



2019 Predictive
Analytics in
Health Care
Trend Forecast

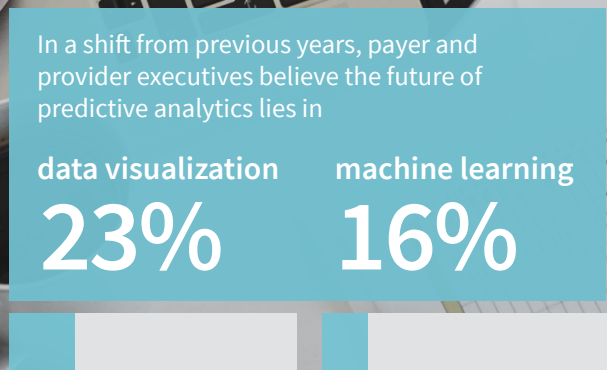
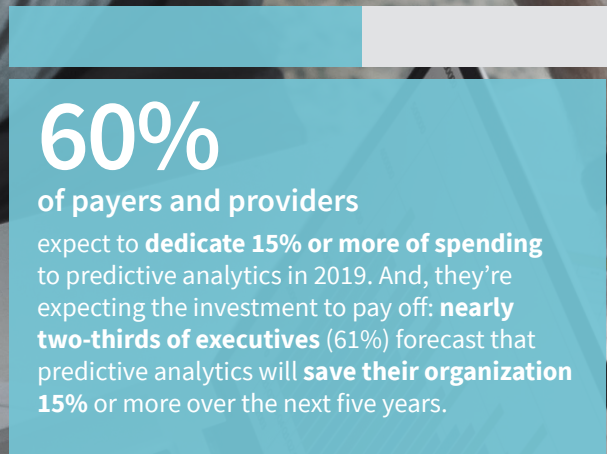


Predictive Analytics in Health Care Trends

Predictive analytics is poised to reshape the health care industry by achieving the Triple Aim of improved patient outcomes, quality of care and lower costs. But, how are executives actually using predictive analytics, and does it help uncover the insights and efficiencies they expect?

To answer these questions, the Society of Actuaries conducted its annual survey of health payer and provider executives.

The survey, now in its third year, found that:

