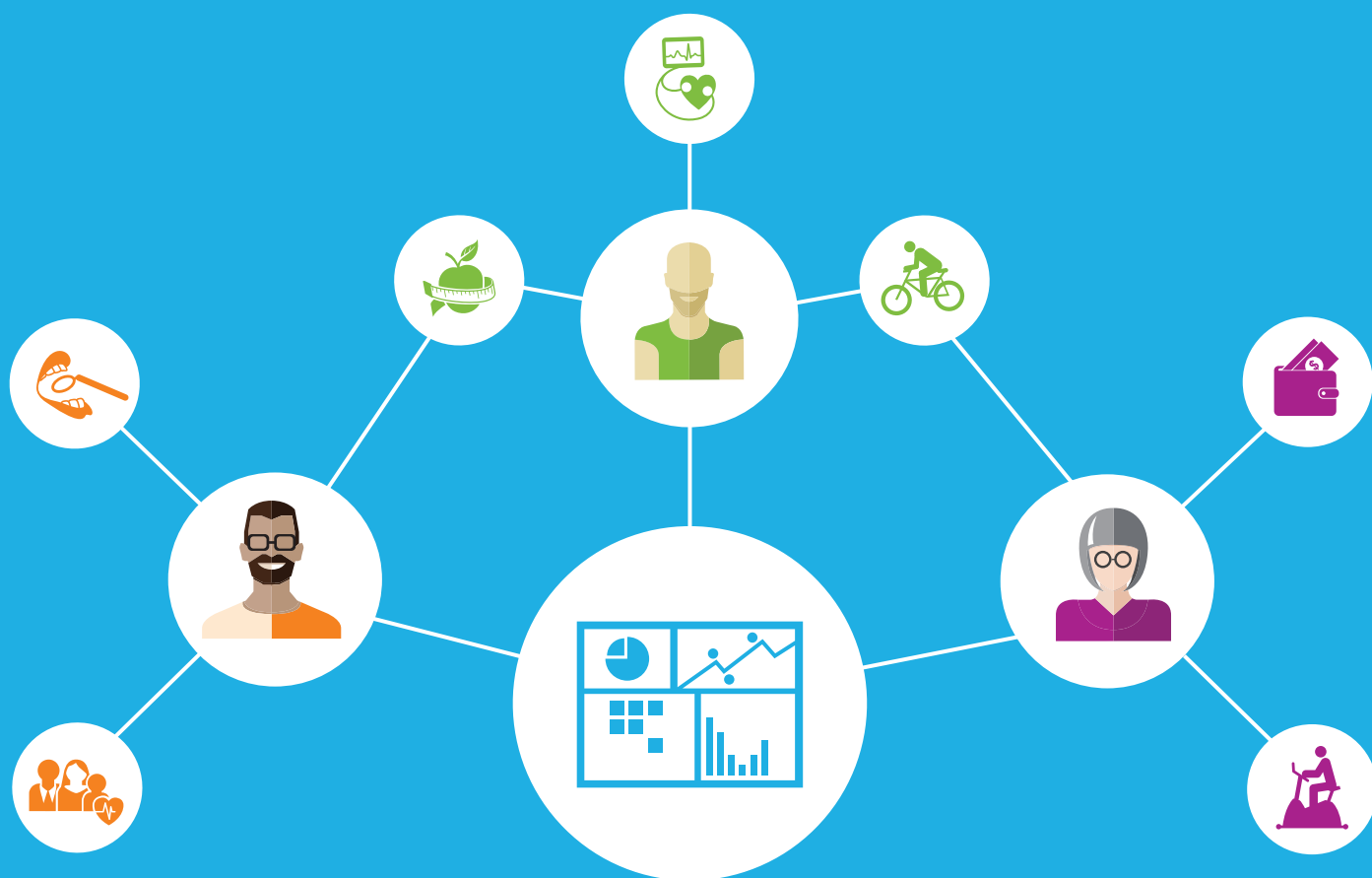


THE SMART GUIDE TO BIG DATA

How to Leverage Advanced Analytics to Drive Consumer Health Engagement



Introduction

Whether you're an employer, a health plan or a hospital system, you invest millions to help your consumers avoid illness and keep chronic conditions from spiraling out of control. Yet, the healthcare industry is still struggling to keep consumers engaged in their health. This disconnect is most likely due to a lack of understanding consumers' distinct needs, knowing if you are even offering the right programs, and creating awareness of what's available and relevant to them. Unless you know who to target with which programs, and how to best communicate with them, you will not get the value you want or need.

