Advice sheet

Continuing Professional Development, Clinical Governance, Clinical Audit and Peer review
advicesheet
Continuing Professional Development, Clinical Governance, Clinical Audit and Peer review

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Continuing professional development (CPD) and clinical governance are the two areas through which quality assurance in dental practice is managed. This advice sheet explains the details of the regulations and what they mean for dentistry.
Mandatory CPD was phased in over three years, starting 1 January 2002

- All dentists on the Dentists Register must undertake CPD for recertification every five years
  - 250 hours over a five-year period
  - 75 verifiable, 175 general CPD
  - An average of 50 hours per year, 15 of which verifiable

- From January 2007, compulsory subjects apply to new five-year cycles
- All dentists need to maintain and retain their own records
- Random sampling by the GDC
- Failure to comply can lead to erasure from the Register
- A first step towards revalidation

Continuing professional development – lifelong learning

Lifelong Learning is the GDC's mandatory scheme for continuing professional development (CPD), a requirement for recertification. The scheme helps dentists to demonstrate that they are up-to-date with the latest developments in their area. Public scrutiny of the self-regulated professions is intensifying and dentists need to be able to demonstrate the high standards to which they are working. As well as offering greater protection and reassurance for patients, CPD has also led to increased professional satisfaction for dentists. Complying with the CPD requirement is an individual responsibility.

By 2008, the GDC will introduce a compulsory CPD scheme for DCPs, along the lines of the dentists’ CPD scheme. DCPs will also have to cover certain compulsory subject areas as part of their verifiable CPD requirement.

Timetable

CPD is mandatory for all dentists to retain their names on the General Dental Council’s Register and is monitored in discrete five-yearly cycles. The statutory scheme was phased in over three years:

- 1 January 2002: dentists registered after 1 January 1990
- 1 January 2003: dentists registered between 1 January 1980 and 31 December 1989
- 1 January 2004: dentists registered on or before 31 December 1979

Newly qualified dentists or first-time registrants start their five-year CPD cycle from 1 January following their registration date. For example, dentists registering in September 2006 will begin their CPD cycle on 1 January 2007.

Recording CPD

You must maintain records of your own CPD, as records are not kept centrally. Course providers might not be able to confirm your attendance at a verifiable course at a later date; they will not take on this responsibility when organising an event. It is important therefore that you develop a system to record your attendance at verifiable events and retain your certificates of attendance. Time spent on general CPD, such as reading professional journals, should also be recorded. The BDA’s CPD planner can help you record and store this information and develop a personal development plan. A prototype recording form is also available from the GDC but any method of recording will be accepted.

Declaring CPD

In March each year, the GDC will ask about the CPD you have undertaken in the past year and record your response. The GDC recommends that you spread your CPD...
over the five-year period and undertake 50 hours per year. It will write to you if you fall significantly below this amount. The system is flexible, however, and it is up to you how many hours per year you undertake - provided you fulfil your total of 250 hours at the end of the five-year cycle. The GDC can audit your CPD records at any time.

**Verifiable CPD**

Verifiable CPD is defined as activities with concise educational aims and objectives, clear anticipated outcomes and a means of quality control. A course with verifiable CPD attached should make you aware of what you can expect to learn from it and provide you with the opportunity to feed back to the provider on whether the course fulfilled its aims and you learnt what you expected to. The provider of a verifiable course should give you an attendance certificate stating the course title, your name and the verifiable hours.

Verifiable CPD includes
- courses organised by postgraduate dental deaneries
- courses organised by professional or scientific organisations, which comply with the above criteria - for example, courses provided by BDA, GDPA, Royal Colleges, the FGDP (UK) etc
- vocational training (VT) or general professional training (GPT) study days
- commercially-run courses
- distance learning incorporating a verifiable component

**A flexible scheme**

*Lifelong Learning* has been designed to be highly flexible, to accommodate personal situations as far as possible. Although the GDC recommends that you undertake 50 hours of CPD per year, of which 15 hours should be verifiable, the five-year cycle allows flexibility for special circumstances, for example family needs, ill health or time abroad. If you think that you will not achieve your target CPD in any given year, let the GDC know about your situation and how you plan to make up the hours during the following years.

