



## Auditing your Continence Service

W36A, 30 August 2011 14:00 - 15:30

Start	End	Topic	Speakers
14:00	14:15	Audit Overview	<ul style="list-style-type: none"> <li>• Ian Pearce</li> </ul>
14:15	14:30	What Aspects of Care to Audit	<ul style="list-style-type: none"> <li>• Andrew Thompson</li> </ul>
14:30	14:50	Designing the Audit	<ul style="list-style-type: none"> <li>• Ian Pearce</li> </ul>
14:50	15:10	Performing the Audit	<ul style="list-style-type: none"> <li>• Andrew Baird</li> </ul>
15:10	15:30	Discussion	<ul style="list-style-type: none"> <li>• Andrew Baird</li> <li>• Ian Pearce</li> <li>• Andrew Thompson</li> </ul>

### **Aims of course/workshop**

The aims of this workshop are to explain the basic principles of clinical audit, both process and outcome on a functional practical basis to allow the delegate to return to their establishment with the knowledge and expertise to set up an effective audit program in their unit.

Particular attention will be paid to audit design, the use of standardised proforma and basic statistical analysis and time will be spent enabling the delegate to draw meaningful and valid conclusions from data.

Tips on audit presentation and re-audit will also be included

### **Educational Objectives**

Clinical audit is the cornerstone of good clinical practice and is vital for enhancing patient care. Well designed, conducted and interpreted audit reaps enormous benefit for both patient and clinician and unmask development opportunities in the delivery of healthcare in all countries

Being able to effectively audit clinical practice is an essential aspect to modern day patient care and in some countries will be an integral aspect of continued clinical practice. In the UK, involvement in clinical audit will be a pre-requisite of continued revalidation.

## Auditing your continence service

Ian Pearce  
Andy Thompson  
Andy Baird  
UK

W36A

## Faculty

- Ian Pearce
  - Consultant Urological Surgeon
  - NW Regional audit committee member
  - BAUS FNUU Section Audit Lead
- Andrew Thompson
  - Consultant Urological Surgeon
  - Chairman NW Regional audit
- Andrew Baird
  - Consultant Urological Surgeon
  - NW Regional audit committee member

## Course Outline

- Audit Overview
  - I.Pearce
- What aspects of care to audit
  - A.Thompson
- Designing the audit
  - I.Pearce
- Performing the audit
  - A.Baird
- Discussion

## House Keeping

- Fire alarm
- Mobile phones
- Questions & discussion

## Audit Overview

- Definition
- Classification
- Audit loop
- Audit v research
- Ethics
- Indications

## Definition

- “Clinical audit is a quality improvement process that seeks to improve the quality of patient care and outcomes through systematic review of care against explicit criteria and the review of change. Aspects of the structure, process and outcome of care are selected and systematically evaluated against explicit criteria. Where indicated changes are implemented at an individual, team or service level and further monitoring is used to confirm improvement in healthcare delivery.”
- “Audit involves improving the quality of patient care by looking at current practice and modifying it where necessary”

NICE : 2002  
DoH : 1998

## Classification

- Process
  - What is done to the patient
- Outcome
  - Result of clinical intervention
- Structure
  - Resource based. Taken in conjunction with above

*Donabedian 1966*

## Audit Loop

- Identify a topic, procedure, outcome or pathway to audit
- Identify or describe best practice
- Measure current practice + identify shortfalls
- Identify and implement necessary changes to practice
- Monitor impact of changes in practice

## Audit v Research

Audit	Research
Aims to produce information to inform care delivery	Aims to derive new knowledge
Measures against a standard	Addresses specific questions
Does not involve randomisation	May involve randomisation
Analysis of existing data	Analysis of new data
Ethics approval not required	Ethics approval required

UK National research ethics service 2008

## Ethics

- Not required
  - No additional aspects of care
  - Current care assessed
  - Standard of care already set

## Indications

- Optimise care
- Tool for
  - Education
  - Resource allocation
  - Infrastructure procurement
  - Quality control
- Pillar of clinical governance

## Designing the Audit

Ian Pearce

- Proforma
- Database
- Timing
- Cohort
- Data Collection
- Re-audit

- Simple to complete
- Focussed around defined standard
- Background information
- Dictated by audit : process v outcome
- Electronic v paper
- Pilot and refine

