EY Smart Health Analytics

Building a better

working world

The future of health care



Health systems amass huge amounts of data but struggle to realize insights

- According to the findings of a Black Book survey, 84% of the C-suite execs and board members polled said their health systems only used analytics to a "limited or minimal extent to generate commercial or outcome insights."1
- Hospitals have a complex web of electronic health record (EHR) vendors and data interoperability in healthcare is at a historical low. According to the Healthcare Information and Management Systems Society (HIMSS) Analytics, the average health system has 16 different EHR platforms. 2
- 73% of clinicians surveyed say they do not have all of the information they need to become a value-based system. They lack full understanding of their patients and consumers beyond limited clinical data sets, which are often siloed in numerous systems. 3

EY Smart Health Analytics solution benefits

EY Smart Health Analytics helps you to:

- Combine data from a full range of internal and external sources to create live data sets that provide a broad view of each patient
- Retain full control of data and how it is used and share relevant insights with patients in ways that improve care and build trust
- Use customized data sets and algorithms to meet specific needs, create relevant insights based on a fuller understanding of the patients and populations
- Identify how a patient's wider context could affect their health today and, in the future, and how to provide better care and support with the resources at your disposal
- Make it easier for people across the health ecosystem, clinicians, management and partners to understand insights so they can take action that makes a difference
- Use powerful visualizations to filter what doesn't matter and focus on what does

Using artificial intelligence (AI) to drive personalized health care

The mega health trends of our time center around personalization, technology adoption, smart Al and facilitating health care equitably for all. The COVID-19 pandemic in particular has accelerated the transition to virtual, digitally enhanced smart care and wellness.

EY Smart Health Analytics is a modular solution comprised of AI libraries that accelerate the application of analytical capabilities and reduce implementation complexity. AI libraries are preconstructed to accelerate data preparation, modeling and visualization. By integrating and analyzing data inside and outside of the health enterprise about an individual, EY Smart Health Analytics can fully tailor the care experience and anticipate the needs of each patient.

The EY Smart Health Analytics experience includes scalable personalization of care through data aggregation, dashboards and predictive modeling at the individual and population health level leveraging digital twin technology. The EY Smart Health Analytics Digital Patient Twin tool adds value by using data outside of health systems to bring a more holistic view of an individual or population, helping not only to identify the problem, but also to recommend possible courses of action to identify the right solution.

Key functionality

After data is collected, it is ingested into the proprietary analytics platform for analysis, moving beyond merely presenting the collected data.

Collect data to create a rich view of the patient beyond the medical record Ingest and analyze data elements to translate data into information Provide users with actionable insights, enabling personalized care



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EY Smart Health Analytics in action: Helping a local safety-net health system in the northeast US to better capture social determinants data from their patient population and fast-track their analytical capabilities

EY teams are collaborating with the client to develop and test a proxy methodology for the current survey, that would reduce the reliance on patients to complete the survey themselves. Additionally, the high utilizer predictive model of the EY Smart Health Analytics Solution Digital Patient Twin tool is being used to accelerate the capability to apply predictive analytics to this data set. The existing model is being adapted to meet the specific needs of the client and characteristics of the target patient population, and will go through testing and validation to confirm accuracy when used with patient provided and proxy survey data.

Client challenges

- The client had already begun the journey of understanding the socioeconomic needs impacting health of the patient population through the implementation of their electronic health record (EMR) vendor's social determinants module and host of programming.
- The current module requires data collection from patients via survey, which has proved challenging for the organization till date.
- In addition to data collection, the organization also sought to leverage this data to identify potential high utilizers of care by leveraging predictive analytics.

Client benefits

- Obtain a more robust and timely data set describing the social determinants impacting patients
- Identify potential high utilizers proactively before they reach high utilization status and provide intervention
- Help deliver equitable and personalized care by leveraging this data into the appropriate workflows
- Reduce the cost of overall care and offer exceptional personalized
 experience

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