



HEALTH IMPROVEMENT PROGRAM

*Celebrating 25 years of
Health Promotion*



Health Improvement Program

Hoover Pavilion
211 Quarry Road
Ground Level, Suite N049
Stanford, CA 94305-5705

Phone: (650) 723-9649

Fax: (650) 498-4828

<http://hip.stanford.edu>

<http://hprc.stanford.edu>

<http://prevention.stanford.edu>

A Brief History and Overview of the Health Improvement Program (HIP)

The purpose of this document is to chronicle and celebrate the accomplishments of the Stanford Health Improvement Program over the past 25 years and to use this retrospective overview as the basis for creating our next five-year plan. HIP has played a significant role in advancing the science of health promotion on-campus, in our local community, across the United States and around the world. Our educational programs and materials have benefited millions of people and we are proud to represent the Stanford Prevention Research Center, the School of Medicine, and Stanford University.

Stanford Prevention Research Center (SPRC)

The Stanford Prevention Research Center (SPRC) began more than 30 years ago when John W. Farquhar, M.D. received a large research grant from the Kaiser Family Foundation to study the impact of community based health promotion strategies on cardiovascular disease and its risk factors. The Center was established as an inter-disciplinary research unit within the Department of Medicine, having Principal Investigators from the fields of medicine, communication, exercise physiology, and psychology. SPRC is even more inter-disciplinary today, because the focus of research has expanded greatly beyond cardiovascular health. SPRC has strong research ties throughout the Medical Center and on the main campus. SPRC also offers a series of classes through Human Biology. Most of the funding to support SPRC research is derived from grants awarded by the National Institutes of Health.

Stanford Health Improvement Program (HIP)

The Health Improvement Program, more popularly referred to as HIP, is a unique worksite health promotion program for faculty, staff, retirees, and family members. It is unique because it not only provides a broad variety of educational and fitness programs at the worksite, but also because HIP:

- 1) Develops health promotion materials that are licensed across the country and around the world
- 2) Transfers science to community based programs by working with non-profit organizations to plan, implement, and evaluate health promotion programs and services
- 3) Conducts translational research, often based on interventions tested by SPRC
- 4) Serves as a respected advocate for population health improvement programs that encourage health related policy at all levels of government
- 5) Hosts visiting professors and scholars who want to improve their knowledge of population based health promotion, often requested by foreign medical schools
- 6) Provides education and consultation to delegations that visit Stanford from around the world. Visitors come from government, academia, public health, and health care organizations.

In the early 1980s, research was beginning to show that wellness programs offered at worksites could effectively impact the health of employees. Entrepreneurs began marketing health promotion programs intended for faculty and staff to Stanford President,

Don Kennedy. Dr. Farquhar observed that many of the health promotion products being offered to Stanford were based on learning principles developed by the Heart Disease Prevention Program, which is now called the Stanford Prevention Research Center (SPRC). Dr. Farquhar believed that the university should take advantage of its own intellectual property by creating a wellness program for faculty and staff and that it should be located within SPRC. With the help of an advisory committee composed of Stanford faculty and executive staff, and with a small allocation from the university's benefits pool, the Health Improvement Program was created in 1983. This year (2008) marks the 25th anniversary of HIP.

HIP as a university resource

The hallmark of the Health Improvement Program is our commitment to science based information and educational processes that reflect the best practices of pedagogical and behavioral science. Our primary purpose is to provide health promotion for the Stanford community by offering a wide variety of fitness and health education programs. Each quarter, HIP offers more than fifty health education and fitness classes to faculty and staff with a typical quarterly enrollment of between 1,700 to 2,000 participants. We reach faculty and staff in many ways, however, so class participants reflect a fraction of the total number of faculty and staff with whom we interface.

Throughout the past twenty-five years, HIP has responded to requests from departments for help with a specific issue that impacts health, productivity, absenteeism, and morale. From the beginning, we were determined to become an important part of the fabric of the university and the medical center. We are proud of the many of ways that HIP has served the university. For instance, in the mid-1980s, HIP was responsible for initiating and directing efforts that established Stanford Hospital as one of the first in the nation to become smoke free. Similarly, the football stadium and basketball arena were among the first in the nation to ban smoking based on health related reasons. HIP worked with the Faculty Club to offer heart healthy food choices, to identify those choices on the menu, and to list the calories for each item on the menu.

In October of 1989 there was a significant earthquake in the Bay area. In the aftermath, people struggled with emotional issues and sought to learn how to prepare for the future. HIP quickly held focus groups to identify important issues then brought together the HELP Center and Environmental Health and Safety to deliver programs that addressed these needs. Twenty seminars were held across the university and the medical center and we provided follow-up programs on safety, first aid, how parents can talk with children about earthquakes, and the importance of family, friends and community in time of crisis.

