The Quality Improvement Guide for Dental Teams

Helping dental teams to improve their practices, team working and patient care.
Introduction

Dental teams are familiar with quality improvement and improving the services they deliver to patients or better ways of working for staff. Many undertake formal quality improvement work (such as audit) and even more introduce better ways of working in informal ways.

**Improving Quality Together (IQT)** has been developed to support all staff working in NHS Wales to use a common and consistent approach to improvement. It is based on recognised local, national and international expertise.

This quality improvement guide outlines IQT for all members of the dental team, and gives information on how you can participate in IQT, gain CPD for completing on-line training and use the model for improvement in practice. It’s designed to be used on-line, but you may like to print a copy for reference in the practice (it has 14 pages).

1000 Lives Improvement has published a generic **Quality Improvement Guide**, which forms the basis of this guide for dental teams.

The **Dental Postgraduate Section of the Wales Deanery** (PGMDE) provides and facilitates programmes for CPD and quality improvement for individuals and practice teams across Wales. These existing programmes can work with and alongside IQT.

The CPD programme also includes systems for practice development with In-practice training, practice and personal development plans, Maturity Matrix Dentistry and clinical audit. This work is described in the Driver Diagram on page 3, and in the **Dental Practice Quality Improvement Programme for Wales**.
Driver Diagrams are one way of describing systems, including clinical systems, and how they can be improved to give better outcomes for patients and staff. More information is on the [Improving Quality Together website](#).
What is Improving Quality Together?

Improving Quality Together (IQT) is the national learning programme for all NHS Wales staff and Independent Contractors such as general dental practice teams. It provides a common and consistent approach to improving the quality of services in the NHS.

All dental team members can undertake the training - dental staff who work in general dental practice can email IQT@wales.nhs.uk for access to the IQT programme. More information is on page 13.

IQT is for all members of the dental team helping us to improve:
- Patient experience and the outcomes of care.
- The way we organise and run our practices.
- By identifying and implementing small but significant improvements to the way we work.
- Safety and reliability.
- Communication and team working.
- Working environments.

Improving Quality Together (IQT) is a set of skills and techniques based on the Model for Improvement. This guide explains those techniques and how you can use them in your practice.

By taking part you can:
- develop skills to identify small improvements that your team can make
- apply these skills to make a difference to patients and the practice
- gain transferable skills
- share the improvements you make with other dental teams
- gain verifiable CPD by doing on-line training

Small changes

Every change is not an improvement. NHS dental services are subject to frequent change, but they don’t always improve the way we do things. IQT is about making sure that changes do result in improvement.

It may take time to plan exactly what to do. Once you’ve decided on what you want to improve, using the Model for Improvement means you try out and then make changes quickly - sometimes over a few days.

Improvement isn’t always about making widespread and sweeping changes. Small sustained improvements can be cost-effective and easier to achieve and maintain. Every member of the dental team can identify areas where small improvements could make a big difference. Unlike many other groups
of health staff, dental teams are used to working together “day in day out” and often in the same practice / clinics. They are ideally suited to use IQT.

**How does this differ from audit?**

Auditing clinical practice against agreed standards is a well-established process which enables dental teams to recognise good practice, identify areas for improvement and provide assurance to patients, staff and Health Boards.

Audit can identify problems but doesn’t solve them, and won’t always identify how to solve them.

For example, an audit of infection control standards (WHTM 01-05) shows that sterilizers are not always correctly loaded. The audit identifies a problem but does not solve it, or necessarily provide answers to the problem.

If you’re familiar with audit, you’ll see that the Model for Improvement is very similar. The main differences are

- you’ve already identified something you want to do better
- you’re not necessarily measuring what you do against agreed standards, and
- the Model for Improvement is geared to making improvements happen.

*A definition of audit: Audit seeks to improve quality by using a structured review to look at systems, practices and results against agreed standards – and then making improvements when indicated. (CGSDU Clinical Audit Toolkit 2002 & NHS Wales Audit Committee Handbook 2012)*

**The Model for Improvement**

The Model for Improvement provides a straightforward way to make improvements in the way we work and deliver services.

The model is based on three key questions -

1. *What are we trying to accomplish? What do we really need to do better?*
2. *If we make changes, how will we know that a change is an improvement?*
3. *What change can we make that will result in improvement?*

These questions are used in conjunction with small scale testing in “Plan-Do-Study-Act” cycles (PDSA)
Using the Model for Improvement

Think about the questions in the Model for Improvement:

What are we trying to accomplish?

