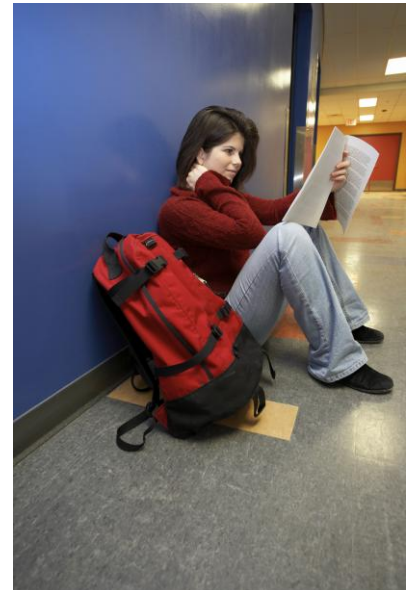


Inner Reach® HiGS
for Universities, Colleges, and
Their Sports Programs
Our Health Information Gathering System—HiGS



Education and health are everything!

The Inner Reach health information gathering system - HiGS provides many advantages for college and university students. Inner Reach HiGS is a tracking, monitoring, and following-up preventive care technology. Today's educational institutions are responsible for keeping their learners healthy and out of harms way. Young people armed with knowledge of their histories are better prepared when they travel away from home to college. When they collect their histories in HiGS, they can better identify risk (especially useful for athletes) while being ready in advance for travel, crisis, or any need.

Discovering histories about people is very time consuming. Going to college makes this one more important thing to think about, to identify risk, maintain health, and have health history information available. Most health histories are stored and kept by medical institutions not people themselves.

This is a big problem. When people have their own histories, they can update them as needed and refer to them to stay healthy and delay disease. **HiGS** saves time and cuts down on confusion when college students are away from home and their usual care.

Difference between Healthcare and Preventive Care

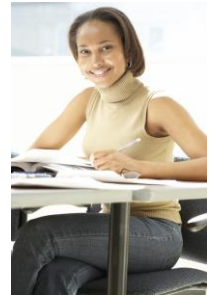
Healthcare technology systems for Western Medicine are based on disease and its treatment which only address healthcare record keeping and healthcare delivery. They are inadequate systems for preventive health matters. Preventive care needs this different type of tracking, health education, and focus that **HiGS** technology provides.

HiGS Shifts Responsibility and Control to the Individual

Preventive care is something we do for ourselves.

HiGS Preventive Care Technology enables people to:

- Collect their own personalized comprehensive histories
- Keep control over their own histories; have immediate access to them for any need
- Learn about their risk based upon their own histories
- Learn how their histories relate to diseases and how they can delay or prevent them
- Take assessments in areas family members have experienced disease to see how these risks might relate
- Give their results to their children as a *health legacy item* for their children's future genetic health knowledge
- Share their histories fast with healthcare professionals as needed when they wish
- Hold back on helpful information relevant to individuals that they do not want to share with others



The **Inner Reach HiGS** technology meets all these needs. It is designed for the individual and not everybody in healthcare. It can benefit the healthcare system when people choose to use their **Personal Health History (PHH)** report as a reporting and communicating tool with their physicians. **HiGS** and the **PHH** are also designed to help people identify their risk for various diseases and problems so they can take action to have health and delay disease from happening.

HiGS Collects Information in Many Areas

HiGS contains more than ten thousand questions and gathers data in the following:

- More than 30 **Histories**
- More than 100 **Assessments**, including many mental health areas which enable people to investigate these concerns without others' knowing about them if the individual does not wish that. (All **HiGS** mental health protocols are based on standard DSM-IV manual of psychiatric criteria.)
- 9 **Body Systems** collect signs and symptoms during a 24 hour period then starts anew. There are more than fifteen-hundred signs and symptoms in the **HiGS Body Systems**.
- **Monitoring Calendars** to keep daily track of special areas of interest or concern for each month such as weight, Body Mass Index (BMI), waist measurement, amount of walking and locomotion, alcohol drinking monitoring, menopausal issues, cigarette smoking, and more. The BMI is the height-weight-ratio to calculate how many *safe* fat cells are in the body.
- **Traditional Chinese Medicine Components** for those who like *joint* medicine.



Everything comes together in the report – the **Personal Health History (PHH)**. The **HiGS Library** ties everything together that is in the **HiGS** so people can find common descriptions of things to do to make changes for health and disease delay.

HiGS Does Two Main Things

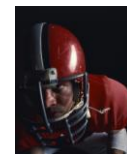
HiGS does two main things: 1) it provides a way for individuals to collect their histories themselves, control their results, identify risks, and get educated to fix problem areas in which risks occur; and 2) share their **Personal Health History (PHH)** which is their **HiGS** results report with healthcare professionals as they wish. This is particularly important and useful for athletes and students away from home.

