance rates calculated under the analyses procedures discussed here, are somewhat inflated.

4.5.4. Suggestions informed by registrants' responses

Key Messages

Registrants would like the GDC to provide greater clarity on what is expected from the recommended and highly recommended topics. Ideally, they wanted the GDC to provide courses on some of the recommended topics or offer a list of verifiable CPD providers.

It would assist registrants with compliance if certificates for verified CPD were not rejected for omitting very specific wording and if registrants were warned if they were at risk of failing to meet the 10/2 rule. A mentoring or advisory service might be helpful to support registrants failing to meet requirements. Registrants thought failure to comply should be reviewed on a case-by-case basis.

Registrants suggested that communication by the GDC could be improved by making guidance more succinct and relevant to the different registrant roles. More guidance on how to make best use of the PDP and reflection would likely be welcomed.

A tick-box approach to CPD would diminish if the Enhanced CPD scheme were to move away from being an hours-based system.

Some dental professionals in the survey and interviews questioned the value of a CPD system based on counting hours and were sceptical that completing the required time equated to learning and / or enhanced patient care. It was explained that activities could be completed simply to hit hours requirements, regardless of quality or relevance to learning needs. Suggestions were made for an outcome-based system:

Measuring educational need and outcomes in terms of 'hours' is an absolute nonsense! The system needs to focus on outcomes, on competencies, on observed behaviour. (Dentist, Survey)

It was also questioned whether the same amount of CPD should be required throughout a career but there was no consensus on whether requirements should be reduced or increased for those nearing the end of their career. Other modifications to requirements were suggested for registrants with non-standard and non-clinical roles.

There were some suggestions for more support from the GDC. In part this related to communications. There were requests for communications to be clear and concise, highlighting what registrants needed to know and omitting unnecessary information. It was suggested that additional effort should be made to ensure that relevant information is clearly targeted to each professional role.

The proportion of nurses to dentists is like twice as many, easily. Therefore, they [the GDC] should put in twice as much effort into making sure the nurses have got the information ... what they need to know, slap bang in front of them, in plain English. (Dentist, Interview)

Improved communication about the details of the requirements was also identified as an area for improvement, including what "recommended" CPD means and the 10/2 rule. There was the suggestion that a warning system could usefully alert registrants who were looking likely to fail to meet requirements:

There should be a warning system, via email, to alert registrants when they're nearing 2 years – e.g., 'we note that you are 2 hours short of meeting the 10/2 requirement so you need to get those hours in within the next couple of months', sort of thing. (Dental nurse. Interview)

Other suggestions of support included the production of a list of verifiable CPD providers and courses linked to specific topics and roles. This was seen as a mechanism to improve access to high quality, verifiable CPD. Some registrants went further and suggested that the GDC should provide "core" training as part of the registration fee, accessible to all.

I think the GDC should provide CPD on core subjects. You set our standards and could provide a basic suite of CPD to meet these. We then could have a target for other CPD of our own choosing to meet our specific needs. (Dentist, Survey)

Many registrants would like the certification process to be more flexible and certificates not rejected simply for missing certain wording.

Participants indicated that they would benefit from additional guidance from the GDC on completing a PDP. Provision of examples of "typical" completed role-specific PDPs were

suggested to assist participants in understanding what kind of information is required and how much depth of reflection is required. Additional guidance on how to best use reflection was also identified. Better understanding of what was expected and how to achieve it was said to be one way of limiting the potential of PDPs becoming tick-box exercises.

The PDP hasn't been well explained. I would like to see some examples of good and bad ones. I have no idea if mine is appropriate. (Dentist, Survey)

Other registrants indicated that they would like the PDP to be an optional tool to guide learning rather than a mandatory requirement.

A proposal was made for an advisory service to support those registrants who may be concerned about meeting the requirements for compliance. Such an advisory service could have a role in supporting non-compliant registrants, reviewing their circumstances on a case-by-case basis, rather than automatic removal from the register. Extending the time to meet CPD requirements was suggested for those on maternity leave or on sick leave. An advisory service could also be instrumental in reviewing individual cases and determining action to be taken on failure to meet the CPD requirements, rather than automatic removal from the register.

5. Conclusions

In this last section findings are directly related to the research questions (RQs) that were posed. We refer the reader to the executive summary for an overview of findings related to the study objectives. Included there is a list of suggested improvements.

