Fall 2023

Optimizing Medication Prior Authorization

Miranda Delatore
Franklin University, delato02@email.franklin.edu

Optimizing Medication Prior Authorization

DNP Project Report

Miranda A. Delatore

Franklin University

Dr. Debbie Conner

October 28, 2023

Optimizing Medication Prior Authorization

The prior authorization process was designed to control drug costs in the United States healthcare system; however, pre-approval has become a point of frustration that must be streamlined. Before a medication can be dispensed to a patient, some high-cost prescriptions require a request for pre-approval from the insurance plan. Prior authorizations (PA) are frequently initiated days after the prescription is written, delaying prescription pick-up by at least 12 days (Geynisman et al., 2020). The PA workflow is burdensome and demands collaboration between nurses, medical assistants, case managers, and pharmacists. Navigating the manual process creates barriers and challenges for the entire care team and the patient. This project aimed to simplify the workflow in two clinics over twelve weeks.

In the Midwest, one Federally Qualified Health Center (FQHC) experienced the administrative burden and patient delays related to PA. The FQHC operates 10 neighborhood-based clinics providing access to low-cost care in underserved areas. This report describes how a quality improvement (QI) team worked to close the PA practice gap in two provider clinics by using rapid change cycles to guide staff through implementing a new, centralized, standard PA workflow that leverages electronic tools.

Problem Statement and Gap Analysis

Medication PAs exhaust clinical resources and create suboptimal impacts on patient care. They were implemented initially to control costs and ensure guideline-adherent treatment. However, PAs are now viewed as inconvenient and time-consuming (Psotka et al., 2020). Costs associated with PAs range from $2,100 to $78,913 per provider per year (E.M. Jones et al., 2021). Standard, optimized workflows, including electronic tools, can decrease administrative burdens and reduce the cost of processing PAs (Bhattacharjee et al., 2018). In early 2023, more

than 100 medical societies supported the proposed national PA reform due to increased delays and denials (Norris, 2023). The reform proposal, if approved, would require all Medicare Advantage plans to use electronic prior authorization (ePA) to reduce the administrative burden across the United States. Since many Americans use this bundled plan, the regulatory change could broadly impact clinician behavior.

Locally, a gap analysis in the FQHC clinics found that the PA process was manual and time-consuming, leading to frequent denials and delays in patient care. The historical practice varied significantly across 10 locations. Some clinics leveraged the lead nurse to complete the PA work from a shared electronic health record (EHR) inbox. In contrast, others depended on a PA coordinator or medical assistant to fill out paper forms and submit them via fax. Staff documented progress on PAs inconsistently in multiple locations of the electronic health record, creating a quality and safety risk. This QI project was intended to address the gap in practice, decrease the time to therapy for patients, and improve the PA-associated workflow for clinic staff.

Background and Significance of the Problem

Providers, pharmacists, and patients often must determine if a PA will be required. Once a prescription is received, the pharmacy cross-references the patient's prescription insurance to determine if the payer covers the medication (Norris, 2023). If the drug is medically necessary and on the covered list of medications, the pharmacist can dispense it to the patient. If not, information is returned to the pharmacist, requesting pre-approval before dispensing the medication (American Medical Association, 2018). Pre-approval requires documentation of clinical justification from the prescriber before returning to the insurer. The following section outlines the background information of the PA problem and explains its impact at scale.

Background

The cost of healthcare in the United States (U.S.) has outpaced other countries for decades. In the 1980s, policies were implemented to control costs and inspect the appropriateness of hospital admissions and high-cost procedures (Resneck, 2020). The same rules were then applied when prescription drug expenditures increased. Over 131 million Americans (66%) take at least one prescription drug (Papanicolas et al., 2018). Providers and their clinical staff spend at least 16 hours weekly on PAs (Robeznieks, 2020). Despite the regulatory standards and electronic tool availability, most providers, including the two selected FQHC clinics, continued to process transactions manually (Centers for Medicare & Medicaid Services, 2022). When transactions are processed manually, associated costs for payer and provider organizations increase, contributing to the continued rise in U.S. healthcare costs. However, the most considerable impact is on the patient waiting to begin or continue treatment.

