American Health Data Institute

Integrated, Creative, Turnkey, Profitable and Proven Solutions

Technology Driven Solutions

PATENTED POPULATION HEALTH MANAGEMENT PROCESS

The American Health Data Institute (ADHI) has been utilizing a patented process of population and disease management since 2002. This patent protects a population health management process of assessing and targeting interventions based on the risk of the population. This unique and proven process of managing the health of a population has been used by TPA's and healthcare systems all over the country to provide results for providers, employers, insurers and self-funded plans.

This patented process identifies members likely to be of the highest risk down to the lowest risk. Once identified, it is determined whether those individuals are meeting standard of care requirements for their health conditions. In addition to identifying care standards suitable to the condition, the process provides necessary interventions to improve the healthcare consumption characteristics of the population. In addition to member care management strategies being employed, the process identifies high quality, cost effective providers who have proven through episodic care analysis an efficient and effective way to deliver care. This proven and unique process has consistently reduced healthcare costs and increased the health status of the population.

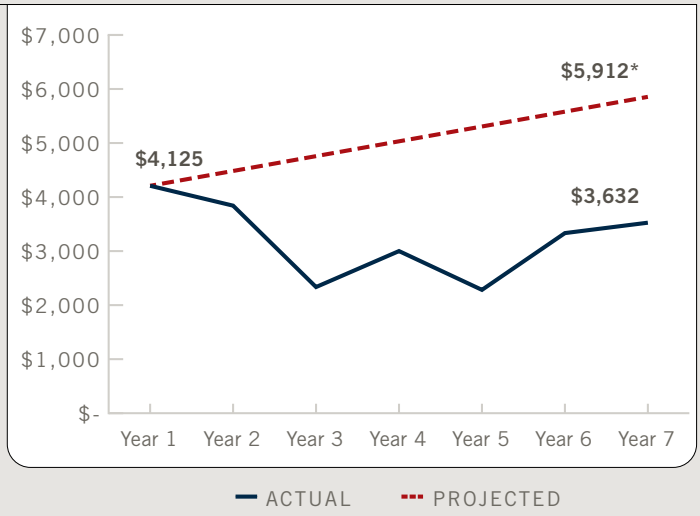
PATENTED POPULATION HEALTH MANAGEMENT PERFORMANCE REVIEWS

The American Health Data Institute has been demonstrating results using the patent-protected population health management process in the form of Performance Reviews. AHDI has the ability

to capture all the necessary data elements to show immediate reduction of healthcare costs and a sustained reduction of healthcare costs as measured against national healthcare trend data. These Performance Reviews also measure the progression of health status of the population through a Healthcare Index. This Healthcare Index calculates the health status of individual members as well as an aggregated group of members at either the employer or community level. In addition, the Performance Reviews track the progress of the care standards of the population because there is a direct correlation between compliance with care standards and a reduction in healthcare costs.

1 | SEVEN YEAR MEDICAL AND RX TREND ANALYSIS PMPY CLAIMS ONLY

Company 1 is a nonprofit organization located in North Carolina with 784 members. Since joining the program in, **Company 1** has been on a consistently favorable financial path and is currently 39% below trend. **Company 1** has not only used AHDI's Population Health Management, but also the programs patent pending Controlled Healthcare Budget, and Flex program to help control their healthcare costs.



U.S. Government Statistics

DATA WAREHOUSE — BEST IN CLASS SOFTWARE

The American Health Data Institute (AHDI) utilizes sophisticated data warehousing techniques and analytical tools. The data in the AHDI warehouse includes over 2 million lives. All states are represented related to geographic and regional data and we have over 20 terabytes of computer storage, capacity and memory. To provide a perspective on the volume of data, a warehouse which can store ten terabytes could hold the entire printed collection of the Library of Congress. The data in the AHDI warehouse is transformed into powerful, actionable intelligence, utilizing very sophisticated software to analyze the variance, cost drivers, cost trends and other significant clinical and financial factors influencing healthcare costs.

DATA MINING AND DATA ANALYTICS — EZView™

Health Risk Management (HRM) Proprietary Reporting System

The American Health Data Institute has created reports that answer all the critical questions regarding the following:

- How is the health plan financially performing
- What are the health conditions of importance to the population
- How well is the population following care standards
- How is risk predicted and stratified in the population
- How are the providers performing related to providing necessary care
- How does all this compare to local, regional and national normative data bases.

Each one of the reports was meticulously designed to interconnect with the other reports as well as stand on its own in order to answer critical health plan questions. These reports identify key indicators important to a health plan. No other reporting package has the extensive chronic disease reporting capabilities along with the ability to profile providers and analyze Health Economic Zones (HEZ). In addition to the robust reports, AHDI has created online teaching tools in the form of interactive modules that assist the user in weaving the reports together to tell a story. The HRM Reporting System turns data into actionable intelligence.

