

Executive Brief

Interoperability: Making critical connections for better patient care

Envision this hypothetical scenario: A seven year-old boy arrived in an Omaha emergency department presenting with life-threatening, stroke-like symptoms. By taking advantage of a network capable of sharing images, his mother was able to obtain a same-day second opinion on the brain scan from another neurologist in San Francisco. With this specialist's input, it was decided that a course of blood thinners – not invasive surgery – was the preferred course of treatment.

This theoretical case illustrates how interoperability can make a significant impact on the quality of care received. However, creating the necessary connections — between IT systems, healthcare facilities, clinicians, caregivers and so many others — requires planning, commitment and vision. And while the consequences may not all be as dramatic as the case detailed above, the benefits of interoperability can be wide-ranging for both patients and providers across the continuum of care.

A single source of truth

Greater interoperability can create a more holistic patient record by gathering all available patient information in a centralized standardsbased repository — one with rich integration to the clinical applications providers use every day. Instead of fragments of patient records scattered across various facilities and systems, a “single source of truth” is formed, making it possible for care teams to easily access and view all the same information. As a result, care decisions and treatments may be accelerated, and patients can feel more confident in diagnoses since their providers are working with a more complete medical record.

For medical imaging in particular, interoperability makes it possible to consolidate and store images in a single vendor neutral archive (VNA), eliminating departmental silos where imaging data is often stored on workstations, filing cabinets, and smartphones. Greater access helps to paint a clearer picture of the patient, while streamlined systems make it easier to store, share and view images confidently, protecting sensitive patient data from cyber threats and breaches.

The gift of time

With all of a patient’s information centralized in a protected repository (and ideally accessible through an image-enabled EHR), providers can reallocate their time accordingly. Instead of spending hours mining information from disjointed, complicated and varying technologies/ locations, they can focus on more meaningful patient interactions, conversations and care plans.

And while more face time is important, so too is the need to reduce the amount of time wasted in waiting rooms. Interoperability eliminates the costly practice of burning images to CDs and then delivering them to referring or consulting providers via patients who act as couriers. The ability to share and view images through interoperable systems also means that patients may spend less time waiting as images are uploaded and reviewed prior to their arrival.

The ability to both connect and protect patients and their healthcare data is among the greatest strengths of interoperable systems.

Déjà vu all over again

Just as concerning as unnecessary wait times is the prevalence of replicated imaging exams. In the absence of interoperability, images may not be transferred or shared in a timely manner, prompting physicians to duplicate tests. In addition to the time wasted in multiple appointments, patient dollars are squandered in co-pays, not to mention their exposure to unnecessary doses of radiation. Healthcare systems that leverage interoperable technologies can prevent this kind of redundancy, facilitating more efficient appointments, which frees up time to see more patients — boosting the bottom line.

The ability to both connect and protect patients and their healthcare data is among the greatest strengths of interoperable systems. To learn how the Watson Health interoperability suite of solutions can benefit your patients and your organization, visit ibm.com/watson-health/imaging

About Watson Health Imaging

Watson Health Imaging, a segment of IBM Watson Health, is a leading provider of innovative artificial intelligence, enterprise imaging and interoperability solutions that seek to advance healthcare. Its Merge branded enterprise imaging solutions facilitate the management, sharing and storage of billions of patient medical images.

With solutions that have been used by providers for more than 25 years, Watson Health Imaging is helping to reduce costs, improve efficiencies and enhance the quality of healthcare worldwide.

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IBM Watson Health

75 Binney Street, Cambridge, MA 02142

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