CLINICAL AUDIT AND PEER REVIEW
For Dental Teams in Wales
Cookbook

This document contains twelve examples of audit methodologies:

<table>
<thead>
<tr>
<th>Number</th>
<th>Topic</th>
<th>Page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Root Treatment</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Radiography</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Antimicrobial prescribing</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Disposing Waste safely in Dental Practice</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Disinfection and Decontamination</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Periodontology</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Referrals</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>Time Management</td>
<td>11</td>
</tr>
<tr>
<td>9</td>
<td>Record Keeping</td>
<td>14</td>
</tr>
<tr>
<td>10</td>
<td>Health and Safety</td>
<td>16</td>
</tr>
<tr>
<td>11</td>
<td>Auditing the Consent Process in Endodontics</td>
<td>17</td>
</tr>
</tbody>
</table>

Why Undertake a Clinical Audit?
Undertaking a clinical audit encourages dental teams to self-examine different aspects of their clinical practice, to implement improvements where the need is identified and re-examine, from time to time, those areas, which have been audited to ensure that a high quality of service is being maintained or further improved.

What are the key points that I should remember?
MAKE THE AUDIT S.M.A.R.T.
S. SPECIFIC
M. MEASURABLE
A. ACHIEVABLE
R. REALISTIC
T. TIME – CAN BE COMPLETED ON TIME, AND NOT TAKE UP TOO MUCH TIME

Who should be in the proposed group?
- Dental team (see guidance notes).
- One member of the group must be prepared to act as convenor/project lead
- Concentrate on clinical treatment and management procedures in general practice where the range of expertise and peer review from fellow practitioners and DCPs will be most useful.

Who should lead each session?
- The peer review sessions will need to rotate around the different surgeries of each group member.
- Each member of the group should ideally lead one of the sessions.
- The project lead at each session will need to get the latest information, standards or guidelines on the topic and plan how the session will be conducted.
- Good sources of information are, the BDA Information Centre, peer reviewed journals, Faculty of GDP (Standards in Dentistry Manual), guidelines issued by specialist societies.

What needs to go in the final report?
- The methods used
- What was covered in each session
- The groups conclusions and recommendations on each topic area
- The benefits the dental practice team had gained

Suggested audit topics for the dental practice team
- Cross Infection
- Radiography
- Waste Disposal
- Medical Emergencies
1. **EXAMPLE PROJECT ON ROOT TREATMENT**

**The Audit**

1.1 **Aim**
The aim of the project is to determine the quality of the process and outcomes from endodontic treatments.

1.2 **Background: why the project is worth doing**
- Patients routinely expect a tooth to be root filled rather than extracted.
- Careful endodontic treatment should result in pain free teeth with excellent survival rates and providing a good structure for subsequent restorations.
- Good isolation, security of instruments in relation to the airway or swallowing and infection control minimizes hazards and maximizes outcomes.
- Good technique will ensure that the instrumentation performs to its optimum level and that mishaps such as instrument fracture in the root canal are avoided.
- Good technique should also ensure that the canal is filled as near to the apex as possible and that infected material is not pushed into the periapical tissues.
- Consider, also, the criteria you use in deciding to carry out root canal therapy.

1.3 **Who is involved and who will do what.**
- Dentists note reason for treatment, treatment components and assess x-ray and length scores.
- Dental Nurses process films and ensure they are mounted, named, dated and correctly sided. Also to ensure they are available with record card for assessment.
- If you are using computer spread sheets for your data analysis, appoint someone to transfer data etc.
- Team discussion to agree conclusions of your audit and (if required), improvements to be made.

1.4 **Source Material to Ensure the Audit has a Sound Evidence Base**
Information can be found by:
- Searching journals, recent BDJ, Dental Update, IEJ
- Looking into various Internet sites.
- Contacting the BDA library
- Contacting Faculty of General Dental Practitioners.

1.5 **Work out and write down your standard.**
The standard needs to be measurable, realistic, achievable and agreed
Look at what methods and techniques you currently use and see how these compare with recommended “best practice”. Are there things you could do to improve your methods and how might you implement such changes?
Useful reference material can be found in:
- Standards in Dentistry. FGDP (UK) 2006.
- The European Endodontic Society Consensus. [IEJ 2006; 39(12) 921-930]

1.6 **Methodology.**
- Decide how many meetings you will need to carry out the project and describe, briefly, what will be done at each meeting.
- Decide what types of root fillings you want to include in the audit (single root, multiple or both) and what size sample to use.
- At the time of the RCT, the reason is noted on the record card.
- Decide what data you are going to collect.
- Design a data collection sheet to allow you to record it

1.7 **What items of data need to be collected? Some examples of the data you might wish to collect.**
- Reason for treatment.
- Tooth being treated.
- Initial radiograph.
• Method of isolation used.
• Working length radiograph.
• Mechanical cleansing / irrigation.
• File size and length.
• Check radiograph with master cone, prior to completion.
• Radiograph on completion.
• Report on length of root filling re apex and density of root filling in canal re any voids.