5.1. CPD objectives and levels of compliance (RQ1)

Analyses of the snapshot of the full GDC register demonstrated a 94.6% overall compliance rate with the five-year requirements of verifiable CPD hours. Rate of compliance ranged from 93.1% (the same rate for both dental nurses and dental technicians) to 98.0% (for the dual role clinical dental technician and dental technician). The finding that the overall rate of compliance on the former CPD scheme was higher (97.0%) may suggest that registrants find it more difficult to meet the requirements of the new Enhanced CPD scheme (although the difference between these groups demonstrated a negligible effect size).

Compliance with the 10/2 rule ranged from 91% to 95% of registrants across four two-year periods. Compliance was highest among dentists for three of the four two-year periods, and highest among the Other DCPs group for one two-year period. Although the 10/2 rule was only introduced with the Enhanced CPD scheme, approximately 91% of registrants were already following this when on the former CPD scheme.

Only small proportions of survey respondents indicated that they found it difficult to meet the requirements of the Enhanced CPD scheme; most found it easy to spread their CPD across the five-year cycle (which the 10/2 rule facilitates), make an annual or end of cycle statement, find, and complete verifiable CPD, and obtain the required documentary evidence. That said, difficulty in obtaining the required documents to evidence verifiable CPD was noted and, although a minority, there were those who had difficulties in conforming to the Enhanced CPD processes and requirements. GDC staff noted that incomplete applications or submissions were observed across all roles and that the timing of the annual declaration was a source of some confusion.

Some GDC staff in the scoping interviews were not sure whether the Enhanced CPD scheme was successful in encouraging dental professionals to undertake high quality CPD. High proportions of survey respondents indicated that they were discouraged from doing

activities that would not count as verifiable CPD. This suggests that some activities might be undertaken more as an exercise in securing the hours rather than chosen for the dental professional's learning development.

5.2. Impacts of COVID-19 (RQ2)

In addition to its negative affect on registrants' earnings, COVID-19 changed training needs. Some of these necessarily related to enhanced disinfection and decontamination and personal safety procedures. The survey responses showed that undertaking remote consultations was the area of greatest unmet need.

The reported most common forms of verifiable CPD were hands-on clinical training or workshops (more preferring in-person attendance) and lectures (more preferred online attendance). CPD moved online during the height of COVID-19 and the increased offer of online learning opportunities is one of the legacies of pandemic. Data from our survey indicates that this is something likely to be welcomed by many registrants who appreciate the greater flexibility of online activities.

5.3. Accessibility and inclusivity of processes (RQ3)

When looking at compliance across all registrants, neither role nor any of the EDI characteristics were predictors of compliance. EDI characteristics did not predict the compliance rate of any DCP group. A statistically significant difference was only seen among dentists in relation age. The five-year compliance rate for younger dentists (aged 22-30) was notably higher (99.7%) than that for older dentists (aged 66+; 83.0% compliance). The small numbers of some EDI groups limited the scope for quantitative analyses. Other methods to explore their experiences of CPD might be worthy of consideration.

GDC staff were aware that life circumstances (such as maternity or long-term illness) can impact on a dental professional's ability to meet CPD requirements. Barriers to meeting the CPD requirements were highlighted in the interviews with registrants. Geographical isolation for some meant choosing between long distance travel or finding alternative online CPD. Less well-paid staff were more acutely affected by the personal cost associated with certain CPD choices. Practice size could also be a barrier with smaller practices struggling to release staff for CPD. Some in non-clinical roles or rare specialties explained that they could only find relevant CPD offered by providers who did not supply adequate certificates; they reported that their attempts to get providers to use the mapping forms were not always successful. Others who had to complete employer-mandated training on GDC recommended topics found they could not always secure appropriate certification.

5.4. Views and experiences of the Enhanced CPD process (RQ4)

There was widespread support for the current length of the scheme (five years) and the 10/2 requirement. However, many dentists and DCPs were discouraged from doing non-verifiable CPD leading to self-imposed restrictions on choice of CPD. There was little firm indication from the survey responses that registrants wanted to inform the GDC either about the quality of the CPD undertaken or about the difference it made. Many survey respondents and interviewees felt the GDC's directive to undertake CPD was not a primary motivational factor but rather their participation in CPD was driven by their sense of professionalism and a personal desire to keep up to date. Interest in the topic was a key influence on CPD choice.