What Improvement to Select
Start with the problem. All too often we think “something should be improved” without really considering what the problem is. Examples could be dealing with failed appointments (DNAs) or concerns about how often sterilised instruments have cement left on them

Think about
- What drew your attention to the problem / issue? Was it something that staff mentioned they found difficult, findings from an audit, a patient concern? Is it something the team are “always moaning about” or that annoys them?
- How is it affecting your staff or patients?
- How will you assess the causes of the problem?
Take 5 minutes to consider where you work.
Is there a small change that could improve the way you work?

Examples of this could be:
- Do you spend ages looking for the right equipment?
- Are there too many things to remember in busy times?
- Are you equipped to do your job properly?
- Do messages always get to you on time?
- Are practice staff included in making decisions on how the practice runs?
- Are there times when you think “that nearly went wrong”?

Identifying the Real Issue
It can be easy to make assumptions about the real issue, but it pays to think it through fully and discuss with others such as your team members or patients. That way you can be clear about the real issue rather than what it appears to be.

- What exactly is the problem you have identified?
- Do other team members agree it’s a problem?
- Is it something you need to “do something about”?
- Is it a problem you can do something about – can the team solve the problem?

Decide Your Aim
Be clear about exactly what it is you want to achieve. All too often we are over ambitious or unrealistic about what we can do – much better to make a small, real, sustainable improvement. Be sure that any improvement becomes part of the way the practice operates and doesn’t rely on one staff member being in work

How will we know that a change is an improvement?

Set up Measures
Can you measure or assess the problem and any change you’ve made? Is it really a better way of doing things? If you can’t measure a change it’s very difficult to prove to yourself (and team members) that it’s an improvement. “Measures” don’t always have to be something you can count (numerical data). They can include other ways of assessing the change such as feedback from patients or colleagues. Examples include recording the number of failed appointments before doing anything different and recording the number again after making changes. Has the number of failed appointments gone down? Has the change helped to solve the problem?

This 20 minute YouTube video provides more information.
Identify Changes.
- What will you do differently?
- Can it be done easily and economically?
- Will staff need training or is it easy to tell everyone what to do?
- Can it be sustained or is it likely to be a “flash in the pan” and everyone goes back to the old way of doing things when the enthusiasm wears off?

What change can we make that will result in improvement?

Test Changes
Test any changes on a very small scale. All too often we introduce changes wholesale (e.g. a new appointment system) only to find it’s no better than the old way of doing things - or even worse than the old way. Testing on a small scale allows you to assess or measure whether the change is an improvement. An example of a small scale is testing a change in one surgery with one dentist / nurse team for one day.

If the change is not an improvement, you haven’t lost anything. You can re-think how to deal with the problem.

If the change is an improvement, you can try it out on a larger scale, e.g. two teams in two surgeries for a week. Some questions to consider:
- Does everyone think it’s a good idea?
- Are there suggestions for doing it even better?
- Can you make more small changes to make it even better?

Record and share what you did
Dental teams don’t often share their good ideas and innovative ways of working. The Dental Deanery has set up a section of their website where dental teams can share their improvements - this will be ready from November 2014.

Some improvement examples are available online. They give an idea of how issues can be shared.

Potential areas for improvement

You may identify a wide range of things you want to improve in your practice. However there are some essential issues which could be improved in almost every part of the health service
- Safety and reliability.
- Communication and teamwork.
- The working environment.
You may decide to start with one of these areas before you tackle other problems you’ve identified.
Safety and reliability
Patient safety needs to be seen as the number one priority in all healthcare organisations - the principle is “first do no harm”. Harm and waste are seldom caused by bad people but usually by bad systems.

Dental teams are used to managing risks, but it can be difficult to maintain reliable and consistently good care when we work in busy practices under stressful conditions - it’s inevitable that errors will occur, but there are ways to reduce the risk of this.

The World Health Organization (WHO) suggests the following ways to improve safety and reduce risks:

- Avoid reliance on memory
- Make things visible
- Review and simplify processes
- Standardise common processes and procedures
- Routinely use checklists
- Decrease the reliance of vigilance

Example of improving safety
A dental practice introduced a safety checklist prior to surgical extractions. The checklist included ensuring the patient had up to date medical history, had undergone all necessary pre-treatment checks, radiographs available and reviewed, patient advised of risks and benefits. It also included a check that all equipment was available.

