


Challenge Themes & Uses Cases



The healthcare and financial services industries are undergoing dramatic digital transformations impacting nearly every aspect of operations. There are several common themes driving innovation and transformation in both industries including:

Open Business Models

Financial services firms and healthcare organizations are unlocking value from data and creating synergies with 3rd parties by opening up core platforms using application programming interfaces (API's).

Digital Identity Proofing

Reliable, high assurance and friction-less digital identity verification is fundamental to the digital delivery of products and services in the finance and healthcare space in compliance with regulatory and risk requirements.

Highly Personalized, Data Driven Experiences

Data is driving key decisions about both customers and patients in the finance and healthcare spaces. Creating a 360-degree view of customers and patients is critical to providing highly personalized and relevant experiences.

CHALLENGE THEME

Open Business Models

Financial services firms and healthcare organizations are creating and capturing value by opening up core platforms and data to 3rd parties using application programming interfaces (API's). Solutions aligned to this theme will explore innovative solutions to real-world problems that can be solved with open business models.

Providers

Unlock clinical data to improve coordination of care, enable patient access to data, transition to value based care and improve the quality and cost of healthcare.

Payers

Explore opportunities to use benefits and claims data to improve coordination of care, enable patient access to data, transition to value based care and improve the quality and cost of healthcare.

Financial Services

Marry financial and healthcare data to power patient centered care experiences, frictionless authentication, price transparency, reduced payment cycles, healthcare affordability predictors and more.

Ecosystem Infrastructure

Conceptualize solutions to gaps in the current ecosystem to enable end point discovery for patients, providers and organizations, authorization and authentication and digital identity proofing.



CHALLENGE THEME

Open Business Model Provider Use Cases

- Accelerate the transition to value based care by exposing clinical data to payers. Look to the [HL7 Da Vinci Project](#) use cases for examples and consider API's like [IOL](#) and [Allscripts](#).
- Improve coordination of a care across the healthcare system by making patient data more accessible to a patient's care team. Address ecosystem technical challenges and gaps to realizing fully coordinated care. Consider the [Argonaut project](#), [SMART on FHIR](#) and API's like [IOL](#) and [Allscripts](#).
- Give patients greater insight and control over their care by exposing clinical data and capabilities through 3rd party apps. Consider the [Argonaut project](#), [SMART on FHIR](#) and API's like [IOL](#) and [Allscripts](#).
- Empower patient care givers and family to provide better support for patients by exposing relevant clinical data and capabilities to them through 3rd party apps. Consider the [Argonaut project](#), [SMART on FHIR](#) and API's like [IOL](#) and [Allscripts](#).



CHALLENGE THEME

Open Business Model Payer Use Cases

- Accelerate the transition to value based care by exposing claims data to providers. Look to the [HL7 Da Vinci Project](#) use cases for examples and consider API's like [Blue Button 2.0](#), [IOL](#) and [pokitdok](#).
- Help providers make informed treatment recommendations to patients by exposing the financial impact of various options at the point of care. Consider API's like [Blue Button 2.0](#), [pokitdok](#), [IOL](#), [Yodlee](#) and [Finicity](#).
- Supplement clinical data with claims data to help providers and patients create a more complete medical health picture by exposing claims data through third party apps and services. Consider API's like [Blue Button 2.0](#), [pokitdok](#) and [IOL](#).
- Help patients understand the financial impact of treatment options before and after making healthcare related decisions by allowing them to access benefit and claims data through 3rd party apps. Consider API's like [Blue Button 2.0](#), [pokitdok](#), [IOL](#), [Yodlee](#) and [Finicity](#).



CHALLENGE THEME

Open Business Model Financial Services Use Cases

- Improve security, reduce friction and unlock siloed value by conceptualizing a cross industry federated identity network where both financial services firms and healthcare organizations can act as identity providers or relying parties. Consider authorization standards like [OAuth/OIDC](#) and API's and services like [4medica](#), [Daon](#), [IOL](#), [Yodlee](#) and [Finicity](#).
- Patients need to understand the cost of treatment options before making treatment decisions. Empower patients to make more informed decisions by providing a cost estimate of treatment options before making decisions about how and where to get treatment. Explore opportunities to expose cost data through EMR's at the point of care and through third party patient facing apps. Consider API's like [Blue Button 2.0](#), [pokitdok](#), [IOL](#), [Yodlee](#), [Finicity](#), [Allscripts](#) and others.
- Go beyond just estimating the cost of treatment options. Create a highly personalized experience that helps patients gain insight into the future cost and affordability of healthcare services tailored to their specific health characteristics. Help them understand behaviors that can lead to better and more affordable health outcomes for them. Analyze clinical, claims, benefits, financial and other data sources to power your experience. Consider API's like [Blue Button 2.0](#), [pokitdok](#), [IOL](#), [Yodlee](#), [Finicity](#), [Allscripts](#) and others.