Only a small minority of respondents had poor experience of recording and submitting CPD information. Awareness of the option to submit a zero-hour return one year was, however, not universal and there were reports of accidentally failing to meet the 10/2 requirement. A

notable number were unaware that they could request a grace period at the end of a fiveyear cycle. There was limited support for an automatic removal from the register for failing to comply with CPD requirements and arguments made for case-by-case review.

There was evidence of some confusion about whether completion of recommended or highly recommended training was required. A limited and repeated focus on recommended topics could be demotivating and result in a tick-box approach with little time for CPD more relevant to learning needs. However, others better understood the flexibility of the Enhanced CPD scheme and were able to tailor their CPD choices to their needs. Related to this, the PDP was sometimes not well understood or used to best effect. It was seen as an administrative burden and not used to identify gaps in skills and knowledge, support professional development or enhance ownership CPD.

5.5. GDC staff insights (RQ5)

Although the GDC staff we spoke to saw regulation as a mechanism that helped ensure patient safety and patient trust, they also described the Enhanced CPD scheme as involving a level of trust in dental professionals' ability to judge their own learning needs. Integral to the scheme is the PDP but GDC staff reflected that the quality of dental professionals' PDPs varies. They recognised that some dental professionals misunderstood the intention of the PDP and suggested the place of the PDP in the scheme could be strengthened, and more attention given to the impact of CPD on practice. Some felt the Enhanced CPD scheme could go further in assuring the quality of dental professionals' learning.

5.6. Suggested improvements (RQ6)

Should greater emphasis be given to the PDP then there would be a clear need to support registrants in the creation and maintenance of one and in reflective practice. Many (49% overall) indicated that they would benefit from guidance on best use of the PDP. Equipping students and pre-qualification trainees with skills in planning their own learning would support a CPD scheme in which personal development planning and reflective practice is important.

Related to communication, there were comments made about the volume of emails and communication from the GDC and a need for clearer messaging.

To address the potential avoidance of CPD that is not readily verifiable, there is scope to enhance CPD providers' awareness of how to manage this; it is feasible for activities such as peer-learning and some of the other non-variable activities to be verifiable. This might then enhance engagement with such CPD.

There is scope also to enhance registrants' awareness of the option to request a grace period and in other ways support the registrant who might be struggling to need the requirements. This is further noted in responses to RQ10.

5.7. Learning from others (RQ7)

It is common for regulators to recommend or require learning topics or domains of knowledge. From the REA, requirements or recommendations for certain activities or topics were seen as driving the CPD choices of the registrants. Some regulators specify certain learning activities, such as peer review or peer learning and reflection. Reported benefits arising from interactive learning and peer learning provide evidence for the CPD scheme to encourage participation in such activity. Literature suggests that dental professionals may be uncertain about reflection on learning, but it has been shown that this can be developed through relevant education and training.

Common barriers to CPD cited in the literature included course costs, quality and time. Reference to these barriers was echoed by the registrants.

5.8. Links to connected GDC research (RQ8)

In 2021 the GDC published feedback from dental professionals and professional organisations on their views of the future development of lifelong learning (General Dental Council 2021). That report presented the wide-ranging and often divided opinion of registrants and we found these reflected in the survey comments and in interviews with registrants. The feedback published by the GDC reported suggestions for motivating registrants. These included incentives or enabling factors such as provision of time off to undertake CPD, access to free CPD and / or a discounted Annual Retention Fee, highlighting that time and cost can present challenges for registrants undertaking learning activities. Ensuring the compatibility of any new model with existing systems was identified as important for reducing the risk of duplication and minimising extra work for registrants.

Findings from our study are corroborated by that report: for example, the finding that participants viewed the "demise" of peer review as an unintended consequence of the Enhanced CPD schemes' removal of non-verifiable CPD (General Dental Council 2021).

5.9. Factors associated with CPD needs and meeting needs (RQ9)

It was apparent from registrant responses that support from employers was variable. From discussions with GDC staff, the workplace context was posited as particularly influential for DCPs whose engagement with CPD may be dependent on their employer's discretion. The affordability of CPD was especially noted by DCPs and undertaking CPD outside working hours was more challenging for those with caring responsibilities. For others, attending courses in the daytime required forward planning to manage clinical time, workload, and associated loss of income.

Although high proportions of both dentists and DCPs agreed that CPD in medical emergencies and CPR, cross infection control, safeguarding, clinical and technical areas and consent supported them in their work as dental professionals, those in certain roles (notably those not patient-facing) questioned the relevance of some topics. That these are recommended not mandated topics is worthy of reiteration.