1.8 Analyze the results
Compare them with the standards set.

1.9 Conclusions
• Identify what improvements, if any, are required in your practice.
• Decide how changes will be implemented.
• The practice team should discuss and agree recommendations for improvement. You may wish to identify specific problems and decide how best to address them.
• A decision is also made whether to adjust the success rate percentage in the standard for future audits.
• Dates are agreed for introducing any changes.

1.10 Decide when you will re audit the topic.

2. EXAMPLE PROJECT ON RADIOGRAPHY

2.1 What is the problem that we are trying to solve?
Poor quality radiographs within the practice

2.2 Why is this problem important?
Dental radiographic examinations represent one of the most frequently undertaken radiological investigations in the UK. A recent survey estimated that dentists were taking 19 million intra-oral radiographs each year and more than 2.9 million panoramic radiographs. The effective dose delivered to the patient is very small but the collective dose is significant because of the large number of radiographs that are taken.

X-ray exposure involves risk to the patient. It is essential that any x-ray examination should show a net benefit to the patient, weighing the total diagnostic benefits it produces against the detriment that the exposure may cause. Therefore it is very important that the radiograph is of high quality to maximise the diagnostic yield.

2.3 What would happen if the problem was solved?
All radiographs taken in the practice would have a QA image rating of 1 and therefore would have a high diagnostic yield and benefit to the patient.

2.4 How would we measure that the implemented change will make an improvement to the quality of radiographs in the practice?
Record the QA image ratings of all the radiographs in the practice before the change is implemented and after the implementation of the change. The QA image ratings would be shown on a run chart.

2.5 How do you decide what change would resolve your problem?
Can you make a change to the process/ procedure in which the problem has been identified?
Develop a process map of the steps involved in taking a dental radiograph within your practice.
Develop a method of collection of QA data within the practice

Subjective quality rating of radiographs

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<th>Rating</th>
<th>Quality</th>
<th>Basis</th>
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<tr>
<td>1</td>
<td>Excellent</td>
<td>No errors of patient preparation, exposure, positioning, processing or film handling</td>
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<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 yield of the radiograph</td>
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<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>
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It is important that if the radiograph is given a QA rating of 2 or 3, the reason for the error is recorded. The error codes for radiographs will inform the discussion of possible changes to implement to improve the quality of the radiographs in the practice.

Data collection sheet for QA data and error codes

<table>
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<tr>
<th>Date</th>
<th>Name of patient</th>
<th>QA rating</th>
<th>Error code</th>
<th>QA rating 2 or 3</th>
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<td></td>
<td></td>
<td></td>
<td>Patient error</td>
<td>Operator error</td>
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Depending on the size of the practice and number of patients seen on a monthly/weekly basis express the QA data in the form of a run chart.

The error code information can be expressed on a pareto chart to show the most common cause of a QA rating of 2 or 3.
Implement change to improve the quality of the radiographs

Discussion at practice meeting, using the information from the process map, QA run charts and the error code pareto chart to develop a list of changes that could be implemented to improve the quality of the radiographs.

Using the PDSA model, implement the change and monitor the process and the outcome

Review the QA run charts to see if the implemented change has resulted in an improvement in the quality of the radiographs

It is also important that if the implemented change has resulted in a SUSTAINABLE improvement
The continuous data collection and representation of the information in the form of a run chart will clearly illustrated if the resultant change is sustainable or unsustainable.

The process of Quality Improvement facilitates, using the run charts, the continuous collection of data and therefore allows on-going monitoring of the QA of the radiographs in the practice.

Any further changes that are implemented to improve the quality of the radiographs should follow the PDSA model.

3. **EXAMPLE PROJECT ON ANTIMICROBIAL PRESCRIBING IN GENERAL DENTAL PRACTICE.**

3.1 **Background.**
The prescribing of antimicrobials is a very important aspect of patient care. This project will enable groups to assess their current prescribing protocols and compare them with “Best Practice” recommendations. The group will also be able to assess the effectiveness of their prescribing on the patients they treat.

3.2 **What To Look At.**
These are some examples of topics you may wish to consider as part of your project and you may wish to include other topics of your own choice.
- What antimicrobials do we use?
- What doses?
- Why do we use them?
- What evidence do we have to support our criteria?
- How do our criteria compare with “best practice” recommendations?
- How successful is the treatment?

