picker Institute Europe

Making patients' views count

Evaluation of Supporting Evidence Types for Revalidation Stage 1

PREPARED FOR: GENERAL DENTAL COUNCIL

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Picker Institute Europe

Picker Institute Europe is a not-for-profit organisation that makes patients' views count in healthcare. We:

- build and use evidence to champion the best possible patient-centred care
- work with patients, professionals and policy makers to strive continuously for the highest standards of patient experience.

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Executive summary

Aims and objectives

This study set out to evaluate the suitability of a range of potential evidence types for Revalidation Stage 1 for dentists. The following research questions were addressed:

- RQ1: What are the types of evidence already used across dentistry to assess performance and quality of the practice of dentists?
- RQ2: What are the purposes of each evidence type?
- RQ3: What is the extent of consistency in application of evidence types and standardisation in format across the four countries of the UK and practice settings?
- RQ4: What contribution could they make to assessing practice in accordance with the GDC's standards?
- RQ5: What criteria could be used to evaluate compliance with the GDC's standards?
- RQ6: Can thresholds of (un)acceptable practice be identified and agreed?
- RQ7: What are the equality and diversity implications of requiring certain evidence types?

Research methods

A mixed-method approach was used, combining

- desk-based literature and website searches
- in-depth interviews with key informants from dental organisations and practising dentists
- two online surveys: one of a stratified sample of UK dentists and another with a smaller purposive sample of individuals from dental organisations (commissioners, deaneries, defence organisations, etc).

Findings

Eleven performance management and quality assurance processes were included in the study, assigned to one of the following three categories:

- Evidence of participation in quality improvement or assurance systems
    - Continuing professional development; clinical audit; personal/professional development planning; peer review; review of significant events; case-based discussion/assessment; review of complaints and compliments
- Direct assessment of dentists' practice, performance, skills or knowledge

  - Multi-source feedback; patient feedback; direct observation
- Data gathered for payment or monitoring purposes
  - Data gathered by the NHS Business Services Authority (England and Wales), Practitioner Services (Scotland) and Central Services Agency (Northern Ireland)

The surveys showed variation in the extent to which each evidence type is used overall. CPD had most often been undertaken within the last year, and multi-source feedback the least.

Examination of the extent of usage of each evidence type by geography (the four UK countries), practice setting (general dental practice, community, hospital and non-clinical) and mode of provision (NHS, private or mixed) identified patterns of usage that can largely be related to different regulatory and contractual arrangements under which dentists practise.

The surveys revealed the extent to which each evidence type is considered to have formative or summative value, fair and meaningful criteria, and to which participation in them represents a burden in terms of time or cost to the dentists. Individual types had strengths in some areas and weaknesses in others. For example, gathering data for multi-source feedback was felt to be the most difficult but was perceived by dentists to be the most effective in improving their communication skills.

Evidence of participation in these activities does not in itself guarantee that a dentist is practising in line with the GDC's standards. Very little evidence was found relating to the evidence types' *reliability* as measures of dentists' practice against *Standards for Dental Professionals.* This is unsurprising, since the majority of them were not developed to assess dentists' performance against specific criteria.

However, participation in these activities indicates that a dentist is engaged in performance management and quality assurance processes. There is some indication that engagement in some of these (for example clinical audit, personal development planning) may improve the quality of dentists' practice.

Individually there is not sufficient evidence for their role in making summative judgements about a dentist's fitness to practise. However, in combination and used in the appropriate settings and circumstances, they could combine to signal where referral to Revalidation Stage 2 is appropriate.

There is some evidence that, reflected on in a supportive structure and driven by personal development planning, these evidence types could contribute to the formative aims of revalidation for dentists.

Recommendations

On the basis of the limited evidence available, we would recommend that two of the evidence types should not be used for Revalidation Stage 1:

- Peer review: because it does not imply making changes to improve practice, therefore lacking the formative potential of clinical audit.
- Direct observation: because it is costly and not proportionate to Revalidation Stage 1. Where it is carried out for other purposes (e.g. within the Defence Dental Services, or

as part of a Dental Reference Service inspection), evidence from it could be incorporated into a revalidation portfolio of evidence.

We recommend the following evidence types do play a role in Revalidation Stage 1 for dentists:

- Continuing professional development
- Personal development planning
- Review of significant events
- Review of complaints and compliments
- Case-based discussion/assessment
- Multi-source feedback
- Patient feedback

To meet the formative objectives of revalidation, these processes are most valuably undertaken:

- Within supportive professional/organisational frameworks.
- When they are closely linked to professional/personal development planning.
- With a mentor/appraiser/colleague who encourages the dentist to reflect on the information it provides and how they might act on it to improve their practice.

To meet the summative objectives of revalidation, the range of evidence should be considered together. The judgement of whether to refer to stage 2 should:

- Take into account both the evidence presented by the dentist and their capacity to reflect on what the evidence tells them about their practice and how they could develop it; and
- Be made in a consistent, transparent and fair way

All types of evidence should be interpreted within the context in which they are generated and presented to minimise the likelihood of unfair discrimination against individuals or groups.

1. Background

The General Dental Council (GDC) regulates all dentists and dental care professionals in the UK. It protects the public by holding a register of qualified dental professionals; setting standards of practice and conduct, (*Standards for Dental Professionals)*; assuring the quality of dental education; ensuring professionals keep up to date; and dealing with complaints.

The settings within which its 38,000 dentist registrants work range from primary care, through secondary care and non-clinical roles including management, education, research and public health. They may provide services under NHS contract, to private patients, or both. In common with other professional healthcare regulators, GDC has been charged with developing an evidence base to inform its own revalidation proposals (Department of Health 2011).

Revalidation is a mechanism by which dentists and other health professionals will be required to demonstrate, on a regular basis throughout their career, that they are up to date and fit to practise in line with their regulator's standards of practice and conduct. The frequency and intensity of revalidation for any group of health professionals should be proportionate to the level of risk (Department of Health 2007), and it is likely that dental revalidation will operate on a 5-yearly cycle.

The revalidation system being developed by the GDC is expected to meet a number of requirements. First, that it should be applicable across the range of different workplace settings and dental specialties: *"Revalidation should be capable of consistent and fair application across a range of circumstances"* (GDC 2011). Second, it should be evidence-based *"for revalidation to have the trust and confidence of the dental profession, and of patients and the public, it must be free from unfair bias"*(GDC 2011). Third, it should minimize the administrative burden and avoid duplicating the existing requirements of other bodies. Where data are gathered for clinical audit or quality assurance at practice or system level (for example for clinical governance or practice accreditation scheme), their potential contribution to an individual's revalidation portfolio will be considered. Fourth, it should be proportionate (CHRE 2012), balancing regulatory intervention with risk posed and *"imposing the least cost and complexity consistent with securing safety and confidence for patients, service users, carers and the wider public"* (Department of Health 2011). Fifth, it should perform both summative and formative functions (Department of Health 2006). Summative assessment evaluates competence or performance and makes pass/fail judgments against clearly defined standards. This component of the GDC's revalidation system is necessary if it is to claim influence as a means of ensuring patient safety or assurance of acceptable standards of practice. Formative assessment emphasises provision of feedback on an individual's strengths and weaknesses and is designed to inform improvements in practice.

Stage 1 Revalidation is the first of three proposed stages of revalidation. For stage one, all dentists will be required to submit a declaration that they have produced a portfolio of evidence of performance on a 5-yearly cycle. This portfolio is based

around the framework of standards and evidence and must be capable of indicating that a dentist is practising in accordance with the GDC's standards. It is anticipated that most dentists would be revalidated at Stage 1, but any who failed to produce sufficient evidence to demonstrate compliance with the standards would be scrutinised further under subsequent stages.

The GDC commissioned Picker Institute Europe to carry out a research project to evaluate the workability, proportionality and cost-effectiveness of a range of potential evidence types for the GDC's Revalidation Stage 1. The research will:

- Assess how widely different types of evidence are used in the variety of practice settings across the UK,
- Evaluate how each evidence type could contribute to the Revalidation Stage 1 process, i.e. its qualities as an indicator of an individual dentist's practice or performance,
- Suggest criteria for evaluation of registrants' performance against each evidence type.

It will address the following research questions:

- RQ1: What are the types of evidence already used across dentistry to assess performance and quality of the practice of dentists?
- RQ2: What are the purposes of each evidence type?
- RQ3: What is the extent of consistency in application of evidence types and standardization in format across the four countries of the UK and practice settings?
- RQ4: What contribution could they make to assessing practice in accordance with the GDC's standards?
- RQ5: What criteria could be used to evaluate compliance with the GDC's standards?
- RQ6: Can thresholds of (un)acceptable practice be identified and agreed?
- RQ7: What are the equality and diversity implications of requiring certain evidence types?

On the basis of the findings of this research, recommendations will be made to the GDC about the value of each evidence type to Revalidation for Dentists.

2. Research Strategy

This research uses a multi-method approach to identify and evaluate systems and methods of assessing the quality of dentists' practice that are incorporated in existing performance management and quality assurance processes. The first (desk-based) stages of the research were a literature search and website search. These were followed by a series of in-depth interviews and the development of two online surveys.

2.1 Literature review

Research questions

The literature review was designed to address the following research questions:

1. What types of evidence are already used across dentistry to assess performance and quality of the practice of individual dentists?
2. What are the purposes of each evidence type?
3. What contribution could they make to assessing practice in accordance with the GDC's standards?

Methods

Databases

The following databases were searched:

AMED (Allied and Complementary Medicine)

CINAHL (Cumulative Index to Nursing and Allied Health Literature)

HBE (Health Business Elite)

HMIC (Health Management Information Consortium)

Medline

Opengrey

Search terms

The diagram below shows the search terms used and how they were combined.

Dent*	AND	Practice OR standards OR performance OR conduct OR quality	AND	Regulat* OR revalidat* OR apprais* OR assess* OR complaint OR peer review OR performance management OR dental audit OR performance evaluation OR competence OR performance enhancement

NB * denotes truncated search term where, for example, "regulat*" includes "regulate", "regulation", "regulator", and "regulated".

Inclusion and exclusion criteria

The following inclusion and exclusion criteria were applied:

Inclusion

1. Papers about systems used to assess, manage, or assure the quality of the performance of qualified practising dentists[1]
2. English language, including UK, Ireland, North America, Canada, Australia, New Zealand
3. All standards of evidence, i.e. not restricted to systematic reviews and randomised controlled trials but including observational studies without control group
4. Papers published since 1992

Exclusion

1. Instruments or systems used to gather feedback *only* at organisational level (i.e. at the level of team, trust or system and not at the level of individual dentists) for quality monitoring of dental care at an organisational level.
2. Systems used only with trainee dentists or dentists in difficulty (i.e. dentists whose practice or conduct has raised concerns)

Results

[1] *Where papers were found that had no direct links to dentistry but were considered to add significant value to the review, they were retrieved and included where relevant.*

The search produced a total of 306 hits, 23 of which were found to fit the inclusion criteria. Their content was analysed and the findings integrated with the other data sources mentioned previously.

The literature review found no systematic reviews, one major literature review (Eaton et al, 2011), one randomised controlled study (Bullock et al, 2007) and 15 observational studies. The remaining papers retrieved were guidance documents or commentaries.

The lack of high quality evidence from the existing literature limits the extent to which robust conclusions and recommendations can be drawn.

2.2 Website search

Research questions

The website search addressed the following research questions:

1. What types of evidence are already used across dentistry to assess performance and quality of the practice of individual dentists?
2. What are the purposes of each evidence type?
3. What contribution could they make to assessing practice in accordance with the GDC's standards?

Methods

The websites of the following types of organisations were searched:

- Departments of Health, NHS/health service organisations, corporates, system regulators, dental quality assurance schemes, professional associations, deaneries , Medical Royal Colleges and defence organisations.

Each website was searched for information about performance assessment and quality assurance. Where documents or papers were found which detailed documentation or approaches used for these purposes, they were downloaded for analysis. Their content was used to clarify the context and to inform data collection and analysis. Further details of the websites searched can be found in the bibliography.

2.3 In-depth interviews

Research questions

The in-depth interviews were designed to address the following research questions:

- RQ1: What are the types of evidence already used across dentistry to assess performance and quality of the practice of dentists?
- RQ2: What are the purposes of each evidence type?

- RQ4: What contribution could they make to assessing practice in accordance with the GDC's standards?
- RQ5: What criteria could be used to evaluate compliance with the GDC's standards?
- RQ6: Can thresholds of (un)acceptable practice be identified and agreed?
- RQ7: What are the equality and diversity implications of requiring certain evidence types?

In total, 18 key informants from dental organisations were interviewed and 8 practising dentists.

Sample 1: Dental organisations

British Dental Association

COPDEND

Denplan Ltd

Chief Dental Officer - England

Chief Dental Officer - Scotland

Chief Dental Officer - Northern Ireland

Chief Dental Officer - Wales

Care Quality Commission x 2

NHS National Commissioning Board

Senior Assessment Advisor

NCAS

Defence Postgraduate Dental Dean

Department of Health and Social Care in Wales

Postgraduate Dental Dean, Wales

Department of Health and Wellbeing in Scotland

Faculty of GDP (UK)

Northern Ireland Health and Social Care Board

Regulatory and Quality Improvement Authority (RQIA)

Sample 2: Practising dentists

Dentist in a wholly private small practice

Dentist working in mixture of NHS and private

Dentist working in secondary care setting

Dental educationalist (non clinical)

Dental administrator (non clinical (e.g. public health))

Dentist working in the NHS

Dentist working in defence/military

Locum dentist

Efforts were made to include a representative from a dental defence organisation, commissioning body, dentists from the Channel Isles or Isle of Man, and a dentist practising in a purely private corporate setting. However, efforts to recruit these participants were not successful within the timeframe of the project.

Discussion guides for the interviews can be found in Appendix 1.

2.4 Online surveys

Research questions

The online surveys were primarily designed to answer the third research question:

- RQ3: What is the extent of consistency in application of evidence types and standardisation in format across the four countries of the UK and practice settings?

Survey 1: Dentists

Research methodology and sample:

The survey population was the GDC database of all dentists registered with the GDC. Those whose record included no email address were removed since an email address was required to administer the online survey. The sampling frame was stratified by gender (M/F), age (<40 and =>40) and country of registration (England, Scotland, Wales and Northern Ireland), and the sample was drawn with the aim of an achieved sample of 100 dentists in each of the 16 categories.

Based on an estimated response rate of 35%, a sample of 286 (100*100/35) was required for each category. Where there were fewer than 286 in the population for a category, they were all included in the sample (this was the case for all four groups for Wales, and for female dentists =>40 in N Ireland). This resulted in a total sample

of 4244. The details of the sample can be seen in the technical appendix (Appendix 2).

The survey closed after 12 days with 498 respondents, representing a response rate of 12%. This was lower than expected and it is anticipated this was due in part to the length and complexity of the survey and in part due to the bureaucratic nature of the subject matter.

This survey intentionally oversampled dentists from Wales, Northern Ireland and Scotland in order to ensure views from these countries were adequately and accurately represented. However, in order to make the responses representative of the UK as a whole, respondents were given a statistical weight by country and gender, bringing proportions back to those seen in the entire GDC register.

A full sample profile and further detail on weighting can be found in the technical appendix (appendix 2).

Questionnaire:

The content of the online survey instrument is attached in Appendix 3

Data tables:

Weighted data tables with confidence intervals can be found in Appendix 4.

Margin of error:

The overall margin of error (for the unweighted sample) was +/-4.4%.

Margins of error calculated for subgroups of respondents (by geography, practice setting, mode of provision, dental practitioner type) can be found in Appendix 2.

Survey 2: Dental organisations

Research methodology and sample:

The sample was a purposive sample of individuals within dental organisations who had not participated in the in-depth interviews but whose professional position or organisational role lends them a valuable perspective on the research questions.

41 invitations were despatched by email. 31 responses were received, of which 19 were partially completed. This represents a 75% response rate for the full sample (or 30% response rate for completes only).

Data from the stakeholder organisations was not weighted as this sample was not designed to be representative of a particular population.

Questionnaire: The content of the online survey instrument is attached in Appendix 5.

3. Findings

The findings from this research are presented in three sections:

- 3.1: Overview of the evidence sources identified, including:
  - definitions and descriptions of each evidence source
  - overview of the extent of application of each evidence source
- 3.2: In-depth analysis of each evidence source, including:
  - extent of application by geography, practice setting, mode of provision, dental practitioner type
  - how each evidence source can demonstrate practice in accordance with the principles and standards in the GDC *Standards for Dental Professionals*
  - evaluation of formative and summative potential
  - examination of burden and acceptability
  - conclusions on the value each evidence source offers to revalidation
- 3.3: Discussion of equality and diversity implication

Notes: Where quotations from the semi-structured interviews are included in the reporting of the findings, the source of the quotation is shown at the end. Where "PD" is shown, this indicates a quotation from one of the practising dentist interviews. Where "KI" is shown, this indicates a quotation from one of the key informant (stakeholder organisation) interviews.

Where survey findings are presented in chart form, significant differences between categories or sub-groups are shown using the letters A-D next to the relevant column.

3.1: Overview of the evidence sources identified

Three distinctive types of evidence were identified from the qualitative and quantitative research phases, as illustrated in figure 1 below.

Quality Improvement Activity	Assessment of dentists	Data gathered for other purposes
•CPD •Clinical audit •Personal development planning •Peer review •Review of significant events •Case-based discussion / assessment •Complaints & compliments	•Multi-source feedback •Patient feedback •Direct observation	•Data on activity and quality (e.g. from NHS Business Services Authority)

Figure 1: Evidence sources identified

First is evidence of **participation in quality improvement** or **assurance systems** that record activity, for example continuing professional development (CPD)[2].

The second are those that directly **assess dentists' practice, performance, skills and knowledge** by measuring their quality against agreed criteria, for example multi-source feedback (Morris et al. 2001).

A third category of evidence is **data gathered for other purposes** but which can also have a secondary application, for example recording of units of dental activity (UDAs) collected for payment purposes, in monitoring probity.

These categories are not completely exclusive, for example some types of audit could be part of a quality improvement activity or could contribute to an objective assessment of the quality of practice. However, the distinction is a useful one in that it signals the different primary purposes for which each is carried out and therefore its potential to contribute to a formative and/or summative revalidation process, and the conditions within which this can be achieved.

Before examining these forms of evidence in more depth, it is useful to briefly consider how each one can be defined and described and its principal purpose, using the findings from the qualitative work (literature review and in-depth interviews).

[2] *Consideration was given to whether appraisal should be included as an evidence type within the category of "evidence of quality improvement activity," or as a mechanism for performance management, along with system regulator inspections, primary care organisation inspections etc. While it could be seen to straddle the two categories it was felt to sit more naturally along with the performance management mechanism since, like the other mechanisms, it is a process to which a variety of evidence types could be brought rather than a discrete type of evidence itself. We felt that if this was perceived by respondents as a category error, they would add 'appraisal' in the free text box for "other" and in fact only 3 respondents did so. It is also consistent with the approach to medical revalidation which distinguishes between supporting evidence and the process of appraisal to which it is to be presented.*

Definitions

3.1.1 Continuing Professional Development

CPD can be **defined** as activity that could reasonably be expected to advance a dentist's professional development (GDC 2011).

CPD can take a number of **forms**, for example: courses and lectures, vocational training or general professional training study days, conference attendance, peer review and clinical audit, and educational elements of professional and specialist society meetings. CPD may be delivered or participated in through a variety of means, including distance learning, multimedia learning, staff training and private study and attending conferences.

Its **purpose** is to keep skills and knowledge up to date in order to provide patients with high quality care. It potentially assures dentists' competency, satisfies public expectations and keeps dentists abreast of advances in patient care, although no direct associations are evidenced in the literature (Eaton et al. 2011).

3.1.2 Clinical Audit

Clinical audit can be **defined** as "a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and implementation of change" (NICE, 2002). It is described by NHS Education Scotland as a cycle within which there are the following stages:

- Identifying the area to be improved (the problem or issue)
- Establishing best practice & setting criteria and standards
- Observing what you are currently doing and collecting data
- Comparing against the criteria and standards
- Taking action to improve care - implementing change
- Monitoring to sustain improvement and re-audit (NES, 2011)

The **purpose** of clinical audit is to improve clinical practice, patient care and outcomes, and to demonstrate these improvements through implementing and also monitoring change (Bullock et al. 2000). According to the Department of Health, it aims to encourage *"... individual general dental practitioners to self-examine different aspects of their practice, to implement improvements where the need is identified and to re-examine, from time to time, those areas which have been audited to ensure that a high quality of service is being maintained or even further improved*" (Department of Health 1997, paragraph 18).

3.1.3 Personal Development Planning

Personal/Professional Development Plans[3] can be **defined** as structured tools to provide a framework for individual reflection and action planning based on educational and professional development needs.

Its **purpose** is to develop the capacity of individuals to reflect on their own learning and achievement, and to plan for their own personal educational and career development (Clegg & Bradley 2006).

3.1.4 Peer Review

Peer review can be **defined** in a variety of ways. It may be "the systematic evaluation by a group of colleagues of their own or each other's dental care based on clear criteria and standards" (Poorterman et al, 1998, p348).

An alternative definition is clinicians assessing one another's performance in ways such as observing their clinical activity or analysing outcomes against pre-defined performance indicators (Ricketts et al. 2003).

Bullock et al (2000) describe peer review as a less methodical exercise in which "groups of dentists meet together, share experiences and identify changes that could lead to improvements in their service to patients" (Bullock et al. 2000, p445).

In their review of quality assurance in dentistry in the Netherlands, Poorterman et al (1998) argue that the criteria and standards for peer review should be identified by experts with the co-operation of the dental field so they are acceptable to the profession as a whole. They could be adapted by peer groups or individuals to their own particular setting (Poorterman et al. 1998).

In practice, the term "peer review" was used by participants in the in-depth interviews to refer to a wide range of less formal, managed processes. One participant referred to it as an informal shift towards a professional culture in which dentists exert pressure on one another to place a high regard on good quality practice.

Another participant used peer review to mean working in contexts in which dentists see each other's work and expect others to see theirs. This may be because the dentists, their patients, or both are either highly mobile or work in a clinical setting which relies on collaboration between professionals. They learn methods and techniques from one another, and the knowledge that their work will be widely seen drives up their standards of practice.

Its **purposes** include contributing to the quality of dental care, encouraging the dental profession to take responsibility for care it provides, and offering the possibility for the discussion of the quality of dental care as delivered by fellow dentists, thus serving an educational purpose (Poorterman et al. 1998).

[3] The terms "Professional Development Planning" and "Personal Development Planning" are used interchangeably and are both abbreviated to PDP

3.1.5 Review of significant events

A review of significant events, alternatively known as a significant event audit, can be **defined** as occurring when "..individual episodes in which there has been a significant occurrence (either beneficial or deleterious) are analysed in a systematic and detailed way to ascertain what can be learnt about the overall quality of care and to indicate changes that might lead to future improvements." (Pringle et al. 1995).

Amongst its **purposes** are risk management, fostering a positive approach to complaints, identifying learning needs, identifying audit and research topics and understanding other team members' roles, stimulating clinical audit and needs assessment, informing commissioning and improving quality (Pringle et al. 1995).

3.1.6 Case-based Discussion and Case-based Assessment

Case-based discussion (CbD) can be **defined** as an in-depth discussion about a patient the dentist has recently seen alongside an inspection of their clinical records, or *"a documented account of interesting or challenging cases that a doctor has discussed with a peer, another specialist or within a multidisciplinary team."* (Royal College of Psychiatry 2012). Case-based assessment (CbA) goes beyond discussion of a case, to assessment of the clinical reasoning and record keeping against a set of standards or criteria.

Its **purpose** is to assess clinical reasoning, judgement and record-keeping and a discussion of the ethical and legal framework of practice. It can also stimulate discussion about educational needs and applying standards.

3.1.7 Review of complaints and compliments

A review of complaints and compliments can be **defined** as the systematic examination of complaints and compliments relating to an individual or, more often, a practice or service over a given period.

Its **purpose** is to learn about and reflect on the aspects of performance that are particularly good, and those that are particularly poor.

Summary of quality improvement activities

All of the quality improvement evidence types described in sections 3.1.1-3.1.7 may currently contribute to performance management and quality assurance in dentistry. The majority of the material found in the literature referred to these quality improvement activities. Participation in CPD is a mandatory condition of registration with the GDC, for example, while clinical audit and peer review may be part of health service contracts for dental care.

There is an inter-relationship between personal development planning, peer review, clinical audit and CPD. PDP and clinical audit can help ensure CPD needs are identified and met at an individual level and, if co-ordinated, at a collective level. In peer review, the identification of standards, change or educational need might be the end point of the process. Clinical audit goes further than peer review: the dentist identifies standards and measures practice against them, implementing a change to their practice or addressing an educational need.

Assessment of dentists

3.1.8 Multi-Source Feedback

Multi Source Feedback can be **defined** as a standardized means to collect anonymous assessments of clinical and professional behaviours from a range of related perspectives, such as colleagues, superiors and patients.

Its **purpose** is to shed light on aspects of individual practice.

3.1.9 Patient Feedback

Patient feedback can be **defined** as a set of questions about patient's views on the performance of a dentist they have recently consulted, administered in a standardized way.

Its **purpose** is to assess dentists' performance on criteria relating to patient care and patient experience from the point of view of a sample of patients.

3.1.10 Direct observation

Direct observation can be **defined** as the inspection of the clinical work carried out by a dentist along with the patient records. The observation may occur as the examination or intervention takes place or it may be carried out after the work is complete.

Its **purpose** is to examine directly the quality of a dentist's work and in some cases whether the work has indeed taken place.

