**21st Century Healthcare Data Access Platform**

# InteropX: Standards-Based Healthcare Data Exchange Solution for Payers and Providers

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"Our core focus is to create new standards-based electronic data exchange processes for Payers and Providers without disrupting their existing manual and non-standard processes. This transformation will significantly contribute towards the ultimate goals of improving healthcare data quality, reducing overall cost, and reducing provider burden… We take pride in the high-quality data generated by InteropX using the latest patient matching, linking, and de-duplication algorithms with machine learning to create patient longitudinal records."- Latif Khalil

**CEOCFO:** *Mr. Khalil, what is the vision behind InteropX today?*
**Mr. Khalil:** InteropX Platform is designed to provide data interoperability in the healthcare data space that enables a healthcare system to seamlessly exchange healthcare data between its key stakeholders, patients, providers and payers. Our core focus is to create new standards-based electronic data exchange processes for Payers and Providers without disrupting their existing manual and non-standard processes. This transformation will significantly contribute towards the ultimate goals of improving healthcare data quality, reducing overall cost, and reducing provider burden.

**CEOCFO:** *Why is it so difficult to put it all together? It seems that many companies have been trying for a long time but cannot quite get it right.*
**Mr. Khalil**: We have observed that most companies tend to create one-off solutions where a specific solution is developed for a specific problem or use case, such as the problem of data extraction from multiple EHR/EMR systems, data exchange between Provider and Patient, or data exchange between Payer and Patient. Such solutions are not easily adaptable when a use case changes or when you have different entities involved in the data exchange.

Our approach is different. InteropX uses well-established standards for data exchange, data management, and data storage which allows InteropX to support all use cases of healthcare data interoperability. In addition, InteropX microservices architecture and APIs allow seamless integration of vendor apps -- making InteropX highly adaptable for the ever-changing healthcare data management use cases.

**CEOCFO:** *What is your target market? Which part of the industry are you looking at first?*
**Mr. Khalil:** InteropX provides out-of-the-box value and ROI to healthcare Provider organizations and Payers or Healthcare Insurance organizations. InteropX is especially valuable for Payers that are making payments on behalf of Medicare and Medicaid; both require Payers to be compliant with the latest healthcare data exchange standards and use these standards to directly interoperate with healthcare Providers. InteropX integrates with the existing Payer systems and makes them standards compliant, enabling data exchanges with Providers and Patients without requiring any major upgrade of the Payer systems. Payer systems integrated with InteropX can leverage apps like Risk Adjustment and Quality (RAQ$^{Plus}$) to easily manage the patient population risk and significantly increase their revenues.

**CEOCFO:** *Is there one solution? Are there several solutions? What is the actual product?*
**Mr. Khalil:** The InteropX product is packaged as a Platform that provides the base set of components and services including connectors, data transforms, data quality pipeline, and patient data repository. On top of that, we have developed several apps that are designed for specific Payer and Provider use cases. These apps provide coverage for the Da Vinci use cases – Da Vinci Project is an HL7 project to create FHIR based electronic data exchange between Payers and Providers. Other integrated apps and solutions include Risk Adjustment and Quality (RAQ$^{Plus}$), CARIN and Blue Button 2.0 APIs.

**CEOCFO:** *How would an organization implement InteropX?*
**Mr. Khalil:** There are multiple ways. A customer could use InteropX in the secure InteropX cloud as a service to cost-effectively utilize all features of InteropX for their enterprise. InteropX can also be deployed in a private cloud or in a customer data center. Once deployed, InteropX securely collects patients' clinical and demographic data from participating EHR/EMR systems on behalf of the InteropX-enabled Payer. The collected data is made available to the Payer system in a ready-to-analyze repository. Participating Providers can also directly interact with the Payers to discover patient coverage, prior authorization, and approvals for their patients.

**CEOCFO:** *What are some of the challenges for a payer to make this change? How do you ease some of the trepidation of going to something new?*
**Mr. Khalil:** Payers have existing systems with well-established manual or digitized data exchange processes and adopting new data exchange standards usually means significant investment and quality validation for the new or modified systems and processes. System changes and adoption of new processes are always disruptive with direct impact on revenues. InteropX offers a radically different solution – it is designed from the ground up to ensure seamless integration with existing Payer systems with almost no change in existing process and without any disruption in existing workflows.