A new dentist joined the practice - he was sceptical about the checklist until it showed the correct radiograph was not available for his patient and the situation could be corrected before treatment started.

Better communication and teamwork
Good teamwork is essential in dental practice and good communication within the team is one indicator of efficient practice.

Dental teams don’t always communicate as well as they could. There are several reasons for this:
- The message is delivered in an uncoordinated, unorganised manner.
- Messages are muddled - a bit like the game “Chinese Whispers”.
- Team members are left out of important communications.
- Communications are late or delivered when everyone is very busy.
- Verbal communication not backed up with something in writing.
- Use of complicated language and different communication styles.
- A reluctance to say “I don’t understand what you mean”.
- A reluctance to have face-to-face discussions.
Example of improving communications
An infection control audit showed that sterilisers are not always correctly loaded. Staff were told to ensure they always load the steriliser properly, but a later audit showed the situation hadn’t improved. The message had not been communicated to everyone, and the system still relied on conscientious individuals.

The team discussed exactly what caused the problem and identified a shortage of instruments in one surgery and lack of staff training. Instruments were redistributed and staff arranged a training session with the steriliser manufacturers.

However the simplest change produced the most improvement. The team pasted large laminated photos of correctly and incorrectly loaded sterilisers above the equipment. These acted as a prompt every time the steriliser was loaded.

Using briefings to improve communication
A briefing is a short team discussion that takes around five minutes. A briefing improves communication and allows team members to share knowledge and manage a busy clinical session.

Briefing the team prior to the commencement of a clinic ensures everyone is aware of any special requirements or difficult issues. It allows all team members to voice concerns and raise issues.

A typical briefing includes:
- Ensure every team member is clear about their role today
- Check equipment is available and functioning properly
- Check lab work, radiographs available.
- Ask “What if” something doesn’t go right today?

Some of the ways in which team briefings can be developed are:
- Allocating five minutes at the start of the day where the team can discuss the patients and any treatment / safety concerns.
- Identify in advance a list of safety issues for discussion e.g. patients with complex medical histories, anticipated complications (a structured checklist may be helpful)
- Using a de-briefing session at the end of the clinic to review any issues, answer concerns or discuss incidents.

A de-brief be quick and simple. Just get the team to tell each other:
- Their reflections on the session / patient treatment
- What went well?
- One thing they could have done more of.
- One thing they could have done less of.

**Example of using team briefings**

A patient’s relative was taken ill in the waiting room. The dental team had received training in CPR and had all necessary equipment to hand. Despite their best efforts, the patient died. The team reported this as a safety incident, but did not have a debrief.

A few days later one of the team was very distressed - she had dwelled on the incident and become very concerned that she “hadn’t done enough” to save the patient.

A proper debrief would have given the team time to support each other, recognise all the things they had done well, and to share anything they had learnt from the incident.

**The working environment**

Dental teams generally work in well organised environments, but there are always potential areas to improve. The surgeries are often well organised but non-clinical areas can become cluttered. Using the 5S way to organise the practice environment enables a team to look at their practice/clinic and decide collectively what they want to change and what they can do to improve their processes.

Doing this as a team means everyone contributes, understands why changes have been made and has a vested interest in sustaining the improvement.

It means faster and more accurate access to equipment, which is easier for staff whether they are familiar or unfamiliar with the area.

**Example of improving the working environment**

A dental team complained of insufficient storage for essential equipment. They used the 5S method to de-clutter non-clinical areas, as well as surgery storage areas. This created sufficient space.

Every team member took part - they realised that non-clinical areas were always cleared by one team member who was “fed up” with clearing up after everyone. She agreed to take on this role as long as she had permission to throw things away when others had left them lying around.
A well-organised environment creates a highly visual and organised working area

5S is a method of standardising the work environment, so that you always have the right equipment and it’s ready to use. The 5S method helps to:

- Remove unwanted / out of date materials.
- Maintain correct stock levels.
- Ensure equipment is serviced, maintained and ready for use.
- Manage documentation and records.
- Organise the practice in a way everybody understands and is useful to the whole team.
- Prevents waste.

