

Quality Improvement Initiative: Part 2

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Introduction

Quality improvement (QI) activities are essential in enhancing healthcare services and ensuring optimal patient outcomes. The effectiveness of a QI program depends on systematic inputs, processes, and stakeholder involvement. Three quality improvement methodologies that are critical for this initiative include Six Sigma, flowcharting, and the Plan-Do-Study-Act (PDSA) cycle. This QI initiative focuses on improving processes and requires participation from all employees, administration, specialists, patients, and quality improvement teams to achieve maximum effectiveness. This paper explores the three methodologies, identifies key stakeholders, and examines the necessary resources required for the successful implementation of the quality improvement measures at Iron Mountain VA Medical Center in Michigan.



Quality Improvement Tools and Methodologies

Several quality improvement methodologies can be applied to address process care concerns, particularly in the timely and effective care measure at Iron Mountain VA Medical Center. The percentage of healthcare practitioners and staff who received influenza vaccination was below the state and national averages. This suggests that the facility did not provide vaccines and necessary training programs at the appropriate time to address the issue. The three methodologies that can effectively improve this quality concern include Six Sigma, flowcharting, and the Plan-Do-Study-Act (PDSA) cycle.



Six Sigma



Six Sigma is a data-driven methodology aimed at reducing errors and unpredictability to enhance processes. It follows the DMAIC (Define, Measure, Analyze, Improve, Control) five-phase process to improve patient care outcomes (Hughes, 2021). Process performance is measured by comparing the process capability before and after implementing a potential quality improvement solution. To implement the DMAIC approach at Iron Mountain VA Medical Center, historical data on healthcare practitioner vaccination uptake and expected outcomes must be reviewed (Hughes, 2021). Identifying sources of variability, setting performance objectives, and establishing total quality performance standards will ensure continuous improvement. By gathering data during implementation, the effectiveness of modifications can be evaluated.

Flowcharting

Flowcharts provide a visual representation of healthcare procedures, making it easier to identify inefficiencies and areas for improvement. According to Chen and Tagaram (2024), flowcharting is particularly valuable in the early phases of process improvement work. By mapping out patient care workflows, Iron Mountain VA staff can pinpoint delays in service delivery, allowing for process streamlining and improved interdepartmental coordination (Aultman et al., 2023). At Iron Mountain VA, timely and effective care concerns stem from untimely influenza vaccination among healthcare workers, increasing the risk of patient readmissions and complications. Flowcharting can help optimize workflows to address these delays.

Plan-Do-Study-Act (PDSA) Cycle

The PDSA cycle is a four-step iterative process used to test and implement improvements in healthcare settings. This methodology allows organizations to experiment with small-scale

initiatives, assess their impact, and adjust processes accordingly. The cyclical approach facilitates continuous, data-driven modifications rather than large, infrequent changes (Aultman et al., 2023). At Iron Mountain VA, the PDSA cycle will start with identifying vaccination challenges and assessing the effectiveness of the facility's existing programs. The Plan phase will involve developing education programs and free vaccination initiatives for healthcare workers (Hughes, 2021). After implementation, data will be collected, and the results will be analyzed to determine success or the need for further modifications.

Stakeholders Involved

Successful QI initiatives require the involvement of multiple stakeholders. Key stakeholders at Iron Mountain VA Medical Center include:

1. **Healthcare Providers:** Physicians, nurses, and allied healthcare professionals serve as frontline personnel responsible for implementing quality improvement interventions (Spencer et al., 2021). Their involvement ensures that QI strategies align with clinical best practices and patient care quality.
2. **Hospital Administration:** Administrators play a critical role by providing leadership, allocating resources, and ensuring compliance with regulatory and accreditation standards (Spencer et al., 2021). Without administrative support, sustaining quality improvement efforts would be challenging.
3. **Patients and Families:** Patients and their families are key stakeholders, as their experiences and outcomes drive QI efforts. Engaging them ensures that care remains patient-centered, addressing their concerns and needs (Spencer et al., 2021).

4. **Quality Improvement and Risk Management Teams:** These teams oversee QI implementation, monitor progress, and make data-driven decisions to sustain improvements. Their role is essential in ensuring that initiatives align with evidence-based practices and regulatory requirements.

Required Resources

For the QI initiative to succeed, several resources are essential:

- **Time:** Staff must dedicate time to training sessions, QI meetings, and implementation while balancing patient care responsibilities. Adequate scheduling adjustments are necessary to avoid workflow disruptions.
- **Financial Resources:** Budget allocation is required for staff training, procurement of vaccination supplies, and protective equipment. Additional funding may also be needed to hire temporary personnel to maintain care efficiency during the transition period.
- **Technology and Data Analytics:** Implementing electronic tracking systems will facilitate real-time monitoring of patient outcomes, trend identification, and evaluation of QI intervention effectiveness.
- **Educational Materials and Training Programs:** Continuous staff education on best practices, patient safety measures, and influenza vaccination compliance is necessary for long-term success.

Conclusion



The timely and effective care measure at Iron Mountain VA Medical Center can be improved using Six Sigma, flowcharting, and the PSDA cycle. These methodologies focus on process improvement and require the engagement of all employees, administration, specialist, patients, and QI teams. Adequate resource allocation is crucial for achieving sustained quality improvements in influenza vaccination adoption. By leveraging these methodologies and ensuring stakeholder collaboration, Iron Mountain VA can enhance patient safety, reduce readmissions, and align with national standards for healthcare excellence.



References

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