Duke Team in JAMA: nSES Data Doesn’t Add Much Prediction Power Beyond What EHRs Already Have

“This work reaffirms that the social environment is associated with health outcomes; however, it suggests that information about environment may not contribute much more to population risk assessment than is already provided by EHR data. Although this does not mean that integrating social determinants of health into the EHR has no benefit, researchers may be able to use EHR data alone for population risk assessment.”

rupen Bhavsar PhD, Assistant Professor of Medicine in the Division of General Internal Medicine and first author of an original investigation reported in the health informatics section of JAMA Network Open on September 21, answered the paper’s central question – “What’s the added predictive value of neighborhood socioeconomic status when predicting outcomes and use of services with data from the electronic health record?” – in a single tweet: “Short answer: It depends.”

In the study, researchers from Duke University “sought to determine whether census tract-level nSES indicators are associated with poor health outcomes, whether census tract-level nSES data alone or in concert with EHR data can improve risk prediction beyond current models by using EHR data and which elements in EHR indicators can serve as proxies for census tract-level nSES measures.” The goal: use the information to “deploy pragmatic interventions, such as patient navigators, social workers or access to telemedicine, to high-risk populations.” They found that the value of the added data “varied by outcome of interest,” but emphasized that “when added to EHR variables, nSES did not improve predictive performance for any outcome.”

Consultants See Hospitals, Analytics Vendors in Deeper Relationships

Hospitals are “taking on more accountability and expanding into non-acute care settings, while looking for suppliers with broader solutions,” according to LEK Consulting’s annual study. That’s “a growing opportunity for enabling technologies.”

Healthcare industry suppliers “face pressure to deliver value,” notes a report from LEK Consulting, but they can “seize opportunities,” it says, “especially by offering solutions and enabling technologies to help respond to the demands of value-based care.” That’s because “hospital systems are turning to outside partners for enabling technologies that allow them to more efficiently move patients to lower-acuity settings or reduce variability in care delivery” -- examples, LEK says, include patient engagement tools, telehealth, predictive analytics and clinical decision support tools. “Overall, we expect the big progressive systems to continue to get bigger,” the report says, “and to drive the continuing shift toward a new, value-based care model.”

Indeed, a statement says, “the Department of Health and Human Services may have slowed the Centers for Medicare and Medicaid Services’ drive towards value-based care,” but evidence from LEK Consulting’s annual survey of hospital executives “indicates that progress towards more accountability and value-based contracting is continuing apace.” The ninth annual Strategic Healthcare Landscape Review combines responses from hospital decision makers with economic data and other insights; in a first this year, it was conducted in collaboration with the American Hospital Association, which surveyed its members.