



Clinical Audit Teaching Toolkit



Clinical Audit Support Centre
Raising standards in clinical audit

Contents

3	Introduction to the CATT
4	How to use these tools
5	Resource 1: Florence Nightingale Film
7	Resource 2: Attitudes to Clinical Audit
10	Resource 3: RASE
14	Resource 4: Draw the Clinical Audit Process
16	Resource 5: The Clinical Audit Race Game
19	Resource 6: 'Chocolate box' criteria and standards activity
21	Resource 7: Structure, Process and Outcome Conundrum
23	Resource 8: Sample size experiment
27	Resource 9: Data Analysis – Hit or Miss?
29	Resource 10: The Clinical Audit Report Builder
32	Resource 11: The Life Audit
35	Resource 12: Critiquing Clinical Audits
37	Resource 13: Audit in Action – Short Films
39	Resource 14: Blankety Tweet
41	Resource 15: Barriers to Clinical Audit Ladder
45	Resource 16: Turning Haters to Lovers
47	Resource 17: Clinical Audit Mythbusters
50	Resource 18: The A to Z of Clinical Audit
52	Resource 19: Clinical Audit Quiz Generator
54	Resource 20: Fun Clinical Audit Tiebreakers
56	Acknowledgements

Introduction to the CATT

Dear Clinical Audit Trainer,

We would like to welcome you to the updated version of the Clinical Audit Teaching Toolkit (CATT). The CATT pack has been developed over many years and was first published in 2011. With further assistance from HQIP we have now updated the pack and there are now 20 teaching activities to use as part of delivering clinical audit training.

Since starting work in clinical audit in the mid-1990s, both Tracy Ruthven and I have facilitated hundreds of clinical audit training sessions. We have trained clinical and non-clinical professionals, NHS and non-NHS staff, UK-based and international learners in clinical audit methodology. Irrespective of who and where we train clinical audit, our philosophy is always to focus on the learner. Therefore, we ensure that our training is interactive and learner-centred.

We would like to stress that the purpose of this pack is NOT to suggest that you deliver clinical audit training in exactly the same way that we do. Trainers are individuals and need to develop their own resources and styles for teaching learners. However, what the CATT pack provides is a range of materials that can be used to embellish local clinical audit training sessions and we would encourage those using this pack to adapt and modify any of the resources we have supplied if such a route is likely to add value.

We have also tried to develop materials that reflect the current economic climate in 2014. Trainers who use our resources simply need access to a laptop, projector, screen and flipchart in order to conduct most of the activities and tasks contained within the pack. This has been a deliberate decision on our part as we are well aware of the current financial constraints and pressures facing the NHS.

On a final note, it is not for us to say how you should deliver your training. However, it is worth noting that our previous experiences of training clinical audit over the last 20 years have taught us that a significant proportion of learners who attend audit training are fearful of the concept, lack knowledge and/or are sceptical of the value of clinical audit. With this in mind, we urge all trainers in the subject to deliver enthusiastic, fun and exciting training that challenges pre-conceptions that the subject is rather dull! The days of tutor-centred, PowerPoint-driven, listen and learn teaching are truly over and we very much hope that you find the materials in this pack helpful in providing learner-centred training that empowers and inspires staff to take part in clinical audit activity.

We would like to take this opportunity to thank Kate Godfrey and HQIP for initially commissioning this resource in order to make it widely available to the clinical audit community. We are delighted the HQIP have asked us to update the resource and on a final note we would like to thank all healthcare staff who have provided us with feedback on the initial pack and ideas for this updated version.

Stephen Ashmore (CASC Director)

How to use these tools

The Clinical Audit Teaching Toolkit was originally formulated with the intention of the Clinical Audit Support Centre creating a hard copy resource for those who deliver clinical audit training sessions to healthcare staff.

By working with HQIP we have adapted the toolkit in such a way that all materials can now be downloaded from the HQIP website. This is great news as it makes the resource quickly available and postal/freight costs have been avoided. By making the training toolkit available online this also provides those wanting to utilise the resource with instant access to the materials.

We would advise those intending to use the toolkit to initially download this guidance document and print out hard copies. Once you have printed the toolkit we next advise you download the relevant materials for teaching resources 1-20. These are available via the HQIP website and have been placed in appropriate folders. Once you have downloaded the resources you will then need to read the relevant section of the guidance on how to use each resource. In some cases you will need to print out the resources (e.g. the attitudes to audit quiz – resource 2), whereas in others the required materials are PowerPoint slides (e.g. draw the clinical audit process – resource 4).

Once you are familiar with the materials you will be in a position to start using them. It is highly advisable that before using the toolkit you ensure that you have a full understanding of how each resource works. It may be helpful to test out each resource with colleagues before adopting them in a 'live' training situation.

We hope that you find the resources useful and that you will be able to incorporate the activities into your local training sessions. We don't expect you to utilise all the materials, but particular resources may help learners understand key clinical audit concepts (e.g. RASE resource 3 – helping learners understand how audit differs from research and/or service evaluation). The materials have been designed in such a way that you can include them as part of your lesson plans for training or you may simply want to utilise materials in a training session where learners are struggling to understand or where there is a need for an activity to break up the session. All materials are learner-centred. The resources have been created in such a way that they can also be used effectively irrespective of the number of learners attending the training.

Finally, if you are interested in gaining more formal training in how to use the toolkit you may be interested in the Clinical Audit Support Centre's 'Train the Trainer in Clinical Audit' course. This accredited course provides learners hands-on experience of how to use the materials. The training includes guidance on how to prepare lesson plans and all learners have an opportunity to conduct their own micro-teach session. Visit www.clinicalauditsupport.com for details.

Teaching Resource 1: Florence Nightingale Film

Background:	An explicit learning outcome for those attending any form of clinical audit training session is that they gain an insight into the history and value of clinical audit. Studies have shown that healthcare staff often hold negative perceptions of clinical audit and that many are unconvinced by its value and worth. Therefore, it is important that facilitators of clinical audit training show clinical audit in a positive light and provide clear and tangible examples of successful clinical audit projects.
Description:	<p>Our 'Florence Nightingale Film' resource last for 3 minutes 8 seconds and describes the clinical audit work carried out by Florence Nightingale during the Crimean War of 1853-6. The resource examines the background to the work of Florence Nightingale during her time in Scutari and outlines the changes that she implemented in order to improve the outcomes of British soldiers wounded on the battlefield.</p> <p>The film is simple to use and should be shown to all learners collectively. Facilitators may then wish to use the film to stimulate wider discussion, e.g. asking learners what we can learn today from the quality improvement work that Florence Nightingale undertook over 150 years ago?</p>
What you need to facilitate:	<p>Facilitators need minimal resources to conduct this activity and the key resources are:</p> <ul style="list-style-type: none">(a) The 'Florence Nightingale Film' (see Folder 1)(b) Facilities for projecting the film to the audience (e.g. laptop and screen)
When to use the resource:	<p>This resource can be used at various times during a clinical audit training session, for example:</p> <ul style="list-style-type: none">(1) the film could be shown at the start of the training session to provide an insight into the longevity of clinical audit and to emphasise that healthcare professionals have been trying to improve the care they deliver to their patients for over 150 years(2) the film could be shown in conjunction with other successful clinical audit projects in order to convey the positive impact that clinical audit can have on patient care(3) the film could be shown at the end of a clinical audit training session to demonstrate to learners the value of clinical audit.
Time required:	The film lasts 3 minutes 8 seconds!
CASC tips:	We show the Florence Nightingale film in approximately 50% of the clinical audit training sessions that we facilitate. We certainly try and make sure that we show the film whenever we have an audience that is made up predominantly of nurses! The resource is simple to use and the film allows

facilitators a few minutes to take a break and potentially prepare for other parts of the training session. Learners always react positively to the film and appear to like the fact that it helps put clinical audit into a historical context.

In terms of CASC tips when using the film:

- (1) Make sure that your IT/computer is set up appropriately to display the film. You will also need to check that audience members will be able to hear the audio.
- (2) Be prepared to be asked 'is the work of Florence Nightingale really a clinical audit project'?! As the film states at the start, there is 'contention' over the work of Florence Nightingale and some would point out that her work is not a true clinical audit project because she did not establish clear criteria and standards from the start. However, it should be noted that the work of Florence Nightingale is very clearly linked to clinical audit and that it displays many key features of a good clinical audit project: e.g. a problem was identified, data was collected and analysed to assess the extent of the problem, changes were implemented and subsequent further monitoring and analysis proved that significant improvements had been made. Furthermore, the work of Florence Nightingale is almost entirely 'outcomes-based' which is where the NHS and clinical audit are currently focusing their attentions.

Comments from learners:

'I had no idea that Florence Nightingale did the first-ever clinical audit!'

'The short video was a really good way to break-up the training and show us why we should use [clinical] audit to solve local problems'

Teaching Resource 2: Attitudes to Clinical Audit

Background: Studies have shown that attitudes towards clinical audit vary greatly and that successful clinical audit often centres on a key person taking a pro-active approach in leading clinical audit projects/programmes. It is valuable to know how healthcare staff view clinical audit and how susceptible to change they are. The purpose of this resource is to gauge how individual learners view the current arrangements for clinical audit and quality assurance with regard to the team that they work in.

Description: Our 'Attitudes to Clinical Audit' resource provides individual learners with a way of gauging their current personal attitude towards clinical audit. The activity involves learners answering a short 20-question survey (see Folder 2) where all questions relate to the team in which they work. This activity works best if training is being delivered to members of a single team, e.g. community pharmacy, GP practice, group of health visitors, members of the same hospital department, etc, but it can be utilised in a training session where learners are attending from a wide range of teams, disciplines and specialties, etc.

The facilitator simply hands out a survey to each learner in the training session. Each learner works through the survey: this involves them gauging their response to 20 pre-determined statements, e.g. 'Clinical audit is a truly shared vision in this team'. Learners have five options to select in response to each statement: 'Strongly Disagree', 'Slightly Disagree', 'Neutral', 'Slightly Agree' and 'Strongly Agree'. Learners should provide responses to all statements.

Once learners have completed the survey the facilitator needs to explain the relevant scoring system. This involves projecting the scoring slide in Folder 2. In terms of explaining how the scoring for the survey works:

- Statements 1-10 are marked as follows:
 - 'Strongly Disagree' scores 1 point
 - 'Slightly Disagree' scores 2 points
 - 'Neutral' scores 3 points
 - 'Slightly Agree' scores 4 points
 - 'Strongly Agree' scores 5 points.

The scoring for statements 11-20 is reversed, so hence:

- Statements 11-20 are marked as follows:
 - - 'Strongly Disagree' scores 5 points
 - - 'Slightly Disagree' scores 4 points
 - - 'Neutral' scores 3 points
 - - 'Slightly Agree' scores 2 points
 - - 'Strongly Agree' scores 1 point.

Once learners have allocated their scores for each question, they should add up their scores and this will result in a total score of between 20-100. In terms of quantifying the meaning of each learner's score, the higher this is the more positive their attitudes to clinical audit and the better their team are set up to undertake clinical audit successfully. The activity is called 'Attitudes to Clinical Audit' as the result depends on the 'attitude' and perceptions of the individual completing the survey. For example, members of the same team do not always routinely score similar totals owing to the fact that interpretation of the statements is linked to a personal viewpoint.

The survey results typically produce a range of scores across the group and this can provide useful discussion in terms of how well established clinical audit is in one team, or across teams. In terms of scoring – it is not untypical to attain individual scores above 90 points, although scores of 50 or less are becoming increasingly rare! Scores of 60 or less suggest that attitudes to clinical audit are indifferent given that 20 neutral responses (score 3) will lead to a total score of 60 (the middle value in the survey).

We often try to find out learners with highest and lowest scores in the group and get them to talk about their local arrangements for clinical audit and their personal views of clinical audit. For fun we always suggest that the learner with the highest score will make the ideal clinical audit lead in their team as they clearly have the most positive view of clinical audit in the group!

What you need to facilitate:

Facilitators need a number of resources to conduct this activity:

- (a) 'Attitudes to Clinical Audit' surveys
- (b) Pens/pencils for learners
- (c) The relevant powerpoint scoring grid (see Folder 2).