Significance of the Problem

While successfully controlling health care costs and ensuring medical necessity, PAs are the most common administrative barrier preventing patients from accessing or continuing their prescription medications. Seventy-three percent of all prescriptions require two or more phone calls by providers and their staff, and of these, 40% require five or more calls about missing, incorrect, or incomplete data (Geynisman et al., 2020). With delays in prescription access, patients may experience worsening symptoms or require hospital admissions (Sharma et al., 2020). Paper forms, faxes, and phone calls were barriers to timely access to medications at the FQHC. Interprofessional staff worked together to complete the PA process; however, time and labor costs continued to rise. By transitioning from a manual to an electronic PA process, $417

million annually could be saved in the U.S. healthcare system (CAQH, 2019; CMS, 2022). Operating any business, regardless of industry, requires administrative tasks. However, when the time and money spent on administrative tasks are excessive, fewer resources are available for direct patient care.

Overarching Aim of the Project

The aim of this project was to meet the industry benchmark for prior authorization processing by reducing the time from transaction initiation to approval or denial for adult patients requiring prescription medications. The industry best practice is to complete 74% of all PAs in 36 hours or less (Birdsall et al., 2020). To achieve this, the project team implemented a 12-week QI initiative that incorporated two changes from the literature. The first change involved centralizing PA-related tasks, while the second change involved utilizing electronic tools for the submission of each transaction. The aim was to streamline the workflow at the FQHC clinic by cutting down the average time spent by clinic staff on each PA request by 50%, enabling patients to receive their prescribed medications promptly and decreasing processing costs for the organization.

Summary of the Evidence

Healthcare leaders, professional organizations, and government entities have extensively published the impact of PA on the U.S. healthcare system and patient outcomes. When a PA is required, patients cannot pick up their medication from the pharmacy. A comprehensive literature search on this problem was conducted with a PICOT question: In adults requiring prescription medications, how does a centralized electronic prior authorization process, compared to a decentralized manual process, affect medication prior authorization time to approval over eight weeks? A review of the evidence showed that PA delays range from a few

days to a few months (Birdsall et al., 2020). Pharmacy-led strategies improved the process by implementing electronic tools and creating a standardized, centralized workflow (L.K. Jones et al., 2021; Psotka et al., 2020). Roles responsible for PA work ranged from medical assistants to nurses and pharmacy technicians. Evidence to support this project and the expected outcomes from the literature are discussed below.

A consistent theme noted in the literature was clinician dissatisfaction with the PA process. The evidence supports two primary interventions: assigning dedicated staff under pharmacy leadership to centrally process all PAs and changing how PAs are processed from phone and fax to electronic prior authorization (ePA). Together, these changes have been found to increase effectiveness, decrease cost, and improve prior authorization turnaround time (PA-TAT) for patients. Interprofessional teams led by a pharmacist can drive these interventions and create workflow efficiencies. By dedicating staff to process PAs and centralizing the work, first-time PA approval rates increase to 87% (E.M. Jones, 2021). Turnaround time improves significantly when the team is embedded in the clinic (Birdsall et al., 2020; E.M. Jones et al., 2021; L.K. Jones et al., 2021). If the staff's scope expands beyond PA processing to include the review of high-cost specialty medications, additional benefits, including cost savings from fewer denials, can be realized; however, additional current evidence should be collected on the topic (Leniss et al., 2015). Having staff allocated under pharmacy leadership at the FQHC could facilitate efficiency gains and cost savings. Staff and patients may benefit equally from these changes if implemented and sustained.

Further reducing the burden of PAs can be accomplished by moving from a manual to a technology-assisted or fully electronic process. PA forms are filled out electronically online when this change is made, increasing staff productivity by 25% and decreasing PA-TAT for

patients by 62% (Birdsall et al., 2020). The transition to ePA is supported by federal legislation and has been found to reduce the time and cost it takes to process a transaction (Birdsall et al., 2002; CAQH, 2019; Psotka et al., 2020). Multiple vendors provide the automation technology. Implementing ePA requires organizational support, technology education, training, and a standard operating procedure.

