

Maximizing ROI While Adhering to CMS Interoperability and Prior Authorization Requirements

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Abstract: *Interoperability and prior authorization requirements by the Centers for Medicare & Medicaid Services will not only better coordinate patient care but also reduce administrative headaches for many health systems and improve outcomes. On the other hand, while there are some huge opportunities to maximize their return on investment, compliance does pose some challenges. This article delves deeper into ways to comply with these CMS requirements while optimizing financial performance: by leveraging advanced technologies, streamlining processes, and improving patient engagement.*

Keywords: CMS Interoperability, Prior Authorization, ROI, Patient access, API, Compliance, Interoperable IT Solutions, Data security

1. Introduction

Regulatory changes, technology advances, and a focus on value-based care are forcing a paradigm shift across healthcare. Together, the CMS Interoperability and Patient Access Final Rule and updated prior authorization requirements bed a better sharing of information and smoother administrative processes among stakeholders in the ecosystem of healthcare. Compliance should not only be about meeting legal obligations but also about leveraging opportunities for operational efficiencies and financial gains.

This article will dive into the financial ramifications of both CMS interoperability and prior authorization requirements. It will provide an in-depth strategy on how healthcare organizations can maximize ROI while ensuring compliance, improving patient care, and positioning themselves for future success.

2. Understanding CMS Interoperability and Prior Authorization Requirements

CMS Interoperability and Patient Access Final Rule

Under the CMS Interoperability and Patient Access Final Rule, effective July 1, 2021, CMS seeks to provide patients with more control over their health information and promote secure, seamless data exchange between payers, providers, and patients. The important provisions of this rule include:

- **Patient Access API:** Medicare Advantage (MA), Medicaid, Children's Health Insurance Program (CHIP) and Qualified Health Plan (QHP) issuers must implement and maintain a secure, standards-based Patient Access API using Health Level Seven (HL7) Fast Healthcare Interoperability Resources (FHIR) standards to allow patients to obtain easy access from their selected third-party applications to their claims and encounter information, including cost, with a defined subset of their clinical information.
- **Provider Directory API:** Payers must make their provider directory information publicly available via a standards-based API, enabling third-party applications to access up-to-date provider directories.
- **Payer-to-Payer Data Exchange:** At a patient's request, payers must exchange specific patient clinical data with

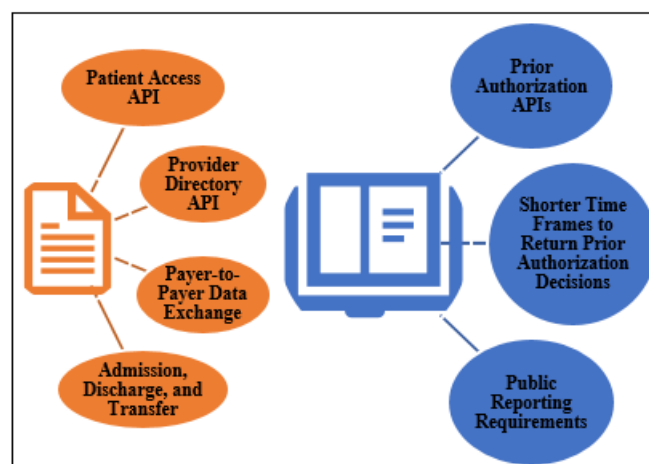
other payers, ensuring that patients' health records follow them as they move between health plans.

- **Admission, Discharge, and Transfer (ADT) Event Notifications:** Hospitals, including psychiatric and critical access hospitals, are required to send electronic notifications of a patient's admission, discharge, and/or transfer to another healthcare facility or provider.

Prior Authorization Requirements

On December 10, 2020, CMS published a proposed rule entitled "Reducing Provider and Patient Burden by Improving Prior Authorization Processes, and Promoting Patients' Electronic Access to Health Information". While many of those provisions were finalized, and others re-proposed, among the important features of this proposed rule are:

- **Prior Authorization APIs:** Payers - for example, Medicaid, CHIP managed care plans, and QHP issuers - would be required to implement and maintain FHIR-based APIs to reduce the burden on prior authorization.
- **Shorter Time Frames to Return Prior Authorization Decisions:** Payers must respond back within a certain timeframe for prior authorization requests, including a maximum of 72 hours for urgent and seven calendar days for standard.
- **Public Reporting Requirements:** Transparency should be extended to ensure that payers report in a public way some of the metrics from prior authorization.