Most health and wellness programs take a one size fits all approach, but in reality, it's one size fits none.

Enter advanced analytics—a collection of tools and techniques that analyzes multiple sets of data to create deeper, actionable insights. For your organization, it can reveal patterns, tell stories, predict outcomes and ultimately inform more effective program design and communication strategies—built on facts and evidence. For consumers, advanced analytics help create personalized experiences and motivate behavior change.



When done right, advanced analytics helps answer these questions:

WHICH HEALTH CONSUMER CAN BE IMPACTED?

Who has what needs and what are the financial implications for those at risk, if actions are not taken?

WHO WILL BE RECEPTIVE?

Who is most receptive to taking action and is most likely to participate? What incentive values or types will motivate action?

HOW DO YOU COMMUNICATE WITH CONSUMERS?

What are their communication preferences, and how do they want to be reached? Do they prefer a phone call or text message? What language and tone should be used?

WHAT ACTIONS SHOULD CONSUMERS TAKE?

What interventions will provide the most value? What recommendations should be provided on a person-by-person basis, while still protecting privacy?

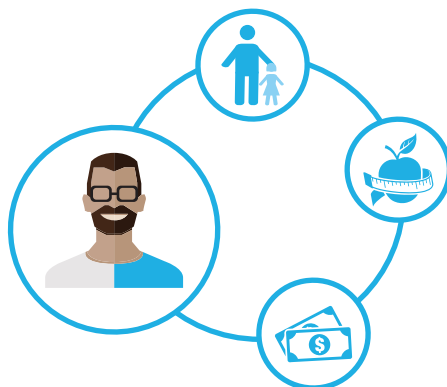
About This Guide

Advanced analytics are mission critical to delivering personalized experiences that drive year-round health engagement. They can also be instrumental in determining how to optimize health and wellbeing program spend.

Leveraging advanced analytics may sound complex, but it doesn't have to be. The most innovative health and wellbeing platform providers are already integrating and applying advanced analytics to create personalized experiences for employees and their dependents. The key is finding the right solution partner—one that can take the data you already have, but may not be using, and supplement it with additional claims, clinical and consumer data. And then, utilize advanced analytics technologies, such as machine learning, to help you focus your resources and create greater value for your organization.

In this paper, you will learn what advanced analytics is, what to look for in a partner, and how they should be enhancing your employee health and wellbeing programs and communications strategy, in order to:

- **Better understand and predict consumer needs**
- **Motivate consumers to take action with targeted communications**
- **Strengthen your business case for programs and investments**





Better Understand and Predict Your Consumers' Needs

Advanced analytics are your key to better understanding and supporting consumers at a personal level, which drives engagement, improves health outcomes and creates greater value.

You most likely have a diverse and broad group of consumers, like employees, members and/or patients and their dependents to engage. Advanced analytics can help shift categorization from “male employee,” to “father with high cholesterol suffering from back pain,” which gives you a different lens as to what support he may need. Other targets could be the dependent child who eats too much sugar, or the mom taking care of aging parents who is also struggling to manage her diabetes.

With advanced analytics, you can support and predict health needs by offering the right programs at the right time. For example, proactively recommending a meditation program for those in high-stress positions or a coaching session on 529 college savings plans for new parents. Continuously collecting and analyzing data means the experience can change and be updated as an employee’s needs change—in real-time. Let’s say, if an employee sprains an ankle, they would not be invited to join a walking challenge because your data-driven health platform is smart and dynamic enough to know not to recommend that program at that point in time. What’s more, you can target your specific consumers with communications about very specific resources using the methods they are most receptive to, like text messages, emails, automated calls, or maybe even all three.