HiGS Also Contains Assessments for Athletes' Special Needs



Some examples of **HiGS Assessments** particularly geared for athletes include:

- **Specific Sports Assessments**
 - The College Sports: Football Assessment
 - The College Sports: Basketball Assessment
 - The College Sports: Golf Assessment...and more sports areas
- **HiGS Heart Checks Histories, Assessments, and Body Systems** include:
 - Family and Personal **History** (2 Histories)
 - Hypertension (High Blood Pressure) **Assessment**
 - Heart Check **Assessment**
 - Hydration and Dehydration **Assessment**
 - Chest Pain: Potential Heart Problems **Assessment**
 - VTE – Venous Thromboembolic disease **Assessment**
 - Stroke – Cerebral Vascular Accident (CVA) **Assessment**
 - Overweight **Assessment**
 - Obesity **Assessment**
 - Diabetes Type II **Assessment**
 - Osteoarthritis **Assessment**
 - Cardiopulmonary and Circulatory System **Body System**
 - Cigarette Smoking and Smoking **Assessment** (if you have ever smoked or live or work with a smoker)
 - Knowing the blood pressure
- **Substance Abuse**
- **Sexually Transmitted Diseases (STDs)**
- **Other Areas:** numerous specific **HiGS** assessments geared for athletes such as Post-concussion **Assessment**; and other common factors for athletes such as anxiety, depression, eating disorders, senses problems, and much more...



Keeping Athletes Healthy and Safe with HiGS

Athletes may be at particular risk for health problems and not know it. This requires screening beyond physical exams in doctor offices which studies show exams miss a lot. Sudden death, associated with vigorous exercise and sports participation, has occurred to some professional and collegiate athletes. Except for traumatic injuries, cardiac death is the most frequent cause of sports-related deaths among young athletes. The majority of such deaths can be prevented.

The significance of preparticipation screening for sudden cardiovascular death in young competitive athletes is an important consideration which can save lives. One nation's study informs of the decline in incidence of sudden death due to preparticipation screening implementation for athletes.^[1] Studies show the personal and family history of an athlete reveals 64 to 78 percent of conditions that could prohibit or alter sports participation.^[2] This speaks to the importance of

HiGS screening and history gathering overall. The more information an athlete knows about himself or herself, the better the likelihood of increasing *ferreting-out* of potential risk areas. The best person to know about individual history is the athlete.

Screening to gather an individual's history is a more sensitive tool than the physical examination.^[3] cursory examination often fails to uncover problems that might rule out vigorous activity and sports.^[4] **HiGS** histories and blood testing can enable 'ferreting out' potential problems and risk factors, supplying individuals with a *missing piece* of health management and healthcare since time in doctor offices has become even more limited, resulting in essential comprehensive and thorough histories not being collected.

HiGS screenings can help the athlete identify potential risk areas, including sickle cell trait, status asthmaticus (exercise-induced asthma), post concussion syndrome, hydration risks, eating disorders, previous history of exertional hyperthermia (heat-related illness), congenital cardiac abnormalities, and serious disqualifying cardiac risks such as rhythm and conduction abnormalities, systemic hypertension, and valvular heart disease. Objective blood testing and **HiGS** subjective testing can help identify some potential risk, delay disease, and save lives. When the **PHS** is presented to a healthcare professional by the student, the doctor or healthcare professional can now direct questions in a more targeted exploratory manner since a lot of historical information can be quickly reviewed and expanded upon. *Keep in mind, the HiGS PHS is history gathering for health preventive self-care measures and is separate from the healthcare system.* **HiGS** simply gathers information for individuals themselves to control.

Note: A study reviewing the literature regarding preparticipation physical exams (PPE) which included the reviewing of 176 medical research articles found lack of effective evidence of screening due to: control group issues, follow-up of athletes, and other factors.^[5] However, it did find scientific evidence is lacking to support the ability of the PPE to satisfy the basic requirements for medical screening. Highlighted in the article, "the practice of providing preparticipation medical screening for athletes is neither supported nor refuted by the current medical literature due to the inadequacies of research data available."^[6] This speaks to the value of screening beyond the doctor office visit to gather histories through **HiGS** and blood testing plus additional interview and risk predictive data for this specific group – athletes.

HiGS Time Savings Histories to Gain Knowledge to Have Health



Time is money. When a doctor or health professional spends time asking questions to learn about a person, it can be very expensive, reducing the time attending to diagnosing and interventions for care. When the person can collect their own histories with **HiGS**, they can have information readily available for travel, crisis, and during times of need. They can be prepared for anything – bird flu, pandemics, infections, hurricanes, earth quakes, trauma, and most of all - simply learning about ways toward daily health and mind-body balance. When college students and athletes have and use **HiGS** Preventive Care Technology, they are better prepared to know about themselves and what is needed to be healthy and stay safe.

