Quality improvement Process/Cycle

Action orientated audit

By

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What is quality?

- Difficult-to- define words
- Understand at least in terms of concrete items such as cars, cameras and computers.
- We know it has something to do with goodness and value.

- In terms of health care a number of dimensions of quality are talked about

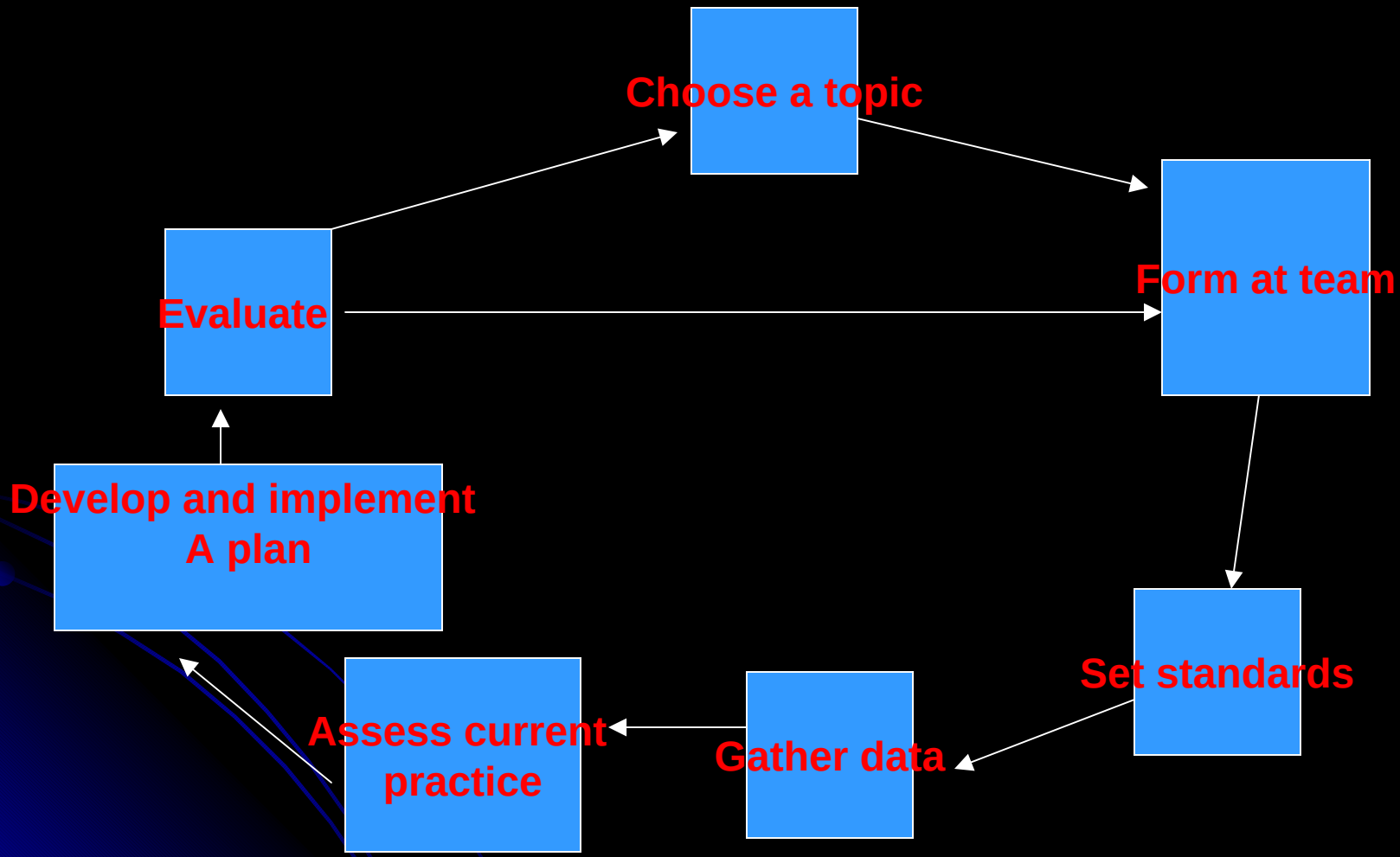
  * effectiveness,
  * equity,
  * humanity and
  * efficiency
  * value for money

Quality improvement involves assessing the current level of performance in health care and efforts to improve the provision of health care

The Quality Improvement Cycle

- The process of quality improvement is based on a cycle, so conceptualized because it is never ending

Quality improvement cycle



Choose a Topic

Some questions to ask in selecting a topic include the following:

- Is this something I / we have influence over or can do something about?
- Would dealing with this issue make a significant difference to the way we work?
- Why do I want to work on this?

