Performing a clinical audit in the OUH Trust – A brief guide for junior doctors

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15/08/2016

Clinical Audit

The Trust expects all clinical staff to participate in clinical audit. Clinical audit projects conducted must be well planned, make good use of resources and show commitment to making improvements in practice. The principles of this document must be followed in order to produce high quality clinical audit which benefits the organisation and the patients under its care.

Clinical audit is a process for reviewing clinical performance by measuring current clinical practice against agreed standards or protocol (documented evidence). Addressing any deficits should lead to the refining of quality of clinical care

1) What are the benefits of clinical audit?

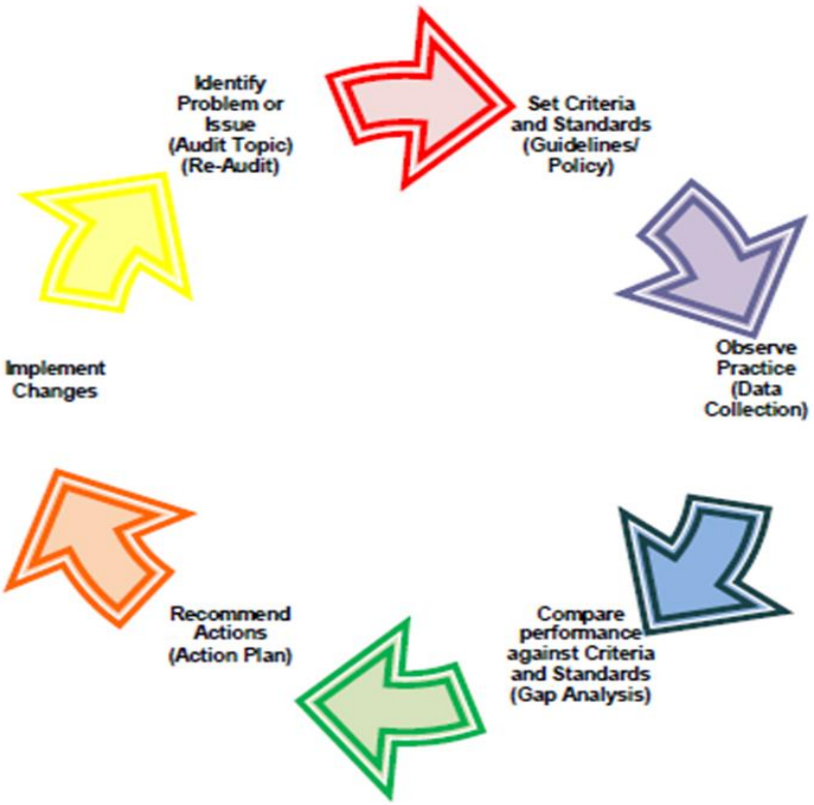
- Audit improves clinical effectiveness, to ensure existing evidence is being employed in local practice.

- You will be involved in clinical audit throughout your career and therefore it is useful to learn about the practicalities of the audit cycle at an early stage.

- Involvement in clinical audit is a requirement of the foundation programme

- You may get opportunities to present or publish your audit findings, which can help in specialty applications

2) How does the audit cycle work?



I Choose a topic: Are there any issues you notice in day to day practice? Are there any areas of risk or areas needing improvement, e.g. unnecessary requests for investigations or poorly prescribed drugs? Speak to senior doctors including your supervisors to hone your own ideas, or to ask them for their suggestions. Try to choose a project that can realistically result in an improvement in care. Check whether any audits have been done on a similar topic in the same clinical area.

II Set audit criteria and target standards:
Criteria: Aspects of treatment and care to be measured
Standards: Percentage of sample that is expected to meet each criterion
Ideally, there may be nationally or locally defined criteria and standards e.g. in NICE guidelines. If not, then set an "optimum" standard that sits between the minimum acceptable and the ideal under perfect conditions.

III Observe practice: Ideally find a way of collecting your data that involves using electronic systems such as EPR, Case Notes or PACS rather than needing to pull large numbers of physical notes. Make a data collection template and complete for a pre-defined number of patients.

