

TEACHING QUALITY MANAGEMENT IN RESOURCE LIMITED SETTINGS

Experience in developing and using standards for health care in low resource settings

Dr Mselenge Mdegela Liverpool School of Tropical Medicine, LSTM. Monday, 9th April 2018

STANDARDS-BASED AUDIT

"A cycle which involves defining standards, collecting data to measure current practice against those standards, and implementing any changes deemed necessary"

- Research and professional development



STANDARDS-BASED AUDIT

- ☐ An objective, systematic & critical analysis of the quality of care against set criteria:
 - clinical and nursing aspects
 - management aspects
 - human rights aspects (e.g.; dignity, respect, privacy, confidentiality, non-discrimination)

□Pre-requisites:

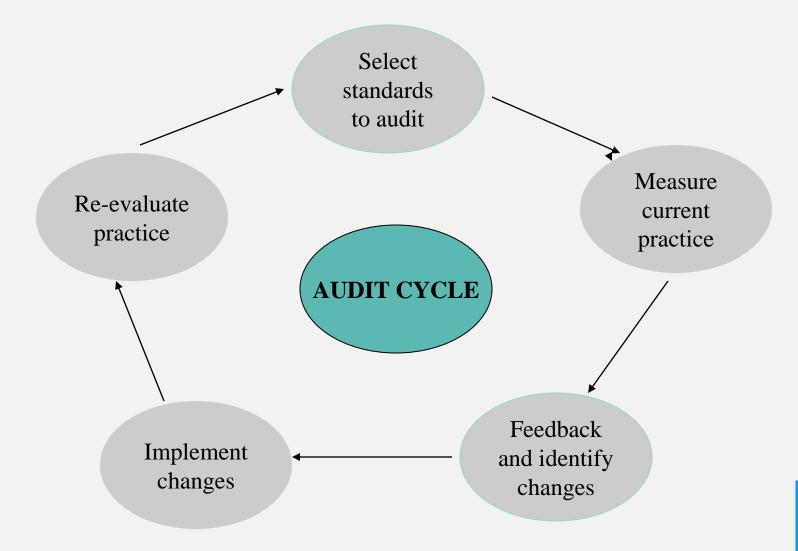
- evidence-based standards (or National protocols) that are the source of criteria
- registers to identify cases
- written patient records: 'if it is not written down, it did not happen

OR

Facility assessments to identify problems

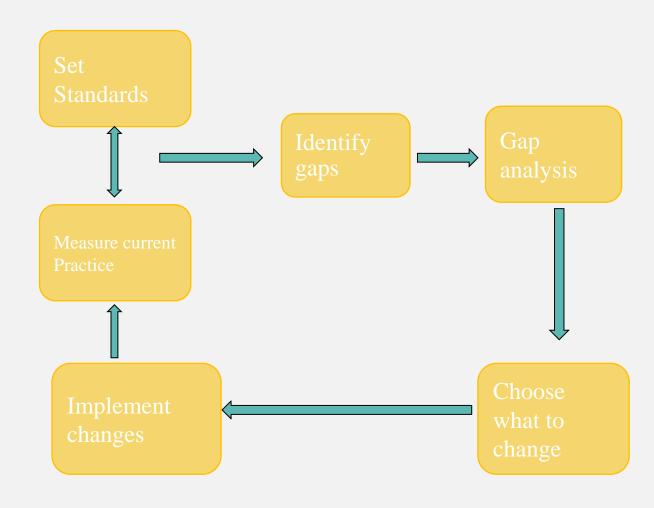


THE AUDIT CYCLE





THE AUDIT CYCLE





STEPS OF THE AUDIT PROCESS

- Agree on criteria for audit
- Agree on case definition
- Identify cases
- Measure current practice
- Identify and analyse problems
- Develop solutions
- Implement changes
- Repeat measurement of practice



PREPARATORY PHASE OF AUDIT PROCESS

- Form audit team
- Select topic for audit
- Define cases / unit for analysis
- Set criteria of evidence-based good care
- Identify information sources
- Design data extraction sheet



FORM AUDIT TEAM

□ Could the health facility QI team be the audit team?

□Possible membership:

- Health facility in charge/ hospital director
- Hospital administrator
- In charge of maternity, MCH, gynaecological ward
- Doctors
- Nurse-midwives
- Other health professionals: lab technician, pharmaceutical technician
- Cleaners
- Record keeping



SELECT TOPICS FOR STANDARD-BASED AUDIT What can be audited?