Data gathered for monitoring and payment purposes

3.1.11 Data gathered for monitoring and payment

Quantitative data on access, activity, quality and finance are gathered by the Dental Services division of the NHS Business Services Authority (BSA) on all work carried out by NHS dentists in England and Wales for payment and monitoring purposes, and by Practitioner Services in Scotland. Activity data are submitted by dentists themselves which allows commissioners and regulators to obtain an analysis of aspects of NHS dentistry practice such as prescribing patterns, treatment patterns, and recall periods. These are submitted electronically or on paper, allowing almost real-time analysis and

benchmarking. A survey of patients is also carried out by BSA which asks for information about the treatment they received and also asks two questions about their satisfaction with the service.

This evidence is collected for payment and monitoring **purposes** and to allow checks of probity. The data allow commissioners to identify and investigate anomalous practice, and to check that the work dentists claim payment for was indeed carried out by performing a "Claims to records check".

3.1.12: Extent of usage and applicability of evidence sources

Information captured in the survey of dentists provides a more detailed understanding of the extent to which each of these evidence types is currently in use, as shown in figure 2 below.

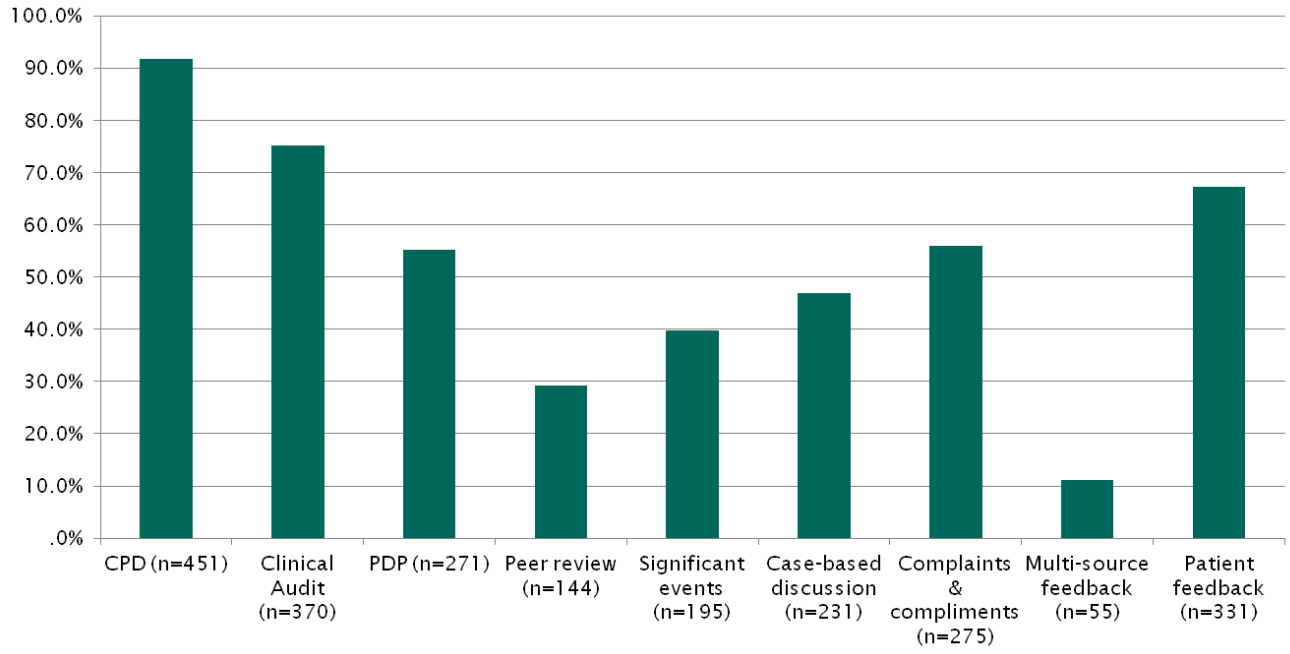

Figure 2: Dentist survey – extent of usage of evidence sources ("Which of the following have you, or your practice, undertaken in the last year?")

Direct observation does not feature in this chart since it was not included in the dentists' survey. This is because there was a period of overlap between the analysis of the desk-based stage of the project and the development of the survey, and the identification of direct observation as a potential evidence type fell between the two.

The following four charts, drawn from the dentist survey, give an overview of the extent to which each of the evidence types is used by geography, practice setting, mode of provision and practitioner type.

In order to maintain the integrity of the discussion of each evidence type, further discussion on each of these aspects can be found in the subsequent in-depth analyses of each evidence source.

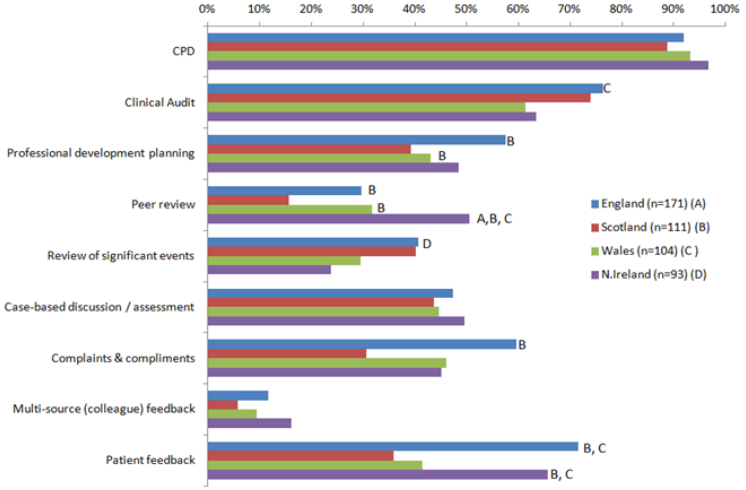

Figure 3: Extent of application of evidence sources, by geography (dentist survey)

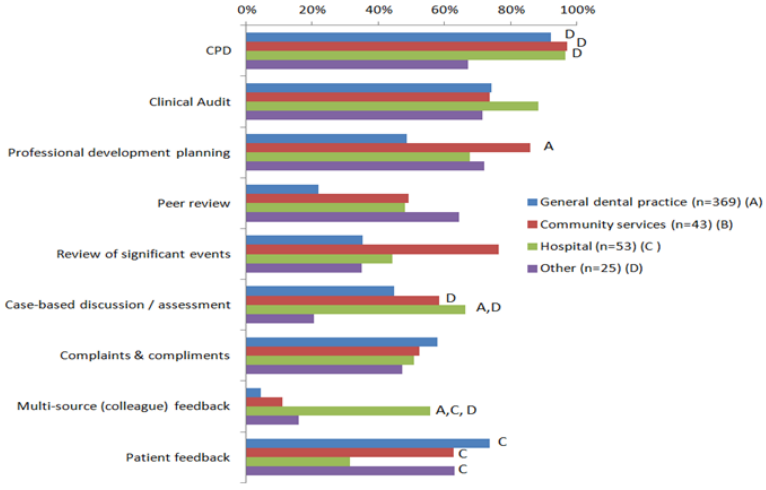

Figure 4: Extent of application of evidence sources, by practice setting (dentist survey)

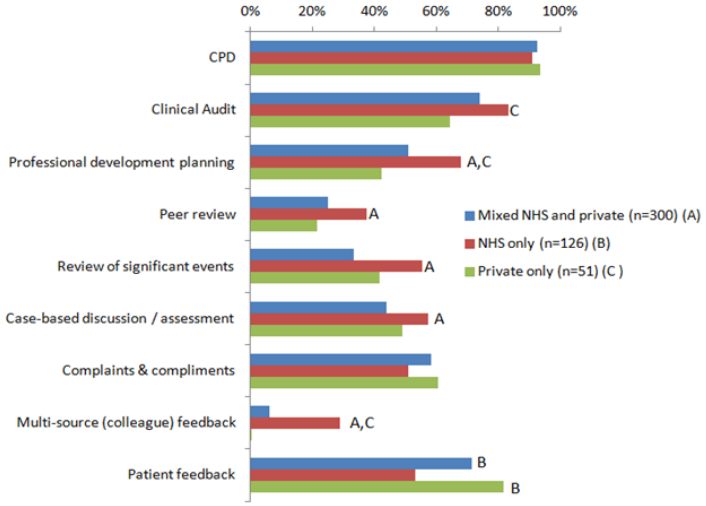

Figure 5: Extent of application of evidence sources, by mode of provision (dentist survey)

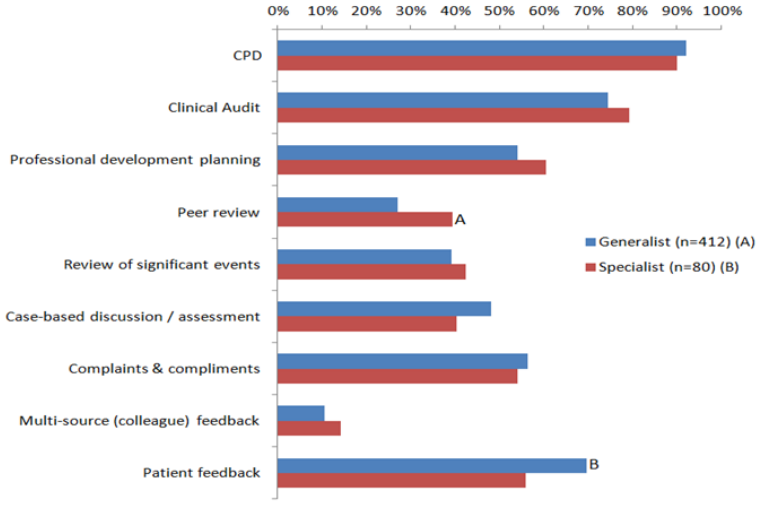

Figure 6: Extent of application of evidence sources, by practitioner type (dentist survey)

3.1.13 Differences in performance management and quality assurance by country and setting

Appendix 7 sets out the main systems in place for the performance management and quality assurance of UK dentists in primary care. It illustrates the diversity of contractual and regulatory systems, many of which do not link consistently to particular evidence types.

3.2 In-depth analysis of each evidence type

3.2.1: CPD

Extent of usage

Participation in CPD is a requirement of registration with the GDC. Dentists must complete a minimum of 250 hours' CPD over a five year cycle, at least 75 hours of which must be verifiable (i.e. it must have concise educational aims and objectives, clear anticipated outcomes, quality controls and documentary proof). The GDC strongly recommends that the verifiable CPD should include three *core* subjects: medical emergencies (minimum 10 hours per five year cycle); disinfection and decontamination (minimum 5 hours per cycle); and radiography and radiation protection (minimum 5 hours per cycle).

Since it is compulsory, it is unsurprising that the dentists' survey revealed that 92% of respondents to the dentists' survey had carried out CPD in the last year – more than any of the other activities (see Figure 2, page 21). The dentist survey revealed it was carried out principally to satisfy the requirements of appraisal and for inspection by a system regulator, as shown in Table 1 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	38	8.7%
Inspection by system regulator (CQC, RQIA, HIW)	101	22.9%
Assessment for a quality assurance or accreditation scheme	35	8.1%
Appraisal	104	23.7%
Other performance management process/scheme	28	6.4%
NCAS practice inspection	0	.1%
Dental Reference Officer assessment	3	.7%
Fellowship exam	17	4.0%
Other	113	25.5%
Total	**441**	**100.0%**

Table 1: Dentist survey: Usage of CPD in the last year

Similar levels of usage were seen amongst respondents practising in different geographies and practice settings and also according to the mode of provision and type of dental practitioner, as shown in Figure 7 below.

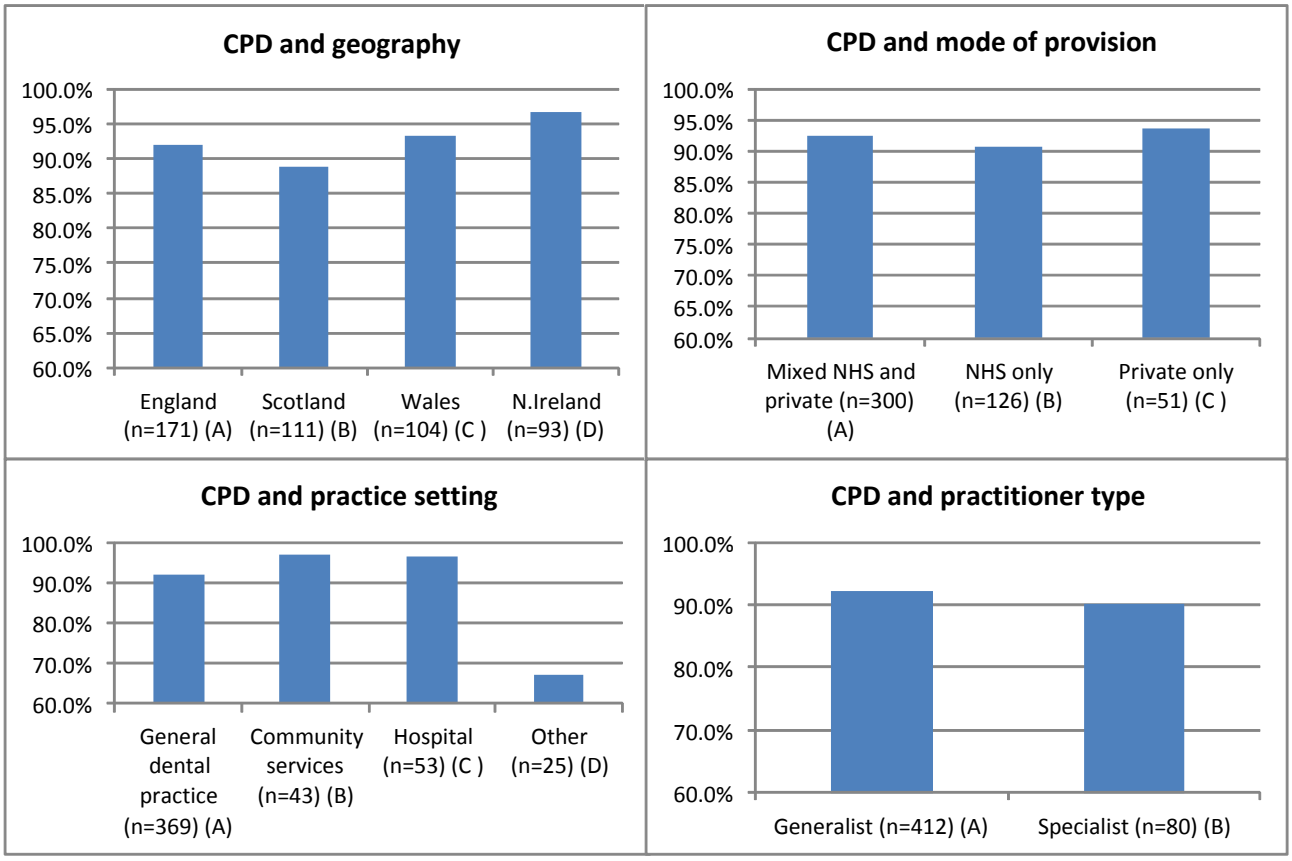

Figure 7: Dentist survey: Extent of application of CPD by geography, mode of provision, practice setting and practitioner type

Contribution of CPD to aligning practice with GDC Standards

Depending on the particular activity, CPD could relate to any of the *Standards for Dental Professionals*, but in a general sense, CPD relates directly to the principles of:

- Maintaining your professional knowledge and competence;
- Putting patients' interests first and acting to protect them.

Participants in the dentists' survey were asked to consider how each evidence source helped them in demonstrating certain specific aspects of practice (which are also reflected in the GDC's *Standards for Dental Professionals*).

CPD was found to offer wide-ranging coverage of the attributes examined in the survey, but most valuable for reflecting on and identifying CPD needs generally and identifying clinical skills needs, as shown in figure 8 below.

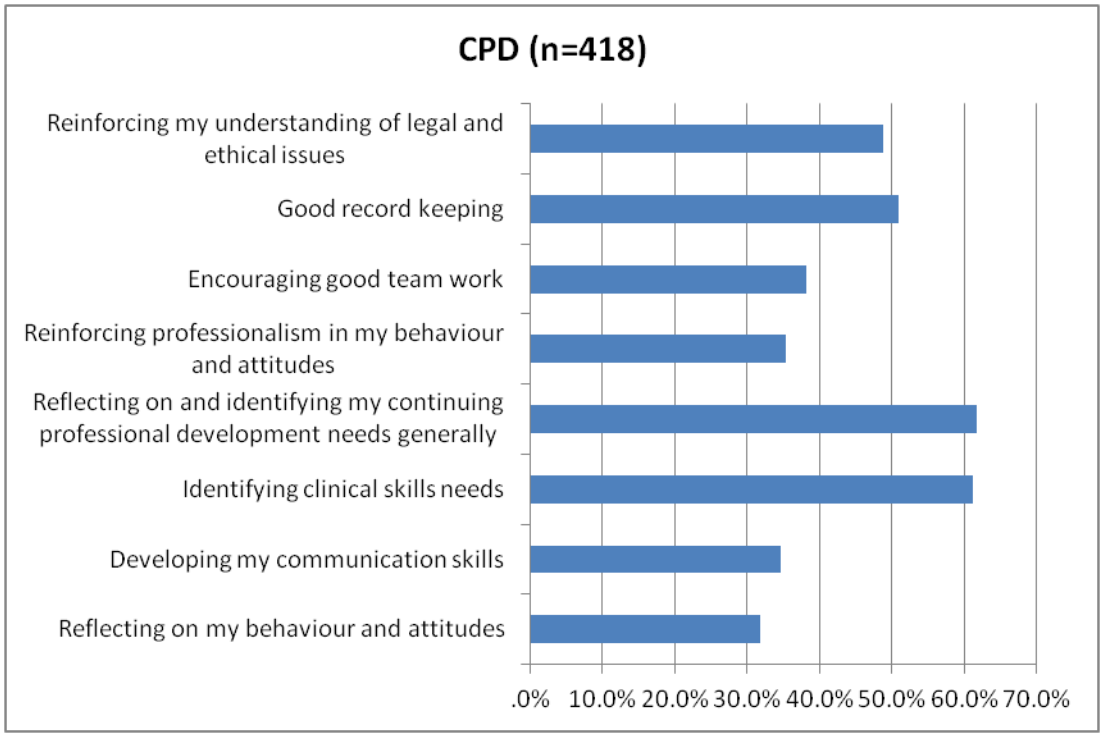

Figure 8: Dentist survey: Which if any of the following did CPD help with?

Summative and formative potential of CPD

The dentist survey revealed a sense amongst participants that taking part in CPD was probably good overall for improving practice, but that its effectiveness was not guaranteed in every case. Whilst only 46% of dentists surveyed had received feedback at a personal or practice level on their CPD, 68% of those perceived that it had a positive impact on their practice, as shown in figure 9 below.

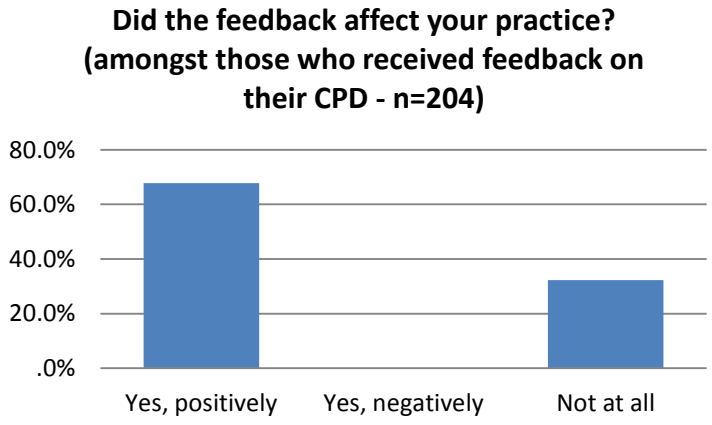

Figure 9: Dentist survey: Extent of feedback on CPD affecting practice (amongst those who received feedback)

These findings were supported by the in-depth interview findings.

However, one reason given for why effectiveness might not be guaranteed was the suspicion that a minority of dentists would cheat, for example by signing in to a course and spending the day reading the newspaper at the back of the room.

> *"While it is tempting to presume that such activities result in 'improvement', and there is some negative evidence that dentists who fail to participate may be underperforming, there is no actual evidence that the reverse is the case or that participants are anything other than passive attendees in some cases." (Stakeholder organisations survey)*

While one interviewee felt they themselves, and probably many dentists, had benefitted from CPD, he felt it was inadequate as a means to protect patients from poor practice, particularly when only a certificate of attendance is required to claim CPD "*points*".

> *"It's a (sighs) I don't know, it's a means of saying to the public we're protecting you but they're not really." (PD1)*

A recent review of the literature (Eaton et al. 2011) on CPD found no evidence that participation in CPD is a reliable indicator of professional competence or performance. Similarly the authors found no demonstrated link between participation in CPD and enhancement of performance, but they cautioned that these findings could be attributed to the methodological challenges of assessing the effectiveness and impact of the outcomes of CPD (Eaton et al. 2011).

Views of participants in the in-depth interviews regarding the value of taking steps to ensure that CPD would improve practice and protect patients by assessing learning outcomes covered a wide spectrum. At one end, an educationalist argued that post-programme testing should, in at least some cases, include core CPD, a requirement of sign-off and the award of CPD credits. Another held the contrasting view that such assessment was a slight on the professionalism of the majority of dentists, as well as impractical:

> *"It seems to me that we're dealing with professional people and having to start to do some sort of assessment every time somebody goes to a CPD event is, is not the right way to do it… and anyway, who is the assessor… And who sets the standard, who is going to do the marking, who is going to, where is the resource to do that assessment and where is the educational research that says this is a benefit?" (KI 13)*

Several participants contributed examples of how the regulatory value of CPD was or might be enhanced. Candidates for the Fellowship of the Faculty of General Dental Practice (FGDP) are asked not only to report what CPD they have attended, but for some reflective commentary on its impact on their practice. This interviewee felt that such an approach was appropriate for FGDP Fellowship assessments, but would be too time consuming for revalidation.

> *"We are able to question them on the course, which provides some assessment of learning, so that there is some form of assessment there… but this is time consuming. However, for Fellowship assessment we've got about a 45 minutes to an hour oral assessment, we can cover quite a lot of ground."* (KI14)

For some CPD activities, participants have to complete pre- and post-course assessments to demonstrate learning or knowledge gained from the course, but these were sometimes

thought to be open to abuse or cheating. As one participant, a dental educationalist, pointed out, even courses that test practical skills, such as resuscitation on a mannequin (*"which you can kill"* (PD2)) offer no guarantee of long-term improvements in practice:

> *"Some courses, such as medical emergencies, use sophisticated simulation on mannequins, others such as disinfection and decontamination may have MCQ [multiple choice questionnaire] and you have to perform to a certain standard before you are signed off. But this does not tell us how learning translates into dentists' clinical practice or whether they will continue to update their knowledge and understanding." (PD2)*

Registrants are encouraged to spread their learning activities throughout the five year CPD cycle, but it is possible for long stretches to pass between CPD sessions on *core* subjects (medical emergencies, disinfection and decontamination, radiography and radiation protection). One participant cited the example of a dentist who completed their medical emergencies training at the beginning of one five year CPD cycle and then again in the final year of the second cycle. They need not have updated it at all during that 9 year period, and he argued this was too long to assure patient safety. He recommended interim online training for core subjects with post-course assessment in between in-person training at longer intervals.

One interviewee argued that rather than assessing learners after a course or programme, it would be better to make the CPD itself more engaging using interactive or blended delivery methods (KI13). The environment in which learning takes place was deemed to potentially affect the value of CPD. One interview participant argued that some is most beneficially taught in practice or with a dental team, which allows colleagues to learn from each other and apply it directly to their own circumstances, for example:

> *"Where topics such as CPR, health and safety or disinfection and decontamination are taught in practice, it can be tuned to their particular environment and practice circumstances, which enriches the learning experience." (PD2)*

These ideas are in line with research evidence of the conditions under which there can be more confidence that CPD has formative value. CPD can be active or passive. Adult learning is more likely to be effective if it is relevant to the learner's work, interactive and problem-solving (Bloom, 2005; PSI 2010). CPD that is sustained over a period of time, using interactive methods of delivery or combined techniques, was found to be more effective, particularly if it takes place in the context of support in identifying learning needs, planning and reflective practice (Eaton et al. 2011). In its guidance for revalidation, the GMC states that CPD should be needs-based and outcomes focused, and develop competence and performance, rather than take a time-served approach (GMC 2012b).

Burden and acceptability of CPD

Dentists participating in the survey were also asked to consider how difficult and costly it was to undertake CPD work. Whilst their responses show that, in general, CPD was not considered terribly difficult, they did show that the cost to dentists of carrying out CPD is considered to be higher than any of the other activities apart from MSF with 27% of dentists rating it to be either very or quite costly (see figure 10 below). 26% said it was not at all costly, which was a lower figure than for any other process, although only slightly lower than peer review at 28%.

