Summarizing Patients Like Mine via an On-demand Consultation Service

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ABSTRACT

Using evidence derived from previously collected medical records to guide patient care has been a long-standing vision of clinicians and informaticians, and one with the potential to transform medical practice. We offered an on-demand consultation service to derive evidence from millions of other patients' data to answer clinician questions and support their bedside decision making. We describe the design and implementation of the service as well as a summary of our experience in responding to the first 100 requests. We will also review a new paradigm for a scalable time-aware clinical data search, and to describe the design, implementation, and use of a search engine realizing this paradigm.

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BIOGRAPHY

Dr. Nigam Shah is Professor of Medicine (Biomedical Informatics) at Stanford University, and serves as the Associate CIO for Data Science for Stanford Health Care. Dr. Shah's research focuses on bringing machine learning to clinical use safely, ethically, and cost-effectively. Dr. Shah was elected into the American College of Medical Informatics (ACMI) in 2015 and was inducted into the American Society for Clinical Investigation (ASCI) in 2016. He holds an MBBS from Baroda Medical College, India, a PhD from Penn State University, and completed postdoctoral training at Stanford University.

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