In theory, VDPs can fulfil all their CPD requirements through their VT study days, but it is vital that young dentists get into the habit of undertaking CPD and develop contacts in their local area, so full participation in CPD from the start is important for career development.

If you are planning a career break or a time of working abroad, the BDA recommends remaining on the Dentists Register and continuing to stay in touch with developments through CPD; the need to undertake CPD continues, even if you are not practising. If you leave the Register with the intention of returning at a later date, you will need to provide proof at re-registering of the CPD that you have undertaken whilst absent, which should be in-line with the GDC’s requirements.

The GDC will accept overseas courses but you must have a certificate or accompanying letter from the course provider that states the number of verifiable hours.

**Monitoring the scheme**

The GDC maintains a tally of your CPD activity from your annual CPD declaration and at the end of five years will check that you have met your 250-hour requirement. If you haven’t, you will be sent notification of erasure, but you can apply for a six-month period of grace to complete the outstanding CPD.
A random sample of dentists who have complied with the 250-hour requirement will be asked to submit their CPD records (including certificates as proof of verifiable CPD) for the five-year cycle to the GDC for checking.

Non-compliance
Appeal against erasure will be to an independent review panel in the first instance, and then to the Privy Council. If your appeal is turned down, your erasure will take effect and you will not be able to practise again until you have fulfilled your Lifelong Learning commitment.

Planning your CPD
The BDA’s CPD Planner Continuing professional development: A guide for the dental team provides a comprehensive, yet easy-to-use tool to help you comply with the requirements. The pack comprises:

- a folder for storing your records
- a workbook containing advice on determining your CPD needs through professional development planning
- CD Rom
- storage sections for general and verifiable CPD records and certificates of attendance
- forms to send your CPD returns to the GDC
- personal pages for you to use as you wish.

The planner is available to BDA members from BDA Shop (tel: 020 7563 4555).

Allowances
In England and Wales, a training allowance is included in your NHS contract value but NHS dentists can still claim reimbursement for travel and subsistence linked to attending Section 63 courses. The deaneries provide form FP84-0306 for this purpose, which should be completed and passed to your primary care organisation (PCT or LHB) for payment.

In Scotland and Northern Ireland the arrangements for dentists to receive continuing professional development allowance (CPDA) are unchanged. Details on the rates can be obtained from NHS Education for Scotland (www.nes.scot.nhs.uk/dentistry) and Northern Ireland Medical and Dental Training Agency (www.nimdta.gov.uk).

Revalidation
The introduction of mandatory core subjects is a step in the direction of revalidation, a system to ensure that professionals are fit to stay on the register. There is no published timescale for the introduction of revalidation, but the GDC is committed to bringing it in gradually over the next decade in line with further changes to the legal framework and government recommendations.

The GDC has defined mandatory core subjects for CPD cycles starting in January 2007, which total a minimum of 20 hours. The remaining requirements of 55 hours of verifiable CPD can be fulfilled as you wish. Selecting CPD activities requires you to identify your needs and the best way of meeting them. Your choice of CPD should be relevant to your practice.

A personal development plan (PDP) is the best way of assessing your CPD needs and will help you to be more focussed when selecting CPD activities, ensuring that they are relevant to your PDP.
Mandatory requirements
From January 2007, dentists starting a new CPD cycle will be required to undertake the following verifiable CPD each five-year cycle:

- Medical emergencies (minimum of 10 hours)
- Disinfection and decontamination (minimum of 5 hours)
- Radiography and radiation protection (minimum of 5 hours)

Dentists in practice should also undertake CPD in legal and ethical issues, and handling complaints. The GDC has not specified a minimum number of hours nor that this CPD must be verifiable.