The 5S are:

**Sort/Sift** - sometimes items are kept unnecessarily. Review all items in one area at a time: What are they used for? Are they needed? How often and when are they used? Are they still valid / in date? Clutter creates wasted time searching for items, ineffective use of space, and potential health and safety risks. It presents an image of a disorganised and inefficient practice.

**Set** - this is about setting the area so you can instil control, such as positioning items where they are needed, visual management and communicating when and why things have been repositioned. Clearly identify key items and their location.

**Shine** - clean the work area and ensure the area is maintained to a high standard. Dental surgeries are usually well organised, but non-clinical areas can be cluttered and untidy. In a NHS environment, five minutes spent tidying and sorting the immediate work area at the end of the day can save hours in a week searching for materials or equipment.

**Standardise** - a standard must be agreed, communicated and displayed visually to ensure the area continues to be well organised.

**Sustain** - the hardest part is to maintain and improve the area so that it always looks in control and in a good condition. 5S should be used as part of daily operations.
Improving Quality Together training

Dental teams across NHS Wales are taking part in IQT. There are three main levels - Bronze, Silver and Gold.

What is Bronze level?

The Bronze level is suitable for all dental team members, including non-clinical staff. It is a set of four e-learning modules which are completed on a computer. You can access it from a workplace or home computer and from any e-mail address.

If you are new to e-learning or Improving Quality Together it may take about two hours to complete. If necessary you can do it in stages by stopping and returning at a later stage. Everyone who completes Bronze level will receive 2 hours verifiable CPD, including a printable certificate.

The IQT office collects information from across Wales to identify which areas are using on-line training. No information is collected from individuals or shared with Health Boards.

Top tip! Complete the modules as a practice team, so you can discuss and test ideas for improvement together

How to do Bronze level training

Send a request for the dental team Bronze enrolment form to IQT@wales.nhs.uk

Include the name and e-mail address of every team member who wants to do the training. It’s best to send one request for the practice.

You’ll receive the form and joining instructions. Complete and return the form and you’ll be sent confirmation that you can do the training (this may take a week).

The “enrolment key” for GDS dental teams is CDDenIQT. You have to enter this to complete the training.

What is Silver level?

If you lead a team, (for example as practice principal in a training practice) the Silver level will help you apply quality improvement principles to make your workplace function more smoothly.

IQT Silver level is organised by Health Boards and includes:
- Four sessions offering a complete package of training.
- In-depth understanding of the Model for Improvement.
- Support to lead a quality improvement project in your workplace.
• Real-life application and testing of quality improvement methodology, including completing a short improvement report on your project.

Email IQT@wales.nhs.uk for more information on how to access Silver level training in your Health board.

What is Gold level?
The Gold level of IQT is a network of improvement coaches across Wales who are sharing learning and developing expertise to understand what makes improvement happen. Members of the network are available to help support staff embarking on quality improvement projects. Email IQT@wales.nhs.uk for more information.

Summary of Next Steps

1. Undertake on-line Bronze level training. See page 13 for details on how to register. This will provide 2 hours of verifiable CPD.

2. Discuss with your practice colleagues. Is there something you want to improve?

3. Consider exactly what changes you want to make and how you’ll be able to assess or measure whether any changes you make are improvements – or not!

4. Use the Model for Improvement to test your change on a very small scale. Assess whether it’s worthwhile? Do you need to modify your ideas? Do you need to rethink and start again? Once you’re happy with the change on a small scale (e.g. in one surgery) try it on a larger scale (e.g. other surgeries). Does it work well there? What do the staff and/or patients think?

5. Document or share your improvements. Once your change becomes part of the normal way of working write it up very briefly so you can share your ideas. The Dental Section of the Wales Deanery has set up a Sharing and Learning webpage where you can share examples of improvements in dental practices. Stories can also be submitted to the Improving Quality Together website - email them to IQT@wales.nhs.uk
Sources of help and advice

The Improving Quality Together website offers guidance, advice and support for developing the tools:  
www.iqt.wales.nhs.uk/what-is-iqt

The Dental Section Deanery website provides guidance on CPD and improvement methodologies:

Within this website there are also contact details to access the PDP Tutors who can provide guidance and support and facilitate practice improvement.

There are supporting documents for this guide on
www.1000livesplus.wales.nhs.uk/dental-qi-guide