- Service provision
- Clinical obstetric & midwifery practice
- Management and organisation
- Human rights aspects

□ Selection of topics is based on:

- Severity (high case fatality)
- Frequency of occurrence (common problem)



IDENTIFICATION OF CASES

For identification of cases standard case definitions are needed

Example from district hospitals in Ghana:

Complications	Essential features	Additional features
Primary PPH (ml)	Genital bleeding within 24 hours of delivery	At least one of the following: -Estimated Blood loss > 500 -Clinical signs of shock (pulse >100/min; syst BP < 100)



SELECTION OF CRITERIA

□Criteria must be:

- relevant to case management for the level of care (availability of test or treatment)
- indicative of essential practice
- evidence-based
- measurable from patient case notes
- restricted to not more than 10 per complication or practice to be audited
- preferably developed by an expert panel



SELECTION OF CRITERIA

Example from Ghana:

- □Criteria for optimal management of obstructed labour:
- Prompt delivery of fetus should be < 2hours of diagnosis
- Urinary bladder should be drained
- Observation chart should be maintained (pulse, BP, urine output, temperature)
- Intravenous access and hydration should be achieved
- Broad-spectrum antibiotics should be given
- Typing and cross-matching of blood should be carried out.



IDENTIFY INFORMATION SOURCES FOR SELECTION OF CASES

☐ It is advisable that different information sources are used to identify cases, such as:

- Labour ward register
- Admission register of maternity ward
- Admission register of gynaecology ward
- Discharge registers
- Operation theatre register



MEASUREMENT CURRENT PRACTICE

- Review of a number of patient records from a certain period (e.g. 10).
- Record findings from each patient record on data collection sheet
- For each criterion the % of case notes which fulfilled the criterion is given.
- Direct observations of practice and exit interviews with patients can be used as well to complement record review.



IDENTIFY AND ANALYSE PROBLEMS AND FIND SOLUTIONS

- Based on the findings (scores) from the standard-based audit,
 problems are identified
- Discuss why these problems exist and analyse contributing factors and root causes.
- Find possible solutions to solve the problems and tackle the root causes and select the most appropriate solutions.
- Make an action plan
- Communicate the action plan to staff



IMPLEMENT CHANGES

- Identify what has to be done, when and by whom.
- Clarify who is responsible for the implementation of different activities of the action plan.
- Agree when the plan should have been implemented (time for re-audit)
- Carry out the activities of your action plan



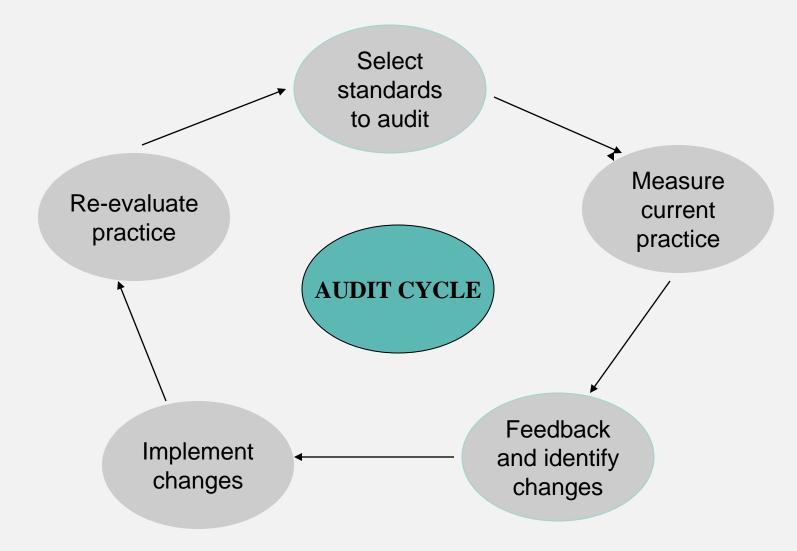
RE-EVALUATE PRACTICE

 After the agreed time that changes should have been implemented carry out the same audit.

- Compare findings of the 2nd audit with those of the 1st audit
- Effectiveness of the audit is measured by the change in the % of cases which met the criteria of good care.
- Give feedback to staff about changes in their performance and congratulate staff with achievements.