3.3 **Who Will Be Involved In The Project?**
- Dentists.
- Nurses and/or Reception Staff to help with patients' follow-ups.
- Patients.

3.4 **What are the Standards and Evidence Base?**
In order to determine the current best practice recommendations, a search will need to be undertaken. The BNF is one example of literature that will provide useful information. It is also recommended that you find out what information is available from such bodies as the Faculty of General Dental Practitioners, BDA etc. A search of relevant articles in leading Journals should also be undertaken. Details of the references you use to support your project will need to be listed in your application.

3.5 **What Outcomes Should You Look To Achieve?**
- Improved patient care by ensuring they receive appropriate treatment, which is supported by “Best Practice” recommendations.
- Consider your current rationale and prescribing protocols.
- Identify areas for improvement and other day to day problems.
3.6 What methodology should be used?
- Decide how many meetings will be required and give brief details of what will be done at each meeting.
- The group should discuss their current prescribing methods before reviewing the research material.
- Design and pilot an information sheet for collecting the data.
- Decide on sample size and when the survey will be commenced. (At least 30 patients).
- Consider outcomes of treatments given with prescriptions. Look at best practice guidelines in all cases to see if the prescription alone was appropriate or if some other intervention, with or without prescription is indicated.
- Ensure all patients are followed up and monitored.
- Compare your prescribing profile with the recommended “Best Practice” procedures.
- Consider changes you need to make and how you will implement and assess these.

3.7 What data do you need to collect?
These are just some examples of the information you may wish to include in your information sheets:
- Patient details.
- Diagnosis.
- Medication prescribed, dose and duration.
- Was the prescribing of antimicrobials appropriate for the diagnosed condition.
- Other treatment given for the condition.
- Some way of assessing the patient’s degree of pain so that a follow up scores can be taken to assess outcomes.
- Any general comments e.g. Allergies, drug interactions etc.

3.8 What Should Be Included In The Final Summary?
The results of the project will need to be presented in an anonymised way. The following topics should also be mentioned.
1. Brief details of what was discussed at each group meeting.
2. Details of any problems that were identified and how they were dealt with.
3. Details of improvements made and how they were implemented.
4. The educational benefits that the group members identified from the project and any other areas.
5. The results of the group must be collated into your final summary. Completion forms should, preferably, be filled in by computer and submitted electronically.

**National Audit: 1000 Lives Antimicrobial Prescribing Audit**

The Dental Postgraduate Section, Wales Deanery in collaboration with 1000 Lives Plus have developed an Antimicrobial Prescribing Audit for General Dental Practitioners. It has been developed and tested by GDPs in Wales.

The aims of this audit are to:
1. Support the most effective clinical use of antimicrobials.
2. Reduce the number of unnecessary prescriptions.

Completed audits qualify for 3 hours verifiable CPD and associated funding (£195.21) for dentists with an NHS Performer Number. You will need to register for the audit by completing an AMP1 form and submit your data electronically.

For further information or to request an electronic copy of the AMP 1 form please contact Heather Stewart on 02920 687780 or via email StewartH5@cardiff.ac.uk. Or alternatively the registration form and guidance notes are available to download from the Wales Deanery Website.

4. **EXAMPLE PROJECT ON MANAGEMENT OF WASTE IN GENERAL DENTAL PRACTICE.**

4.1 Introduction
The Hazardous Waste (England and Wales) Regulations 2005 and List of Wastes Regulations 2005 places a duty of care on dentists as how to healthcare waste should be managed. Each dental practice
should have in place a healthcare waste policy which identifies who is responsible for healthcare waste and how it should be managed. The policy should identify waste as hazardous, offensive or trade. How the waste is segregated, stored and handled should be documented along with the practice arrangements for collection and record keeping. **All clinical waste should be disposed of according to the regulations.** Where hazardous waste production exceeds 200 kg per annum it is necessary to register with the Environment Agency.

Possible Source Material: -
- **BDA** - Advice sheet 3 Health & Safety Law for Dental Practice, Practice Compendium, Healthcare Waste Management Advice Note 76 (Revised Nov 07)
- **H&S Executive** - An Introduction to Health & Safety:
- **Denplan** - Practice Quality Programme Handbook.
- **Internet** - search for papers using PubMed

**4.2 Aim**

To audit the waste disposal procedures of the practice/practices and obtain observational evidence of their compliance with current good practice guidelines and legal requirements.