Choose a Topic

- Will this process improve the experience and outcomes for our clients (patients)?
- Is success in improving quality in this area a possibility?

Form a Team

- QI is not a one man show.
- Health care is a team effort and only the team can bring about improvement.
- Who should be included in the team will depend on the topic chosen. Be as inclusive as possible.

Form a Team

- May consider a core team to lead and implement the process, and a broader support team (stakeholders) to include people of influence who are needed to support proposed changes

- Include patients (clients) in the team wherever possible.

Set Standards

- Standards should be set towards one's aim.
- Here evidence-based practice is important.

Standards

- Standards are desired performance levels for criteria chosen by the team.
- Criteria relate to
  - structures (staff and equipment),
  - process (activities taking place within the hospital), and outcomes (end points of care).
- Criteria should be important, measurable and clearly related to quality of care.

Gather Data

- This involves finding out what is happening at present in order to measure present practice against.

Assess Current Practice / analyze the gap

- The team analyses the data gathered and compares it to the standards set in order to ascertain the gap between current practice and desired outcomes.

Assess Current Practice / analyze the gap

- Often it is difficult to understand why there is the gap between reality and ideals, and problem-analysis techniques are needed to analyse clearly what the reasons are.
- Such techniques include brainstorming, fish-bone analysis, tree diagrams, and others

Develop and Implement a Plan

- Decide what needs to happen to move towards the standards set.
- Focus on solutions rather than rehashing the problem or finding scapegoats.
- Think laterally and creatively. Solutions may be unexpectedly simple.

Develop and Implement a Plan

- If the gap between the standards and the reality is wide, aim for an incremental improvement in quality, making a plan that has reasonable chance of success.
- The ultimate aim of the spiral is to reach the standards, but the aim of each cycle is simply to move towards those standards.

Develop and Implement a Plan

- Therefore the team sets specific objectives, with a practical action plan linked to each objective.
- These objectives must be realistic in terms of context and current level of quality.
- The plan based on these objectives must clearly specify who will do what by when

- Plan Must be SMART

- S - goals must be **Specific**
- M - targets should be **Measurable**
- A - goals should be **Adjustable**
- R - goals must be **Realistic**
- T - targets should be **Time based**

- Then make it happen. The core team needs the support and help of colleagues and management – the other stakeholders referred to earlier.
- Implementation and feedback should be continuous.
- The team should meet regularly to ensure that implementation is happening and to make adjustments to the plan as is needed.
- Flexibility in terms of the plan is important.

Evaluate

- The team needs to review whether there has been any improvement in the quality of the aspect of health care being addressed.
- To do that a new set of data needs to be gathered and compared with the previous data as well as the current and target standards.
- On the basis of this further plans are made and implemented and the spiral continues.

Cryptococcal Meningitis at Northdale Hospital

- Problem:
  - Recurrent readmissions for cryptocoocal meningitis
  - Varying length of stays and patient outcomes

Form a team

- Clinical head : Dr. Sirkar
- Principal Family Physician : Dr. M. Naidoo
- Chief Family Physician : Prof Cassimjee
- Lab Microbiologist
- Principal Specialist Infectious diseases: Dr Dawood – Greys
- Infection Control Practitioner
- Medical Ward unit manager

Identify current practice

Northdale Hospital statistics:
July 2006

Lumbar Punctures done: 107
Normal results on CSF = 68
= 63%

TB Meningitis on CSF = 20
= 19 %

CryptoCoccal Meningitis = 14
= 13%

TB and Cryptococcal Meningitis on CSF = 5
= 5 %

Total cases of Cryptoccocal Meningitis = 18 = 18 %

Currently 16 October 2006 **6** patients with Cryptococcal Meningitis in ward at present

Current Treatment Modalities:

1
Fluconazole
800mg Fluconazole po stat
400mg daily po for 3 months
200mg daily po then for life

2
Fluconazole
400mg daily po for 3 months
200mg daily for life

3
Amphotericin B
0.7 mg /kg/day ordered on diagnosis
Obtained and started by day 3
Stocks run out by day 7
Up to 3 day wait for further stocks to arrive
Duration of therapy usu under 7 days
Patients are then commenced on Fluconazole 400mg daily and discharged; supposedly duration of Fluconazole would then be for 3 months.