CMS Interoperability and Prior Authorization Requirements

Security Compliance Financial Implications

Costs of Implementation

- **Technology Investments:** Developing and maintaining FHIR-based APIs, upgrading IT infrastructure, and ensuring system interoperability requires huge capital. For example, this may include investing in new hardware, software licenses, and perhaps even special IT staff.
- **Operational Adaptation:** This requires investment in process redesign and staff training with the implementation of change management initiatives. All these increase the potential for reduced productivity during transition time.
- **Data Security and Privacy:** Compliance with the need for Health Insurance Portability and Accountability Act (HIPAA) and other regulations on patient data privacy requires further investment in state-of-the-art security measures such as encryption, intrusion detection systems, and periodic security auditing. Also ensuring the data is masked or tokenized with in the healthcare data servers.

Penalties for Non- Compliance

- **Monitory sanctions:** There are financial fines imposed by the government for failure to comply with federal legislation. In addition, there is exclusion from federal healthcare programs and litigation. For example, under HIPAA, all violations attract fines starting from \$100 to \$50,000 for every violation.
- **Reputation Damage:** Lack of compliance may result in patients losing trust, damaging the organization's reputation, and loss of market share. Negative publicity will have long-term effects on patient acquisition and retention.

Operational Efficiency Impact

- **Administrative Cost Reduction:** Smoothed processes reduce manual labor, cut down on errors, and eventually reduce administration costs. Automation of routine tasks frees up the staff to focus on higher value-added activities.
- **Smarter Cash Flow:** Faster preauthorization could translate to quicker delivery of service and, by extension, more efficient billing. Revenue cycles enhance, accounts receivables days go down, and the financial stability of your clinic improves.
- **Data Accuracy Enhanced:** The automation of data exchange eliminates errors resulting from manual entry, thereby assuring better patient outcomes and potentially reducing claim denials.

3. Strategies for Maximizing ROI While Adhering to CMS Requirements

1) Investing in Scalable, Interoperable IT Solutions

- **Adopt FHIR Standards:** Usage of FHIR Standards: The integration of HL7 FHIR standards ensures alignment to the requirements of CMS and future-proofs investments. FHIR makes electronic health information exchange facile, hence, easy to share across systems.
- **Utilize API Platforms:** The realization of full-featured API platforms secures efficient data sharing among stakeholders in a secure way. The APIs allowed different software apps that can speak to one another, thus attaining better interoperability.

- **Cloud-Based Solutions:** Leveraging cloud technologies can offer scalability, cost savings on infrastructure, and enhanced data security. Cloud providers often offer compliance certifications and advanced security features.
- **Partnership with Vendors:** It is vital that the entities partner with experienced and knowledgeable vendors in health care interoperability. This will reduce risks during implementation. Vendors will be useful right from expertise to support in implementation.

2) Streamlining Prior Authorization Processes

- **Automation and AI:** Leverage automation along with AI to process prior authorization requests on an auto-pilot basis for quicker turn-arounds. AI can even predict - approval or denial-outcomes of authorizations based on historical trend analysis.
- **Real-Time Eligibility Verification:** Includes the implementation of various systems that can help in the verification of the patient's eligibility in real time to facilitate quicker approvals. This would reduce delays and improve customer satisfaction.
- **Integrated Workflows:** Integrate prior authorization systems seamlessly with electronic health records, either directly or using third-party applications, to streamline clinician workflows. Consequently, it limits duplicate data entry and reduces the likelihood of errors.
- **Standardized Data Exchange:** Whenever possible, use open standards to enable information to be interoperable among various systems by minimizing the potential for data misinterpretation. This is due to the fact that standardization minimizes misunderstandings and increases efficiency.