**Objectives**
- To review the literature to identify current good practice and legal requirements for waste disposal
- To use the information gathered to set a standard for complying with waste disposal requirements.
- To design a sheet for the collection of data relating to audit of the waste disposal arrangements.
- To audit the waste disposal arrangements in the practice/practices and to record the results on the data collection sheet.
- To analyse the results and compare them against the standard and identify areas of weakness or non compliance.
- To implement changes/improvements in identified areas of weakness or non compliance
- Plan to re-audit in three years

**4.3 Suggested Method**

Use the literature review to identify the legal requirements for waste disposal in General Dental Practice. Current good practice will be compliance with the legal requirements. The standard set will need to be 100% compliance with the legal requirements. Audit each of the practice’s/practices’ systems and processes for waste disposal and record the results onto a data collection sheet. Compare the results against the standard. Identify any areas of non compliance and plan implementation of the changes necessary to meet the legal requirements.

**Welsh Health Technical Memorandum 01-05 (WHTM 01-05)**

NHS Wales Shared Services Partnership - Facilities Service have published WHTM 01-05 which replaces HTM 01-05. The new WHTM 01-05 replaces the concept of “Essential Requirements” and “Best Practice” with a process of continuous improvement which is in line with other recent revised WHTM.

You can access WHTM 01-05 at:

WHTM 01-05 includes information on an audit of compliance with decontamination. The audit has been developed by dentists in Wales and is supported by the School of Postgraduate Medical and Dental Education. The audit is administered through the Clinical Audit Peer Review process and is now available to all GDS and CDS dental teams in Wales.

For further information or to request a registration form please contact Heather Stewart on 02920 687780 or via email StewartH5@cardiff.ac.uk. Or alternatively the registration form and guidance notes are available to download from the Wales Deanery Website.
5. **EXAMPLE PROJECT ON DISINFECTION AND DECONTAMINATION IN GENERAL DENTAL PRACTICE.**

5.1 **Aim**
To carry out a review of the cross infection control procedures used in dental practice.

5.2 **Background**
Effective cross infection procedures are vitally important. The GDC includes cross infection as one of the core topics for GDP and DCP recertification.
Changes are made to the requirements at regular intervals and it is important that practices have effective measures in place and keep up to date with new procedures and recommendations.
Patients need to feel confident that they are treated in an appropriate way by well trained professionals and tend to be more aware of what the requirements are.
Being able to display how good they are in following correct procedures can be a useful marketing tool for a dental practice.

5.3 **Who is involved and what are their roles?**
Every member of the team has a role to play in cross infection procedures.
Involve the whole group in deciding how to plan the project; collect data; research the topic and develop new protocols.
Remember to include everyone in developing protocols. Make sure everyone has a stake in the project.
If they feel joint owners of the project and its outcomes, they are more likely to make it work.

5.4 **Some Suggested Research Material.**
BDA A12 Information Sheet.
BDA A3 Advice Sheet.
Schulke & Mayr. (run postgraduate courses and produce excellent hand outs).
Professional Indemnity Societies.
GDC

5.5 **Setting a standard.**
Use the above to help you set standards. Remember that some standards are legal requirements and will need total compliance.

5.6 **What items of data do you need to collect?**
Carry out a baseline assessment of what you already do. A starting point could be your written practice cross infection control policy.
Are there updated medical histories of patients?
What protocols do you have for cleaning, disinfecting and storage of instruments?
Use of single use items.
What about the equipment? Consider such things as use of autoclaves; quality of water in dental units etc.
What measures do you take to protect staff and patients? E.g. Immunisation of staff; personal protective equipment;
What safe working procedures do you use e.g. handling equipment, re-sheathing LA syringes, hand cleaning/use of gloves; disposal of waste?
Do you have cross infection training as part of the induction for new staff?
Are there written protocols and appropriate records?

This is clearly a very large topic and you may wish to carry out a general overview or perhaps take a more in depth look at areas that you feel are more appropriate for your practice.

5.7 **Analyse the results.**
Compare your results with the standards you have identified.

5.8 **Conclusions.**
Identify your strengths and weaknesses.
Decide how you can improve and discuss ways of introducing changes.
Develop written protocols that all team members can help to formulate and sign up to.
Review any areas of concern to see if changes have been effective.
When you write up the project include details of all areas reviewed and research material used. Include your results, analysis, outcomes and include copies of any data collection sheets and written protocols.

6. **EXAMPLE PROJECT ON PERIODONTOLOGY IN GENERAL DENTAL PRACTICE**

6.1 **AIM.**
To carry out a review of how patients’ periodontal needs are managed in general dental practice.