Assessing your CPD needs
Developing a PDP to produce your CPD programme is an individual responsibility, but there is much to be gained from sharing experiences and pooling resources in the practice team. A PDP helps you to look objectively at any skills shortages. Ask yourself:

- What have I done?
- What have I learned?
- What have the problems been?
- What are my strengths and weaknesses?
- What are my likes and dislikes?

By looking at gaps between what you can do and what you should be able to do or what you would like to be able to do, you can develop a plan of action. Ask a colleague who knows you well to go through the conclusions you have come to via your PDP and discuss the gaps to help you decide on the most appropriate course of action.

The BDA Planner contains a series of learning processes that you can use either in conjunction with a colleague or on your own to identify your learning objectives.

Choosing the right educational activity
An educational activity can take a variety of forms. Your PDP might lead you to read a book, surf the net or work shadow a colleague. These are general CPD activities. Your PDP may have also identified a need for verifiable activity such as attending a course or undertaking a distance-learning training package.

Verifiable activity should have:

- Concise educational aims and objectives - the activity should have a clear purpose or goal so that you can decide whether it will fulfil the learning objective that you have identified in your PDP
- Clear anticipated outcomes - you know what you can expect to gain as a result of taking part in this activity
- Quality control - you have an opportunity to comment, with a view to improving quality
- Provision of a certificate.

If attending a course is the best way for you to meet a need, take care to choose the right course for you. You may be faced with a wide range of activities in the one area you have identified as a gap in your skills.
The following questions and statements may help you to narrow your choice of course:

**Does the course fulfil one of the CPD objectives in your PDP?**

It is tempting to go on the most convenient course rather than one you really need so check that the course relates to your defined objectives; otherwise you will fail to address your main areas of development. Once you are satisfied that the course matches your needs, consider whether a single course will fulfil all your learning needs; be realistic, however, and don’t expect all your CPD objectives to be addressed at once. You may need more than one course to satisfy your PDP evaluation.

**Is this course for you?**

The course information should make it clear who it is aimed at and what level of knowledge and/or experience is necessary to fully benefit from attending? Is the course open to both newly qualified and experienced dentists or is it specific about the prior level of knowledge and experience needed by the delegates? Will the course be suitable for other members of the team as well?

**Is the course provider reputable?**

Ask your colleagues and friends if they know the course provider and are able to give you a first hand account of their learning experiences. It is useful to have a personal recommendation; neither the GDC nor the BDA recommend or accredit course providers.

**Does the course literature provide you with a programme for the course?**

A programme of the event will show how time is allocated for each session and speaker to help you decide if the balance matches your PDP needs.

**Will you need anything else to implement what you have learned?**

On your return to work, will you be able to develop and put into practice everything you learned? Will you need to buy new equipment or train other members of the team to get up to speed with your new knowledge?

**Is a list of relevant reading material provided so that you can prepare yourself for the course?**

It can be helpful to have access to resource material before the event, including website references and recent articles.

**Is the event sponsored?**

Is the sponsorship proportionate to the aims of the course or does it adversely affect the usefulness of the course by causing bias or limiting scope? Sponsorship is acceptable if it is clearly stated on the course information and you are made aware of it in advance.

**What about the speakers?**

Speakers should provide their biographical details and state their business interests. Is there enough information to judge the suitability of the presenter(s) to teach the proposed subject and an indication of whether they are experts in their field? Can you judge whether they are presenting original material so that you can avoid attending a talk that you have heard before? The course information should also give the speakers’ interests and credentials with some information on their professional background.

**Is the method of presentation clear and appropriate?**
Various options are available including lecture, video, group discussion, interactive video/computer, workshop, hands-on and distance learning. You will need to know in advance that you will be comfortable with the method of learning and to bring any required equipment.

If the course is distance learning-based does it have adequate support?
Distance learning activities require good technical and personal support. You may have questions and need to talk to someone about them, so a 'live' customer help facility is essential. You will also need to know how feedback will be provided.

Is there an opportunity to comment on the event if it is verifiable?
A verifiable event must give you the opportunity to comment and give the course provider feedback on the event. This is a chance to review the criteria set for the event and indicate if the course provider has provided the course originally advertised. It will help to improve the course, if necessary, or maintain the existing quality.

