Reshape CMS Requirements, Roadmap, and Domains for Transformation

Overview of CMS Strategy: Current CMS requirements and roadmaps are value-based and often generalized, making them difficult to implement across the healthcare ecosystem.

Opportunities:

- **Generalization**: Current directives lack actionable, real-world and adoptable examples
- **Overload of Priorities**: With CMS treating everything as a priority, no single project receives the attention needed to succeed.
- **The "Big Bang" Approach**: Large, sweeping initiatives like the VA-Cerner project demonstrate the pitfalls of trying to solve everything at once, leading to misalignment, delays, and failure.
- **Specificity**: Lack of concrete use cases and clear outcomes has led to slow traction, confusion, and frustration among healthcare providers and technology vendors

Rethinking CMS's Approach to Healthcare Technology and Interoperability

While CMS has made strides in embracing technology-driven reforms, its current roadmap and requirements often remain overly generalized, leaving key stakeholders without actionable guidance or use cases.

CMS must reshape its approach to focus on concrete, prioritized use cases that stakeholders can implement and measure, as opposed to vague value-based initiatives.

The "big bang" approach to innovation, where all initiatives are considered priorities, has proven ineffective. A more targeted, phased approach with focused evaluations after each success will deliver tangible results and reduce the risk of inefficiencies and project failures. Drawing lessons from the VA Cerner EHR implementation debacle, CMS needs to prioritize scalability, interoperability, and manageable projects in its future strategies.

The failure to prioritize projects and provide actionable guidance has led to ineffective implementation across many of CMS's initiatives. This paper will argue that CMS needs to change its approach by adopting a more pragmatic, focused, and phased strategy.

Focus groups and brain trusts are some of the most effective ways of creating a forming, storming, norming and performing group of ambassadors for any major change in operations or technology. I once inherited a steering group that had a great initial phase but a continued churn on topics and had a preoccupation with focusing on data standards and technical specifications. There is a short life on these topics, even with a group of nerds and/or geeks. Eventually, people want to do something about it. However, the steering was formed from clinical and business leaders.

I have started sharing a ponderance with people as a way to get an understanding of where the current state is, and how I can apply emerging technology strategies.

I started calling the quip the "Beetlejuice" comment.

> The business of business is business.
>
> The business of healthcare is care of health. (this is where it gets fun)…
>
> The business of healthcare is NOT data (gets a few torches).
>
> The business of healthcare is not technology (full on William Wallce revolt).

This is 10% snark and 90% a way to truly understand the stance of a good representation of people involved. It came to me as I started seeing comments that gave me a pause. For example, if the payors and providers do not stop dragging out AI adoption, we will just go around them.

⬚ **Control rhetoric instead of enablement.**

⬚ **Selective crisis storytelling while withholding material facts.**

⬚ **Broad-scope data monetization that may exceed consent boundaries.**

⬚ **Operational tactics that functionally close claims under the label of "decisioning."**

Mindset challenges impacting success:

- FHIR is a Means, not a Mission. We're not teaching FHIR, we are installing a conduit.

- Clinicians *don't have to care* how the data gets there, just that it is when and how needed

- Clinicians are not technologists, they focus on patient care, not data transport protocols.

- FHIR's job is to disappear in the workflow.

- If clinicians understand the technology in depth, they had no choice, due to issues

- The "WIFM" for clinicians is simple: Faster access, no dual entry, less clicks, care context

- Adoption hinges on clinical relevance. If it doesn't, it won't get used.

- Clinical time is the scarcest resource in healthcare but don't make decisions for them

- *Stop Talking API, Start Speaking Outcome:* Translate Tech to Clinical Value

Case Study: 72 Hour to decision, a comparison.

It seems that healthcare is narrowing down the approach on how to fulfill the CMS authorization determination effective 2026, by using transactions where technology limitations or interpretation hinders the process intended to alleviate issue.

Nowhere do the regulations state that X12 has to be replaced or groups cannot continue or create a process that blends X12 and HL7, just that the API are enabled. I would argue that API will be recommended for everything but one scenario, when an instantaneous decision cannot be made and would benefit from additional follow-up. This is the process that group benefits created that led to final determination of 83%+ within 48 hours.

