

UNIT NO. 6

IMPROVING CLINICAL QUALITY IN THE CLINIC

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ABSTRACT

Clinics should focus on improvement systems of care for substantive and sustainable improvement in clinical quality. Improvement requires change, and the model for improvement developed by the Institute of Healthcare Improvement provides a useful framework for managing change for improvement. The most effective efforts at quality improvement involve the entire clinic team. The improvement journey begins with an analysis of the current state. Identify the problems in terms of effectiveness and efficiency issues which may be related to performance, knowledge or skills gap, administration, and clinical process. There are frequently many things that can be improved. Choose one or two to work on at a time. Analyse the problem to identify potential interventions. Test changes initially on a small scale. Implement those changes that result in improvement.

A SYSTEMS APPROACH TO IMPROVEMENT

We believe that healthcare workers are generally highly trained and motivated, and have a genuine desire to do their best for their patients. For most of us, the WHY is self-evident, and we need some suggestions on the HOW.

'Every system is perfectly designed to achieve the outcome it achieves'
Berwick¹

Very often, we think of poor performance in terms of individuals not trying hard enough. This is encouraged by the traditional craft-based approach to medical training that relies on well-trained individuals to practice as expert craftsmen, and also looks at clinical quality as a matter of individual effort.

A system includes people, things, processes, and interaction among all these.

While working harder can contribute to some improvement, substantive and sustainable change requires improvement to the system of care.

MODEL FOR IMPROVEMENT

A Model of Improvement advocated by the Institute of Health Improvement (IHI) was that first described by Langley et al² (Figure 1). The model addresses 3 improvement questions and uses the plan-do-study-act (PDSA) improvement cycle to do that (Figure 2).

The model can be used in a variety of situations. Also, rapid cycles of testing can be done to allow changes to be evaluated

and refined, even abandoned if necessary. The changes that work are then incorporated into the system as mainstream changes.

The 3 questions are:

- κ What are we trying to accomplish?
- κ How will we know that the change has been an improvement?
- κ What changes can we make that will result in an improvement?

The Plan-Do-Study-Act (PDSA) improvement cycle follows the stage of selection of the topic for improvement. There are four stages, namely:

- i. *Plan* a change based on the knowledge of what will be useful to change. This may come from ground experience and other information gathered from colleagues about the current state of the system.
- ii. *Do* the change with a small test and analyse the data.
- iii. *Study* the effects of the change by comparing data to predictions and summarise what was learned.
- iv. *Act* to implement what will lead to improvement. Consider the next cycle of PDSA.

STARTING OFF

Quality improvement is a journey, not a destination.

The most effective efforts at quality improvement involve the entire clinic team. While different combinations of members can be involved in different projects, the whole team should share a common commitment to continuous improvement. Leadership is essential.

Figure 1. Model for Improvement

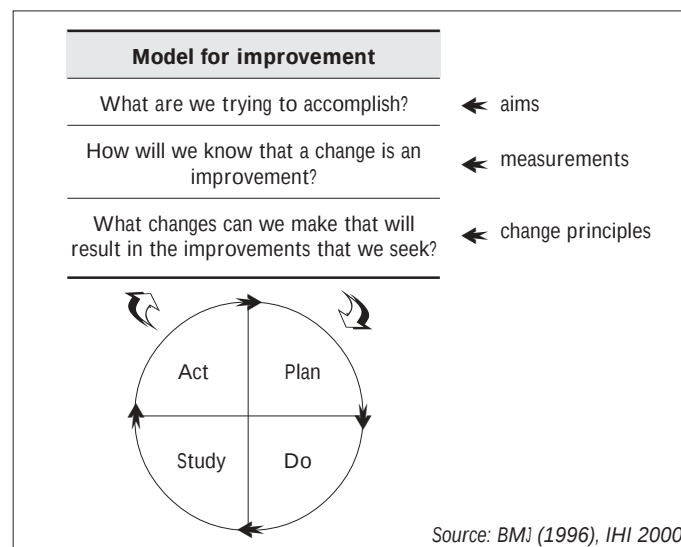
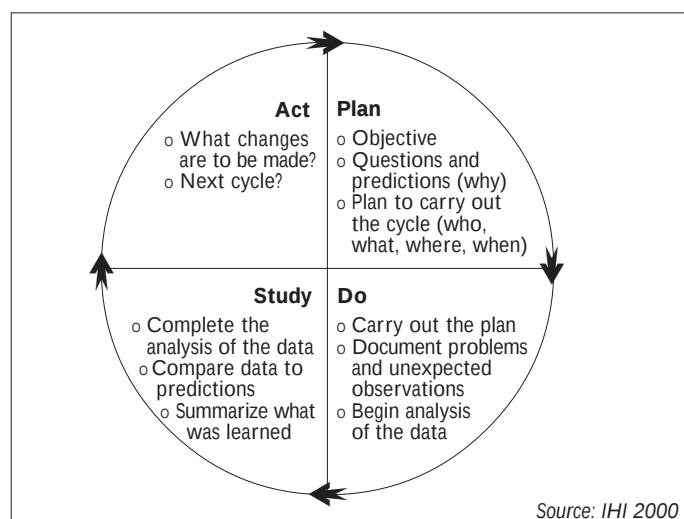