Other considerations – Current Practice

- At LP opening pressures are not measured
- No CSF manometers available
- Patients still complaining of headaches after 1 or 2 days of therapy for cryptococcal meningitis are assumed by some doctors to have
  - Resistance to treatment
  - Booked for urgent CT Brain scans
  - Request made to do therapeutic csf tap and drain 10 to 20mls of CSF
  - Started on IV Rocephin
  - Started on TB treatment
  - Booked for Urgent assessment at ARV Clinic

- Length of stay is problematic as doctors are unsure when to discharge
- Patient education and family counseling is not done
- Families are expecting a cure
- Recurrent presentations of the same patient at night with headaches , after how many days should a diagnostic LP be redone, eg patients discharged today on Diflucan ,presents in 3 days with a new folder and gets a repeat LP

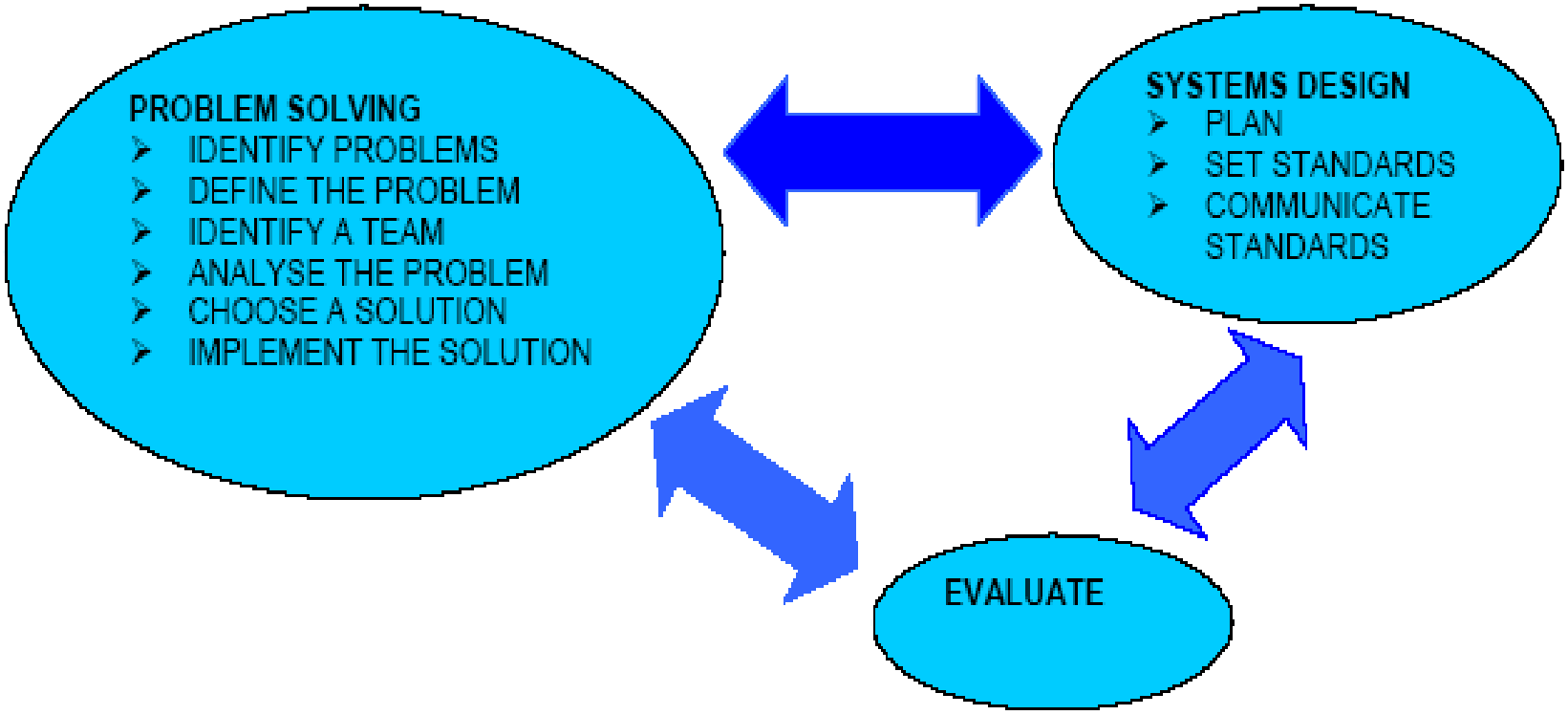
Other considerations – Current Practice

- Patients from other hospitals on therapy for cryptococcal meningitis, what treatment regimen is to be used when the LP is done here?
- Routine screening for Cryptococcal Meningitis by ARV clinics , is this acceptable?
- After a therapeutic CSF tap , When should this be repeated ? and How often ?
- Neurology and Neurosurgical registrars at higher levels of care often refer patients with cryptococcal meningitis for serial csf taps, What protocol should be followed?
- Patients discharged after acute hopitilisation rarely present regularly for maintenance Fluconazole
- Should Fluconazole be stopped in patients on ARVs ?