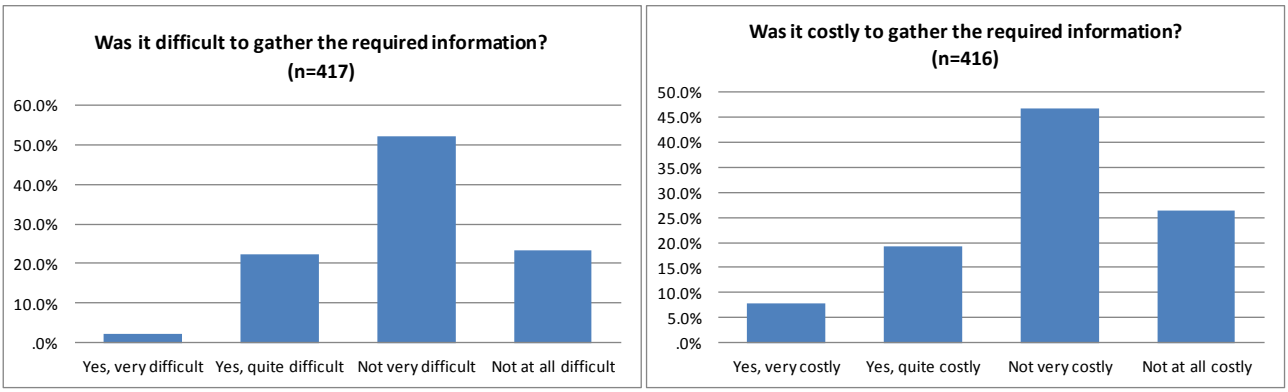

Figure 10: Dentist survey - levels of difficulty and cost burden involved in undertaking CPD

Survey respondents felt the CPD requirements were unduly demanding for GDPs who are in private practice and/or with NHS contracts and who have financial difficulties, as they bear the cost of courses and other CPD activities. As one put it:

> *"General dentists in general practice have to fund their own CPD courses, whereas in salaried they receive funding. General NHS dentists in practice with only a small list number of NHS patients may be struggling financially which may prevent them attending courses which are costly but may benefit them clinically." (Dentist survey response)*

Dentists who are geographically remote from where CPD activities are run, and those with commitments such as young families found it more difficult to attend:

> *"Acquiring appropriate CPD is extremely expensive and time consuming, I work part time, all the NIMDTA courses are miles away and community services will not allow day release all the time as the trust is so broke." (Dentist survey response)*

Those who are no longer in clinical work but for whom registration with the GDC is a condition of holding a particular role (e.g. a local dental protection advisor) felt that the CPD requirements were unduly burdensome, and that flexibility should be allowed around completing core topics. A considerable proportion (six of the 26) of the dentists who offered their concerns about CPD commented that dentists on extended leave or working part time should not have to meet the full CPD requirement. Dentists whose organisation was unsupportive of their development met challenges:

> *"Principal completely disinterested, no encouragement, often actively discourages." (Dentist survey response)*

In a study of the evaluation of short courses for GDPs in the West Midlands, individual participation in CPD was found to be unstructured and typically unrelated to an individual, regional or national needs analysis. (Belfield et al. 1998). This concern was echoed in a comment in the survey for the present study regarding the quality and variety of CPD on offer:

> *"The CPD timetable in N. Ireland is quite limited, frequently repeated and quite expensive, yet we have to attend a certain number per year. They should be either more varied or the CPD hours should be reduced as we end up going to the same things year in, year out." (Dentist survey response)*

Another recent study of GDC registrants' perspectives on CPD (Electoral Reform Research 2012) found that the majority of the stakeholders and providers they interviewed accepted that they should take part in mandatory CPD, and 64% of all registrants agreed they would do CPD even if it were not mandatory. However, many were concerned about the quality of the CPD on offer. Some stakeholders called for the GDC to accredit CPD courses to help the registrant choose good quality ones.

The lack of national, local or individual needs analysis for CPD provision was documented in a study of CPD provision (Belfield et al. 1998). Bullock et al (2000) argue that information held (anonymously) by facilitators of collaborative clinical audit and peer review could inform the appropriate provision of CPD locally so that it might more closely match the CPD needs of local dentists. One interviewee explained efforts had been made by one Deanery to develop a systematic approach to the provision of CPD courses by assessing need based on information from local dentists' PDPs and feedback from existing courses.

Conclusion

CPD is a mandatory element of registration for all GDC registrants and is therefore widely carried out across the UK and the range of practice settings. It is carried out in a five year cycle.

There is little empirical evidence to demonstrate that participating in CPD has a beneficial effect on the quality of care delivered by dentists, their performance, competence or patient safety or experience. However, this does not mean there is no beneficial effect. The limited evidence base may be attributable to the methodological challenges of establishing a causal link between participating in CPD activity and quality improvement.

The contribution of CPD, to the process of revalidation, could be enhanced if:

1. It is undertaken in the context of professional development planning that identifies training needs.
2. A supportive organisational structure is in place to facilitate reflection.
3. It is needs based and outcomes focused, developing competence and performance, not undertaken with a time-served approach (GMC 2012b).
4. The provision of courses is locally needs-assessed and the quality of the courses is assured.

3.2.2: Clinical Audit

Extent of usage

The qualitative interviews, survey findings and literature review for this study revealed that clinical audit is widely used within dentistry. 75% of respondents to the survey said they had been involved in a clinical audit within the last year (see figure 2, page 21). Its main application was for inspection by primary care organisations or by a system regulator, as shown in table 2 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	92	25.0%
Inspection by system regulator (CQC, RQIA, HIW)	86	23.3%
Assessment for a quality assurance or accreditation scheme	63	17.2%
Appraisal	31	8.4%
Other performance management process/scheme	36	9.7%
NCAS practice inspection	0	.0%
Dental Reference Officer assessment	7	2.0%
Fellowship exam	4	1.1%
Other	50	13.5%
Total	**369**	**100.0%**

Table 2: Dentist survey: Usage of Clinical Audit

The extent to which application of clinical audit varies by geography, mode of provision, practice setting and practitioner type, is shown in figure 11 below.

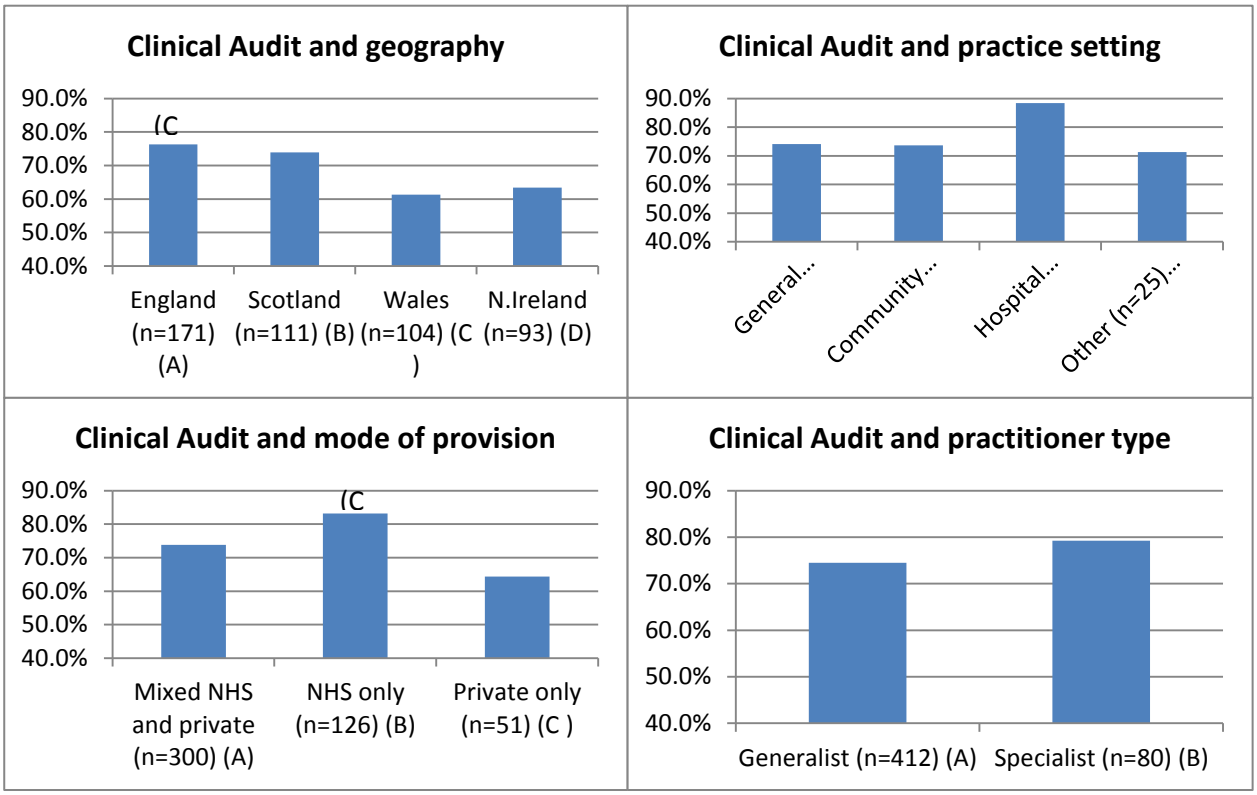

Figure 11: Dentist survey: Extent of application of clinical audit by geography, mode of provision, practice setting and practitioner type

It is interesting to note higher levels of clinical audit are undertaken in England and Scotland, particularly in NHS settings.

It is a contractual requirement of the primary care organisations that commission general dental services in England and Scotland and of the Health and Social Care Board in Northern Ireland that dentists take part in clinical audit or peer review.

The Welsh Government has retained a funded clinical audit programme for GDPs working in the NHS, although clinical audit is not a contractual requirement of all Welsh Local Health Boards. The programme is delivered through the School of Postgraduate Medical and Dental Education of Cardiff University which provides trained Peer Review and Clinical Audit tutors who help organise the audit programmes, provide a "Clinical Audit and Peer Review Cookbook" (Dental Postgraduate Department, Cardiff University 2008) and assure the quality of audits.

The higher level of clinical audit in a hospital setting (as shown in Figure 11 above) reflects the larger-scale audit programmes run in hospitals, and this is also backed up by the in-depth interviews for this study which indicated that clinical audit is generally easier to undertake in settings where there is organisational support and expertise in design and implementation (for example in a hospital or where a primary care organisation provides co-ordination).

Contribution of Clinical Audit to aligning practice with GDC Standards

The process of clinical audit has direct links to three areas of the GDC's *Standards for Dental Professionals*:

- Maintaining your professional knowledge and competence
- Putting patients' interests first and acting to protect them, and
- Co-operating with other members of the dental team and other healthcare colleagues in the interests of patients.

When considering the extent to which clinical audit helped them in demonstrating certain specific aspects of practice, it was believed by the dentists surveyed to be most valuable for examining good record keeping (where it was considered to be the *most* helpful of all the evidence sources) and identifying clinical skills needs, as shown in figure 12 below.

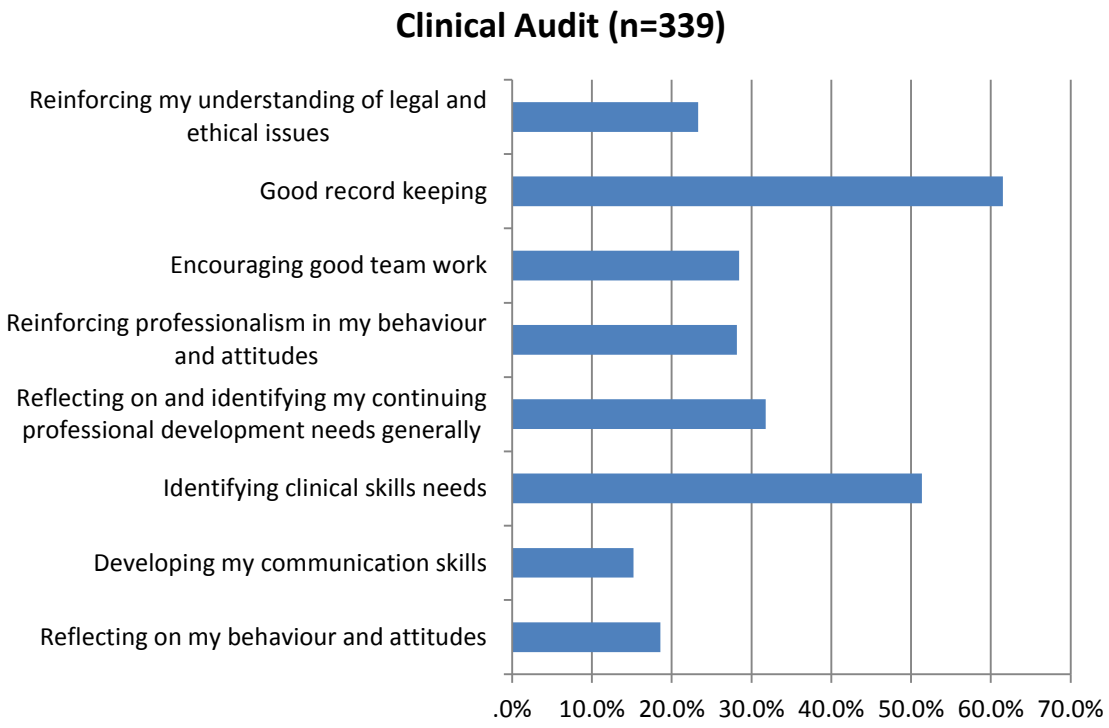

Figure 12: Dentist survey: Which if any of the following did Clinical Audit help with?

Formative

The dentists' survey showed that feedback from clinical audit was perceived by dentists as one of the most effective means of improving their clinical practice. 70% of those who had received feedback following an audit believed there had been changes to their practice for the better.

The majority of respondents to the survey were given feedback on their clinical audit: 39% at individual dentist level and 31% at practice or team level, but 30% were given no feedback, as shown in figure 13 below.

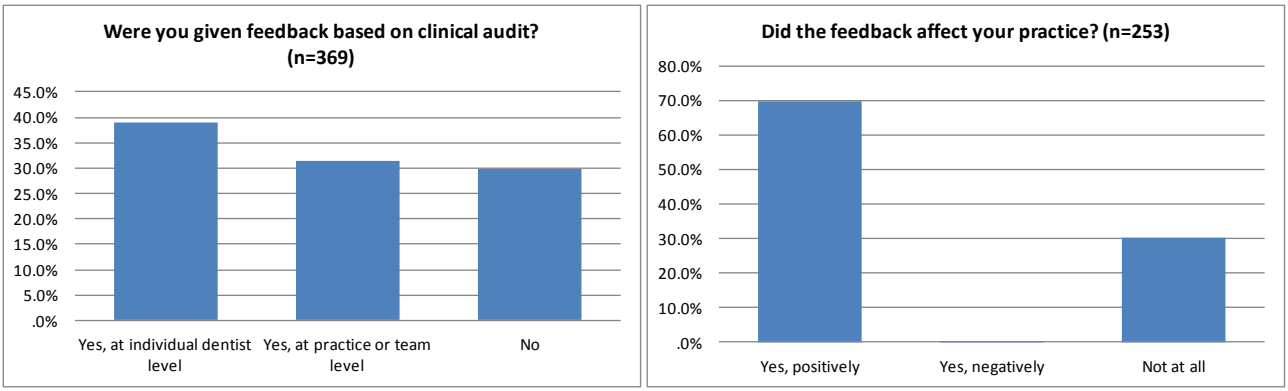

Figure 13: Dentist survey: levels of and impact of feedback on clinical audit

This suggests a considerable proportion of dentists are involved in clinical audit but, without feedback, do not have the opportunity to reflect on their practice and make improvements. One survey responder argued that individual feedback was particularly valuable.

> *"Combined individual and group feedback is effective. Group audits alone do not always have the same impact. It's easy to mask excellence and poor performance. Better to share individual data compared with peers." (Dentist survey response)*

70% of those who were given feedback said it had positively affected their practice and 30% said it had not affected it. None said that it had a negative effect on their practice (see Figure 13 above). The survey suggested that clinical audit was seen as effective in helping dentists to identify their clinical needs and raise their standards of record keeping.

Some formative value of clinical audit was documented in Cannell's study of the effect of audit on the appropriateness of recall intervals for patients attending dental practices across a primary care trust (PCT) area. It was demonstrated to be a successful tool to bring about change in the behaviour of dentists regarding their determination of appropriate recall intervals for patients (Cannell 2011). However, the study did not assess duration of the effect of the audit on changes in practice, and a longitudinal design would be required to assess whether the effects were sustained.

A qualitative study of the experiences of general dental practitioners' of clinical audit reported positive changes in practice as a result of the audits, from which patients

benefited. However, the impact of the audits was in many cases limited by the fact that they tended to be carried out by dentists in isolation from the wider dental team, and that learning and quality improvement were not disseminated beyond the individual practice. The audit cycle was not consistently completed, so feedback was rarely offered to audit participants and a topic was not always re-audited after the intervention (Eaton 2012).

Howard-Williams's study of clinical audit in primary dental services monitored the effect of providing "*cook-book*" audits in six areas: Infection control and decontamination, Clinical record keeping, Quality of radiographs, Patient satisfaction, Recall intervals based on NICE guidelines, Contractual obligations for General Dental Services and Personal Dental Services contracts. They were initially set up and administered by a Local Assessment Panel. They found that all audits apart from the patient feedback audit (where the pre-intervention assessments showed patient satisfaction ratings of 99%) showed an improvement in practice, and that they met with support from the participating dentists (Howard-Williams 2009).

The role of clinical audit in identifying appropriate areas for CPD activity is demonstrated by Bullock et al, who argue that collaborative clinical audit could be used to inform the provision of CPD in a locality. Links between audit facilitators and providers of CPD could allow CPD courses to match the needs of local dentists (Bullock et al. 2000).

Summative

Principles of best practice in clinical audit sets out the requirements for measurement within clinical audit, including that criteria should be explicit, relate to important aspects of care (process or outcome) and measurable. Where outcomes are compared for different dentists or practices, adjustment for caseload mix may be necessary (NICE 2002).

One responder to the survey felt there was insufficient consistency regarding whether or not a given audit exercise would count towards their verifiable CPD.

> *"Hospital dentists have to take part in audit/CPD which may not be recognised by GDC but it could be argued is far more robust than that in General Dental Practice as it is supervised by senior clinicians and many more peers than is possible in the average practice." (Dentist survey response)*

If a quality assurance activity is to contribute towards the evidence presented for revalidation, clear and consistent guidance must be provided to allow dentists to understand what is required of them and to ensure fairness.

Of those who had carried out clinical audit, 81% said they felt the criteria for assessment were fair and meaningful, a higher percentage than for any other type of evidence, as shown in figure 14 below.

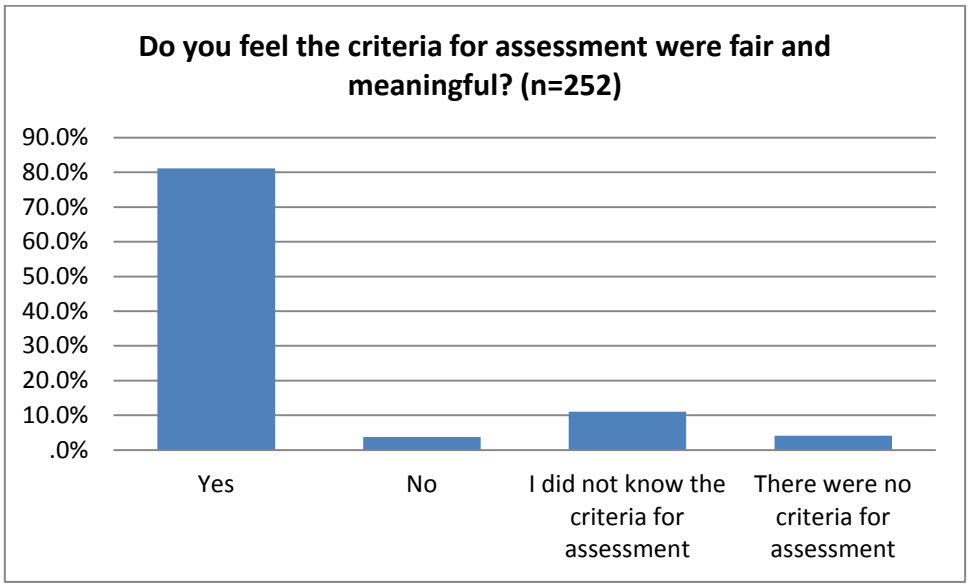

Figure 14: Dentist survey – extent to which the criteria for assessment of clinical audit were seen to be fair and meaningful?

Burden and acceptability of Clinical Audit

When asked whether it was difficult to gather the required information, 4% of the dentists' survey respondents said it was *very* difficult, whilst 27% said *quite* difficult, higher figures than for any other evidence type apart from multi-source feedback (MSF). This suggests it is perceived as burdensome relative to other methods of performance management, but still the majority of dentists (82%) perceived it to be "not very" or "not at all" costly and 69% felt it was "not very" or "not at all" difficult. (see figure 15 below).

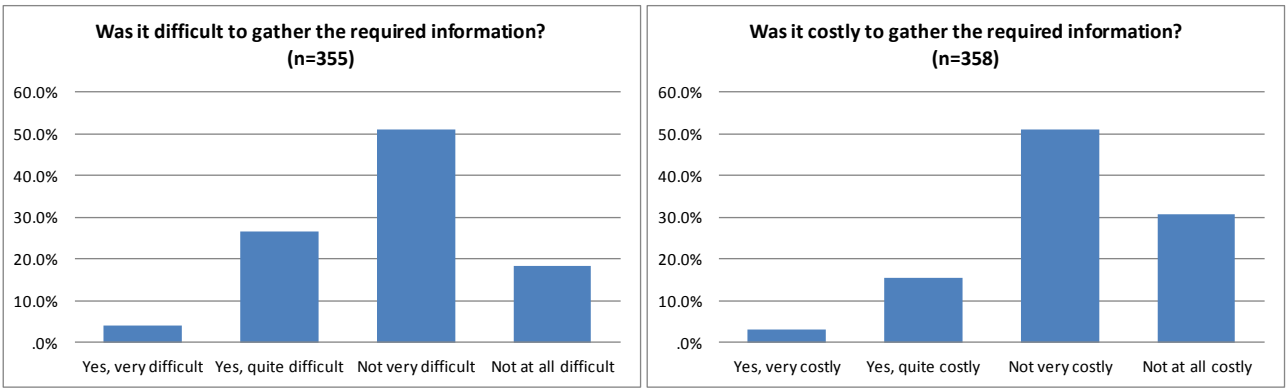

Figure 15: Dentist survey - levels of difficulty and cost burden involved in undertaking clinical audit

One interview participant argued that, to be successful, clinical audit requires resources in the form of time (or possibly remuneration for time), and the support of facilitators or audit advisors whose role is to advise those engaged in the process by helping in the design and implementation (PD2). "Cookbook" audits have a role to play in helping dentists who are unsure of how to go about carrying out an audit.

> *"If a dentist is struggling or would like some guidance as to how that could be formulated that they've got this [cookbook audit] to carry out and we feel that that is a major part of how we make sure that we're doing everything right."* (KI11)

Collaborative methods of audit can have benefits in terms of the administrative input, which can be shared or centralised, reducing the burden on individual dentists. A small-scale qualitative study was carried out of dentists' experiences of a centrally designed clinical audit scheme piloted across one PCT. The input from a central co-ordinator and structured design, analysis and reporting systems were perceived by the dentists to be credible, to result in efficient use of time and to produce findings that could be compared with other practices (Cannell 2009).

In their guidance on best practice in clinical audit, NICE highlights that the participation of staff in selecting audit topics enables concerns about care to be reported and addressed and that, while it is not always necessary, it can help reduce resistance to audit and the changes that may be indicated by the findings (NICE 2002). One interviewee identified strengths and drawbacks of the clinician having complete autonomy in choice of audit topic:

> *"I mean it's obviously important in terms of audit that people actually perform audit that's really relevant to their practice and of some interest because you've got to have a measure of energy to get it done properly... but at the same time... it's the sort of Johari Window thing isn't it really, revealing the bit that you don't know, so yeah, and I think in all these things it seems to me that one comes back to the idea that people need at the very least a critical friend or two to get these processes going don't they." (KI6)*

However, flexibility and sensitivity in audit of practices is important and cookbook audits may not be relevant to dentists who practice in non-standard settings, for example special care or prison dentistry. Extra support for clinical audit may be required for these dentists and inexperienced dentists.

> *"Prescriptive audits produced by local assessment panels are geared towards general dental practice but are applied to other fields of dentistry. This leads to a limited number audits developed by an assessment panel being applicable in a prison environment eg audits on patient charges, orthodontics are not relevant. As there is an annual requirement to carry out a clinical audit this means that we often have to develop our own audits which is very time consuming." (Dentist survey response)*

> *"The health board were very picky about topics for audit, they should try and help inexperienced dentists with topics and what criteria they are looking for instead of making us wait till it's over the deadline then refusing our topics." (Dentist survey response)*

Denplan Excel is a voluntary commercial quality assurance scheme for dental practices. Membership depends on meeting standards set by the scheme, one of which is a requirement that an Oral Health Score is carried out once a year on all their patients. This is an audit tool, gathering a range of data about examination, treatment and patient perceptions of their oral health in a uniform way. It allows Denplan Ltd to audit how care is being provided.

Conclusions

The use of clinical audit is widespread amongst dentists in clinical practice. If carried out with an appropriate combination of quality control and local flexibility, there is some evidence of its formative effects, although there is not yet evidence of the duration of its effects on practice. Within a robust appraisal framework, it could provide evidence that a dentist is involved in activity that maintains knowledge or competence, puts patients' needs first and co-operates with colleagues in the interests of patients. On this basis it may contribute to a summative judgement of the dentist's practice. Clinical audit can also feed into the identification of CPD needs.

Given sufficient support structures (including where necessary guidance on designing and implementing audit, the provision of "*cook-book audits*," and the facilitation of collaboration amongst a peer group) clinical audit can be a relatively low-burden undertaking to the individual dentist. If the ethos is supportive rather than disciplinary, clinical audit has high acceptability to dentists. On this basis, clinical audit could in many cases make a valuable contribution to Revalidation Stage 1 for dentists in clinical practice.