5.10. Dental professionals' needs from the Enhanced CPD scheme (RQ10)

Registrants would like communications to be tailored to role and generally more succinct. Specific needs were for guidance on how to make best use of the PDP and greater clarity on what is expected from the recommended topics (misconceptions remain). There was desire for the GDC to provide courses on some of the recommended topics or at least a list of verifiable CPD from suggested providers. Flexibility on required wording on certificates for verified CPD would also be welcomed.

There were a few suggestions for mechanisms to assist compliance such as some kind of warning system to alert those at risk of failing to meet the 10/2 rule, mentoring support an advisory service to support registrants to achieve compliance and review failure to comply.

Suggestions were made for the scheme to move away from an hours-based approach to one focused more on outcomes. However, most registrants were not enthusiastic about telling the GDC about the impact of their CPD. There was little support for enhancing the role of the GDC in terms of reviewing the quality of dental professionals' PDPs and making

judgements about whether it was being used meaningfully and effectively for professional development and growth.

5.11. Collecting and analysing data on CPD processes (RQ11)

If all CPD cycles started on the same date (for example, 1 January) and data on CPD activity was captured on a monthly basis, this would permit comparisons by calendar year and allow exploration of trends in CPD activity throughout the year, revealing months of particularly high or low CPD activity. The absence of this information meant that exploration of the impact of the COVID-19 pandemic on CPD activity was not possible as data could only be explored by CPD cycle year (e.g. year 1, year 2, etc.) and not by calendar year or month.

The presence of examples of excess hours of verifiable logged in a 12-month period suggests there might be anomalies in the database and data quality assurance processes may need review.

5.12. Concluding remarks

In conclusion, this study marshalled an extensive wealth of data in various formats (database, survey, interview transcripts) to provide the GDC with a rich evidence base to inform the future development of the CPD scheme and the support of dental professionals. Evidence highlighted what seems to work well and what appears to work less well in the Enhanced CPD scheme. In term of what works well, our data indicated widespread support for the current length of the scheme (five years) and the requirement of at least 10 hours every two years. Most reported that it was not difficult to meet the requirements of the Enhanced CPD scheme and few indicated that their experience of recording and submitting CPD information had been poor. Many registrants appeared to engage in CPD from their sense of professionalism and personal interest rather than simply to meet the GDC's requirements. But the picture was complex and some registrants could be mechanistic in choosing activities to secure the required hours rather than to address their learning needs. From all the data analysed, we indicate where there is room for improvement, most notably in terms of further enhancing registrant compliance rates and specifically in the provision and succinct and potentially tailored communications about details of the scheme (about engagement with recommended topics, how to make best use of a PDP, zero-hours return and grace periods). To enhance engagement with various forms of CPD, we suggest that it would be beneficial for providers to offer greater diversity of verifiable CPD. Some flexibility on the wording of the CPD verification certificates would facilitate this. More radical change would be to introduce a scheme which is outcomes not hours-based.

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Appendix 1: Evidence base for the REA

Search terms

(continuing professional development) or CPD or (continuing education) or CET or (lifelong learning) or (life-long learning) or LLL or Enhanced CPD or (enhanced CPD) or (personal development plan) or PDP or (career development) or (professional training) AND

experience or efficacy or (record keeping) or monitoring or compliance or ownership or (learning needs) or (learning gaps) or covid or coronavirus or Sars AND

(dental team) or (dental professional) or (dental practitioner) or (dental hygienist) or (dental therapist) or (hygienist-therapist) or dentist or (dental nurse) or orthodontist or (orthodontic therapist) or (dental technician) or DCP

Regulator websites

General Medical Council

Nursing and Midwifery Council

General Optical Council

General Pharmaceutical Council

Pharmaceutical Society of Northern Ireland

General Chiropractic Council

General Osteopathic Council

Health and Care Professionals Council

Professional Standards Authority

PRISMA diagram showing the literature search process



The following exclusion criteria were applied at the outset:

- not published in English language
- published before 2017 (publication date was included in the search filter, but papers were also screened in case of incorrect listings in a database)
- contains no human data
- does not include the professionals identified in the keywords (database search only).

At the point of screening, an item was also excluded if it:

- did not concern continuing education / CPD
- did not apply to the research questions agreed with the GDC
- referred only to undergraduate education, vocational training, or assessment.

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