When to use the resource:

We utilise this activity in the first 30 minutes of a clinical audit training session. The activity fits nicely with any corresponding learning on how healthcare professionals view clinical audit and allows learners time to assess how they feel about local arrangements for clinical audit and their view of this. The activity often helps identify problems that are preventing the progress of clinical audit and wider quality improvement work in teams, e.g. the view that senior staff are not fully engaged in the clinical audit process (Q6) or that some members of the team consider re-audit as an optional part of the clinical audit process (Q14).

As stated earlier, the activity works most effectively when a facilitator is conducting a training session with a group of healthcare professionals working within one team/organisation. However, it is also an interesting activity to undertake with multi-disciplinary groups from different organisations, not least as results can help identify best practice in one team that could be shared with members of another.

Time required: Facilitators should allocate up to 20 minutes for conducting this activity. This will allow time to: explain the activity, allow learners to complete the survey, allow learners to understand the scoring system and determine their personal result, find out scores across the group and discuss issues arising from this.

We have been using the 'Attitudes to Clinical Audit' activity since 2002 and learners seem interested in the results of the survey. We particularly find that members of the same team/organisation enjoy the chance to compare results attained. The activity centres on the survey and is therefore quite simple to facilitate.

CASC tips: In terms of tips for facilitators, we would make the following points:

1. Ensure that you and your learners understand how to score their survey! Make it clear how the scoring works as we have found that some learners can get a little confused with the fact that the scoring system reverses from statement 11 onwards. It is often a good idea to give a number of examples when explaining the scoring, e.g. for Q2 a response of 'Strongly Agree' would score 5, whereas the same response for Q12 would score 1.
2. Make it clear that results from the survey simply gauge attitudes towards clinical audit. In other words, the score does not relate to learner knowledge. All scores – high or low – should be embraced.

Comments from learners: *'The Attitudes to Clinical Audit quiz was really interesting. Three staff from our practice attended the training and I scored 15 more than the Senior Partner and 18 higher than the Practice Manager, so it looks like I'm going to be the nominated [clinical] audit lead from now on'.*

Teaching Resource 3: 'RASE'

Background: One of the key recurring problems in the world of clinical audit is that healthcare professionals consistently confuse clinical audit with other disciplines such as research and service evaluation. Indeed, a CASC survey in 2009 showed that up to 35% of abstracts submitted to a national clinical audit conference were not in fact clinical audit! With this in mind, a key outcome for any learner attending clinical audit training must be that they leave the session with confidence in terms of being able to identify how clinical audit differs from research and service evaluation.

Description: Our 'RASE' resource stands for '**R**esearch, **A**udit or **S**ervice **E**valuation' and has been specifically designed to help learners understand the subtle differences between research, clinical audit and service evaluation. 'RASE' is essentially a laminated card-sort whole group activity that helps learners to appreciate the differences between the three aforementioned disciplines. The resource is extremely flexible and facilitators can opt to use the entire resource (or part of it).

In its most detailed form, the 'RASE' resource enables facilitators to oversee a learner-centred activity that helps learners to appreciate the subtle differences between research, clinical audit and service evaluation.

To start the activity, the facilitator needs to place the three 'header' cards in a place where all group members are able to observe them. We recommend that this works best if all cards can be attached to a felt board using velcro. However, facilitators may wish to attach the cards to a wall using blue-tak or place the cards on the floor or on a suitably sized table (this works effectively if the total number of learners in the group is small, e.g. 10 or less).

Once the three headings are in place, the tutor then invites the whole group to try and identify the characteristics of each discipline. This involves the group considering 21 different statements (each assigned a laminated card) and placing them under the three 'Research, Clinical Audit and Service Evaluation' headings. There are 7 laminated cards for each discipline.

We advise that the best way to facilitate this activity is for facilitators to nominate three learners to come to the front of the room to help with the task. Facilitators then give out 3 cards (one to each learner) in relevant batches. In other words, of the three cards handed out at this point, one will relate to research, one to clinical audit and one to service evaluation.

To provide an example, the first set of three cards the group are asked to focus their attention on maybe from line 2 in the 'RASE' answer grid (see Folder 3). These are:

- Designed to test a hypothesis
- Designed to answer 'does this service reach a predetermined standard'
- Designed to answer 'what standard does this service achieve'.

We would hope that after considering the three statements, learners in the group would come to the conclusion that the cards should be placed under the following groupings:

Research	Clinical Audit	Service Evaluation
Designed to test a hypothesis	Designed to answer 'does this service reach a predetermined standard?'	Designed to answer 'what standard does this service achieve?'

The facilitator should then continue to give the laminated cards out in associated batches, e.g. line 7 in the 'RASE' answer grid (see Folder 3):

- Normally requires ethics committee review
- Does not typically require ethics committee review
- Does not require ethics committee review

We would hope that the learners would consider these statements and place the cards under the correct heading to create the following situation:

Research	Clinical Audit	Service Evaluation
Designed to test a hypothesis	Designed to answer 'does this service reach a predetermined standard?'	Designed to answer 'what standard does this service achieve?'
Normally requires ethics committee review	Does not typically require ethics committee review	Does not require ethics committee review

The activity continues for a maximum of 7 rounds at which point all 21 cards will have been assigned to the three groups. At this point the facilitator should examine the groupings and provide relevant feedback.

By taking part in this activity, learners have time to consider the characteristics of each of the three disciplines. Learners are also able to see the wider picture developing in front of them and this helps them to appreciate the differences between research, clinical audit and service evaluation.

We would also note that the 'RASE' activity can be adapted in a number of ways. For example, in our experience it is often helpful to focus solely on the differences between clinical audit and research. In this instance facilitators may wish to adopt the same approach as above and ask the group of learners to consider characteristics in their associated pairs, e.g. 'addresses clearly defined questions, aims and objectives' (research) and 'measures against a

standard' (clinical audit). Alternatively, the facilitator may opt to shuffle the 14 research and clinical audit cards and hand them all out to the group to see if learners can correctly allocate the cards to the relevant research or clinical audit groupings.

What you need to facilitate:

Facilitators need minimal resources to conduct this activity and the key resources are:

- (a) The 'RASE' activity laminated cards (see Folder 3)
- (b) Facilities for allowing all learners to be able to see the cards as they are placed under the headings being used.

When to use the resource:

We would advocate that all introductory level clinical audit training sessions should incorporate activities that help learners identify the characteristics of clinical audit and assist them in understanding how clinical audit differs from research and service evaluation.

With this in mind the CASC team typically use the resource in the first hour of a clinical audit training session after we have provided historical background to the subject and definitions of clinical audit. However, the resource could be utilised at the end of a training session as a means of re-affirming learning and checking that learners have grasped the key points.

Time required:

It will depend how you approach the facilitation of this task but we would recommend that you allocate up to 20 minutes to conduct it. Our experience is that grouping the cards into 3's works quicker and more effectively than simply handing out all 21 cards and asking learners to put them into the correct groups. We have also found that focusing on research and clinical audit (not service evaluation) inevitably helps to speed up the process. However, it should be noted that this part of training staff in clinical audit methodology often throws up considerable debate and discussion so we feel that a minimum of 20 minutes should be assigned to conducting this task.

CASC tips:

As stated above, it is crucial that facilitators ensure that learners appreciate how clinical audit differs from other disciplines. This is becoming increasingly important as healthcare professionals are being expected to participate in clinical audit work (e.g. via job contracts, to show that they reflect on care delivery) and therefore they must be able to ensure that their work does conform to characteristics of clinical audit. In addition, if research work is incorrectly labelled as 'clinical audit' and does not go through the appropriate local research and ethics committee process this could lead to significant repercussions.

In terms of CASC tips when using the 'RASE' activity:

- (1) Make sure that the room is set up in an appropriate manner whereby all learners can observe the activity.
- (2) Consider the knowledge and experience of your audience with care! From our experience we would recommend that in most cases learners

only want/need to appreciate how clinical audit differs from research. However, it may be worth also looking at service evaluation if the group are well versed and experienced in clinical audit methodology.

(3) It is vital that facilitators have a strong appreciation and understanding of clinical audit, research and service evaluation. Facilitators should know local arrangements (e.g. how learners can access their local research and ethics committee) and facilitators should be confident that they can answer queries and questions that are likely to occur. With this in mind we would encourage all facilitators to familiarise themselves with the various national resources that exist to help explain the differences between clinical audit, research and service evaluation. CASC particularly like the 'Defining Research' leaflet produced by the National Research and Ethics Committee. We would also like to acknowledge that the 'RASE' activity is partially based on the differentiating clinical audit, service evaluation and research graphic that appears within this resource.

(4) We would also advise facilitators that guidance on ethical approval for clinical audit is not clear cut and with this in mind we would encourage facilitators to familiarise themselves with two documents that have been commissioned and produced by HQIP. These are:

Ethics and clinical audit and quality improvement

<http://www.hqip.org.uk/ethics-and-clinical-audit-and-quality-improvement>

A guide for clinical audit, research and service review

<http://www.hqip.org.uk/assets/Downloads/Audit-Research-Service-Evaluation.pdf>

Comments from learners: *'The card activity helped me appreciate how [clinical] audit differs from research. I now appreciate that [clinical] audit must be standards-based'*

'Found the card game helpful in terms of understanding how clinical audit is slightly different to service evaluation'

Teaching Resource 4: Draw the Clinical Audit Process

Background: An explicit learning outcome for those attending any form of clinical audit training session is that by the conclusion of it they will understand that there is a specific process for conducting a clinical audit project. Therefore, facilitators will need to find ways of conveying the key steps in the clinical audit process to learners attending clinical audit training sessions.

Description: Our 'Draw the Clinical Audit Process' resource is learner-centred and enables those being trained in clinical audit methodology to work in teams to discover for themselves how the clinical audit process is structured.

The resource is exceptionally simple and involves putting learners into a number of groups. Ideally this activity works best with 2 to 4 groups of between 4 to 8 learners. Groups are then simply asked to 'Draw the Clinical Audit Process'. If the learners have very little prior knowledge and experience of clinical audit no further comments are made and the groups are given 10 minutes to complete the task. However, if learners have previous experience of the clinical audit process, we add the caveat 'You must not represent the process by drawing an obvious circle' and encourage learners to produce imaginative and even wacky drawings.

Once each team has completed their drawing, group members are invited to show their diagrams to other learners and explain their offering in more detail. This often proves to be a great deal of fun as learners reflect on their artwork and try to explain the process they have created.

When each group has given an account of their drawing, facilitators review the drawings and provide positive feedback. It is nice to give a prize to the 'best' drawing, although this is optional. At this point facilitators may choose to show other examples of the clinical audit process that have been drawn by attendees on previous CASC training courses (see Folder 4).

To establish a greater understanding of the clinical audit process the facilitator should then go through a more traditional version of the clinical audit process. Facilitators may choose to use the 8-point CASC clinical audit cycle (see Folder 4), a 'local' clinical audit cycle (e.g. NHS Trust version) or a nationally recognised version of the clinical audit process (e.g. HQIP version).

What you need to facilitate: Facilitators need minimal resources to conduct this activity and the key resources are:

- (a) Flipchart paper for each group
- (b) 2 to 3 coloured marker pens for each group
- (c) A flipchart to display the drawings produced by team members
- (d) CASC powerpoint slides of the clinical audit process (see Folder 4).