3.2.3: Personal Development Planning (PDP)

Extent of usage

Over half (55%) of the dentists who responded to the survey said they had been involved in **personal development planning (PDP)** over the last year (see figure 2 page 21). The dentists' survey showed that half of the respondents carried it out as part of appraisal, as shown in table 3 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	41	15.1%
Inspection by system regulator (CQC, RQIA, HIW)	28	10.5%
Assessment for a quality assurance or accreditation scheme	21	7.7%
Appraisal	136	50.1%
Other performance management process/scheme	13	4.8%
NCAS practice inspection	0	.0%
Dental Reference Officer assessment	3	1.0%
Fellowship exam	7	2.6%
Other	23	8.3%
Total	**271**	**100.0%**

Table 3: Dentist survey – extent of usage of personal development planning

The survey showed higher usage of PDPs in community services and hospital settings (see figure 16 below). This is likely to be due to a more structured line management and performance management process in these settings. This also explains the higher level of usage seen in an NHS setting. The reasons for higher levels of usage of PDPs in England is not clear, but is likely to be in part due to a requirement from primary care trusts that all principal dentists in England have a PDP.

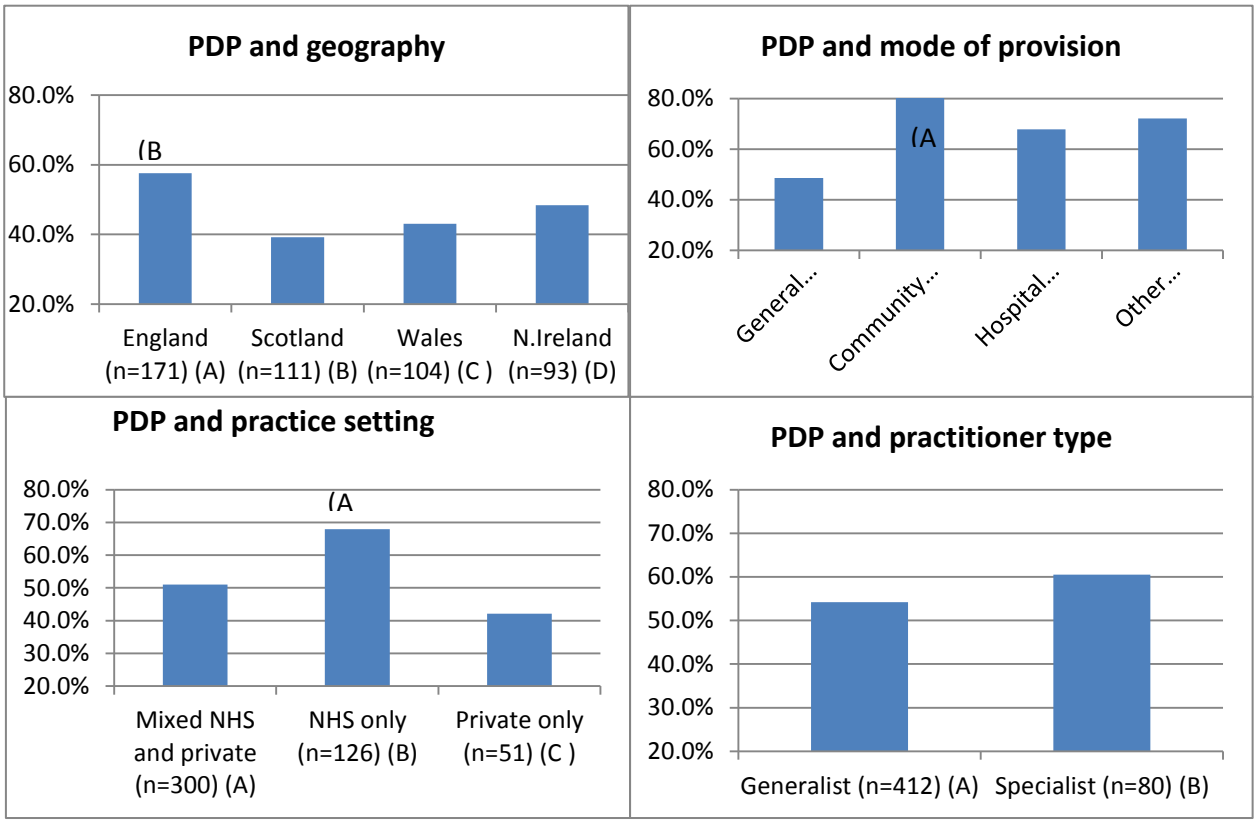

Figure 16: Dentist survey: Extent of application of PDP by geography, mode of provision, practice setting and practitioner type

Interview participants who were employed as consultants, academics, civil servants or salaried dentists all undertook personal development planning as an element of their (more or less) formal annual appraisal carried out by their line manager and using standardised frameworks set out by their employers. In its 2011 guidance, NHS Employers emphasises its focus on patient outcomes and service delivery rather than on the individual clinician's development. Indeed it refers to "*job planning*" rather than "*professional development planning*" (NHS Employers 2011).

Contribution of PDP to aligning practice with GDC Standards

Personal development planning links directly to the GDC's *Standards for Dental Professionals* by:

- Maintaining your professional knowledge and competence

It arguably can provide a framework for reflecting on practice relating to all the standards.

As would be expected, the dentists' survey reflected the close interaction between a PDP and CPD, with 67% of respondents feeling that PDP helped in reflecting on and identifying their CPD needs (as shown in figure 17 below). Indeed, PDP was perceived to be the most helpful evidence type of all for this.

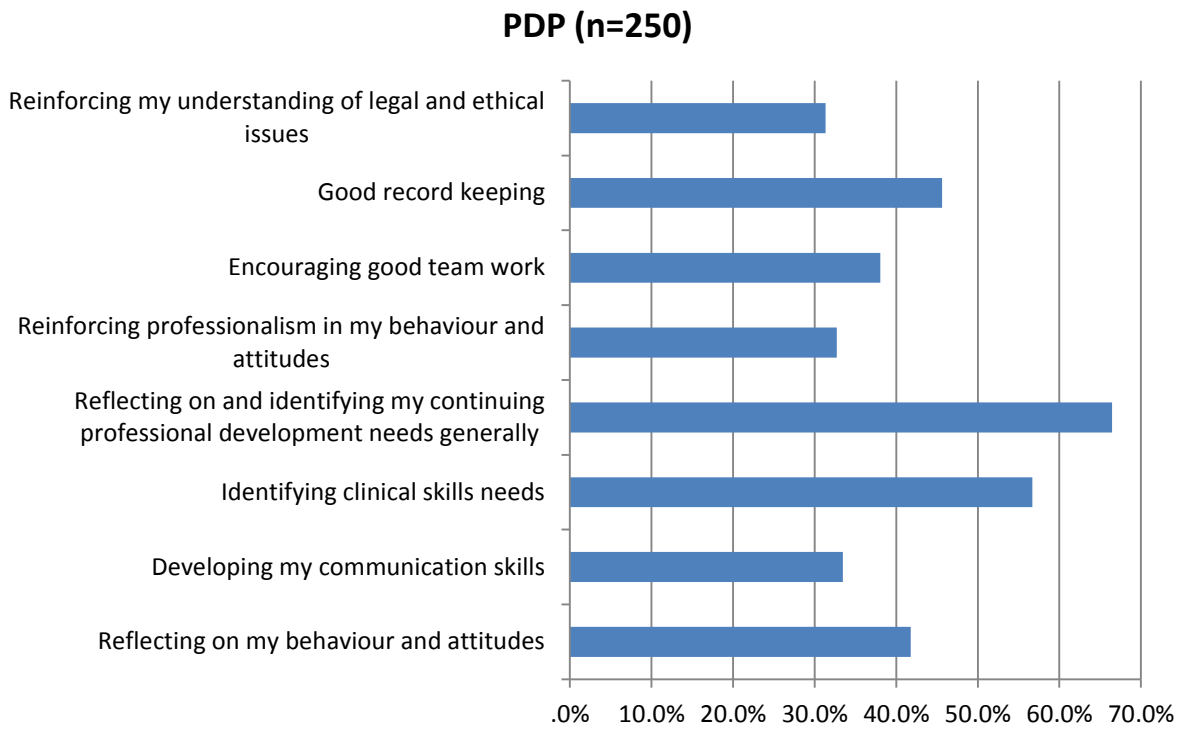

Figure 17: Dentist survey: Which if any of the following did PDP help with?

Summative and formative potential of PDP

Formative

The dentists surveyed revealed that feedback was given at an individual dentist level more often for PDP (53%) than for any other performance management approach. However, 56% of those who did receive feedback perceived that it was translated into improvements in practice. This figure was lower than for any other processes apart from multi-source feedback.

The in-depth interviews showed that the formative effects were perceived by some to be enhanced when personal development planning was an interactive *process* with a skilled mentor or appraiser within a supportive organisational framework, rather than as a *document* that was drawn up by a dentist alone.

> *"It takes time to become effective and requires a good review meeting with a mentor to assist in refining it and developing SMART goals." (Stakeholder organisations survey response)*

> *"It depends on the appraiser and higher management if they support a dentist's needs and that the plan is implemented." (Dentist survey response)*

This is in keeping with the findings of a 2007 study of the impact of the support of a tutor for dentists in developing PDPs on their subsequent practice. The study found that the aid of a tutor was viewed positively and that dentists' ratings of both the shorter- and longer-term impact of CPD activities was rated more highly among the dentists who had

been supported in the development of a PDP, and this was particularly true for activities centred on reading (Bullock et al. 2007).

Personal development planning was perceived by the dentists surveyed to have affected their practice positively in a very wide range of ways, for example boosting morale, motivating dentists and focusing individuals and teams:

> *"It gave me more confidence and I was glad to see that my work was judged positively... I was satisfied that someone had seen that I try my best for my patients and inspired me to do that even more - if there is more..." (Dentist survey response)*

> *"Gave us direction, made us think about issues in logical way gave a framework and made the practice and clinicians less haphazard." (Dentist survey response)*

> *"Any review always make the team more focused as well as motivated." (Dentist survey response)*

It was also identified by some as enabling the identification of areas for improvement and further training and directing career development:

> *"Highlighted areas of weakness to seek further training" (Dentist survey response)*

> *"Change of clinical role and non-clinical responsibilities." (Dentist survey response)*

Or identifying some very specific clinical and practice management outcomes:

> *"Communication skills to listen and consider the other side of any situation" (Dentist survey response)*

> *"Developing protocols to improve quality of patient care." (Dentist survey response)*

> *"Made me reflect on how I lead my team of project managers and also on our methodology for carrying out reviews of trusts" (Dentist survey response)*

> *"To develop audit ideas." (Dentist survey response)*

One respondent however, was less supportive of the benefits of PDP:

> *"It certainly familiarises one with bureaucracy!!! It does help to a very small degree with all aspects of one's professional life but not as much as I imagine those in authority would envision." (Stakeholder organisations survey response)*

Summative

Some dentists in the survey identified the subjectivity of personal development planning as a performance management tool:

> *"It is not a standard and relies heavily on personal judgement especially of the principle dentist." (Dentist survey response)*

In a study of dental vocational trainees' use of a PDP by Morris et al, trainers found it to be a useful reflective tool, while trainees found it repetitive and lacking in relevance. The authors concluded that, as it was used in training, the PDP's reliability as a method of assessment could not be verified since it is a record of activities undertaken rather than a measurement of performance against specified criteria (Morris et al. 2001).

Burden and acceptability of PDP

Personal Development Planning was perceived as a fair and meaningful process by 68% of dentists surveyed, comparing well with most other processes. It was not seen as a very difficult or costly exercise, as shown in figure 18 below. In comparison to the other evidence sources, it was perceived to have average difficulty and be one of the least expensive to carry out.

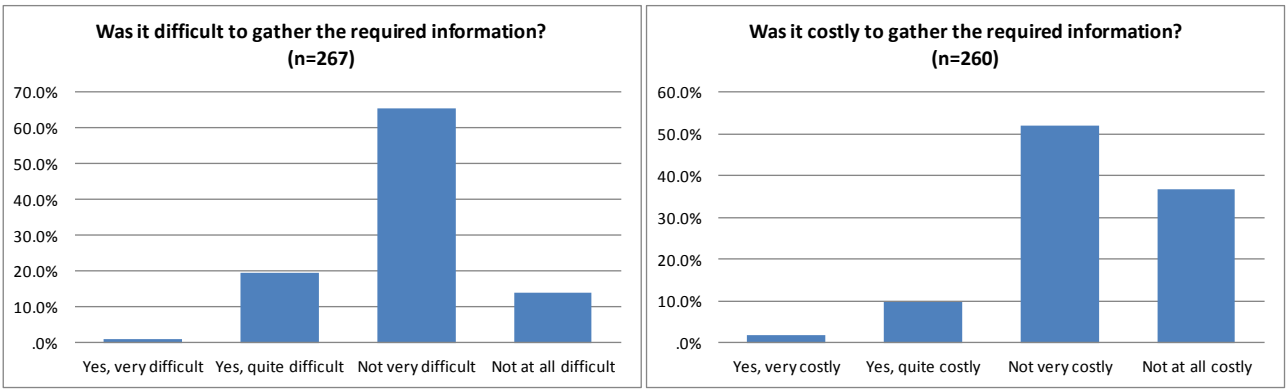

Figure 18: Dentist survey - levels of difficulty and cost burden involved in undertaking PDP

Conclusions

The formative effects of personal development planning were seen to be enhanced when it was an interactive *process* with a skilled mentor or appraiser within a supportive organisational framework, rather than as *document* that was drawn up by a dentist alone.

The PDP process is designed primarily as a supportive process to facilitate personal development by reflecting on educational and development needs and how they could be met, rather than as a means to assess dentists' performance. Its contribution to any formative revalidation process would be to indicate engagement in performance management rather than as evidence of a level of performance itself.

3.2.4: Peer Review

Extent of usage

29% of survey respondents had undergone **peer review** in the last year (as seen in figure 2, page 21).

It was most frequently used within an appraisal process, as shown in table 4 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	22	15.1%
Inspection by system regulator (CQC, RQIA, HIW)	17	12.1%
Assessment for a quality assurance or accreditation scheme	6	4.3%
Appraisal	45	31.5%
Other performance management process/scheme	17	12.2%
NCAS practice inspection	0	.1%
Dental Reference Officer assessment	2	1.5%
Fellowship exam	4	2.6%
Other	30	20.7%
Total	**143**	**100.0%**

Table 4: Dentist survey: usage of peer review

The dentists' survey showed considerable variety in the use of peer review. Those whose roles include a non-clinical element were more likely to have undergone peer review (40%) than those who practised in a purely clinical role (27%). The usage of peer review in Northern Ireland is significantly higher than for the other countries (see figure 19 below). Fifteen hours of clinical audit and peer review must be carried out every three years as part of the Terms of Service of the Northern Ireland Health and Social Care Board.

The level of contact with colleagues is also key to the use of peer review. The survey also showed that, in a primary care setting, where a dentist will work in relative isolation, the use of peer review was found to be lower. It therefore also follows that specialists, working for the most part in secondary care settings, have higher levels of usage of peer review (see figure 19 below).

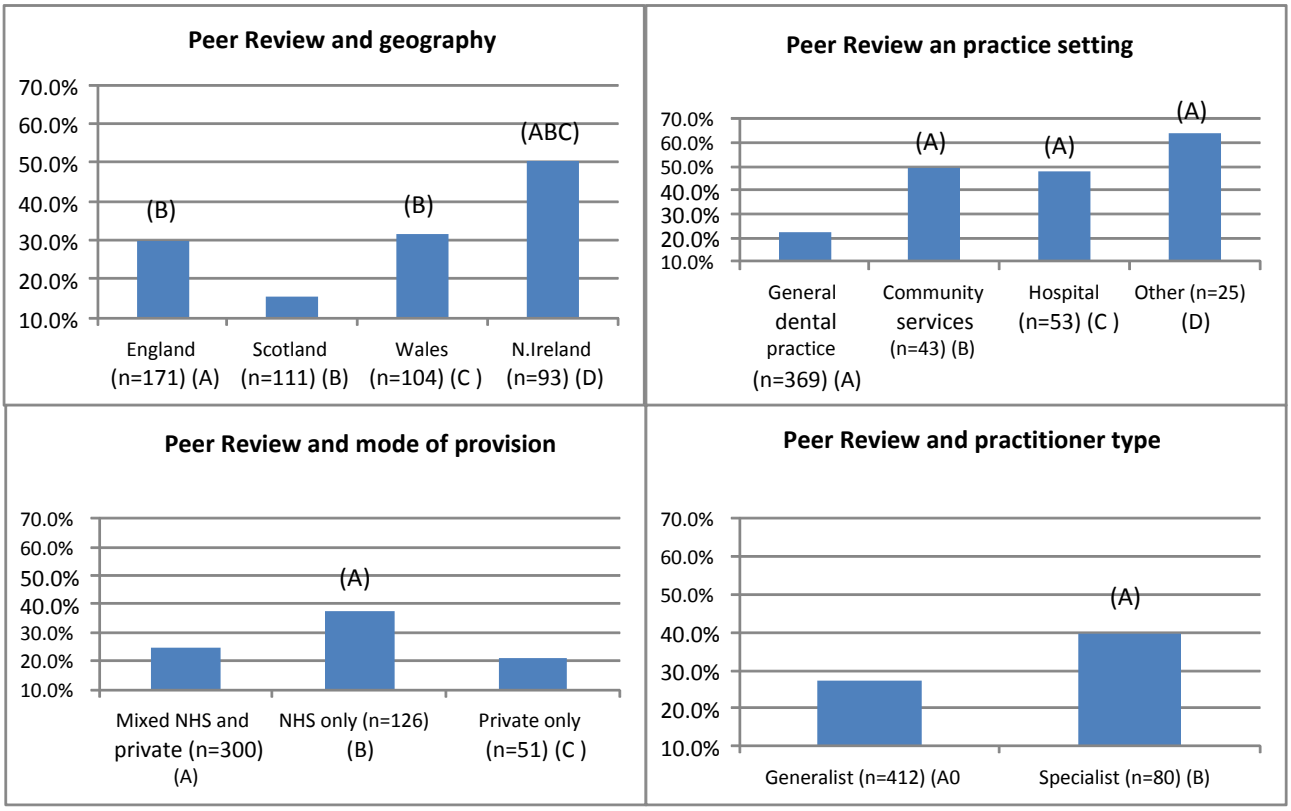

Figure 19: Dentist survey: Extent of application of peer review by geography, mode of provision, practice setting and practitioner type

Peer review was regarded by some interviewees and survey respondents as being an outdated concept, being superseded by clinical audit or soon to be replaced by revalidation.

> *"Formal peer review may not be required for much longer, given the emphasis being placed on CPD and revalidation" (Dentist survey response)*

Contribution of peer review to aligning practice with GDC Standards

As with CPD, peer review can relate to many of the GDC's Standards *for Dental Professionals*, but more generally the process of peer review has links to:

- Maintaining your professional knowledge and competence
- Co-operate with other members of the dental team and other healthcare colleagues in the interests of patients

The dentists' survey showed peer review to be perceived as the most helpful in identifying clinical skills needs (see figure 20 below.) However, the survey also indicated that both CPD and case-based discussion were perceived to be more helpful at identifying clinical skills needs than peer review.

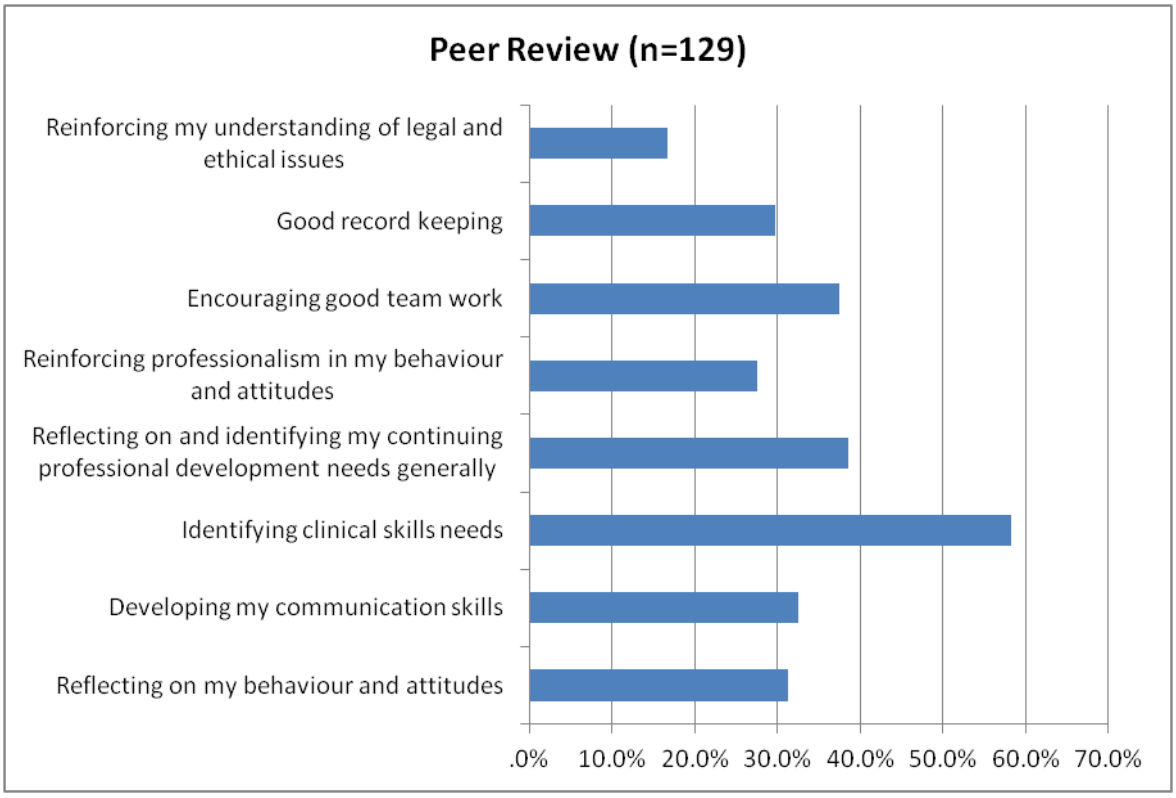

Figure 20: Dentist survey: Which if any of the following did Peer Review help with?

Survey respondents also reported in their free-text comments that they believed peer review to lead to improvement in a wide range of aspects of their clinical and management practice, such as treatment procedures and outcomes, communication with colleagues, treatment outcomes, record keeping and prescribing.

Summative and formative potential of peer review

Formative

The dentists' survey showed that feedback was given in 71% of cases where peer review took place, but only 61% of those who had had peer review said it had led to positive changes in their practice (lower than the majority of other performance management processes).

In its broadest sense, peer review was seen by these two interviewees to be a fundamentally powerful way to improve practice:

> *"We want to use peer review in the broadest sense … to get away from the situation where any sort of poor performance is seen in any way shape or form as acceptable by anybody, and the most powerful lever to improve professional behaviour, I believe, is peer pressure and complete unacceptability of the profession as a whole to accept poor behaviour. You know it is one thing having the GDC leaning on you but, on a day-to-day basis, peer pressure, approval by your peers for how you work and behave is a very, very, very powerful tool."* (KI1)

In the Dental Defence Services, dentists undertake peer review in formal as well as informal ways:

> *"In the military everyone moves around every couple of years or so, patients and dentists. One advantage of that system is that everyone's work is being peer-reviewed automatically, so it encourages you as an individual to make sure your work is of a good standard. You don't want your work to be seen by someone else that it's sub-standard, so you're going to make sure that you do your best." (KI9)*

> *"We carry out peer review all the time in the sense that patients move around a lot and dentists see each other's patients and will talk to each other if they have any concerns." (PD6)*

> *"Practices will run their own peer review sessions and claim CPD for those sessions as well." (KI9)*

Like other forms of personal development, more formal peer review can be active (i.e. it involves the learner through participation in providing learning materials, often from their own experience and feedback) or passive (i.e. the learner acquires ideas and information from material provided by a teacher through a lecture or reading) as a learning tool.

A postal survey of Scottish dentists carried out in 2006 found that it was perceived to be more effective as a means to change knowledge than some other forms of postgraduate dental education such as conferences, symposia, computer assisted learning and study groups but less effective than attending courses and reading journals. However, it was not seen by dentists to be significantly more effective than other forms of education in changing practice (Maidment 2006).

A disadvantage of the peer review process was identified by one survey respondent:

> *"It can on occasion result in positive reinforcement of poor clinical practice and a 'levelling down' rather than a 'levelling up' by the participants, in that it can confirm or reassure them that their practice is 'no worse than that of their peers' rather than providing an incentive for improvement." (Stakeholder organisations survey response)*

Summative

Although overall there was a good deal of support for the principle of peer involvement in performance management, none of the interview participants supported the use of peer review in a summative way.

> *"Any other system which uses peer review as a method of assessment I think is fundamentally flawed. It was a soft way into appraisal originally, to get dentists used to the idea someone else might look at your work." (PD5)*

Indeed several participants (including educationalists and practising dentists) reported that peer review was being superseded by clinical audit, which has the advantage over peer review of incorporating some intervention in practice and measuring the outcome.