CMS Requirements for Prior Authorization Timeliness

Understanding the mechanics of the data exchange will be critical for the process owners, and therefore a hop in the process that will require both business and technical teams to align on understanding and needs. So, an example of when technical functionality is needed but not the weeds.

I see marketing about instantaneous determinations – which is neither a rule or preferred for the patient and provider. I see the 2026 design to be described as API heavy and where instantaneous determinations are made. This dialogue is concerning because, depending on the process, it might be a hinderance versus value and might be backing into workflows based on what API can/cannot do.

- **Workflows may fail** the spirit of CMS timeliness rules by creating artificial abandonment rather than active adjudication.
- Higher pend/closure/soft denial rates lead to more resubmissions, administrative costs, and delays in care delivery.
- Prior designs of these API had connection closures: In standard FHIR API implementations (including PA), the **HTTP(S) connection does not remain open indefinitely**.
- **Synchronous** transactions: The TLS session is open only long enough for the request/response handshake — seconds, not hours.
- **Asynchronous** transactions: The initial connection closes after acknowledgment, and the **server either calls back to the client's endpoint** or the client polls later. There is no long-lived "open port" for the whole workflow.
- **Why timeouts happen**: Security policy — to prevent an idle, authenticated connection from being hijacked. Resource management — holding sockets open is expensive at scale.

So, when you need to explain emerging technologies, the context matters.

Translate FHIR to Patient and Provider Outcomes: Instead of saying "FHIR API," say "real-time med list sync so the doctor doesn't prescribe a conflicting drug." Instead of "FHIR Resources," say "a shared care plans the entire care team can see — no faxing required."

How to explain it to the third-party vendor: Your brilliance with FHIR is what makes the plumbing work. But clinicians are not plumbers — they're the ones turning on the faucet. They care that the water flows cleanly, quickly, and without hassle. If we nail that, technology's doing its job. They don't need to know how the pipes are laid.

Messaging examples: Tech to Clinical

Don't say: "FHIR will solve interoperability!"
Say: "FHIR will help you get a full patient picture without extra effort."

Don't say: "We're exposing Observation resources via an endpoint."
Say: "We're making your patient's recent labs from the ER show up automatically."

Don't say: "It's a FHIR-compliant Prior Auth API."
Say: "The system will pre-check if a test is covered — no phone call needed."

FHIR Term	Clinician Translation (WIFM)	Why It Matters (So What)
FHIR API	Data shows up in your EHR, *no more toggling 18 times, 6 systems, 18 pw*	Reduces clicks, delays, and hunting. Improves decision speed and safety.
FHIR Resource Med Req	You get med list, labs, history from outside systems w/o asking for a fax	Enables whole-person care— no redundant tests or missed info.
SMART on FHIR	A tool inside your workflow that pulls in data from other places and is useful	Avoids context-switching and rework. Think: a sepsis risk score that uses outside hospital data.
Patient Access API	Your patient brings their data to you from other providers or health apps	Better-informed patients, fewer "I don't know", better engagement and trust.
USCDI / Data	Same core info across all systems	You don't have to re-enter data, single playbook.
Subscription / Event Notice	You'll know when your patient is admitted or discharged anywhere	Real-time care coordination. No more finding out days later.
TEFCA / QHINs	Your system will talk to other systems across the country securely	Nationwide data sharing, even if the hospital across town uses another EHR.
Terminology (SNOMED,	Familiar clinical language, even if the system used different codes	Improves clarity, reduces confusion, no guessing what 'test 8497' really was.
FHIR Questionnaire	Forms before the visit, show up in your chart already structured	It saves time. You walk in already knowing the patient's goals, issues, or symptoms.
Provenance Metadata	You can trust where the data came from"	Helps avoid relying on outdated or inaccurate info, especially in emergent

The Case for Prioritization and Focused Execution

Another reason why picking 5 use cases to start with and gain momentum is that it appears that everything is a priority, and we all know that means nothing is and nothing receives the attention needed to succeed. Key recommendations include:

- **Focus on High-Impact Use Cases**: CMS should focus on a small number of high-impact use cases that can be realistically executed within a specific time frame. For example, CMS could begin by addressing one key interoperability issue, such as enabling real-time data exchange between hospitals and payers for claims and prior authorization.