It will also assist you in deciding whether your CPD objectives have been met and allow you to progress to the next identified learning need in your PDP, or identify whether your PDP needs to be modified.

Is the venue appropriate?
Is it easy to park? Near to public transport? Do you have a map? Will you be able to get refreshments or will they be provided? The wrong venue can often overshadow the event if you arrive late because of lack of parking or an unexpected taxi ride from the station.
### Checklist

#### Before the event:

**Learning need identified**
- What type of course should you look for?
  - Workshop?
  - Conference?
  - Hands on course?
  - Distance learning?

**Is this course for you?**
- Are the aims and objectives clear?
- What is the target audience?
- What is the level of knowledge and experience of the delegates?

**Course literature**
- Has the course programme been provided?
- Is the length of the event given?
- Is there time allocated for questions?
- Do you know the time allocation per speaker?

**Additional costs after the event**
- Will additional training be required?
- Will staff training be required?

**Pre-course learning**
- Has a reading list been provided in advance?
- Has the organiser recommended any other sources of learning material?

**Venue and administration of event**
- AV facilities
- Disabled access
- Will refreshments be provided?
- Parking facilities
- Public transport access
- Has a map been provided?

**Sponsorship**
- Is the sponsorship declared?
- Is it in proportion to the aims of the course?

**Speakers**
- Have biographical notes been provided?
- Are they experts within their field?
- Is original material being presented?

**Method of presentation**
- Lecture
- Video
- Group discussion required
- Interactive video/computer
- Workshop
- Hands on
- Distance learning

#### At the event:

**Is there a course attendance certificate?**
**Has a course evaluation form been provided?**
Example course attendance certificate

British Dental Association

This is to certify that

(Name)  ___________________________________________  GDC number: __________________________

attended a course held at

__________________________________________________________________________

title

__________________________________________________________________________

on the subject of

__________________________________________________________________________

The course met the educational criteria set by the General Dental Council for verifiable Continuing Professional Development for the purpose of Recertification.

The course provided ___________________________ hours of verifiable CPD.

Signed: ___________________________________________

(Print name): _______________________________________

Course organiser:

Address:
What is clinical governance?
Clinical Governance is an NHS framework for quality assurance to improve the quality of health care and to make providers accountable for delivering a consistent standard on which patients can rely. All GDS dentists have to comply with the requirements. But clinical governance should not be seen as a requirement only applicable to the NHS. All healthcare should have quality assurance, just like any other area of work activity.

Within your practice you can help yourself and the team to establish a clinical governance framework by making sure that

- everyone understands what the practice is supposed to do
- everyone understands their role in delivering the service
- you have monitoring systems to tell you whether you are doing it
- you have processes for continuous improvement.

The NHS definition is a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish (NHSE, A First Class Service, 1998).

The NHS Clinical Governance Framework
The current NHS clinical governance framework is contained in the Department of Health publication Standards for Better Health (2004) and defines the level of quality of services that all NHS organisations are expected to meet or be working towards. The framework consists of 24 core and 12 developmental standards across seven areas (known as 'domains'). The domains and standards contained in the 2004 publication do not translate easily into dentistry, so standards for dentistry were developed: Primary Care Dental Services Clinical Governance Framework (May 2006). These dental standards focus on 12 themes, most of which will be familiar to dentists.

Existing practices will already have quality assurance systems in place, which should only need minor adjustments to comply with the new framework. Some requirements, however, will vary locally ('prevention and public health', for example) and the PCO will provide information and guidance on what you should have in place.