When to use the resource:	This activity works best towards the start of a clinical audit training session. CASC tutors typically begin clinical audit training with a brief history of clinical audit that includes details of why it is currently relevant to healthcare professionals. We then go through definitions of clinical audit and explain the difference between clinical audit and other related disciplines (e.g. research and service evaluation). At this point we use the drawing activity to introduce the concept of the clinical audit process.
Time required:	The length of time needed to conduct this activity will depend on the number of learners attending the training session. We advise that groups are given no longer than 15 minutes to complete the task of drawing the clinical audit process. Assuming 5 minutes for explaining the activity and allocating learners into groups, plus 10 minutes for groups to feedback and final thoughts from the facilitator – this should take no longer than 30 minutes.
CASC tips:	<p>We use this activity regularly and it is a personal favourite of ours! The activity works on many levels: it is simple, few resources are required, learners appreciate the opportunity to work together and discover how much they know for themselves. The activity is great fun and groups usually produce versions of the clinical audit process that are often more memorable and interesting than some versions that currently exist in the clinical audit world!</p> <p>The activity also enables learners to express themselves and sometimes drawings that are produced give a great insight in terms of how healthcare professionals truly view the clinical audit process, local/national arrangements for clinical audit, etc. (see examples in Folder 4).</p> <p>In general, this is a straightforward activity for facilitators to conduct. The activity is self-explanatory and learners/groups quickly grasp what they are being asked to do.</p> <p>We would advise that facilitators need to monitor the progress of each group – particularly at the start of the activity. Occasionally we encounter individual learners who try to take over from the start and dictate to other members of their group. Facilitators should support groups and encourage all learners to have input into what is produced. Be aware that the ‘quality’ of drawings produced can vary in terms of artistic ability and clinical audit knowledge. Therefore, facilitators should ensure that all drawings are positively appraised and learners should be supported and praised for their efforts. Finally, some groups can start to take excessive amounts of time to produce their drawings, so monitor time carefully.</p>
Comments from learners:	<p><i>‘I loved the drawing activity – made me realise I knew more than I thought’</i></p> <p><i>‘I didn’t expect to be doing art in an audit training session – great fun’</i></p>

Teaching Resource 5: The Clinical Audit Race Game

Background: An explicit learning outcome for those attending any form of clinical audit training session is that by the conclusion of it they will understand the various stages of the clinical audit process.

Description: Our 'Clinical Audit Race Game' resource is learner-centred and enables those being trained in clinical audit methodology to work in teams to confirm that they understand the clinical audit process.

The resource involves splitting learners into two teams. It is not important how many learners attend the session and are allocated to each team although team sizes of between 5-10 learners are preferable.

As the name implies 'The Clinical Audit Race Game' is a fun and competitive activity that involves two teams racing against each other in an attempt to try and put 16 laminated cards (see Folder 5) that each represent an individual stage of the clinical audit process into the correct order.

Once learners have been allocated to a team the two teams take up positions at opposite ends of the training room. The facilitator then hands each team a pack of 16 laminated cards that have been randomly shuffled. The aim of the activity is that the two teams race against each other in an attempt to put the cards into the correct order.

The winning team are the first to sort the 16 cards into the correct order. The 'correct' order is as follows:

1. Consult team members*
2. Select topic*
3. Identify best practice
4. Develop criteria
5. Set standards
6. Collect data
7. Analyse data
8. Feedback of data collection results
9. Team to discuss possible changes
10. Implement agreed changes
11. Allow time lag
12. Collect data
13. Analyse data
14. Feedback of data collection results
15. Implement further changes
16. Write final report and share learning.

*In terms of the 'correct' order – we consider that the first two cards 'consult team members' and 'select topic' are interchangeable. CASC consider that clinical audit projects are most successful when the wider team are involved from the start in selecting the clinical audit topic. However, the drivers for clinical audit vary and thus in some cases external forces determine what

clinical audit project individuals and teams have to undertake, e.g. participation in National Clinical Audits, local auditing of NICE guidance or record keeping audits to meet NHSLA requirements, etc.

Once both teams have put the cards into the appropriate order, the facilitator shows all learners the 'correct' order (see Folder 5). The facilitator should discuss in more detail with learners any issues that emerge as part of the task (e.g. disputes over the correct ordering of the cards).

To conclude the activity it is always good fun to give a prize to the team who put the race cards into the correct order first!

What you need to facilitate: Facilitators need minimal resources to conduct this activity and the key resources are:

- (a) Two sets of the 16 laminated race cards
- (b) Enough room to carry out the activity!
- (c) The CASC powerpoint slide of the 'correct order'.

When to use the resource: This activity can be used in a number of different ways. Typically, CASC tutors utilise the resource at one of two stages during clinical audit training sessions. In the first instance we often use the race game after showing learners our 8-point clinical audit process. By conducting the activity at this point it enables learners to check that they have gained an appreciation of the clinical audit process. The 'race game' also works well in this instance to help break-up the training session prior to spending more time looking in detail at each stage of the clinical audit process. Alternatively, it can be great fun to leave the race game to the end of a clinical audit training session. In this respect, the activity serves as a way of re-asserting key points and allows facilitators to assess that learners have understood the various stages of the clinical audit process (and their order).

Time required: The length of time needed to conduct this activity will depend on how long it takes each team to put the 16 laminated cards in order! In our experience facilitators should be able to complete this activity in 5-10 minutes.

CASC tips: We have been using the 'Clinical Audit Race Game' for ten years and we have never had a bad response to it! The success of the activity depends to a degree on creating a friendly and competitive environment between the two teams and in our experience learners love the opportunity to see if they can sort the cards quicker than the opposing team!

The activity revolves around two-sets of laminated cards. In addition the 'race game' is a great way of getting all learners actively involved in a training session.

In terms of tips for facilitators, we would make the following points:

1. Ensure that you shuffle the laminated cards before handing them out!

2. Be aware of some individual learners who try to dominate their team by trying to determine the order without wider discussion. The most obvious way of resolving this situation is to say to a dominant learner 'you have put 3 cards in order, please let others suggest the next card'.
3. Ensure that you have enough space in the room to conduct the race game! Things can get fairly frantic and it is important that learners have enough space to carry out the activity safely.
4. You may want to consider developing a 'local version' of the 'race game' that relates to the clinical audit process relevant to your team/organisation. For example, the local audit process for junior doctors might be: 1) agree audit topic with consultant, 2) complete Trust clinical audit registration form, 3) gain approval of topic from audit committee, 4) search for evidence with help of the local knowledge librarian, 5) formulate criteria and standards, 6) develop data collection tool, 7) agree data collection tool is fit for purpose with a member of the audit team, 8) request patient records, etc, etc.
5. If you are a lone facilitator, be aware that it is quite hard to simultaneously watch both team putting the cards into order at the same time. In this respect it is often useful to have a tiebreaker activity (see resource 20) lined up as it may be quite tricky determining which team completed the task first.

Comments from learners: *'I enjoyed the card sort game'*

'The race game was ace!'

Teaching Resource 6: 'Chocolate box' criteria and standards activity

Background: The purpose of this activity is to provide a fun and interactive way of enabling learners to understand how to develop clinical audit criteria and standards.

Description: The 'chocolate box' criteria and standards activity is a simple activity to facilitate and enables learners to discuss and discover a different way to develop clinical audit criteria and standards. This is often an aspect of the clinical audit process that professionals struggle with and so the option to be able to use a training activity to explain this is something that is likely to help untangle the complexities.

The activity revolves around developing criteria and standards based on best practice you would expect from manufacturers of chocolates. Depending on the size of the training group we suggest one box of chocolates for every 6-8 people. We use a 350g box of Cadbury's Roses for this activity as the different varieties of chocolate enable groups to develop a full range of criteria and standards.

Each group is provided with a box of chocolates, set of instructions and a group work template. In a nutshell, without opening the box each group are tasked with devising and agreeing a minimum of five audit criteria and standards that aim to assess if the box of chocolates that they have meets expected best practice.

As you will see from the instruction sheet (see Folder 6), each group is advised to make sure that the criteria and standards are SMART (**S**pecific, **M**easurable, **A**chievable, **R**elevant and **T**ime-bound). The instruction sheet also provides an example criterion and standard that will help groups to understand what is expected of them:

Criterion	Standard	Evidence/rationale
The surface area of all chocolates must be fully encapsulated by a wrapper	100%	As per images displayed on packaging. Otherwise concern chocolates not meeting this criterion may have been tampered with.

Once all groups have agreed their five criteria and standards the facilitator should encourage a debate to discuss the criteria and standards that have been established in order to gain feedback and to address any issues/queries that may have arisen. If there is time facilitators may also invite groups and participants to conduct a quick data collection exercise in order to see if the impromptu criteria and standards have been met. Typically this enables members of the group to open the chocolates and eat a number of them!

What you need to facilitate:	<p>Facilitators need minimal resources to conduct this activity:</p> <ul style="list-style-type: none"> (a) A box of chocolates (we suggest a 350g box of Roses but facilitators are welcome to use different food items as they see fit) (b) A set of weighing scales (optional – but useful) (c) The instruction sheet (d) Sample answers handout.
When to use the resource:	<p>This activity works best during a training session when you are explaining more about the clinical audit process. It serves as a good break in proceedings to complete an activity that is a little more light-hearted when as a facilitator you are explaining a technical aspect of the clinical audit process. It also provides the opportunity to enjoy the chocolates once the activity is complete and so if possible it is good to time this with a refreshment break.</p>
Time to conduct it:	<p>No longer than 20 minutes if simply asking groups to devise criteria and standards. Allow a little longer if groups will also be given time to ‘collect data’.</p>
CASC Trainers comments/tips:	<p>From our experience ‘criteria’ and ‘standards’ are two words that have the ability to confuse learners. Therefore it is vital that learners understand (a) what criteria and standards are and (b) have a reasonable understanding of how to develop and write them. The beauty of this activity is that it is simple, fun and enables learners to gain a wider understanding of clinical audit by utilising a non-healthcare related example.</p> <p>We usually find that learners understand what they are required to do from the instructions sheet but facilitators need to be on hand to advise, assist and offer a helping hand. The emphasis should be on fun but groups should be asked to write their criteria as clearly as possible and encouraged to make sure that all group members agree with the criteria and standards that have been devised (as we know clinical audit is unlikely to succeed where team members dispute/disagree with the criteria and standards in place).</p> <p>If time allows groups enjoy collecting data! Scales are useful to help determine if the chocolates in the box meet their prescribed weight (as stated on the packaging) and most groups have devised at least one criterion that enables them to taste a number of chocolates in the box!</p>
What previous learners have said about the activity:	<p>‘Great way to explain criteria and standards and I enjoyed the chocolate too’</p> <p>‘Thanks for the unusual teaching on criteria and standards. Loved the Roses’</p>

Teaching Resource 7: Structure, process and outcome conundrum

Background: Topics for clinical audit are virtually unlimited! However, in recent years attention has undoubtedly turned to measuring outcomes. Certainly organisations such as the Care Quality Commission now place much importance on reviewing the outcomes of care provided to patients. The purpose of this activity is to help learners understand the different aspects of care that can be measured via clinical audit.

Description: Writing in 1966 the American theoretician and healthcare expert Avedis Donabedian proposed that the quality of healthcare consisted of three inter-related parts – structure, process and outcome.

Clinical audits can focus on either the structure, process and outcome of care and it is helpful to understand what each category covers:

Structure audits: focus on what is needed to deliver care. This may be in terms of auditing equipment and facilities. A structure audit may ask if healthcare staff have the right resources/equipment to conduct their work.

Process audits: focus on what is done to patients in terms of the delivery of care. This may be in terms of auditing processes and procedures. A process audit may ask if healthcare staff have given the patient the right treatment at the right time.

Outcome audits: focus on what you expect to happen to patients as a result of their treatment and care. This may be in terms of auditing changes in the patient's current and future health status. An outcome audit may ask if patients have attained the appropriate outcome.

According to Crombie et al (The Audit Handbook, 1993), historically the most common type of audit is process. Indeed, it is probably fair to conclude that up until the mid-2000's clinical audits focused more on structure and process criteria than outcomes.

With the increasing focus on outcomes within the three different types of clinical audit, CASC have created a card-sort activity that will help learners understand how to differentiate between structure, process and outcome audit criteria. Of course, it is worth noting at this stage that a single audit project may focus on all three categories and measure aspects of structure, process and outcomes.

To start the activity, the facilitator splits learners into groups and then hands out a series of laminated cards (see Folder 7). For each pack of cards there are three header cards entitled: structure, process and outcome and these should be placed as three separate columns. The remaining 15 cards have attributes and characteristics associated with the measurement of either structure, process or outcomes of healthcare and thus the challenge for each group is to place each card under the appropriate heading.

