

How HealthTech providers can best achieve interoperability in UK healthcare

At its core, interoperability represents effective information sharing between care settings; organisations; healthcare professionals; and citizens to optimise patient outcomes and quality of care. It is a positive vision but achieving it remains one of the key challenges for HealthTech companies seeking to integrate their digital solutions within the UK NHS healthcare system. There are many reasons why.

One important issue is the lack of consistency in standardisation. Multiple electronic patient record (EPR) systems use different healthcare standards, including HL7v2 and FHIR for example. **They may also be running systems on different versions of the same standard, leading to compatibility issues.** Coupled with this, many operational systems lack appropriate integration points for innovative new solutions to be properly included in care pathways, resulting in non-optimal workflows.

Patient data is sensitive and ensuring privacy and security of the data is crucial. If the HealthTech company fails to integrate its new solutions effectively into existing hospital or patient workflows, convincing healthcare providers, patients, and other stakeholders to adopt them can be a significant challenge.

HealthTech organisations also frequently find difficulties getting access to people with the right skills. They often face resource constraints with the majority of their workers capable at using innovative digital solutions but lacking skills around healthcare workflows and interoperability standards.

Finally, interoperability with centralised NHS digital services like the personal demographics service (PDS), spine mini services provider (SMSP) or summary care records (ShCR) etc. requires significant effort and investment, which can create a barrier to adoption and success.

The journey to interoperability

As the largest interoperability solution provider in UK Healthcare, **InterSystems provide key insights for start-ups to conceptualise and integrate their digital solutions effectively within the complex NHS ecosystem.** The end goal is to provide a mature understanding of interoperability challenges and how HealthTech start-up organisations can most effectively overcome them.

For HealthTech start-ups, **the journey to interoperability begins with innovation and leveraging cutting-edge technologies like data analytics, wearables, machine learning, and artificial intelligence** to develop innovative solutions that address a particular healthcare challenge.

However, in a highly fragmented industry, coordinating and integrating HealthTech solutions into a complex ecosystem can be challenging. **Apart from innovation, HealthTech startups also need to ensure seamless integration and adoption of their solutions.** For example, integrating with different electronic patient records across different hospitals can be a complex task, requiring support for multiple healthcare interoperability standards and a deep understanding of hospital workflows.

How best to address interoperability issues

When developing innovative healthcare solutions, integrating them into hospital and patient workflows should always be among the core design principles. **It is important that HealthTechs understand the privacy, security, and information governance (consent) around patient data,** and which care setting and systems within those care settings best fit their digital solution.

At the same time, they must ensure that their solution integrates with primary care systems; hospital systems; social care systems; or integrated care systems within the NHS ecosystem. **To do that effectively, they should work with interoperability platform vendors like InterSystems that provide a unified platform for data management and interoperability.** In doing this, they should be aware that building standards-based interoperability, specifically FHIR, into the HealthTech solution stack can future-proof their solutions.

InterSystems HealthTech success tips:

- **Early integration:** Embed flexible interoperability in the design phase of your solution to ensure seamless integration with NHS systems.
- **User-centric design:** Focus on how your solution will improve patient care or healthcare provider workflows within the NHS.
- **Utilise standards and protocols:** Familiarise yourself with NHS standards and protocols to ensure compliance and ease of integration.
- **Leverage expertise:** Seek guidance from InterSystems and our partners, who have decades of experience and understand the NHS's digital landscape to navigate the interoperability challenge effectively.

Final thoughts on achieving interoperability

Interoperability, while challenging, is a bridge that connects innovative HealthTech solutions with the complex but critical NHS digital infrastructure. **InterSystems IRIS for Health is used by a wide range of HealthTechs** including HBS, Ummanu Health, and eConsult.

By understanding the nuances of NHS systems and designing solutions with interoperability at their core, **start-ups can significantly enhance their potential for success.**



Get in touch to arrange a discovery session today www.intersystems.com/uk

