Big data collaboration to improve chronic disease management
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Duke-NUS Graduate Medical School Singapore (Duke-NUS) and Holmusk, a global tele-health platform, have recently announced a collaboration to further the potential of big data in healthcare. Big data refers to very large, unstructured and diverse datasets that cannot be managed using conventional methods. In healthcare, big data and analytics allow us to discover patterns that would not be found otherwise, and make predictions about disease. This has the potential to improve care and lower costs.

The collaboration will focus on addressing ways to improve care management for diabetes and mental health. The aim is to leverage information collected from personal health records, medical and fitness devices, as well as more traditional sources of health data such as medical records, claims data and clinical research. The result will be a new generation of tools that offer better insights, real-time feedback and recommendations. These will enable physicians and patients to make timely, evidence-based and personalised decisions about health and disease management.

"We are excited to be contributing to the healthcare IT space in Singapore," said Professor David Epstein, Director of Duke-NUS' Centre for Technology and Development. "With the decision-making tools that will come from this collaboration, it will be possible for hospitals and doctors to adopt a more patient-centric approach to determining the necessity, extent and timing for particular treatments."

"We're looking forward to helping develop and evaluate tools that can be applied in the hospital setting to cost effectively improved delivery of patient services," said Professor Eric Finkelstein from the Health Services and Systems Research Programme at Duke-NUS. Professor Finkelstein will be overseeing the collaboration with Holmusk on the Duke-NUS campus. His research focuses on health technology assessment and the use of incentives to influence health behaviours.

"From banking to retail, many sectors have already embraced big data," said Nawal Roy, CEO and founder of Holmusk. "We're still in the early days of the big data revolution in healthcare. With this collaboration, we can help to transform the way we manage health. By putting powerful and accurate decision support tools into the hands of patients and doctors, we can make the system more efficient, cost-effective and data-driven. Ultimately, we want to improve patient outcomes."