Top tips:
- Trial your method of data collection on a small number of cases to make sure it works
- Be pragmatic about the size of your sample. It needs to be big enough to give meaningful results but small enough that you can complete the project.
- Obtaining medical records: Many clinical audit projects collect data retrospectively from patient medical records. You will need a completed and approved Clinical Audit Project Proposal Form (Appendix 1) to get access to the medical records library to pull the notes. NB. Library staff will only retrieve notes for Mandatory Clinical Audits (mostly National Clinical Audits). For all other audits you will have to pull the notes yourself.

IV Compare performance with standards: Calculate how many cases met the standards you have set for the audit. If standards were not met in some cases, try to identify why this was. List the recommendations for change

V Implement change and plan care: Think about how to disseminate the results and any key changes in practice that need to be made. A Clinical Audit Full Report Template is available on the Trust Intranet. Use it to help you write a full but concise report in association with the supervisor/Consultant or local clinical audit lead.

The report should include an action plan that says what actions are needed, who will make sure they happen and by when. Unless you spell this out, the changes are unlikely to happen.

Present your data to the departmental team at a local meeting. Posters, education sessions or even online videos have been used.

VI Cycle repeated: Re-audit practice after a suitable time period for your intervention to make a measurable difference. This can vary a lot depending on the nature of the changes. You may choose to work with other foundation doctors who will be in the department at the appropriate time to re-collect data.

3) Is my idea an audit, research, or something else entirely?

Research creates new knowledge and forms the basis of agreed guidelines and standards – what practice should be.

Clinical Audit looks at practice, compares it with guidelines. Are we doing it as we should? If not, why not?
3 key questions to differentiate:

Question 1: Is the purpose of your project to improve the quality of patient care in your local setting?

Question 2: Will the project involve comparison of practice against standards?

Question 3: When performing your project, does it involve changes to treatment / services?

If yes to 1 and 2, and no to 3, this is a clinical audit. If you answered differently you should get advice on whether your project is research and may require ethics committee approval.

You may also choose to get involved in a quality improvement project that does not necessarily fit the definition of an audit. These will often assess and test interventions to improve how a service is delivered, without clearly defined audit standards. An example of this is given below in part 5.

4) How do I register my clinical audit?

When you have an audit you are ready to conduct you need to follow the Trust approval process as illustrated in the below flow chart 1 -Clinical Audit process.

You will need to complete a Clinical Audit Project Proposal Form. This form is available on the intranet on the clinical audit intranet site.

It is a good idea to have a senior doctor look over your form and discuss your project with you before submission. If your clinical supervisor, or one of your departmental consultants, has helped you develop the idea, that is usually sufficient. Alternatively, below is a list of the Divisional and Departmental Clinical Audit Leads who should be contacted to discuss your audit plans.

Once you are happy with your completed Clinical Audit Project Proposal Form it should be forwarded to the Clinical Audit Lead, alternatively it could be forwarded to wendy.washbourn@ndcn.ox.ac.uk who will forward them on to the appropriate Clinical Audit Lead for approval. A list of Clinical Audit Leads is available on the intranet here. They will then arrange for details of the project to be entered on the Trust's Datix Clinical Audit Database. This will register the audit and it will be assigned a project number. You can now start your audit!

Once you have carried out your audit you will need to complete a report summarising your project and its findings in association with the relevant Consultant.

