

The CEO's Guide to Making Healthcare More Affordable with AI-backed Analytics





Healthcare costs are rising, but the workforce isn't getting healthier

Our current healthcare system does not support a long-term and holistic approach to disease prevention. Despite having medical benefits from employers, the majority of the working population does not have an established relationship with a primary care physician, and in this reactive healthcare system, individuals don't seek care until the seriousness of the issue outweighs the hassles involved.

In a 2018 **survey** by Willis Towers Watson, a top priority by employers is to focus on overall wellness solutions and chronic conditions management, as part of the effort to overhaul workplace healthcare spending. This is an acknowledgement of a broken healthcare system, where the consequences of delayed medical attention are dire to everyone involved when major diseases go unidentified and untreated. Costs of employee health benefits have continued to soar by approximately 5 percent year-on-year since 2017¹, but nearly **half** the American population, or **6 out of 10** adults are afflicted by at least one chronic disease. Somehow, the workforce isn't concurrently getting healthier.

¹ U.S. healthcare spending to climb 5.3 percent in 2018: agency <https://www.reuters.com/article/us-usa-healthcare-spending/us-healthcare-spending-to-climb-53-percent-in-2018-agency-idUSKCN1FY22D>

86% of healthcare costs today are a direct result of treatable and preventable chronic diseases.

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Through the emergence of proactive healthcare models that prioritize the use of big data and analytics, employers are discovering that it's not the standard office visits for milder issues like the flu that is driving increased healthcare costs. Rather, it is the catastrophic issues that impact a small percentage of employees and their spouses – roughly 10-15 percent of a group are the ones who will spend 80-90 percent of the claims dollars.

This paper discusses the benefits of a preventive healthcare model, and how specific types of big data analytics are integral to leading the charge towards better healthcare planning and spending.

The Big Five

1	Obesity	2	Diabetes
3	Hypertension	4	Hyperlipidemia
5	Tobacco Use		





Preventive care without the prohibitive costs

With early detection, many of those issues are manageable or even preventable. But the logistical barriers to healthcare access continue to stay up in standard main street healthcare. The waiting period for an appointment is 2-3 weeks, and on the day of the appointment, patients are fortunate to even get five minutes of a doctor's time and attention to discuss one health issue alone. Even the most diligent patient would be discouraged from seeking preventive care.

A proactive healthcare model is designed to transform the status quo into one that is convenient, engages employees and their families, and seeks to identify preventive measures. Predictable and repeatable processes within the model aren't just easy to implement but enables a shorter path to care with on-site clinics and pharmacies, disease prevention and a long-term focus on overall health.

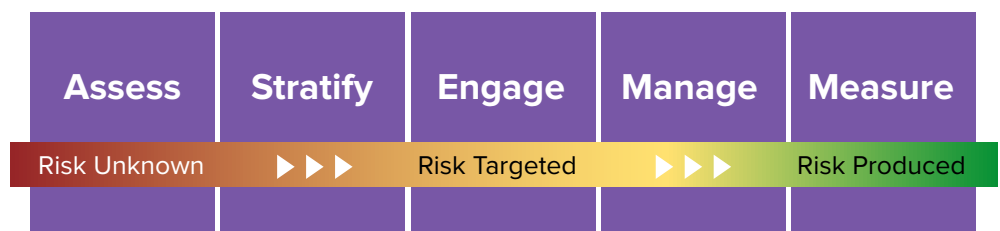
The model is also set up to conduct risk assessments of a work population and equip employers with a greater ability to estimate their healthcare cost impact. Additionally, they can plan health engagement strategies that work towards healthier and happier workers that encourages retention, as well as recruitment. This is achieved with the use of healthcare AI, where algorithms compute long-term patient data to produce aggregate analytics of a population.



A closer look at the analytics used by CareATC to lower employer health costs

Central to the success of the CareATC model is the use of a risk assessment methodology that governs their strategy for data utilization. From a centralized enterprise data warehouse, various forms of patient data – collected from sources that include third-party administrators (United, Cigna, Blue Cross, etc), past clinic visits, medical history and the CareATC personalized health assessment (PHA) – are processed by the Johns Hopkins ACG system, a population health analysis tool that predicts the health of an individual based on the collected data.

A Proven Methodology



CareATC's shared on-site clinics make it convenient for employees to see to their medical needs and obtain prescriptions without having to drive to a separate location. Doctors and nurse practitioners are given the tools, training and time to spend addressing each patient's concerns, and in most cases, co-pays and deductibles are not required.

