

Accreon Cloud Exchange Service White Paper



Current State of the Industry

The fact that the healthcare industry around the globe is trending from an analog method of operation to digital is not in question. While the rate of transformation can vary, just about every healthcare player is embracing newer technology such as Electronic Health Records (EHRs), Patient Portals and Mobile Healthcare Delivery.

Even those outside the tech space are getting on board this digital revolution. Including our world leaders, those who tend to be some of the last to embrace this kind of new technology, have cleared the path for further development.

In 2004, President Bush set a target for all Americans to have Electronic Health Records (EHRs) by 2014. In 2010, Japan announced a similar initiative which they called 'My Hospital Everywhere'.

The great strides in this digital transformation that have been made over the past 10-15 years have also posed an even greater challenge which can be summed up in one word – interoperability. In order for the system to work at maximum efficiency, all of these programs and platforms that store this digital health information need to be able to communicate with one another. This has proven to be difficult given the countless number of unique systems and platforms currently in play.

This seismic shift in the industry creates both opportunities and challenges to solve as Dean Minor noted in his forward in the June 2017 Stanford Medicine 2017 Health Trends Report *Harnessing the Power of Data in Health* "...technology like wearable devices, at-home testing services and telemedicine are empowering patients to be more engaged with and proactive about their own health. Meanwhile, the industry is grappling with the tension between encouraging data sharing to maximize the benefits of data and maintaining patient privacy and trust. All of these developments are altering the role of physicians and their relationships with patients."

For those in the health IT space, the issue isn't that they can't connect to data. It's that they often have to use multiple means to access it.

There are numerous different mechanisms in the space today that can connect data. The hard part is getting the data from one source or system to where it needs to be within a system quickly and seamlessly.

This particular challenge requires more than simply building a software solution. There are plenty of vendors in the space who can sell a program that can collect and store digital information. But what happens when new technology or system evolutions are introduced, and that solution needs to be upgraded in order to function properly?

The cost and inconvenience of keeping the solution updated currently falls squarely on the shoulders of the end user. The reality is that too often, these institutions don't have the knowledge in-house to monitor and maintain those connections and actually make them work in the manner they should.

The result is there are a lot of players in the healthcare space that are buckling under the weight of trying to keep their systems from becoming obsolete and non-functioning in the face of ever-changing technology. The consequences of this situation cannot be overstated. If someone is taken from assisted-living to a hospital that cannot access their EHR for the past year, it can be more than problematic; it can be life-threatening.

Future State of the Industry

There are two fundamental shifts occurring that will greatly affect the state of interoperability in healthcare in the very near future. First is the growing trend of Application Program Interfaces (API's) to help connect disparate data systems. This is a marked shift away from the current situation which sees integration between various healthcare systems overwhelmingly achieved through HL7, FHIR or custom solutions.

API's will be successful at breaking the logjam of information that currently exists with systems that can't readily communicate with one another. In doing so, however, they will present a new challenge for the various institutions in the space. These API's will enable access to what could be seen as an overwhelming amount of data.

The second, and arguably more significant trend, is the evolution of digital health information migrating from the core healthcare providers such as hospitals and clinics to more peripheral players such as senior care facilities, home care providers, pharmacies, electronic medical devices, mobile health devices, as well as software/solution niche vendors who sell their products into the major healthcare institutions. Whereas the challenge of the recent past was making various systems within the healthcare institutions interoperable, the challenge of the very near future will be connecting all of this new peripheral information in an easy and seamless manner.

A senior care facility, mobile health device, and pharmacies will all have completely different systems, platforms and infrastructure. Yet, in a truly interoperable healthcare sector, they will all need to freely and quickly exchange information with each other as well as with hospitals and physician's offices. It's not just accessing the information which presents a major challenge. All of these new sources of data will provide so much information, it may become difficult sorting the necessary information from the superfluous.

Imagine the previous challenges in interoperability are like the frustrating drip, drip, drip from a garden hose.

Ideally one would like the smooth, steady, full flow of the garden hose. What the future represents, however, is more like a full-on blast of a fire hose. We will soon have access to so much information the challenge becomes filtering and determining what is the most relevant information and where it needs to go.