- Age
- Gender
- Risk factors
- Severity
- Outcome
  - definition
- Process
  - Guidelines

- Time frame dictated by
  - Audit types
    - Process usually quicker
    - Outcome determined by definition of outcome
  - Previously defined standards & guidelines
  - Practicality
    - Patient numbers
    - Data collection period

- Depends upon audit
- Homogeneity
- Focussed
- Realistic
- Relevant

- “If you want something doing properly,  
do it yourself” Miles Coverdale 1541
- “or make the proforma idiot proof” Ian Pearce  
2011

<u>Do</u>	<u>Do Not</u>
Aim for independent data collection	Delegate to inexperienced staff
Seek colleagues permission	Keep identifiable patient records
Maintain anonymity	Identify colleagues without their permission
Collect yourself	
Utilise local audit dept	

- Simple
  - Excel or workbook
  - Multiple columns
  - Aim to enter
    - 1 for yes
    - 0 for no
  - Prospective entry
- Encrypt

- Completes the loop
- Set a realistic date
- Utilise same proforma (can add to it)
- Can be done more than once

- ....and don't forget to present your findings !

## **Auditing your continence services**

### **Performing the Audit**

Mr Andrew Baird  
Consultant Urological Surgeon  
University Hospital Aintree NHS Foundation Trust  
Liverpool

## **• Patient Identification**

Which patients will you audit?  
*Your own? Your colleagues? Your whole department?*

Single centre vs Multicentre audit?  
*Consider the benefits of each*

Identifying patients;  
*By referral? By diagnosis? By treatment? By outcomes?*

## • 2. Data Collection

*Data collection involves the retrieval of information in order to determine whether the criteria and standards in the audit subject are being achieved*

Data can be collected in many forms, most commonly in paper-based or electronic records

Clinical audit data needs to be accurate, relevant and representative. To ensure that these criteria are met, most effective data collection exercises use a simple data form or specifically designed questionnaire

## • 2. Data Collection cont...

A common flaw in designing data collection tools is to include too many questions

Ensure that excessive irrelevant data is not included

Try to adhere to the criteria and standards identified in the planning stage of the audit

Perform a small pilot data collection exercise;  
*this quickly establishes the usefulness of the audit data tool and helps to identify problems early in the process*

## • 3. Confidentiality

How will you store your data?

Accessibility?

Electronic password protection?

Register with data protection authority?

Filing cabinet storage - who has the key to the office and the cabinet?

Patient identifiers?

What is permissible?

*Unit number/name/date of birth/diagnosis/treatment*

What will be done with the data after the audit study?

Stored securely? Destroyed? Used for basis of future study?

Published? Shared?

## • 4. Obstacles and Troubleshooting

Identify potential obstacles as early as possible. It will be easier to undo and repeat the work before much progress has taken place.

*Again demonstrates the usefulness of an initial pilot data collection exercise*

Obstacles can appear at ANY stage from concept and planning to implementing change. Anticipate!

A team approach will help in troubleshooting any issues which arise.

Delegate responsibility for small tasks where appropriate.

Ask for help where-ever it is available.

## • 5. Data Analysis

This involves the interpretation of collected data.

Data analysis will demonstrate ways in which your practice and performance measures compare with the agreed standard. It will also identify areas of under/(over) performance.

Data analysis methods range from sophisticated electronic programmes to simple tools such as tally charts, pie graphs etc.

## • 5. Data Analysis cont...

You do not need to be a statistician to analyse clinical audit data.

Basic statistical methods are often sufficient  
*eg frequency counts, means, medians.*

In the most basic of terms, analysis of audit data reflects the percentage of incidents which meet the audit criteria, thus comparing the results to the standards set out in planning the audit.

?Involve the hospital audit department in the analysis stage  
-it depends upon the resources available locally

## • 6. Reporting

Who is your target audience?

*You may have decided this in planning your audit*

What format will the report take?