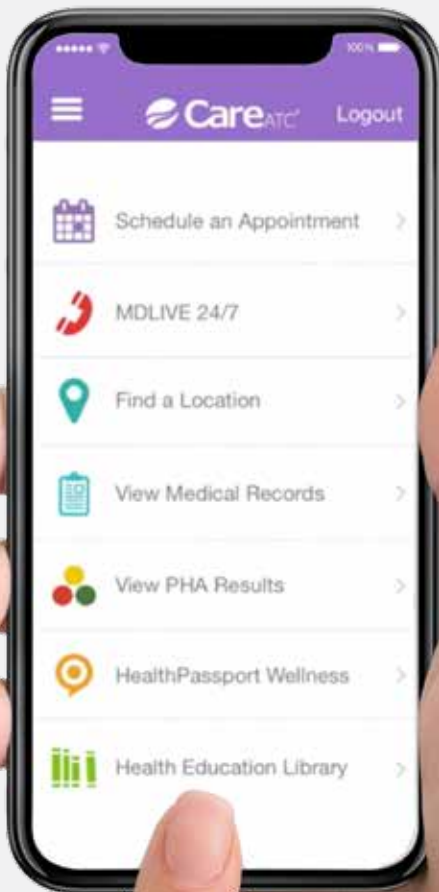
Descriptive analytics

Descriptive analytics are the foundation of a patient's journey to better wellness. In healthcare, this includes information from health provider plans, pharmacy benefits manager (PBM), clinical visits, and personal health assessment (PHA) results, among other sources. It's used to identify strengths and weaknesses in a situation to inform strategy and next steps.

To understand how descriptive analytics work in improving an individual patient's wellbeing, consider this hypothetical case study of a 28-year-old male patient:

The patient's personal health assessment results indicated that while he was generally healthy, was found to have high levels of LDL cholesterol in his bloodstream. Although he was contacted by CareATC Outreach regarding the issue and made a doctor's appointment, the patient did not make the visit. Months later, however, the patient was scheduled for a clinic visit for an entirely different issue altogether.

As part of CareATC's standard operating procedure, the doctor didn't just take care of the issue that the patient came in for, but also examined the patient's PHA data and discovered the unresolved issue of high cholesterol. By talking to the patient, they also determined that he was at risk for heart attacks, which ran in the family. The patient left the clinic that day with his issue resolved, and with the knowledge that other conditions he was at risk for were being monitored.