EZVIEW™ — DRILL DOWN HEALTHCARE REPORTS

The HRM Reporting System also includes a turbo charger called EZView™. EZView™ is the newest generation of business intelligence software. With the "click" of a button, any question can be answered and then displayed in a variety of graphic layouts. AHDI's newly trademarked program creates an online platform for healthcare risk management. Security of data is iron-clad, normative comparisons are customized and a single-click allows reports to be exported into Excel. EZView™ produces intelligent data at the speed of thought, and no one has to be a power user to successfully access answers.

INTEGRATED HEALTHCARE RISK MANAGEMENT SOLUTIONS

The American Health Data Institute offers integrated health risk management tools proven to reduce the cost of a health plan and improve the health of the members. AHDI accomplishes this by offering health risk management tools proven to work and integrating those tools to maximize the results.

Chronic Disease Management

AHDI has been successfully managing chronic conditions for employers for almost 2 decades. The claim system provides a robust resource to identify chronic conditions in a population. AHDI selected 27 different chronic diseases to track and benchmark based upon the cost of each condition, the prevalence of co-morbidities and the ability to self manage the condition. The chronic disease program further stratifies the chronic population into four risk stratums, those with greater cost, more co-morbidities and noncompliance of care standards are assessed at a higher level of risk.

There are several components to the success of the chronic disease management program. Once an individual has been identified with a chronic condition they are assigned a Healthcare Navigator™ Nurse. These are Registered Nurses who have specific experience in managing chronic conditions and all have been trained in Motivational Interviewing, a coaching technique highly effective in helping with long term behavioral change. The nurses work with the individual to identify areas where they would like to change behavior in order to better manage their chronic condition(s). The nurses focus on underlying behavior change but also readiness to change and compliance with care standards. Each of the 27 chronic conditions has established care standards. These care standards are compiled as the best practices as defined by the medical community.

In addition to the nurses, the chronic disease management program has a robust and comprehensive set of reports that track care standards, financial indicators and contact information. These are critical elements to track and report in order to determine the progress of the program. Each of the 27 chronic diseases is individually tracked for compliance, as are the individuals who participate in the program. AHDI maintains a high percentage of participation in their program (over 98%) which is an excellent indicator of the value provided to the member. The chronic disease program has maintained a consistent return on investment within three years of implementing the program and an increased return on investment over five years. On average the program will reduce claims costs from 11-17% depending on the prevalence of chronic disease in a population and the employer's support for compliance with the program.

Physician Profiling

AHDI through the use of very sophisticated software applications has the capacity to identify which physicians provide high quality, cost effective care. It is a well known fact the way physicians practice medicine related to both treatment options and cost, varies as much as zip codes. The physician profiling program analyzes practice patterns, the delivery of post-primary preventive care services and the cost efficiency index of individual providers. The analysis covers an entire episode of care through the use of ERGs (Episodic Risk Groups) and ETGs (Episodic Treatment Groups). Historically, the vast majority of physicians had no way of comparing an entire episode of care. An episode of care

incorporates everything a physician orders for the patient, from the first office visit through the last healthcare service performed for a particular healthcare problem.

Identification of high quality, cost effective providers is essential to a healthcare system desiring to become an Accountable Care Organization. It is also critical to employers who desire to steer their members to providers who have proven to follow evidence based medicine guidelines in a cost effective manner. In studying the AHDI database, a physician who does not follow these guidelines is on average likely to be 40% more expensive and did not follow best practices. If an employer utilizes 15% of physicians who do not meet these guidelines, it is costing the employer on average 10% additional cost and the highest quality of care has not been achieved. AHDI produces a variety of reports that can drill down to the exact factors that are deviant from the established evidence based treatment patterns.

Predictive Modeling — Healthcare Indices

A Predictive Modeling is the science of ranking individuals from those with the greatest probability of disease onset down to those with the least probability. Episodic Risk Groups (ERGs) are used in predictive modeling. The Society of Actuaries recognizes ERGs as one of the best risk assessment tools for predicting future healthcare costs.

Using medical, pharmacy and demographic data as inputs, the ERG software generates individual health risk scores. Each employee is assigned a Healthcare Index, which is a number that considers their past claims history and likelihood of future claims cost depending upon that history. The individual health risk scores are then converted to a monetary value. Those employees with the highest Healthcare Index are most likely to incur the highest healthcare bill over the next twelve months. The predictive

modeler can actually predict how much money they are likely to spend as well. Since reducing large claims is a major goal for employers, this is invaluable information. An employer can reduce their future risk by practicing large claim prevention. Nurses can be assigned to individuals with the highest likelihood of claims cost within the next twelve months. Instead of looking in the rearview mirror of large claimants, an employer can look forward and provide necessary nurse interventions to manage care and claim cost.