6.2 **Background.**
Most patients require periodontal treatment. During this project we will determine the level of knowledge of participants about the various forms of periodontal disease. We will look at how we record disease in patients and if patients are made aware of their periodontal status. This will be underpinned by good record keeping including details of treatment planning, treatment and compliance. The group will need to look at how they currently perform as well as where and how they can improve. By carrying out this project, participants can ensure that they improve their knowledge and have robust protocols which allow them to provide a high standard of care.

6.3 **Who is involved and what are their roles?**
**GDPs, Hygienists, Therapists.** To help with baseline assessment of knowledge of disease process. Decide on sampling methodology. Develop data collection sheets and protocols. **Nurses.** Assist in above and help in record keeping and completing data collection. It is important that all members work as a team and are able to bring their ideas to the group.

6.4 **Some suggested research material.**
Faculty of General Dental Practitioners (Booklet on record keeping in general dental practice and Standards in Dentistry). Dental Protection Society. (Risk Management Leaflets). BDJ and other journals. Standards in Dentistry [FGDP (UK) 2006] Search on “PUBMED”

6.5 **Setting Standards.**
Use the research material to set the required standards. The standards should be realistic and achievable.

6.6 **Data Collection.**
First of all do a baseline assessment on the level of knowledge about the topic. This could mean an assessment and update of the classifications of periodontal disease and indices. Measure your current performance. To do this you will need to develop a data collection sheet. This may need to be piloted to ensure its effectiveness. Involve your DCPs in collecting and discussing the data. Carry out a retrospective audit of a randomly selected representative group of patients for each clinician. Data you collect should include; current medical history; risk Factors; periodontal charting; radiographs; diagnosis; treatment plan formulated; patient informed. You may have others you wish to include.

6.7 **Analyse the results.**
Compare your results with the standards you have set.

6.8. **Conclusions.**
Present your anonymised results and analysis for each clinician. Identify your strengths and weaknesses. Decide where and how you can improve and agree methods and protocols as a group. Re-audit to measure the effects of any changes made

7. **EXAMPLE PROJECT OUTLINE FOR A RETROSPECTIVE AUDIT OF REFERRAL LETTERS.**
Referral letters are frequently the only method by which information is transmitted between general dental practitioners and the hospital-based services. It is essential that referral letters and the replies,
which provide a crucial link between GDPs and specialists, are of the highest possible standard.

Referral letters need to contain both administrative data and clinical details.

The referral process should be efficient and effective for the patient, the referring GDP and the recipient
of the referral letter.

Opinions regarding what constitutes a reasonable standard of referral letter may vary between
specialists and GDPs.

The primary objective of this retrospective audit will be to assess a random sample of referral letters
sent for their quality and appropriateness.

7.1 Aim

To audit a sample of the referral letters sent to specialists for their quality and appropriateness.

7.3 Objectives

- To search for and review relevant papers from the literature. Use PubMed www.ncbi.nlm.nih.gov
- To use the literature review to prepare a standard that defines appropriate referral.
- To set a standard that lists the details and information expected to be included in a referral.
- To design a data collection sheet.
- To review retrospectively a random sample of referral letters for appropriateness and quality and
  compare them against the standards set
- To analyse the results and identify weak areas
- To consider how improvements could be made and implemented.

7.3 Suggested Method

Use an on-line literature search using PubMed for ‘Dental Referral Letters’. Apply limits, human, English
and dental. Obtain and read copies of relevant papers and use the information gained to set the
standard for the audit. Other useful sources include: Standards In Dentistry, FGDP (UK) 2006; Dental
Indemnity societies and Hospital Trusts’ referral protocols.

Decide what data is to be collected and design a data collection sheet.

Select a random sample of referral letters sent by members of the audit group. Assess each referral
letter against the standard set and record the results onto the data collection sheet.

Analysed and discuss the results. Identify areas where improvements may be required and consider
how to effect such improvements.

Finally make a list of conclusions.

8. OUTLINE OF PROJECT ON TIME MANAGEMENT.

For practitioners probably one of the biggest problems faced is the need to manage their time to ensure
maximum efficiency

Most time management experts seem to agree on one thing. They say that one of the first things people
need to do in order to manage their time is to determine how they use the time now. This is where this
audit fits in

A time audit is the tool used to determine or measure how practice time is used. Once a time audit has
been completed the results can be used to identify areas in the use of time or in the practice processes
where changes could effect an improvement in the management of practice time.

Suggestions for planning a time audit in order to record where time goes

1. Efficient use of the clinical time.
   - the appointment length versus the clinical procedure to be completed
   - or who manages our appointment times. E.g. RCT – 15 minutes: alginate impressions 45 minutes
   - or who is responsible for the lab work return date

2. Wasted time: how much time is wasted by:
   - late cancellations
   - or missed appointments
There may be other aspects. Each practitioner can determine what aspects to audit.