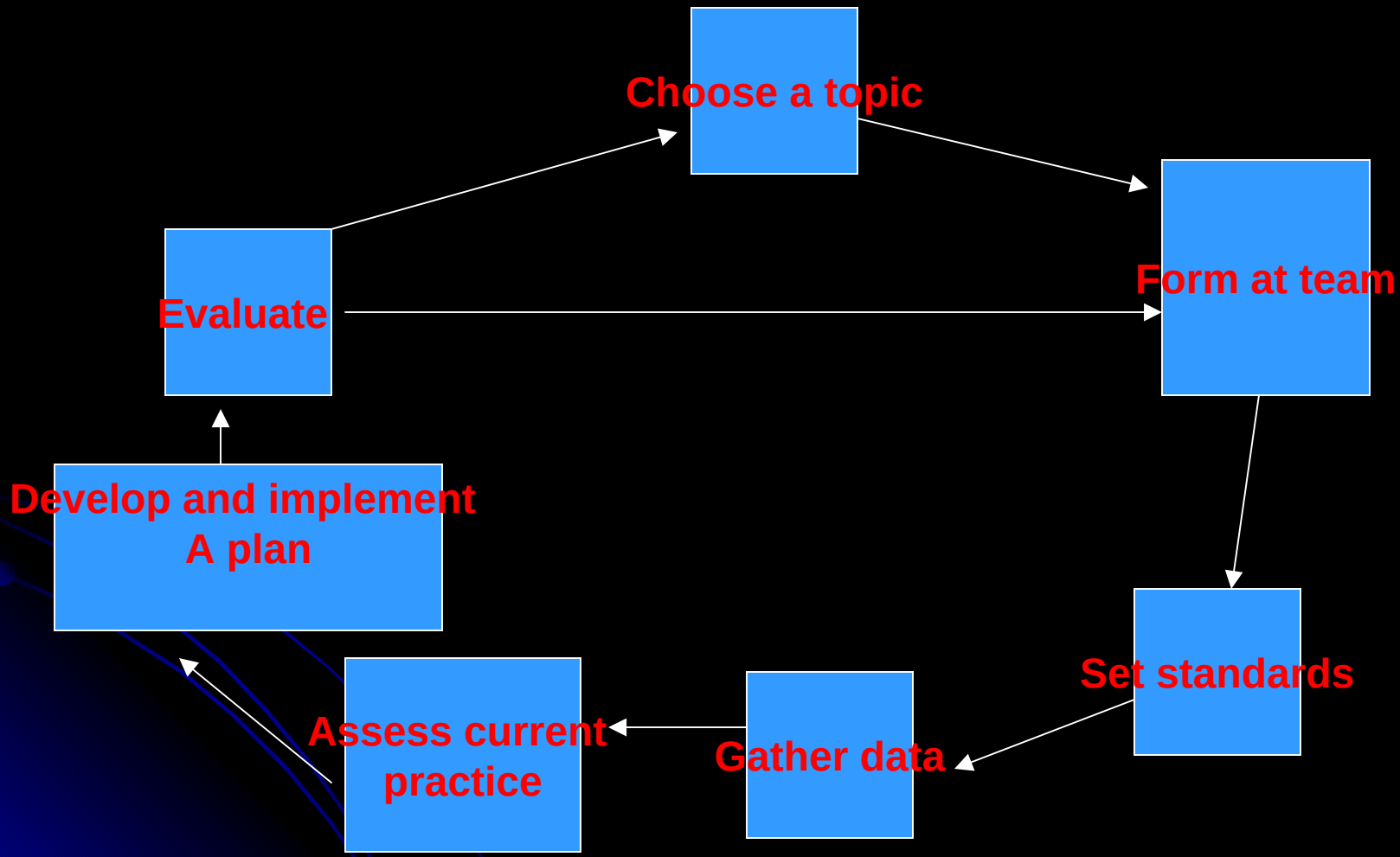
Recommendations

- CSF culture is the gold standard in diagnosing an acute infection
- India Ink stain does not always mean intensive treatment
- Pulse therapy
- Resource needs for optimum therapy
- The ARV clinic - Cryptococcal Meningitis partnership
- Value of CSF manometry
- Development of a treatment guideline

FRAMEWORK FOR QUALITY IMPROVEMENT PROCESS



Quality improvement cycle



The end