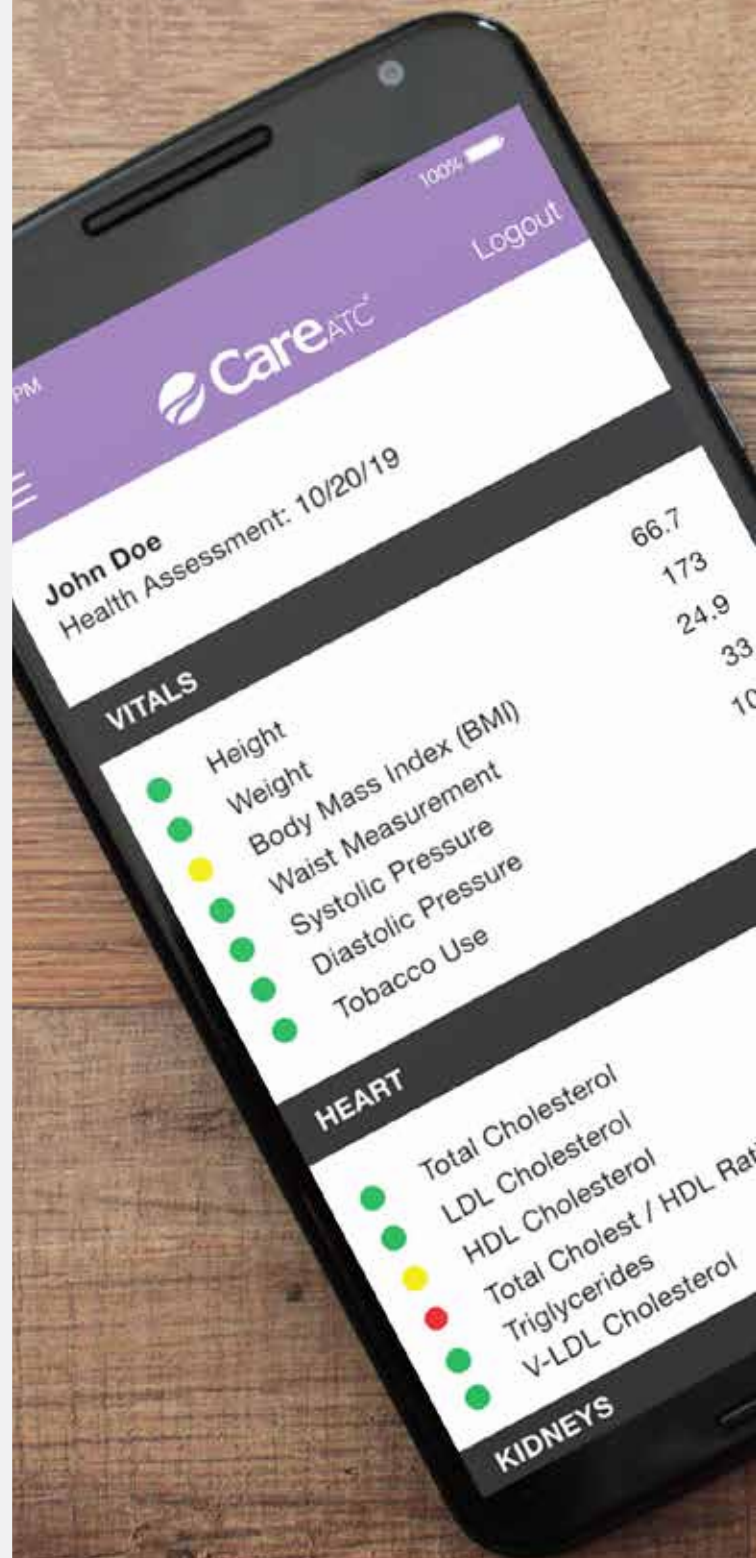
Predictive analytics

Healthcare providers who are given access to a patient's health analytics are enabled to assess their holistic health instead of individual episodes, in order to identify future trends. In doing so, they capture the multidimensional nature of an individual's health over time, and consider morbidity clusters rather than separate individual diseases. Doctors get to target risks before they occur and engage the patient by encouraging positive behavioral changes, potentially lowering the occurrence of a catastrophic incident.

From a population health management perspective, CareATC uses the Johns Hopkins ACG system, an algorithm tool to determine health risk scores by processing data points from descriptive analytics. This increases the reliability in assessing high cost areas, predicting healthcare utilization more accurately and setting fairer payment rates.

CareATC's Predicted Risk Score takes into account the estimated total costs for the year, including pharmacy claims, high cost claims and persistent high cost claims. It also allows for estimating the likelihood of hospitalization for the entire group, and being presented with that risk is another urgent call to action for patients to work on better healthcare management.

CareATC is HIPAA-compliant and does not reveal individual patient PHAs to external parties. What employers receive are aggregate reports to help them measure their year-on-year health spending.





Prescriptive analytics

Based on the analysis on long-term data, prescriptive analytics provides recommendations that can be implemented to improve population health rates and lower costs. In the discussion to determine if an employer is achieving their year-on-year goals and managing risks, here are several guiding points to help stay on the right track:

Are you encouraging early prevention and intervention?

This is the quickest way to reduce medical spending. By understanding the population risks and what percentage should be participating more in health management, you have critical information to advocate for the success of your health plan and employee wellbeing.

How are you encouraging better engagement?

Whether it's mobile apps or other types of patient outreach, meeting patients at a level that they're comfortable with is critical to any engagement initiative.

Does your benchmark comparison stack up well against the best-in-class?

For example, fewer visits for chronic issues may indicate a population that is healthier, but if the percentage of a population at risk for chronic issues falls short of a CareATC best-in-class score, some of your engagement campaigns should be built around addressing this issue.

Are ER and hospital resources being used inappropriately?

Early outpatient care with targeted treatment can avoid emergency room visits and expensive hospital treatment. Build client-specific programs that address relevant risks in any population.

Employers that stay with **CareATC** for more than 18 months get to compare summary scores and statistics with benchmark comparisons, and receive explanations and diagnostic suggestions.



Summary

The saying “if it isn’t broken, don’t fix it” should not apply when it comes to disease prevention. But it is the status quo of our current healthcare system, and it costs employers millions of dollars annually in hospital bills and chronic conditions treatment. The CareATC way is a preventive approach to healthcare. It is not about the early detection of diseases in individual patients but is a strategically plotted course towards better overall health management.

When backed by AI-enabled data, numbers don’t lie. A health population’s status—presented in the form of summary scores, risk factors and benchmark comparisons—allows employers to build engagement strategies that help employees better monitor their own health and avoid catastrophic medical events. A healthier workforce is also a happier one, leading to better productivity and retention.



Partner with the Pioneers of Shared-Site Clinic Networks

CareATC pioneered the shared-site clinic network concept in 1998. As the only vendor in the space with 100% HHHC accreditation and credentials in disaster recovery, the company boasts some of the highest retention rates in terms of both providers and customers—at 99% in 2018.

CareATC is a data-driven population health management company that empowers you to inspire healthier, happier employees and reduce your health-care spend. We have the proven programs and technology to help you create an exciting wellness culture that works wonders for your workforce. Headquartered in Tulsa, Oklahoma, CareATC was incorporated in 2000 and now operates in 35 states.



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