To understand where the time goes, it is important to assess how it is actually used. One way of doing this is to keep simple operating records and for this a yardstick or measure is needed in order to evaluate our use of time. So the purpose of this audit is to provide a yardstick or measure of clinical time.

**An Audit Outline** needs an aim, objectives and a method.

**8.1 Aim.**
To carry out an audit of the use of clinical time in General Dental Practice

**8.2 Objectives.**
These are the steps or processes used to carry out the aim.
- Review literature
- Set standard
- Decide sample size
- Design data collection sheet
- Record use of time
- Analyse results
- Evaluate and consider changes

**8.3 Method:** - This sets out how the objectives are carried out
- Review Literature
  We can use the internet. PubMed is a useful site. BDA? Denplan?
- Set Standard
  Remember the Audit Cycle.

For a first-time Time Management Audit, it may necessary to set a self standard as there are no previous yardsticks or measures to use as the standard. The outcome of this first audit will however give a measure or yardstick which could in future be used as the standard against which subsequent time audits could be measured

- Sample Size
  The sample size needs to be sufficient to be representative of how time is spent. If a one week period only was recorded then it is very possible that the week selected would turn out to be atypical. To obtain a balanced sample it is suggested that the minimum time recorded should be a four week period.

**Data Collection**
Design a sheet on to which clinical activity and inactivity over each week period can be recorded. This process in itself will give a start in observing time usage more effectively. What is to be recorded?
Some suggestions are: - length of treatment session, type of treatment planned, cons, periodontics,
prosthetics, surgery, endodontics, cancellations, missed appointment, NHS or private. Possibly UDAs
complete or UDAs lost. The completed data collection sheets become the results.

• Analysis of Results
To analyse the results it is probably easier if a summary of the results or data collected is made onto
another chart or summary sheet.
Once these charts are completed they can be used to try to identify areas where improvements could be made.

- Evaluation and Conclusions

Outline conclusions: - weaknesses or problems identified.

Draw up possible plans for effecting improvement.

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<th>Possible Problems</th>
<th>Possible Solutions</th>
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The final part is to consider how to implement the possible solution that would lead to improvements in the use of practice time

9. **EXAMPLE PROJECT ON AN AUDIT OF CLINICAL RECORD KEEPING**

9.1 **AIM**

To establish if clinical records contain all the necessary information required to comply with current guidelines.

Patients expect their records to be up to date, complete, clear, accurate and legible (GDC, 2013). They expect that all those involved in their care and treatment will keep their personal details confidential and that all information will be kept securely. Patients also need to be able to access their dental records. All records should be written contemporaneously. Remember that good record keeping is part of our professional practice and the mark of a safe and skilled clinician.

Patients have a right to expect that clinicians will examine them thoroughly, ask the right questions, diagnose their needs correctly, provide a clear treatment plan and treat them accordingly (Faculty of General Dental Practice, 2016).

When carrying out an examination often we go through the process of checking various facts about our patients and observing through examination various structures, however these checks and examinations are not always recorded fully within our records. The type and extent of an examination will vary for each category of patient that presents. A new patient will require a more comprehensive baseline examination than a patient who has been seen previously. The aim should be to maintain these records in such a state that any other clinician could seamlessly ensure continuity of care.

With the above as a focus the purpose of this audit to check what is currently being recorded and to implement change where necessary for the benefit of patient and practitioner alike. This is especially important with regard to medico-legal issues.

9.2 **What should be recorded:**

- Personal information - patient details including date of birth, address and postcode, contact telephone number.
- Socio-behavioural history
- Factors affecting appointment
- Medical History record
- Medical Alerts
- Previous dental history
- Reason for patient attendance
- Mouth Cancer risks noted e.g. smoking and alcohol consumption.
- Periodontal examination: BPE or more
- Extra oral examination: Nodes, TMJ, asymmetry
- Intra oral examination: Tongue, fauces, floor of mouth, palate, mucosa
- Hard & soft tissue examination
- Treatment plan.
- Treatment options noted.
- Radiographs: notes made of justification and report made
- Consent obtained.
- Recall timing noted (NICE guidelines followed).

These headings are for guidance. The group should agree its own headings.

Decide and agree on a standard

Some standards already exist as to the appropriate timing for bitewing radiographs and what should be recorded, but it is for the practitioner(s) to agree appropriate standards.