Structure	Process	Outcome
Premises, e.g. sound-proofed consultation rooms	Screening, e.g. regular retinal screening for patients with diabetes	Mortality, e.g. post-surgery

As an example, three cards have been placed under the correct headings:

The activity continues until all groups have placed their cards under the three headings and then the facilitator should examine the groupings and provide relevant feedback. A sheet with the correct answers is available and this should be distributed to all learners as part of task feedback.

By taking part in this activity, learners have time to consider the characteristics of each of the three different types of clinical audit.

What you need to facilitate:

Facilitators need the following resources to conduct this activity:

- (a) The Structure, Process and Outcome activity laminated cards activity laminated cards
- (b) Facilities for allowing all learners to be able to see the cards as they are placed under the headings being used
- (c) PowerPoint answer grid.

When to use the resource:

It is not always necessary to focus on structure, process and outcomes as part of an audit training session but given the increased focus on outcomes this activity provides facilitators with a simple activity to use if learners are keen to know more. If the resource is to be used we would suggest it works best as part of wider training on developing audit criteria and standards.

Time to conduct it:

No longer than 15 minutes. This should allow sufficient time for groups to carry out the activity and for further discussion upon completion of the task.

CASC Trainers comments/tips:

As stated above, it is not essential to focus on structure, process and outcome criteria as part of an introductory-level training session, but learners who want to find out more will find this activity thought-provoking and helpful. This is a simple activity to facilitate as long as tutors understand structure, process and outcome criteria and provided they oversee the group work, e.g. making sure learners understand they place 5 cards under each heading.

What previous learners have said about the resource:

‘Until today, I thought all audit was the same but now I appreciate there are three different types’.

Teaching Resource 8: Sample size experiment

Background: Key indicator seven of HQIP's *Criteria and indicators of best practice in clinical audit* states 'The target sample should be appropriate to generate meaningful results'. Therefore, it is important for learners attending clinical audit training to understand how different approaches to sampling may impact on the validity of results attained.

Description: CASC's 'Sample size experiment' is a learner-centred activity to help those being trained in clinical audit methodology to understand how different sample sizes will impact on the validity of results.

The experiment involves splitting learners into groups. Ideally there will be four groups in total. If there are not sufficient numbers of learners to create four groups then the next best is two groups.

The sample size experiment aims to show learners that sampling different proportions from the same population will impact on the validity of the overall results. In essence, the activity should help learners appreciate that adopting scientific approaches to sampling are advantageous compared to auditing small numbers of patients.

The sample size experiment is quite tricky to facilitate because (a) groups of learners are dealing with fiddly training materials and (b) groups must conduct a similar task repetitively and so making it clear to learners what they are expected to do is paramount to the success of the experiment.

Prior to commencing the activity, facilitators must prepare the materials for the experiment. This involves creating a sample of 37 green and 13 yellow counters in a container that restricts learners from directly seeing the counters held in the container. See the 'what you need to facilitate' section (below) for further clarification on materials required to help set up the experiment.

Once all materials have been prepared, provide each group with their sample (containing 37 green and 13 yellow counters). From the start, it is vital to stress to all groups that they **must not look into the container** at any point during the course of the experiment.

When all groups have their container of counters it is time for the experiment to begin. This involves providing each group with the instructions sheet (see Folder 8). This provides full details of what each group is required to do in order to complete the experiment. As per the instructions, each group carries out four blind rounds of random sampling. In round one each group sample 10% of the population (i.e. 5 counters), 20% (10 counters) in round two, 50% (25 counters) in round three and finally 90% (45 counters) in round four. After each round all 50 counters are returned to the container before the next round of sampling begins. At the end of each round groups record the total number of green and yellow counters withdrawn from the container on the instruction sheet and also convert their respective results into percentages.

Once all groups have completed the experiment then it is time to collate and assess the results. To assist with this CASC have created a PowerPoint slide (see Folder 8) that enables facilitators to quickly transfer each group's results onto a slide that can be viewed by all learners taking part in the training session. For information, we would recommend taking a short break between groups completing the task and reviewing the results (thus giving facilitators time to enter the results into the powerpoint template).

When the results from all groups have been entered onto the slide, it is time to reveal and discuss the results. The first stage in this process is to inform learners that there were a total of 37 green (74%) and 13 yellow (26%) making up the total population of 50 counters. We then advise that facilitators work through each set of results per round, i.e. focus on round 1 (10% of population) before moving onto round 2 (20% of population), etc. drawing attention to how close the results of the sample are to the actual distribution of counters in the container.

What one would broadly expect to see from the results at this point is that the smaller samples are most likely to result in the biggest margins of error. Indeed, the 10% sample (5 counters) will at best allow groups a result of 4 green counters (80%) and 1 yellow counter (20%), i.e. 6% difference in the round one sample compared to the actual result of 74% green.

However, by the time you compare the 90% sample (used in round 4) with the actual result of 74% green, results across all four groups should be very close to the actual result of 74% green.

Of course, the beauty of employing random sampling techniques to any population is that there is no guarantee that we can foresee what the results will be. Indeed, it is possible that some groups may attain their most accurate results (i.e. closest to 74% green) from their 20% and 50% sample rounds as opposed to their 90% sample round. That said, in most cases the results of this experiment usually show that the 10% sample in this instance provides inaccurate results and there will usually be at least one group out of four that record a result of either 3 green (60%) = 14% inaccurate or 5 green (100%) = 26% inaccurate.

When all the results have been reviewed and discussed, it is helpful to introduce the concept of confidence levels to learners. Of course if you proceed along this route as a facilitator you must have a strong understanding with regard to the scientific approach to sample sizes and be able to explain confidence levels and the margin of error across a range of different sized populations. A useful online resource that provides further information in relation to sampling is www.raosoft.com/samplesize.html

We have created a slide (see Folder 8) that shows learners the various confidence levels for the four different samples they applied to their population of 50 as part of the experiment. It may be useful at this point to see if sampling results recorded by all groups across all four sampling rounds conform to the confidence levels (in most cases they should - thus endorsing

the scientific approach to sampling). The table also shows the high margin of error rate likely to be attained by utilising sample sizes in rounds 1,2 and 3 of the experiment.

Population	Sample size	Confidence level
50	5 (10%) = round 1	95% +/- 42%
50	10 (20%) = round 2	95% +/- 28%
50	25 (50%) = round 3	95% +/- 14%
50	45 (90%) = round 4	95% +/- 5%

On a final note, it is vital that facilitators ensure that learners appreciate that sampling methods are not static/proportional and population size will have a significant impact on the number of patients/cases that will need to be audited. With this in mind, CASC have created a slide that shows how achieving results accurate to 95% +/-5% is impacted by different populations.

Population	Sample size needed for 95% +/- 5%	Percentage of population sampled to achieve 95% +/- 5%
50	45	90%
100	79	79%
200	132	66%
300	168	56%
400	196	49%
500	217	43.4%
1000	278	27.8%
5000	357	7.14%
10000	370	3.7%
20000	377	1.89%

What you need to facilitate:

Facilitators need a number of resources to conduct this activity:

- (a) 37 to 13 distribution of different coloured but identical sized/weighted counters. For information, CASC use 37 green and 13 yellow

hamabeads. These are available from www.hamabeads.com and are plentiful and inexpensive

- (b) A container that restricts learners (as much as possible) from being able to see its contents. For information, CASC use white plastic cups and coloured plastic beakers
- (c) Instruction sheets for the sample size experiment (one per group)
- (d) Relevant PowerPoint slides to explain the impact of results and how sample size is important in ensuring that meaningful audit results are attained
- (e) Calculators or phones/computers with calculators will help groups to calculate the relevant percentages of green and yellow counters.

When to use the resource:

This activity should be used when explaining how to collect data for clinical audit projects. It is important that learners understand the impact that their sample size will have on the validity of their audit results. However, it is unlikely that this activity would be used in a short introductory-level clinical audit training session as it is (a) time consuming to conduct and (b) introduces complex concepts that some learners may struggle to understand, e.g. confidence levels, the margin of error, etc.

Time to conduct it:

We recommend tutors allocate a minimum of 30 minutes for this task.

CASC Trainers comments/tips:

Sample sizes for clinical audit are a controversial subject with many Trusts and healthcare providers adopting their own local approach to sampling. CASC prefer to adopt a statistically valid approach to sampling and best practice for CASC represents a sample that conforms to 95% +/-5%.

This activity takes time to conduct but helps learners understand how sampling works in a practical and hands-on way. One beneficial outcome of carrying out this activity and presenting the additional slides is often that learners appreciate that they have previously carried out audits looking at hundreds and/or thousands of patient notes whereas the sampling table makes them appreciate their results would have been almost identical by looking at a much smaller sample that falls within the 95% +/-5% approach.

On a final note, we would encourage trainers to adapt this activity to suit their local setting. For example, the 74% green result can be altered as can the population of 50. There are an infinite number of approaches to adapting the sample size experiment.

What previous learners have said about the activity:

'Our approach to sampling for audit is 10% every time. I can now see that this approach is completely flawed!'

'Wish I had known about confidence levels before I carried out my audit last year. It would have saved me a lot of time and effort'.

Teaching Resource 9: Data analysis - hit or miss?

Background: Those who conduct clinical audit projects must have an appreciation of how to analyse clinical audit data. The purpose of this simple activity is to provide basic dummy data for learners to analyse. The activity focuses on a single criterion audit and introduces the key concepts of: understanding exception reporting, determining if the standard has been met, calculating the mean, mode, median and data ranges.

Description: This activity should be carried out by learners in pairs or small groups (max. 4 learners per group). The activity is based on a series of handouts that relate to a simple waiting time audit conducted by a team of physiotherapists in response to results attained from a local patient survey of service users.

There are three handouts in total and the task starts with handout 1: 'Data from physiotherapy waiting time audit'. This handout should simultaneously be given to all groups.

Handout 1 contains background information for learners and summarises that a recent patient survey has found that on average the majority of patients who use the physiotherapy service expect to be seen within 20 minutes of their appointment time. As a result, the physiotherapy team have agreed the following local criterion and standard.

Criterion	Standard
Physiotherapy patients should be seen within 20 minutes of their pre-booked appointment time	90%

Further, the handout goes on to explain that the physiotherapy team wish to see if they are meeting patient expectations and have therefore conducted a small pilot audit to see if the standard is being met. Data has been collected on 20 physiotherapy patients over one day and information gathered includes:

- Patient ID (confidential number)
- Appointment time
- Time patient arrived
- Time patient seen.

The first handout requires each group to carry out one single task, namely to determine if the 90% standard has been met. Learners are given 5 to 10 minutes to analyse the data and the key discussion points typically revolve around patient 5 (who did not attend) and patient 19 (who arrived 26 minutes late for their appointment).

Once groups have completed the first task the facilitator should ask each group if the 90% audit standard was met and what calculation process they went through to work this out.

At this point, handout 2 (Task 1 results and details of task 2) should be distributed. This provides detailed analysis of the data and an explanation of why the 90% standard has been met. Although groups are only analysing small amounts of audit data quite a few groups often fail to exception report patients 5 and 19 out of the results and if this is the case they incorrectly reach the conclusion that the standard has not been met. Facilitators should use this part of the training session to explain exception reporting and provide further details on how to calculate if the audit standard has been achieved.

Handout 2 contains a new series of tasks and learners analyse the data from the 'time between appointment and when seen' column to calculate:

- Mean
- Median
- Mode
- Ranges.

Facilitators should allow groups approximately 10 minutes to complete the analysis and calculate their results before distributing handout 3 (Task 2 results).

What you need to facilitate:	Just three handouts are needed by facilitators to conduct this task (see Folder 9).
When to use the resource:	This activity should be used when explaining how to analyse data for clinical audit projects. It is important that learners understand the fundamentals in terms of analysing data and although this example is based on very basic information it is surprising how many groups/learners incorrectly come to the conclusion that the 90% standard has not been achieved. Equally, a significant number of learners do not know the difference between mean, median and mode.
Time to conduct it:	No longer than 30 minutes in total.
CASC Trainers comments/tips:	<p>This is a simple activity that does not take long to carry out but it introduces key aspects of clinical audit data analysis: exception reporting, determining if the standard has been met, calculating mean, median, mode and ranges.</p> <p>We have selected a waiting times audit as this is generic to all healthcare professionals. Therefore, if you were training a different group of healthcare staff you can adapt the example from physiotherapists to a group that may be more relevant to those in attendance, e.g.: practice nurses, dentists, staff working in the sexual health clinic, etc. Please feel free to adapt the example and add in additional data if you wish to make the task more complex.</p>
What previous learners have said about the activity:	<i>The activity reminded me that even with small numbers you have to be super careful when analysing data'</i>

Teaching Resource 10: The Clinical Audit Report Builder

Background: An explicit learning outcome for those attending any form of clinical audit training session is that by the conclusion of it they will understand the key stages involved in sharing details of their work with stakeholders via the production of a clinical audit report.