Figure 2. The PDSA Cycle for Learning & Improvement



Improvement requires change, and change can be stressful. While the need for change for the practice can be obvious, individual staff may have different perspectives, especially if change involves more work, or if they feel that they have no role in the new process and might lose their jobs. It is important to address the concerns of our staff so that the teams can function well. Passive resistance can be a heavy price for a practice to pay.

SELF AWARENESS

Our improvement journey begins with an analysis of our current state and where we want to be. Elements of this analysis include:

- Our stakeholders and their needs.** Our stakeholders would include our patients, staff, partner organisations, third party purchasers and our shareholders.
- The profile of our patients.** Our core function is to deliver clinical care, and knowing who our patients are would help us plan for their current and future needs.
- Our practice team.** We all have different strengths. We need a combination of knowledge and skills that meets the needs of our patients.
- Our practice environment.** The location and size of our clinic, as well as the type and level of equipment affect the quality of care we deliver.
- The community in which we practice.** Most of us practice within a community setting that defines the types of patients we see, as well as the community partners and resources we can develop synergies with to deliver effective care.
- How well we are doing.** For the main conditions we treat, we should have process and outcome indicators that tell us how well we are performing. A basket of indicators that address the different dimensions of quality would be most useful.

IDENTIFYING OUR STRATEGIC FOCUS

The needs of our practices can relate to gaps in current performance as well as planning for the future. A clinic team practising in a rapidly ageing estate would do well to have effective skills and services to meet the needs of an elderly population.

We have to identify key areas that have the greatest impact on the care we provide to our patients and the performance of our practice. Defining the link between our professional duty of care to our patients and the business needs of our practices will help us allocate resources for greatest impact and sustainability.

After identifying the strategic focus of the practice, and the clinical conditions that align with that focus, we can assess our current and desired performance and the areas for improvement.

In broad terms, when we look for problems worth solving, we can think in terms of:

- Effectiveness.** Are we achieving the required standard of care?
- Efficiency.** Are we utilising available resources to greatest impact?

There are frequently many things that can be improved. Choose one or two to work on at a time.

TYPES OF PROBLEMS AND SOLUTIONS

There may be different dimensions to a problem, and different solutions would have to apply:

- Performance issue.** This is best addressed through a performance management process.
- Knowledge or skills gap.** Learning issues should be addressed through training.
- Administrative issue.** A policy approach would be useful.
- Clinical process issue.** Improvement efforts should be directed at clinical processes and systems of delivery.

DEFINING A CLINICAL PROBLEM AND A GOAL FOR IMPROVEMENT

‘What are we trying to accomplish?’

From the list of strategic priorities of the practice a clinical problem can be identified for improvement. The baseline data from the initial practice analysis provides an idea of the scope of the problem.

For improvement, stretch goals should be set, such that simply trying harder would not work. This focuses the efforts on systems improvement. The goal of improvement is to improve, and not to pass or fail in relation to the goal.

It is not about whether we succeed, but by how much we do succeed. The only way we fail is if we do nothing.

An aim statement for an improvement project should include:

- i. The target population
- ii. The location where the project is focused on
- iii. The indicator
- iv. A stretch target
- v. A timeframe.

