



# **Empowering Healthcare Analytics through Predictive Analytics and Machine Learning**

Pragmatic Works' mission is to empower our clients to improve their business by leveraging their data. Through predictive analytics and machine learning, we help healthcare organizations anticipate business factors that lead to improved efficiency and quality of services provided.

Healthcare analytics allows providers to make more informed decisions that improves clinical efficiency and quality care of patients. The volume and variety of data has increased due to the adoption of EHRs, and by tapping into it healthcare organizations can transform it into actionable information to enhance organizational ability, patient care and experience.

By better understanding their data, healthcare organizations are able to solve challenges like patient flow forecasting, clinical and demographically adjusted patient risk and employee turnover. With innovative tools like Azure ML and Power BI, this data is also available in real-time to help them make better business decisions quicker.

## **FORECASTING**

Forecasting patient flow and hospital census enables healthcare providers to better match the supply of healthcare professionals and facilities to actual patient demand. Predictive analytics can uncover patterns in demand that connect the dots between community demographics, provider services, competition, historic demand and many other factors to determine forecasted demand. In doing so, healthcare providers can avoid costly over / under staffing of people and resources.

## **PERSONALIZATION**

Crafting a specific care plan that will guide a patient toward wellness is very important. Predictive analytics is able to uncover patterns across patient behavior, socio-economic indicators, payer information, medical and family history

and many other factors that can be used to predict the likelihood of patient compliance throughout the journey to a quality outcome. Personalization can be used to evaluate a patient's unique characteristics against known care plans providing a probability based view of how likely a patient is to accept a proper care plan.

## **TURNOVER**

Hospital employee turnover can be a significant cost to an organization as well as a constraint on its ability to provide care to patients. Having an insight into what drives good employees to leave can enable healthcare organizations to enact proactive measures. Having insight into which employees are likely to remain with the organization is key to avoiding costly mistakes in the hiring process.

**To learn more about how Pragmatic Works can help empower your organization, please contact [sales@pragmaticworks.com](mailto:sales@pragmaticworks.com)**