- **Use Focus Groups to Drive Prioritization**: Involve stakeholders, such as healthcare providers, insurers, and technology vendors, in focus groups to identify pain points and determine the most critical areas for improvement. These discussions will not only guide CMS in selecting priority areas but will also ensure that the initiatives are relevant and actionable for the target audience.

- **Implement in Phases**: Rather than attempting a large-scale rollout of multiple initiatives, CMS should break down projects into manageable phases. Each phase should involve specific, well-defined objectives, and upon completion, CMS should evaluate the success of the project before moving on to the next one. For example, after completing a pilot project on real-time data exchange, CMS could evaluate results and then scale the initiative.

The Tension Between Scale and Interoperability

Scale and interoperability are often viewed as mutually exclusive. Large-scale projects that seek to centralize data or integrate multiple systems into a single framework often face interoperability challenges due to the complexity of healthcare data exchanges. As demonstrated in the VA Cerner case, a large-scale approach can lead to bottlenecks and inefficiencies, particularly when the systems are not designed to work together.

- **Small-Scale, Modular Systems**: To promote interoperability, CMS should prioritize modular, decentralized systems that can exchange data across networks without relying on a single, central database. By focusing on incremental improvements and using standards like FHIR (Fast Healthcare Interoperability Resources), CMS can foster interoperability without being bogged down by the complexities of centralized data repositories.

- **Encourage Decentralized Data Models**: CMS should encourage the use of decentralized data models where information is stored locally but can be shared across platforms via secure data exchange protocols. This approach will reduce the risks associated with centralized data lakes and promote a more flexible, adaptable healthcare ecosystem.

Recommendations for CMS's Future Strategy

- **Develop Actionable, Concrete Use Cases**: CMS must shift its focus from generalized goals to specific, actionable use cases. These use cases should have clear success metrics and be piloted in real-world environments before being scaled.

- **Adopt a Phased, Iterative Approach**: Rather than trying to implement everything at once, CMS should prioritize one project at a time. After each initiative is implemented and evaluated, CMS can move on to the next project with the lessons learned from the previous one.

- **Promote Interoperability Standards**: CMS should focus on fostering data interoperability through the adoption of standards like FHIR, which can facilitate data exchange across decentralized systems.

- **Focus on Stakeholder Engagement**: Use focus groups and stakeholder feedback to ensure that initiatives are meeting the needs of healthcare providers, payers, and patients. This feedback loop will ensure that CMS's strategies are both practical and impactful.

Case Study: The VA Cerner Implementation and Lessons Learned

Background: The VA's 2019 Cerner EHR rollout aimed to create a single data lake for all veterans' health data. The current CMS's Health Technology Ecosystem Category framework outlines CMS's vision for a modern, patient-centered healthcare system, emphasizing interoperability and collaboration across various stakeholders. However, the current approach may lack actionable use cases and clear prioritization.

1. Develop Concrete Use Cases with Measurable Outcomes While the Health Technology Ecosystem Categories provide a broad vision, they lack specific, actionable use cases that stakeholders can implement and measure.

For instance, the "Kill the Clipboard" initiative aims to eliminate manual check-in forms by enabling patients to share their health information digitally. However, without clear metrics and guidelines, stakeholders may struggle to adopt and implement such initiatives effectively.

> **Recommendation:** CMS should collaborate with industry partners to develop detailed use cases with defined objectives, timelines, and success metrics. These use cases should be piloted in real-world settings to gather feedback and refine the approach before broader implementation.

2. Implement a Phased Approach with Prioritized Focus Areas The current strategy treats all initiatives as priorities, leading to resource dilution and potential burnout among stakeholders. This approach mirrors the challenges faced in large-scale projects like the VA-Cerner implementation, where shifting leadership and unclear direction hindered progress.

> **Recommendation:** CMS should adopt a phased approach, focusing on one initiative at a time. For example, starting with the "Kill the Clipboard" initiative, CMS can evaluate its impact, gather stakeholder feedback, and refine the approach before moving on to the next priority. This iterative process allows for manageable implementation and continuous improvement.

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3. Conduct Focus Groups to Gather Stakeholder Feedback To ensure that initiatives align with the needs and capabilities of stakeholders, CMS should engage in regular dialogue with healthcare providers, payers, technology developers, and patients. This engagement can help identify potential barriers, resource constraints, and areas for improvement.