As retiree health care costs escalated in the early 1990s, the university asked HIP to create an educational program targeting retirees. Analysis of health plan data, telephone surveys and focus groups with retirees identified key areas for health improvement. HIP developed a twelve-session course called "Bon Vivant" that incorporated a walk on campus prior to each session. Topics included, "health for travelers", "understanding Medicare benefits", "how to cope with the loss of family and friends", "physical activity adaptations for seniors", and the "prevention of heart disease." Evaluations from

participants reflected appreciation for the content, and also for the opportunity to return back to campus and re-connect with other Stanford retirees.

Following discussions with the university's Director of Risk Management in about 1992, HIP implemented a wide variety of office ergonomic programs for faculty and staff. We established a "model work center" that highlighted specific ergonomic principles. HIP provided seminars and performed hundreds of workstation evaluations. For five years HIP was an internal vendor to the Stanford Hospital and Clinics, providing employee and supervisor education, workstation evaluations, and interviews with employees returning to work after having filed a Workers' Compensation claim. HIP developed guidelines that enabled department managers to purchase office furniture and design workstations that were ergonomically appropriate.

During much of the 1990s, California was dealing with a major issue related to Workers' Compensation. Stress was the leading cause of workplace claims being filed. HIP developed stress management classes that had a variety of titles. We offered stress management as part of our schedule of classes and we notified departments that we were enthusiastic about offering programs during staff meetings. No fewer than twelve departments requested stress management programs. Bob Beth, Director of Risk Management for many years, speculated that the university's relatively low rate of Workers' Compensation claims was a result of HIP having created a culture of health and wellness on campus. Since Stanford is self-insured, the savings represented big dollars.

Because HIP is a university benefit intended to equally serve faculty and staff, we sought to increase HIP participation among "represented" employees who do not have the scheduling flexibility to enroll in some HIP programs. Thus, beginning in 1991, we took screening and education programs directly to departments such as Operations and Maintenance (O&M), Stores, and Housing. HIP was a regular speaker at the monthly safety meetings that were held by the O&M department. Topics included "skin cancer prevention", "ergonomics for back injury prevention", "stretching and core strengthening for a healthy back". HIP also provided classes in first aid and CPR, which are mandated courses for certain departments within O&M.

We offered similar educational programs to housing and food service employees, with lectures being offered in both English and Spanish. As we were offering blood pressure and cholesterol screening to faculty and staff, we went directly to the represented staff in these departments and provided screenings before their shift began. HIP also provided wellness programs and screening services to hospital employees during each of the three work shifts.

More recently, when the university purchased a new software accounting system and the implementation staff were struggling to cope with low morale and a high absentee rate caused by vendor delays and complaints from faculty and staff, HIP provided stress management programs that encouraged healthy coping strategies. The programs also focused on team building to improve the morale of the staff.

HIP worked with the Controller's Office for a year, testing a "concierge" program that would address the needs and interests of staff. We worked with "advocates" within the department who helped to identify program topics and helped to raise enthusiasm for the program. In addition to health improvement, an additional goal was team building.

For at least ten years during the 1990s and continuing to the present time, HIP has been the first lecture on the agenda for participants attending the Summer Executive Program sponsored by the Graduate School of Business. Executives from around the world come to Stanford to learn from well-known business executives who manage large Silicon Valley companies. GSB believes that a healthy lifestyle is important for executives. As such, in addition to the opening lecture, the executives also are encouraged to participate in early morning fitness programs, to enroll for a health and fitness exam, and to receive personal coaching on wellness, all of which are offered by HIP. This is an important contributor to the overall success of SEP program and it certainly differentiates the experience at Stanford from that offered by other universities.

In 2008, HIP developed and implemented a Stretch & Flex program for the managers, administrative staff, trades technicians and custodians of the Stanford Student Housing Department. The goals of the program were to increase health awareness, teach good body mechanics, and reduce "on the job" injuries due to repetitive stress and excess force and strains. Initial and follow-up surveys were compiled and evaluated to measure retention of information, effectiveness of the program, attitudes toward stretching and physical activity at the start of the shift, and general attitudes toward work. The on-going program includes 6-8 minutes of movement at the start of the shift, coupled with health and ergonomic workshops and printed materials.

HIP as a Medical Center resource

A large work unit within the medical school requested a series of stress management programs when work related difficulties arose between management and staff. Working with that department's administration we developed and implemented a four-session stress management program that addressed the root causes of the internal conflict. The program resolved the issues and morale immediately improved.

By its nature, the emergency department of a hospital is a stressful place to work. The Chief of Emergency Medicine asked HIP to provide stress management programs to the Attending Physicians. He was so pleased with the program that he requested we offer the same lecture to Residents, and Nurses who work in the emergency department.

