How Personalized Care Promotes Optimal Health
What is Personalized Care?

Until recently, medicine was pretty much a one-size fits all approach, with treatments and medications being administered based on limited knowledge that centered on statistics of general populations instead of individual people. Even with the best advances in science, this was the best we could do.

Recent developments in new science, however, have opened the medical industry up to a personalized approach to medicine and healthcare. It is based on more precise, predictable and beneficial medicine that is customized to each individual’s genetic makeup. This is producing strong advancements in diagnosis, medications and treatments that are safer and more effective.

This new approach is known as personalized medicine or personalized care. To clarify, let’s define these two terms, which are sometimes used interchangeably, but which do have some differences:

Personalized Medicine = The use of genomics and diagnostics to customize healthcare to a unique patient based on their genetic makeup.

Personalized Care = The use of numerous customized methods to care for a patient over time instead of a one-size-fits-all approach to care.

How Personalized Medicine is Coming About

In 2003, the Human Genome Project was completed, and as a result, healthcare will never be the same. From this project, scientists learned about the order of the 3 billion units of DNA that make up the human genome. Current studies are in the process of identifying the individual genes that make up long strands of DNA, as well as what controls each gene and what causes certain diseases and reactions in the body.
With genome-based medicine, we now have a greater opportunity than ever to personalize healthcare by analyzing each person’s unique DNA in order to assess their personal risk factors as well as the treatments that will work best for them as an individual.

If there was a health blueprint for each person on this planet, it would be the genome because it illustrates a person’s predispositions to certain diseases, how well their immune system will fight disease, how their bodies will metabolize food, and what therapies their bodies will respond to the best. Armed with this information, a person can take steps to reduce their risk factors and improve their health.

Personalized medicine uses that blueprint – the human genome – as well as a person’s environmental and clinical information to treat patients uniquely. Since not everyone will respond to drugs or treatments the same way and since diseases react differently depending on the person, personalized medicine is also known as precision medicine because it allows healthcare providers to treat patients with a much higher degree of precision.

According to U.S. News & World Report, the benefits of personalized medicine include:

- The ability to make more informed medical decisions
- A higher probability of desired outcomes thanks to better-targeted therapies
- A reduced probability of negative side effects
- A focus on prevention and prediction of disease, rather than merely reacting to it
- Earlier disease intervention than has been possible in the past
- Reduced healthcare costs
How Personalized Medicine Works

Personalized medicine allows each person and their healthcare provider(s) to predict much more accurately what diseases a person is susceptible to so that they can work together to prevent the onset of those diseases, and to properly treat the disease if it does appear.

Many diseases, such as cancer, heart disease and diabetes, are complex diseases that have multi-gene components, which can be caused by errors in a person’s DNA and can therefore can be better understood by using a whole-genome approach.

Your genes tell your body how to produce proteins and perform important functions. It is normal for our genes to differ from person to person. For example, bases of genes are often switched or missing, and some of these variations can have an impact on what diseases you might be more likely to get and what medicines will work in your body and which ones will cause unwanted side effects.

Pharmacogenomics is the study of how genes affect the way medicines work in the body. Armed with genomic information, a doctor can much more accurately prescribe medications that will work for you without side effects, as well as the right dosage.

The Benefits of Personalized Care

Personalized Care Leads to Better Outcomes

Since every patient responds to treatments differently, tailoring medications and treatments to patients according to their personal genetic makeup, family history and current lifestyle helps improve the quality of care and therefore better outcomes.
Everyone reacts to medications differently, and adverse side effects are a leading cause of hospitalization in America. The targeted therapies used in personalized care allow for more effective care with less side effects than one-size-fits-all medications. Drugs and treatments have typically been developed as a result of performing studies on broad populations of people, yet according to The Jackson Laboratory, “on average, any given prescription drug now on the market only works for half of those who take it. Among cancer patients, the rate of ineffectiveness jumps to 75 percent.”

Due to disease screening and prevention, a lot of what is wrong can be reversed, and it can be more easily reversed when we are dealing with people as individuals instead of people as a demographic or group.