<table>
<thead>
<tr>
<th>Number</th>
<th>Patient Detail</th>
<th>Patient Identifier</th>
<th>DOB</th>
<th>Postcode</th>
<th>Medical History</th>
<th>BPE updated</th>
<th>NHS/Private status</th>
<th>Exemption</th>
<th>Extra Oral</th>
<th>Soft Tissue</th>
<th>Recall Timing</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Data collection

An example of a data collection sheet is shown below. This is not meant to cover all areas and you should modify it to suit your requirements according to the data you wish/need to collect.

9.3 Presentation of results.
Present the results in a way that the group can understand, but ensure anonymity where appropriate.

Agree where change needs to occur.

9.4 Implement the change.

9.5 Re-audit as appropriate.

9.6 References.
- Spahl TJ  *The pen: the clinicians most powerful “handpiece”* 1997 Funct Orthod 14:26-28
- FGDP(UK)  *Standards in Dentistry* Faculty publication 2016
- British Dental Association  *Clinical Governance Pack*
- Dental Defence Union
- Dental Protection Society.
- General Dental Council Standards for Dental Professionals (2013)

This list is purely an example and should merely form the basis for further study.
10. **EXAMPLE PROJECT ON HEALTH AND SAFETY IN GENERAL DENTAL PRACTICE**

10.1 **Aim**
To ensure the whole practice team have a thorough understanding of the Health and Safety requirements for General Practice.

10.2 **Background**
Health and safety legislation protects patients and staff and it is a legal requirement under the Health and safety at work act 1974. Below is a list of many of the aspects, but is not exhaustive.

- Riddor
- Cossh
- Display screen
- Portable appliance testing
- Fire precautions
- First aid and medical emergencies
- Infection control
- Manual handling
- Mercury spill hazard
- Pressure vessels
- Protective equipment
- X-ray registration and testing
- Risk assessment
- Safety signs
- Waste disposal
- Working environment
- Water supplies

10.3 **Who is involved?**
All members of the dental team have a responsibility to ensure that practice policies and guidelines are adhered to although the ultimate responsibility is that of the employer. As with any audit it is important to ensure that all members of the team are kept informed of developments and feel that they play a role in the development of any future policies and procedures. Involve the team in developing a data collection sheet and in discussion of results.

10.4. **Research Materials**
- BDA advice sheet A3 (Health and safety law for dental practices)
- HSE guidance and Act
- NRPB radiological guidance

10.5 **Standards**
Most Health and Safety requirements are law and therefore require complete compliance (a guide is available at the end of the advice sheet A3).

10.6 **Data collection**
Most of the data collection will revolve around whether you comply with the Act and other aspects of Health and Safety Law. There are numerous aspects to Health and Safety and it should be remembered that it does not just involve having a piece of paper with a written policy on, the act also requires that procedures are in place to ensure that policies are carried out within the practice and regularly updated.

Don’t forget to ensure that part of your audit includes checking that the practice has an induction or training procedure for new members of staff who may not be conversant with the act.

As a starting point look at what requirements there are within the act (again the guide at the back of the A3 document is a good starting point) then assess how the practice complies compared with these standards.

In the data collection sheet perhaps consider collecting data on:
- Name of policy: fully or partly written
- Compliance with policy: full or part
- Induction procedure in place: full or part
Once this data is collected look for where the gaps are and devise a plan to implement and fulfil the requirements.

Anonymise and discuss the results and improvements with other members of the group. Ensure all members of the team are involved.

11. **Auditing the Consent Process in Endodontics**

11.1 **Background**
Endodontics is a challenging and complex treatment modality that raises issues for risk management. To complete endodontic treatment to a high standard requires technical ability and skill, however complaints arising may not exclusively relate to clinical situations and are often due to issues in patient management and communication factors.

To undertake an audit on consent it should be noted that three elements must be present for valid consent:

- The patient demonstrates capacity.
- Consent is given voluntarily.
- Information is disclosed to the patient necessary for them to make a decision.

11.2 **Informed consent**

"An adult person of sound mind is entitled to decide which, if any, of the available treatments to undergo, and their consent must be obtained before treatment interfering with bodily integrity is undertaken"

Montgomery v Lanarkshire


Clinicians must take reasonable care to ensure that patients are made aware of any material risks involved in recommended treatment and of any reasonable alternatives

Materiality of risk:
- Nature of the risk.
- Effect of the risk occurring.
- Importance of the beneficial aim of the treatment to the patient.

The test of materiality is whether, in the circumstances of the particular case,

*either*; A reasonable person in the patients position would likely to attach significance to the risk.

*or*; The clinician is or should reasonably be aware that the particular person would likely to attach significance to it.

11.3 **Aim**

To measure the current standard of consent, regarding the provision of endodontic treatment against FGDP UK Standards, with the aim of identifying any shortcomings and subsequent learning, and action necessary to pursue constant improvement.