Get smart on the fundamentals of advanced analytics

YOU NEED CONSUMER DATA TO GET A COMPLETE PICTURE OF EACH PERSON:

While you may have access to basic demographic information (salary, gender, marital status, zip code), this data is often siloed and doesn’t have much meaning on its own. Even claims data is retroactive and insufficient—it’s about what has already happened to an employee, health plan member or patient, not what may happen. Whereas common consumer data such as buying habits, voting history, home ownership, television viewing, social sentiment, etc., are much more telling about what a person can or may do related to their health. Combining healthcare and non-healthcare data is essential to creating a complete picture of an individual and providing guidance they may not receive.

BRING THE DATA TOGETHER:

Most data is disparate, living in different places, and as such, doesn’t tell a meaningful story on its own. The data has to be brought together in a logical way to make it both meaningful and actionable. Advanced analytics organizes these types of disconnected data points into a linear story to understand and predict a person’s future behaviors and needs. For example, what if you could identify people who are less likely to complete an antibiotic treatment, creating a higher likelihood of relapse and requiring additional physician visits. You could effectively educate and incentivize those consumers on the importance of completing the medication regimen—keeping both their costs and yours down.

MACHINE LEARNING HELPS YOU DO MORE, FASTER:

The process of mining big data to create, test, and validate a model that will forecast future outcomes is predictive modeling. Models are made of multiple variables, such as employer type (profit or non-profit), activity level on social networks, and head of household age, that when combined serve as predictors of an individual's behavior. For example, you may not have information on "X," but you have information on thousands of people like "X," and therefore can make accurate predictions as to motivation, needs, and interventions.

The best models allow you to quickly build an accurate picture of the problem you're solving for and the opportunities available to guide decisions and understand your employees—in real-time. This level of speed is now possible with machine learning, a type of artificial intelligence that enables computers to self-learn rather than being explicitly programmed. It automates modeling and allows compiled data to be analyzed quickly and processed in a manner that is similar to the way people think. Machine learning also generates more accurate outcomes than humans are capable of with greater efficiency.

UTILIZE REAL-TIME ANALYTICS TO RESPOND TO REAL-LIFE CHANGE:

Using advanced analytics allows you to be more nimble and proactive so you can meet your consumers where they are in their life, at any given time. This matters because people are complicated and their needs or situations are consistently changing. Consider someone who is fine one minute and the next has a ski accident and tears her ACL. Up-to-date data ensures your programs automatically adapt and respond to employee changes in a more informed way. For example, by looking at data about other individuals who also had an ACL tear, your health and wellbeing partner can better predict her needs and behaviors to provide support on a more personal level, which can ultimately save costs and improve care.

PRO TIP

Your partner should supplement available data with proprietary consumer data to create a complete picture of a person in terms of what their interests are and what could motivate them to make a change.

To smartly apply big data, think about how to align your business goals with consumers' needs.

Framing questions appropriately helps to illuminate how advanced analytics can be used to provide detailed answers and recommendations, which can help you more intelligently allocate resources and spend based on employee need, receptivity, and impactability.

Which employee or member should I target for our 'Cut the Sugar' program to get diabetes under control?



Advanced analytics can tell: Of your 10,000 employees/members, these 128 will be the most receptive to your program, and will drive nearly \$2.1 million in value if they can get their diabetes under control.

How can I drive more usage of a telemedicine solution?



Advanced analytics can tell: Who would most likely benefit from a telemedicine offering? Who would most likely use it? How do I best educate targeted consumers about the offering, and what type of incentive would motivate them to use this service over higher-cost physical care?

I want to know how many people would take advantage of a fitness subsidy?



Advanced analytics can tell: Of these 75,000 people, 25% live within 10 miles of a gym. Of those, 10% will join and of those who join, 3% will use it weekly.