In addition, new drugs are now coming out that treat the genetic mutations that cause diseases instead of just treating symptoms. This is the power of personalized medicine.

**Personalized Care Leads to Better Patient Participation and Compliance**

Because personalized care is tailored specifically to individuals, patients feel they will get better results from the treatment, producing a feeling of empowerment, which helps them better comply with their care plan. Patients have more confidence in their care plan because they feel the recommendations being offered to them are the right ones for them, and they participate as such.

**Personalized Care Tends to be More Comprehensive**

Personalized care utilizes a more holistic approach that focuses on the whole patient and takes into consideration their combined physical, mental and emotional health instead of looking at those things separately.
In this way, care plans are more comprehensive and hit on the root causes more than traditional treatments, which tend to focus on symptoms.

**Personalized Care Has a Strong Focus on Proactive Care**

With the transformation to personalized medicine, our healthcare system is shifting from a reactive system to a proactive system, and from treatment to prevention. Prevention is more accurate and effective than treatment because there are too many factors related to diseases that we still don’t fully understand. When we rely on treatment alone, we are relying on something that is unpredictable and ineffective for many people, while only being effective for some people.

Personalized care provides a road map that allows each patient to lead a long, healthy life through proactive solutions. When we take proactive care of ourselves, we prevent issues from coming up so that we can lead a better life. The more personalized we get with our care, the more effective we are at being proactive.

**Personalized Care is More Affordable**

These days, patients are assuming more and more of the costs of their healthcare, and while taking proactive measures and “paying more” for personalized services can seem expensive, in most cases, it ends up being more affordable. This is because by preventing chronic conditions and health issues from coming up in the first place, we never incur those costs, which typically end up being much more than the money we put into our personalized preventative care.

**Personalized Care Reduces Emotional Stress**

When you have a plan in place, you are more equipped to handle situations with less stress. The same is true when it comes to your health,
and even more so when your care plan is personalized to your specific needs. Plus, the outcome of your care plan will be an optimal quality of life, which will certainly reduce emotional stress.

**Personalized Care Promotes Stronger Doctor-Patient Relationships**

Traditionally, physicians have not been able to dedicate much time to their patients, both during appointment and in follow up. Personalized care, on the other hand, typically involves more in-person time, as well as follow up care management through phone calls and email connections. Since personalized care is an ongoing process, prescribed treatments are more closely monitored, allowing for more personalized attention and better relationships between patients and their providers.

**Steps to Personalize Your Healthcare**

While personalized medicine is relatively new, many healthcare providers are making this form of treatment available. It starts with having a simple saliva sample taken so that the genome can be sequenced and then interpreting the data to determine the best course of action.

**You can take the following steps to personalize your healthcare:**

- Ask your physician to request a testing kit here: [http://carpevitagenomics.com/request-a-kit/](http://carpevitagenomics.com/request-a-kit/)
- He or she will order a test and then take a saliva sample from you to send to the lab for sequencing.
- When the results are complete, your physician will call you to schedule a follow up visit to discuss your results and put a care plan in place.
- Learn more here: [http://carpevitagenomics.com/](http://carpevitagenomics.com/)

Don’t worry – the Genetic Information Non-Discrimination Act of 2008 (GINA) prohibits health insurance companies from determining your
eligibility for insurance or determining insurance premiums and employers from discriminating against you based on your genetic or genomic data.

**P4 Health: The Change Our Healthcare System Needs**

Healthcare challenges have never been so real, but it has never been so revolutionary either. A shift is taking place that is bringing health, wellness, science, technology, engineering and mathematics together to solve the challenges of global health. This shift is called P4 Health, otherwise known as P4 Medicine, and it will literally revolutionize the healthcare industry, pharmaceuticals, biotechnology, diagnostics, healthcare technology, health insurance, therapy, prevention, wellness, nutrition, assessments of environmental toxicities, and academia and medical schools.

Personalized medicine is a big part of P4 Health, as you will see when we answer the question, “what is P4 Health?” It is bringing together the four key P’s of health: Prediction, Prevention, Personalization and Participation. When these four concepts exist, healthcare competency is elevated, healthcare costs come down, and our healthcare system moves from reactive to preventive.