Description: Our 'Clinical Audit Report Builder Activity' resource is learner-centred and enables those being trained in clinical audit methodology to work in teams to confirm that they understand the key components needed for producing an effective clinical audit report.

The resource involves splitting learners into small groups (we recommend 3-6 members per group).

As the name 'The Clinical Report Builder Activity' suggests the focus of this training resource is to help learners understand how to produce a clinical audit report. This activity is very simple to conduct and each group is provided with 20 laminated cards (see Folder 10) that represent a key section of the clinical audit report. The aim of the activity is that the groups work together to place the cards in the correct order.

To make the activity more competitive facilitators may encourage groups to race against each other in order to see which can work out the correct order in the fastest time. However, the purpose of this activity is to focus learners attention on the importance of making sure they understand (1) the need for writing up their audit project into a report and (2) what sections a high quality clinical audit report will include. With this in mind, we recommend that learners and groups are given time to conduct this activity and discuss key issues that occur as they carry the activity out.

The 'Clinical Audit Report Builder Activity' is based on a slightly adapted version of the Healthcare Quality Improvement Partnership's Clinical Audit Report guidance document. The correct order is:

1. Project title
2. Division type/organisation
3. Speciality/service/operational area
4. Disciplines involved
5. Project lead
6. Other members of staff involved
7. Background/rationale
8. Aim
9. Objectives
10. Standards/guidelines/evidence base
11. Sample
12. Data source
13. Methodology – including data collection methods
14. Findings
15. Observations

16. Presentation/discussion
17. Recommendations
18. Learning points
19. References
20. Action plan.

Once groups have agreed on the order for their laminated cards, the facilitator shows all learners the 'correct' order (see Folder 10). The facilitator should discuss in more detail with learners any issues that emerge as part of the task (e.g. disputes over the correct ordering of the cards).

To conclude the activity it is an excellent idea to distribute copies of HQIP's Clinical Audit Report guidance document. This provides learners with a valuable reference document for how to write a structured clinical audit report. If this is not possible, we would recommend that learners are advised on how to obtain a copy of the HQIP document (via the guidance documents section, under the resources tab on the HQIP homepage – www.hqip.org.uk).

What you need to facilitate:

Facilitators need several resources to conduct this activity and all are available via the wider CATT pack:

- (a) 20 laminated cards
- (b) CASC powerpoint slides of the 'correct' order
- (c) Copies of the HQIP Clinical Audit Report guidance document.

When to use the resource:

This activity should be used towards the end of a clinical audit training session. Studies have repeatedly shown that clinical audit work often remains hidden and is not always shared with key stakeholders and patients. Producing a clinical audit report is a vital part of the clinical audit process and this activity helps those attending clinical audit training sessions to understand why audit projects should be documented and how to do this in a simple, effective and structured way.

Time to conduct it:

The length of time needed to conduct this activity will depend on how long it takes groups to put the 20 laminated cards in order! In our experience facilitators should be able to complete this activity in 20 minutes or less.

CASC Trainers comments/tips:

In recent years we have found that learners attend clinical audit training as they are expected to facilitate a local clinical audit project. While it is important to explain to learners the key phases of the clinical audit process, details of how to write a structured and effective clinical audit report are often overlooked. However, learners are increasingly being expected to lead all aspects of clinical audit projects and this includes the need to produce a final report that can be shared with others.

In our experience, many learners have a good appreciation of the key parts of the clinical audit process, but lack confidence and understanding when it comes to formally documenting the clinical audit work that they have been involved in. This activity should be considered as part of a wider clinical audit training session to help learners build confidence with writing up their audits.

As a final note, we appreciate that not all organisations utilise and advocate HQIP's Clinical Audit Report guidance document. Indeed, there are many different clinical audit report templates and we recommend that when conducting this activity you either adapt the laminated cards to the headings used in local clinical audit reports, or advocate the HQIP guidance to learners.

What previous learners have said about the activity:

'I found the report card sort and HQIP guidance invaluable. I now have confidence that I can produce a respectable account of my audit'

'Not written a report since school so review of what makes a good audit report helped a lot'

Teaching Resource 11: The Life Audit

Background: One of the main aims of any clinical audit training sessions must be that learners leave with a good appreciation of how to conduct their own clinical audit project. It is often quite easy to show learners the theoretical side of clinical audit, but less straightforward in terms of giving them a practical appreciation of how a clinical audit should/can be undertaken. The purpose of the 'Life Audit' is to help learners appreciate the practical stages involved in conducting a simple clinical audit project.

Description: The 'Life Audit' is a resource that enables learners to take an active part in a number of stages in the clinical audit process, including:

- Devising criteria
- Formulating a suitable audit question [to collect appropriate data]
- Collecting data
- Analysing data
- Agreeing results
- Action planning for improvement

The 'Life Audit' is so named as it is based on learners assessing whether or not they currently lead a healthy life. As with the clinical audit process, there are a number of stages to the 'Life Audit' and facilitators use the resource in the following manner:

Stage 1:

Split the learners in to groups of no more than 10 members. Once the group/s have been assembled, hand out the 'Life Audit 1 document' (see Folder 11).

The document provides clear instructions to learners in terms of what they need to do to participate in the 'Life Audit'. In essence, learners have been provided a document with pre-determined and evidence-based criteria that will enable them to measure whether they currently lead a healthy lifestyle. For example, criterion 1 states 'adults should eat a minimum of five different portions of fruit and vegetables per day'.

The first task of the group is to collectively agree an additional criterion that they can adopt in order to measure whether they lead a healthy life. This part of the 'Life Audit' tests to see if learners have gained an appreciation of setting evidence-based or consensus criteria.

Stage 2:

Once the group have agreed criterion number 5, the next task is to go to the 'personal results' section (part of 'Life Audit 1 document') and formulate a suitable question for assessing if criterion 5 has been met. This part of the 'Life Audit' tests to see if learners understand how to develop questions that assess if criteria have been met or not.

When the question 5 has been agreed, each group member takes a few moments to record their own personal data. This part of the life audit represents the data collection phase of the clinical audit process.

Stage 3:

When each individual group member has recorded their own personal data, the next stage is for the facilitator to distribute the second handout – ‘Life Audit 2 document’ (see Folder 11). Each group member now transfers their own results onto the group results grid (this should be done anonymously). Once all members have recorded their results, the results are collated and the total number of ‘Yes’ responses are reported. This stage of the ‘Life Audit’ represents analysing data and producing results.

Stage 4:

The final stage of the ‘Life Audit’ involves each group reviewing their results and selecting the criterion where they have scored least well. The group now discuss how possible improvements could be made and are tasked with agreeing a minimum of three action points that (if implemented) should lead to better results if a re-audit was carried out in 6 months time. This stage of the ‘Life Audit’ encourages learners to think about the importance of reviewing audit results and putting practical action points into place. Once all groups in the training session have completed the ‘Life Audit’, the facilitator should invite a spokesperson from each group to summarise. The summary should include information on how the group agreed their additional criterion, what question they formulated, the overall results for each criterion and the action points agreed for improvement.

What you need to facilitate:	In order to facilitate the ‘Life Audit’ you will need sufficient handouts for all the learners taking part in the training session (see Folder 11).
When to use the resource:	Theoretically it is possible to incorporate the ‘Life Audit’ into various stages of a clinical audit training session. However, we believe that the ‘Life Audit’ works best if it is utilised after the clinical audit process has been explained. All clinical audit training sessions should include a theoretical description that works through each stage of the clinical audit process and the ‘Life Audit’ is a great way of then showing learners the audit process in a practical fashion.
Time required:	The ‘Life Audit’ can take a considerable time to conduct as it involves quite a lot of work. Typically, facilitators running a training session with two or more groups of five or more learners undertaking the ‘Life Audit’ should allow approximately 30 minutes for this activity.
CASC tips:	The ‘Life Audit’ is one of our favourite activities to conduct during a training session as it helps learners gain familiarity with the practical side of clinical audit. We appreciate that the ‘Life Audit’ is not perfect as it does not allow learners to select their own topic or to conduct a re-audit, but the resource gives learners an opportunity to familiarise themselves with many of the key stages involved in the clinical audit process.

A number of tips we would suggest:

- (1) The 'Life Audit' does involve a fair amount of facilitation. Although the 'Life Audit' handouts include full instructions, facilitators do need to keep a close eye on how learners are working through the task.
- (2) The data collection stage is key and it is important that groups are adopting a uniform approach – especially in relation to criterion/question 5. If learners are confused whether 'Yes' is a positive or negative response to the question, this may invalidate the overall results.
- (3) We have developed the 'Life Audit' as leading a healthy lifestyle is something that all learners should be able to relate to. However, we are aware that the subject of lifestyle could potentially make some learners feel uncomfortable, especially if they record negative answers to the audit questions. With this in mind, we have tried to keep potentially controversial topics such as weight/BMI and smoking out of the initial audit, but this does not stop groups from suggesting these as their additional criteria. We have not encountered any problems with the 'Life Audit' to date, but facilitators need to support all group members.
- (4) If groups struggle with agreeing an additional criterion, please be on hand to assist them. There are a huge number of additional criterion that could be agreed, e.g. salt intake should be no more than 6g per day, contact lens wearers should have a contact lens check every 12 months, teeth should be brushed a minimum of twice daily, etc, etc.

Comments from learners:

'The personal audit was fantastic – fun and thought-provoking'

'I'm going to use the life audit to get my patients to think about their own lifestyle choices!'

Teaching Resource 12: Critiquing Clinical Audits

Background: It is imperative that learners who attend clinical audit training depart with a robust understanding of how to critique and evaluate clinical audit projects. Sadly not all clinical audits adopt appropriate methodology and research has shown that audits often fail to reach the re-audit stage and/or improve patient care. By critiquing a variety of local, regional and national clinical audits, learners gain an invaluable insight into the world of clinical audit and also benefit from recognising poor and best practice in the discipline.

Description: CASC believe that trainers teaching clinical audit need to provide practical examples of 'real life' clinical audits. If training focuses solely on clinical audit theory many learners (particularly activists and pragmatists) are likely to disengage. CASC have created a simple group activity that invites learners to critique one or more clinical audit projects.

The first step is to assemble learners into equal groups. The size of each group will depend on the number of learners being trained but we would recommend groups of between 3-6 members. Once groups have been assembled tutors provide learners with one or more clinical audit projects that each group is then asked to critique. It is entirely up to tutors where they source their clinical audit projects from and what format they are in. For example, tutors may invite learners to critique a poster from a national audit competition, a local audit report or an audit published in a recognised journal. The only caveat here is that unless the learners have been asked to review the document as pre-course reading, they will need time to work through the audit they have been asked to critique. With this in mind we would suggest that audit documents used in this instance are no longer than 1000 words.

In addition to supplying learners with clinical audit projects to review, tutors should also provide learners with a template to assess audit projects. There are a number of options available here and local Trusts may have their own template in place for critiquing and evaluating completed audits so if that is the case we recommend that local documentation be adopted.

Alternatively, HQIP's 'Best Practice Checklist' provides learners with comprehensive guidance on what constitutes a high quality clinical audit and can be used to critique clinical audit projects. If you prefer to adopt a shorter template for critiquing clinical audits then CASC have also provided the version that we use with training groups (which is shorter, but less comprehensive than the HQIP document).

Whichever template you adopt, the purpose of this activity is to ask all learners to read details of a real-life clinical audit project and then critique it in groups using whichever template you have supplied learners with. Once groups have completed the critique a member of each group is asked to supply feedback and this typically leads onto a valuable wider discussion.

