Accelerating HL7 Da Vinci Project Adoption by Providers – Clinical Advisory Council Insights
June 11, 2025

The HL7 Da Vinci Project Clinical Advisory Council invited early adopters Anna Taylor, Da Vinci Steering Committee chair and associate vice president, Value Based Care and Population Health Management, MultiCare Connected Care, and Semira Singh, director, Population Health Informatics at Providence, to present at its June 2024 meeting to share their insights, experiences and benefits of adopting HL7 FHIR and implementing HL7 Da Vinci Project implementation guides.

Subsequently, at its meetings the Clinical Advisory Council discussed implementation barriers facing providers and adoption strategies and considerations regarding how to accelerate adoption by providers. The insights and recommendations are below.

Barriers facing providers

Limited resources

- Lack of resources or technical competence to adopt new technology
- Lack of funding for technology improvements
- There are more challenges for low-resourced organizations. They have ongoing workforce resource issues because they lack the necessary bandwidth, as they cannot hire a large team. They also have a small budget for infrastructure upgrades. Often the smaller, lower resource organizations take insurance from wherever they can get it, so there is a large number of payers for a relatively small number of patients. When providers set up one kind of feed it is important for it not to have one-offs. Lots of things keep them out of the data marketplace. If these issues are not resolved, it will evolve into digital health inequities and patients will suffer.
- Smaller physician practices may have a greater need to use intermediaries, but this adds costs. These practices are least able to afford the additional costs of intermediaries and are at most significant risk of being left behind.

Manual processes and workflow

- Significant burden of prior authorization, including manual efforts and time for reviewing web portals, phone calls, faxes, etc.
- Old technology and manual workflows to track down a medical record and a set of information for member attribution, care management, quality measurement, risk adjustment, etc.
- Latency issues exist surrounding claims, prohibiting data to be exchanged in real time

Organizational readiness

- Benefits of HL7 FHIR APIs and Da Vinci implementation guides are spread to numerous silos within organizations, such as population health and other business units, and use cases' relevance vary by unit so it is challenging to advocate the benefits and gain interest across all of the units within an organization

- Lack of executive leadership awareness, understanding and support of HL7 Da Vinci project work and FHIR APIs

Community readiness

- Difficulty finding the right payer partners in the community that are ready to implement because most of the time, especially for prior authorization, the payer's side of the equation is more challenging than the provider's responsibilities
- Education for providers needs to be increased, addressing issues like is FHIR riskier than CCDA, and can the data be shared or not.
- Engaging providers without a dominant payer is challenging. How do we adopt a payer-agnostic strategy?
- Providers do not have a clear understanding of what TEFCA is and there are some concerns in the marketplace about TEFCA. Some providers feel it is important to have competition among the payers rather than seeking out a dominant payer.
- The multi-million-dollar costs to payers of some proprietary interoperability solutions means that there are fewer resources to support Value-Based Care and strategic partnerships between payers and providers.

Data governance and standardization

- Lack of an all-encompassing view of data for value-based care as, historically, payment and coverage data were completely separate from care
- Lack of data standardization and easy information access, which hinders the ability of both payers and providers to create efficient care delivery solutions and effective care management models
- Fragmented data provides incomplete records and requires manual effort to complete missing information
- Persistent concerns of privacy, ability to filter data, and sensitive data (like reproductive data, etc.) exist (FHIR is more flexible and data-specific, which can help protect data.)
- Demand from payers for different data for prior authorization for the same treatment/test/study is a challenge.
- Some data overlaps with care, and therefore would normally be documented during the clinical encounter, and some data does not and must be obtained after the encounter, a time-consuming process.
- In addition, it is difficult for providers who are with multiple payers each requiring their own proprietary data set for each treatment/test/study and not all of that overlaps what you are documenting for patient care,
- Providers have concerns about potential information asymmetry issues created by exposing so much clinical data to payers with only partial administrative and operational data coming back through claims.
- Providers have concerns about secondary uses of clinical data shared with payers. For example, it could increase the number of denials and the prevalence of claw backs.

EMRs

- Many practices will be entirely dependent on their EMR to provide them with the necessary functionality to participate in interoperability with payers around standardized use cases, such as prior authorization, clinician-directed exchange (CDEX), and payer-directed exchange (PDEX). To date, these functionalities have not been implemented.
- Implementing on a payer-by-payer basis is difficult and expensive. To what extent can you leverage EMR platforms for FHIR-enabled data exchange and to scale across the providers?
- Many providers do not see a viable interoperability strategy outside of turning the data over to their EMRs and letting them take care of all data exchange needs. EMR-based solutions may not meet the needs of Clinically Integrated Networks (CINs) and in cases where data sources live outside the EMR.
- Providers are concerned about the potential costs of having an EMR-centric solution for some payers and another solution based on open standards for payers that cannot purchase the EMR-centric solution.