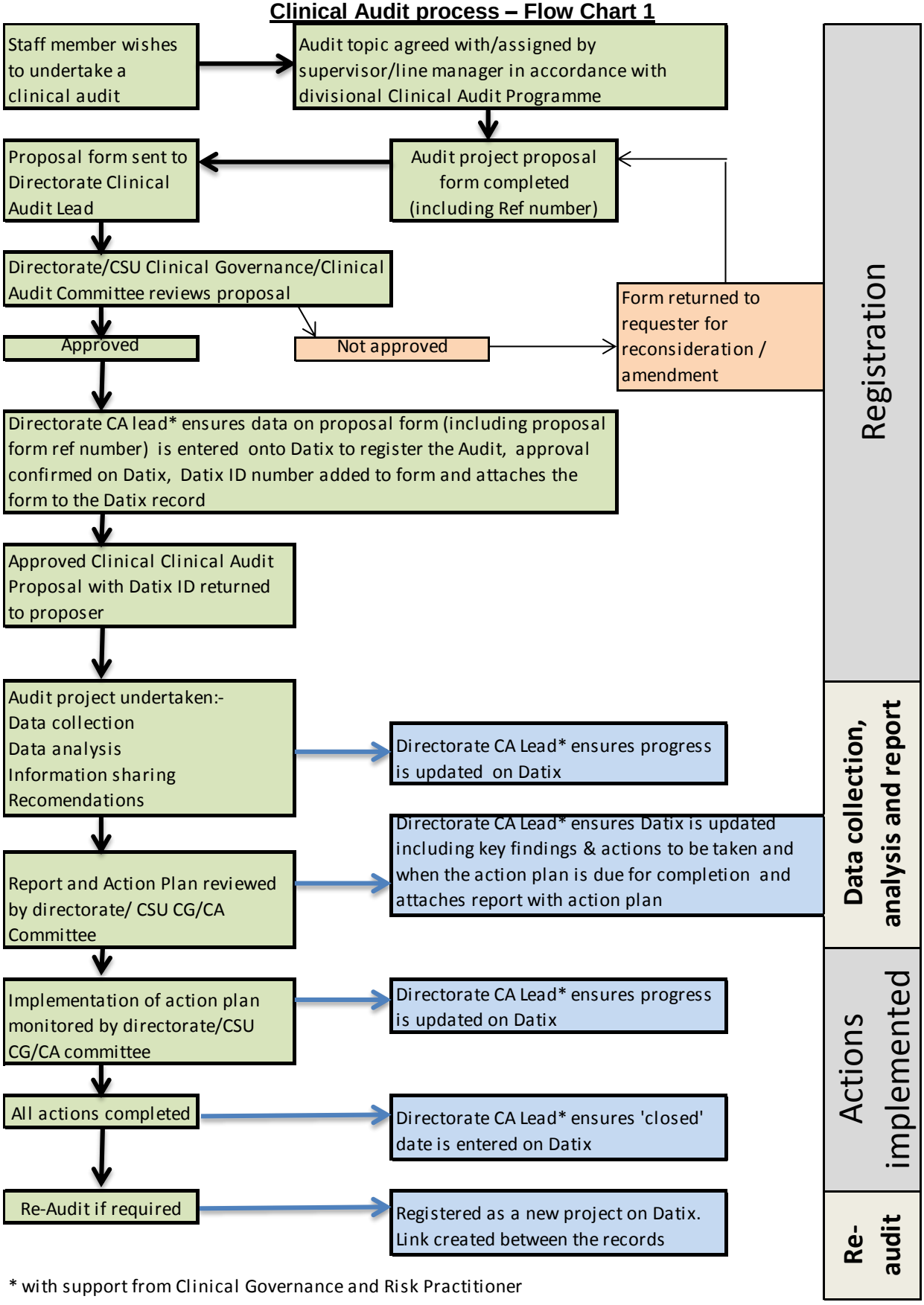
After completing the report you can send a copy to the relevant Directorate Clinical Audit Lead and Divisional Clinical Director. It can also form the basis of your presentation and any further discussion on change implementation.

Key Contacts/Information:
Clinical Audit Leads: document on intranet

Clinical Audit intranet site: http://orh.oxnet.nhs.uk/SafetyQualityRisk/Pages/Welcome.aspx

Clinical Audit enquiries mailbox: clinical.audit@ouh.nhs.uk Please say which specialty your query relates to. Your query will be forwarded to the Clinical Governance and Risk Practitioner for your division.
NB: If you are having problems getting permission to carry out your audit, please contact the Oxford Foundation Trainees Group who can flag this up to the Medical Education Director to try to find solutions.

Clinical Audit process – Flow Chart 1



* with support from Clinical Governance and Risk Practitioner

5) How do I make sure my audit has an impact? Two examples of foundation doctor led projects

Example 1: OUH audit on gentamicin prescribing

As an F2 working in general medicine at the Horton, I noticed that the majority of patients who had been prescribed a stat dose of gentamicin had not had the dose adjusted for their weight or renal function. A guideline existed relating to how a stat dose of gentamicin should be calculated, taking account of whether a patient was over or under weight and their renal function. However, the guideline required several calculations, and I thought it was likely time pressure on the admitting doctor that led to the guideline not being followed. I discussed this with one of the ID consultants and decided to audit whether patients being prescribed a stat dose of gentamicin were receiving the correct dose. I used the dose recommended by the guideline as the audit standard and looked through notes of patients admitted with UTIs (the most likely reason for patients to be prescribed gentamicin) to the JR over a 4 month period. The results showed conclusively that many patients were being overdosed, particularly overweight patients and those with poor renal function.