What you need to facilitate:	<p>Facilitators need minimal resources to conduct this activity and the key resources are:</p> <ul style="list-style-type: none"> (a) A clinical audit project to review – this may be in the form of a poster, abstract, case study, report, published paper, etc. (b) A template (see Folder 12) that will help learners critique the clinical audit document, e.g. HQIP’s ‘Best Practice Checklist’, CASC’s ‘Clinical Audit Critiquer’ or suitable alternative.
When to use the resource:	<p>This resource is probably best used after learners have been taught the key aspects of clinical audit methodology.</p>
Time to conduct it:	<p>This will depend very much on how long the clinical audit document being critiqued is as learners will need to be given appropriate time to read and digest the project they are reviewing. From our experience we would suggest that tutors should allocate between 20-30 minutes to conduct this activity.</p>
CASC Trainers comments/tips:	<p>We would advocate that all levels of clinical audit training should give learners an opportunity to review and critique real-life clinical audit projects. As stated above, providing learners the chance to review audit projects often helps them bring abstract theory to life.</p> <p>There are three main tips we have for facilitators in regard to this activity:</p> <ul style="list-style-type: none"> (1) You will need to have a thorough understanding of the clinical audit project that learners are being asked to critique. Learners may have additional questions, want further information, etc. so it is important you are familiar with the documentation (2) Make sure that authors of clinical audit projects that learners critique have agreed to share their work. This is not an issue with published papers, documents available on the internet, etc. However, local audit projects should not be used for this activity unless author/s have given their consent (3) Healthcare organisations should have access to a wide range of completed audit projects that could be used for this activity. If you struggle to gain example audits for learners to critique you may wish to use previous HQIP award winners (available via the HQIP website) or audits published in journals (e.g The Online Journal of Clinical Audits - www.clinicalaudits.com).
What previous learners have said about the resource:	<p><i>‘I really enjoyed the chance to sink my teeth into a clinical audit project’</i></p>

Teaching Resource 13: Audit in Action - Short Films

Background: An explicit learning outcome for those attending any form of clinical audit training session is that they gain an understanding of how to conduct a clinical audit in practice. Learners should also be given the opportunity to see a real-life clinical audit project in action so that they can (a) understand the audit process and learn from how a clinical audit has been conducted and (b) critique clinical audits carried out by other healthcare professionals.

Description: CASC's annual 'Junior Doctor Clinical Audit of the Year' was established in 2010 and has proved to be a huge success. In recent years CASC have worked with award winning junior doctors to develop their work further and in 2012 CASC collaborated with three winners from the 2011 competition to create short films of their clinical audit projects.

The three films feature junior doctors narrating a series of slide sets that provide information in relation to the clinical audit projects they carried out. For information, all three audits were voted award winning projects by clinical audit professionals and their peers.

Details of the films featured as part of the teaching toolkit are as follows:

Film 1: Hip Blocks in Proximal Femoral Fractures

This ten-minute film is narrated by Mrs Debbie Lees and Mr William Harrison and provides full details of their clinical audit project that won the Martin Ferris Award as part of CASC's 2011 junior doctor audit competition.

Film 2: An apple a day keeps VTE at bay

This ten-minute film is narrated by Dr Katie Eyre and provides full details of the clinical audit project carried out with her fellow doctors: Hanna L., Maughan E., Fawcett N., and Reckless I. The audit was voted the overall winner of CASC's 2011 junior doctor audit competition.

Film 3: Standardising routine neonatal checks

This eight-minute film is narrated by Dr Gemma Gough and Dr Abigail Gee and provides full details of their project looking at standardising routine neonatal checks, their documentation and adherence of NICE guidelines. The audit was voted 3rd overall in the 2011 junior doctor competition.

What you need to facilitate: Facilitators need minimal resources to conduct this activity and the key resources are:

- (a) The short films (downloadable as part of the CATT pack)
- (b) Facilities for projecting the film to the audience

When to use the resource: The films can be used at various times during a clinical audit training session. We would recommend that one film is shown to showcase clinical audit in action, but you may wish to show more than one. Typically, a film could be shown in a number of instances for a variety of reasons:

- (1) at the start of the training session to provide learners with an example of clinical audit in practice – this approach shows learners award winning audits that they can aspire to
- (2) within a training session to encourage learners to critique and evaluate a real-life audit (see resource 12).
- (3) at the end of a clinical audit training session to demonstrate to learners the value of audit and the impact a good audit can have.

Time to conduct it: Films last between 8 and 10 minutes.

CASC Trainers comments/tips: Irrespective of where and when CASC conduct clinical audit training the recurring theme from learners is that regardless of the clinical audit theory taught to them, they want to see examples of real-life clinical audit projects that have made a difference and improved patient care.

These films enable learners to find out more about real-life award winning audit projects. Of course not all learners in a training session will have first-hand experience of the topics shown in the films but the films demonstrate clinical audit in action. In addition, because junior doctors are extremely busy professionals, the audience who watch the films see what is possible when those conducting audits are forced to balance competing priorities/workloads.

In terms of CASC tips when using the film:

- (1) Make sure that your IT/computer is set up appropriately to display the film and enable audience members to hear the audio.
- (2) Make sure that you are familiar with all the short films and try to pick a film that will appeal to members of your audience. Also be clear on how you wish to use the film, for example – is it a model of best practice in audit that you want your learners to be inspired by or is it a real-life audit that you want your learners to discuss and critique?

What previous learners have said about the film: *The audit film was excellent – good to see what is possible*
My colleagues believe juniors carry out rushed, poor quality audits. They would think again if they watched the film

Teaching Resource 14: Blankety Tweet

Background: As part of delivering clinical audit training it is important to make learners feel at ease and relaxed. This resource can be used as a fun ice-breaker activity at the start of a training session, or serve as a fun way of concluding training.

Description: ‘Blankety Tweet’ is a simple and fun quiz based on clinical audit quotes sourced from Twitter. For information, Twitter is a social networking website that enables users to post updates totalling no more than 140 characters at a time.

In 2013 the website ranked number 10 in the most popular websites with approximately 500 million tweets per day! The quiz also incorporates elements of the BBC TV game show Blankety Blank – hence its name ‘Blankety Tweet’!

In order to play ‘Blankety Tweet’ facilitators should divide learners into two teams. Each team should nominate a captain who will relay answers back to the facilitator when asked. For the purpose of the following example, the two teams are named: Team A and Team B.

To conduct the quiz the facilitator projects screenshots taken from Twitter (see Folder 14) onto a screen that all learners can see. All screenshots relate to comments that have been made with regard to clinical audit and all screenshots have been saved as associated pairs – the first of which has a word/words blanked out and the second that reveals the original twitter comment in full.

The quiz starts with Team A being shown a twitter comment that has a word or words blanked out. Team A then discuss what the blank is and make one guess via their team captain. If they guess correctly they score 1 point. However, if Team A guess incorrectly, Team B have a chance to guess. If they are correct they gain 1 point. If neither team correctly guess the blank word/s, no points are scored and the facilitator moves onto the next twitter comment, this time starting with Team B.

Folder 14 includes a total of 20 twitter comments and we recommend that facilitators play the quiz on a ‘first team to reach 3 points is the winner’ basis. However, you may choose to play the quiz in whichever format suits you best, e.g. best of 5/6/7 rounds, first to 2/3/4/5 points, etc. A worked example of how to play the quiz is provided below:

Round 1:

Twitter comment: ‘A rather **BLANK** day of clinical audit and research’

Team A guess: ‘LONG’ (this is incorrect)

Team B guess: ‘DULL’ (this is also incorrect)

The answer is ‘BORING’ so the scores at the end of Round 1 are: A 0 v B 0.

Round 2:

Twitter comment: 'Clinical audit is not **BLANK**'

Team B guess 'FUN' (this is correct so they gain 1 point)

Scores at the end of Round 2 are: A 0 v B 1.

Round 3:

Twitter comment: 'Doing my clinical **BLANK**..... Exciting life I lead'

Team A guess 'AUDIT' (this is incorrect)

Team B guess 'RE-AUDIT' (this is correct so they gain 1 point)

Scores at the end of Round 3 are: A 0 v B 2. Team B are the winners!

What you need to facilitate:

The 'Blankety Tweet' quiz is very straightforward to conduct and all you need are the PowerPoint slides from Folder 14 and a screen on which to project the images for learners to view.

When to use the resource:

Theoretically it is possible to incorporate quizzes into training sessions at any point. Perhaps the two most logical times to conduct a quiz are as follows:

- (1) At the start of training – the quiz can act as a useful ice-breaker especially as this activity involves learners working in teams to guess the missing answers.
- (2) At the end of the training – this is the most logical time to conduct the quiz as it is a fun way in which to conclude the training session.

Time required:

The time it takes a facilitator to conduct a quiz will depend on the number of rounds played. 'Blankety Tweet' is a quick quiz and each round should take no longer than a minute to complete.

CASC tips:

The 'Blankety Tweet' quiz is primarily a fun activity that encourages learners to get together and guess twitter comments posted in relation to clinical audit.

In terms of CASC tips when using 'Blankety Tweet':

- (1) We would recommend that the quiz is used at the end of a training session rather than at the start. This is because the majority of the twitter comments convey clinical audit in a negative context. Therefore it is perhaps not advisable to start with 'Blankety Tweet' as learners may view clinical audit in a negative way from the start of the training.
- (2) Although 'Blankety Tweet' does focus on negative twitter comments in relation to clinical audit – the comments we have sourced for the quiz are reflective of current views on clinical audit. Facilitators can cleverly show the twitter quotes and use them to spark discussion on why those posting comments on twitter may view clinical audit as boring, unexciting, dull, slow, disengaging, etc.

Comments from learners:

'Where on earth did CASC get the idea of blankety tweet from? Really interesting to see how the world views clinical audit!'

Teaching Resource 15: Barriers to Clinical Audit Ladder

Background: Many healthcare professionals face significant barriers that prohibit them from undertaking successful and effective clinical audit. The more that learners attending clinical audit training understand the potential barriers they may face when attempting to conduct local clinical audit projects, the greater the opportunity to confront these barriers and identify possible solutions (with or without the support of local clinical audit facilitators).

Description: Our 'Barriers to Clinical Audit Ladder' resource is learner-centred and enables those being trained in clinical audit methodology to work in teams to identify what they consider to be the main potential barriers that may stop them from conducting effective local clinical audit.

The resource involves splitting learners into two teams. It is not important how many learners attend the session and are allocated to each team although team sizes of between 5-10 learners are preferable.

Once learners have been allocated to a team the two teams review a series of laminated cards – all of which identify potential barriers to clinical audit:

There are a total of 12 'barrier cards' (see Folder 15), listing the following potential problems that are likely to impact negatively on attempts to conduct local clinical audit:

- Lack of time
- Lack of access to local clinical audit experts
- Lack of training in clinical audit skills, e.g. questionnaire design, change management, report writing, etc
- Confusion over how audit differs from research, service evaluation, etc
- Lack of management support for clinical audit
- Problems with clinical data, e.g. accessing records and/or concerns that data is not accurate
- Fear that clinical audit will be used negatively, e.g. blaming staff
- Perception that clinical audit is dull/boring
- Inability to choose clinical audit topics, i.e. audit is 'done to' staff, not led by them
- Problems identifying or agreeing what is best practice
- Perception that clinical audit does not make a difference
- Difficulties in identifying appropriate topics to audit.