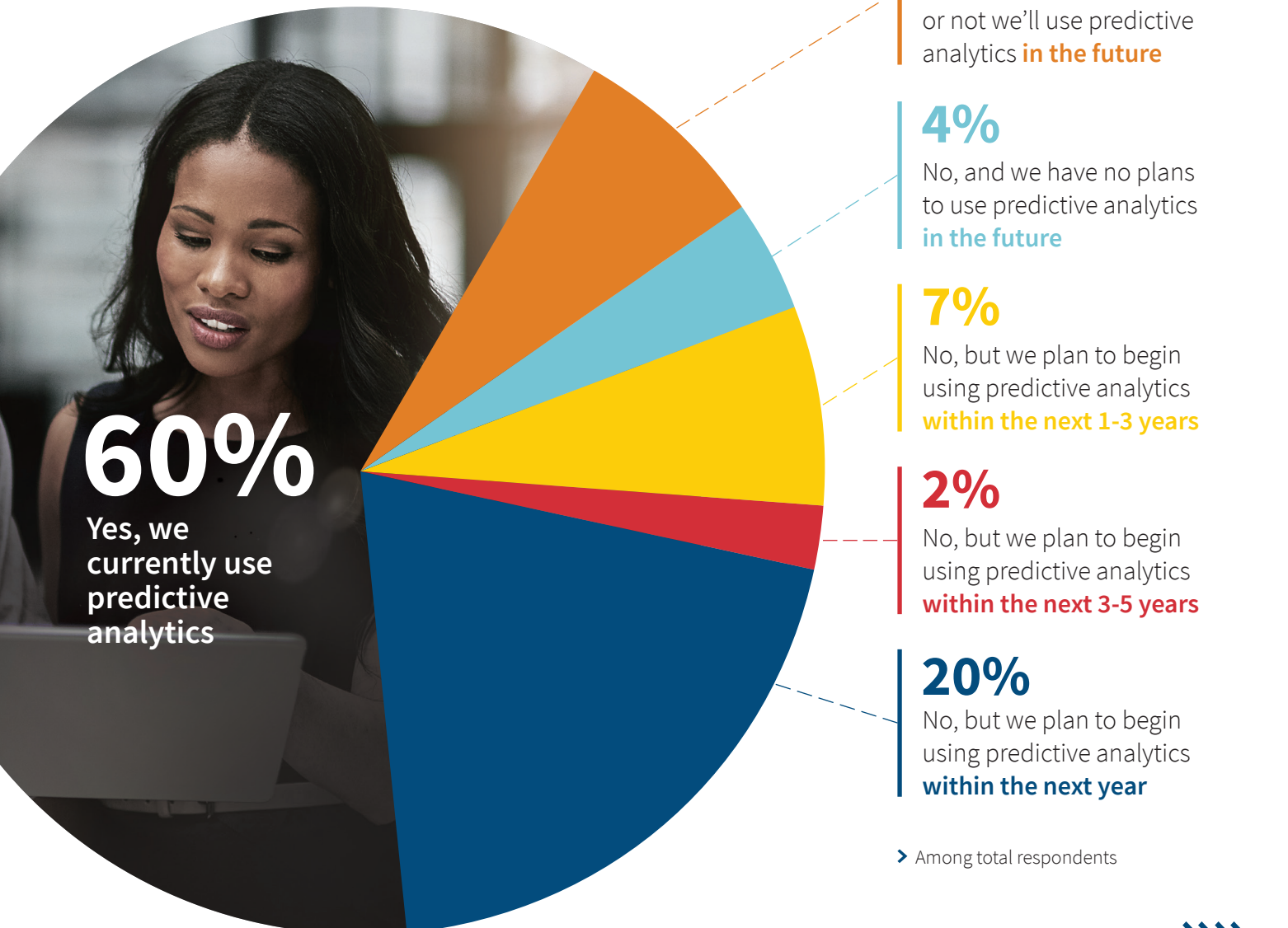




Predictive analytics adoption increased 13 points over the past year

In 2019, current predictive analytics use (60%) jumped with a significant 13-point year-over-year increase from 2018 (47%) and a 6-point increase from 2017 (54%). This increase was driven almost equally by both payers (63%) and providers (56%). Similarly, a majority (89%) of health care executives indicate that they use or plan to use predictive analytics in the next five years—a 4-point year-over-year increase from 2018.

Organizations' current and projected predictive analytics use





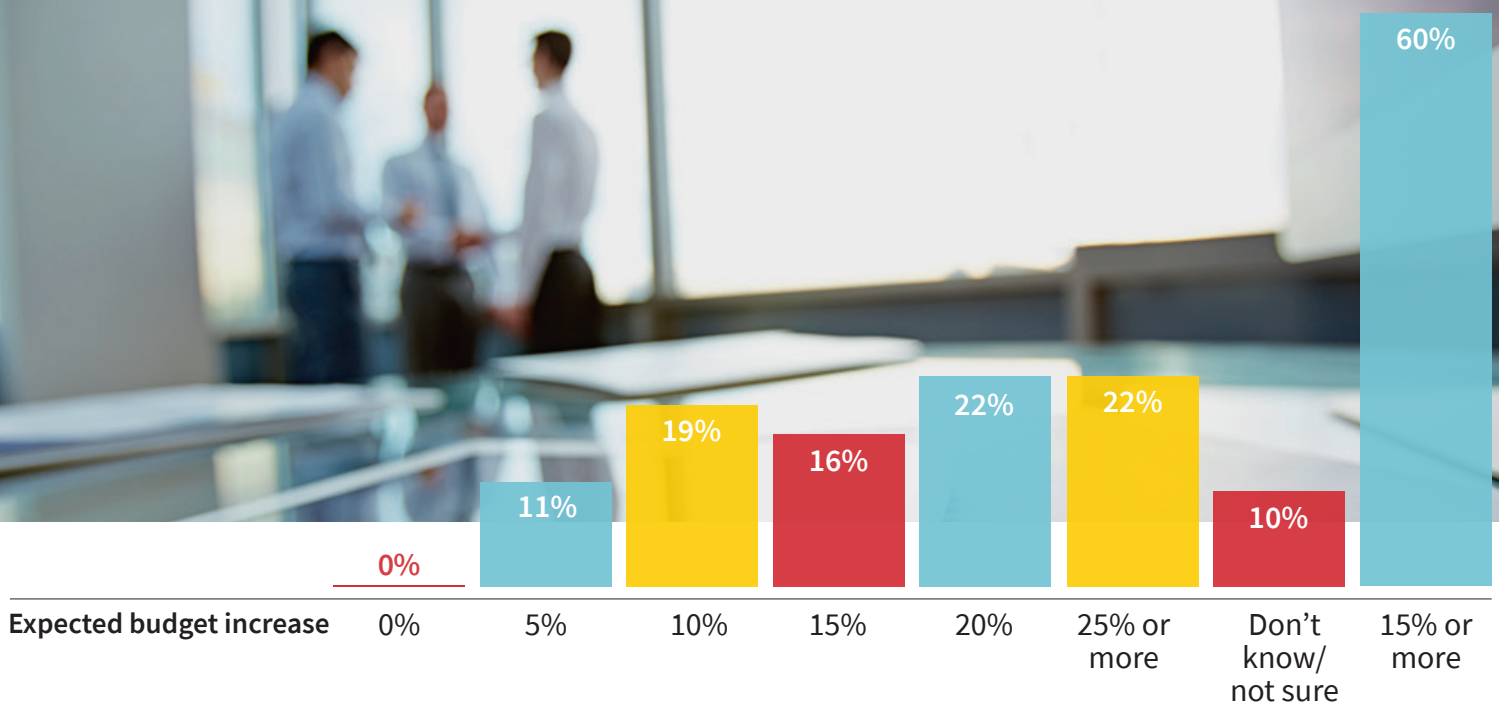
Payers and providers agree: predictive analytics is important to the future of their business