CHALLENGE THEME

Open Business Model Ecosystem Use Cases

- Knowing where to find data about a patient in a FHIR mediated API ecosystem is a fundamental capability. Conceptualize a framework that enables an ecosystem participant to discover endpoints associated with patients, providers and payers. Looking at the [HL7 Validated Healthcare Directory IG](#) is a good starting point. Consider creating a solution using synthetic data in [IOL](#).
- Once you know where to find data the next step is to confirm the requesting party's identity and that they are authorized to access the data. Conceptualize an authentication and authorization framework to grant providers, payers, patients and third party apps access to data on remote systems. Consider [patient consent](#), [TEFCA](#), [SMART on FHIR](#) and [OAuth/OIDC](#). Consider creating a solution using synthetic data in [IOL](#).
- Reliably managing a person's identity across multiple organizations will be key to maximizing an outcome and value based healthcare system mediated by FHIR API's. Conceptualize solutions that reconcile patient identity across multiple sources. Consider API's and services like [4medica](#), [Daon](#), [IOL](#), [Yodlee](#) and [Finicity](#).



CHALLENGE THEME

Digital Identity Proofing

Reliable, high assurance and frictionless digital identity verification is fundamental to the digital delivery of products and services in the finance and healthcare space. Solutions aligned to this theme will explore how digital identity proofing solutions enable innovative new products, services and delivery models in both healthcare and finance.

Patient Identity

The future of patient centered care is powered by high assurance, frictionless digital identity verification. Create innovative new applications and services made possible by digital identity solutions.

Provider/Payer Identity

Accessing patient data on remote systems is fundamental to a successful transition to a value and outcome based healthcare system. Explore how digital verification of provider and payer identity can enable that transition.

Consumer Identity

The financial services industry is undergoing a dramatic digital transformation. Explore opportunities to leverage digital identity proofing and federated identity networks to power end-to-end digital banking and healthcare experiences.

Digital Identity Solutions

Conceptualize innovative new identity solutions to power patient, provider, payer and consumer experiences including risk based identity proofing, federated identity networks, biometrics, user data verification and others.



CHALLENGE THEME

Digital Identity Proofing Patient Identity Use Cases

- Providing patient access to healthcare data through open API's is a central tenant of the [CMS](#) and [ONC](#) proposed rules on data exchange and interoperability. Explore opportunities to enable patient access using digital identity proofing solutions. Consider API's and services like [4medica](#), [Daon](#), [IOL](#), [Yodlee](#) and [Finicity](#).
- Conceptualize solutions that reconcile patient identity across multiple sources to enable record location and query and reduce patient identity related errors and medical claims fraud. Consider API's and services like [4medica](#), [Daon](#), [IOL](#), [Yodlee](#) and [Finicity](#).
- A key source of healthcare related data is the patient themselves. Explore opportunities to leverage digital identity proofing solutions to create innovative solutions that incorporate patient reported data into the health record. Consider API's and services like [4medica](#), [Daon](#), [IOL](#), [Yodlee](#) and [Finicity](#).
- Patient consent is required to enable the free flow of information between healthcare organizations. Explore opportunities to create an electronic consent management system that enables the free flow of data and is transparent to patients using digital identity proofing solutions. Consider API's and services like [4medica](#), [Daon](#) and [IOL](#).



CHALLENGE THEME

Digital Identity Proofing Patient Identity Use Cases

- Explore the benefits of biometric patient identify verification solutions. Consider situations where patients might not be able to represent their own identity, for example a child or an unconscious patient. Medical staff could use biometrics to identify the patient and find and retrieve medical records and data. Consider API's and services like [4medica](#), [Daon](#) and [IOL](#).
- Explore opportunities to leverage biometric identify verification solutions to reduce prescription drug abuse. Consider API's and services like [4medica](#), [Daon](#) and [IOL](#).



