2021 Cambia Grove Innovator Fellowship Program

*Executive Summary : Da Vinci FHIR Accelerator Project
and the Value Metrics Framework*

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Introduction

Cambia Grove launched in 2015 leading an innovative approach by creating a community of like-minded professionals focused to support and develop healthcare transformation solutions to solve real problems leading to system-wide and nationwide healthcare transformation. A component of their transformative efforts included an opportunity for diverse individuals to apply and take part as a Cambia Grove Innovator Fellow. The focus of the 2021 Cambia Grove Innovator Fellowship was to identify the value of practical implementation and adoption of HL7 FHIR implementation guides (IGs) born through various accelerator projects. These guides focused on providing solutions to improve the complex challenges of healthcare data interoperability. The information gathered would be provided to help other organizations understand the value of implementation and adoption keeping the 5 points of healthcare in focus for: Patients, Payers, Providers, Policymakers and Purchasers.

Da Vinci Project

The Da Vinci Project (an accelerator program) was created by technical experts and healthcare leaders who were working to support the interoperability needs focused on value-based care (VBC) which would help payers and providers realize improvements in clinical, quality and cost outcomes. The IGs promote real time data access to improve gaps in care, coverage requirement, documentation requirements and prior authorization with the goal of allowing it to scale faster nationally. The implementation guides not only outline the technical requirements but provide real use cases and are available to the general public.

Interviews

Fellows worked with their mentors to identify stakeholders to interview from diverse backgrounds (payors, policy makers, healthcare systems, vendors and technology companies). Interviews were conducted over phone or Zoom with the intention of gaining various perspectives on the value of implementing specific use cases and potential barriers or concerns with implementation. The information gathered was aggregated by all fellows and consolidated into a value metric framework. The objective was to identify shared and unique values across the stakeholder groups.

Common Themes

The fellows interviewed various stakeholders implementing different Da Vinci Use Case's and identified common themes. Top themes included improvement in technological implementation standards, patient and provider satisfaction and overall improved quality and cost of care.

The promise of an API is in its ability to help users innovate and scale their solutions faster. The Da Vinci implementation guides outlined new technical standards or identified the use of previous standards (i.e. CDS Hooks, SMART on FHIR). The familiarity of the technology was identified as a value to quickly implement and scale to various use cases. The use of these standards would improve the automation of data ingestion either through direct import to standard electronic health records or push data for evaluation.

By automating data into downstream systems, an organization can not only have a more complete and real time picture of the patient's experience, but also gain that picture in a cost-effective manner. These advantages promote improved collaborative decision making between providers and patients that results in better clinical care, faster care gap closures and lower bottom lines. For example, the Da Vinci IGs can reduce inefficient processes in healthcare such as reducing chart chasing by hospital staff, fewer faxes and phone calls and prevent duplicate treatments/procedures. Real-time access to complete data promotes better use of the limited resources that is available in healthcare. Current inefficient methods to transfer and analyze data holds back the true potential of value-based care. Although healthcare data is shared bidirectionally between payers and providers, the current systems to send and receive data (e.g., secure file transfer protocols) are archaic and cumbersome. The data requires formatting and ingestion into downstream systems that causes delays in care gap management and quality reporting. Adopting FHIR standards can create aligned incentives where payers and providers agree on the definition of high-quality care, how it should be measured and how providers are reimbursed. Additionally, Use Case implementers felt that patient satisfaction was an area that could be improved through real time evaluation of their health history and addressing the cost of treatments in a transparent manner without the need for future scheduled visits.

The wide breadth that the Da Vinci IGs observe in improving access to actionable information can help deliver actionable information to improve various existing processes that are cumbersome and time-consuming including, but not limited to: improving patient scheduling, minimizing duplicate procedures or treatments, and increasing patients self-management of health leading to improved health and healthcare costs.

Potential Barriers

Conversations between Fellows and Use Case implementers identified unique challenges associated with implementing Da Vinci IGs. One major technical pain point shared by most implementers was it takes a significant number of resources to implement IGs and the value can be hard to immediately measure. Second, being a "market leader" creates significant organizational risk. Conservative organizations sometimes would rather wait for others to take the plunge and learn from their experience. Organizations such as payers who have implemented FHIR based API's to meet regulatory mandates have not witnessed a mass adoption and higher demand for this technology in the market, creating additional skepticism in its potential value. Finally, providers often are concerned that they are not part of the solution, and the implementation will create more work. The pandemic has made it difficult for organizations to dedicate resources to changing current workflows, especially workflows that are perceived to be "working just fine".

Other Points of Interest

Da Vinci is somewhat unique among the accelerator programs because it heavily involves payers and providers. Payer to provider and payer to payer interoperability has the potential to be the "silver bullet" that all stakeholders seek in creating a more efficient and cost-effective healthcare system.

Recommendations

Identifying the barriers of implementation was a key area of focus to identify next steps and recommendations. With the concern of required resources, risk reluctance and the current HealthIT complexity, the fellows recommend future exploration into supporting a collaborative "proof of concept" to accelerate adoption, reduce costs and identify and verify requirements of the implementation guides.

Next cohorts of fellows could partner with one (or many organizations) with intent to identify a solution to improve one value metric (this can be identified through the spreadsheet of value by stakeholder) and test a small "proof of concept" providing technical assistance, project management and process mapping. The fellows would utilize the Da Vinci implementation guides to consider the implementation cost to organizations and strive to reduce that cost whenever possible. Implementation would include tracking implementations with real organizations and keeping track of any mistakes or unexpected delays.

An additional recommendation might be allowing technical staff to canvas the published use cases for shared pieces of functionality. By constructing road maps of the different requirements to fully enable each use case, Da Vinci can strive to overlap requirements when possible to reduce the cost of each individual use case.

With technology rapidly changing the need to accelerate implementation is important to test and provide actionable solutions to the long-time barrier of interoperability that can lead to improved patient outcomes and help reduce cost of care.