Once the teams have been given the 12 'barrier cards' facilitators can opt to conduct the task in one of two ways:

- 1) In the first instance simply instruct each team to place their 12 cards in 'ladder order' with the most significant barrier at the top of the pile down to the twelfth card (deemed the least significant barrier to clinical audit).
- 2) Provide learners with the scorecard (see Folder 15). This enables each

group member to consider the 12 'barrier cards' and vote on the top three that they feel are the most significant. In this instance, each team member identifies their personal top three barriers to clinical audit and allocates rankings of 1st, 2nd and 3rd. The highest rank scores 3 points, 2nd = 2 points and 3rd is allocated 1 point. Once all team members have distributed their three votes the group add up the scores (using the group results document - see Folder 15) and calculate the impact of the votes. A worked example is given below:

	1st (3 points)	2nd (2 points)	3rd (1 point)
Learner A	Lack of time	Management	Fear
Learner B	Training	Data	Lack of time
Learner C	Lack of time	Topic selection	Training
Learner D	Lack of time	Training	Management
Learner E	Training	Data	Lack of time

A group of 5 learners select the following barriers:

The results of the above vote would be:

1) Lack of time	$3+1+3+3+1 = 11$
2) Training	$0+3+1+2+3 = 9$
3) Data	$0+2+0+0+2 = 4$
4) Management	$2+0+0+1+0 = 3$
5) Topic selection	$0+0+2+0+0 = 2$
6) Fear	$1+0+0+0+0 = 1$

Whichever way facilitators conduct the task the initial part of the activity is to enable and encourage learners to consider what factors have the potential to de-rail clinical audit projects/work that they wish to undertake.

Once teams have put the 12 cards into order or when points have been allocated, facilitators should then identify the top three barriers agreed by each team. These should be listed in order on two separate pieces of flipchart paper and the teams should then swap their top three barriers.

In the first instance it will be interesting to see if the two teams are in agreement with regard to the top three barriers that they have selected.

The key part of this activity is to now get opposing teams to try and identify solutions that may help each other to overcome their top three barriers. For example, Team A may have identified their top three barriers to audit as:

- 1) Lack of time
- 2) Lack of management support for clinical audit
- 3) Lack of access to local clinical audit experts.

By discussing and considering Team A's 3 barriers to clinical audit, Team B may suggest these possible solutions:

1) Lack of time

Solutions: keep clinical audit projects small and focused, link audits to existing data sources, get team members to share the audit burden.

2) Lack of management support for clinical audit

Solutions: make management aware of clinical audit obligations, use audit to identify potential patient safety issues, use clinical audit to identify possible opportunities for saving money.

3) Lack of access to local clinical audit experts

Solutions: discuss ways that clinical audit staff can more effectively support healthcare professionals, assess what useful information can be accessed via the internet/intranet, identify clinicians to act as audit leads to help advise other staff on clinical audit delivery.

It is helpful to finish with each team looking at possible solutions to barriers as this ensures that the task ends with a positive conclusion.

What you need to facilitate:

Facilitators need minimal resources to conduct this activity and the key resources are:

- (a) Two sets of the 12 laminated cards (see Folder 15)
- (b) The barriers ladder scorecard (see Folder 15)
- (c) Flipchart paper and pens.

When to use the resource:

This activity is flexible and can be used at various stages in clinical audit training sessions. The activity does need time to conduct but it typically generates some very thought-provoking discussion. The activity also enables learners to consider the possible problems that may impact on successful local clinical audit and consider potential solutions (with the support of other group members). The resource lends itself best to training that takes place over a 3+ hour time period as it will be difficult to incorporate into a short training session.

The resource should also be used if trainers ever encounter a particularly negative group of learners. In our experience learners appreciate the chance to be negative and identify barriers to audit, but by then looking at possible solutions this then helps change their mind-set and encourages them to consider clinical audit in a more constructive way.

Time required:

The length of time needed to conduct this activity will depend on how long facilitators allow groups to conduct the task. Realistically, 30 minutes should be allocated to facilitation of this task.

CASC Trainers comments/tips: We appreciate that most clinical audit facilitators conduct training over the course of half-a-day or less and in such cases it is probably asking a lot to include this activity into such a training session.

However, we have found that learners very much value the chance to consider and discuss with others what factors have the potential to hamper local audit projects/programmes. This activity always generates interesting discussions and facilitators may pick up on common local problems that are preventing clinical audit from reaching its full potential’.

Our cautionary note when conducting this activity is that you need to be confident in terms of facilitating the task. Initially encouraging learners to focus on negative factors is a potentially hazardous exercise and facilitators must be able to successfully end the task by getting learners to think positively in terms of how solutions may be identified and implemented.

Comments from learners: *‘Barrier game enabled all learners to think about how clinical audit will be best delivered in the local setting’*

Teaching Resource 16: Turning haters to lovers

Background:	This is a challenging team activity that should only be carried out by a confident and experienced clinical audit facilitator. The purpose of the activity is to acknowledge that not all clinical staff value clinical audit and to consider a negative/anti-clinical audit viewpoint. The purpose of the task is to challenge teams to see if they can provide a coherent, rationale and pro-clinical audit argument that will inspire others to view clinical audit in a positive light.
Description:	<p>This activity is straight-forward to conduct and revolves around an article published in Hospital Doctor magazine on 4th November 1999. The article was written by Dr Gavin Spence and is entitled 'Why I hate... Audit'. Not surprisingly, given the title of the article, Dr Spence is neither an advocate or champion of clinical audit and the article clearly sets out his opposition to clinical audit and describes in detail why he hates it. Although the article was written many years ago the arguments put forward by Dr Spence in 1999 are likely to still be shared by medical and clinical colleagues today who dislike clinical audit.</p> <p>To facilitate the activity, teams of 4 to 6 learners are provided with the article from Hospital Doctor magazine and asked in the first instance to read what Dr Spence has to say. Once all learners have read the article teams are given 15 minutes in which they must write a short letter (no longer than 100 words) to Hospital Doctor magazine in reply to the article and arguments put forward by Dr Spence. The article must begin 'Dear Hospital Doctor Magazine' but thereafter teams can write whatever they wish. The purpose of the letter is to defend the integrity and value of clinical audit thereby convincing those who may be sympathetic to the views of Dr Spence that there is another side to the story.</p> <p>After 15 minutes a representative from each team will read their letter to other members of the training group. Letters from each team should provide ample subject matter for further debate in relation to the pros and cons of clinical audit. In addition, facilitators may turn the activity into a competition and offer a prize to the team who have come up with the best letter.</p>
What you need to facilitate:	Facilitators need copies of by Dr Spence's article to distribute. Team members will need access to pen and paper to write out their reply.
When to use the resource:	This activity could theoretically be used at any point in a clinical audit training session but is perhaps best utilised as part of a debate looking at negative attitudes and / or barriers to clinical audit.
Time to conduct it:	You should allow groups at least 20 minutes to carry out the task (5 minutes to read the article and a minimum of 15 to write the 100 word letter). Time needs to be allocated for a member of each group to read their letter and the activity may result in further discussion and debate. When utilising this activity for training sessions with 3 or 4 groups of 4 to 6 learners, CASC have found that this activity can take upwards of 30 minutes to complete.

**CASC Trainers
comments/tips:**

This is a thought-provoking activity that revolves around a real-life magazine article written by a doctor working in the UK.

The activity embraces the fact that we must accept that some doctors, nurses and other healthcare professionals continue to view audit with scepticism. Although healthcare professionals are now expected to carry out clinical audit work, not all view audit in a positive light. Indeed, although Dr Spence wrote his article in 1999, there will be those who will share his views today.

CASC consider that negative views of audit are healthy and that they can help stimulate valuable debate. The purpose of this activity is to challenge learners to look at clinical audit positively and to construct a coherent defence of the discipline. We have found that when conducting this task teams enjoy the challenge and they have effectively been asked to provide balance in a debate where Dr Spence has taken an anti-audit stance.

The task also encourages teamwork and creativity. There are no right and wrong answers in terms of the letter that each team produces and the activity is exceptionally learner-centred and requires minimal tutor input.

The only warning we would give is that facilitators have to be careful when using this activity. If a classroom is made up of a number of learners who have given anti-audit viewpoints earlier in the training, then we would urge caution in terms of introducing this task. Learners in training sessions who are not convinced of the value of audit may seize on the article by Dr Spence and use it as evidence to support their view that the value of clinical audit is questionable or not proven.

**What previous
learners have
said about the
activity:**

'Writing the letter was hard, but good to think about clinical audit from a different perspective'

Teaching Resource 17: Clinical Audit Mythbusters

Background: The purpose of this activity is to provide a fun and interactive way of helping learners differentiate methods, concepts, people, groups, etc. that relate to clinical audit, from those that do not.

Description: Clinical Audit Mythbusters is a very simple activity to conduct and can be carried out in a variety of ways.

In essence, the activity revolves around a 4 x 4 word grid that holds a total of 16 different words (or phrases, acronyms, etc.). The game is called Clinical Audit Mythbusters because only some of the words in the grid should be there, whereas others are imposters! The aim of the activity is for learners to try and identify words that belong and words that do not (i.e. the 'myths'). The most simplistic way of playing the game is to project a grid of 16 words onto the screen and then ask learners to shout out words that they think are myths. In some cases learners will correctly identify myths and further discussion can be had and in other cases non-myths will be identified and this will equally generate debate. As a reminder, training should be inclusive for learners so if you adopt the 'shout out' approach, then make sure all learners are given an opportunity to take part.

The grid below is an example of a typical mythbusters 16-word grid. In this instance learners have been given 16 acronyms and would be asked to identify five that are not currently relevant to clinical audit

MEAN	CAA	NICE	NQICAN
NAGCAE	NAGG	CASC	GAIN
MINAP	RCT	HQIP	SWANS
NAO	NCAPOP	NCAAG	NCAF

The five not currently relevant to clinical audit are:

NAO – National Audit Office. This includes the word 'audit' but the NAO report mainly on 'value for money issues' rather than clinical audit.

CAA – Clinical Audit Association. The CAA acted as the association for audit professionals during the 1990s and helped audit staff share resources. The CAA disbanded many years ago.

RCT – Randomised Control Trials. An RCT is a specific type of scientific experiment seen as the gold standard for clinical trials. RCTs link to research but not clinical audit.

NCAAG – National Clinical Audit Advisory Group: established in 2008 but changed their name to National Advisory Group on Clinical Audit and Enquiries (NAGCAE) in 2012

NAGG – National Audit Governance Group: set up in 2000 as the clinical audit ‘network of networks’ but changed name to NQICAN in 2013.

As mentioned above, Clinical Audit Mythbusters can be played in a number of different ways.

An alternative approach (using the previous example) is to provide individual, pairs or groups of learners with a handout featuring the 16-word grid and then ask them to circle the 11 acronyms currently related to clinical audit. Those taking part gain one point for each correct answer. This approach enables facilitators to turn this activity into a competition.

Whichever approach is taken to conducting the Clinical Audit Mythbusters activity the key is to review all 16 words on the grid and make sure learners understand why some are classified as myths and others are not.

What you need to facilitate:

Facilitators need minimal resources to conduct this activity:

- (a) Slide with 16 words on the screen for learners to review and/or a handout with the 16 word grid
- (b) A handout that provides more details for learners, e.g.: whether the word is a myth or not, why the word is a myth or not, etc. CASC have provided examples in the toolkit.

When to use the resource:

This activity can be used at any time during a training session! It serves as a good ice-breaker at the start of a session to enable facilitators to find out what learners know but equally can be used at the end of a training session to see if learners have picked up on key learning points. It can also be used at any point during training especially if learners are becoming tired or distracted and facilitators want a quick activity to help learners to engage in the session, shout-out answers and re-focus attention.

Time to conduct it:

No longer than 15 minutes.

CASC Trainers comments/tips:

Based on experience of utilising this resource, the only caveat to note is that facilitators must take care not to be-little learners. Inevitably some learners will shout-out or identify incorrect myths. If learners provide incorrect answers they should be fully supported by facilitators with all answers explained. The aim of the mythbusters game is not to try and deliberately catch learners out!

CASC have provided two mythbuster 16 word grids (see Folder 17). However, the mythbusters game can easily be adapted to your local setting and you may wish to amend our templates, create smaller or larger grids and focus on different aspects of clinical audit, etc.

We would also advise that when conducting the mythbusters activity facilitators check answers are correct. For example, organisations change their names on a periodic basis as with NCAAG and NAGG so please check the answers in the mythbusters activity are up-to-date.

What previous learners have said about the activity:

Mythbusters was good fun'

'I will adopt mythbusters game for my training in Health and Safety'

Teaching Resource 18: The A to Z of Clinical Audit

Background: This is a simple and fun team activity that engages everyone involved in clinical audit training session. The activity is essentially a word-association game carried out in groups that helps trainers assess what participants know about clinical audit and equally what they think about clinical audit.