Burden and acceptability of Peer Review

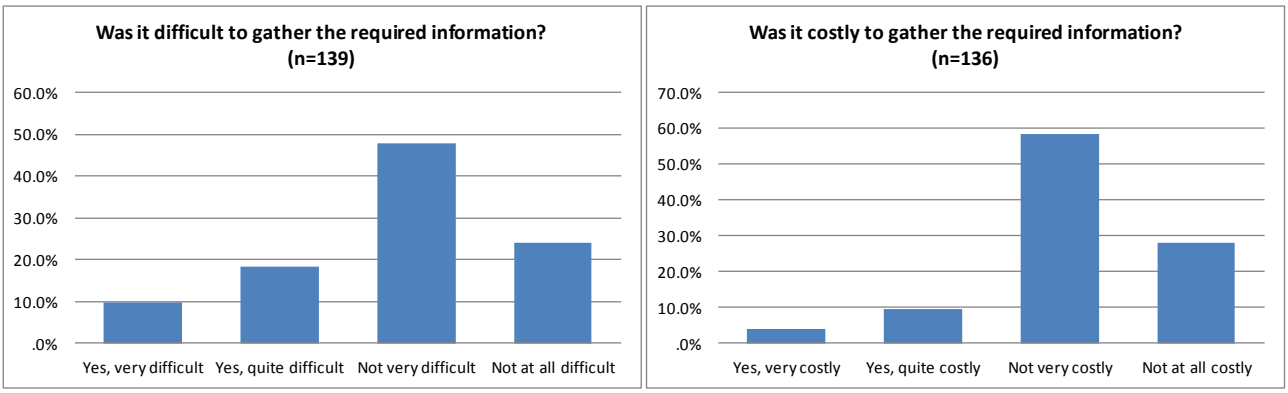

Figure 21: Dentist survey - levels of difficulty and cost burden involved in undertaking peer review

The dentists survey demonstrated that it was seen as moderately difficult (28% "*very*" or "*quite*") but not very costly (87% "not very" or "not at all" costly) to gather the information required for peer review (as shown in figure 21 above).

It was seen to be more easily carried out in large practices or other institutions. As with other forms of performance management that involve contact with peers, challenges may arise in carrying out peer review for dentists who work in isolated environments or part time, although technology increasingly provides opportunities for professional contact.

Conclusions

The concept of peer review is understood in many ways, ranging from the informal effect of peer pressure in developing a professional culture of quality in dentistry: knowing other dentists will see one's work and therefore performing to the highest standard possible, to a formal organised process in which a specially convened group examines and discusses practice against explicit standards.

Regardless of the degree of formality of the intervention, most participants in this study felt positive about the role of clinical peers in performance management and some element of peer involvement in revalidation would seem to have merit. However, in its formal sense, it is not seen by dentists as a strong way to improve practice, and is sometimes regarded as an outdated approach, a "soft" way to introduce appraisal, but soon to be superseded by clinical audit, in which the "loop is closed" and changes implemented on the basis of information discussed.

3.2.5: Review of Significant Events

Extent of usage

40% of respondents to the dentists' survey had been involved in a review of **critical incidents** over the last year (see figure 2, page 21).

It was principally used for primary care inspection and system regulator inspection, as shown in table 5 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	36	18.9%
Inspection by system regulator (CQC, RQIA, HIW)	32	17.1%
Assessment for a quality assurance or accreditation scheme	21	11.3%
Appraisal	17	9.2%
Other performance management process/scheme	28	15.0%
NCAS practice inspection	0	.0%
Dental Reference Officer assessment	2	1.0%
Fellowship exam	4	1.9%
Other	48	25.6%
Total	**188**	**100.0%**

Table 5: Dentist survey: usage of review of significant events

The dentists' survey showed some differences in the usage of a review of significant events across geographies and settings. There are variations in the contract between primary care trusts and primary care dental services between England and Northern Ireland, and this is reflected in the minimal review of significant events that was reported by survey respondents in Northern Ireland (see Figure 22 below).

Community dental services are provided for *"patients who have difficulty getting treatment in their "high street" dental practice and who require treatment on a referral basis, which is not available in a general dental care setting. For example, community dentists look after young children who need special help, as well as elderly and housebound people and people with severe physical disabilities or mental illness."* (NHS Careers website). These characteristics could be seen to increase the likelihood of significant events occurring in a community care setting as shown in Figure 22 below. Community service provision is also much lower in Northern Ireland, which again reinforces the lower level of significant event review found in Northern Ireland.

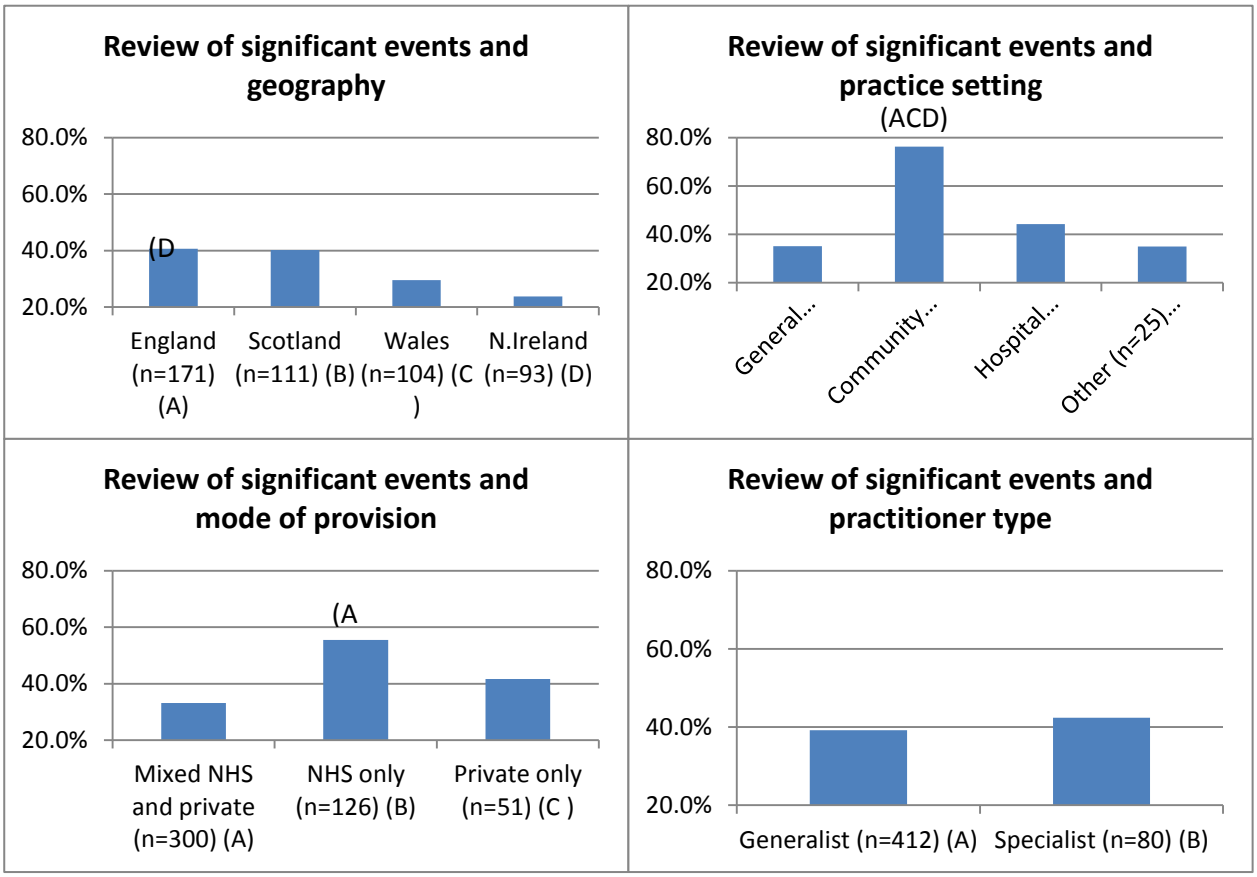

Figure 22: Dentist survey: Extent of application of review of significant events by geography, mode of provision, practice setting and practitioner type

Those whose roles included a non-clinical aspect were significantly more likely (53%) to have been involved than those whose role did not (37%).

Contribution of significant event review to aligning practice with GDC Standards

The process of a review of significant events has links to the GDC's *Standards for Dental Professionals*:

- Putting patients' interests first and act to protect them
- Maintaining your professional knowledge and competence
- Co-operate with other members of the dental team and other healthcare colleagues in the interests of patients

Participants in the dentists' survey found review of significant events to be most helpful in examining good record keeping, indeed it was the second most helpful in this regard, behind clinical audit (see figure 23 below).

Figure 23: Dentist survey: Which if any of the following did review of significant events help with?

As figure 23 shows, it also had wide coverage of many other aspects of practice.

Summative and formative potential of a review of significant events

Formative

The dentists' survey also showed that most feedback from significant events reviews came at practice or team level (53%) but 34% said they received no feedback. It was perceived as having a considerable effect on dentists' practice (more than any apart from case-based discussion), with 72% of those who received feedback saying it affected their practice positively.

An interview participant who was a hospital dentist identified a possible impediment to using significant events analysis as a way to improve practice by explaining that when such events were recorded in hospital they are not attributed to an individual.

The survey data suggest, however, that this does not necessarily preclude learning from an analysis of significant events since there was not a significant difference in the perception of positive effect on practice between those who had received individual and group feedback. Indeed, learning for the whole team or practice may be facilitated by a no-blame culture where accidents and near misses are recorded anonymously.

Respondents to the survey of stakeholder organisations commented that the reviews had led to reflection, discussions with the wider team or practice to ensure learning from

incidents was shared, changes in practice or policy to avoid future critical incidents and in some cases reassurance that incidents had been dealt with well.

> *"Undertaken properly, and with training for those taking part to understand the benefits, significant event review is a powerful learning tool. Carried out badly, there are considerable risks of non-engagement." (Stakeholder organisations survey response)*

> *"This needs to be systematic and documented with links to PDP and follow up audit to be really effective. (Stakeholder organisations survey response)*

Three percent (4 respondents) said the review affected their practice negatively. One of those explained:

> *"Critical feedback served to undermine confidence and overall reduced service development." (Dentist survey response)*

underlining the importance of supportive practice or department to take forward learning from critical incidents.

Summative

Westcott et al's study of the feasibility of significant events' reviews in primary medical care revealed substantial difficulties that could work against its successful implementation but also damage teams and alienate individuals. *"Members fear exposure, find it difficult to step out of role, worry about causing offence (especially to GPs who may be their employers) and need sensitive encouragement based upon an awareness of these various anxieties"* (Westcott et al. 2000, p.178). They highlight the importance of establishing clear rules, ensuring general ownership, carefully selecting the right topics and using good leadership skills, allowing for proper support and protecting individuals. Under these conditions they found these reviews could provide immediate outcomes-focused feedback on wide-ranging practical and relevant issues.

Pringle et al strongly recommend that significant events reviews should supplement, not replace, other methods of performance management. They say *"high levels of mutual trust and communication need to be in place before significant event analysis can successfully be carried out. To start too early with this approach could, we fear, lead to its being discredited and mean that the benefits it might bring later would be lost"* (Pringle et al. 1995).

Burden and acceptability of review of significant events

Gathering data for the review was seen as less difficult (21% "very" or "quite") and less costly (11% "very" or "quite") than most other processes (see figure 24 below).

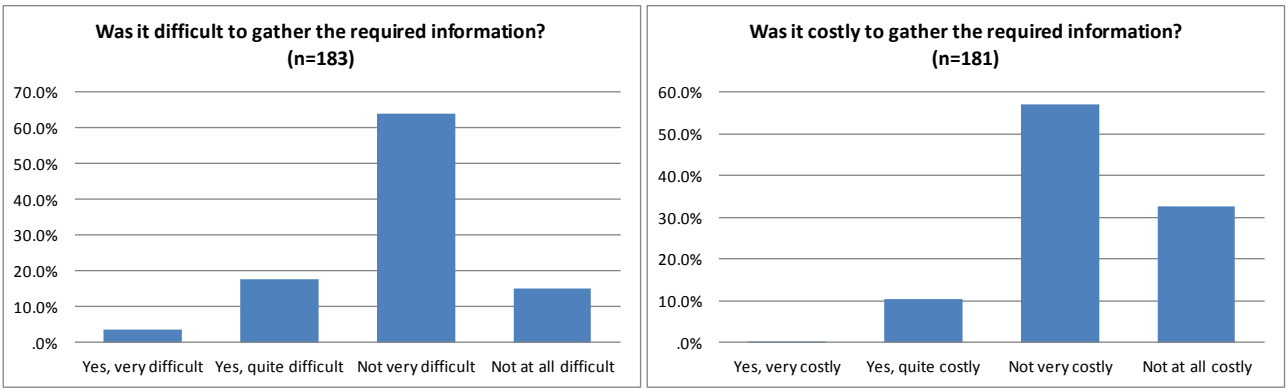

Figure 24: Dentist survey - levels of difficulty and cost burden involved in undertaking review of significant events

It is inevitably a potentially sensitive area, and the qualities of the person carrying out the review, particularly that they had a constructive approach and a grasp of the circumstances of dental practice, mattered:

> *"In my opinion many of the people chosen to check general practitioners do not have much experience in general practice themselves… and were more concerned with protocols and policies than the care of patients." (Registrant survey response)*

> *"In some cases it can provide a tool against clinicians rather than being an educational instrument." (Registrant survey response)*

Conclusions

Reviews of significant events are already carried out more often in secondary care than in general dental practice. It is a relatively low-cost, low-difficulty exercise perceived by dentists as having potential to change practice for the better.

Research in the field of general medical practice shows that it can be effective in improving clinicians' practice, given a working environment that has fostered a no-blame culture, a facilitator who can help dentists, individually and within teams and systems, to reflect on the events, link them to a PDP where appropriate, and feed them into CPD planning. Done badly, it can undermine colleagues' confidence.

3.2.6: Case-Based Discussion/Assessment

Extent of usage

47% of respondents to the survey said they had undergone **case-based *discussion*** in the last year (see figure 2, page 21).

It was used primarily for appraisal purposes, as shown in table 6 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	11	4.9%
Inspection by system regulator (CQC, RQIA, HIW)	4	1.9%
Assessment for a quality assurance or accreditation scheme	14	6.4%
Appraisal	51	23.4%
Other performance management process/scheme	18	8.4%
NCAS practice inspection	0	.0%
Dental Reference Officer assessment	4	1.7%
Fellowship exam	9	4.3%
Other	107	49.0%
Total	**219**	**100.0%**

Table 6: Dentist survey: Usage of case-based discussion / assessment

The dentists' survey also showed that whilst usage levels are broadly consistent across geographies, it is used significantly more in hospital settings than in general dental practice (see figure 25 below). It is a regular part of assessment for dental foundation trainees, but has been adapted for use with more experienced dentists. It is used routinely within the Dental Defence Services in their regular clinical quality assurance and assessment (CQAA) process. As with peer review, case-based discussion or assessment lends itself more readily to less isolated working, therefore is much more common in community or hospital settings than in general practice (see figure 25 below).

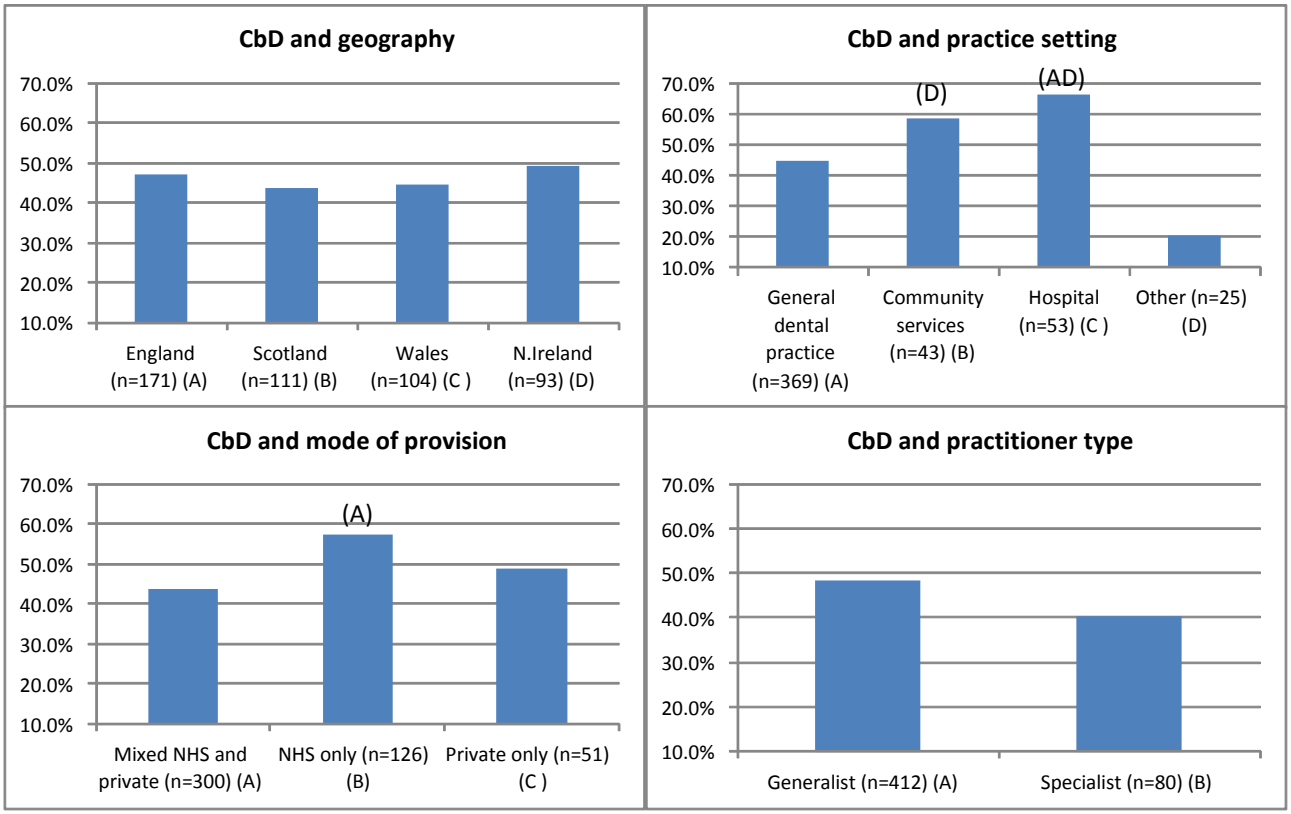

Figure 25: Dentist survey: Extent of application of case-based discussion/assessment by geography, mode of provision, practice setting and practitioner type

Case-based *assessment* is not routinely carried out with dentists under normal circumstances, but it is used within a National Clinical Assessment Service (NCAS) performance assessment with dentists who are in difficulty or whose fitness to practice has been called into question. It has been introduced to revalidation for psychiatrists.

An interviewee who worked in salaried service in the NHS reported that a case-based discussion approach was taken within appraisal, although this would be taken as far as a discussion of clinical reasoning and judgement but would not necessarily include an inspection of records. Otherwise CbD was most frequently undertaken, not as part of a formal performance management process, but when self-initiated informally with colleagues.

Contribution of case-based discussion / assessment to aligning practice with GDC Standards

CbD has links to two of the GDC's *Standards for Dental Professionals*:

- Maintaining your professional knowledge and competence
- Co-operate with other members of the dental team and other healthcare colleagues in the interests of patients

The dentists' survey clearly showed how valuable case-based discussion could be in identifying clinical skills needs (where 64% of respondents perceived it to be helpful) (see figure 26 below). CbD was seen to be the most helpful on this aspect in comparison to all the other evidence sources.

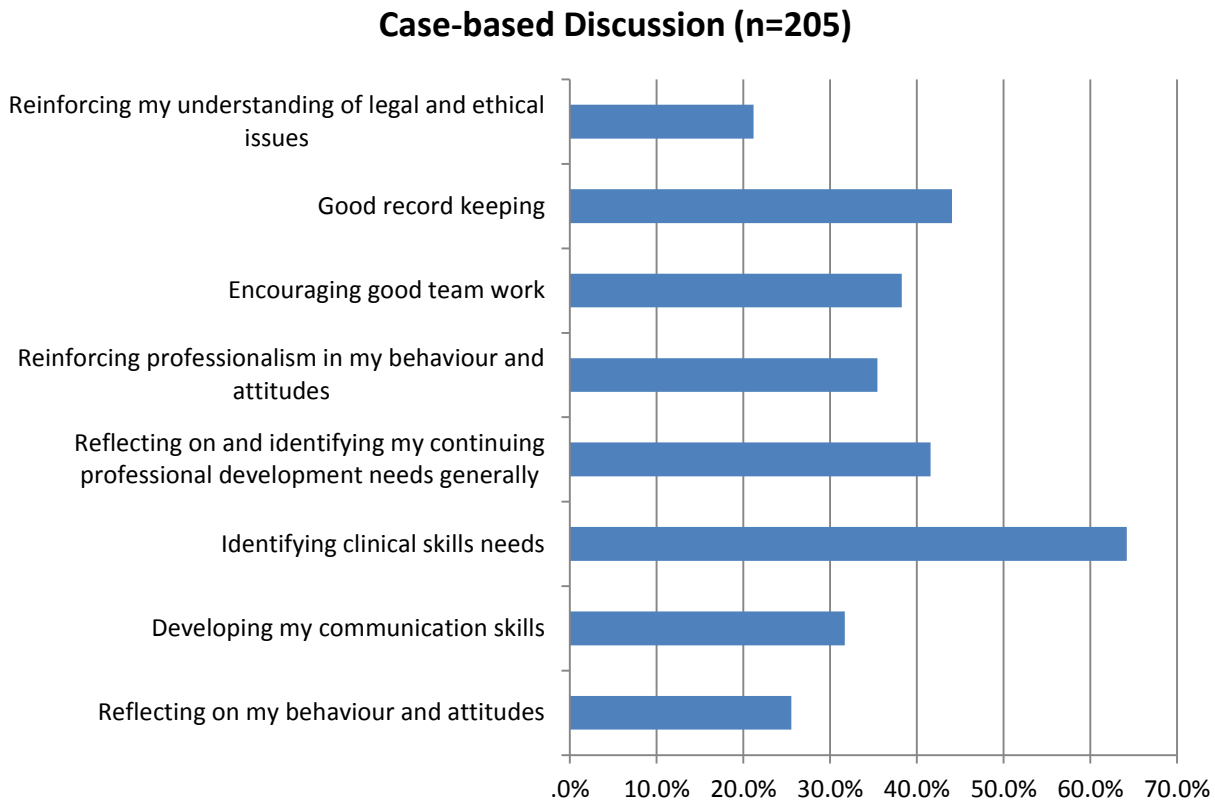

Figure 26: Dentist survey: Which if any of the following did case-based discussion help with?

Summative and formative potential of CbD

Formative

In 39% of cases, the case-based discussion resulted in feedback at an individual level. Compared to all the other processes, it was often (for 72%) felt to have a positive effect on performance. Below are examples of how it was perceived to have changed practice:

> *"Developed individual clinician awareness thus enhancing patient care." (Dentist survey response)*
>
> *"Discussion with peers contributes to teamwork ethos and allows discussion of ideas and opinions in a non-threatening way." (Dentist survey response)*
>
> *"It helps to remember that there are often different treatment planning options rather than what seems to be obvious. It reminds one to stop and think." (Dentist survey response)*

"Having an exchange of treatment options discussed with a colleague is meaningful, helpful and benefits patient care." (Dentist survey response)

The Defence Dental Services Clinical Quality Assurance Assessment (CQAA) incorporates two kinds of CbD (although it is not necessarily formally referred to as CbD). The first is carried out by a Principle Dental Officer with the patients present, usually two patients who have had extensive work carried out and who are selected by the dentist being assessed. Alongside a discussion of the assessee's clinical reasoning, the assessor will inspect the mouths of the patients, look at their radiographs, records and talk to the patients about their experiences of care. The second set of CbDs is based on 10 sets of dental documents, some picked by the assessor, some by the assessee, with a discussion of treatment planning decisions, whether guidelines for radiography were followed, recall intervals, and any details relevant to each case.

The dentist working in defence described her experience of CbD within the CQAA as one that could be formative for both dentists.

"Whenever I've had my CQAA I've really enjoyed it because it's been a, an exchange of sort of clinical opinion, and I think as much as I learn something, I'm sure the assessors take away points from whoever they're looking at, because everyone does things differently and there's not a right or wrong way of doing it." (PD6)

"As a formative tool it's really, really powerful you know, actually somebody having the opportunity to have this sort of structured conversation with a peer that goes through it with them." (KI6)

Summative

The summative value of case-based *discussion* alone is limited to the detection of severe poor practice, because it does not assess dentists' performance against explicit criteria. The military dentist argued that the examination of patient records that occurred as part of the CbD was the key opportunity to pick up evidence of poor performance. This is in keeping with the views of other interview participants who asserted that inspection of records provided good insight into the quality of dentists' practice.

Case-based assessment, however, does assess practice against criteria and if implemented within a robust system, could have summative value.

Burden and acceptability of CbD

Responses to the dentists survey suggested the burden and difficulty of gathering information on which to base CbD was very low (very or quite difficult for just 11% and very or quite costly for 8%), as shown in figure 27 below. Only 3% felt it could unfairly discriminate against particular groups.