The **HiGS** histories can be shared with parents and or healthcare professions as the young adult wishes. Parents can be more at ease when they know their young adults have health knowledge and can find information which relates to their own self-assessment. When students want to share their information, clinic doctors or nurses are also more apt to have *at-a-glance* type of information in a variety of areas, now limiting their time for questions to targeted ones based upon what is already known. **HiGS** gathers first notes; then doctor interviews expand on notes for healthcare.



College Quack Shacks

Irreverently and affectionately referred to by college students as the *quack shack*, the facilities within colleges and universities which are tasked to take care of unhealthy and injured students have a daunting responsibility. Students are used to their own home healthcare medical professionals; typically, their medical records are spread throughout various institutions and doctor offices in other parts of the nation or world. Away from home, students enter the healthcare areas at colleges often with no histories provided except for perhaps very limited routine superficial information such as existing medical conditions and allergic reactions to drugs and such.

Histories are essential for genetic, family, and personal general and specific information; background, and numerous helpful factors when caring for someone. **HiGS** can help in two ways: 1) to prime the students with knowledge about themselves in advance, identify potential risks, and arm them with more knowledge about health as it relates to them; 2) to assist the healthcare professional when the students determine they want to share some or all of their **PHH** with a healthcare professional. **HiGS** is designed for ages 18 and over; these students control their own **HiGS** histories and results so they can always refer to their histories and results and update them or retake assessments whenever they wish.

Our Histories are Essential for Our Health

HiGS histories can enable the ‘ferreting-out’ of potential problems and risk factors, supplying college and university students with a *missing piece* of health management and healthcare – preventive self-care through history gathering and self-knowledge.



Development for translations include: Japanese, French, German, and a communal Spanish which can be used by four Spanish speaking groups: Spaniards; Latinos and Latinas from South America, Mexico, and Puerto Rico. **HiGS** is ready for travel too.



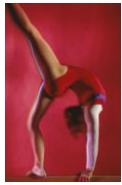
HiGS Has Cultural Components

HiGS has cultural components built into its technology throughout the **HiGS Histories, Assessments, and Library**. It includes other medical approaches in addition to Western medicine ways such as Ayurveda and Traditional Chinese Medicine. Factored in are cultural considerations since our genetics, where we were born, where we have lived, and all those who have influenced our lives bring strong inclinations toward interests, habits, lifestyles, belief systems, traditions, and more. Environmental, nutritional, and occupational areas are also big in the **HiGS**. Every one of these factors impacts health.

“The function of protecting and developing health must rank even above that of restoring it when it is impaired.” — Hippocrates

Improving Health in Your College Students and Yourself

Healthcare and Western Medicine are **NOT** primarily in the business of preventing disease; they are in the business of diagnosing and treating diseases. We need care for disease when we are ill but more importantly; we need to keep from becoming ill in the first place. That is served by preventive care which is self-care - looking after ourselves rather than relying on others to it. **HiGS** is not broad; it is dense, specific, in-depth, and individualized. Students need personalized data for success. If they collect it, they can learn more and pay better attention to themselves.



HiGS for Real Preventive Self-Care: What is Real Prevention?

The research from around the world on preventive care is very interesting since prevention means different things to everyone, especially medical professionals. Medical care simply cannot provide prevention because of time constraints; lack of reimbursement for time extended for prevention, and lack of staff or training and expertise in health. [7] Instead most medical training and emphasis is on disease and its diagnosing and treating. Research shows the world thinks prevention is:

- Diagnostic testing for early detection such as mammograms, PSA blood tests for prostate cancer, communicable diseases, and simple treatments such as immunizations and so on.
- Environmental medicine areas with heaviest emphasis on public health such as chemical hazards, air pollution control, and water safety type of things.
- Health education recommended by many agencies and governments as something communities should and must do. This is a daunting task. Countries vary in styles.

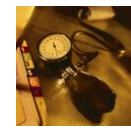
HiGS helps fill this unmet need, providing numerous layers of preventive information in various ways delivered rapidly and efficiently over the Internet. **HiGS** provides a bigger preventive care piece; additionally, when shared, its histories can be a front piece for medical care at the same time. More is learned from histories than a physical exam so they crucial. Everybody wins.

The Inner Reach HiGS Provides Preventive Care Technology

Our preventive technology enables *client customers* (such as colleges and universities) to provide an inexpensive way for their learners to get their 'arms around' their own health and ways to stay healthy. With **HiGS**, students control their data rather than the medical institutions' controlling it; they take responsibility for their own health. **HiGS** asks questions similar to those doctors ask but are even more comprehensive and authentic; **HiGS** also asks questions health psychology doctors and nurses ask then educates to preserve health.