> **Recommendation:** CMS should establish focus groups comprising diverse stakeholders to provide ongoing feedback on initiatives. These groups can meet periodically to discuss challenges, share best practices, and suggest refinements to CMS's strategies.

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4. Address the Interoperability Challenge The ambition to create a centralized data lake, as seen in the VA-Cerner project, faces significant challenges related to scale and interoperability. A single, massive database may be too complex and costly to maintain, and it may not integrate seamlessly with existing systems.

> **Recommendation:** CMS should focus on promoting interoperability standards, such as Fast Healthcare Interoperability Resources (FHIR), and encourage decentralized data exchange models. By fostering an ecosystem where data can be securely shared across systems, CMS can enhance accessibility and reduce the risks associated with centralized data storage.

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5. Learn from Past Initiatives The VA-Cerner implementation serves as a cautionary tale of ambitious projects that lack clear direction and stakeholder buy-in. Understanding the lessons from such initiatives can inform CMS's approach to future projects.

> **Recommendation:** CMS should conduct post-implementation reviews of past initiatives to identify successes and areas for improvement. These insights can guide the development of more effective strategies and prevent the repetition of past mistakes.

Conclusion: By developing concrete use cases, implementing a phased approach, engaging stakeholders through focus groups, addressing interoperability challenges, and learning from past initiatives, CMS can create a more effective and sustainable Health Technology Ecosystem.

This approach will not only enhance the quality of care but also empower patients and providers in the digital age. If you need further assistance in developing specific use cases or structuring focus group discussions, feel free to ask.

Project Scope and Technical Design

The VA's EHR modernization project, known as the Electronic Health Record Modernization (EHRM) program, was designed to integrate VA's EHR system with the Department of Defense's (DoD) Military Health System (MHS) Genesis, also powered by Cerner. The goal was to create a unified system that would allow seamless sharing of health information between the DoD and VA, ensuring continuity of care for service members transitioning to veteran status.

A central component of this integration was the development of a shared data repository, intended to house comprehensive health records accessible across both departments. However, this approach raised concerns among interoperability experts, as centralized data repositories can pose challenges related to data access, system scalability, and the flexibility required for diverse healthcare environments.

Interoperability Challenges

Despite the intention to enhance interoperability, the implementation of the Cerner EHR system faced significant hurdles:

- **Scheduling and Pharmacy Module Issues**: Reports indicated that scheduling errors and pharmacy-related coding problems within the Cerner system led to patient safety incidents at VA medical facilities. These issues made it difficult to reschedule medical appointments and effectively track veterans' prescriptions.

- **System Downtime**: The Cerner EHR system experienced multiple instances of downtime, affecting the continuity of care and raising concerns about system reliability.

- **Leadership Turnover**: Several leaders appointed to lead key bodies of work exited quickly, and that means it has nothing to do with personality or individual vision, then lack of alignment on the work that led to the approval and launch of the bodies of work. So, a recommended evaluation would be to look at the timelines of resources and find patterns. It does not matter to the author, but it should matter as part of due diligence to rehabilitate the viability.

Best Practices in EHR Implementation

- **Stakeholder Engagement**: Involving clinicians and staff in the design and configuration of EHR systems to ensure they meet the practical needs of end-users.

- **Phased Deployment**: Implementing EHR systems in stages to allow for troubleshooting and adjustments before full-scale deployment.

- **Training and Support**: Providing comprehensive training and ongoing support to users to facilitate smooth transitions and effective system utilization.

- **Data Interoperability Standards**: Adopting standards such as Fast Healthcare Interoperability Resources (FHIR) to promote data exchange across diverse systems.

Recommendations for Future Initiatives

- **Alignment on scope**: There is a broadening bifurcation of technical productization of HIT, those administering it, the adjudication process and the respective clinical care. Clinical care & adjudication are interdependent but not the same.

- **Decentralized Data Models**: Consider adopting decentralized data models that allow for localized data management while ensuring interoperability, thereby reducing the risks associated with centralized repositories.

- **Iterative Implementation**: Implement EHR systems in phases, starting with pilot programs to identify and address issues before broader deployment.

- **Enhanced Interoperability Standards**: Focus on adopting and adhering to established interoperability standards to facilitate seamless data exchange across systems.

- **Leadership Stability**: Ensure consistent leadership to maintain strategic direction and foster stakeholder confidence throughout the modernization process.