CHALLENGE THEME

Digital Identity Proofing Provider/Payer Identity Use Cases

- Explore opportunities to enable provider and payer access to patient data on remote systems using digital identity proofing solutions. Examples include payers querying providers for clinical quality measures or providers querying for patient health records from remote systems. Enable access from multiple settings of care or via 3rd party developed apps. Consider [patient consent](#), [TEFCA](#), [SMART on FHIR](#) and [OAuth/OIDC](#). Consider API's and services like [4medica](#), [Daon](#) and [IOL](#).
- Patient consent is required to enable the free flow of information between healthcare organizations. Explore opportunities to create an electronic consent management system that enables the free flow of data and is transparent to patients. Use digital identity proofing solutions to create a solution at the individual care giver level. Consider API's and services like [4medica](#), [Daon](#) and [IOL](#).



CHALLENGE THEME

Digital Identity Proofing Consumer Identity Use Cases

- Improve security, reduce friction and unlock siloed value by conceptualizing a cross industry federated identity network where both financial services firms and healthcare organizations can act as identity providers or relying parties. Identify scenarios where this capability could add significant value. Consider authorization standards like [OAuth/OIDC](#) and API's and services like [4medica](#), [Daon](#), [IOL](#), [Yodlee](#) and [Finicity](#).
- Explore opportunities to use financial account data to boost the strength of a digital identity proofing system. Think about how consumer identity data obtained from financial accounts could be used to improve patient matching, reduce data entry error and strengthen identity verification processes. Consider using an account verification service from [Yodlee](#) in combination with other API's like [4medica](#) and [Daon](#).



CHALLENGE THEME

Digital Identity Proofing Digital Identity Solution Use Cases

- Biometrics typically do not change for an individual, cannot be forgotten like a password, and can be virtually unique to every individual, especially when combined with demographic data. Explore opportunities to streamline patient care, improve security, provide a high level of assurance of a patient's identity, protect against data entry errors, improve the on-boarding experience, prevent medical identity fraud, and improve revenue cycle management using biometric authentication solutions. Consider API's and services like [4medica](#), [Daon](#) and [IOL](#).
- Improve security, reduce friction and unlock siloed value by conceptualizing a cross industry federated identity network where both financial services firms and healthcare organizations can act as identity providers or relying parties. Consider authorization standards like [OAuth](#)/[OIDC](#) and API's and services like [4medica](#), [Daon](#), [IOL](#), [Yodlee](#) and [Finicity](#).



Highly Personalized Data Driven Experiences

Patient Centered Care

Price Transparency



CHALLENGE THEME

Personalized Data Driven Experiences Patient Centered Use Cases

- Information and control over one's treatment is the mainstay of positive patient experience. Patients must be provided accurate and timely knowledge and information about their treatment, medical intervention, drugs, after care, health insurance coverage, treatment cost and more. The ability to make informed decisions and take action empowers patients to play an active role in their own healthcare. Explore opportunities to create powerful new experiences that put the patient at the center of their own care. Consider combining data from providers, payers, financial services, medical devices and patients.
- Patient families and caregivers are also central to positive patient experiences. Consider the role that family and caregivers play in positive health outcomes. Design experiences that that empower caregivers to support patients, offer support and counseling associated with a patient's illness and prognosis, and enable them to be a proactive participant in a patient's care. Consider combining data from providers, payers, financial services, medical devices and patients.



CHALLENGE THEME

Personalized Data Driven Experiences Price Transparency Use Cases

- Patients need to understand the cost of treatment options before making treatment decisions. Empower patients to make more informed decisions by providing a cost estimate of treatment options before making decisions about how and where to get treatment. Explore opportunities to expose cost data through EMR's at the point of care and through third party patient facing apps. Consider API's like [Blue Button 2.0](#), [pokitdok](#), [IOL](#), [Yodlee](#), [Finicity](#), [Allscripts](#) and others.
- Go beyond just estimating the cost of treatment options. Create a highly personalized experience that helps patients gain insight into the future cost and affordability of healthcare services tailored to their specific health characteristics. Help them understand behaviors that can lead to better and more affordable health outcomes for them. Analyze clinical, claims, benefits, financial and other data sources to power your experience. Consider API's like [Blue Button 2.0](#), [pokitdok](#), [IOL](#), [Yodlee](#), [Finicity](#), [Allscripts](#) and others.