The industry isn't just talking about predictive analytics, they're investing in it. According to the survey, 60% of payers and providers expect to dedicate 15% of spending or more to predictive analytics. And, they're anticipating that the investment will pay off: nearly two-thirds of executives (61%) forecast that predictive analytics will save their organization 15% or more over the next five years.

In 2018, payers (82%) were less likely than providers (92%) to view predictive analytics as important for the future of their business. However, in 2019, these numbers leveled out with 92% of payers and 93% of providers agreeing that predictive analytics is important to the future of their business.

Over the next five years, organizations that currently use predictive analytics are expected to increase their budget by:

► Among total respondents





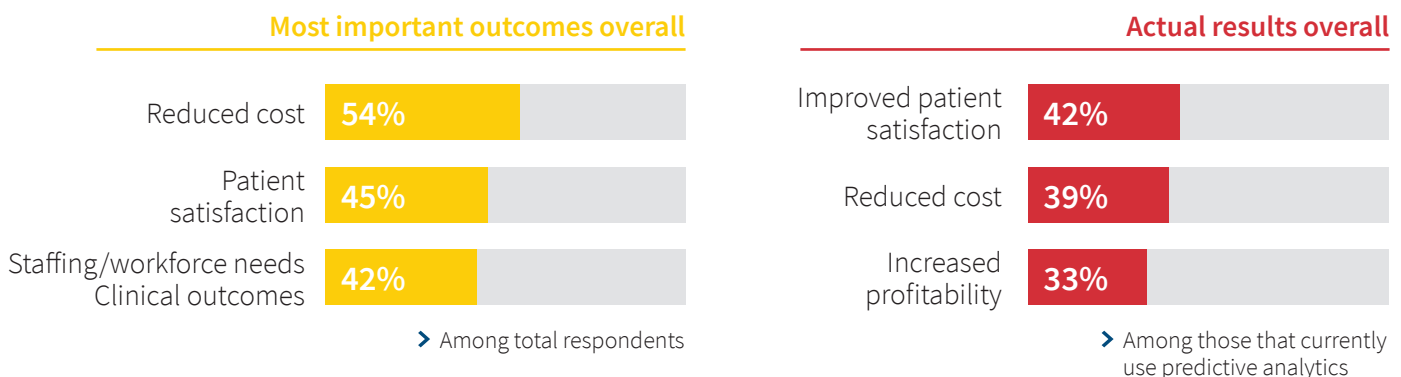
Predictive analytics expectations match reality

Executives who implement predictive analytics are experiencing results that align with the outcomes they're targeting.

The top two desired outcomes executives cite for using predictive analytics are “reduced cost” (54%) and “patient satisfaction” (45%). This is closely aligned with the top two actual results that executives are seeing from the implementation of predictive analytics: “improved patient satisfaction” (42%) and “reduced cost” (39%). This is a significant year-over-year change; in 2018, “reduced cost,” “improved clinical outcomes” and “improved patient satisfaction” were all cited as equal (36%) results that health care executives experienced after implementing predictive analytics.

“Increased profitability” (33%) follows closely behind as the third most cited result by health care executives, which aligns closely to the percentage of executives who say that “profitability” (37%) is a desired outcome of implementing predictive analytics.

Most desired outcomes with predictive analytics versus actual experience



“ This data underscores the importance of achieving the Triple Aim for both payers’ and providers’ bottom lines: two of the three pillars are represented in executives’ top priorities. And 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.”

—Sarah Osborne, FSA, FCA, MAAA



“ It’s imperative to present datasets in a way that is actionable, visual and tells a clear story. That’s why so many executives cite data visualization as the future of the field: without visuals, they’re just looking at a pile of data that is difficult to understand. By enhancing data visualization capabilities, we can present clear analysis with actionable insight to solve a pressing industry challenge.”