Except for genetics and a few other factors, good preventive measures matched with personal histories along with targeted changes, when acted upon and adhered to; make it nearly impossible or very difficult for disease to happen. The Centers for Disease Control (CDC) and the World Health Organization (WHO) tell us that most diseases are preventable; the United States Department of Health and Human Services tells us that 95% of all diseases are preventable. WOW! People need a way to better understand the complexities of how to have health and delay disease and what they need to do. **HiGS** can help by targeting certain high risk areas such as:

1. No Smoking
2. Meet target goals for blood pressure
3. Cholesterol checks; blood test within normal levels
4. Height weight ratio indicating not overweight or obese



Except for cholesterol testing and any other blood testing (although we do have a *Cholesterol Checks Assessment*), we are collecting all these factors and more in the **HiGS**, including height weight, Body Mass Index (BMI) and big risks such as metabolic syndrome. Blood testing can be done by those who do such testing and then that information can be entered into the person's medical record – not the **HiGS**. **HiGS** small cost per user could be regained by time-saving, freeing up doctors and staff, comprehensive history gathering, personal knowledge; decreasing the likelihood of disease, pain and suffering, and improving health and delaying disease. Wow!



Attacking the Major Health Problems and More with HiGS

HiGS has numerous *attacks* for high-cost health problems people are facing. We provide solutions with a variety of structured simple approaches toward understanding for sound outcomes for student and the general public health, including college and university delivery. Diseases **Inner Reach** calls, the ***Dangerous Dozen Diseases*** when attacked through history gathering, risk identification, targeted personalized changes, and prevention education can have big impact on health. **HiGS** is designed to enable prevention for all these diseases and more.

The targeted dangerous dozen diseases which can be caused by being overweight or obese include: high blood pressure, osteoarthritis, inflammatory diseases, chronic diseases; four types of cancers including prostate cancer in men, breast cancer and uterine and ovarian cancers in women, and colorectal cancers in both genders; gallbladder problems, type II diabetes, heart disease, and stroke.

Since overweight and obesity can be a cause of all these 12 diseases, **HiGS** is *heavy* in its emphasis and tracking of their related issues and needed actions. *Students need to see how ‘stuff’ affects them. They are more apt to ‘buy into’ change when they know their own personal risks and what can be done to lessen those risks.*

HiGS and the Personal Health History (PHH) Report

The **Inner Reach** system offers individuals, the ability to create their own **Personal Health History (PHH)**, capturing histories, symptoms, and situations to know what is needed for health and be prepared in advance with histories for times of illness. **HiGS** gives people a way to learn about their own histories, ways their health can be affected by their histories, and how to make changes to have health and delay disease. **HiGS** histories tell a personalized story, enabling individuals to be better prepared to stay healthy and delay disease. The **PHH** can be shared with physicians and healthcare professionals in times of illness and need.

About Inner Reach



As a **Stewardship for Humanity™**, **Inner Reach** is committed to the design, development, and delivery of individual centered health information gathering with the highest standards of excellence. We envelope: software technology, Internet technology, and health psychology. Health psychology is based on health and preventive care using a biological-physical-sociological-psychological-medical model, including nutritional, environmental, cultural, and occupational, components. Founded in 1996 and incorporated in 1998, the **Inner Reach Corporation** is headquartered in Oklahoma City, Oklahoma, USA.

Inner Reach Independent of Outside Influences

The **Inner Reach** system is independent of any specific healthcare provider such as; private physicians, PPOs, HMOs, insurance plans, Hospitals, Clinics etc., and not part of usual medical mechanisms. It is strictly for and about preventive care for individuals. The **Inner Reach HiGS** is designed for asymptomatic (not showing indications of a disease or medical condition) populations to enable populations to learn more about themselves through history information gathering to have and keep health and delay disease. **HiGS** is not about disease but rather health and risk. If people are concerned about having an illness or disease and or need diagnosing and treatment, their medical care provider is the contact for their healthcare.

Source References: **1.** Trends in Sudden Cardiovascular Death in Young Competitive Athletes After Implementation of a Preparticipation Screening Program. Corrado, D. Et al: JAMA. 2006;296:1593-1601. **2.** Krowchuk DP. The preparticipation athletic examination: a closer look. Pediatric Annals 1997;26:37-49. **3.** Ibid., 2. **4.** Ibid., 2. **5.** Carek, P.J.; Mainous, A. The Preparticipation Physical Examination for Athletes: A Systematic Review of Current Recommendations. BMJ published online 20 March 2003; doi: 10.1136/bmjusa.02120003 **6.** Ibid., 5. **7.** Falkenheimer, S. A; The Adequacy of Preventive Health Care: Does the Health Care Provider Matter? The Center for Bioethics and Human Dignity. 2004.