During the past twenty-five years, HIP has offered many continuing education courses for nurses. These programs were sponsored by the Nursing Continuing Education Office. For each of the past seven years, HIP has offered a full day CEU seminar to nurses on healthy lifestyle. Most of the registrants are employed by Stanford Hospital and Clinics.

For many years in the mid 1990s, HIP provided a unique smoking cessation program for hospital patients who were scheduled for surgery. These programs were facilitated by an experienced nurse-educator. Because surgery is a significant event for patients, they

were highly motivated to quit smoking. The quit rate was extremely high, above 75% for the period between the start of the program and discharge from the hospital. Both patients and physicians were very satisfied with the program.

When the Health Library first began in 1989, HIP served on the Advisory Board and remained active on the Board for many years. In addition, as a way of helping to secure members for the Health Library, HIP permits members to enroll in health education programs that are offered on campus and at the health library. Some programs sponsored by the Health Library also have used HIP staff to give lectures at

HIP has helped SPRC researchers with recruitment. Using our registration data base and information gathered through the health and fitness testing program, we contact individuals who may be interested participating in a study. Letters are sent along with a description of the study that was prepared by the Principal Investigator.

Women's Health at Stanford uses the HIP developed behavior modification program known as the Healthy Lifestyle Program. Staff were trained to facilitate the program. Clinic participants are invited to take the web-based SHALA. Also, HIP staff have provided stress management programs for couples attending the infertility clinic.

HIP and the Health Plans

The Health Improvement Program has a long history of working with health plans to serve the university and to promote the health of faculty and staff. In 1990, we interpreted health claims data provided to Stanford by Kaiser. The analysis and support from HIP during meetings to negotiate premiums helped the university argue in favor of a rate that was less than the community rate. Data showed that Stanford employees who were Kaiser members had lower rates for both in-patient and out-patient services.

Early in 1991, we asked the health plans to provide financial support for a health and fitness test that we developed for faculty and staff. Tests included a sub-maximal test of aerobic capacity, waist to hip ratio and waist circumference, cholesterol, blood pressure, percent body fat, muscular strength and endurance, flexibility and balance. The screening is followed with a personal wellness consultation. Since 1991, more than 5,000 tests/consultations have been completed among faculty and staff.

For a period of time in the mid-1990s, Health Net required hospitals and medical groups with whom they contracted to provide health promotion programs to their plan members in exchange for a designated wellness capitation fee. Because the Stanford hospital does not have a wellness program, we were asked to provide the defined wellness services and in exchange receive the capitation from Health Net. When Stanford Hospital and the UCSF Hospital merged, HIP continued to provide the wellness programs for Health Net members who used the Stanford Hospital and Clinics with funds coming through Brown and Toland medical group in San Francisco.

In 2005, when the university began to offer cash incentives to employees for taking their health plan's on-line health risk appraisal, and for participating in wellness programs that could lead to an additional cash incentive, HIP worked with the health plans to insure relative consistency across plans for the qualifying level of wellness participation. Our staff received many questions about the health plan websites and about content found on the websites. Health Net members completed the SHALA and we notified the payroll office when a Health Net member (Stanford employee) qualified for the incentive. Our active support for website wellness programs offered by the health plans sent a unified message to faculty and staff about the importance of making healthy lifestyle choices.

BeWell @ Stanford

The most recent wellness collaboration on campus is known as *BeWell at Stanford*, which is an incentive program for faculty and staff that brings together the Health Improvement Program and the Department of Physical Education, Recreation, and Wellness (PE, R&W). These two organizations developed a plan that encouraged faculty, staff and family members to move along a continuum toward health improvement. Employees who register on the *BeWell* website, are linked to the HIP website with secure servers located in the medical school, in order to complete the Stanford Health and Lifestyle Assessment (SHALA). Participants receive an immediate health education report and they qualify the employee for a cash incentive of \$150. Participants are then encouraged to enroll in an interpretation seminar called *Bridge to Wellness*. This seminar supports participants who wish to develop a personal plan of action for health improvement. Then, participants are eligible to receive a free health and fitness assessment as well as two free sessions with a personal trainer. Both of these services are provided by PE, R&W. In the first three months of 2008, more than 5,000 faculty and staff completed the SHALA and most have followed-up by taking advantage of the interpretation seminar, personal training and/or the health and fitness assessment.

When the participant completes the interpretation seminar, he/she becomes eligible to enroll in fitness classes offered by HIP or by PE,R&W for a co-payment of \$20.00. In addition, for those faculty and staff who want to improve their lifestyle, HIP offers a variety of group and individual behavior change options:

-Stanford Behavior Change/Weight Management Program: Ten month program where participants meet in small groups to gradually adopt a healthier lifestyle in the areas of weight management, nutrition, stress management, or increased physical activity.