Project Design

The project design was based on quality improvement principles used to enhance patient care by standardizing processes. Deming's Model for Improvement helps bring best-practice healthcare evidence to the local care setting to support improvement (Ogrinc et al., 2018). As changes are made in the care system during a project, each change must be continuously checked. This project used the plan, do, study, act (PDSA) model to continuously evaluate each change cycle. During each PDSA cycle, three questions were answered to close the practice gap (a) what are we trying to accomplish; (b) how will we know if the change is an improvement; and (c) what change can we make that will result in additional improvement? Using the QI framework and Model for Improvement for this study provided the foundational structure for this project design.

One-week post-implementation, many PA requests were still being sent to individual clinic nurses; this initiated the first PDSA cycle during week four of the project. The first PDSA cycle included a technology routing change in the ScanSTAT application and re-educating staff. The organization's technology team made the change, and the staff were receptive to additional education. The second PDSA cycle during week seven was prompted by the PA coordinator being out of the office, which required developing and communicating a short- and long-term coverage plan for the PA coordinator to ensure continuity in the new workflow when another

staff member was asked to fill in. A third PDSA cycle during week ten was completed to improve the collection of insurance information at patient registration by building a checklist and training the front desk staff on its use. Correct patient insurance information was critical to ensure the patient's PA was submitted to the appropriate plan.

The variation in PA workflow by staff members and FQHC clinics, coupled with the patient delays, initiated the formation of the improvement team. The team included a system leader, team members with technical experience, day-to-day leaders, and an executive sponsor. The group formed after the gap in practice was identified and took responsibility for the project design. In addition, the team was also responsible for managing the change. Managing change requires the use of guiding principles and a model. Managing the tactical aspect of change, like what is changing and how much it will cost, was vital; however, who was making the change and how they felt about their role in it was even more critical (Armstrong, 2023). The OhioHealth Change Management Methodology is a goal-focused approach to change, and combines templates, tasks, and tactics that were used to effectively manage the people side of the change. This model supported the development and execution of the project and was used to communicate the change effectively. The team selected the first tool from the OhioHealth Change Management Model to assess organizational readiness for change and inform future project development. After the selection of a QI framework, the formation of the improvement team, the OhioHealth change readiness survey, and the SWOT analysis, the project design was finalized.

Project Implementation

The setting for this project was a neighborhood-based FQHC founded in 1997 to provide a community-centric, low-cost option for primary care services. The project was designed as a

pilot and focused on two out of 10 clinics, including two providers and their healthcare support staff. The focus was limited to adult patients where PAs for prescription medications were required. Pre-approval for labs, imaging, and procedures were not in scope for the project. Barriers to implementation included time, competing demands, staffing, and historical behaviors. To overcome these barriers, the project team used the OhioHealth change model's case for change to succinctly communicate the project intent and its importance to impacted staff.

Additionally, multiple change readiness surveys were used throughout the project to gather feedback and assess readiness for change. Information from the surveys was used to plan for each project step. Adjustments to planned steps were made based on feedback from impacted staff and data collected throughout the project. All tools, tactics, and templates from the OhioHealth change model were well received by staff and stakeholders.

During week one, the director of pharmacy approved the new PA workflow, which included centralizing all PA work for the in-scope providers and using electronic prior authorization (ePA) instead of manual processes to complete each transaction. During week two, a kickoff meeting was held in both clinics to inform impacted staff of the change. The objective of the kickoff meeting was to effectively communicate the project's goal and explain how the new process would affect their work and the patients they serve. Additionally, two training sessions occurred for nurses, providers, medical assistants, and the centralized coordinator after kickoff; impacted staff were expected to attend. In the training sessions, medical assistants and nurses were instructed to stop performing PA-related tasks on the go-live date and informed that all authorization work would be done centrally by the coordinator moving forward.

