Why predictive analytics is the "next big thing" for the revenue cycle

Mede/Analytics®

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Big data is transforming healthcare in ways we couldn't have even imagined ten years ago. Advances such as artificial intelligence (AI) and machine learning have entered the healthcare scene in recent years and are making it possible to apply models and algorithms to process data, automate workflows and predict outcomes.

With today's health system challenges—including accessing and making sense of the vast amounts of data across multiple technology systems—these big data advances offer a much-needed solution to gain insight, efficiency and improve decision-making.

The Society of Actuaries released a report focusing on the use of predictive analytics in healthcare in 2019 and found 60% of respondents currently use predictive data processing methodologies. This is a significant increase from 2018 when less than 50% said they were using predictive analytics. "The good news is that organizations using predictive analytics are actually achieving their desired results. Our hope is that this trend will continue through additional predictive analytics implementation across the industry," explains Sarah Osborne, senior vice president, chief actuary and analytics officer at the Government Employees Health Association, in the society's report.

The results of implementing predictive analytics include:

‣ Reduced costs;

‣ Improved patient satisfaction;

‣ Better clinical outcomes; and

‣ Increased profitability.

Concerning, however, is the 40% who say they have no plan to use predictive analytics ever, may get into it in five years or so, or have another timeline in mind, all of which makes these organizations vulnerable.

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- Sarah Osborne, Senior Vice President Chief Actuary and Analytics Officer Government Employees Health Association

Predictive analytics gives organizations a good sense of what's working well and what's not. This helps everyone involved in providing healthcare make better decisions and act with insight and knowledge, not guesses.

Predictive analytics helps healthcare organizations:

‣ Forecast models for revenue cycle management;

‣ Analyze population health participants and take action;

‣ Predict future challenges that drive costs;

‣ Locate patients with drug-seeking behavior for intervention; and

‣ Identify anomalies or outliers that cause large-scale health or financial risk.

The more often data insights are elevated and put into the hands of end-users and decision-makers, the better off the healthcare organization. Predictive analytics save time and resources and can mean better outcomes for patients and lower costs for healthcare organizations.

76%

of hospitals and health systems expect to dedicate at least 10% of their 2020 IT budgets to predictive analytics for revenue cycle management

Predictive analytics in the revenue cycle

The financial impacts of changing reimbursement models, increasing cost to collect and rising denials put a strain on many health systems. Finding ways to streamline revenue cycle workflows and optimize revenue generation through predictive analyses and automation can be a game-changer in the financial viability of an organization.

In the revenue cycle, predictive analytics in particular is taking a strong foothold. Organizations are realizing the benefits of forecasting revenue and taking proactive measures to correct issues that impact revenue before they even occur. In a survey of nearly 1,500 hospital and health system CFOs, VPs of finance, controllers and other revenue cycle leaders, 76% of hospital and health systems expect to dedicate at least ten percent or more of their 2020 IT budgets to predictive analytics for revenue cycle management. Reasons cited as drivers for acquiring revenue cycle management analytics tools in the next 12 to 18 months were:

- Predicting payer remittance dates to manage organizational cash flow;

- Flag potential denials before they occur;

- Identify inefficiencies and breakdowns in RCM processing at early stages;

- Using machine learning to predict changes in payer-specific rules for claims adjudication;

- Reduce dependency on IT resources for accessing the information you need;

- Streamlining the RCM each fiscal year, including acquisitions and contract changes;

- Identify organizational-specific indicators for RCM leakages and strengths; and

- Support patient engagement goals by refining processes impacting patient payment.

Predictive analytics adoption in healthcare

2018 — 47%   **2019** — 60%
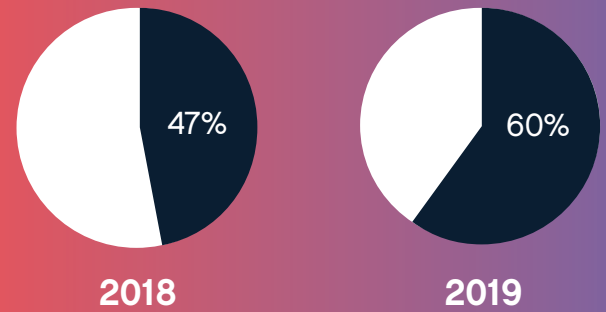
According to the **Society of Actuaries**

Machine learning built into big data systems use algorithms to "learn" patterns in data and make forecasts and recommendations based on those trends. These insights allow leaders to take the necessary actions to address the source of the problem, preventing costly revenue missteps or losses.

With advanced analytics, for example, organizations can track open accounts receivable (AR) snapshots over time to analyze point of service (POS) cash and other collections trends, identify AR outliers and bottlenecks. Additionally, organizations can identify and tie denial root cause back to POS for proactive resolution. Built-in machine learning and predictive algorithms can be used to forecast cash yields from the current AR portfolio relative to month-end targets, enabling leaders to effectively focus staff around high-yield accounts.

As another example, predictive capabilities can shed light on and reduce the cost to collect. Data models allow organizations to segment patients by their propensity to pay, incorporating third-party data to help determine charitable eligibility. This allows staff to focus collection efforts on those accounts that have the highest likelihood of collecting payment, and directing accounts with lower propensity to pay to financial counseling or charity programs to avoid bad debt and wasteful attempts at collection.

Predictive analytics can also automate AR monitoring which was once a manual process. Daily AR snapshots allow organizations to view detailed transaction activity on daily AR movement. Forecasting models can monitor future expected fluctuations, track anomalies daily and provide recommended actions based on rules triggered through machine learning capabilities.

The insights and efficiencies that can be gained from big data analytics will continue to evolve and expand over time. The challenges that value-based care bring to healthcare only magnify the need for hospitals and health systems to improve the utilization of the droves of data across their various technology systems. Predictive analytics has the potential to reshape revenue cycle management, improve decision-making and help organizations achieve their desired results.

"As fiscal pressures continue to build across the health care industry and as value-based care payment initiatives slowly simmer, health care organizations are recognizing the need for employing a robust data analytics program to pinpoint revenue cycle inefficiencies."

- Doug Brown, president of Black Book

About MedeAnalytics

MedeAnalytics was the first to market in 1994 with a healthcare analytics SaaS solution. Today, that spirit of innovation continues with a platform that includes advanced analytics technologies like machine learning, guided analysis and predictive analytics.

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