

# Use of Novel Data Types from the Electronic Health Record to Improve Hospital Medicine Practice



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12:00 – 1:00 PM

BMI Classroom 4004

Woodruff Memorial Research Building

or

Join us on Zoom link:

<https://zoom.us/j/97167609751>



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**Abstract:** Although Hospital Medicine is now one of the largest physician specialties in the country, research into hospitalist practice patterns and performance remains limited. Significant variability exists in Hospital Medicine outcomes; for example, between two hospitalists in a given practice, readmission rates and length-of-stay can vary by as much as a factor of two. Data to explain such variability are extremely limited. Previously, research into clinical practice patterns was limited both by the data available in paper charts and the need for manual chart reviews. However, the widespread adoption of electronic health records (EHRs) in the past decade has allowed for the study of novel data types, such as audit logs, and recent advances in natural language processing will reduce the need for manual chart reviews, which will allow for superior studies in both detail and scale. Development of next-generation performance metrics, both for individual physicians and for the practice environment at large, will allow for improved patient care and bolster the financial sustainability of the healthcare system. Additional aims of the current work include:

- Development of novel clinical practice metrics incorporating EHR metadata to identify "practice phenotypes"
- Addition of data from clinical notes using natural language processing for clinical decision support
- Development of hospital state metrics to guide operations and quality improvement initiatives

**Bio:** David L. Minkoff, M.D. is an Assistant Professor in the Division of Hospital Medicine at the Emory University School of Medicine. He completed his B.A. in Biophysics & Biochemistry at the University of Pennsylvania in 2004. Following his undergraduate studies, he performed research in the Departments of Radiology and Physics & Astronomy focusing on fMRI and biomedical optics. He completed his M.D. at the University of Pittsburgh in 2016, and he completed his Internal Medicine residency at Emory in 2019. Currently, he serves as an attending hospitalist at Emory University Hospital Midtown.