To support the transition from a manual process to an electronic process, the project team elected to use the ePA tool that was already available and utilized by some staff, but not all. The

PA coordinator was trained on the ePA tool and new workflow. During technology testing before go-live, the project team requested one initial, unplanned investment related to transaction routing from the information technology staff. On the go-live date during week three of the project, the medical records department began to route all PAs for the selected providers to the centralized PA coordinator. The coordinator began to receive and process PAs electronically instead of manually.

Weekly meetings were held each Thursday during the project implementation to ensure alignment and engagement with the project remained high. Significant time was spent on-site at the FQHC to support and coach staff throughout the implementation process. At the end of each PDSA cycle, the project team gave staff positive and constructive feedback: the PA coordinator, director of pharmacy, and project lead collected data and a project update was communicated to critical stakeholders. Reports, including standard timestamps, were extracted weekly from the EHR and ePA systems. Data was collected and evaluated four times throughout the project to monitor progress toward the project goal. The first data collection occurred at the end of week four and then again at weeks five through eight. Data from each clinic was recorded in a single formatted Microsoft Excel spreadsheet on a password-protected company computer.

Outcomes and Data Analysis

The project team collected and analyzed data to determine how implementing a centralized, standard ePA workflow decreased the time to PA determination. Data, including standard timestamps, were extracted weekly from the EHR and ePA systems. Trends were evaluated four times throughout the project to monitor progress toward the outcome measure. According to Birdsall et al. (2020), at least 74% of PAs could be processed in under 36 hours. Data included the number of prescriptions written, the number of PAs required, the number of

PAs processed by the central team, and the number of PAs processed using electronic tools to inform the measure. Data dashboards were created to inspect change and communicate progress throughout the project.

While prior authorizations remain essential to the U.S. healthcare system, the administrative burden of manually completing the forms is time-consuming. A time interval was measured for each PA using the hours calculated from when the transaction was initiated until the transaction decision was made by the payer. The equation calculating PA-TAT was: (Time of PA Determination -Time of PA Initiation = PA TAT in Hours). Turnaround time was the primary outcome measure for the project. When PA-TAT decreases, additional time can be spent providing direct patient care, reducing costs to the organization, and improving time to therapy for patients.

Descriptive statistics also determined the effectiveness of the project's process measures. The first process measure determined the percentage of staff who attended the workflow training. The total number of impacted staff was the denominator and the total number of staff participating in the activity was the numerator multiplied by 100. The second process measure evaluated the compliance and efficacy of the new PA workflow during the project's first two weeks. This measure was documented by manually counting the number of PAs sent to the centralized PA coordinator and those sent to the decentralized clinic staff. The total number of PAs forwarded to the PA coordinator was divided by the total number of PAs and then multiplied by 100 to get a percentage of compliance with the new workflow. After workflow compliance was reached, a centralized cost analysis began.

The final measure of the project was financial and evaluated the cost to process PAs for the FQHC. The cost to process was calculated by taking the direct labor hourly rate and

multiplying it by the number of direct labor hours to process PAs. For the month before implementation, multiple staff members making $30/hour spent 342 hours on PAs. The cost to process PAs for that month totaled $10,260. A comparison of cost and other results from this data collection and analysis are found in the results section.

Results and Findings

The project aimed to understand how creating a standard, centralized electronic prior authorization (ePA) workflow would impact the time spent processing PAs. The primary objective was to reduce the PA-TAT for adult patients requiring prescription medication in one FQHC by 50%. Pre- and post-implementation data was collected for the outcome, process, and financial measures. The project team gathered and analyzed all aggregate data to inform project success and to make recommendations for sustainability.

Outcome Measure

Before the standard ePA process implementation, the average PA-TAT baseline in May 2023 was 14.29 days. Following the workflow change in the first month, there was a notable decline to an average of 11.4 days. This trend continued in the second month, with the time to process dropping to nine days and decreasing to an average of three days in the final month of the project. The original goal had been to reduce PA-TAT by 50% over twelve weeks, but the project exceeded expectations with a 79% reduction.

