PDSA Cycles - Dr Parijat Chandra

Slide 1 - Hello, today we will be talking about the third step of quality improvement. PDSA cycles

Slide 2 - The learning objectives of this presentation are - what is PDSA, what types of changes can be planned, how to test changes, learn about pilot phase versus implementation phase and how to achieve continuous quality improvement

Slide 3 - What is PDSA? PDSA is short for plan do study act. It is simply an easy-to-understand tool for bringing about change. It is a structured approach of small incremental changes which involve a full cycle of planning testing and implementing. It helps to identify further useful changes and once you keep on repeating these PDSA cycles the systems eventually improve.

Slide 4 - This is how we represent PDSA cycles. We start with the Plan step which involves assessing what we are going to do, when will we do it, who will do what, how we will do it and review outcomes. In the next Do step we actually do the test change and document it. The third step of Study helps to assess what are the results and what did we learn from this. The last step is Act where if the change was useful, we adopt it, if it needs to be modified, we can adapt it, or if it was a failure, we can abandon it. Then we keep repeating such PDSA cycles and eventually improvement will be observed.

Slide 5 - There are various categories of changes which can be planned. The ideas for changes come from the analysis phase of the QI process. We can improve knowledge or skills which can be done by training or setting standards. We can eliminate waste by stopping to do harmful or useless things. We can reassign tasks by changing who does what. We can reorganise tasks to do tasks in a different order or location. We can improve patient relationship by listening to what the patients want. We can reduce variations by doing things to make work practices more standard.

Slide 6 - The next important step is to test the changes. We need to test big changes but on a small scale. We should test individual changes separately when possible so that benefits of the change can be properly analysed. Negative results should not be demoralising but are a good opportunity to learn.

Slide 7 - When we start doing changes in the pilot phase with small-scale testing, few people are affected by the change and there is less resistance. Therefore, rapid cycles of changes can be done in a shorter time. The support needed is low and tolerance is high in case the project fails, in which case it serves as an opportunity to learn.

Once clear improvement is demonstrated through changes tested by multiple PDSA cycles, the team confidence is high and now it can be implemented on a larger scale. However, in the implementation phase as a large number of people are affected by the changes there may be stronger resistance. The support needed to implement these changes will be higher. The tolerance for failure is low as time, people and resources needed are higher. Hence, we need to implement at scale only those changes that will have definite improvement.

Slide 8 - Multiple PDSA cycles and repeated testing helps to improve our knowledge and implement useful changes that work. Thus, repeating this process of PDSA cycles helps to bring about continuous quality improvement in the system.