The Watson Health imaging vision

Watson Health aims to bring the power of AI to healthcare to expand the physician’s view so they have greater confidence in diagnostic and treatment decisions for their patients.

We are building next-generation solutions for medical imaging professionals, powered by Watson technology, which intends to understand, reason, and interact with data and people. Specifically, we seek to help clinicians:

1. See expansively by harnessing the power of AI to search text and image data to identify contextually-relevant information.
2. Recognize reliably by aggregating and displaying information that may otherwise be easily overlooked.
3. Communicate objectively by analyzing structured and unstructured patient data and presenting insights for physicians’ consideration.

IBM Watson Imaging Patient Synopsis is a pivotal component of our initial wave of commercially available AI offerings. Leveraging text analytics to inform care decisions, this powerful solution marks the beginning of an exciting journey to help transform medical imaging across the globe.
IBM Watson Imaging Patient Synopsis

Radiologists are a crucial, consultative part of the patient care team. However, obstacles to communication, siloed data, increasingly high output expectations and numerous distractions present growing challenges to their already complex role.

Radiologists are inherent multi-taskers, spending just one third of their time interpreting images.\(^1\) Their work days are dynamic and full of interruptions, making effectiveness in the reading room an ongoing challenge, even for highly-trained specialists.

When there are unusual presentations or unclear indications in a given imaging study, radiologists may require additional information to make their diagnoses, which means sifting through an overwhelming amount of patient data in the EHR. And, since 80 percent of EHR data is unstructured,\(^2\) and radiologists often do not perceive EHRs as user-friendly, this crucial task of finding additional information can consume valuable time and in some cases may increase the risk of critical data not being considered.

Patient Synopsis is a radiologist-trained AI tool that aims to efficiently **inform confident care decisions** by extracting relevant patient information from the EHR and projecting that data via a **single-view summary** in sync with PACS.

Patient Synopsis, a cloud-based solution that can integrate with your existing systems, provides patient context from a comprehensive list of data sources — in a matter of seconds.
Radiologist trained
Patient Synopsis has been trained by radiologists for radiologists, taking into consideration what they believe to be important in their day-to-day tasks.

96
radiologists trained
Patient Synopsis

2
institutions provided
de-identified clinical
notes

4,000
clinical notes were
analyzed, including
treatment notes,
radiology reports and
surgical notes

12
categories of patient
data were defined for
the Patient Synopsis
summary

1
template applies to
all data, structured
and unstructured

“We value our relationship with IBM Watson Health because we want to be on the forefront of imaging. Watson Imaging Patient Synopsis is an important step in the right direction. Its cognitive ability strives to present a patient synopsis “front sheet,” with the most relevant and critical clinical information readily accessible while interpreting images. With this clinical insight easily available, radiologists can make better decisions and become more important consultants to patients’ clinical care teams.”

Larry Elgarresta, MD, VP, Radiology Associates of South Florida, Baptist Health South Florida
About Watson Health Imaging

Watson Health Imaging, a segment of IBM Watson Health, is a leading provider of innovative cognitive computing, 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.

To learn more about Patient Synopsis and our vision for future AI-enabled solutions, visit merge.com/ai.


Factors Affecting Physician Professional Satisfaction and Their Implications for Patient Care, Health Systems, and Health Policy. Rand Health. 2013.