The primary benefit is to the patient who should enjoy a bespoke dialogue regarding their specific treatment and concerns, with the dentist allowing them to share in the decision and foster a positive working relationship including rapport and trust.

The audit should review:

**The structure to support consent.**
Reviewing the resources available to support consent.

**The process to support consent.**
Reviewing the disclosure to the patient in regards to discussed information that has been recorded in the patients clinical records.
11.4 The outcome
Reviewing the patients understanding of their received treatment in the format of a patient questionnaire.

When undertaking an audit it is necessary to set a standard against which you can compare yourself. This standard can be determined or aspirational, it can be *best practice standard i.e 100%*. This audit suggests that you determine your standard target.

When auditing the Process and the Outcome of consent in this audit it is suggested that you set a standard for comparison and measurement.

**Method:**

1. **To audit the resources available to support the consent process.**
   - Review four areas in your practice using the data capture sheet. *(Data Capture Sheet 1.)*

2. **To review the process used to support consent.**
   - Select 10 random retrospective patients who have received endodontic treatment and collect information using the audit sheet *(Data Capture Sheet 2.)* These patients might not have necessarily been treated by yourself however this is an improvement exercise for the team.
   - Using the audit determination score system.
     - 0- no recorded information.
     - 1- Minimal discussion.
     - 2- Comprehensive discussion.
   - Add the scores and calculate the percentages of positive scores.
   - Compare against the standard you set, make observations and consider how to make an improvement utilizing your dental team.
     - Create an Action plan and Make a change.
     - Set a re-audit date and re-record your results.
     - Analyse your results and ask yourself should your change be **Adopted**, **Adapted** or **Abandoned**.

11.5 To review the Outcome of consent.
This audit will monitor the level of patient satisfaction with their treatment and the consent process.

The patients response should be recorded in the patients records.

The review of Outcome can be used for any treatments and it is recommended that use in high risk treatments such as surgical or cosmetic procedures aids the clinical records.
Use the Data capture sheet 3.

Survey each patient completing endodontic treatment post treatment.
Complete the questionnaire prior to leaving the practice.

<table>
<thead>
<tr>
<th>Comprehensive information available in a patient friendly format.</th>
<th>Comprehensive examination procedure in Place</th>
<th>Team members trained to understand consent</th>
<th>Suitable environment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient leaflets. Y N</td>
<td></td>
<td></td>
<td>Unhurried Y N</td>
</tr>
<tr>
<td>Models Y N</td>
<td>CPD certificates onsite Y N</td>
<td></td>
<td>TPC Y N</td>
</tr>
<tr>
<td>Video Y N</td>
<td></td>
<td></td>
<td>Additional non surgery space Y N</td>
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<tr>
<td>Other language availability Y N</td>
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</tbody>
</table>

**DATA CAPTURE SHEET 1,**
Used to determine the resources available to support consent.
TPC = Treatment Plan Co-ordinator

**Data Capture Sheet 2**
Used to determine the recorded process for consent in the patients clinical records

<table>
<thead>
<tr>
<th>Options discussed with patients</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
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<tbody>
<tr>
<td>Recommended Options</td>
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<td>Nature of treatment</td>
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<tr>
<td>Prognosis discussed</td>
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<tr>
<td>Benefits of treatment discussed</td>
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<td>Material Risks of alternative treatment</td>
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</tbody>
</table>
We VALUE YOUR OPINION.

We would like your opinion on our consent process. We would like you to reflect upon your time when we discussed your treatment and answer the following questions.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did you have enough time to make a decision on your treatment options?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Did we provide you with enough information on your treatment?</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Was the information easy to understand?</td>
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</tbody>
</table>

Analysis of results.

Remember to use the audit determination key:
0 - no recorded information.
1 - Minimal discussion.
2 - Comprehensive discussion.

This means that if scoring 2s for 10 patient maximum score is 20. 100% would be 20.
Provide your Actual score as a percentage.
Provide your Target score for comparison.

Data Capture Sheet 3

Reviewing Outcome of consent process

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**Table:**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Did you have enough time to make a decision on your treatment options?</td>
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<tr>
<td>2. Did we provide you with enough information on your treatment?</td>
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<tr>
<td>3. Was the information easy to understand?</td>
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<td>Yes</td>
<td>No</td>
<td>Comments</td>
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<tr>
<td><strong>4. How would you rate the end result of your treatment?</strong></td>
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<td><strong>5. Did your treatment proceed as expected?</strong></td>
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</tr>
</tbody>
</table>

References.

3. FGDP (UK) 2016 Clinical Examination Standards
4. GDC Standards.