The initially planned categorization of turnaround time into specific timeframes, such as 0-12 hours, 12-24 hours, 24-36 hours, and 36-48 hours, had to be revised due to the minimal number of PAs processed under 48 hours. This plan was created to compare this project's results to Birdsall et al.'s findings, where 74% of all prior authorizations took an average of 36 hours or

less to process (2020). Implementing a centralized and standardized workflow using ePA yielded remarkable efficiencies within two FQHC clinics over the twelve weeks. Although significant progress was made, additional efforts are necessary to meet the industry benchmark (Birdsall et al., 2020). With the commitment of the clinic staff and a sustained focus on continuous improvement, it was anticipated that progress toward the industry standard would continue.

Process and Financial Measures

The pharmacy department's initiative to revamp the workflow proved highly successful, and the progress made during the QI project aligned with the process and financial results found in the literature. The pre-implementation training achieved a remarkable 100% attendance, pivotal in the project's overall success. During the training sessions, the attendees learned that the workflow would change from decentralized to centralized and manual to electronic. Notably, 25% of PAs (n=3) remained outside the electronic submission process one week after the implementation. By the end of the second week, this percentage had doubled to 50% (n=2). However, by the third-week post-implementation, after a PDSA cycle all PAs (100%) were seamlessly submitted electronically through the centralized coordinator. Of all PAs processed during the project using the new workflow (n=36), 86% were submitted electronically over twelve weeks.

After fully complying with the revised workflow, the project focused on the financial impact. Before the QI project's implementation, the organization had incurred approximately $10,260 in PA processing costs for the month before starting the project. When electronic PA tools are used, the time and cost to process each transaction can be reduced from $7.50 to $1.89 (Pstoka et al., 2020). As the new process settled in, the FQHC costs decreased significantly, reaching $8,190 in the first month, further lowering to $6,480 in the second, and further reducing

to $2,160 in the final month of the project. The cumulative effect at the FQHC was a 78% reduction in the cost to process PAs. This was observed during the twelve-week project period.

Discussion

Healthcare providers report a significant burden related to PA. Meanwhile, this QI project demonstrated that consolidating these activities and leveraging technology in a FQHC has shown promise for improvement. Success can be attributed to three key factors. The critical pre-implementation training attended by the entire team facilitated a deep understanding of the reasons behind the change and how electronic submission would improve the process. This early investment in training was critical because it enabled the team to plan for the new workflow. The shift to centralized electronic submission streamlined the process, reducing the time for approval or denial. Before the project's implementation, the average PA-TAT was 14 days, but within three months, it declined to just three days. The objective of lowering PA-TAT by 50% was exceeded with a significant 79% reduction. Ongoing focus is needed to meet the industry standard, and the organization's director of pharmacy will assume responsibility for working toward this goal.

Moreover, the financial implications of the workflow change were significant. Before the project, the organization spent approximately $10,260 processing PAs in a decentralized fashion—the new process led to substantial cost reductions, with expenses decreasing to $2,160 in August. A 78% decrease in the cost to process PAs was achieved, reflecting the significant financial benefits of the streamlined workflow.

Summary

The requirement of prior authorization for prescription medications can impose a substantial operational burden on healthcare professionals. When this process is executed

manually, it engenders frustration among the entire care team. Leaders at the Ohio-based FQHC were intrigued by the outcomes shared in a Pecha Kucha presentation, which showcased a significant reduction in PA-TAT. This decrease in administrative workload constituted substantial progress toward the objectives established by the American Hospital Association to enhance healthcare in the United States. The association promotes proactive measures across healthcare by underscoring the triple aim: enhancing the patient experience, improving population health, and diminishing the per capita cost of healthcare (Ogrinc, 2018). This presentation highlighted a transformative QI project focusing on all three aims by applying research findings to practice. The project adheres to the American Association of Colleges of Nursing Essentials; it fulfilled the expectations by instituting an evidence-based, centralized, and electronic workflow for PA processing. In any business, administrative tasks are required to function. However, in healthcare, when the time and financial resources allocated to these tasks become excessive, fewer resources remain available for direct patient care. This QI project has significantly reduced turnaround time and associated costs, giving time back to the FQHC healthcare professionals.