ANALYSING THE PROBLEM

- i. **Fundamental knowledge.** Effective analysis of a problem requires fundamental knowledge of the care process. This knowledge includes current process in the practice, as well as possibilities in centres of best practice. While local knowledge is essential to identify local issues, a team thinking about improvement might not even consider their practice a problem if that is all they know.
- ii. **Teams.** Very often, delivery of care depends on a process that involves more than one person. Having the people who know about the various parts of the process in the team would allow different concerns to be addressed. In Primary Care, the patient has a central role in his care, and the patient's perspective should not be forgotten.
- iii. **Cause and effect analysis.** An Ishikawa diagram is a useful way to explore the different causes that contribute to a problem. Information that contributes to the analysis can come from the experience of team members, as well as data from the practice.
- iv. **Prioritisation.** Often, there are many more causes to a problem that can be addressed at once. Those causes that have highest impact on the outcome should be give priority for intervention. Problems that are easy to solve can also be quickly addressed even if they do not have the greatest impact.

DEVELOPING CHANGES THAT ARE LIKELY TO LEAD TO IMPROVEMENT

'Not all change is improvement but all improvement is change.'

If we do something the same way, we should expect a similar result. If we want to improve, we need to accept change in the way we do things.

'What changes can we make that will result in improvement?'

Implementing change blindly is not an effective way to improve. By focusing our change efforts at those causes for our chosen problem that have greatest impact, we increase the likelihood that our efforts will lead to improvement.

There are different approaches to improving clinical processes. One way is to improve the existing process. Drawing a flow chart of the current process helps to identify opportunities for improvement. Another option is to think of completely new ways to achieve the same objective. Appropriate use of technology often helps improve clinical processes.

Some concepts that have proven useful include:

- i. **Putting the patient in charge.** Patients agree to shared objectives and drive their care. Exploring the Ideas, Concerns and Expectations of our patients is an essential part of our consults.
- ii. **Team approach to care.** Not everything is best done by the doctor. Different members of the clinic team can contribute to the care process.
- iii. **Patient registries.** Knowing whom we are looking after and for what allows us to manage things proactively.
- iv. **Decision support.** We can't remember everything every time. Build tools to help us make the right decisions consistently.
- v. **Make the right thing easier.** We often make things more complicated in our efforts to improve. Identify the right thing to do, make it easier.

TESTING CHANGES

'All improvement is change but not all change is improvement.'

Notwithstanding our best efforts at developing changes from evidence and principles, it is often difficult to predict with certainty that a change will perform optimally as intended.

'How do we know that the change is an improvement?'

While some changes just work and can be implemented straight away, there is often a need for deliberate testing.

Prototypes of the changes should be developed, and these should be subject to testing to see if they perform as designed in real life. In order to minimise the risk inherent to such testing, and to maximise the learning, testing should start on a small scale, and then gradually increase in scope. Along the way, improvements and refinements can be built in. Changes that do not work can be abandoned.

The *Plan-Do-Study-Act (PDSA)* cycle is a useful framework for rapid cycles of testing and learning.

MEASUREMENT

'How do we know that the change is an improvement?'

Measurement is an inherent part of cycles of testing and learning. The indicators involved in PDSA cycles can be process or outcome indicators. They can also be in the form of feedback from users.

When collecting feedback from users, a 'before and after' type of comparison can be useful. If we want to track the impact of a change on practice, time based run charts provide information on trends, and takes into account the effect of variation.

IMPLEMENTING CHANGES

‘What changes can we make that will result in improvement?’

When we are satisfied that a change has led to improvement, we want to incorporate that change into the new system.

Implementing a change means that specific efforts are made to make sure that the new way of doing things is established and embedded in the systems of our practice. The aim is that when patients attend our practice, they will benefit consistently from the new processes. We want to minimise variation in practice arising from the provider while retain variation arising from patient needs.

Implementation involves a variety of activities:

- i. Writing the new processes into the SOPs and protocols of that practice.
- ii. Training of staff to use the new processes, including induction training for new staff.
- iii. Use of indicators for process control to track consistency of practice.

CELEBRATING SUCCESS

We all appreciate encouragement, especially when we are all putting in extra effort towards improving systems. Find opportunities to acknowledge the hard work and celebrate even small successes.

REFERENCES

1. Berwick D. A primer on leading the improvement of systems. BMJ 1996; 312:619-22(9 March).
2. Langley GJ, Nolan KM, Nolan TW. et al. The improvement guide. San Francisco: Jossey Bass, 1996.

LEARNING POINTS

- o **Take a systems approach to improvement.**
 - o **The core of improvement is meaningful change.**
 - o **Choose one or two problems to work on at a time.**
 - o **Analyse the problem to identify potential interventions.**
 - o **Test changes initially on a small scale.**
 - o **Implement those changes that result in improvement.**
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