

Inner Reach HiGS for Health Clinics

Our Health Information Gathering System—HiGS



健康はすべてである! 健康是一切!

The Inner Reach health information gathering system - HiGS provides many advantages for health clinics in various countries. Inner Reach HiGS is a tracking, monitoring, and following-up preventive care technology. Today's clinics are often taxed with many time-constraints, leading to very little time to collect the most important part of health assessment - comprehensive histories. Histories are usually gathered through doctor interviews, written into forms, or by healthcare professionals who electronically enter data about someone. Discovering histories about people is very time consuming. Time could be better spent addressing the already identified issues. HiGS meets that need.

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, education, and focus that HiGS technology provides. 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.

HiGS Shifts Responsibility and Control to the Individual



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



HiGS Time Savings for Health Clinics

Time is money. When a doctor or health professional spends time asking questions to learn about a person, it can be very expensive and reduces the time allowed to see many people and attend to 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 clinics have HiGS Preventive Care Technology, they are better prepared to handle a big work load. Clinic doctors or nurse practitioners 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 Collects Information in Many Areas



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

- More than 24 **Histories**
- More than 100 protocols – **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.



Constance Y. Fitzpatrick, PhD., RN
CEO Inner Reach Corporation

HiGS Has a Legacy Factor



Dr. Fitzpatrick, the CEO and health director at **Inner Reach** describes **HiGS** as, “Like an inheritance, as valuable as Grandma’s wealth, priceless recipes, and training; or Grandpa’s stocks and bonds and his life’s teachings, **HiGS** gathered information can be utilized and passed down through family members. This generational *passing down* of health information, gathered in **HiGS**, insures more comprehensive care for prevention and early detection with sound interventions when illness strikes.”

“With a personal career commitment to health and its caring, a company called **Inner Reach** took shape more than a decade ago. Captured personal relevant information can help understanding by providing clues and discoveries that enable changes for a longer health span and life. Gained self-knowledge and having this information readily available provides individuals with a means for staying healthy, knowing baselines, and getting better diagnoses and customized care when needing it while keeping costs down. When shared, gathered information by **HiGS** facilitates *time-sensitive communication* between the **HiGS health customer** and doctor toward increasing the likelihood of the highest quality of care possible and an effective quality process.”

“Designed to redefine health delivery by placing the individual in the center of their own health process utilizing e-health Internet Web-based technology, **HiGS**, our unique Health Information Gathering System preventive care technology was born. By involving individuals in their own health process through this system, designed just for them, **Inner Reach** prepares individuals with health knowledge specific to them with the purpose of focusing on prevention and health preservation. Now the most important part of health care and its delivery - the individual - has a pivotal and self-actualized part in its processes.” *Dr Constance Y. Fitzpatrick*

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.

Our Histories are Essential for Our Health and Medical Care



Studies from around the world show the importance of collecting and knowing histories to get good medical care and to have good health. Studies reveal that conditions and diseases can be missed when adequate and essential history is omitted during a physical examination by a physician in a doctor office.¹ They suggest, “*physicians using electronic health records preferentially structure interviews around data-gathering demands rather than patients’ own narrated accounts*”.^{2 3} *This results in lost opportunities for gathering histories and **patients powerful stories**. Screening to gather an individual’s history is a more sensitive tool than the physical examination. Cursory examination often fails to uncover problems.*⁴ In the absence of genetic testing, studies suggest that family history can be used as a tool to form risk into layers for common chronic diseases; thereby identifying individuals with increased disease susceptibility.⁵ High-risk people are missed by their primary care physicians due to lack of genetic evaluation.⁶ **HiGS** histories can enable ‘ferreting-out’ potential problems and risk factors, supplying individuals with a *missing piece* of health management and healthcare. This is needed since time in doctor offices has become limited, resulting in essential thorough histories not being collected and risk missed.