Details of the framework
The new framework is based on 12 themes, for which key actions and policies are defined. Below is an overview of the themes and key actions and policies. The full document is available on the NHS Primary Care Contracting website (www.primarycarecontracting.nhs.uk).
<table>
<thead>
<tr>
<th>Theme</th>
<th>key actions and policies include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Infection control</td>
<td>Infection control policy, inoculation injury policy, immunisation records (hepatitis B, TB)</td>
</tr>
<tr>
<td>2. Child protection</td>
<td>Child protection policy, staff employment records and staff training</td>
</tr>
<tr>
<td>3. Dental radiography</td>
<td>Ionising radiation policy, including staff protection, radiation protection file, audits</td>
</tr>
<tr>
<td>4. Staff, patient, public and environmental safety assessment</td>
<td>Health and safety requirements, risk assessment and COSHH, patient safety and incident reporting</td>
</tr>
<tr>
<td>5. Evidence-based practice and research</td>
<td>NICE guidelines, referral protocols</td>
</tr>
<tr>
<td>6. Prevention and public health</td>
<td>Local and national strategies on, for example, smoking cessation, alcohol consumption advice, mouth cancer awareness</td>
</tr>
<tr>
<td>7. Clinical records, patient privacy and confidentiality</td>
<td>Record keeping, data protection, patient access to health records</td>
</tr>
<tr>
<td>8. Staff involvement and staff development</td>
<td>CPD and PDPs, employment policies, appraisals, training, practice meetings, raising concerns</td>
</tr>
<tr>
<td>9. Clinical staff requirements and development</td>
<td>GDC requirements, patient consent, complaints policy and complaints handling, underperformance</td>
</tr>
<tr>
<td>10. Patient information and involvement handling, patient feedback</td>
<td>Patient information leaflets, complaints</td>
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<tr>
<td>11. Fair and accessible care</td>
<td>Compliance with disability discrimination legislation, access to emergency care</td>
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<td>12. Clinical audit and peer review</td>
<td>Audit reports</td>
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Implementation of clinical governance

The Primary Care Dental Services Clinical Governance Framework provides a guide for PCOs to implement clinical governance locally. It is also possible for PCOs to develop their own local clinical governance framework for dentistry which could be anything from a self-declaration to the preparation of a portfolio and practice development plans and may also include a practice visit. PCOs will need to communicate their clinical governance requirements to dentists locally.

The Healthcare Commission assesses the performance of PCOs annually, so PCOs will encourage and support compliance by local practitioners but may make stringent demands of a practice if they feel that compliance is not forthcoming.

BDA support

The BDA can provide help and advice on clinical governance requirements through its Clinical Governance Kit, which contains information on the required standards as well as pro-forma policies and models to ease compliance.

The BDA’s Good Practice Scheme can help with clinical governance compliance; many of the requirements are the same. Working through the practice self-assessment programme, ensures that you are working to recognised standards of good practice and meeting your legal obligations. For some PCOs, membership of the Good Practice Scheme demonstrates adequate compliance with clinical governance requirements.

Clinical governance in practice

Getting started - identifying and minimising risks

The individual circumstances in any dental practice define where to start. The practice size, the number of staff, the level of staff turnover, the types of treatment being offered for example, are all areas to take into account. Quality assurance is about:

- being clear about what you are trying to do
- being clear about how you will do it
- checking that you are actually doing what you intend.

For a large number of everyday processes this will be entirely straightforward, with common understandings, an obvious rationale for what is being done and minimal risk of mishap. But alongside this there are processes that can be forgotten or carried out incompletely, and where failure would impact significantly on the outcome for the patient. These need to be identified, prioritised and discussed with the whole team, so that best practice can be established and observed.

What needs to be done?

Clinical governance describes a framework in the practice within which work processes are established, problems highlighted and responsibilities defined. What is required is to put these arrangements, which may have been informal in the past into a more formal, documented format.

In practical terms, a clinical governance system is strengthened by, for example, running staff meetings so that ideas can be shared and better working methods devised, by looking at staff training and by ensuring common understandings through documenting certain processes. There is no single formula for every practice. Work as a team with other practice members, talk about the issues and let things evolve gradually.
The process

- Identify tasks which different practice members approach in different ways, discuss the pros and cons of each and consider whether one can be adopted as 'best practice'.
- Look through BDA Advice Sheets, the BDA Practice Compendium or the Clinical Governance Kit for models, guidance and advice, and tailor them to the practice.
- Devise a simple satisfaction survey for patients and discuss the findings at a practice meeting.
- Carry on through the whole range of practice quality issues until you have established a portfolio of management processes.

