Data Analytics & Predictive Modeling | 2020
A Benefits Strategic Planning White Paper

Using Data to Improve Health Plan Performance and Participant Health

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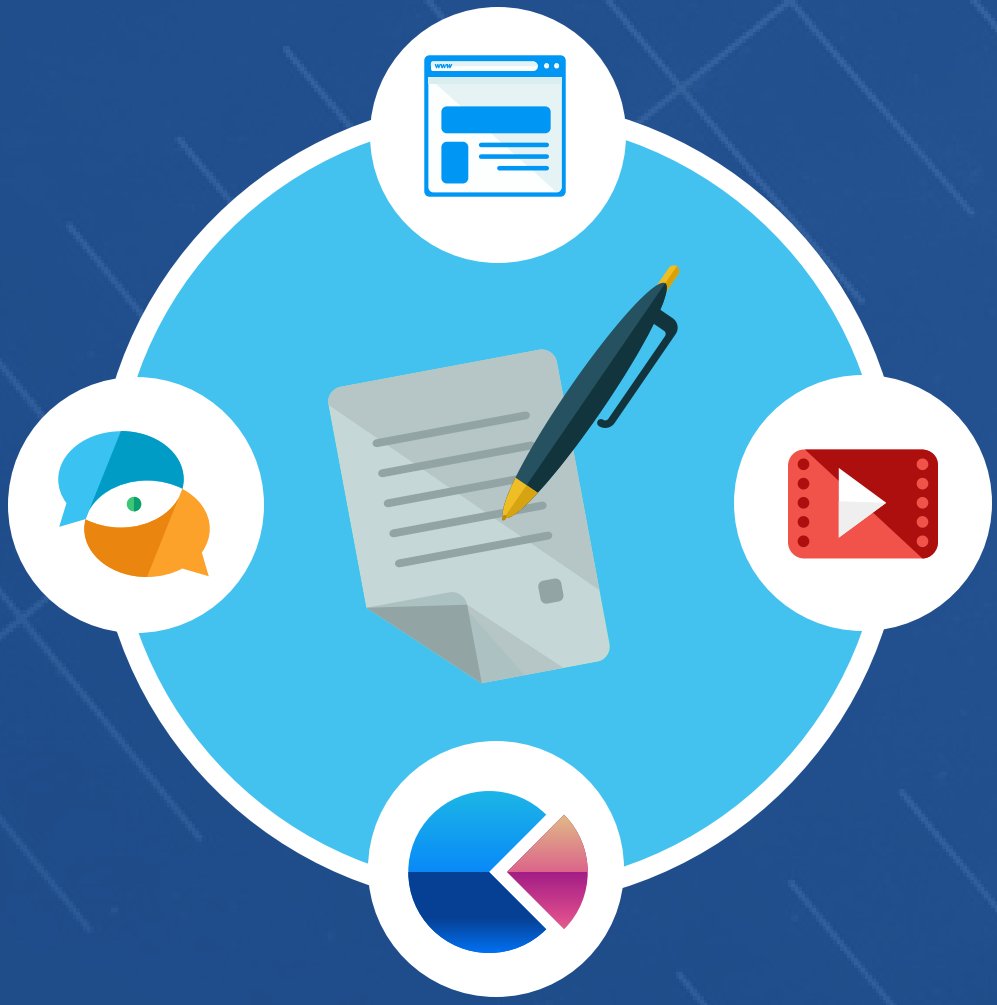

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Definition: Data Analytics

Data analytics is the process of inspecting, cleaning, transforming, interpreting and modeling data to discover trends, patterns and other information that can support benefit plan decisions and changes. The goal of this work is to (1) reduce costs and (2) improve clinical outcomes and/or the participant experience.

Definition: Predictive Modeling

Predictive modeling is a statistical technique commonly used to forecast future behavior. It involves analyzing historical and current data to generate a model to forecast future outcomes. Predictive modeling can be used to quantify risk and costs for individuals and groups of individuals enrolled in a health plan.

Studies have shown that one-third to nearly one-half of U.S. health care expenditures are wasted – driven by duplicative services and testing, variations in service costs, treatment in the "wrong" setting and inefficiency in vendor contracting and management. To make the most of health care plan dollars, employers must continue to seek strategies that reduce waste, mitigate cost increases and improve the overall health and well-being of their employees.

The Value of Data Analytics & Predictive Modeling

Gaps in care can be found by comparing plan participant data to Health Effectiveness Data and Information Set (HEDIS) benchmarks-measures used by more than 90% of U.S. health plans to assess performance on various dimensions of care and service.

How Can Employers Use Data Analytics and Predictive Modeling?

Employers can use data analytics and predictive modeling to identify claim trends, target high-risk users, identify gaps in care, steer employees to the best providers, measure vendor performance, uncover costs-sharing strategies, engage participants in their own care and investigate waste, abuse and fraud.