THE AUDIT CYCLE





IMPROVING QUALITY OF ESSENTIAL OBSTETRIC CARE - KENYA

Standard	Measuremen t 1	Changes made	Measurement 2
Every woman with obstructed labour is delivered within 1 hour of the diagnosis	1 - 2 hrs 27%	Procedures for handing over patient simplified. Continuous 24- hour anaesthetic cover in theatre ensured	1-2 hrs 43%
Broad spectrum antibiotics are always available and accessible	67 %	'back up store' organised for the maternity unit which could be accessed during weekends as well as during the week Agreement reached that if necessary, ward staff could 'borrow' antibiotics from each other	100 %



IMPROVING QUALITY OF REFERRAL BETWEEN HEALTH CENTRES AND DISTRICT HOSPITALS - MALAWI

Standard	Measurement 1	Measurement 2
All patients referred are attended to by a clinician within 30 minutes of arrival to the hospital	30.8% (16/52)	92.6% (50/54)
Ambulances are available at all times to transport patients who need referral	100 % (60/60)	100% (62/62)
Time between calling for ambulance and arrival of patient into hospital < 2 hours	41.8% (23/55)	88.3 % (53/60)
Health Centre staff receive feedback on all patients referred	1.7% (1/60)	91.9% (57/62)

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QUALITY IMPROVEMENT TEAM





AUDIT CAN WORK IN ALL TYPES OF FACILITY

- Locally appropriate development of standards
- Time and patience
- Avoidance of a culture of blame
- Willingness to work together
- Capacity building needs met
- Team effort management, clinical and support staff involved



STANDARD-BASED AUDIT OF THE USE OF THE Small group work: PARTOGRAPH

- Review 10 partographs and record your findings on the data collection sheet for standard-based audit
- Check each partograph for each standard whether it was done or not
- Tick in the column for each partograph Y for yes or N for no.
- Add up the total score for each standard from all 10 partographs in the last column



STANDARD-BASED AUDIT OF THE USE OF THE PARTOGRAPH

Use the following criteria-

- Vital details filled in on admission (Name, Para/Gravida, Date, Time)
- FHR monitored & recorded at least hourly
- Moulding recorded at least 4 hourly
- State of membranes and liquor recorded at least 4 hourly
- V/E done 4 hourly & cervical dilatation recorded
- Descent of the presenting part recorded at least 4 hourly
- Contractions monitored every hour
- BP monitored & recorded hourly
- PR recorded at least 2 hourly
- Temperature recorded at least 4 hourly
- Mode of delivery recorded
- Weight of baby recorded
- Sex of the baby recorded
- Apgar score recorded



PARTOGRAPH AUDIT

	1	2	3	4	5	6	7	8	9	10
Vital Information										
FHR										
Moulding										
Membranes and liquor										
Cervical dilatation										
Descent										
Contractions										
PB										
PR										
Temperature										
Mode of delivery										
Weight										
APGAR score										
Scores										



How to develop and use STANDARDS in low resourced healthcare facilities.



WHAT IS A STANDARD?

- An agreed upon level of performance that specifies what action should be taken. (WHO, 1999)
- A statement of the best quality of care that a service aims to offer. (NICE, 2000)
- An objective with guidance for its achievement, given in the form of criteria sets which specify required resources, activities and predicted outcomes. (Royal college of Nursing, 1990)



IMPORTANCE OF STANDARDS

- Benchmarking:
 - Best achievable performance
 - Available evidence-based practices
- Agreed processes of care in different situations
- Support staff to do the right thing at the right time



REMEMBER ABOUT THE 3 DELAY MODEL?

Why do pregnant women and neonates die?

Decision

Drive

Delivery







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BARRIERS TO SKILLED BIRTH ATTENDANCE

FGD with women, men, TBAs (9 locations, Suba district, Kenya)

- Preferred birth attendant: TBA access 24 hours, friendly, flexible and affordable fees, competent (not majority view)
- Health facility best for complications but

 transport not available, not affordable, lack of 'anything' in facilities, lack of facilities, cost of care, lack of staff at facilities, not open 24 hrs, staff attitude and practices, unnecessary operations are done



COMPONENTS OF A STANDARD

- A standard should consist of an <u>objective</u> and clear set of <u>criteria</u>
 - **Objective:** a broad statement of good practice based on the best possible current evidence
 - Criterion: an item/ aspect of care necessary to the
 achievement of best practice that we wish to
 examine based on structure, process or
 outcome of interest.



CRITERIA

• Criterion has been defined as an item/ aspect of care necessary to the achievement of best practice that we wish to examine

Classifiable into those that will address:

- Structure what you need
- Process what you do
- Outcome of care what you expect

Note: there is a considerable degree of overlap between the three types of criteria for a chosen objective.