Document certain processes

Practice processes should be documented. A practice manual of agreed work procedures can make it easier to induct new staff as well as to work more consistently. A simple auditing/checking system for each defined process will be helpful. Start by agreeing a practice policy, which can be displayed in your waiting room. A model policy is available in the Practice Compendium and the Clinical Governance Kit.

Defining processes for delivering each objective should be the next step. For example, one of your policy's objectives could be that all staff joining the practice are given training in practice-wide procedures. Once a year, there is an individual review of training needs for everyone in the practice. This could be achieved by defining a process like this:

- References are taken up before engaging any member of staff, to establish that an applicant is a fit person to work in health care.
- Everyone joining the practice receives induction training which includes training in the procedures described in this system.
- One-to-one training reviews are held in [January] to identify any training needs and resolve any work difficulties that staff members may be having.
- The practice encourages all DCPs to belong to the relevant national association to help them keep in touch with developments outside the practice.
- Nurses are required to take the National Vocational Qualification.
- DCPs are allowed [x] days of paid study leave in a year for formal continuing professional development.
- Between training reviews, if performance falls short of expectations, there are systems for investigating causes, seeking remedies or, if necessary, taking disciplinary action.
- Where critical incidents occur, systems are reviewed to assess whether a change could prevent recurrence.

Some of these processes can then be audited using, for example, records of induction training or training reviews. For example, did training reviews and induction training actually happen as intended? The audit can be based on documentation systems that already exist.

The BDA's Clinical Governance Kit goes into more detail and the Practice Compendium contains models covering all aspects of practice management. Both are available from BDA Shop on 020 7563 4555.

Clinical audit and peer review

- Part of the NHS clinical governance framework for dentistry.
- Overseen by local Primary Care Organisations (PCOs).
- Local arrangements which are not controlled centrally.

Clinical audit encourages individual GDPs to examine different aspects of their practice, to make improvements where the need is identified and, from time to time, to re-
examine areas that have been audited to make certain that a high quality of service is being maintained or further improved.

*Peer review* provides an opportunity for groups of dentists to get together to review aspects of practice. The aim is to share experiences and identify areas in which changes can be made to improve the quality of service offered to patients.

**Local arrangements**

PCOs are responsible for ensuring compliance with clinical governance, which includes audit and peer review. The approach by PCOs varies:

- Some contact dentists in their area with a list of projects and ask them to carry out a set number of hours on one, some or all projects from the list demonstrating that the PCO has identified clinical areas that may need improvement. Dentists involved in these audits will provide data on a specific subject, which may lead to the provision of courses or information material in this area and contribute to local public health strategy setting.

- Others may wait for dentists to contact them with enquiries on their strategy and project proposals. Unless the PCO is working on a policy it wishes to implement locally, it may be satisfied to see local dentists being proactive.

If your PCO has not yet requested you undertake audit/peer review, consider making contact about the project you are planning. Keep full project data and reports/minutes of meetings as the PCO may, at a later stage, ask you for proof of participation.

Historically, audit/peer review was funded at a rate of 15 hours over three year. In England and Wales, there is no longer a current required minimum and PCOs can implement their own limits. If this is considerably more than 15 hours, you may wish to consider negotiating a comparable reduction in UDAs to reflect the additional time that audit/peer review might take.

**Verifiable or general CPD**

Projects that have been approved by a local PCO can be regarded as verifiable CPD, and you should be given a certificate to that effect. ‘Non-approved’ projects will count as general CPD.

**Further information**

You should familiarise yourself with local arrangements by contacting your PCO, which should provide you with project guidance. The Education pages on the BDA website are also a useful source of information (www.bda.org) and provide three suggestions for audits and background information. If you have an idea for an audit, a literature search in the BDA’s Information Centre may help to set your standards.