*Written/Verbal to a committee/Presentation/Official report*

Time frame

*Allow enough time to study the data analysis, draw conclusions and anticipate questions and criticisms.*

**You will know your data better than anyone else, so make sure you have the answers at your fingertips.**

## • 7. Conclusions

Does the outcome of the audit reflect your *perception* of your practice?

Were there any surprises?

How will you respond to unfavourable outcomes?

Will the outcome lead to significant changes in clinical practice? Was this anticipated?

What impact will changes in practice have on service provision?  
Will additional resources be required?

## • 8. Incorporating changes into practice

It is likely that audit data analysis will identify areas of performance which can be improved.

Necessary and achievable changes should be implemented in a practical way after identifying where additional resources might be required.

Commonly, audit studies lead to additional training for staff, introduction of guidelines, pathways and protocols or development of new ways of working.

Action plans can be useful in identifying responsibilities, actions and timescales.

## • 8. Incorporating changes into practice

Implementing change requires good communication, and inclusivity within the team.

It is important to ensure that change is systematic- ie it is integrated into existing working practices and remains in place once the audit is completed.

### Re-audit

This involves a second data collection after a suitable time period, to determine whether the *changes* made originally have resulted in effective improvements

## • Six Top Tips for a Successful Audit

1. Start small and grow with experience.
2. Get a team involved; don't go it alone.
3. Decide on audit vs research. There are differences.
4. Collect accurate, meaningful and reproducible data.
5. Have realistic aims, and strive for service improvement.
6. Realise that meaningful clinical audit can help YOU in your practice, education and personal development.

## Discussion

I.Pearce  
A.Thompson  
A.Baird

## Summary

- Introduction
- Overview
- What to Audit
- Designing the Audit
- Performing the Audit

## Discussion Points

- Regional & multicentre audit
- Funding
- Appraisal
- Organisation
- Independent data collection
- Collaboration
- Trust benefits

Regional & multicentre audit

Funding

Appraisal

Organisational



Independent data collection

Collaboration

Trust benefits

## Conclusion

- Well designed and conducted clinical audit can enhance the delivery of continence care for our patients

Thank you

## What to audit – Andy Thompson

Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the subsequent implementation of change. Aspects of the structure, processes and outcomes of care are selected and evaluated against explicit criteria and, where indicated, changes are implemented at an individual, team or service level and further monitoring is used to endorse the improvement in healthcare delivery. (Modified from NICE definition)

### Application to continence services

Modern continence services are integrated and occur within various settings, often by different providers, with patients crossing the borders between the providers.

As such, continence services can (and must!) be audited at all levels of continence care.

- Community care (nursing homes, community continence services)
- Primary care (General practice, district nurses)
- Secondary care (Hospitals)
- Specialist services (Regional services eg artificial sphincter implantation)

The different levels of services can be audited in isolation but need not be (see patient pathways)

Essentially audit can be of process or outcomes, although larger scale audits can combine elements of both. Some of these areas of audit are discussed in greater detail.

#### Process

Access to services  
Patient pathways  
Assessment/documentation  
Guidelines for care  
Waiting times (and assess delays)  
Prescribing protocols  
Patient information / consent

#### Outcomes

Rate of surgery (eg per head of population or per 1000 pts referred)  
Complications (of surgery)  
Length of stay (after surgery)  
Surgical success (measured by surgeon)  
Validated symptom questionnaires (medical / surgical treatment)  
Patient satisfaction surveys  
PROMs (Patient reported outcome measures)

### Guidelines

- Many guidelines exist for managing urinary incontinence (UI).
- AUA, EAU, NICE, SIGN have produced guidelines, to name but a few well known examples.
- Guidelines should be measurable and hence it is easy to assess compliance on retrospective review for any patient.

Examples of guidelines to continence practice.

- Post void residual should be measured by USS
- Dipstick urine analysis should be undertaken and urine cultured if indicated
- Pelvic examination should be performed to assess for prolapse and pelvic floor tone
- At initial assessment problem should be categorised (and documented) as stress, mixed or urge UI

- Compliance can be compared with peers or previous audits and acceptable compliance rates can be set for each guideline - eg 95%

### Pathways

Modern continence services have an integrated model with community, 1° and 2° care involved.

Clinical pathways of optimum care are mapped out for the service.