**Predictive Medicine**

P4 Health is data driven, utilizing billions of patient data points, from which scientists are able to create predictive models that will take healthcare to new heights. It puts each person as their own control for disease assessment, instead of relying on the data of studies.

This is made possible with the digital information derived from genomics, which is the study of the genome and the role they play in biology and disease, as well as the environmental information that modifies that genetic information. It’s biology and technology working together to create diagnostics that allow for early detection and preventive strategies.
Preventive Medicine

Through genomics and systems approaches, preventive drugs and new vaccines will surpass current options. With the power to predict disease, we are then able to prevent disease at the earliest stages.

Personalized Medicine

With each person acting as the control in what is essentially their own individual study, the information generated from their personal DNA will lead the way to predictions and care that is based on their unique genetic makeup. In this way, they can focus on preventing the specific diseases they are more likely to get and they can integrate the treatments that will work for them as an individual.

Participatory Medicine

Patients will be able to participate in their own health in new ways, and it will be necessary for them to do so for P4 Health to work. Technology and tools will be provided to empower patients to take a more active role in optimizing their state of wellness.

Digitalization Transformation

The digitalization of biology and medicine are making P4 Health possible, and Lee Hood from the Institute for Systems Biology in Seattle, WA, states that it will “transform medicine even more than digitalization transformed info technologies and communications.” This is because it is making it possible to analyze single molecules, single cells, single organs and single individuals. Digitalization will also serve to lower healthcare costs.
The Role of Genomics in P4 Health

Genomics is the science that is leading this personalized health transformation. It allows scientists to evaluate an individual’s DNA to make predictions based on diseases the individual is genetically predisposed to and the treatments and medications that are likely to work best for the individual. A CarpeVITA Genomics GenoTest can be taken with a simple saliva sample, and then individuals can work together with their health provider(s) to create a more effective, customized plan of care.

Environmental & Lifestyle Factors

It is important to point out that personalized medicine does not take into account environmental and lifestyle factors that could lead a person to develop a disease, and that if a genomics test finds that you are not genetically predisposed to a disease, it does not mean that you won’t get the disease due to environmental and/or lifestyle factors.

For this reason, it is important to engage in healthy lifestyle habits, refrain from unhealthy lifestyle habits and avoid unhealthy environmental factors. With the help of your physician, consider taking herbal supplements to support the body’s natural ability to heal itself. Eat a healthy diet, get consistent exercise, don’t smoke, reduce the stress in your life, and give your body the sleep it needs to rejuvenate each night.

Personalized medicine approaches are already available, and through the CV4P™ model, CarpeVITA is one of the leaders of this P4 Health approach.
Take Control of Your Life the CV4P™ Way

With personalized medicine, the focus is on prevention and wellness. By understanding your risk areas, you can change your lifestyle habits to help prevent those diseases from occurring. It’s healthcare designed specifically for you!

By adopting the concept of P4 Health and the CV4P™ model for yourself, you’ll center your health and wellness around Prediction, Prevention, Personalization and Participation. It’s time to Carpe Vita, which means “Take Control of Your Life!

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About CarpeVITA, Inc.

CarpeVITA, Inc. is setting the standard for healthcare outcomes by providing services that encourage prediction, prevention, personalization and participation.

Our CV4P™ Approach

CV4P™ provides the bridge every health care professional and patient needs to Predict, Prevent, Personalize and Participate in their health. It provides individuals with a customized roadmap to optimal wellness.

CV4P™ is about helping people reach and maintain wellness to improve population health and individuals, families, companies, communities and healthcare providers on the right track.

CarpeVITA Health Networks

A CarpeVITA Health Network is an integrated medical network that facilitates our CV4P™ approach to health and wellness. In a CV Health Network, the fragmented parts of the current healthcare system become coordinated, procedure-oriented care becomes outcome oriented, reactive care becomes proactive care, and provider-payer conflicts become alignments. Patients, Physicians, Healthcare Systems and Complementary Providers all benefit from using the CV Health Network model.

Contact Us Today to See What We Can Do For You!

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