3) Applying Data Analytics for better Decision-Making

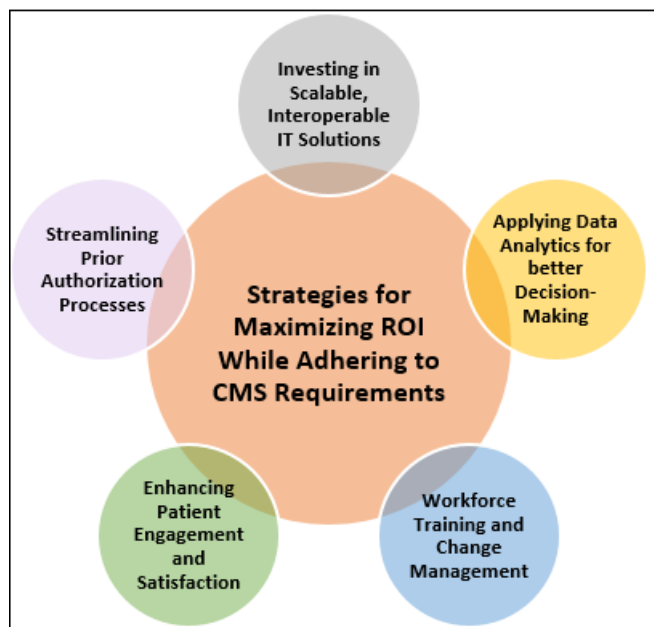
- **Predictive Analytics:** Run predictive models to predict the needs of the patients, resource utilization, and risk, and utilize the same for enhancement in the quality of care and cost reduction. For example, predicting the readmission of patients will help in proactive resource allocation.
- **Population Health Management:** Aggregate patient information is analyzed for trending, chronic condition management, and the construction of targeted interventions that improve outcomes in high-risk populations.
- **Revenue Cycle Optimization:** Avail analytics to identify where efficiencies in the billing and collection process are required for improvement in financial outcomes. Data-driven decisions may empower revenue cycle management.
- **Quality Improvement:** Monitor key performance indicators (KPIs) that could be utilized in developing continuous improvement programs. Examples of such KPIs will include patient wait times, denial rates of claims, and patient satisfaction scores.

4) Enhancing Patient Engagement and Satisfaction

- **Improving Personalized Care Experience:** Implement easy-to-use patient portals and mobile applications to allow patients to access their health information, schedule appointments, and communicate with providers. This will lead to a better care experience and

involve overall engagement that can be associated with improved health outcomes.

- **Education:** Provide relevant education to all patients regarding their health condition and management, as educated patients are more likely to be compliant with treatment.
 - **Feedback Mechanisms:** Set up a system to garner complaints and suggestions from the patients, which would help the organization to take instant remedial actions with a view to allow quality improvement in services. Surveys and feedback forms could be some helpful tools.
 - **Transparency in Care Costs and Processes:** Availing transparent information about care costs and processes can improve patient trust and satisfaction. Patients like to know what they are getting themselves into both financially and clinically.
- 5) **Workforce Training and Change Management**
- **Comprehensive Training Programs:** Invest in the training of staff with regard to new technologies, workflows, and compliance requirements. Well-trained staff are not dispensable to successful implementation.
 - **Change Management Strategies:** Include change management methodologies and help in smooth transitions and staff buy-in. Proactive addressing of resistance to change minimizes disruptions.
 - **Interdisciplinary Collaboration:** Encourage collaboration among clinical, administrative, and IT staff to foster a holistic approach at implementation. Teamwork enhances problem-solving and innovativeness.



4. Case Studies

Case Study 1: Integrating Interoperable Systems for Enhanced ROI

Background: A large hospital system had goals of enhancing its financial performance by achieving all the CMS requirements brought about by interoperability.

Actions:

- Development of APIs based on FHIR for Accessing Patient Health Data, Provider Directory.
- Improved their EHR to make the exchange of relevant data easy.
- Cloud-based solutions were implemented to reduce IT infrastructure costs
- It includes the setup of a cross-functional team that manages implementation and training.

Outcomes:

- Admin cost reduced by 20% because of smoother data exchange.
- With increased access to health information, there is an increase in patient satisfaction scores of 15%.
- Improved operational efficiencies and enhanced the revenue cycle, ensuing an 18% increase in ROI within two years.
- An enhanced compliance posture with reduced risk of penalties.