—Sarah Osborne, FSA, FCA, MAAA

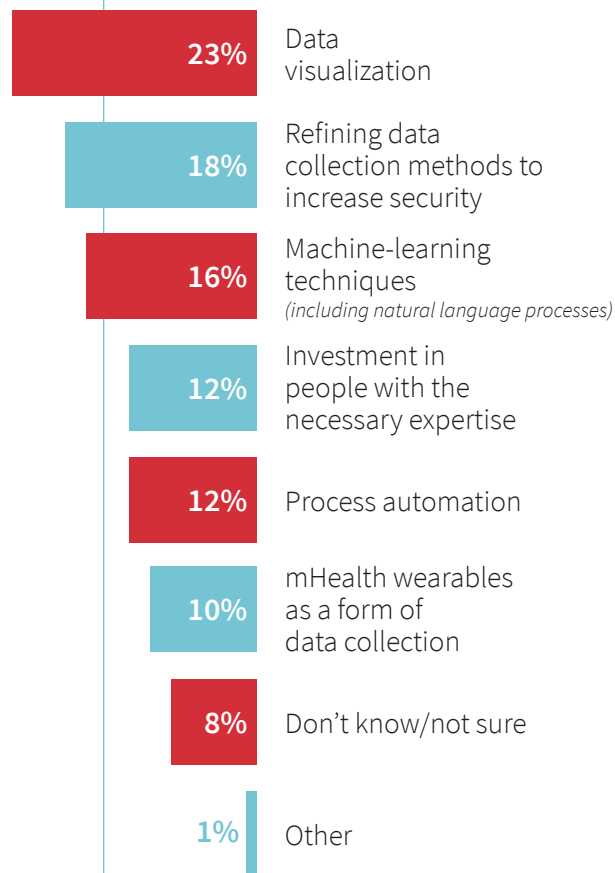


Health care executives anticipate future changes to predictive analytics to reduce cost

Both payer and provider executives think the future of predictive analytics is “data visualization” (23%), a 5-point increase from 2018. Other anticipated improvements include “refining data collection methods to increase security” (18%) and “implementing machine-learning techniques” (16%).

Factors including data visualization and machine-learning have the potential to create future cost reductions by increasing efficiency—an outcome that payer and provider executives cited as the most valuable result they hope to achieve when implementing predictive analytics within their organizations.

Expectations for the future of predictive analytics capabilities



➤ Among total respondents



Despite the proven benefits, executives are still facing barriers to implementing predictive analytics

Executives cite shifting barriers to adoption, suggesting that new issues are arising as they navigate predictive analytics implementation. For example, in 2017, “lack of budget” (16%) was the biggest challenge for both payers and providers. But in 2018, there were three equal barriers to adoption: “lack of budget,” “regulatory issues” and “incomplete data” were equal at 14%. This year, priorities shifted once again, with “lack of skilled employees” (13%), “too much data” (12%) and “regulatory issues” (12%) all seen as equal current challenges.

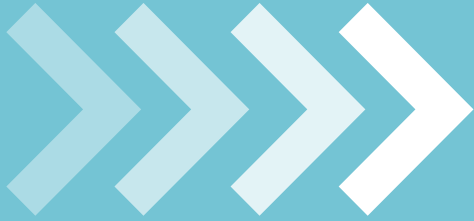
“ By efficiently utilizing emerging technologies to analyze complex datasets and uncover actionable insights that ultimately solve industry challenges, actuaries are adept at filling the roles employers are seeking. An example of this is using machine learning to increase data analysis efficiency. By training an algorithm to identify severe medical conditions in health care data, the actuary is able to swiftly uncover data with major implications for patient costs and health outcomes.”

—Sarah Osborne, FSA, FCA, MAAA

Biggest challenge to implementing predictive analytics in their organizations over the next five years:



› Among total respondents



About the survey

The Society of Actuaries conducted an online survey in March 2019. 201 total health payer and provider executives were interviewed. 100 respondents were health payer executives and 101 respondents were health provider executives. The survey's purpose was to reveal insights about future predictive analytics trends in the health care industry including usage, valuable outcomes to predict and challenges to implementation.



For additional information, please visit:
SOA.org/healthcare-analytics



About the SOA

With roots dating back to 1889, the Society of Actuaries (SOA) is the world's largest actuarial professional organization with more than 30,000 actuaries as members. Through research and education, the SOA's mission is to advance actuarial knowledge and to enhance the ability of actuaries to provide expert advice and relevant solutions for financial, business and societal challenges. The SOA's vision is for actuaries to be the leading professionals in the measurement and management of risk. SOA.org