This should detail what happens at each stage, which level of care provides that stage of the journey, when the patient is to be reviewed and what decision making process occurs with subsequent outcome possibilities.

Cohorts of patients can be tracked through the pathway ensuring each stage and decision making process is implemented.

The patients can be tracked across the boundaries between service providers as the integrated service should have a pathway mapped out that crosses those boundaries, indicating when patients should be referred to the next level of provider.

### **Measuring outcomes for audit**

Surgeon reported outcomes

- Notoriously unreliable
- Difficult to compare to peers / literature

Objective outcome measures

- Often invasive, expensive and time consuming (eg repeating post-operative UDS after surgery)
- Minimal patient benefit (?ethics outside trials)

Patient reported outcomes

- Relatively easy and cheap.
- Allow comparison
- Reproducible

### **Surgical success**

- Needs to be measured for quality control
- Needs to be measured with consistency
- Allows comparison to peers and literature
- Particularly important for any surgeon undertaken a new procedure
- Allows commissioners / patients to see success rates and assists valid consent

### **Complications**

- Most complications rare eg tape erosion / visceral injury with TVT hence small scale audits within a department can be uninformative unless a possible problem has been identified.
- Targeted audit maybe necessary if “bad run” of a particular complications or poor outcomes.
- Wound infections, bladder perforations, rate of post op ISC, blood transfusion maybe more informative as indicators of quality, as they may occur frequently enough to identify outliers.
- Robust data collection important
- Peer comparison of self reported data difficult for example due to differences in how wound infection is defined.

### **Patient reported outcomes**

- Very simple single questions:
  - Are you glad you had the operation?
  - Are you glad you came to see me?
  - Would you recommend the service to a friend?
- Patient satisfaction surveys – relate to whole process, valid for non surgical as well as surgical treatments. May include items such as appointment services, waiting times etc as well as clinical care.
- Validated symptom questionnaires pre & post intervention.
- PROMS

### **Validated Symptom Questionnaires**

Validated questionnaires can be used to assess their bladder / bowel function pre and post operatively.

Examples include Bristol Female urinary tract symptom questionnaire (BFLUTS), incontinence impact questionnaire (IIQ), patient perception of bladder condition (PPBC) and various ICS questionnaires modified for stress and urge urinary incontinence and faecal incontinence. (ICIQ modular questionnaires for males, females, children, bowel symptoms, urinary incontinence etc.)

Validated questionnaires are reproducible between patient groups and over time.

Use pre and post op allows measurement of the patients' symptomatic improvement.

### **PROMs (Patient reported outcome measures).**

Patient Reported Outcome Measures (PROMS) employ short, self-completed questionnaires which measure the patient's health status or health-related quality of life at a single point in time. PROMs are used to derive measures of the outcomes of specific interventions. Changes in health status measured by PROMs at two different points in time (e.g. before and after an operation) can be used to derive measures of the impact of health care interventions.

These are increasingly used for elective surgery to assess pre-operative general health and quality of life measures along with co-existing co-morbidities. PROMs will improve the knowledge we have relating to the benefits of health care provision from the patients' perspective.

In a pilot of 2400 patients across 24 centres, undertaken by the London school of hygiene and tropical medicine, PROMs were found to be cost-effective and it was shown that patients were willing to participate.

PROMs data includes general patient demographic data including socio-economic class, a condition specific tool and a generic instrument of health status.

### **Potential advantages**

Allow for commissioners to assess quality of care

Allow help for GPs in choosing what care to recommend.

Help reduce inequalities of care and strengthen audit processes

Help clinicians and managers benchmark the quality of their care.

Allowance in outcome variances due to co-existing morbidities.

### **Summary**

- Audit should assess quality of care, drive service improvement and monitor progress
- All aspects of continence services in all areas by all providers can be audited.
- Process and outcomes can be measured and used to monitor the performance of the service.
- Targeted audits should be considered for apparent or possible problems (procedures or clinicians!)
- Audit service and patient journey against guidelines and pathways - together or independently.
- A variety of outcome measures can be measured and must be appropriate to the audit purpose.
- Patient reported outcomes will become a necessity and constitute a more comprehensive measure of pre and post operative health status in both general terms and specifically related to the clinical condition.