(intel®)

Realizing the Benefits of Health Analytics and Wearables for Population Health

Improve population wellness and identify at-risk members to improve outcomes, lower costs and advance the level of care.

An estimated **USD 2 TRILLION PER YEAR IN HEALTHCARE COSTS** globally are attributable to **POOR HEALTH HABITS.[1]**

— McKinsey and Company, 2015

Industry Strategic Challenges

Health plan costs can be a real burden for employers and employees. Now, new forces at play in healthcare are putting pressure on population health managers to embrace innovation and respond to the changes their industry. Healthcare and payment reform are shifting to a value-based model that is increasing the importance of patient and member engagement in their own healthcare management. Digital transformation has reduced information and operational technology costs. At the same time, there are growing concerns about privacy and security. Aging populations and advancements in technology are challenging the existing healthcare fee-for-service models, which are cost intensive and increasingly unsustainable. Population health managers are looking for ways to target industry trends and set their organization apart from the competition.
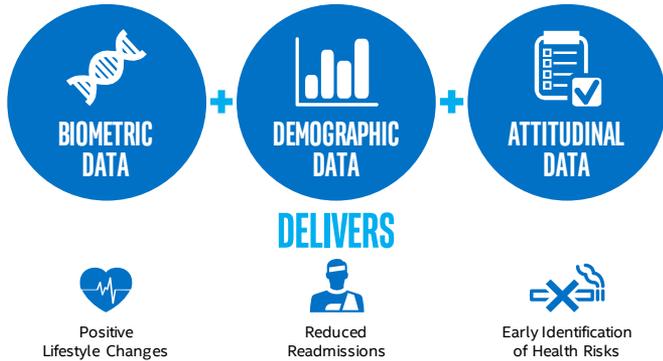
Healthcare organizations and employers who embrace predictive analytics based on data gathered, in part, with wearable technology are able to address the healthcare needs of their patients and members and can reduce the cost of managing population health. The power of clinical and predictive analytics offers the ability to meet today's challenges effectively with a more targeted approach to wellness management.

McKinsey and Company* estimates that twenty percent of all healthcare costs result from lack of consistent exercise; lack of adequate sleep; and addictions to alcohol, drugs and tobacco. These poor health habits can cause obesity and other conditions, including type 2 diabetes, strokes, heart disease and cancer. Such costs are avoidable but require the ability to measure activities and engage with populations in broad and cost-efficient ways. The best avenue to improve population health and reduce these costs is by putting behavioral data in the hands of healthcare and benefits professionals.

Big Cloud Analytics* and Intel have partnered to deliver a solution for addressing quality-of-life and cost-of-care issues. The combination of wearable fitness trackers and the COVALENCE* Health Analytics Platform enables organizations to more securely use data to engage insured employee populations with event-triggered, personalized messaging and encourage better health. By identifying early warning signs, population health managers can head off the onset of chronic diseases, improve lives, and generate long-lasting savings.

Business Drivers and Desired Outcomes

High costs associated with aging populations that are increasingly burdened with chronic disease challenge healthcare and benefit providers to provide innovative wellness plans that will engage patients and lead to healthier lifestyles. Data gathered from the activities of daily living is used to score the population and to identify members exhibiting potential health risk factors. Predictive analytics helps healthcare providers and benefits administrators reduce the cost of member benefits by identifying population cohorts and focusing customized health messaging and coaching where needed. In addition, the insights that health analytics provide aid population managers in identifying early indicators of potential health issues. Proactive management of a person showing such risk factors can lead to population members better managing their health and putting off or eliminating the debilitating onset of chronic conditions. Predictive analytics can also identify benefit plan defectors in advance and allow plan managers to mitigate benefit plan churn and reduce coverage costs.

BIOMETRIC DATA + DEMOGRAPHIC DATA + ATTITUDINAL DATA

DELIVERS

Positive Lifestyle Changes | Reduced Readmissions | Early Identification of Health Risks

Digital Transformation and Business Innovation

Through its increasing influence, availability and power, digital technology offers opportunities for all healthcare and benefit providers to drive healthcare improvement through increased quality of care and decreased expenses. The betterments gained from new technology tools can redefine relationships between providers and their population members. For example, wearable health monitoring bracelets and advanced analytics of the biometric data obtained from those bracelets allow providers to create personalized offerings to match the needs of individuals. Providing patient and plan members with wearable technology and advanced analytics also encourages healthier lifestyle and behavior changes.

This can affect the health and life expectancy of the population members, in turn impacting the cost of care treatments, and ultimately improving both members' quality of life and benefit providers' bottom lines.

COVALENCE™ Health 360 – Beyond Steps

Enabling Transformation

Using data obtained through wearable technology and other sources assists healthcare organizations in reaching key patient care goals such as improved wellness, increased engagement, and lower cost of care. In one possible scenario, population members might share personal data in exchange for health plan benefit reimbursements. In another, healthcare providers might use health analytics to obtain a deeper understanding of correlations between activity and diabetes risk, allowing for personalized care treatment plans. Faster, more accurate risk analysis of populations could enable optimization of care plans for multiple chronic diseases that are increasingly prevalent in aging populations. Early identification of these health risks leads to more effective treatments and can cut into mortality and morbidity rates, resulting in significant savings on healthcare costs.

Solution Summary

Together with our technology collaborators, Intel is helping organizations proactively manage population health with wearables and data analytics solutions such as COVALENCE Health Analytics Platform from Big Cloud Analytics, devices from Fitbit* and Garmin*, and other health data tracking devices (weight scales, blood pressure cuffs, glucometers, etc.) from additional providers. These solutions offer healthcare providers and benefit managers the ability to transform population health and drive down healthcare costs through the many benefits of health analytics.

Where to Get More Information

For more information about health analytics solutions, please visit **www.bigcloudanalytics.com** and **www.intel.com/healthcare**.