Description: This activity should be carried out in teams of three or more learners. The activity revolves around an instruction sheet that facilitators give to all teams at the same time. The instruction sheet (see Folder 18) lists all letters of the alphabet from A to Z and teams are given a limited amount of time (3, 5 or 10 minutes) to write down as many words, phrases or acronyms that they can think of starting with each letter of the alphabet that relate to clinical audit.

The ultimate aim of the game is for a team to think of one word per letter of the alphabet, i.e. 26 clinical audit-related words from A to Z.

At the end of the time allocation, the facilitator focuses on each letter of the alphabet to see what answers each team has supplied. If a team have chosen a word that relates to clinical audit (as adjudicated by the facilitator) then they score one point.

For example, we have three teams taking part and the following answers are given for letter B: Team 1 (best practice), Team 2 (bar charts) and Team 3 (barriers). It is for the facilitator to determine if the words relate to clinical audit but in this instance we would suggest all teams would score a point each for their answers to letter 'B'). As a further example, if the same teams then progressed to letter 'C' and their answers were: Team 1 (criteria), Team 2 (criteria) and Team 3 (no answer). Only teams 1 and 2 would gain a point.

It should be pointed out that (as per the instruction sheet) teams can only gain one point per letter of the alphabet, so a team would only score one point even if they came up with 'criteria', 'change', 'confidence intervals' and 'CQC' for the letter 'C'. When facilitating this activity it is important that trainers stress to teams that as soon as they have one answer for a letter then they should move onto other letters of the alphabet.

Once the facilitator has worked through the alphabet and adjudicated on answers given, teams then count up the total number of letters where they have managed to select a clinical audit-related word and this generates a score of up to 26. The team with the highest score is deemed the winner!

What you need to facilitate: Facilitators need the instruction sheet entitled 'Clinical Audit A to Z' in order to carry out this activity.

When to use the resource: This activity can be used at any stage of a clinical audit training session. It is an excellent way of getting learners talking so it serves as a good ice-breaker activity at the start of a session. Equally the A to Z of audit can be used within a training session or at the end to see what words learners have picked up during the course of the training.

Time to conduct it: This will depend on how long you give groups to identify words, phrases, etc. We advise a maximum of 10 minutes. However, don't under-estimate the time it can take to facilitate working through all the answers from each team. Adjudicating on answers can lead to lively debate and time must also be put aside for teams to add up their scores. Even if teams are given 10 minutes thinking of audit words, the activity should take no longer than 30 minutes.

CASC Trainers comments/tips: This is a simple activity that requires minimal resources. Learners like the opportunity to work in teams and see this as a non-threatening task. The activity is easy to understand and involves little effort.

Facilitators should find this task very learner-centred so minimal intervention by the trainer is required. However, facilitators should make sure that learners understand the rules, in particularly that teams understand they only score one point per letter.

Facilitators also have to be confident in their knowledge of clinical audit and be prepared to make controversial decisions. For example, would you as a facilitator accept answers such as 'ethics' for 'E', 'p-values' for 'P' and 'National Joint Registry' for 'N'?. CASC can only advise that when facilitating the A to Z of audit you judge answers in a fair and consistent way and give clear reasoning if you do not accept an answer!

The A to Z of audit often proves a great activity for identifying incorrect thinking. For example, an answer for letter 'R' of 'randomised control trials' would indicate that learners are not clear how clinical audit differs from research. In addition, the A to Z activity can also be useful for identifying staff views on clinical audit and local issues. For example, an answer for letter 'I' of 'incomplete' would raise concerns that audit projects do not reach the re-audit stage and demonstrate improvements in patient care. Clearly, such an answer would merit further discussion'

What previous learners have said about the activity: *'The alphabet competition was good fun!'*

Teaching Resource 19: Clinical Audit Quiz Generator

Background: As part of delivering clinical audit training it is important to check that learners are picking up on key information that is being imparted to them by the trainer or trainers. With this in mind, we have developed two templates that will enable trainers to test the knowledge of their learners.

Description: In essence, training resource 19 in this pack includes two different formats for conducting quizzes with learners taking part in clinical audit training:

- **Template 1:** is a simple powerpoint slide set that enables those facilitating clinical audit training to conduct a five-question multiple choice quiz (using handouts). The slide-set in Folder 19 includes a pre-designed five-question clinical audit quiz that facilitators may choose to adapt, i.e. add additional questions.
- **Template 2:** is a more sophisticated set of powerpoint slides that enable facilitators to conduct multiple choice quizzes with learners in the training room via the screen. The resource in Folder 19 includes 5 example quiz questions, but the purpose of the resource is to help facilitators generate their own set of questions to use when delivering local clinical audit training.

Further details of how to utilise the quizzes are included with the powerpoint presentations and the instructions are clear and simple to follow.

In order to provide an example of the usefulness of quizzes, both templates include the following question:

Which part of the clinical audit process follows developing criteria and standards?

- A) Search for literature
- B) Data collection
- C) Data analysis
- D) Implement necessary changes

The answer that we are hoping for here is B) Data collection.

What you need to facilitate: This will depend on whether you are opting to use template 1 or template 2. If you opt for template 1 then this will generate a quiz that you print and handout to learners. In this instance they will need a pen/pencil to note down their answers.

If you have set up a quiz via template 2, the questions will be projected onto the screen for learners to consider. Therefore, you simply need to ensure that all learners can see the screen clearly.

When to use the resource: Theoretically it is possible to incorporate quizzes into training sessions at any point. Perhaps the two most logical times to conduct a quiz are as follows:

- (1) At the start of training – a quiz can act as a useful ice-breaker especially if you ask learners to pair up or put them into teams. The benefit of conducting a quiz at the start of a training session is that it will provide the facilitator with a gauge in terms of the knowledge level among learners.
- (2) At the end of the training – this is perhaps the most logical time to conduct a quiz as it allows the facilitator to assess if key learning outcomes have been met. A facilitator who conducts a quiz at the end of a training session should relate questions to information and knowledge that has been imparted during the training. By conducting a quiz in this form, learners also gain a final opportunity to pick up on key information.

Time required: The time it takes a facilitator to conduct a quiz – in handout format or displaying questions onto the screen – will depend entirely on the facilitator and the number of questions that have been set for learners! We would advocate that no single quiz should last for longer than 15 minutes in total.

CASC tips: CASC tutors are huge advocates of utilising quizzes! Indeed, we try to include a short quiz in almost every training session that we facilitate. Our experience is that learners enjoy taking part in quizzes. We also increasingly use quizzes at the end of training sessions to check that learners have picked up on key messages and as a reminder to them of key information.

In terms of CASC tips when using quizzes:

- (1) We would suggest that learners aren't singled out as this often makes them feel nervous. Encourage learners to pair up or join into teams when conducting quizzes as this encourages discussion and helps those attending training sessions to get to know each other.
- (2) Never call a quiz a test!
- (3) Try to incorporate fun and interesting questions. Learners are unlikely to enjoy answering 10 multiple choice questions that all relate to technical aspects of clinical audit methodology!
- (4) Keep your quiz short and simple. Any more than 10 questions or 15 minutes spent on a quiz is likely to be too long!

Comments from learners: *'The quiz got the session off to a fun and interesting start'*

Teaching Resource 20: Fun clinical audit tiebreakers

Background: As you will be aware from reading through resources 1 to 19 in this pack, the Clinical Audit Support Centre believe that clinical audit training should be delivered in a fun, entertaining and interesting fashion.

A number of resources contained in this pack relate to group and team activities/quizzes and competitions. With this in mind it is quite possible that activities that we have established in the pack may result in a tie or draw and as a result we have put together a number of clinical audit 'themed' tiebreaker questions that you may want to use as part of your training to break a tie!

Description: The CASC team have drawn up a list of 5 questions that could be used in a tiebreaker situation. All questions relate to the world of clinical audit.

The tiebreaker questions are obscure and therefore it is unlikely that any learners present in the training session will know the exact answer. With this in mind, teams/individuals asked to answer tie-breaker questions are asked to provide one answer and the team nearest to the actual answer is deemed to be the winner of the tiebreaker round. This type of approach lends itself well to tiebreaker situations that involve two or more participants.

The five tiebreaker questions and their answers can be found in Folder 10. The questions are as follows:

- 1) In what year did Sir Michael Rawlins (Chairman of NICE) state 'The time has come for everyone in the NHS to take clinical audit very seriously'? Answer: 2002 (in his foreword to the first issue of Principles for Best Practice in Clinical Audit)
- 2) According to official records, the number of soldiers who died from infectious diseases during the Crimean War in January 1855 was over 2,500. Following the work of Florence Nightingale and her team of nurses, what was the equivalent death rate in January 1856? Answer: 42
- 3) A search for the term 'clinical audit' via Google on 1st January 2014 resulted in approximately how many total results? Answer: 12,800,000
- 4) How many regional clinical audit networks existed in Autumn 2013? Answer: 15
- 5) According to CASC's annual survey conducted in 2013, what percentage of respondents stated they intended to still work in clinical audit in 2018? Answer: 59%.

What you need to facilitate: Facilitators need minimal resources to conduct this activity and the key resources are:

- (a) CASC PowerPoint slides of the tiebreaker questions (see Folder 20)
- (b) Flipchart for noting down the answers given.

When to use the resource:	The purpose of this resource is simply to determine who has won a quiz, competition or activity where the initial outcome has resulted in a tie.
Time to conduct it:	It should be possible to conduct this activity in less than 2 minutes!
CASC Trainers comments/tips:	<p>As we have previously noted, the CASC trainers like to engage learners directly in training sessions. It is often easy to forget that when conducting quizzes, competitions, etc a tie is not an unusual outcome! Therefore, it is useful to have a fun tiebreaker question in order to determine the overall winner/s.</p> <p>We have suggested five tiebreaker questions that relate to clinical audit but you may wish to develop your own series of tiebreaker questions that relate to local clinical audit delivery.</p>

Acknowledgements

The Clinical Audit Support Centre would like to take this opportunity to thank the following people who have been instrumental in helping us to devise and formulate this teaching resource:

- Louise Hazelwood for her initial comments on the training toolkit
- Keith Stevenson, Professor Richard Baker and other former colleagues in Leicestershire who were instrumental in helping to provide the inspiration for our 'Attitudes to Clinical Audit' activity
- The National Research and Ethics Committee for their excellent leaflet on clinical audit, research and other associated disciplines
- Leicestershire Primary Care Audit Group
- Philip Connolly for allowing us to utilise his inspired idea of making a clinical audit quiz more than just a 'paper-based' activity
- We are indebted to Julie Bennett from the Clinical Audit Team at University Hospitals of Leicester who used a version of the chocolate box activity as part of her 'Train the Trainer in Clinical Audit' presentation at a CASC course in 2012. She has kindly allowed us to adapt her work and include it in this update teaching toolkit
- Thanks to Anne Weist, Education Manager, NICE Evidence Services who utilised the mythbusters quiz as part of her presentation at CASC's junior doctor conference in 2012. She has kindly allowed us to adapt her work for clinical audit training purposes
- Dr. Gavin Spence for his thought-provoking 'Why I hate... Audit' article
- There are too many clinical audit professionals to mention who have indirectly helped us develop this resource, whether it be via their feedback after attending one of our training events or having had the pleasure of observing them conduct a micro-teach audit training session on our Train the Trainer in Clinical Audit course
- All providers of materials that we have sourced to develop this resource
- Kate Godfrey and the wider HQIP team for their support
- And finally we would like to thank all those hundreds of learners who we have had the great pleasure in training since the mid-1990s. Many of the resources provided here emerged from working directly with learners. Their feedback on our approaches to training has been invaluable and this training toolkit represents the activities that they have told us they have appreciated and enjoyed the most.

Clinical Audit Support Centre
PO BOX 8429,
LEICESTER, LE8 0WS,
UNITED KINGDOM

T: +44 (0)116 264 3411
F: +44 (0)116 278 7679

E: info@clinicalauditsupport.com

W: clinicalauditsupport.com

Twitter: [@cascleicester](https://twitter.com/cascleicester)