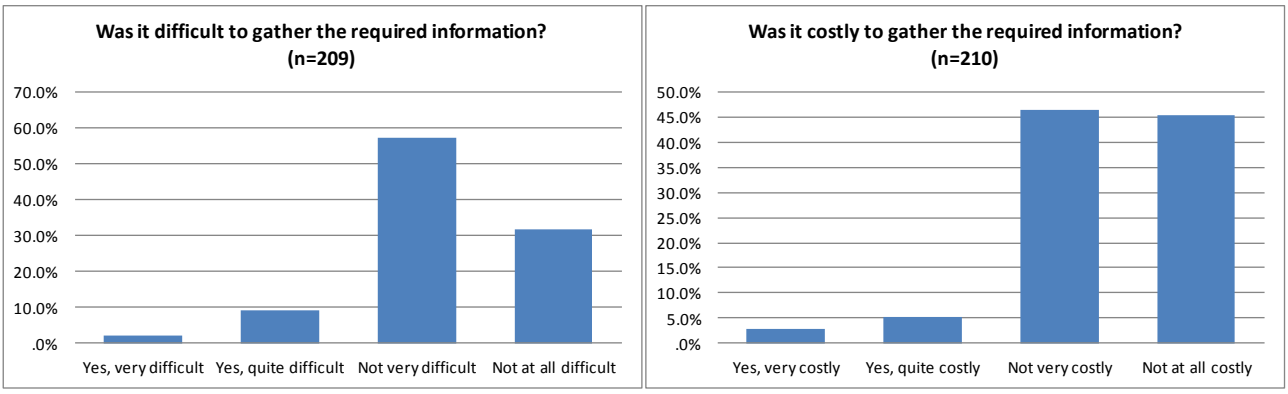

Figure 27: Dentist survey - levels of difficulty and cost burden involved in undertaking case-based discussion

One interviewee was of the view that, while case-based assessment had a place in vocational training programmes, it was not appropriate to expect qualified dentists to undergo this sort of assessment, and that finding people and resources to carry out the process would be prohibitive:

> *"People who are actually in practice are no longer in training, they're a substantive dentist so I don't think to use that sort of assessment is something that's appropriate for revalidation. Revalidation is around being fit to practice, continuing to be fit to practice, so the last thing we want to do is start imposing assessments… it makes the, it makes the dentist almost feel as though they're still in training and they're not." (KI13)*

> *"If we did who is going to do them? Where's the resource to do, for the people to do the assessments on the dentist. That wouldn't be appropriate." (KI13)*

A model of administration of a CbD is that it is carried out by peers, which arguably improves the feasibility of carrying it out on a wider scale *"so you're not sort of jetting in appointed externals from everywhere"* (KI6) but could diminish its reliability since each assessor might carry it out slightly differently, reducing its suitability as a summative tool. This could be mitigated to some extent by adopting what was described as a "*daisy chain*" method whereby people form small groups and one assesses the next person, who assess the next person, and so on, so each assessee gets a different assessor each time. This could also increase the formative effect as each clinician can be an assessor and an assessee. It is felt to be important to match assessor and assessee as far as possible in terms of clinical background and the setting within which they work. It can be carried out in groups or individually.

One interview participant (KI14) pointed out that the Faculty of General Dental Practice runs a course for dentists in practice appraisal which trains dentists, among other things, to appraise records and to discuss with the candidate how to make changes or improve practice.

Training for the role could be (and is, in the case of psychiatrists) provided by DVD. The Royal College of Psychiatrists guidance requires that each psychiatrist undertakes ten case-based discussions over a 5-year cycle with a maximum of three to be done with one individual in order to have a minimum of four assessors commenting on cases over a 5-year cycle. For each one an uninterrupted hour is to be set aside. In revalidation for

psychiatrists, eight standards are assessed on a scale of 1-4, although the emphasis is on using it as a developmental process.

Conclusions

Case-based discussion is a way of examining clinical judgement, reasoning and records. At present it is mostly carried out informally. It has formative potential for both assessor and assessee.

Case-based assessment involves using the discussion to rate the assessee's performance against a number of standards along with a thorough inspection of clinical records. It is considered to be a reliable way to pick up evidence of poor performance, so if it were conducted in a standardised way, it could possibly contribute valuably to a summative assessment.

It is important that it is carried out by a trained clinician whose professional background is similar to the assessee, and that it takes place in a supportive environment. Cases should be selected by both the assessor and assessee, and a variety of assessors should be engaged in each dentist's CbA over the period of an assessment cycle.

3.2.7: Review of Complaints and Compliments

Extent of usage

56% of the dentist survey respondents had been involved in a review of complaints and compliments in the last year (see figure 2, page 21). The largest proportion of these was carried out as a requirement of a system regulator (26%) or local primary care organisation (23%), see table 7 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	59	22.9%
Inspection by system regulator (CQC, RQIA, HIW)	67	26.1%
Assessment for a quality assurance or accreditation scheme	26	10.1%
Appraisal	44	16.9%
Other performance management process/scheme	20	7.8%
NCAS practice inspection	0	.0%
Dental Reference Officer assessment	2	.7%
Fellowship exam	4	1.5%
Other	36	14.0%
Total	**259**	**100.0%**

Table 7: Dentist survey: Usage of review of complaints and compliments

Varying levels of usage are seen across the 4 geographies, with the most striking difference found between England and Scotland (see figure 28 below). CQC requires that all dentist practices in England have systems in place to deal with comments and complaints.

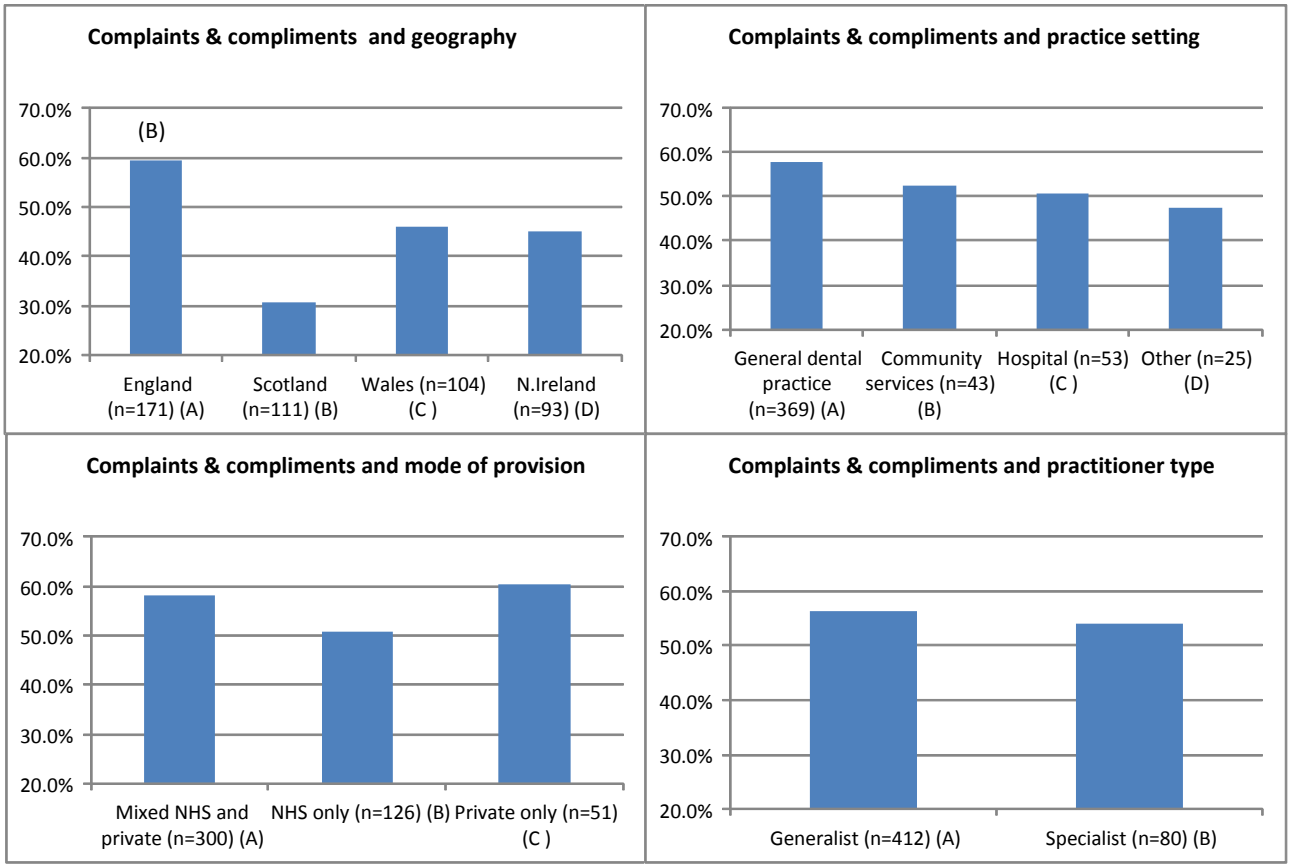

Figure 28: Dentist survey: Extent of application of complaints and compliments review by geography, practice setting, mode of provision and practitioner type

Dentists who practiced in whole, or in part, in a non-clincal role were significantly more likely (70%) than those whose role was purely clinical (53%) to have been involved in a review since non-clinical roles would be more likely to include responsibility for co-ordinating quality assurance processes. For those with a clinical role, they were significantly more likely to work in a primary care organisation than in a university or hospital. The reason for this difference is not clear.

Contribution of compliments and complaints review to aligning practice with GDC Standards

The process of reviewing complaints and compliments has links to the GDC's *Standards for Dental Professionals*:

- Put patients' interests first and act to protect them
- Co-operate with other members of the dental team and other healthcare colleagues in the interests of patients

The dentists' survey showed that respondents found reviewing complaints and compliments particularly useful in examining professionalism in their behaviour and

attitudes – indeed it was the evidence source most helpful for this aspect. It was also found to be very valuable in reinforcing understanding of legal and ethical issues (second behind CPD), encouraging teamwork (second behind MSF) and development of communications skills (second behind MSF).

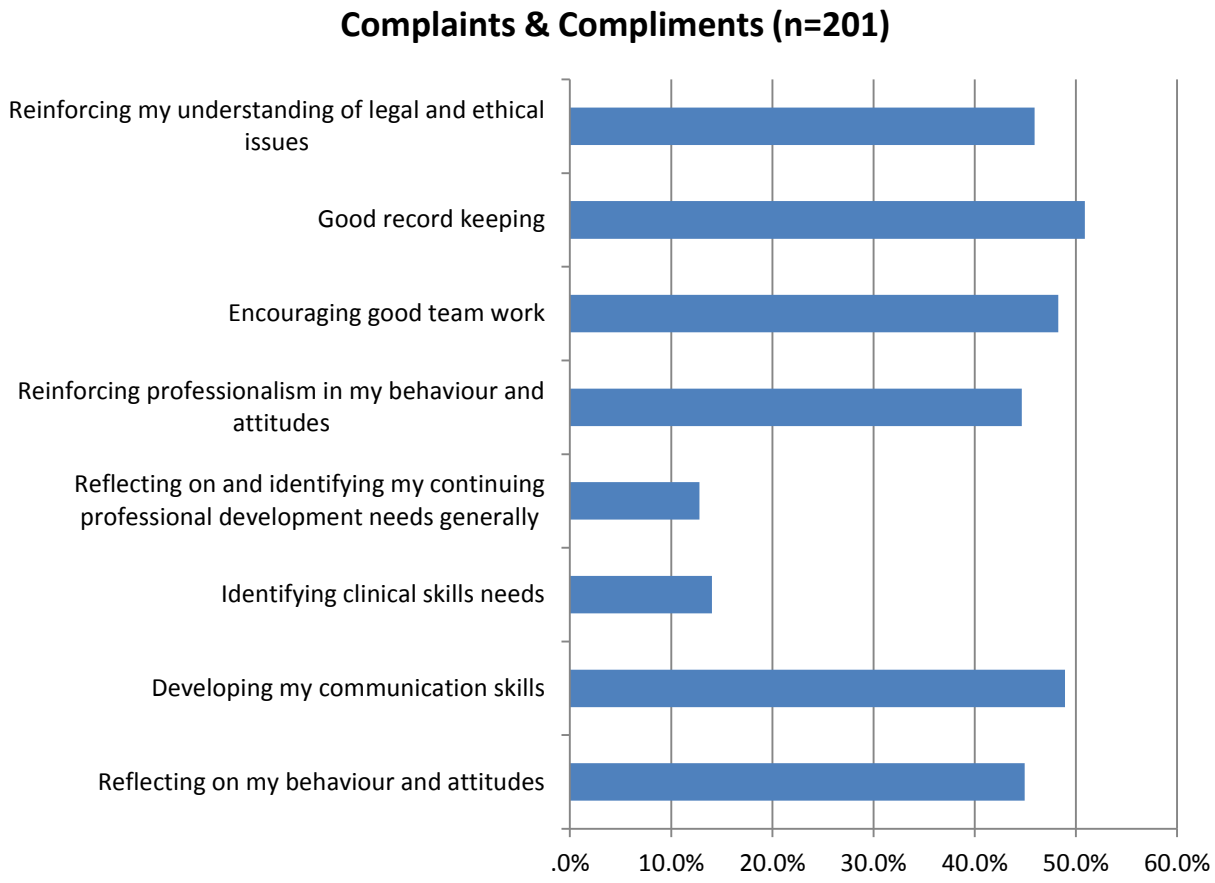

Figure 29: Dentist survey: Which if any of the following did review of complaints and compliments help with?

Summative and formative potential of reviewing complaints and compliments

Formative

One interviewee highlighted the lack of credibility or validity in basing assessments on complaints and compliments, arguing that it was possible to be likeable without being skilled. However, while it is inevitable that not all patient complaints point to deficiencies in clinical skills, many dentists felt they had learned and improved their practice, often in non-clinical areas, based on such feedback.

46% of survey respondents said they were given feedback at a team or practice level, with a further 15% receiving feedback at an individual level. 63% of those who were given feedback said it had affected their practice positively.

It was felt to have been effective in improving dentists' communication skills by a large proportion of those who had used it (49%, second only to MSF), and on reinforcing professionalism in dentists' behaviour (45%, more than any other performance

management processes), and to have had less impact on identifying clinical skills needs (14%) than any of the other processes.

Amongst the examples of ways in which it had improved practice were these:

> *"Pay more attention to clear communication with patients" (Dentist survey response)*
>
> *'Improved patient information leaflets" (Dentist survey response)*
>
> *"Helped to improve recognition of potentially difficult situations for team members and patients alike and therefore early avoidance or intervention in complaints situations." (Dentist survey response)*

One interviewee described a process of reviewing complaints with doctors: they were asked to reflect on all complaints, what each meant for them and their team, what changes it prompted them to consider and what changes they actually brought about. Doctors would be supported in that process of reflection and some simple training was produced in how to write reflective diaries. He argued that this was much more effective than a reductionist analysis of the raw number of complaints and whether this was above or below average:

> *"Not to say that the maths might not be interesting and might not reveal something but on its own it can be a bit of a cul-de-sac, and what we thought was important, because we took the view that really the main principles we wanted to espouse with revalidation was supporting people continually improving as well as finding where there are problems and doing something about it, so we thought what people really needed to do was reflect on matters, so reflect on complaints and incidents and really think, "so what am I going to do different?". (KI6)*

Summative

Responses to the stakeholder organisations survey raised questions about the reliability of data from reviews of complaints and compliments

> *"In my experience, the frequency and nature of complaints is not related to the clinical quality of care provided, so offers neither reassurance that the clinical quality of care provided is satisfactory nor an indication as such that it is poor. The frequency of complaints relates more directly to patients expectations of the service, and cannot be regarded as even an indirect indicator of clinical quality." (Stakeholder organisations survey response)*

Another responder urged that compliments and complaints should be reviewed in the context of other indicators, not taken by itself to identify good or poor practice.

> *"Review is a good thing but not in isolation from other indicators." (Stakeholder organisations survey response)*

A review of complaints and compliments could contribute indirectly to a summative assessment. If a dentist presented evidence that he or she had been involved in such a review but was unable to accept that a patient had a right to complain and have their

complaint dealt with in a timely manner, or to demonstrate that the patient's interests had been put first in dealing with a complaint, this may be an indication that they are not practising in line with the GDC's standards.

Burden and acceptability of reviewing complaints and compliments

Fewer than half (46%) of the dental survey respondents felt that the criteria for the review of complaints and compliments was fair and meaningful - a lower proportion than for any other performance management process.

Gathering data for the review was seen as less difficult and less costly than all other evidence sources except case-based discussion/assessment. Levels of difficulty and cost reported from the dentists' survey are shown in figure 30 below.

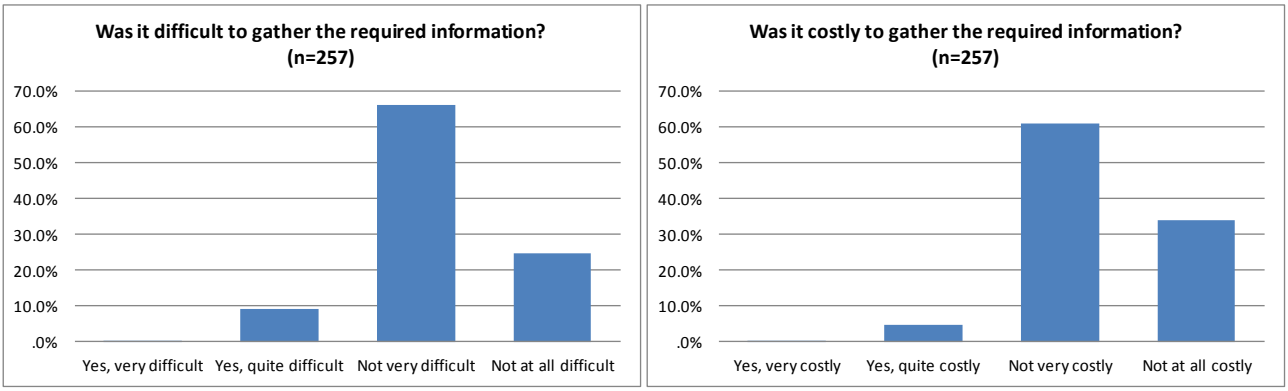

Figure 30: Dentist survey - levels of difficulty and cost burden involved in undertaking review of complaints and compliments

Concerns about the fairness of using complaints and compliments were raised during the survey. Dentists who do not own or manage their own practice may feel less control over the practice. Some respondents raised concerns about the risk that complaints and compliments may relate to aspects of practice that are outside an individual dentist's control (e.g. available equipment or materials). There were also worries that in an environment in which the patient is a customer, a complained-about dentist may not always be supported when they feel they are in the right.

Conclusions

Reviews of compliments and complaints are carried out moderately widely amongst dentists, often to comply with requirements of primary care organisations or system regulators. Although it is emphatically not seen as a reliable indicator of clinical skills, a review of complaints and compliments is a low cost and low difficulty undertaking and, when taken in conjunction with other indicators of performance and interpreted sensitively, has the potential to inform changes in practice in so-called "soft" areas of communication and professionalism.

3.2.8: Multi-source Feedback

Extent of usage

There were 11% of survey respondents who had undertaken **MSF** in the last year. This was less than any other performance management process considered by the study (see Figure 2, page 21).

Qualitative interviews indicated that MSF is widely used within foundation training programmes, amongst hospital consultants and academics and with dentists in difficulty. This was borne out by the survey findings, which showed those in non-clinical roles who had carried out MSF were significantly more likely to work within a hospital or university than in a primary care organisation.

The dentists' survey showed that the largest proportion of MSF was carried out as part of an appraisal process, as shown in table 8 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	2	3.8%
Inspection by system regulator (CQC, RQIA, HIW)	8	14.7%
Assessment for a quality assurance or accreditation scheme	1	1.2%
Appraisal	30	54.6%
Other performance management process/scheme	7	12.1%
NCAS practice inspection	0	.0%
Dental Reference Officer assessment	0	.2%
Fellowship exam	0	.2%
Other	7	13.2%
Total	55	100.0%

Table 8: Dentist survey: Usage of multi-source feedback

Analysis of the dentists' survey showed that hospital-based NHS dentists had conducted most multi-source feedback, with very low levels of usage found in general practice, community or private settings (see figure 31 below).

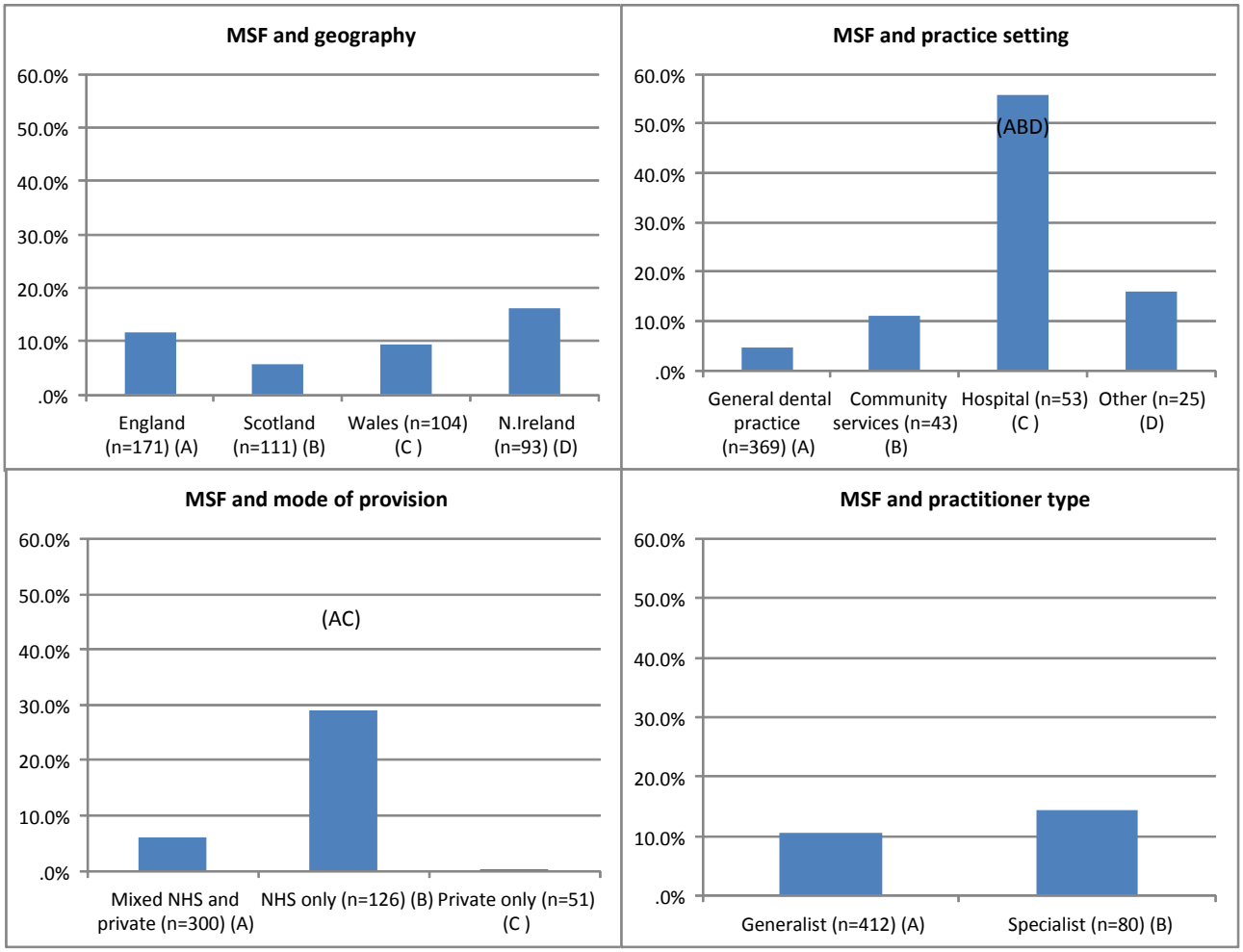

Figure 31: Dentist survey: Extent of application of multi-source feedback by geography, mode of provision, practice setting and practitioner type

The dentists' survey also revealed that dentists were significantly more likely to gather multi-source feedback during NHS work only (29%) than private or mixed work (6%) and were in turn significantly more likely to work in salaried service or as an employee than a contractor.

Several interviewees from the in-depth interviews pointed out the challenges of implementing MSF, particularly in general dental practice due to the small number of colleagues that some dentists have and the power dynamics between them if their relationship is one of employer-employee.

In speciality training, one of the deaneries recommend there should always be at least four people in any one category of respondents to protect their anonymity. This can be a challenge:

> *"360 in general practice is much more difficult because you're working with such a small group of people. But if you're working in an institution like a hospital it is a bit easier to do." (KI 13)*

This challenge is intensified in the case of locum dentists, who may only have a transient working relationship with colleagues.

Registrants who are dental educationalists and whose roles involve teaching, whether at undergraduate or postgraduate level, can observe and rate one another's teaching sessions. One interviewee said that instruments have been developed for this purpose, albeit not specifically for dentistry, although the literature and web search revealed no publications about this.

Some form of MSF can be presented in the portfolio of evidence for the Fellowship assessment for Faculty of General Dental Practice.

Contribution of multi-source feedback to aligning practice with GDC Standards

MSF has links to the GDC's Standards for Dental Professionals:

- Maintaining your professional knowledge and competence

The dentists' survey also showed that multi-source feedback, although currently showing low levels of usage overall, has the potential to be helpful in several different aspects of care (see figure 32 below).