PRO TIP

Targeting and protecting privacy are not mutually exclusive.

While it is important to make healthcare more personal, companies also need to prevent a “Big Brother” perception. Employees don’t want their employer to know if they are trying to get pregnant or suffering from an addiction. Experienced partners take extraordinary measures to safeguard employee privacy. For example, best-in-class vendors create an “anonymity filter” so the individual’s name is removed and a profile pseudonym assigned in its place. Everything is also encrypted with several layers of security. Finally, users may opt in to recommended programs and share activity in aggregate to receive rewards.



Motivate Consumers to Act with Targeted Communications

Taking a one-size-fits-all approach to reaching consumers may seem more cost effective upfront, but it won't drive desired engagement or outcomes.

Advanced analytics helps target consumers with the right message at the right time to take action.

Your population and their needs have now been revealed at an individual level. The next step is to once again leverage advanced analytics to create a targeted outreach strategy that informs them of the available and most relevant resources.

To create communications that have maximum impact, use analytics to help identify whom you want to reach, when to contact them, the message to deliver and what channel to use. Materials delivered by you or your partners need to be relevant and meaningful to inspire real engagement and behavior change.

Communication to employees, members and patients must be targeted to break through the noise. Information overload is taxing, so out of necessity people aggressively filter the information that comes to them, whether it is from friends, family, employer, health plans, or hospitals. To be heard, make sure messages are clear, actionable, use appropriate language, and are relevant to each target population. Advanced analytics can help identify who to target with a specific message and what message will resonate the most. For example, one organization used campaign messaging about “pirate teeth” and increased dental screenings among male Millennials by 44%.

The delivery method is just as important as the message itself.

Advanced analytics provides actionable insights on how consumers and their dependents should be contacted. With the ubiquity of technology, some employees may be most responsive to text or email, while others may take action after receiving an automated call about closing gaps in care.

Data will help reveal if web, mobile, live agent, mail, email, text, coaching, or an automated call is right for an individual—or if a combination of multiple communication channels would be more effective. For example, by creating a multi-channel outreach campaign that included automated calls and follow-up letters to a targeted group, an organization more effectively closed gaps in care for people with diabetes.



TEXT



EMAIL



APP



COACHING



MAIL



WEB



AUTOMATED
CALLS



AGENT



Strengthen Your Business Case

As investments in health and wellness programs increase, there's greater pressure to demonstrate business value.

Advanced analytics can provide the insights required to determine which programs and communications you need to build the best interventions for consumers. Here are four identified ways analytics can help you make more informed decisions and build a sound business case:

1

SHOW HOW YOU CAN SAVE MONEY.

Advanced analytics can identify needs and likely outcomes, enabling you to target interventions that can save money, and just as importantly, improve the employee experience. On the next page, you'll read a case study about a company that mitigated hospitalization and ER usage. Proactively engaging consumers before they need care or services has the potential to reduce costs. Another example is targeting people more likely to respond to case management, which has the potential of saving \$18,000 annually per engaged employee².

2

SPEND MORE WISELY.

Optimize program spend by not only driving engagement to targeted and relevant benefits, but also scaling back on those that are proving ineffective. For example, you could communicate directly with those who have COPD, and encourage them to participate in an inhaler sensor program so they can track usage and identify triggers—ultimately empowering them to take a more active role in proactively managing their health.

3

PREDICT CONSUMER NEEDS AND OUTCOMES.

Advanced analytics can be used to discover your organization's needs to help you make the right decisions. This will help determine **1)** which programs you should be offering, but don't have; **2)** which of the programs you have should be targeted to specific employees; and **3)** which programs are not providing value and should be discontinued. For example, predictive models can tell you what individuals would use a lower back pain management program and what ROI you can expect.

4

MEASURE SUCCESS.

Advanced analytics can help you set success metrics (e.g., "we expect an 85% participation rate in the flu shot program"), and allow you to see how you performed against them. The best strategies have feedback loops built in so you are constantly reviewing the results and making changes as needed. Combining claims data with consumer inputs can also provide measurable outcomes and predict future behaviors. For example, employees who received a flu shot were less likely to miss work or visit the urgent care, which resulted in X savings to the company.