Various Health Clinics Provide Different Interventions



Our Preventive Care Technology makes a nice front piece to various medical technology applications and methods since people collect their histories themselves, saving time and money. Especially in health clinics, the **PHH** can be sent by users electronically, faxed, or printed out and handed to their doctor. Home health care areas may benefit as well. Health clinics can utilize **HiGS** with a security device hooked up to **HiGS** to enable patients to log on to **HiGS** within their facility or through a partnering company’s system authentication technology. Accomplishing both aiding a person when ill, and helping a person to identify his or her risk for disease when well to stay out of trouble, **HiGS** provides that preventive care area...which until now...has been missing.

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 plus 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.



Telemedicine and Preventive Care Technology

Telemedicine enables fast efficient consultation. **HiGS** histories made available can speed up interviews due to comprehensive histories, and signs/symptoms prepared in advance, cutting cost.

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

Improving Health in Your Employees, Members, Citizens, and Yourself

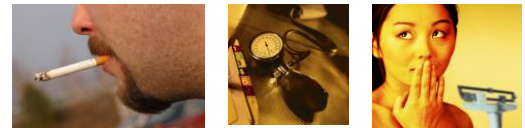
Healthcare and Western Medicine are **NOT** in the business of preventing disease; they are in the business of diagnosing and treating diseases. We need care for disease when we are ill but more importantly; we need to keep from becoming ill in the first place. That is served by preventive care which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

The Inner Reach HiGS Provides Preventive Care Technology

Our preventive technology for companies, organizations, communities, and governments enables **client customers** to provide an inexpensive way for their people to get their 'arms around' their own health and how to stay healthy. With **HiGS**, individuals 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



We are collecting all these factors and more in the **HiGS**, including height weight and BMI (except for cholesterol testing and any other blood testing although we do have a *Cholesterol Checks Assessment*). Blood testing can be done by those who do such testing 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.

Concerns and Trends

- The way of the future is to a paperless, formless system - an e-health system. All records and results eventually will be in electronic form and accessible via the Internet throughout the world. Countries that particularly appreciate preventive measures and interventions for keeping people healthy and cost down can appreciate **HiGS** value for their population.

- 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.
- Use of the **Inner Reach** system is most likely to make today's healthcare provider systems more effective and in the long run less costly. **HiGS** can gather histories, which is a time-consuming cumbersome task for professionals, while helping to identify health risks and teaching ways to improve risk areas and overall health that is individualized based on a health customers' health history - his or her story.
- The **Inner Reach HiGS** is implemented in an electronic format that makes it ideal for the future paperless trends. **Inner Reach** is ahead of the curve with e-health monitoring designed just for individuals and their preventive self-care.

Trusted Computing and **HiGS** Preventive Care Technology



Trusted computing is an important futuristic security technology standard that includes biometrics. Biometrics is a significant piece that Inner **Reach** can implement to additionally protect **access by a HiGS user to** their data on our servers and data warehousing hard drives. It insures the only access to the data is by a **HiGS** user for that particular **HiGS** user's data and no one else. Biometrics is a device that is used to check against a stored template that can uniquely identify any individual such as a fingerprint, iris, or palm vein via a device such as the Fujitsu **PalmSecure™** scanner. For example in cases in which a palm vein authentication system device is used, if the scan of a person's palm does not match the recorded template for that individual, the person would be prevented from logging onto the **HiGS** system. Easily adaptable, **HiGS** can be bundled with our company partners' authentication technology system. This could be valuable for health clinic situations and other third party applications. Trusted computing is an added security factor to utilize wherever it fits and benefits.

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 employee and the general public health, including health clinics delivery. Diseases **Inner Reach** calls, the **Dangerous Dozen Diseases** when attacked through history gathering, risk identification, targeted personalized changes, and education can have big impact on health.

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. *People 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 includes factors related to various studies.