In addition to using this tool for large claim prevention, it can be used to ensure individuals with high Healthcare Indices are participating in all the programs for care management whether that includes the Health Risk Assessment, Chronic Disease Management or Real Time Wellness Systems. Lastly, this tool is 80% more effective in predicting future costs when employers are trying to forecast their budgets for the next twelve months.

KeyCare Guide — Health Risk Assessment

The KeyCare Guide is an excellent consumer engagement tool that allows an individual to become more engaged in managing their own healthcare. The KeyCare Guide is very easy to use and contains many valuable tools such as an assessment which will identify potential health risks. Once those health risks are known the KeyCare Guide provides an educational program related to the member's identified health risk factors.

Another valuable tool in the KeyCare Guide is the ability to input biometric data from year to year. It is important for an individual to understand some basic health indicators in order to manage their overall healthcare. The comprehensive medical library is an invaluable resource for individuals so they can obtain credible medical information. In addition to these resources there are a variety of logs (food diary, blood pressure, glucose) as well as wellness tools such as Body Mass Index Calculator, Calorie Burner Counter, Target Heart Rate Calculator, Nutritional Needs Calculator and Ideal Body Weight.

This tool also serves as a baseline risk assessment to inform employers in the aggregate where there are lifestyle and health risk factors related to their member population. It is vital to engage the ultimate consumer (the employer or member) in assuming more responsibility for their healthcare status in order to control healthcare costs.

RealTimeSolutions
AMERICAN HEALTH DATA INSTITUTE

:: **An innovative** ::
suite of products design to drive intelligent decisions.

RealTimeChoices
AN AMERICAN HEALTH DATA INSTITUTE PRODUCT

RealTimeTelemed
AN AMERICAN HEALTH DATA INSTITUTE PRODUCT

RealTimeHealth
AN AMERICAN HEALTH DATA INSTITUTE PRODUCT

RealTimeWellness
AN AMERICAN HEALTH DATA INSTITUTE PRODUCT

REALTIMESOLUTIONS

RealTimeSolutions offers an innovative suite of products designed to address the unique needs of our clients through actionable data that drives intelligent decisions. These tools are engineered to be uncomplicated for the member to use and powerful enough to positively influence the cost of the health plan, improve the health of the members and to make the individual a better, more informed healthcare consumer.

Each of the RealTimeSolutions has been designed to be simple to implement and cost effective as either an independent offering or integrated suite of products. RealTimeSolutions effectively integrates and complements the core Health Risk Management solutions provided by the American Health Data Institute (AHDI).

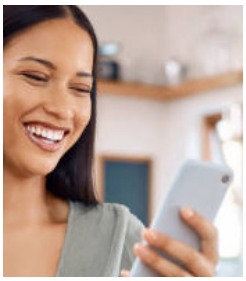
REALTIMECHOICES

We all know it is nearly impossible for consumers to determine the actual price for quality healthcare services. RealTimeChoices is a healthcare price transparency solution that gives individuals the tools they need to better choose where to spend their healthcare dollars.

Specifically, RealTimeChoices provides the ability to shop for and receive a fair price for healthcare services. Consumers are able to quickly and easily understand what they should pay for specific services in their geographic area. We identify the fair price for more than 200 common procedures including surgery, labs and image tests.

RealTimeChoices is delivered directly to your members via website and mobile app. Users are guided by a simple 'traffic light' image that helps them zero in on the best answer to their healthcare needs and costs are detailed on an easy to read scale.

:: **Transparency** ::
is the answer. RealTimeChoices
is the solution.



REALTIMETELEMED

With RealTimeTelemed, you can visit with a doctor 24/7/365 - from your home, office or on the go! Access a broad network of board-certified doctors by secure video or phone chat, a full medical team available to assist you with the non-emergency care you need, when you need it.

:: **One-Of-A-Kind** ::
RealTimeHealth is a one-of-a-kind, diabetic management program directed at improving the health of one of your most at risk groups.

REALTIMEHEALTH

With RealTimeHealth, AHDI brings you a high tech and high touch solution for your health needs. RealTimeHealth is a diabetic management program that uses state-of-the-art, cellular-based glucometers to automatically, consistently and accurately take and record a member's glucose readings. This product is a 24/7 care support system that monitors, encourages and motivates the member to take the steps necessary to control their condition.

When a RealTimeHealth member takes a reading, results are immediately transmitted to our secure 24/7 care center, to the member's personal RealTimeHealth website and to their designated care circle.

RealTimeHealth also removes the hassle of unnecessary mailings, as supplies are mailed to the member's home on an as needed basis. And, as an additional benefit, members are also able to bring family and friends into their care network.