The more pervasive use of present and future technologies will allow for more seamless data movement. However, it's no longer simply about data movement; it's about intelligent data movement. The challenge will be meshing the data together to paint the right picture and answer the right questions.

- How do I get the right data through integration and operability?
- How do we get it to the right places and in an intelligent manner?
- How can we use the data in the right way?

Accreon has long been at the forefront of providing solutions in the healthcare industry that not only improve internal system interoperability but also enable better patient care. We are uniquely positioned to conquer the emerging challenges in the space due to our extensive institutional knowledge.

The Accreon Advantage

The fact is, there are a lot of tech solutions on the market, but just because it exists, doesn't mean the vendor knows how to apply it. Our clients come to us because we understand workflow and where specific tasks need to be in that workflow. We understand how this data came to be and how it needs to be applied.

Perhaps there is no better example of this expertise at work than in our newest offering - the Accreon Cloud Enabled Solution (ACES). ACES is a forward-thinking approach to interoperability solutions. The ACES solution manages integration today by connecting all forms of data exchange above, between a sender and recipient.

ACES is the ideal solution to meet healthcare's emerging challenges of tomorrow, today. As a cloud-based solution, ACES offers a fully-hosted service that allows those on the periphery of the healthcare system to connect and share data with any major player without being saddled with software that needs to be constantly upgraded. ACES includes the tool sets with no software or hardware to install and maintain. Others may offer cloud solutions, but they stop short on service aspects. ACES offers full-service support from our team of experts who make the data exchange seamless regardless of the technology used.

ACES is a cloud solution that features a very simple business model that takes the onus off organizations to maintain and monitor those connections. It's managed on a monthly Software-as-a-Service (SaaS) subscription model which allows customers to easily scale up or pull back as your business ebbs and flows.

The ACES advantage

Simplicity • Cost-efficiency • Service

The ACES advantage provides three distinct benefits:

SIMPLICITY – By engaging ACES, you no longer have to worry about complex operations required to connect and exchange information with other players in the field. Any given healthcare institution could use, as a conservative guess, as many as 30 different core applications. If you manage a senior care facility, home health business, or manufacture or sell electronic health devices, the challenge of seamlessly connecting with all of these systems can seem overwhelming. Monitoring and keeping on track with this constantly evolving infrastructure can be a real burden for any player in the space. With the ACES solution, there is no software to install or new infrastructure to maintain. Just use one simple log-in and leave the rest to us.

COST-EFFICIENCY – ACES works on a month to month SaaS model. Most vendors sell solutions which require clients to pay up-front to buy large expensive pieces of software and then it cost money to maintain them. With ACES, your interoperability infrastructure is implemented, maintained and monitored in our cloud so you are never saddled with a huge maintenance expense. ACES was designed to scale up and down with our clients business so they will never have to worry about exceeding their IT budget. Keeping your information flowing without interruption is all part of the subscription service.

SERVICE – Here at Accreon, we have the track record to back up our reputation as being integration experts. Bottom line – we know this stuff inside and out. Other solution providers may know one corner of the space, but we're able to see the whole picture and deliver the right service for your organization. So, if you manufacture home heart monitors and are unsure how to connect your data to hospitals and physician's offices, worry not. We have both the technical know-how as well as the experience in the overall healthcare space to ensure the job gets done right.

The ACES advantage takes the weight of maintaining interoperability off the shoulders of care providers, device manufacturers, vendors, labs and pharmacies which then frees them up to focus on doing what they do best – enabling excellent patient care.

The healthcare IT space is evolving at an increasingly rapid pace. For any commercial enterprise in the space, not staying ahead of the curve in this new world is not just problematic, it may be detrimental. Making your system seamlessly interoperable with the other players in the space is critical to the future success of your enterprise. The good news is you don't have to take on the burden of building and maintaining this critical infrastructure. By engaging Accreon's ACES cloud-based solution, seamless interoperability is just a click away. Contact us at solutions@accreon.com to learn more about ACES and how it can solve your interoperability challenges quickly, easily, and affordably.