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 Concensus. [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.