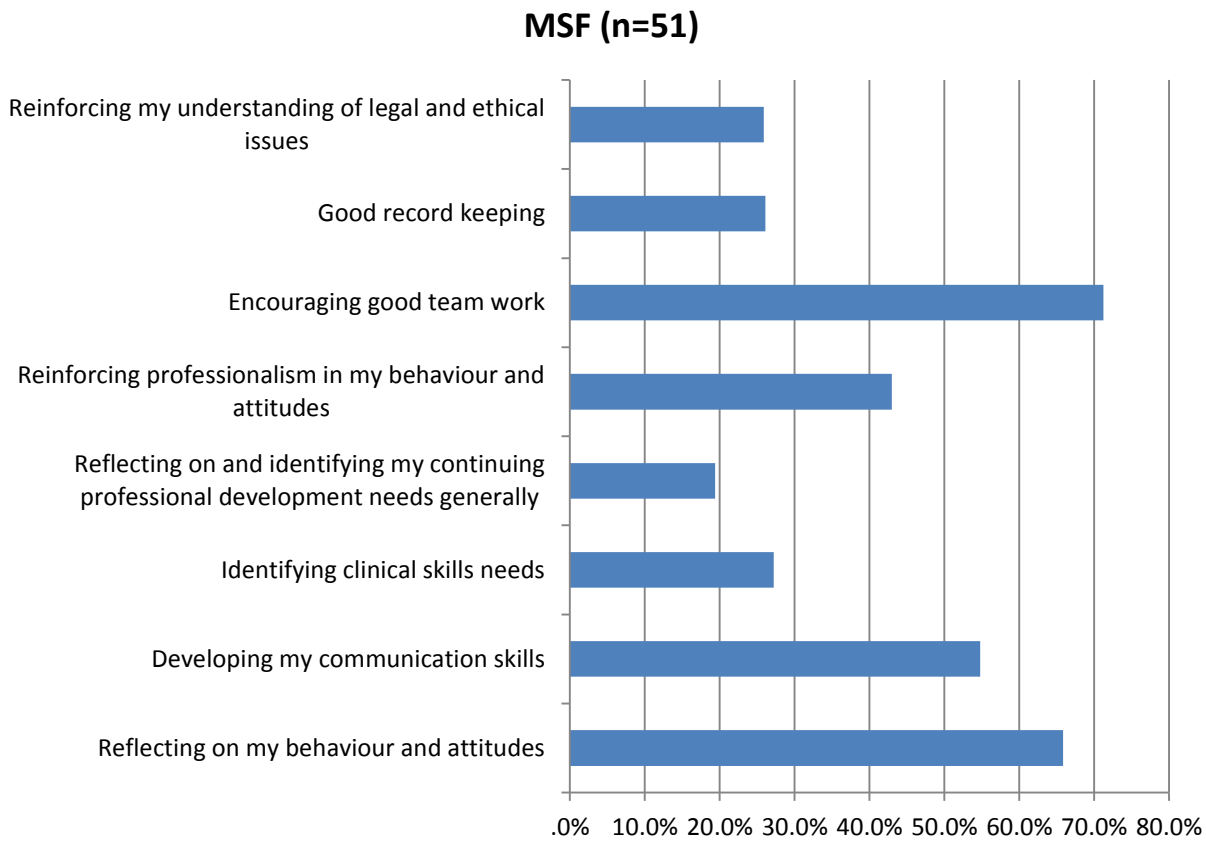

Figure 32: Dentist survey: Which if any of the following did multi-source feedback help with?

Dentists perceived it to be the most helpful of all the evidence types in reflecting on personal behaviour and attitudes, developing communication skills, and encouraging good team work. It was the third most helpful (behind review of complaints and compliments and patient feedback) in reinforcing professionalism in behaviour and attitudes.

Summative and formative potential of MSF

Formative

Surprisingly, the dentists' survey showed that only 50% of those who underwent MSF reported that they received feedback at individual level, while 29% said they were given no feedback at all. Clearly, in order to inform improvements in practice, dentists need feedback from the exercise. Of those who received feedback, 54% said it positively affected their practice and examples of the ways practice was affected are:

> *"Enabled all staff to contribute and improve interpersonal relationships and working day routines" (Dentist survey response)*
>
> *"I was interested in how others saw me, and how I integrated into the team." (Dentist survey response)*
>
> *"Identified areas to improve individuals service provision and team interaction, ie with all support staff." (Dentist survey response)*
>
> *"Encouraged me to be more assertive and give clear instructions." (Dentist survey response)*

The survey also indicated that, of all the performance management types, MSF was perceived to have the least impact on practice amongst those who have experience of it. However, of all the performance management types, MSF was believed to be more helpful to dentists in three "soft" areas of performance: to reflect on their behaviour and attitudes, developing communication skills and encouraging good team work.

One interviewee (KI14) pointed to the risk that MSF could be used unfairly or maliciously against a dentist and that he or she should have the opportunity to challenge any unfair comments

A structured reflective template may be provided to help a clinician to reflect on their MSF exercise. Our search did not reveal this within dentistry, but The Royal College of Psychiatrists have a form that prompts the clinician to reflect on the "main outcomes of feedback," "what learning might I undertake?" and "final outcome after discussion at appraisal" (RCPsych 2012). Foundation dentists using MSF are asked to do a self-assessment to examine how their view of themselves compares to their respondents' views of them.

Summative

All 8 organisation survey respondents who had involvement with MSF saw it as having a formative function, and 5 felt it had a summative function also.

Concerns were expressed in both surveys and in the interviews about the reliability of MSF, particularly in a small practice. A large sample size, validated instruments and ideally third party facilitators were thought to be required to give "*robust and fair*" data.

Burden and acceptability of MSF

In this survey, 70% of dentists who had carried out MSF felt the criteria for assessment were fair and meaningful, but gathering it was felt to be costly and difficult as shown in figure 33 below.

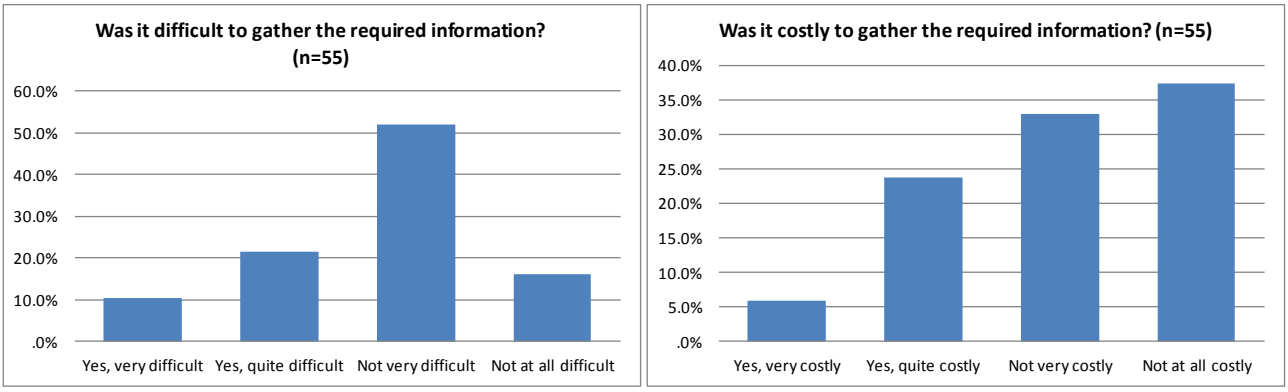

Figure 33: Dentist survey - levels of difficulty and cost burden involved in undertaking MSF

In comparison with the other evidence sources, MSF was perceived by dentists responding to the survey to be the most difficult and the second most costly (behind CPD).

Conclusions

MSF has been used for some time in the world of medicine and is frequently used in dentistry in hospital and community services and for dentists in non-clinical roles. It was rated overall as having the least effect on changing practice, although it was felt to have had a place in developing so-called "*soft skills*" such as communication.

It is perhaps prohibitively difficult to administer in primary care where the size and dynamics of the team may make it difficult to elicit fair feedback, but in larger secondary care settings, and for non-clinicians for whom patient feedback is not feasible, MSF could be useful.

3.2.9: Patient Feedback

Extent of usage

The dentists' survey showed that 67% of respondents had gathered patient feedback in the past year (see figure 2, page 21). Whilst this level is high, there can be great variety in the quality and quantity of feedback that might have been collected.

Patient feedback was most often gathered for an inspection or assessment by a system regulator (30%) as shown in table 9 below.

Which of the following processes was it for?		
	N	%
Inspection by primary care organisation (PCT or Health Board)	49	15.3%
Inspection by system regulator (CQC, RQIA, HIW)	96	29.8%
Assessment for a quality assurance or accreditation scheme	45	13.9%
Appraisal	42	13.2%
Other performance management process/scheme	24	7.6%
NCAS practice inspection	0	.0%
Dental Reference Officer assessment	6	1.9%
Fellowship exam	3	1.0%
Other	56	17.4%
Total	**322**	**100.0%**

Table 9: Dentist survey: Usage of patient feedback

The survey showed that 53% of dentists, working wholly in the NHS, had gathered **patient feedback** over the last year. This is significantly less than dentists practising in mixed NHS and private (71%) or private only practice (81%) (see Figure 34 below). This may be attributable to a greater consumer focus within private dentistry.

Patient feedback is gathered significantly more frequently in England (72%) and Northern Ireland (66%) than in Scotland (36%) and Wales (42%), as both CQC and RQIA (the system regulators in England and Northern Ireland respectively) require practices to gather information about the quality of their services from those who use them or others acting on their behalf.

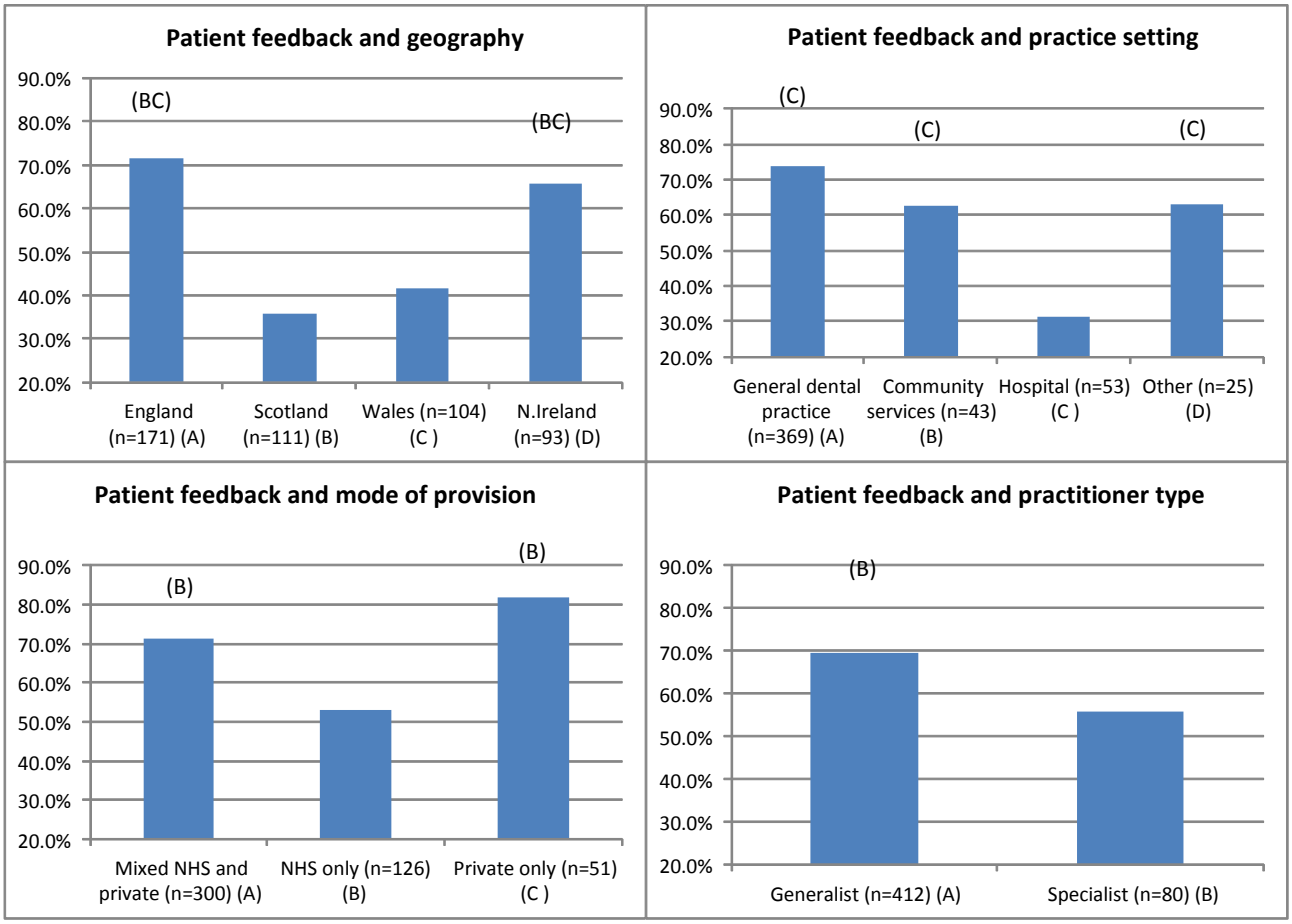

Figure 34: Dentist survey: Extent of application of patient feedback by geography, mode of provision, practice setting and practitioner type

More of those who were contracted to the NHS (70%) had used patient feedback than those employed in salaried service (57%) or were NHS employees (59%), although these differences were not statistically significant.

Denplan Excel, a quality assurance scheme, requires that patient feedback surveys are carried out. They mandate the use of a questionnaire that they developed which does not tend to suffer from ceiling effects (i.e. it tends not to produce scores that are all "excellent") and gives feedback at the individual dentist level. Denplan has required that the questionnaire is carried out every three years, but will allow practices to request them more frequently to fit with requirements of other bodies (e.g. CQC). They administer it directly to the patient post-consultation and have on average a 60% response rate.

One interviewee who worked in community dental services described a system whereby all patients (or their parents or carers) were asked for feedback on their consultation using a tablet computer, with five questions:

1. Did you have confidence and trust in the person providing the service?
2. Were you and/or the person you care for treated with dignity and respect?
3. Were you and/or the person you care for involved as much as you wanted to be in decisions about your care and treatment?
4. Do you think your dental health has improved since attending here? (Response options: Yes, definitely; Yes, to some extent; No)

5. How would you rate the service overall? (Response options: Excellent; Good; Fair; Poor)

Contribution of patient feedback to aligning practice with GDC Standards

Patient feedback has links to the GDC's *Standards for Dental Professionals*:

- Put patients' interests first and act to protect them
- Respect patients' dignity and choices

The dentists' survey showed patient feedback to be especially valuable in encouraging good team work and was perceived to be the second most helpful evidence source behind multi-source feedback. Patient feedback was also the second most helpful source (behind multi-source feedback for encouraging good teamwork and second most helpful (behind review of complaints and compliments) in reinforcing professionalism in behaviour and attitudes.

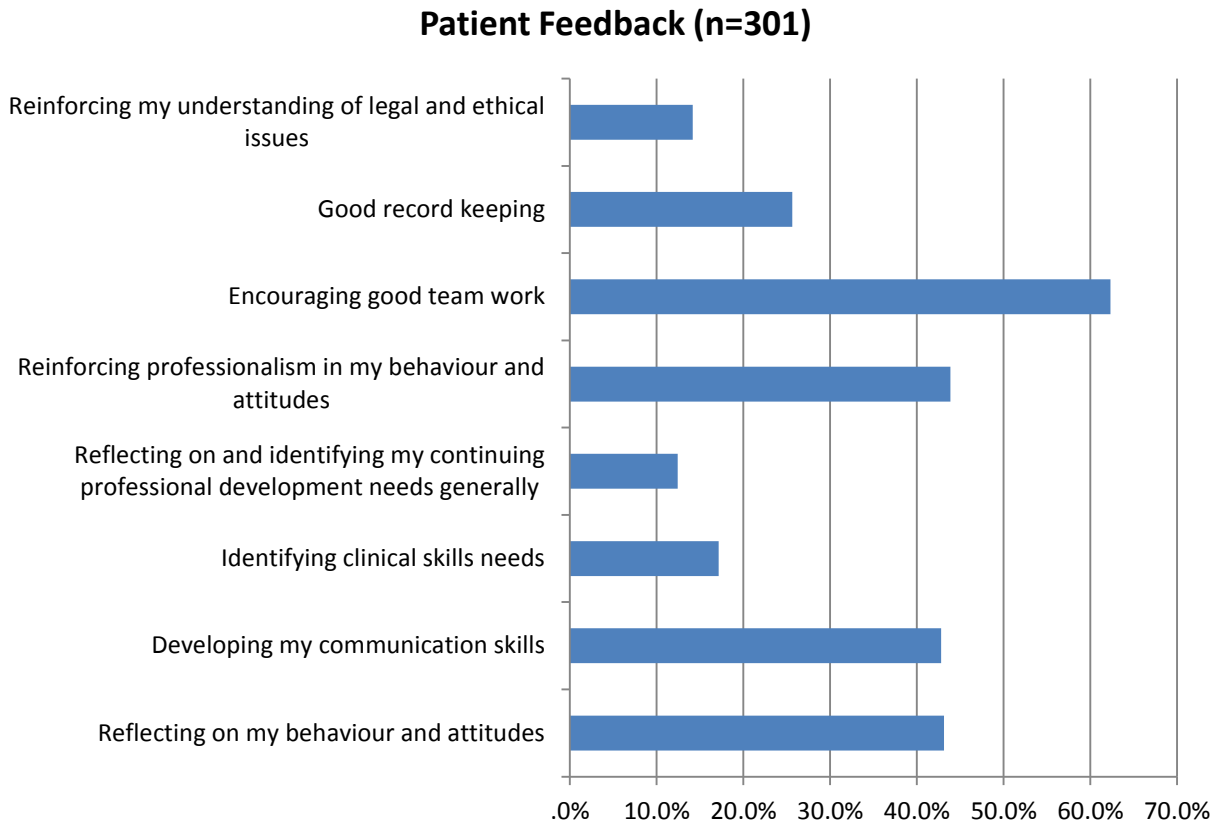

Figure 35: Dentist survey: Which if any of the following did patient feedback help with?

Summative and formative potential of patient feedback

Summative

There was scepticism amongst respondents to the dental organisations survey that patient feedback produced reliable data. Of the 8 respondents who had experience of patient feedback, none agreed that it gathered reliable data, with 5 neutral and 3 disagreeing or strongly disagreeing.

There is some evidence of systematic bias in patient feedback where they have been used with doctors. With some instruments, certain factors have been shown to bear on patient feedback which appear to depend on variables other than the doctor's performance. These are known as confounding factors. For example, recent studies of patient feedback instruments for doctors demonstrated bias in feedback based on the country of qualification of the doctor, the ethnic group of the responding patient and whether the patient reported that they were seeing their usual doctor (Campbell et al. 2011). The drivers for this discrimination need careful consideration, and these findings suggest that in gathering feedback on the performance of individual dentists it is important to be alert to the potential for systematic bias, confounding factors and the potential for unfair discrimination.

Formative

Of those who had gathered patient feedback in the last year, almost half (46%) were given feedback at practice or team level and 19% at individual level, but 36% said they were not given feedback at all. This suggests that a good deal of patient feedback is gathered but does not inform improvements in practice.

62% of respondents to the survey who had received feedback from their gathering of patient feedback said it had changed their practice positively, and none said it had a negative effect on their practice. Those who had been given feedback at an individual level were more likely to say it had affected their practice than those who had been given feedback at a practice level.

The importance of incorporating patient feedback into a structured performance management process was identified by this survey responder:

> *"I have seen examples of … practitioners going through the motions but without following up the findings. It needs to be part of a structured process linked with a PDP and follow up." (Dentist survey response).*

Ways in which it had affected dentists' practice included:

- The majority reported that it boosted morale and affirmed their current practice:

> *"Given that the feedback was very positive, we all felt very happy and satisfied that our efforts are being recognised and that our patients are happy to be registered with us... This inspired an even greater effort to keep up the good work and keep the good feedback coming..." (Dentist survey response).*

"Reinforced the high quality of the service I and my team provide in poor financial conditions and understaffing situation" (Dentist survey response).

"We received positive patient feedback, this made the team feel good about the hard work everyone was putting to provide the service, it made us feel that we were providing a positively valued service within the community" (Dentist survey response).

- Improved patient information leaflets and improved patient discharge procedure
- More efficient use of appointment duration times:

"We gathered information on how patients viewed their journey through the practice from arrival to departure and all the services offered to them. We improved coordination and communication between different members of the practice team to minimise stress for the patients and also improved our general communications with our patients in times between appointments." (Dentist survey response).

Burden and acceptability of Patient Feedback

The dentists' survey showed that gathering patient feedback was not seen as particularly difficult compared to other forms of performance management, and was seen as less costly than most others.

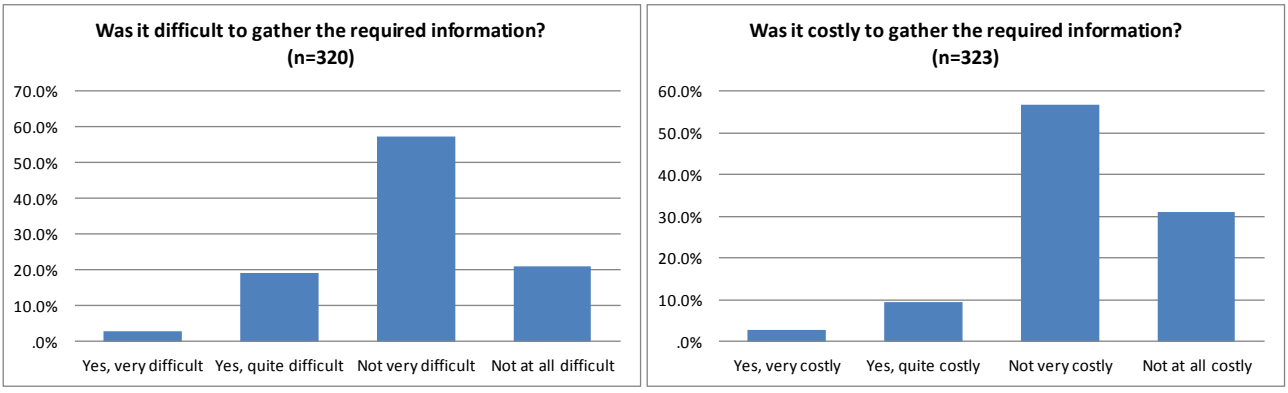

Figure 36: Dentist survey - levels of difficulty and cost burden involved in undertaking patient feedback

Two interview participants described how some dentists feel threatened by the idea of using patient feedback questionnaires, and how consideration is being given to how they could be introduced to make them more acceptable:

"It's not something that practices are particularly used to doing so we're quite happy if they do anything at all at the minute and then we will hopefully move them on over the years." (KI18)

"We're proposing to introduce it as a possible audit project so that they can actually dip their toe in the water. And what we think will happen is that most of the patients will come back saying they're absolutely terrific because they wouldn't be actually

attending the practice unless they didn't have some level of confidence in them.. Now, if we give them a chance to build up some confidence and correct the negative aspects then introducing it on a longer term basis, would be, I think, a lot easier and more fruitful. Because what I would like to see happen is for the practitioners to be actually quite proud of the fact that they could release that information to the public and I also think if we don't take the initiative and give them that opportunity, then there will be the equivalent of trip advisors popping up all over the place. So we want a robust system, we want one that the practitioners have confidence in, but we also want to show the practitioners that they've not got that much to fear." (KI12)

Some survey respondents felt the validity of patient feedback might be compromised by variations in patients' expectations of their dentist or treatment, and that feedback on dentists whose patients were not good attenders or tolerant of the limitations of NHS dental practice might be less favourable but not fairly reflect the standards of the dentist's practice:

"Patient feedback can in many instances give more information about patient expectations of the service/clinic as a whole and their perception of the outcome than information about the quality of clinical care as such. In my experience even quite severe and fundamental weaknesses and failings of individual clinicians' clinical performance do not necessarily result in any perception of dissatisfaction from patients until the situation has persisted for a long period of time" (Stakeholder Organisation survey response)

These concerns point to the need for well developed and tested questionnaires that have been shown to gather valid and reliable data in the field in which they are to be used.

The importance of questionnaires being relevant to the dentist's area of practice or specialty, and of feedback being given in context, was highlighted.

Dentists practising in special care services or with patients who are not highly literate or have English as their first language might struggle to obtain patient feedback. The standardisation of feedback instruments may exclude further some of those who may be vulnerable and whose views are already seldom heard. Some more qualitative, innovative approaches have been developed in other areas of health care (Connect 2007; Davies et al. 2009; Ennals & Fossey 2007; Law et al. 2005) and they can have the advantage of being more sensitive and nuanced, and providing more formative feedback on which professionals can base improvements in their practice. Drawbacks of these may be that they do not meet rigorous reliability standards so may not lend themselves to comparisons between individuals' practice.

Conclusions

Patient feedback can give health professionals a valuable insight into the patient's view of their practice and conduct.

Patient feedback is currently gathered across the range of dentists who practice in a clinical role but in most cases there is little quality assurance of either the instrument or the way it is administered. Not all of the instruments in use assess dentists against *Standards for Dental Professionals* (GDC 2005).

Where dentists practice in a non-clinical role and therefore have no patients, feedback could be sought from equivalent "service-users," for example their students.

3.2.10: Direct Observation

Extent of usage

[Note: direct observation was not included in the dentists' survey. This is because there was a period of overlap between the analysis of the desk-based stage of the project and the development of the survey, and the identification of direct observation as a potential evidence type fell between the two.]

Direct observation is used most often with foundation year trainees and specialist registrars and is known as Direct Observation of Procedural Skills (DOPS). They are "front-loaded" which is to say twelve are carried out in the first 12 weeks of the year and 4 in last three months because the dentist's practice is expected to require most scrutiny early in their traineeship. They are carried out by foundation trainers who are trained in carrying it out by training programme directors.

It is also used by Dental Reference Officers (DRO) who carry out inspections of practices on behalf of the Dental Reference Service (DRS). In England, the inspections are usually requested by a PCT and may be a response to concerns reported by patients or practice staff. The DRS provides PCTs with direct clinical evidence of the quality of patient care and record keeping by examining a selection of patients who are invited in, and their records.

In Wales the DRS inspects the patients and records of each dentist every three years (although this was said to be soon to change). Patients are selected by the dentist, and the records are randomly selected by the DRO.

Direct observation is also part of the Clinical Quality Assurance Assessment (CQAA) process which is routinely carried out with all dentists practising in the Defence Dental Services at a one- or two-yearly intervals (depending on risk and length of service). The CQAA Dental Evaluation of Performance (DEP) involves direct observation of the dentist treating three patients including an emergency care one if possible, and an inspection of their records.

Contribution of direct observation to aligning practice with GDC Standards

Direct observation relates most directly to these *Standards for Dental Professionals*:

- Maintaining your professional knowledge and competence;
- Develop and update your knowledge and skills throughout your working life.
- Find out about current best practice in the fields in which you work. Provide a good standard of care based on available up-to-date evidence and reliable guidance.
- Make and keep accurate and complete patient records, including a medical history, at the time you treat them.

