

Department of Biomedical Informatics

Health analytics to inform transformations in health care delivery



Abstract: We will discuss the preliminary findings from two research projects. These projects use health analytics techniques and have very unique applications. The Ohio Department of Medicaid (ODM) developed the Ohio Opportunity Index (OI)— an area-level deprivation index comprised of seven health and wellness domains. ODM did not have a means to visualize this data and effectively communicate it to its key stakeholders. To address the gap, my research team developed the Ohio Opportunity Index Dashboard. We will demonstrate the data visualization tool and describe its development.

The second project is based on a larger assessment of inpatient portal use at our medical center. Inpatient portals are a recent technological tool that provide a hospitalized patient with similar functions to those

found in the widely-adopted outpatient portal technology. These tools provide patients the ability to view vital signs, laboratory results, medication information, schedule appointments, and communicate with their providers. My research team analyzed the audit log files of outpatient and inpatient portal users to investigate differences in inpatient portal use among experienced and new outpatient portal users. Study findings can be used to inform training interventions to bolster inpatient portal use. We will cover how we processed and analyzed the data to test our hypothesis that experience with outpatient portals may influence inpatient portal use.

About the Speakers: Dr. Fareed received his health services research degree in 2013. From 2013-2017, Dr. Fareed was an assistant professor in health administration and policy at the Pennsylvania State University. He has been at the Ohio State University since 2018, and is an assistant professor in biomedical informatics and core faculty within the Center for the Advancement of Team Science, Analytics, and Systems Thinking in Health Systems Research and Implementation Science (CATALYST).

Dr. Jonnalagadda received her degree in epidemiology in 2018 from the University of Pittsburgh. She has been at the Ohio State University since October 2019 working as a postdoctoral researcher at the Center for the Advancement of Team Science, Analytics, and Systems Thinking in Health Systems Research and Implementation Science (CATALYST).

Naleef Fareed, PhD and Pallavi Jonnalagadda, PhD Friday, January 24th, 11:00am-12:00pm 105 BRT