

## IBM Watson Health Invests in Research Collaborations with Leading Medical Centers to Advance the Application of AI to Health

Initial projects focus on practical application of AI to improve care, enhance health team workflow, and better understand human-machine interactions

ARMONK, N.Y., Feb. 13, 2019 /[PRNewswire](#)/ -- IBM Watson Health (NYSE: [IBM](#)) today announced plans to make a 10-year, \$50 million investment in research collaborations with two separate academic centers - Brigham and Women's Hospital, which is a teaching hospital of Harvard Medical School, and Vanderbilt University Medical Center - to advance the science of artificial intelligence (AI) and its application to major public health issues.

The scientific collaborations with each institution will focus on critical health problems that are ideally suited for AI solutions. Initial areas of study are expected to include the use of AI to improve the utility of electronic health records (EHRs)[1] and claims data[2] to address significant public health issues like patient safety[3], precision medicine[4] and health equity[5]. The research will also explore physician and patient user experience and interactions with AI technologies.

"Building on the MIT-IBM Watson Lab announced last year, this collaboration will include contributions from IBM Watson Health's longstanding commitment to scientific research and our belief that working together with the world's leading institutions is the fastest path to develop, advance, and understand practical solutions that solve some of the world's biggest health challenges," said Kyu Rhee, M.D., M.P.P., vice president and chief health officer at IBM Watson Health. "Today, for example, physicians are spending an average of two hours with their electronic health records and deskwork for every hour of patient care,[6] a phenomenon the American Medical Association says is leading to a steady increase in physician burnout.[7] AI is the most powerful technology we have today to tackle issues like this one, but there is still a great deal of work to be done to demystify the real role of AI in healthcare with practical, proven results and clear-cut best practices. By putting the full force of our clinical[8] and research team[9] together with two of the world's leading academic medical centers, we will dramatically accelerate the development of real-world AI solutions that improve workflow efficiencies and outcomes."

Drawing on the respective areas of expertise from each organization, the collaborations will be a joint effort among IBM Watson Health's newly appointed vice president and chief science officer, Gretchen Purcell Jackson, M.D., Ph.D., David Bates, M.D., M.S., chief of general internal medicine at Brigham and Women's Hospital, and professor of medicine at Harvard Medical School, Kevin Johnson, M.D., M.S., chair of the department of biomedical informatics at Vanderbilt University Medical Center, and Gordon Bernard, M.D., executive vice president for research, at Vanderbilt University Medical Center.

"IBM Watson Health has had a long history of leading in scientific research," said Jackson. "These collaborations give our scientists at IBM Watson Health the opportunity to work with some of the best health informatics researchers in the world to advance the field in the areas of artificial intelligence, clinical decision support, and implementation science. Medical data is expected to double every 73 days by 2020[10]. As a practicing surgeon, I often had to make critical decisions about children's lives without time to dig for information buried in electronic health records or sift through thousands of studies in the literature. Our collaborative research will unlock new insights that affect broad health stakeholders: from providers, payers, governments, and life science companies to ultimately the most important stakeholder, patients, and seek to improve health around the globe."

"We all know that the future of health belongs to AI but today health around the globe is siloed and not actionable, making timely insights difficult to obtain," explained Bates. "Through AI, we have an opportunity to do better, and our hope is to find new ways through science and partnerships with industry leaders like Watson Health to unlock the full potential of AI to improve the utility of the EHR and claims data to address major public health issues like patient safety."

Johnson added: "I have committed my career to using health information technologies to deliver precision medicine, promote health equity, and understand the human-machine interface and opportunities to improve public health. As the largest biomedical informatics department in the U.S., we have been a longstanding leader in understanding the role and potential of new technologies like AI. We are excited to work with a leader like IBM Watson Health and we look forward to expanding the relationship as Watson Health continues to grow."

For more information about the collaborations or the science behind AI in health, please visit the [website](#). Interested parties can also find more information at the IBM Watson Health booth at the HIMSS conference located at [booth # 6459](#).

### **About IBM Watson Health**

Watson Health is a business unit of IBM that is dedicated to the development and implementation of cognitive and data-driven technologies to advance health. Watson Health technologies are tackling a wide range of the world's biggest health care challenges, including cancer, diabetes, drug discovery and more.

[Learn more.](#)

### **About Vanderbilt University Medical Center**

[Vanderbilt University Medical Center](#) (VUMC) is one of the nation's leading academic medical centers and is the largest comprehensive health system in Tennessee. Its core missions are the delivery of patient care, performing biomedical research and training future leaders in health care. VUMC is the recipient of top accolades by the National Academies, the Magnet Recognition Program, the Leapfrog Group, and has been

named a Top Hospital by Truven Health Analytics 14 times. In 2018, *U.S. News & World Report* named VUMC to the 'Honor Roll' of the nation's top 20 hospitals with 10 nationally-ranked adult specialty programs. In 2018, *U.S. News* also named the Monroe Carell Jr. Children's Hospital at Vanderbilt among the nation's 'Best Children's Hospitals' with 10 out of 10 pediatric specialty programs nationally ranked. For more information and the latest news follow Vanderbilt Health on [Facebook](#), [LinkedIn](#), [Twitter](#), and in the [VUMC Reporter](#).

[1] American Medical Association and Electronic Medical Records: <https://www.ama-assn.org/practice-management/digital/improving-electronic-health-records>

[2] EMR + Claims data and the Longitudinal Health Record: <https://www.ibm.com/blogs/watson-health/using-ehr-population-health-whats-missing/>

[3] World Health Organization and Patient Safety: <https://www.who.int/patientsafety/en/>; Crossing the Quality Chasm: <http://www.nationalacademies.org/hmd/Global/News%20Announcements/Crossing-the-Quality-Chasm-The-IOM-Health-Care-Quality-Initiative.aspx>; Medical Errors are 3rd leading cause of death: <https://www.cnbc.com/2018/02/22/medical-errors-third-leading-cause-of-death-in-america.html>

[4] Centers for Disease Control and Precision Medicine: <https://www.cdc.gov/features/precision-medicine/index.html>; Precision Medicine in Cancer Treatment: <https://www.cancer.gov/about-cancer/treatment/types/precision-medicine>; Vanderbilt Precision Medicine Initiative: <https://www.vumc.org/cpm/>

[5] World Health Organization and Health Equity: [https://www.who.int/topics/health\\_equity/en/](https://www.who.int/topics/health_equity/en/), <https://www.who.int/healthsystems/topics/equity/en/>; American Public Health Association and Health Equity: <https://www.apha.org/topics-and-issues/health-equity>

[6] <https://ehrintelligence.com/news/primary-care-doctors-spending-6-hours-daily-on-ehr-data-entry>

[7] <https://www.healthdatamanagement.com/news/ama-president-calls-for-end-to-electronic-health-record-abuse>

[8] <https://www.ibm.com/blogs/watson-health/do-doctors-fear-ai/>

[9] <https://www.ibm.com/blogs/watson-health/watson-health-get-facts/>

[10] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3116346/>

**Contact:**

Rachel Hutman

[rachel.hutman@ibm.com](mailto:rachel.hutman@ibm.com)

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