**National clinical audit and peer review schemes**

Schemes in Wales, Scotland and Northern Ireland are organised locally. More information can be obtained from:

- **Wales:** www.dentpostgradwales.ac.uk or telephone 029 2054 4982
- **Scotland:** www.nes.scot.nhs.uk/dentistry/general/audit
- **Northern Ireland:** telephone 028 9053 5649.
Audit Projects

The following information should be included in a project outline:

- a brief outline of the aims and objectives of the project as well as the standard to be set
- a summary of the methodology, including details of data sample sizes, recording methods and proposed methods of data analysis
- if possible, a timetable of activity
- proposed educational source materials.

You might wish to start with an audit that has a pre-set methodology (cookbook audits). An example is described below, others are available on the BDA website (www.bda.org).

Members of the BDA’s Good Practice Scheme are required to carry out an annual audit on record-keeping. More information on this audit is available from the Good Practice Team on 020 7563 4597.

Audit sample: the quality of radiograph

Why audit radiographs?

Radiographs must be justified and will only benefit patients if they lead to the correct treatment decision using the minimum radiation dosage. Image quality is important and, if poor, can compromise an accurate diagnosis. It should be remembered that although individual patient dose may be low, dental radiographs represent one of the most frequently undertaken radiological investigations in the UK.

An audit of dental radiography could encompass:

- **structure**, by evaluating your own facilities against the standards laid down in the publication *Guidance notes for dental practitioners on the safe use of x-ray equipment* (Department of Health / NRPB, 2001)
- **process**, by examining what was done, for instance whether the correct exposure time was set or the radiographs properly processed; an audit of image quality
- **outcome**, by looking at the diagnostic yield or treatment decisions. This might include, for example, using radiographs to assess the extent of dental caries and the impact on the decision to restore the affected teeth
- **an audit of image quality** can be fairly straightforward and a good one to start with.

Image quality may be marred by errors involving:

- patient preparation
- positioning
- exposure
- processing
- film handling

The DH guidance defines standards for dental radiographs on a 3-point scale: excellent, acceptable and unacceptable as shown in the table shown on the next page.
<table>
<thead>
<tr>
<th>Rating</th>
<th>Quality</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Excellent</td>
<td>No errors of patient preparation, exposure, positioning, processing or film handling</td>
</tr>
<tr>
<td>2</td>
<td>Diagnostically acceptable</td>
<td>Some errors of patient preparation, exposure, positioning, processing or film handling, but which do not detract from the diagnostic utility of the radiograph</td>
</tr>
<tr>
<td>3</td>
<td>Unacceptable</td>
<td>Errors of patient preparation, exposure, positioning, processing, or film handling, which render the radiograph diagnostically unacceptable</td>
</tr>
</tbody>
</table>

The guidance also specifies minimum and interim targets for radiographic quality:

**Percentage of radiographs taken**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Target</th>
<th>Interim target</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not less than 70%</td>
<td>Not less than 50%</td>
</tr>
<tr>
<td>2</td>
<td>Not greater than 20%</td>
<td>Not greater than 40%</td>
</tr>
<tr>
<td>3</td>
<td>Not greater than 10%</td>
<td>Not greater than 10%</td>
</tr>
</tbody>
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**How to undertake an audit of bitewing radiographs**

- Decide whether the audit is to be retrospective (easier) or prospective (better)
- Define the individual features to be audited
  - patient preparation - make sure the patient has removed any dental appliances, for example
  - positioning - do the radiographs cover the area from the mesial surface of the first premolar to the mesial surface second molar (distal surface if an impacted third molar is present)?
  - do the radiographs show an equal amount of interdental bone in the maxilla and mandible?
  - are there any overlapping contact points?
  - is the occlusal plane parallel to floor?
  - is the film the right way round?
  - exposure - is the radiograph too dark/too light? A film properly processed in fresh chemicals should be used as a standard
  - processing - too dark/too light
  - film handling - there should be no fogging, nail marks, chemical splashes, for example
- Use seven pairs of bitewings to calibrate yourself and identify any problems. Make sure your ratings are consistent (reproducible). You will need to decide what level of overlapping contrast points is acceptable/unacceptable. You may decide that less than one-half thickness of enamel is acceptable but more than one-half thickness is unacceptable
- Audit 30-50 pairs of bitewings, depending on workload and duration of audit.
Data collection
You will need to collect the following data:
● patient identification
● date of radiograph
● rating 1, 2 or 3 (see above)
● if 2 or 3, identify why?