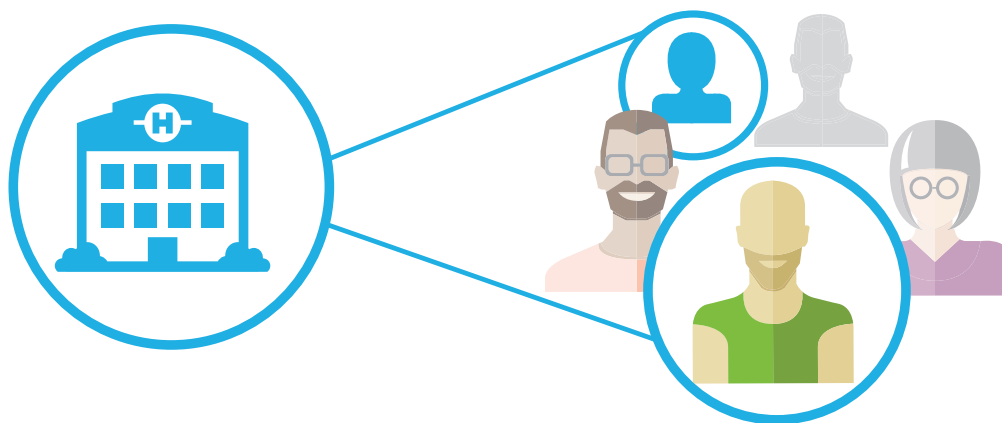
². The Business Case for Employee Health Engagement, 2017

CASE STUDY

Advanced Analytics Saved Money by Predicting Hospital Utilization

One company utilized advanced analytics to save \$1.5 million by predicting and mitigating hospitalizations over the course of 6 months. They achieved this by creating a predictive model with 18 variables that correlated with a higher probability of hospital or emergency room use. Examples of consumer data variables used include being divorced or separated, IRA amount, house value between \$100,000–\$150,000, and political donations.

Identifying employees most likely to be hospitalized or visit the ER before they need it, and proactively educating them on alternatives or enrolling them in a care management program to help keep them from ever needing those services is a large, untapped opportunity for cost savings.



Conclusion

Advanced analytics provides the ability to bring tremendous insights and focus to your health and wellbeing strategy. By understanding the power of advanced analytics and working with vendors who do the heavy lifting, you can meet employees where they are today and predict where they are going tomorrow. Bottom line, it's about making data work harder for you to improve the health of your target consumers and the value of your programs.

About Welltok

Welltok, developers of the award-winning CaféWell Health Optimization Platform, is radically changing the way employers manage the health of their employees and dependents. Welltok helps employers understand and predict their employees' needs, organize the growing spectrum of health and wellbeing resources into a unified platform, and deliver a highly personalized, rewarding experience that drives engagement.

1

Here are a few tips from Phil Fiero, Senior Vice President of Analytics Services at Welltok, to guide your strategy:

KNOW YOUR TARGET POPULATION.

It's difficult to manage at-risk individuals if you do not know why they are at-risk or have confidence that the individuals you are targeting are the right ones.

IT'S NOT JUST ABOUT DATA, BUT IT'S ABOUT COMBINING ALL TYPES OF DATA.

When non-healthcare and healthcare data are combined, it creates a more complete picture of each individual, which helps drastically improve targeting efforts.

2

MAKE IT EASY FOR PEOPLE.

If consumers aren't engaged in their health, many times it is because they don't know how to find the resources available to them. They will not spend time searching if they don't even know what is available. Provide a single destination for all relevant health and benefit information to increase discovery and utilization.

3

FOCUS ON THE RIGHT RECOMMENDATIONS.

Energy should be spent on actionable recommendations that meet business goals, focus on consumers' needs, are measurable and are continuously updated.

4

Contact us to learn more about what advanced analytics can do for your organization.

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