References

Armstrong, G. (2023). Adoption and Sustainability. Franklin DNP. https://docs.google.com/presentation/d/1XnBJk-I2q3zTiU6s-mv_RgkUXhm4wq_w/edit#slide=id.p6

Bhattacharjee, S., Murcko, A. C., Fair, M. K., & Warholak, T. L. (2019). Medication prior authorization from the providers perspective: A prospective observational study. *Research in Social and Administrative Pharmacy*, *15*(9), 1138–1144. https://doi.org/10.1016/j.sapharm.2018.09.019

Birdsall, A. D., Kappenman, A. M., Covey, B. T., & Rim, M. H. (2020). Implementation and impact assessment of integrated electronic prior authorization in an academic health system. *Journal of the American Pharmacists Association*, *60*, 93–99. https://doi.org/10.1016/j.japh.2020.01.012

Geynisman, D. M., Meeker, C. R., Doyle, J. L., Handoff, E., Bilusic, M., Plimack, E. R., & Wong, Y.-N. (2020). Provider and patient burdens of obtaining oral anticancer medications. *American Journal of Managed Care*, *24*(4), E128–E133.

Jones, E. M., Francart, S. J., & Amerine, L. B. (2021). Embedding an advanced pharmacy technician in an adult specialty pulmonary clinic to complete prior authorizations improves efficiency and provider satisfaction. *Journal of Pharmacy Practice*, *35*(4), 551–558. https://doi.org/10.1177/0897190021997007

Jones, L. K., Ladd, I. G., Gregor, C., Evans, M. A., Graham, J., & Gionfriddo, M. R. (2021). Evaluating implementation outcomes (acceptability, adoption, and feasibility) of two initiatives to improve the medication prior authorization process. *BMC Health Services Research*, *21*(1). https://doi.org/10.1186/s12913-021-07287-2

Norris, A. (2023, February). *Prior auths delay, deny and disrupt major medical societies show support for reform*. Health Leaders. https://www.healthleadersmedia.com/revenue-cycle/prior-auths-delay-deny-and-disrupt-major-medical-societies-show-support-reform

Ogrinc, G. S., Headrick, L. H., Barton, A. J., Dolansky, M. A., Madigosky, W. S., & Miltner, R. S. (2018). *Fundamentals of healthcare improvement* (3rd ed.). The Joint Commission.

Papanicolas, I., Woskie, L. R., & Jha, A. K. (2018). Health care spending in the United States and other high-income countries. *JAMA*, *319*(10), 1024. https://doi.org/10.1001/jama.2018.1150

Psotka, M. A., Singletary, E. A., Bleser, W. K., Roiland, R. A., Hamilton Lopez, M., Saunders, R. S., Wang, T. Y., McClellan, M. B., & Brown, N. (2020). Streamlining and reimagining prior authorization under value-based contracts: A call to action from the value in healthcare initiatives prior authorization learning collaborative. *Circulation: Cardiovascular Quality and Outcomes*, *13*(7). https://doi.org/10.1161/circoutcomes.120.006564

Resneck, J. S. (2020). Refocusing medication prior authorization on its intended purpose. *JAMA*, *323*(8), 703. https://doi.org/10.1001/jama.2019.21428

Robeznieks, A. (2020, August 24). *Prior Authorization*. American Medical Association. https://www. Ama-assn.org/practice-management/payment- delivery-models/efforts-fix-prior-auth-move- ahead-congress-states.

Sharma, S. P., Russo, A., Deering, T., Fisher, J., & Lakkireddy, D. (2020). Prior authorization problems and solutions. *JACC: Clinical Electrophysiology*, *6*(6). https://doi.org/10.1016/j.jacep.2020.04.022