Presentation of findings
You will need to prepare a simple chart showing results of the audit:
● percentage of ratings for 1, 2 and 3
● frequency of faults identified under the five headings included above

Making changes
Having completed your first audit, you can then identify any potential sources of error(s) and implement corrective procedures. Correcting some of the faults you have identified may require discussion with colleagues, for instance the practice owner or the nurses.

● Patient preparation: do the nurses have a protocol to ensure, for example, patient’s spectacles are removed?
● Positioning: will film holders help?
● Exposure: when was the last radiation protection survey carried out? Is there a chart showing exposure factors?
● Processing: is time and temperature for processing correct for manual processing? How frequently are the chemicals changed? Is a test object used? How frequently are automatic processors cleaned?
● Film handling: who is responsible for training nurses?

Once the changes have been implemented you will be in a position to repeat the audit in six months’ time to see how effective it has been. Even if you only meet the interim targets, you are on your way to achieving the definitive standards.

Peer review can be organised as an alternative to clinical audit. The aim is to share experiences with dentists from other practices and identify areas of practice where changes can be implemented to improve the quality of service offered to patients.

Peer review groups
The thought of working together in a group with other colleagues may at first appear daunting for some dentist in general practice but it is a technique that is becoming more common for many healthcare professionals; the benefits of this type of activity are now widely accepted.

A peer review group can decide on its composition and the range and type of topics to discuss and review. This freedom and lack of central direction can create some difficulty if the group is uncertain of where to start.

All groups will require a leader or convenor to provide the impetus to get the group together, keep a record of what has been reviewed, act as a point of contact for other members and produce a report at the end. The membership, the length and frequency of meetings, the venue(s) and the topics for discussion should be agreed by the group.
which can then take ownership of the project. Participating dentists must be willing to have some aspect of their practice reviewed. A group normally consists of 4 to 8 dentists and is usually organised through personal initiative.

Needs and aims of peer review
The needs and aims of peer review groups will differ as the areas for quality improvement and individual professional development differs. It is impossible to provide an exhaustive list of activities, but peer review may be used as:

- a method of sharing knowledge between colleagues
- a stimulus for individual learning
- a tool to change and improve practice performance
- a method of supporting daily practice activity
- a way to reduce inter-dentist or inter-practice variation
- a way of agreeing standards for a clinical audit

Setting up the projects
As with clinical audit, the first step is to check the PCO's strategy for clinical governance. Some PCOs will require their dentists to undertake specific audits, and it might be difficult to persuade them to consider an individual approach. If, however, the local PCO is expecting dentists to comply with clinical governance requirements without any PCO input, you should have no problem in setting up your group and the project of your choice. Source materials are widely available: the FGDP's Standards in Dentistry, BDA Advice Sheets and professional journals are good examples which can be used to compare current guidelines and in-practice realities.

The meetings
All successful peer review meetings have a structure and a plan. The group needs to know when, where and why it is meeting. Set a timetable for the project, have an agenda and meeting notes for each meeting - recording the time and place, members present, what was discussed, what was agreed and what was disagreed.

A tried and tested way of organising meetings is to delegate, in advance, a particular topic to individual group members, allowing them to lead the discussion and encourage everybody to participate fully. One thing is certain - dentists love to talk about dentistry and in a successful group the discussion will be both free flowing and wide-ranging. The greatest difficulty is stopping the discussion. At the end of the peer review project, individuals will be surprised at how much knowledge they have both gained from and shared with their colleagues.