

Quality Improvement

OVERVIEW OF ISSUE

Quality improvement is a systematic approach that employs specific techniques to improve quality. Key elements in quality improvement include a combination of a 'change' (improvement) and a 'method' (an approach with appropriate tools), in order to achieve better outcomes.

KEY POINTS

- Patient safety is the first dimension of quality.
- There are many tools and resources focused on identifying and improving safe, quality care for patients.

THINGS TO CONSIDER

Underlying principles to improve quality and mitigate risk

- Six dimensions of healthcare quality - safe, effective, person-centred, timely, efficient, and equitable.
- Data and measurement for improvement – data are vital elements of any attempt to improve performance and are also needed to assess impact, including change over time.
- Understanding the process – process mapping is a tool used to engage staff in understanding how processes link, add value, and where there is waste.
- Improving reliability – ensuring reliability mitigates against waste and defects in the system and reduces error or harm.
- Demand, capacity and flow – wait lists and delays are often viewed as a capacity problem (e.g. insufficient staff, machine or equipment to deal with the volume of patients). For a process improvement to be made there needs to be a detailed understanding of the variation and relationship between demand, capacity and flow.
- Motivating, involving and engaging staff – it is important not to underestimate the importance of involving all relevant staff, including non-clinical staff and physicians.
- Involving patients and co-design – patients, families and caregivers have a significant role to play in quality improvement. Leaders need to question how patient involvement is being embedded in their organization's quality improvement program.

What are the best known approaches to improve quality to mitigate risk?

- Although no one approach is better than the other and some may be used simultaneously, approaches include:
 - **Model for Improvement (including Plan-Do-Study-Act)** – this involves changes that are tested in small cycles which include planning, doing, studying and acting (PDSA). These cycles are linked with the following three questions:
 1. 'What are we trying to accomplish?'
 2. 'How will we know that a change is an improvement?'
 3. 'What changes can we make that will result in improvement?'
 - **Statistical Process Control** – this involves longitudinal data represented on control charts, examining the differences between natural variation (known as 'common cause variation') and variation that can be controlled ('special cause variation').
 - **Total Quality Management (TQM)** – this involves an approach that is applied to the whole organization, encompassing factors such as leadership, customer focus, evidence-based decision making and a systematic approach to management and change.

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- **Lean** – this approach focuses on five principles: customer value; managing the value stream; regulating flow of production (to avoid quiet patches and bottlenecks); reducing waste; and using ‘pull’ mechanisms to support flow, thereby, responding to actual demand.
- **Six Sigma** - this involves a systematic approach that focuses on “defects” within the organization’s products or services. The overarching goal is to reduce factors that customers would define as being critical to quality, drawing on statistical methods to develop standards for variation in quality.
- **Business process reengineering** - this approach involves how an organization’s central processes are designed. By moving away from traditional silos, organizations can identify waste and become more streamlined.
- **Experienced-based co-design** – this approach involves patients and staff working in partnership to design service pathways. Data are gathered through in-depth interviews, observations and group discussions and analyzed to identify ‘touch points’ – aspects of the service that are emotionally significant.
- **Theory of Constraints** – this involves identifying the constraints (or bottleneck) in order to understand the system throughput flowing through the bottleneck. This enables one to recognize the impact of mismatches between the variations in demand and variations in capacity at the process constraint.

How quality improvement and measurement support risk mitigation

- The need to measure the quality of care and make information available to stakeholders has been increasingly recognized as essential to improving care and enhancing patient safety.
- Leaders should continually collect and analyze data and communicate results on key performance indicators. The ultimate goal of assessing and monitoring quality is to use findings to assess performance and define other areas needing improvement.
- There are challenges related to measurement such as accessibility and availability of data.
- Monitoring quality and considering national benchmarks/indicators allows organizations to compare their performance in order to identify areas for quality improvement.
- The patient experience is a strong indicator of quality of care. Information on patient experience should be used to identify strengths and opportunities to improve quality, reduce risks, and increase patient satisfaction. It is important to capture the patient experience feedback in a variety of ways



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