GE HealthCare and Mass General Brigham Collaborate on an AI Algorithm to Predict Missed Care Opportunities

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CHICAGO--(BUSINESS WIRE)--Sep. 6, 2023-- GE HealthCare and Mass General Brigham announced, as part of its initial collaboration, the co-development of an artificial intelligence (AI) algorithm that will help increase operations effectiveness and productivity. The first innovative AI application from the collaboration is the schedule predictions dashboard of Radiology Operations Module (ROM), a digital imaging tool that helps optimize scheduling, reduce cost, and free providers from administrative burden, allowing more time for the clinician-patient relationship. ROM is commercially available to healthcare institutions.

The actionable insights driven by AI and machine learning are designed to help improve both departmental and enterprise-wide productivity and administrative efficiency. By 2025, the U.S. is estimated to have a shortage of approximately 446,000 home health aides, 95,000 nursing assistants, 98,700 medical, and lab technologists and technicians, and more than 29,000 nurse practitioners, according to a report conducted by industry market analytic firm Mercer. Health systems will need to rely on technology to help solve some of these challenges.

"Amid the vast sea of data and the heavy tasks that divert healthcare providers from patient care, our collaboration with Mass General Brigham is groundbreaking. Through the fusion of distinctive datasets and cutting-edge machine learning methods, harnessing the synergy of clinical and technical proficiency, we are ushering in unprecedented healthcare advancements," said Parminder Bhatia, Chief AI Officer of GE HealthCare.

Operational AI-enabled tools can address challenges that often pose a threat to patient care such as cost of care, and hospital inefficiencies. When a patient misses an appointment, fails to schedule a follow up or is late, also known as missed care opportunities (MCO), the impact can be significant. The co-developed algorithm is intended to predict MCO and late arrivals, which could help increase flexibility and streamline administrative operations, improve patient satisfaction, and better accommodate urgent, inpatients, or walk in appointments. In preliminary tests, the algorithm was able to predict the missed care opportunity correctly, at rates of up to 96%, with limited false positives[1].

"Utilizing operational AI and machine learning can bring providers together and streamline data sets," said Keith Dreyer, DO, PhD, Chief Data Science Officer, Mass General Brigham. "The strategic use of AI offers great potential for the future of healthcare and we're proud to be at the forefront of the movement. This technology has the potential to reduce burnout and allow physicians to spend more time with patients, which may ultimately lead to better outcomes."

The 10-year commitment to drive innovation between GE HealthCare and Mass General Brigham was first signed in 2017 to explore the use of AI across a broad range of diagnostic and treatment paradigms. GE HealthCare and Mass General Brigham are working to implement AI in ways that will support each patient's journey.

About GE HealthCare Technologies Inc.

GE HealthCare is a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator, dedicated to providing integrated solutions, services, and data analytics to make hospitals more efficient, clinicians more effective, therapies more precise, and patients healthier and happier. Serving patients and providers for more than 100 years, GE HealthCare is advancing personalized, connected, and compassionate care, while simplifying the patient's journey across the care pathway. Together our Imaging, Ultrasound, Patient Care Solutions, and Pharmaceutical Diagnostics businesses help improve patient care from diagnosis, to therapy, to monitoring. We are an $18.3 billion business with 50,000 employees working to create a world where healthcare has no limits.

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[1] Results are based on testing at one Mass General Brigham location. In testing, the range of prediction of missed care was 67% to 96%. Results may not be typical.

* Mass General Brigham was not compensated for this testimonial, but has a financial stake in the commercial success of ROM. The statements by Mass General Brigham described here are based on results that were achieved in its unique setting. Since there is no "typical" hospital and many variables exist, i.e., hospital size, case mix, etc. There can be no guarantee that other customers will achieve the same results.

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