REALTIMEWELLNESS

It is well documented that people with chronic diseases account for a very high percentage of medical claims cost. The best way to control a chronic condition is to prevent it from happening altogether. RealTimeWellness delivers onsite biometric screenings that immediately identify potential health risk factors.

RealTimeWellness focuses on keeping employees from reaching a chronically ill stage by making them aware of their basic health situation and providing educational and motivational materials. The employee data is uploaded to their personal health website as well as the KeyCare Guide, the RealTimeSolutions Health Risk Assessment tool.

If the employer selects to do so, RealTimeWellness can provide coaching by registered nurses and certified health coaches to these participants on defined intervals throughout the year. This ensures consistent reinforcement to the participants for any identified lifestyle and behavior changes they should make.

Comprehensive Onsite Health Screenings identify potential health risk factors through:

- Cholesterol
- Glucose
- Blood Pressure
- Height
- Weight
- Body Mass Index

AHDI'S COMMUNICTION STRATEGY

AHDI's strategy focuses on creating a dynamic and adaptive engagement solution that leverages multiple communication channels to provide a personalized experience for each individual. The key components of this strategy include:

1. Flexible Communication Channels: AHDI utilizes a variety of communication methods such as voice calls, branded MMS tests, mailers, QR codes, chat, and landing pages to engage with individuals.

2. Personalized Experience: The strategy emphasizes creating an individual experience by tailoring the communication to what it sounds like and what the user experiences.

3. Measuring Success: AHDI measures the success of its engagement strategy by assessing the impact on healthcare spending, engagement scores, EZV reporting, and updates to employer reportS.

DNA SCREENING: GETTING TO THE CORE OF YOUR BODY

Ever wonder why some people can eat bad food, rarely exercise, and yet still maintain a healthy profile? It might be in your genes! The Proactive Health Management Plan's DNA Screening can provide answers to that and many other questions, such as how your body metabolizes caffeine and alcohol, and what types of food and vitamins benefit you most.

What can you learn from a DNA screening?

Fullness

The Proactive Health Management Plan's DNA report can determine how your body senses fullness in degrees of normal, delayed and impaired. All of which tells you whether you have tendencies to overeat. Helpful tips can then assist you in proactively changing your behaviors to promote healthier eating habits.

Caffeine

Caffeine packs a buzz in just about any form—but how does your body react to it? The Proactive Health Management Plan's DNA Report can tell you how your body metabolizes caffeine, and how that affects the intensity and duration of your coffee buzz.

Alcohol

When your body takes longer to metabolize alcohol, it results in a "flush" -- red cheeks, skin blotches, headaches, and increased heart rate and blood pressure. The Proactive Health Management Plan's DNA Report determines how likely you are to flush with alcohol consumption.

Fat Loss with Exercise

The Proactive Health Management Plan's DNA Report analyzes how fat is transported in the blood and where fat is stored, all of which can help you plan your next fitness routine.

Craft your personal health and well-being journey by understanding how your body reacts to and processes food, and what exercises are best for you!

Our personal coaching team will work alongside you every step of the way!

Member Testimonial:

"I looked at my DNA results and I learned that I have a slower recovery from working out, I'm at a low risk for Achilles Tendinopathy, I have to exercise longer and more intensely for weight loss, and must add cardio to my strength training regimens, I must wait 20 minutes between courses as my brain responds slowly to signals that I'm already full (so true), and I have an increased risk for impulsive tendencies to go to "comfort foods" for impulse eating! The most interesting point is that I'm a "supertaster of bitter" when eating healthy vegetables, so they encourage using more herbs and spices to overcome bitter tastes (rather than using salt!)."

ABOUT THE DNA SCREENING

It is important to note that your health and fitness are dependent on many factors. Your genes, environmental influences, and lifestyle choices all contribute to the current state of your body and health. Your health and the way your body responds to nutrition and various types of activity depends upon a number of factors or causes. It has been shown that genetics contributes approximately 30-40% to your body's responses to food and activity, including exercise.

Our exciting new technology reflects your individual genetic make-up and will provide valuable guidance on how to most effectively and efficiently optimize your diet, supplements, and exercise program.

The result of your personal Fitness+Nutrition DNA panel will empower you to make choices to receive the most benefit for the effort as you commit to protect your health and keep your body fit.

Your personalized results based upon your own DNA will be a guide to help you identify and implement actions to assist you in taking control of your health and fitness. Sharing this information with your own personal healthcare provider, nutritionist, physical trainer, or other trusted advisor will help you receive the greatest benefit as you leverage their professional knowledge and support.

An innovative suite of products designed to drive intelligent decisions.

American Health Data Institute

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WWW.AHDI.COM