Case Study 2: Automating Prior Authorization to Achieve Process Optimization

Background: One regional health plan struggled with prolonged prior authorization that led to dissatisfaction among providers and added costs.

Actions:

- Successfully implemented and integrated an artificial intelligence-driven prior authorization platform into their processes, through which requests for approvals will be automated.
- Integrated the platform with the EHR system of the providers for real-time data sharing.
- Ensured recognized standards were set up and manual interventions minimized.
- Trained personnel on new workflows; provided ongoing support.

Outcomes:

- Reduced prior authorization turnaround times from five days to under 24 hours.
- The operating costs are reduced by 25%, hence requiring minimal manual processing.
- Provider relations were boosted along with network retention, driving market share up 10%.
- Data precision that prevents loss due to denied claims.

5. Challenges and Solutions

1) Data Security and Privacy Concerns

- Challenge:** Sharing of sensitive health information while ensuring its security.
- Solutions:**
 - Stringent encryption of data in transit and rest.
 - Perform periodic security assessments and audits to assist in the identification of any kind of vulnerability.
 - Develop and implement appropriate policies, training for staff regarding adherence to all applicable requirements of HIPAA and other regulatory requirements.

- Use multi-factor authentication mechanisms or other similar modern mechanisms for advanced authentication to avoid unauthorized attacks.

2) Integration with Legacy Systems

a) **Challenge:** Legacy systems may not support modern interoperability standards.

b) **Solutions:**

- Use middleware or integration platforms to bridge legacy systems with new technologies.
- Phased upgrades need to be planned to minimize disruptions.
- Engage vendors who specialize in healthcare system integration.
- Budget allocation for system modernization in strategic planning.

3) Staff Training and Change Management

a) **Challenge:** Resistance to change and lack of proficiency with new systems.

b) **Solutions:**

- Develop and implement comprehensive training programs tailored to different staff roles.
- Relay and communicate the benefits of new systems to gain staff buy-in.
- Empower employees through planning and implementation regarding specific ideas of ownership.
- After the implementation support through follow-up assistance may also include resources like help desks and manuals.

4) Financial Constraints

a) **Challenge:** High costs associated with technology investments.

b) **Solutions:**

- Explore funding opportunities, grants, or incentives offered by government programs.
- Consider software-as-a-service (SaaS) models to reduce capital expenditures.
- Perform cost-benefit analyses to demonstrate ROI over time.
- Negotiate flexible payment terms with vendors.

6. Future Outlook

The healthcare technology landscape is expected to continue evolving, with increased emphasis on interoperability, patient-centered care, and value-based models. Key trends include:

- **Advancements in AI and Machine Learning:** These technologies will further enhance data analytics capabilities, enabling predictive modeling and personalized care. AI can assist in diagnostics, treatment recommendations, and risk assessments.
- **Expansion of Telehealth Services:** The integration of wearables and remote monitoring devices will become more prevalent, necessitating robust interoperability solutions. Telehealth can improve access to care, especially in underserved areas.
- **Regulatory Evolution:** Ongoing updates to CMS requirements and other regulations will continue to shape

the operational landscape. Staying informed and adaptable will be crucial for compliance and competitiveness.

- **Consumer-Driven Healthcare:** Patients will demand greater access to their health data and more control over their care decisions. Empowered patients are more engaged and can lead to better health outcomes.

Healthcare organizations that proactively adapt to these trends, leveraging technology to meet regulatory requirements while enhancing operational efficiency, will be well-positioned to maximize ROI and deliver superior patient care.

7. Conclusion

Maximizing ROI while adhering to CMS interoperability and prior authorization requirements is both a challenge and an opportunity for healthcare organizations. By strategically investing in interoperable IT solutions, streamlining processes, leveraging data analytics, and enhancing patient engagement, organizations can achieve compliance and drive financial performance.

Such compliance needs not to be looked at just as a regulatory requirement but more of a catalyst to innovate and improve. Such organizations may then enjoy cost reduction, improvement in quality of care, and competitive advantages in an ever-changing healthcare world.

They have to give much attention to strategic planning, stakeholder engagement, and continuous improvement in the course of compliance complexities toward financial goals. In so doing, they will add value to an efficient, effective, patient-centered healthcare system.

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