Other

- There are significant open questions about how patient identification will work ($match is far from perfect), what will happen to TEFCA with new administration, how TEFCA exchange fees would work, how to limit the impact of bad actors in the network, how data duplication issues will be resolved, how limitation of liability will work, and other potential issues. This uncertainty makes it difficult to choose a path forward.
- Unique, customized one-off solutions are costly and not scalable

Adoption strategies/considerations from the provider perspective

Education

- Offer a recorded demo of both sides of data exchange showing a payer looking for a provider organization to submit a prior authorization request to completion of transaction. Avoid showing additional functionality of the payer system, as it is off-putting to providers, and limit demo to process of prior authorization.
- Understand and align with Epic's FHIR-based development; Potentially invite Epic or the HIMSS Electronic Health Record Association (EHRA) to future meetings or presentations
- Level set regarding what is TEFCA; this is what it is and does, this is the opportunity to use TEFCA to improve clinical care
- Offer more education for provider organizations around Da Vinci IGs and implementation work including:
    - Real impact of "standard implementations," e.g., MultiCare Connected Care experienced the following:
        - Adopting the Member Attribution Implementation Guide led to a 60 percent decrease in patient matching error rates and a 67.5 percent of time saved per full-time employee to be redirected to other activities

        - Using the Data Exchange for Quality Measures led to 175 percent improvement for MultiCare MRP performance, 48 additional gaps closed and a $50 per chart savings due to the reduction in chart chasing
        - After 90 days of automating prior authorization with standard interoperability, MultiCare increased from three to five prior authorization requests per hour to 10 to 12 prior authorization requests processed per hour, a 140 percent to 233 percent increase in prior authorization productivity
        - Implementations for early adopters took approximately six-to-nine months for the first use case, three months for the second and less than a month for the third, which demonstrates the reusability of the use cases and standards and that both providers and partners gain efficiencies as implementations increase
    - Basics of HL7 FHIR and Da Vinci use cases and process, as Da Vinci's use cases have broad membership support and provide reusability and value
    - Why use cases help with Fee for Service and state or federal compliance requirements
        - Impact on provider workflows in addition to organizational ROI
    - Future:
        - Ability for all of the payer proprietary prior authorization data to be incorporated into CEHRTs and associated with the specific order for treatment/test/study such that the provider and staff are aware of documentation required and therefore all required prior authorization data can be completed at the time of the encounter.
        - Standardize required prior authorization data across all payers
    - Ability for all payer facing HIT to pull (TEFCA) required prior authorization data (minimum necessary) from the CEHRT. Digital literacy around what is feasible and what should be required of vendors
    - Value of submitting supplemental data for value-based contracts
    - How automating tasks allows for upskilling of staff, maximizing their potential and adding value
    - Provide meaningful role models. Show who else has been successful that looks like "my organization" that has found partners and provide transparency about what products have been successfully deployed, what barrier was addressed and what resources are needed.
    - Share best practices so new customers can benefit from prior experience

Fiscal measures, investment and incentives

- Provide cost containment to mitigate payers and EHR vendors passing the electronic prior authorization and technology fees onto physicians. Equitable and consistent implementation of certified electronic, prior authorization technology. We support payers having to use prior auth APIs that are certified. Should not have fee passed onto the providers.

- Provide investments from payers, as was done in past, to help fund low-resourced organizations.

Piloting and sharing outcomes

- Create case studies for pilots with positive ROI and provider engagement, leveraging experiences of providers like MultiCare Connected Care, Providence and UC Davis Health. Considerations include:
    - What worked well; What did not
    - Best practices gleaned from the pilot
    - Metric of success
    - Who would be a good candidate to adopt now (right problem, right resources, etc.)
- Work to get implementation and piloting funds to support more provider organizations to join in piloting

Provider implementer support

- Create a provider implementation network and learning collaborative
- Providers need a clear and replicable pathway to engage in interoperability initiatives. The goal to reduce physician burden does not mean that interoperability should happen to providers organizations instead of with them as active participants.
- Identify best practices for working with your EHR and/or working with a 3rd party vendor
- Based on several early adopters' experiences, plan to adopt the Member Attribution Implementation Guide first, as it is one of the "softer" guides to implement
- Provide guidance for what is expected; is organization required to manage it?
- Provide transparency of what products, services, versions are supported. Clients want to know who has been successful at implementing that looks like me. Knowing what the implementation burden will actually be.
- Be honest and transparent to everyone on what it is on the workflow so we can optimize it. It is important that all know the impact to the workflow as a whole.
- We need at least two models for provider-based data exchange: one with the EMR as the information hub, providers would delegate to them the ability to share data on the provider's behalf. In a second model, the provider, vendor, network, or other entity as the information hub. In situations where the GroupID is insufficient, a Clinically Integrated Network (CIN) is in place, the EMR data needs to be filtered to a subpopulation not available in the EMR, or other use cases, an organization may decide to manage data exchange for a population or data source outside of the EMR. Organizations that are willing and able to do so should be permitted to take on that burden.

Certification

- Endorse equitable certification. Support for payers, like providers, who have to use payer APIs that are certified.

Advocacy in industry

- Align provider organizations that are members of Da Vinci and piloting to create a collective advocacy voice to vendors (to drive FHIR API development) and policymakers
- Standardize payer content. Each payer has its own way of wanting to approach data exchange.
- Directly address issues surrounding privacy.
- Identify the dominant payer, emphasize consistency among payers and have a variety among the payers in the marketplace
- To support more physicians and other healthcare providers and provider associations being Da Vinci members, consider reducing or deleting membership fee for the provider stakeholder group? Membership is costly (https://confluence.hl7.org/display/DVP/Membership), making it financially out of reach for many healthcare providers/associations to join. To be eligible for reduced fee Da Vinci memberships, perhaps there could be conditions (such as the healthcare provider being an HL7 member and an active participant in Da Vinci workgroups). We realize this is potentially a big ask, but currently healthcare provider representation in Da Vinci is concerningly low. Bringing more into Da Vinci membership – which would provide them members-only access and increase transparency – could be helpful in accelerating adoption of the Da Vinci implementation guides.