HealthConcourse

Advancing public health and improving patient care

A coalition of partners

Developing HealthConcourse required a coalition of partners with a variety of products to faithfully mimic a complex ecosystem. Our partners and collaborators represent a thriving and evolving community of organizations that are collectively innovating to push the industry forward.

- Humetrix
- Rimidi
- Fluidity Health
- Microsoft
- DXC Technology
- The University of Utah

- Wolters Kluwer
- MDIX
- MITRE
- OSEHRA
- Care Innovations
- HarmonIQ

When medical decisions are made without the complete and relevant set of information, the health and well-being of the patient is what's at stake.

Health care organizations are being flooded with data from multiple sources. And while it all may be valuable, distilling it into meaningful and actionable insights is difficult to achieve. Health care records are fragmented. The data lacks interoperability, standardization and provides minimal automation for extracting insights. This puts the costly and time-consuming burden of manual health data management on health care organizations and their patients. Which realistically might not always happen, or at the very least, not completely.

**HealthConcourse—Perspecta's digital health platform**

Perspecta's HealthConcourse was developed to directly address these challenges. Built using the power of open data standards, our digital health platform emphasizes modularity and interoperability and provides a common framework to optimize how different solution components interact within a cohesive ecosystem.

Modularity is key. Complex health IT ecosystems that contain multiple electronic medical records (EMRs) and other health-related data stores can no longer rely on a single "source of record" for managing the complete life cycle of health data. And no one technology in a complex ecosystem can be solely responsible for managing data processing to drive all workflows or deliver integrated data views to users. This is especially true when clinical data is being collected, transmitted and analyzed to improve clinical outcomes.

Our approach is to redefine what it means to connect patients and providers by not simply connecting the two groups but by augmenting and enhancing the overall experience.

The middleware solution: a system of insight

The HealthConcourse reference architecture is an implementation of "separation of concerns" — a design principle for separating solutions into distinct layers, components or sections that individually satisfy a core business requirement or "concern," as shown in the figure below.
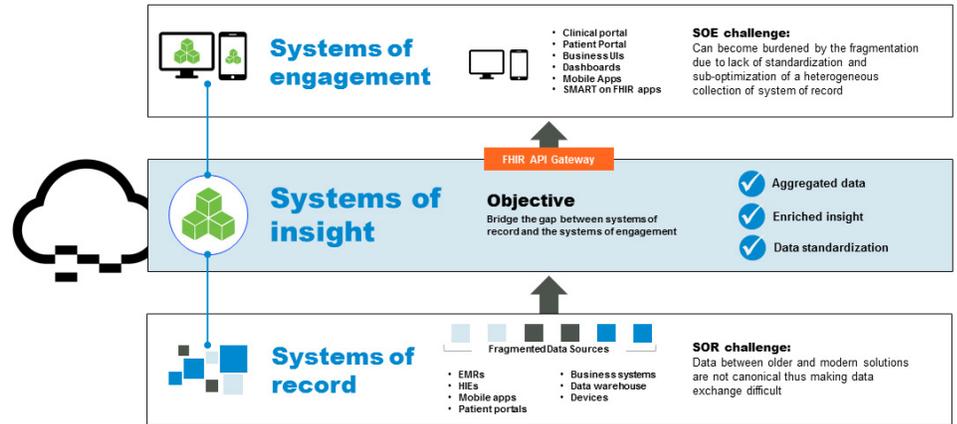
Today's health delivery organizations are becoming increasingly complex, as many systems of record are a mix of older and more modern solutions developed in-house or delivered from a variety of health care solution vendors. In nearly all cases, the data across these systems of record do not consistently conform to industry data model, data exchange and medical terminology standards. The systems of engagement struggle with the fragmentation, lack of standardization, and varying degrees of data access and utility from the multiple systems of record.

HealthConcourse separates these systems, becoming a system of insight. As an intermediary between the systems of engagement and the systems of record, HealthConcourse hides the complexities of the underlying data architecture to ensure that systems of engagement have the information they need to satisfy business requirements. HealthConcourse connects the data interpretation layer to data sources and seamlessly aggregates fragmented data, normalizes that data, and enriches or enhances it so the information can be visualized and used in patient diagnostics.

The benefits of this approach include:

- Better modularity so that individual components can be changed or replaced without cascading impacts across the ecosystem
- The ability to have a best-in-class environment with minimal vendor lock-in, and greater portability of applications and components
- Longevity and portability of the overall architecture and ecosystem to ensure the systems can continue to provide business value as dependencies and infrastructure change over time
- Greater reusability of common capabilities to increase consistency, governance and time to market