STANDARD = OBJECTIVE+CRITERIA MUST BE SMART

• Specific

Measurable

Appropriate

• Realistic

• Time-bound

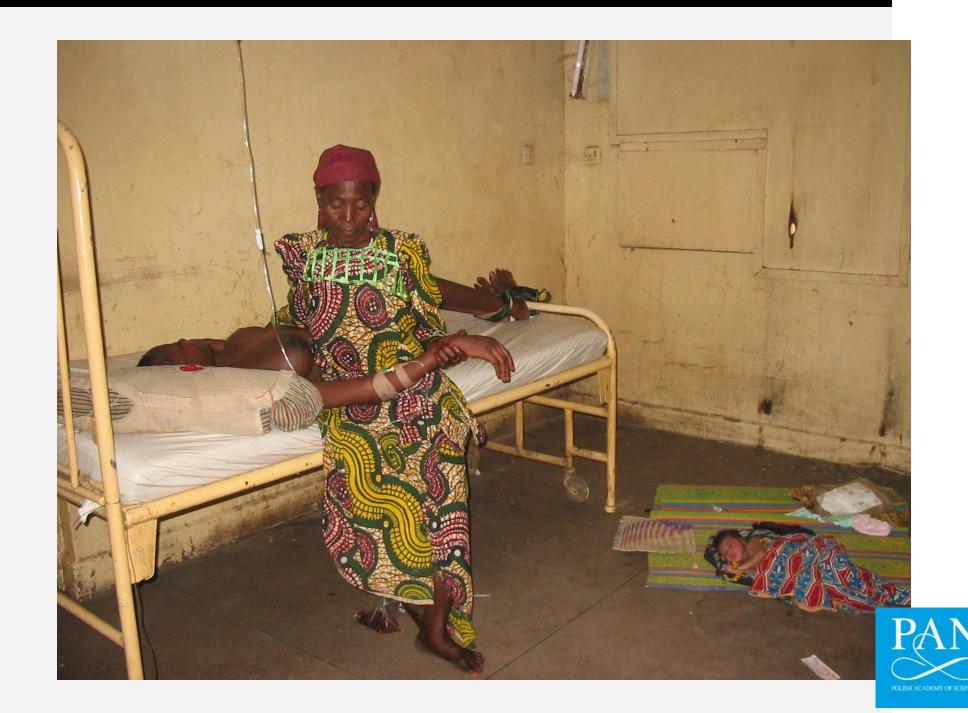




ACADEMIE POLONAISE DES SCIENCES



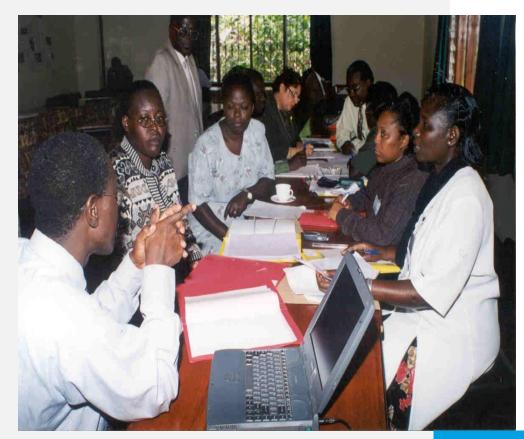




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DEVELOPING STANDARDS

- evidence-based
- make use of existing guidelines for practice
- incorporate input from all professional groups involved in care
- chose area of care requiring change
- develop SMART Standards
- standards form the basis for Audit





EXAMPLE OF A STANDARD

Objective:

AMTSL for all women who deliver in this facility

Need staff, knowledge and skills, oxytocic, syringe and needle

Do

Outcome reduced PPH by 75%



Developing Standards

OBJECTIVE: EVERY WOMAN WITH OBSTRUCTED LABOUR IS DELIVERED WITHIN 1 HOUR OF THE DIAGNOSIS

Structure criteria	Process criteria	Outcome criteria
Functioning theatre	Supportive treatment and theatre prep started as soon diagnosis made e treatment	100% delivered within 1hr
Staff on call 24/7	management protocol displayed	Reduction in mortality due to obstructed labour
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THANK YOU

Mselenge Mdegela

+44 151 701 3705

☑ *Mselenge.Mdegela@lstmed.ac.uk*