Examples of ways culture has impact: *Chinese American women are commonly exposed to secondhand smoke at home and work, including exposure to cooking oil from high-temperature frying which may contribute to lung cancer risk among Chinese women in the US and China.* Colorectal, stomach, prostate, and breast cancers were noted at higher incidence for Japanese Americans when compared to other Asian American groups. For Japanese males, colorectal cancer incidence and mortality were higher than those of every other Asian group. Some risk factors are heavy alcohol consumption, red meat/bad diet, and being overweight.^{8, 9, 10, 11} A study showed smoking is more common among female nurses in Japan than the general female adult population; nurses favored restriction but not smoking being banned.¹² [Note: this speaks to their likelihood of not teaching others about quitting smoking/preventive care.] One Japanese study concluded that tobacco smoking possibly increases the risk of colorectal (specifically rectal) cancer among Japan's population.¹³ Significant effects of stress were prevalent in all sleep disorders in study of 4,000 Japanese; finding habitual exercise had a significant negative association with difficulty initiating sleep and maintaining sleep and hypnotic medication use; whereas drinking and smoking did not affect sleep disorders.¹⁴ **HiGS** factors in relevant studies.

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-psychological-sociological-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.

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.** Patel VL, Arocha JF, Kushniruk AW. "Patients' and physicians' understanding of health and biomedical concepts: relationship to the design of EMR systems." *J Biomed Inform*. 2002;35:8-16. **3.** Makoul G, Curry RH, Tang PC. "The use of electronic medical records: communication patterns in outpatient encounters." *J Am Med Inform Assoc*. 2001;8:610-615. **4.** Krowchuk DP. "The preparticipation athletic examination: a closer look." *Pediatric Annals* 1997;26:37-49. **5.** Paula W. Yoon, ScD, MPH et al; "Can Family History Be Used as a Tool for Public Health and Preventive Medicine?" *Genetics in Medicine* 2002; 4(4):304-310. **6.** Hayflick SJ, Eiff MP, Carpenter L, Steinberger J. "Primary care physician's utilization and perceptions of genetic services." *Genet Med* 1998; 1: 13-22. **7.** Falkenheimer, S. A; "The Adequacy of Preventive Health Care: Does the Health Care Provider Matter?" The Center for Bioethics and Human Dignity. 2004. **8.** Stewart BW, Kleihues P. World Cancer Report. Lyon, France: IARC Press; 2003. **9.** "American Cancer Society. Cancer Facts & Figures 2007." Atlanta, GA: American Cancer Society; 2007. **10.** Whittemore AS, Wu-Williams AH, Lee M, et al. "Diet, physical activity, and colorectal cancer among Chinese in North America and China." *J Natl Cancer Inst* 1990;82:915-926. **11.** Kokkinides, D; et al. "Cancer Incidence, Mortality, and Associated Risk Factors Among Asian Americans of Chinese, Filipino, Vietnamese, Korean, and Japanese Ethnicities." *CA Cancer J Clin* 2007;57:190-205. **12.** Takashi Ohida, Yoneatsu Osaki, Yumiko Kobayashi, Masato Sekiyama, Masumi Minowa: Smoking prevalence of female nurses in the national hospitals of Japan. *Tob Control* 1999;8:192-195 (Summer) Accessed at <http://tobaccocontrol.bmj.com/cgi/content/abstract/8/2/192> on August 18, 2007. **13.** Tetsuya Mizoue, Manami Inoue, Keitaro Tanaka, Ichiro Tsuji, Kenji Wakai, Chisato Nagata, Shoichiro Tsugane and Research Group for the Development, Evaluation of Cancer Prevention Strategies in Japan. "Tobacco Smoking and Colorectal Cancer Risk: An Evaluation Based on a Systematic Review of Epidemiologic Evidence among the Japanese Population." *Japan Journal of Clinical Oncology* 2006;36(1)25-39 doi:10.1093/jjco/hyi207. **14.** Keiko Kim, Makoto Uchiyama, Masako Okawa, Yuriko Doi, Takashi Oida, Masumi Minowa, Ryuji Ogihara. "Epidemiology: Lifestyles and sleep disorders among the Japanese adult population." *Psychiatry and Clinical Neurosciences*. Volume 53 Issue 2 Page 269-270, April 1999.