As a result of these findings, I developed an online-based calculator to simplify the calculation process. Doctors were only required to input 5 basic parameters and the calculator then calculates the dose of gentamicin to be prescribed. This dose is also automatically rounded to a figure that is easy for the nursing staff to draw up and tops out at a maximum dose to prevent excessive doses of gentamicin being prescribed, even in very obese patients. I presented this to the antimicrobial steering group, who approved the calculator for use, following a testing process. The calculator has now been introduced and is available on the antimicrobial intranet site.

Example 2: OUH quality improvement project in call bell accessibility for geriatrics ward.
Preparation: Spoke to matron on ward and consultant on duty for permission. Medical students helped collect data.

Data collection: Call Bell handsets were dotted around the room on geriatrics wards (38 bed ward). I plotted distribution of call bells on a Cartesian (x/y) plot - at 6 times of the day over 1 week.

Initial intervention: Presented graphs at Departmental meeting/Posters on ward and re-measured call bell distribution at same times the following week with no significant improvement in accessibility.

Second intervention: Measured coordinates of patients preferred call bell handset placement and used a computer model to represent 'tethering' the call bell to the bed side - found an optimum tethering distance to map on to patient preferences. Used a clip to tether call bells to patients' beds at this optimum distance and re-measured a third week and found significant improvement in call bell handset accessibility

Presentation: Audit presented at local conference RiCP and at British Geriatric Society, abstract published in Age and Ageing. The doctor has now gone on to invent and patent a bespoke clip for holding call bell clip.

Appendix 1 – Clinical Audit Proposal form

Oxford University Hospitals NHS Trust Clinical Audit Project Proposal Form (to be used a registration form for National Clinical Audits)			
Completed form to be sent to the relevant Directorate Clinical Audit Lead for approval. **Items Marked * MUST be completed**			
***SOURCE of the clinical audit project** (Please put an X next to the most relevant reason for the audit)	National Clinical Audit	Specified in CCG Contract	NICE Quality Standard
	NICE Guidance	CQC Essential Standards	NHSLA criteria
	Incident/Complaint/Claim	Clinical Risk identified on risk register	Other concern re clinical practice
Note: The following Clinical Audits are **mandatory** • National Clinical Audits on NCAPOP or Quality Account list • Clinical audits specified in CCG Contract • NICE Quality Standards for which compliance is declared • Trust wide audits of NHSLA criteria			
***Reference Number** (Date-Division-Surname of Clinical Audit Lead)			
***Title** (Include acronyms, NICE reference numbers and Datix IDs of incidents etc. where relevant)			
***Clinical Audit Project Lead** (Person responsible for quality and completion of project)			
Job Title:	**Email:**	**Telephone/Bleep number:**	
***Description** 1. The aspects of care the project is seeking to improve 2. The criteria that are being audited 3. The standard for each criterion			
Location(s) collecting / providing data			
***Hospital Site(s)**			
***Division(s)**			
***Directorate(s)**			
***CSU(s)**			
***Date audit report expected** For National Clinical Audits this is the date the national report on this data will be published			
Methodology			
Will the data collection be prospective or retrospective?			
How will the data be collected? *(e.g. case note review, patient questionnaire, observation)*			
Population to be audited			
Sample size		How selected?	
Resource implications *Time (Person days); Other costs (e.g. Medical records, Questionnaires, Postage)?*			
User involvement *Are patients involved in the project design?* *How will patients be informed of findings?*			
How will any confidentiality issues be addressed			
This form must be sent to the directorate clinical audit lead for approval			
Approval (Directorate Clinical Audit Lead or designate)			
I confirm that this project is appropriate, has been quality assured and is to be added to the Trust Clinical Audit Programme			
Name		**Signature**	(Not needed if approval forwarded by e-mail/recorded on Datix)
Job Title		**Date**	
Information labelled *must be entered on Datix to register the Clinical Audit Project			
Enter the Datix ID number here			