POPULATION HEALTH FORUMS

5 Analytic Imperatives for Successful Population Health Management

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Dr. Graham Hughes is the Chief Medical Officer within SAS Institute's Center for Health Analytics and Insights. He is responsible for identifying and developing opportunities to create novel analytics solutions that help organizations improve care quality, clinical operations and patient outcomes.

Through an entertaining look at various marketing examples outside of health, Dr. Hughes explained that data in aggregate can be used to anticipate and leverage behaviors. Data mining can be used to understand visitor profiles, and data analysis can provide a high degree of accuracy. Behaviors and people are motivated by their diverse types of experiences; how to understand and leverage those behaviors is well understood in retail, finance, and insurance. According to Hughes, there are many valuable lessons from the retail industry that can be applied to healthcare.

Using the illustration of a HONDA (Hypertensive, Obese, Non-Compliant, Diabetic and Asthmatic) patient, Hughes pointed out that the 21st Century Challenge involves understanding how to ameliorate risk in these populations. He asked the audience to think about population health, starting with the individual and then layering in the various interactions between genetics, environment, behavior and related data.

Hughes when on to discuss the leap from volume to value, explaining that achieving value is really quite complicated, and goes beyond the cost/quality equation. We often don't fully understand the scope of the timespan being used to assess value or from which of perspective we are measuring value. What are we doing systemically to understand which outcomes really matter to the patient?

A robust analytics foundation includes: management of financial risks and incentives; proactive management of quality and outcomes; improvement of efficiency and care delivery; and population health management and patient engagement.

The future will include significant movement toward transparency and data sharing at the regional and international level. Connectivity will continue to play a key role. "Assume every device is connected...your t-shirt, jacket, and shoes will be submitting data over the next 10 years and the data will be used to help us understand the individual," states Hughes.

In summary Dr. Hughes described his analytics imperatives as: movement from piecemeal analytics to enterprise analytics; a mixed delivery approach – on premises and cloud-based; clinical decision support system as a continuum; rethinking the end-to-end process; and development of an analytics Center Of Excellence.

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