Identify Claims Trends

By using data analytics employers can understand what is driving trends and predict what will happen in the next plan year. After identifying the trend drivers, an employer should take a close look at those that are most significant. For example, if a plan's total paid claims rose 9% and the bulk of the increase is attributed to prescription drug costs, prioritizing the data analysis of drug claims is probably appropriate. Plan sponsors might find through the analysis that drug utilization was flat, but specialty drug costs increased substantially.

Target High-Risk Users

Predictive modeling can identify high-risk and/or high-cost users within the employee population by looking at historical patterns of utilization and key demographic indicators. These users include employees who currently drive a high percentage of costs as well as those projected to drive costs in the future. Early detection of a disease with treatment that is less invasive and less costly is one strategy to cut costs and improve care. Another is targeted, clinical intervention to reduce hospital readmission's for the same illness. Reviewing the severity of participant disease and conditions can identify those that have complex needs and require significant care management.

Identify Gaps in Care

Gaps in care can be found by comparing plan participant data to Health Effectiveness Data and Information Set (HEDIS) benchmarks-measures used by more than 90% of U.S. health plans to assess performance on various dimensions of care and service. Performance standards should be implemented using HEDIS benchmarks for top clinical indicators (although target compliance with standards of care should ideally be 100%). Clinical indicators asses health conditions and outcomes. They create the basis for quality improvement and prioritization within a population.

Steer Employees to the Best Providers

Many employers are reviewing the feasibility of implementing tiered networks with incentives for participants to use high-quality/high-performance networks. The purpose of a tiered network is to steer employees away from overpriced hospitals, physicians and drugs for specific procedures and conditions, without justification in the form of better outcomes. Data analytics can pinpoint high-quality/high-performance providers-especially for elective procedures that drive a large percentage of plan costs. Employers can promote the use of these providers to participants who need care and realize plan savings without compromising employee care.

Measure Vendor Performance

Employers can implement performance guarantees for their plan's financial, clinical, operational and utilization results to hold vendor partners more accountable-working towards and achieving the goals they state they can reach. Plans that design "Benefits Strategic Plans" with data-analytics capabilities can better hold vendors and brokers accountable for meaningful performance.

Uncover Cost-Sharing Strategies

The level of cost sharing influences plan utilization and overall costs. If a plan is too "rich," participants tend to overuse health care services. Conversely, if coverage is too "poor," participants forego or delay care. Data analytics can be used to determine whether a plan's benefit design (e.g., co-payments and other cost-sharing features) steers employees to cost-effective therapies, treatments and medical providers. Data analytics can also help employers find ways to increase adherence to testing, improve drug therapy compliance, slow over-utilization of services and encourage appropriate utilization.

Engage Employees in Their Own Care

The amount of excess health care spending attributable to preventable behaviors and lifestyle is well documented. Smoking, obesity, stress, lack of physical activity and poor eating habits contribute to a significant proportion of national health spending. Using data analytics, employers can dissect a plan's claims history to determine if its benefits design promotes wellness and prevention. Plans that use a multifaceted design encouraging and supporting a proper wellness program experience meaningful levels of employee participation. They also see long-term reductions in hospitalization, advanced complications of disease and rates of expansion of chronic disease.

Investigate Waste, Abuse and Fraud

Data analytics can also help employers discover potential waste, abuse and even fraudulent claim activity the complexity of administering medical benefits increases the chances for mistakes, errors, over-payments, etc. Many plans pay claims they should not, such as claims for recalled drugs and devices, ineligible dependents and excessive or unnecessary prescriptions.

How Should Employers Implement These Data Tools?

To launch a data-analytics and predictive-modeling initiative, employers should take the following steps:

Collaborate with a Total Rewards Agency consultant to establish a three-year well-defined road map (i.e. Benefits Strategic Plan) that aligns with the business mission and serves as a project plan, and a springboard for future management decisions regarding the benefits program. This strategy should have a budget, goals and performance targets that increase over time 9e.g. improving wellness program participation from 10% in year one to 50% in year two and 75% in year three).

Use data analytics and predictive modeling to identify and map the most prevalent clinical risk characteristics and associated costs in the plan population. Employer CHROs, CFOs should then evaluate the programs in place to address risks.

Develop a formal participant communications strategy. While data analytics can reveal the cost outliers to plan sponsors, effective communications can have an immediate, direct and positive impact. Employee understanding can directly affect both individual behavior and the financial impact of their actions on the plan.

Identify how the plan's participants will react to change. It is important that any changes an employer implements affects people directly. Careful consideration is imperative to the acceptance of any changes to the benefits program.

Conclusion

Using benefits strategic planning, data analytics and predictive modeling to help develop and support health plan strategies will greatly improve the likelihood that actions taken will have the intended impact. High-level dashboard numbers (e.g., overall trend) do not tell the full story. They are simply clues as to where to start analyzing drivers of cost. Employers should use a strategic planning methodology, data analytics and predictive modeling strategy to make more informed decisions.