Summative and formative potential of direct observation

Formative

Direct observation was experienced as a very rewarding and beneficial experience for the military dentist. It was conducted within a very supportive environment and it was completely "normal" in the sense that all dentists within the Defence Dental Services underwent the same process every year or 18 months. She described it as being a formative experience for the assessee but also potentially for the assessor. Far from feeling threatened by it she saw it as an opportunity to call up a patient with whom she had questions about her performance and to have a stimulating and edifying discussion about the challenges.

Summative

Direct observation is the most direct way to assess the quality of a dentist's technical skills and performance, although it is not perfectly reliable: observation of work carried out after it has been done may reflect things other than the dentist's skill, such as the quality of the materials and the patient's maintenance of their oral health.

Burden and acceptability of direct observation

The military dentist who was interviewed described the great learning and pleasure she took in the DEP, although she conceded that it might be an anxiety provoking experience for a recently qualified dentist:

> *"Could possibly be justifiably used in revalidation but would have to a) be carried out by a peer and b) not incur any financial outlay for the practitioner"* (PD3)

> *"No, I don't think so in terms of a revalidation exercise because it would just be so unwieldy. Yes there would be the resource implications are enormous. I think, you know, their record cards but then it's important who is doing it, as I said, who is reviewing the record cards, trained."* (PD5)

Conclusions

Direct observation allows an assessment of the quality of a dentist's work and is already in widespread use not only with vocational trainees and specialist registrars but also through dental reference services, and in the Dental Defence Services where it is a routine aspect of all dentists' annual Clinical Quality Assurance Assessment.

It is time-consuming and costly, but would provide the basis for an assessor to make a summative judgement about the quality of a dentist's clinical work, particularly if the observation was of the work being carried out, rather than an inspection of it at a later date. It was also considered by the interviewee from the Dental Defence Services to be a great formative benefit.

It may be that it is not cost-effective to require a dentist to have their practice directly observed for revalidation stage one unless data from other sources (MSF, complaints, BSA) brings into question the quality of a dentist's work.

3.2.11: Data gathered for monitoring and payment purposes

Extent of usage

Practitioner Services currently gathers data about quality and activity within all NHS general dental services in Scotland and the Central Services Agency carries out that role in Northern Ireland. The NHS Business Services Authority (BSA) currently covers NHS general dental practice across the England and Wales, including two very general questions about patient satisfaction. When the new General Dental Services contract is introduced in England and NHS general dental practice moves towards a capitation payment scheme, detailed information about the units of activity will no longer be required for payment purposes, these data may no longer be gathered. However, different data will be gathered to monitor oral health and patient reported outcome measures and this will potentially play a role in assessing the quality of dentists' practice. Under the proposals for the new Quality and Outcomes Framework that will apply to General Dental Service in England, 60% of dentists' remuneration will be based on evidence of clinical effectiveness (improvement in oral health, maintenance of oral health); 30% on patient experience (patient experience and Patient Reported Outcome Measures); and 10% on safety. It seems likely that data gathered for these payment purposes will provide rich information on dentists' practice in relation to *Standards for Dental Professionals.* However, until the new framework and contract are in place, it is not possible to draw firm conclusions about this.

Summative and formative potential of data gathered for monitoring and payment purposes

No data were gathered in the dentists' survey on dentists' views of the formative or summative potential of data gathered for payment purposes, or on the cost of difficulty of gathering the data.

Formative

Although two questions are included about patient satisfaction by the BSA, they are insufficiently detailed to inform improvements in practice. Where analysis of these data points to anomalies in patterns of practice or levels of patient satisfaction, this can be pursued to see whether it is indicative of problems and whether any support or further education is required.

Summative

Where a discrepancy between payment claims and work carried out is detected, a dentist's probity will be brought into question.

Conclusions

Data gathered primarily to monitor dentists' activity for payment purposes can be used to flag up concerns about anomalous practice or fraud, therefore prompting closer examination of a dentist's performance against standards 6.1 *"Justify the trust that your patients, the public and your colleagues have in you by always acting honestly and fairly"* and 5.3 *"Find out about current best practice in the fields in which you work. Provide a good standard of care based on available up-to-date evidence and reliable guidance".* There is, however, uncertainty about which data will continue to be gathered in England once the new capitation-based GDP contract is introduced and dentists' remuneration is no longer based on units of dental activity.

3.3 Equality and diversity

The research looked for evidence that the use of any of the evidence types could discriminate against particular minority groups of dentists as defined by age, disability, gender, race, religion/belief and sexual orientation. Overall, a very small number of issues were raised, but the data revealed the following:

CPD: One concern related to gender, specifically a claim that dentists on maternity leave are not routinely informed about CPD opportunities.

PDP: It was suggested that older dentists could be potentially disadvantaged by PDP (and potentially any other "new" approach to performance management) since they might have more difficulty adapting to novel ways.

Review of significant events: some felt that non-practice owners could be unfairly penalised for events that were outside their control.

Review of complaints and compliments: one dentist raised a concern that a review of complaints and compliments could disadvantage particular groups *"Disproportionate numbers of complaints can be related to non-UK trained dentists, non-English speakers, and cultural perceptions."* (survey respondent)

MSF: one respondent to the organisations survey wrote:

> *"A dentist who is unpopular or in some way "different" could receive unfavourable (unjustified) feedback if the process is not carefully managed, with independent /neutral data collection and feedback. This tends to be an issue in small practices." (Stakeholder organisations survey response)*

Patient feedback: Concerns were expressed in the survey that dentists from ethnic minorities, non-UK trained dentists, or dentists for whom English is not their first language might be discriminated against. The literature on the use of patient feedback in medical settings lends some support to this (see section on patient feedback). It was also felt that young dentists could be disadvantaged by virtue of anxiety or not having had time to build a good rapport with their patients.

Conclusion

All types of evidence should be interpreted within the context in which they are generated and presented to minimise the likelihood of unfair discrimination against individuals or groups. Support should be provided to dentists if they are required to use any new assessment system.

4. Conclusions

The conclusions are presented as they relate to the research questions posed at the outset of the research.

1. What are the types of evidence already used across dentistry to assess performance and quality of the practice of dentists?

The main types of evidence used across dentistry to assess dentists' performance and practice are data relating to their involvement in continuing professional development; clinical audit; personal development planning; peer review; audit of significant events; case-based discussion; and reviews of complaints and compliments. Some feedback on their performance is gathered directly from colleagues using multi-source feedback and from patients using patient surveys, and data on activity and patient satisfaction is gathered for payment and monitoring purposes.

2. What are the purposes of each evidence type?

The intended purpose[4] of the quality improvement and performance management activities that form the basis of the majority of the 'evidence types' included in this study is formative: to monitor and improve the quality of dentistry in various ways, for example to improve reflective clinical practice, patient outcomes and experience, and identify and address shortcomings in the quality of services. These activities have an additional benefit in relation to revalidation: evidence of a dentist's involvement in them arguably acts as a proxy indicator that the quality of their practice is likely either to have been improved by this involvement or to be at a level that satisfied the body for which it was carried out (e.g. a system regulator, quality assurance scheme, primary care organisation) that there was no cause for concern. They could therefore be said to contribute to summative assessments.

Multi-source feedback and patient feedback are more direct assessments of some aspects of a dentist's performance. They too may be gathered for the primary purposes of improving practice and patient experience but, since they set out to assess practice against pre-defined criteria, they lend themselves more readily to summative judgements. This is not to say, however, that results can be used in isolation to determine whether an aspect of practice is or is not adequate. Findings must always be interpreted in the context in which they are obtained.

Data gathered primarily for monitoring and payment purposes also has a secondary use as it contributes to a picture of a dentist's activity and patterns of practice, and gives an indication of patient satisfaction.

[4] The purposes of each individual evidence type are set out above in the findings section.

Robust evidence is lacking that involvement in these activities can lead to a summative judgement of whether a dentist is up-to-date and practising in line with the GDC's standards.

3. What is the extent of consistency in application of evidence types and standardisation in format across the four countries of the UK and practice settings?

There is great diversity in the systems and processes in place to manage the performance and assure the quality of dental practice across the four countries of the UK and the different settings in which dentistry is practiced, clinically and non-clinically (see section 3.5). Even within one practice setting within one country, the methods used to administer individual evidence types varies greatly. One survey of general dental practice patients in Scotland, for example, could use a systematically administered, validated instrument that measures performance against GDC standards and feed back findings to dentists in an environment that is supportive of reflection and improvements in practice, whereas another could inconsistently implement a poor quality instrument and have no system in place for translating findings into changes in practice. It follows then, that there is currently very little consistency in application of evidence types or standardisation in format across dentistry in the UK.

4. What contribution could they make to assessing practice in accordance with the GDC's standards?

The GDC's standards cover a wide range of the aspects of dentists' practice, including their technical competence, interpersonal skills and ethics. The evidence sources examined in this research each lend themselves to some areas of the standards more than others. For example, patient feedback has the potential to tap into dentists' interpersonal and communication skills, whereas participation in clinical audit or CPD could indicate maintenance of competence.

The evidence types reviewed here are each implemented in a variety of ways, for a range of purposes and with great variation in quality. In their present form they could not all be said to contribute to assessing practice in accordance with the GDC's standards.

However, implemented within systems to ensure an adequate degree of validity and reliability, and in conjunction with data gathered by system regulators, continuing professional development, clinical audit, case-based discussion, significant events analysis and review of complaints and compliments could be implemented and recorded in a personal development plan, in ways that provide a good indication that a dentist is, on the whole, up to date and performing in accordance with most of the GDC's *Standards for Dental Professionals*. For example, clinical audit carried out in accordance with *Principles for best practice in clinical audit* (NICE 2002), verified by an independent assessor and recorded in a personal development plan, could demonstrate that a dentist has met standard 5.3 *"Find out about current best practice in the fields in which you work. Provide a good standard of care based on available up-to-date evidence and reasonable guidance."*

Peer review in itself would not make a valuable contribution to assessing dentists against the GDC's standards above and beyond those made by CbD or clinical audit.

The potential contribution to assessment against the standards made by patient feedback and multi-source feedback will depend on a dentist's professional role. Multi-source feedback could contribute in practice settings in which dentists have routine contact with a large number of colleagues, for example in hospital or university settings. It is not feasible to use MSF with most dentists who work in general dental practice because they may not be known to a sufficiently large number of colleagues to ensure that anonymity and power imbalances do not adversely affect the reliability of the results.

Where dentists practice in a non-clinical role and therefore have no patient contact, gathering patient feedback will not be feasible. In these circumstances, feedback could be sought from equivalent "service-users," for example their students. Where a dentist's patients have difficulty completing standardised patient feedback questionnaires, they will face challenges in gathering patient feedback until other methods are developed within dentistry for obtaining feedback from these groups.

Data gathered for payment and monitoring purposes can be used to flag up concerns about anomalous practice or fraud, therefore prompting closer examination of a dentist's performance against standards 6.1 *"Justify the trust that your patients, the public and your colleagues have in you by always acting honestly and fairly"* and 5.3 *"Find out about current best practice in the fields in which you work. Provide a good standard of care based on available up-to-date evidence and reliable guidance"*. There is, however, uncertainty about whether this data will continue to be gathered once the new capitation-based GDP contract is introduced and dentists' remuneration is no longer based on units of dental activity.

The standards against which it is most difficult to assess practice using these evidence types, particularly where MSF is unfeasible are:

1.7 *If you believe that patients might be at risk because of your health, behaviour or professional performance, or that of a colleague, or because of any aspect of the clinical environment, you should take action. You can get advice from appropriate colleagues, a professional organisation or your defence organisation. If at any time you are not sure how to continue, contact us.*

3.1 *Treat information about patients as confidential and only use it for the purposes for which it is given.*

Examination of dentist survey data was helpful in revealing the extent to which each evidence source could demonstrate a dentist is practising in accordance with particular GDC standards. This was combined with a mapping exercise which was conducted to identify in more detail which competencies were well covered. The full mapping exercise can be found in Appendix 6.

The potential for the evidence types to demonstrate practice in line with the principles and competencies are summarised below. The findings should be considered as illustrative rather than prescriptive.

- **1: Putting patients' interests first and acting to protect them**

All evidence sources can contribute to assessing practice in line with this principle to some extent, but case-based assessment, review of complaints and compliments and

multi-source feedback could be considered the sources that map most closely to this principle.

Competencies 1.3, 1.4 and 1.7 could be considered 'easier' to assess. Competencies 1.9 and 1.10 are more challenging to assess (asking for/accepting inappropriate payment or gifts; making claims which could mislead patients).

- **2: Respect patients' dignity and choices**

This principle is harder to assess in general, but patient feedback, review of complaints and compliments and, to a certain extent, multi-source feedback have the potential to contribute to its evaluation.

Issues around discrimination against patients, treating patients fairly and observing appropriate boundaries (2.3 and 2.5) are much more challenging to evaluate, especially for those dentists working in more isolated settings or conditions.

- **3: Protect the confidentiality of patients' information**

Overall, this is the hardest principle to examine as in many cases evidence of failure to protect patient confidentiality only comes to light if a breach takes place and is noticed.

Clinical audit, review of complaints and compliments and processes established for regulators, inspectors or the employing organisation may be helpful in understanding whether information about patients has been treated as confidential (3.1). However, the competencies required in 3.2 and 3.3 (prevent information from being accidentally revealed and making confidential patient information known in exceptional circumstances) cannot be found to be covered adequately by any of the evidence sources examined here.

- **4: Co-operate with other members of the dental team and other healthcare colleagues in the interests of patients**

Evaluation of team working is easier to examine, particularly via multi-source feedback, case-based assessment and peer review.

- **5: Maintain your professional knowledge and competence**

All of the competencies examined here can be evaluated relatively easily, with case-based assessment and CPD being the most valuable tools. Competency 5.4 (laws and regulations that affect your work, premises etc) could be evidenced through systematic recording of staff induction procedures or health and safety assessments.

- **6: Be trustworthy**

Trust and confidence are difficult concepts to define and therefore quite challenging to assess. Multi-source feedback and patient feedback could be considered the most valuable tools here.

5. What criteria could be used to evaluate compliance with GDC's standards?

The table in Appendix 6 suggests how evidence types can be mapped onto the individual GDC standards. Criteria to evaluate compliance with individual standards are easier to define for some than for others.

Compliance with some standards can clearly be demonstrated with a particular piece of evidence, for example 1.6 – *"Make sure your patients are able to claim any compensation they may be entitled to by making sure you are protected against claims at all times, including past periods of practice"* requires the production of evidence of a suitable indemnity policy. The question of compliance is relatively clear cut.

Others can best be demonstrated through discussion. For example, 1.3 - *"Work within your knowledge, professional competence and physical abilities. Refer patients for a second opinion and for further advice when it is necessary, or if the patient asks. Refer patients for further treatment when it is necessary to do so."* In this case, no objective evidence may be available. Rather it will be a matter of judgement that a trained appraiser would be able to make on the basis of documentation of a case-based discussion or assessment.

Compliance with some standards, for example 2.5 – "*Maintain appropriate boundaries in the relationships you have with patients. Do not abuse those relationships"* is difficult to assess through the evidence brought to an appraisal. The dentist would be unlikely to volunteer information that demonstrates a serious breach of this standard and evidence would be most likely to come to light if the patient had reported the dentist to the relevant NHS body (hospital or primary care organisation), the police or the GDC.

In the sphere of medical revalidation, the guidance on how to demonstrate that revalidation standards have been met describes a relatively fluid process that relies on the professional judgements of the appraiser and appraisee about what is sufficient and appropriate evidence to allow revalidation decision to be reached. This approach allows for the dentist's individual circumstances to be taken into account and depends on appraisers who have been trained to deliver appraisal fairly and transparently. Psychiatrists bring a portfolio of evidence to an appraisal meeting at which a *"decision as to the appropriateness of evidence will be taken in discussion at the appraisal between the appraiser and the appraisee."* (RCPsych 2012) (p7). There is not a requirement to map evidence to each criterion. The purpose of compiling a portfolio *"is not to tick boxes showing that a particular standard has been met, but rather to enable the psychiatrist to collect a body of meaningful information that will demonstrate continuing fitness to practice."* (RCPsych 2012)(p8)

The GMC guidance states that the appraiser will not be interested that the doctor simply collected evidence in a portfolio. He or she will want to know how the doctor reflected on it, and *"what you think the supporting information says about your practice and how you intend to develop or modify your practice as a result of that reflection"* (GMC 2012a).

6. Can thresholds of acceptable and unacceptable practice be identified and agreed?

Thresholds of acceptable and unacceptable practice cannot be set across the board for any of these evidence types for two main reasons. First, dentists work in a wide variety of roles, practice settings etc, the *Standards for Dental Professionals* must be interpreted in the light of the individual dentist's circumstances. It is not feasible to set a summative threshold of acceptable practice for everyone.

Second, most of the evidence types examined here originated long before revalidation was conceived, and for different reasons. They are not primarily assessment systems and were not devised to measure the quality of dentists' practice against explicit standards. Evidence that a dentist has participated in the appropriate activities is an indication that he or she is engaged with performance management, but does not indicate a particular level of performance. Much more will be revealed in the appraisal process (if indeed this is what revalidation is based on) about how the dentist uses this information, reflects on it, and identifies support or changes that should be made. The decision about whether or not to revalidate a dentist at stage one will depend heavily on the judgement of the individual who considers the evidence brought to the revalidation exercise (the appraiser or responsible officer). The challenge for the architects of dental revalidation will be to bring transparency, fairness and consistency to the way this judgement is made.

7. What are the equality and diversity implications of requiring certain evidence types?

Some concerns were highlighted in relation to the potential of evidence to discriminate unfairly against particular groups of doctors. The only research evidence of unfair discrimination comes from the medical literature on patient feedback that demonstrated bias in feedback based on the country of qualification of the doctor, the ethnic group of the responding patient and whether the patient reported that they were seeing their usual doctor. While this is not grounds for excluding patient feedback from the revalidation process, it suggests caution is required in the use of this feedback. This should be taken into account (by an appraiser and/or responsible officer) alongside other sources of evidence when making a decision based on patient feedback about whether a dentist has demonstrated they have met the standard for revalidation stage one.

Caution and sensitivity must be exercised in terms of the potential of other types of evidence to discriminate unfairly. In particular, all dentists should be adequately supported in taking part in any new assessment system, regardless of age or time in practice. No dentist should be in any way penalised for complaints or significant events that emanate from factors he or she cannot control.

5. Recommendations

The purpose of dental revalidation is to allow dentists to demonstrate, on a regular basis throughout their career, that they are up to date and fit to practice in line with *Standards for Dental Professionals.* A system of revalidation should ideally be: applicable across the range of different workplace settings and specialties, evidence-based, proportionate, perform both summative and formative functions, and not duplicate existing requirements of other bodies.

The evidence types reviewed in this study predate any notion of revalidation, and those we have termed "evidence of quality improvement activity" and "data collected for other purposes" were not originally conceived of or developed as methods for assessing the performance of individual dentists against clearly defined standards. It is unsurprising, therefore, that no evidence was found of their suitability for making summative evaluations of dentists' performance. Even the three types that were designed in some cases to directly assess dentists' practice could not be relied upon, in isolation from other forms of evidence and professional judgement, to determine whether or not a dentist should be revalidated at stage 1 since their applicability to different practice settings will vary.

However, we believe that in combination, used within a carefully designed appraisal-based revalidation system with an appropriately trained and matched appraiser, most of them have the potential to contribute to a decision about revalidation for some, if not all, dentists.

With the caveat that further research evidence is required to be confident of the suitability of these evidence types, on the basis of the findings of this research, we cautiously make the following specific recommendations about the use of each evidence type for revalidation stage 1, and more general recommendations about the characteristics of a revalidation process to which they could usefully contribute:

Evidence types

Continuing Professional Development (CPD)

Evidence of participation in CPD could contribute to a portfolio of evidence for revalidation, but greater quality assurance of CPD activities is required.

- Consideration should be given to introducing an accreditation system for CPD activities

The weight given to a dentist's participation in the CPD activity should depend on to what extent the following conditions were met:

- The dentist in question identified an area of study during the process of personal development planning, possibly as a result of clinical audit or case-based discussion activity, and chose the CPD activity on the basis of this
- The CPD course was accredited, either by the GDC or by another body charged with quality assuring the provision of CPD

- A post-test assessment demonstrated that relevant learning or change in practice or performance had taken place
- The dentist reflected on how the learning would affect his or her practice before recording these reflections in the updated personal development plan
- The dentist would have demonstrated that he or she had complied with standard 5.2 *"Continuously review your knowledge, skills and professional performance. Reflect on them, and identify and understand your limits as well as your strengths."*

Clinical audit

Evidence of participation in clinical audit could contribute to a revalidation portfolio. Its contribution would be strongest if the following conditions were met:

- Clinical audit carried out in accordance with *Principles for best practice in clinical audit* (NICE 2002)
- The audit process and findings are verified by an independent assessor
- Changes in practice or learning needs identified as a result of the audit are recorded in a personal development plan
- The dentist reflects upon what the information tells them about their practice and what support they might need to improve or develop it
- Could demonstrate that a dentist has met standard 5.3 *"Find out about current best practice in the fields in which you work. Provide a good standard of care based on available up-to-date evidence and reasonable guidance."*

Dentists who have a role other than a clinical one could adapt the principles of clinical audit and apply it to their role. For example, a dental educationalist could audit the post-course feedback and any assessment of learning outcomes from a course they had taught or facilitated.

Personal development planning

The personal development plan is a key element of the revalidation process as it helps identify training and support needs and structure how they will be met. It is most valuable when:

- It is part of an interactive process rather than simply a document
- It is used along with a skilled mentor/appraiser to develop SMART goals and regularly updated

Peer review

In its formal sense in which a specially convened group examines and discusses practice against explicit standards, we do not recommend that peer review be included amongst the evidence types for revalidation. A similar process but with greater formative value is clinical audit. However, peers can play a valuable role in performance management.

Review of significant events

A review of significant events could contribute to the process of appraisal. It would make the most effective contribution where:

- Dentists are encouraged to reflect on the events
- Links are made between significant events and the dentist's Personal Development Plan and this feeds into CPD planning, where appropriate

Case-based discussion / assessment

The role of case-based discussion and case-based assessment in dental revalidation should be considered.

- A pilot scheme whereby peers, matched as far as possible in terms of professional background, practice case-based assessment according to a clear protocol and against explicit criteria
- Its formative and summative value in dentistry for both assessor and assessee should be gauged

Complaints & compliments

A review of complaints and compliments could contribute to Revalidation Stage 1. Its contribution would be strongest where:

- It is undertaken in a supportive organisational environment
- It is used in conjunction with other indicators of performance to inform improvements in areas of communication and other aspects of professionalism

Multi-source (colleague) feedback

MSF could contribute to Revalidation Stage 1, most effectively where:

- The dentist practices alongside colleagues and peers, particularly in hospital and community settings, in education or public health
- High quality instruments are approved or developed by GDC
- The instruments used assess the dentist's practice against relevant standards
- The dentist is supported in interpreting and acting on the findings
- The findings feed into the dentist's PDP

Patient feedback

- The GDC could develop or quality assure patient feedback instruments that assess dentists' compliance with standards 2.1, 2.2, 2.4 in *Standards for Dental Professionals*

Patient feedback could contribute to the revalidation of dentists in clinical practice. Its value would be strongest if the survey met the following criteria:

- Used a well-designed and validated instrument that included items that directly relate to the relevant standards such as whether patients were given the information they needed and whether they were involved as much as they wanted to be in decisions about their care
- Sampled consecutive patients over a given period
- Provided feedback from the survey to each dentist individually along with support to interpret the data and to use them to identify further training or support needs
- Recording a plan to meet these needs in a personal development plan

For dentists who do not work in clinical practice, alternative "service-users" (for example, students) could be asked for feedback.

For dentists whose caseloads include patients who are not able to complete standardised patient questionnaires, alternative methods of seeking feedback should be sought.

Direct observation

Where direct observation is carried out for existing performance management processes (e.g. within Defence Dental Services or as part of a Dental Reference Service assessment), it could be presented as evidence of the quality of a dentist's practice for Revalidation Stage 1.

We do not recommend, however, that it be introduced as a mandatory form of evidence for Revalidation Stage 1 due to the anticipated cost.

Data gathered for payment and monitoring purposes

Where these data bring evidence, through direct observation or other measurement of the quality of a dentist's clinical competence, they have a role to play in Revalidation Stage 1.

Overarching recommendations

Need for further evidence

- An ongoing programme to evaluate the formative and summative value of all the evidence types within dental Revalidation Stage 1 is required.

Qualities of revalidation process

- In all cases, the dentist should be encouraged and supported to reflect on what he or she has learned from their involvement in each process and how it will affect their practice, conduct, performance, and ongoing professional development.
- Professional peers have a valuable role to play in implementing appraisal and revalidation
- Recognise and nurture the formative potential of revalidation by making it a supportive and non-threatening encounter, while at the same time being alert to causes for concern.

- Where registrants are not practising in a clinical role, revalidation must accommodate the types of evidence that are relevant to their role. Many of the evidence types we recommend can be adapted. For example, a registrant could seek feedback from "service-users" other than patients (e.g. students), or carry out case-based discussion with peers from similar clinical roles, where cases relate to, for example, management or policy-development activities. Often dentists practising in larger institutions such as hospitals or universities, have line management structures and appraisal processes already in place, and are involved in institution-wide performance management processes.
- Alternative assessment/monitoring systems may be required to assess dentists' performance against standards that relate to trustworthiness, particularly in practice settings in which gathering MSF is unfeasible.

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