UNDERSTANDING AND OVERCOMING BARRIERS TO IMPLEMENTING EVIDENCE-BASED PRACTICE

Dr. Bas van Rijn, gynaecologist-perinatologist at Máxima Medical Centrum, and Dr. Hilde Perdok, midwife and midwifery coordinator at Consortium Brabant and ZonMw Implementatie Science Practitioner fellow

To implement changes into clinical practice, leaders of change projects are faced with numerous challenges. Examples of challenging implementation programs in pregnancy and childbirth care include the use of a shared electronic medical record system for primary and secondary maternity care, implementing telemedicine and value-based healthcare strategies and many other healthcare improvement initiatives.

Some barriers to implementation are easily recognizable and visible to all, others are more hidden or subtle. Factors that contribute to successful or unsuccessful implementations include familiarity with existing knowledge, differences in clinical setting and variation among practitioners' standards of care. To overcome barriers, it is advisable to use a framework for implementation (as has been discussed by others). But then the hard work starts: how do you lead the actual change within the team and among the stakeholders? What tools are there to make sure implementation actually happens?

In this workshop, a number of strategies for hands-on change management are taught using an approach derived from the 'science of improvement', originally developed by W. Edwards Deming to improve outcomes of changes in manufacturing processes and adapted by Langley et al. in their seminal work "The Improvement Guide" (1997) to aid leaders of implementation projects to achieve measurable change.

Methods

A stepwise approach to the casebased workshop includes four critical steps to guide any change project with the purpose of healthcare improvement:

- 1. Define your strategy
- 2. Do a stakeholder analysis
- 3. Start a series of improvement cycles
- 4. Use data to monitor outcomes

In summary

The model for improvement proposed by Langley proposes the use of the three change questions at the start of each cycle of improvement:

- + What are we trying to accomplish?
- + How will we know that a change is an improvement?
- + What change can we make that will result in improvement?

It is advisable to use data-over-time (process control) to monitor the outcomes of your implementation project and to include outcomes that not just show that a technology or strategy is being used but that is has also led to the desired (clinical) improvement. There is a tendency to include only process measures in implementation projects (e.g., "is the protocol being followed?", "is the new technology being used?") while the actual purpose is not being monitored (e.g., "does the new protocol lead to fewer infections?", "does the new technology lead to improvements in clinical outcomes?")

Critical to the improvement framework is working in short, measurable and preferably iterative PDSA cycles to allow for continuous learning. An important element of implementing for improvement is making a sharp distinction between testing and implementation. The essential feature of testing is to reassure the stakeholders that the new change (e.g., technology, protocol) is not implemented before critical adaptations are made. Usually.

this is not a one-step approach due to unpredictable real-world barriers and facilitators. For instance, if a clinical trial shows a clear advantage of a new treatment strategy over existing standard treatment, implementing the protocol for the new treatment in your own setting may not show the same effect or may require additional training, resources, etc. This can be easily figured out in short test cycles focused on identifying and improving the factors needed for successful implementation.

Take-home message

An important part of implementation is planning for change. This is best done using a stepwise PDSA-supported process which allows for change leaders to gain trust and adapt to the setting. Well-guided change projects turn adversaries (those who do not trust the new change) into opponents (those who trust you, but are not yet enthusiastic about the change) into allies (high trust, high agreement).