**CEOCFO:** *When you are talking with the right person at a payer company, do they understand? What do you find is some of the pushback?*

**Mr. Khalil:** Payers definitely understand their own challenges and can easily relate to the features of InteropX which are designed to solve Payers' operational and compliance problems. One of the pushbacks has to do with the level of compliance in the marketplace, especially on the Provider's side. Although a majority of the mid to large Provider systems (EHR/EMR) are fully compliant with the latest healthcare data exchange standards, a few small Providers still use systems that are not fully compliant. InteropX not only works with compliant EHR/EMR systems but also offers special connectors to work with non-compliant Provider systems.

Another concern raised by Payers is about the poor data quality generated by most of the products of this type. Payers are not interested in the raw patient data collected from different sources and dumped in a repository. The burden of data clean-up and data de-duplication is very high and must be handled by the product vendors. We take pride in the high-quality data generated by InteropX using the latest patient matching, linking, and de-duplication algorithms with machine learning to create patient longitudinal records.

**CEOCFO:** *How do you prove to them what you have really works?*
**Mr. Khalil:** That is a very good question, because the implemented solutions for one customer are generally not visible to any other customer due to data privacy issues and the proprietary nature of these engagements. We have a demo of InteropX platform, using simulated data, to show and highlight the product features. However, our approach is to request a pilot engagement with a potential customer with the understanding that we will implement the pilot at no cost to the customer. Upon successful implementation of the customer's use cases within the customer's environment, the customer can validate the immediate value of InteropX and can convert the pilot into licensed InteropX deployment.

**CEOCFO:** *What has changed in your approach from creation to actual use? What have you learned as organizations have started to use your system? What have you tweaked?*
**Mr. Khalil:** We have learned that multiple levels of clarity and elaboration need to be implemented to meet a customer's use cases. Customers are not looking for a solution that addresses a couple of their use cases. They are looking for an out-of-the-box solution that provides a turnkey solution for their current and future use cases. I would say that we learned this during our customer interactions at interoperability conferences and had to tweak our product to ensure extensibility of InteropX through APIs and Apps platform.

**CEOCFO:** *How does InteropX standout at a conference like HiMSS? There are so many companies with so many ideas. How do you garner attention?*
**Mr. Khalil:** It is hard because the market appears to be crowded with products that use interoperability as a buzz word for marketing purposes which confuses potential customers. The term "interoperability" is overloaded and should only be used within the right context. We try to avoid using interoperability in our marketing message and focus on the healthcare data standards and the use cases our customers need to

support. Our focus on data quality and interoperable data exchange between Payers, Providers and Patients, the 3Ps, resonates well with our potential customers.

**CEOCFO: _How do you coordinate with EHRs that, from a patient perspective, have many challenges?_**
**Mr. Khalil:** I think there is lot of maturity in the Provider systems now, especially the dominant EHR/EMR systems, such as Cerner, Epic, Allscripts. These systems are stable and standards compliant. Then there are smaller boutique EHR/EMR companies which may not be fully standards compliant. But I believe that most of the EHR/EMR products are very mature and very stable.

One of the main problems with the EHR/EMR systems is that each system was individually developed without much thought towards data sharing and data exchange with other systems. Each system comes with its own unique architecture, data structures, and data formats, making it hard to interoperate with other systems. This is exactly why you need a product like InteropX. InteropX transforms the data collected from different EHR/EMR systems into a standard format, called HL7 FHIR, which allows InteropX to share and exchange data with any compliant system such as Payers, Providers, hospital systems, patient portals, disease registries, and population health management systems.

**CEOCFO: _Are you seeking funding, partnership or investment as you continue to grow?_**
**Mr. Khalil:** Yes, why not. Right now, we are building it ourselves using sweat equity and personal investments from partners. So far, we have not looked for any funding or investors because we were in the development stage of the product. After the product launch at HIMSS, we may need to look into this to take the product to the next level.

**CEOCFO: _What have you learned from past experience as an entrepreneur, as a trailblazer in healthcare data standards? What have you learned to do and what not to do as well?_**
**Mr. Khalil:** I had a previous company that I created with my partner which was successfully acquired by CA Technologies. So, I have gone through this cycle before and have learned that our solution must fit the growing market and our customer needs. We are not creating a market for InteropX, we have created the InteropX for the fast-growing and competitive healthcare data management market.

**CEOCFO: _What is the takeaway for our readers about InteropX?_**
**Mr. Khalil:** In the light of new regulations, rules, and requirements, the market for healthcare data management, analysis, and reporting is not only very hot right now, but it is going to stay hot for a while. Companies working on products and services that are focused on improving patient care through Payer and Provider healthcare data management and exchange have a very strong growth potential. A product like InteropX, offering a universal solution that is applicable to multiple regulatory use cases and can interoperate with three 'Ps' (Providers, Payers, and Patients), is expected to have significant eminence in the healthcare data management market in 2020.