-Create Your Wellness Plan: Participants meet one-on-one with HIP staff to create their personal action plan for wellness.

-Wellness/Behavior Change Coaching: Either a five or ten week program in which participants meet with a health coach to make gradual lifestyle changes. Email exchanges and telephone calls support the regular meetings.

-Health Behavior Consultations: Participants meet with an experienced HIP professional to identify short and long term goals, potential barriers, and to build a repertoire of strategies that will both achieve and sustain their wellness goals.

-Quit Tobacco Program at Stanford: Web-based or individual program to help participants quit tobacco.

HIP and environmental initiatives

In 1984, HIP distributed organic apples to faculty and staff as a way of introducing this new program to the university.

In 1989/90, HIP implemented a university wide environmental awareness campaign to celebrate the 20th anniversary of Earth Day. Each department had behavior change goals and opinion leaders who supported the individual and departmental behavior changes being implemented. The campaign highlighted the fact that what is good for the individual in terms of a healthy lifestyle, is also good for the environment. (For example, walking rather than taking an automobile) One of the lasting benefits of the campaign was that Central Stores began stocking recycled paper products.

A member of the HIP staff is the co-chair (with Dr. Gary Schoolnik) of the Woods Institute's School of Medicine committee on "Public Health and the Environment". An important project for this committee was the development of a curriculum for medical students emphasizing environmental issues. As Stanford become more environmentally concerned, HIP developed a Coordinator of Environmental Behavior Change to support the greening direction of Stanford for employees, etc.

HIP participated on a GUP task force created by the Dean's office (with Julia Tussing) to reduce auto trips on campus. The Task force generated ideas for alternative commuting incentives for the nearly 3000 employees of the medical school. HIP presented on alternative transportation during a meeting of DFAs and trip reduction representatives, emphasizing how HIP's behavior change strategies can be applied to auto trip reduction and alternative transportation.

HIP has collaborated with Parking & Transportation Services over the past few years. Activities included co-teaching classes and assisting with focus groups to generate strategies for motivating employees to change transportation habits.

For the past 5 years HIP has offered many classes related to carbon reduction, conservation, recycling, greening one's lifestyle, and living more lightly on the earth. HIP recently taught a class called "Low Carbon Lifestyle" at the new energy efficient building (Y2E2) on campus.

HIP provides wellness coaching to faculty and staff. Within this forum for health behavior counseling, participants learn to make gradual and sustainable changes in their lifestyle. One motivation suggested to participants for practicing alternative

transportation is that it enhances their physical activity, which is an important goal for many participants.

HIP served on a planning committee for the Built Environment conference, sponsored by SPRC two years ago and served as a liaison to faculty speakers from the Woods Institute.

Alumni Association

-Women's Health at Sierra Camp

This year marks the 14th annual Women's Health Conference at Sierra Camp sponsored by the Alumni Association. The popular program is available to Alumna and friends. Many participants come year after year and it is especially gratifying that over time, many women attend with mothers and daughters. The programs feature faculty and academic staff from SPRC (Stefanick, Haskill, Wood, Gardner, Farquhar, Fortmann, Berra, Luskin) and most of the HIP staff. In addition, we have enjoyed faculty from other units within the School of Medicine, including Drs. Kate Lorig, Hannah Valentine, Linda Clever, Tracy Kuo, Bertha Chen, and Walter Bortz. Dr. Laura Carstenson, Director of the Stanford Center for Longevity, and Carole Pertofsky, Director of Health Promotion at Vaden Student Health Center also have lectured at Sierra Camp.

-Fresh Start Book

In 1996, HIP staff and SPRC faculty authored a wellness book called *Fresh Start*. The cover indicates the book is "The Stanford Medical School Health and Fitness Program." The copyright is currently owned by the Stanford Alumni Association and the Board of Trustees of the Leland Stanford Jr. University. *Fresh Start* was written at the request of KQED. The book was distributed by the Alumni Association and was sold through the McGraw-Hill website and on eBay. This book brought significant attention to Stanford University's School of Medicine and to the Stanford Prevention Research Center.

-Homecoming Lectures

Each year the Alumni Association hosts a homecoming weekend and invites graduates from specific years to participate in lectures generally given by Stanford faculty. HIP has been a frequent provider of lectures on a variety of health improvement topics. In addition, alumni who live close to campus can participate in health education programs offered by HIP both during homecoming weekend and throughout the year.

Stanford Health Promotion Resource Center (HPRC)

This unit began as part of the Stanford Five City Project and was created to develop health education materials that were to be used within the study. When the Five City Project ended, HIP assumed responsibility for this organization. Its new purpose was to develop programs and materials to serve the university's wellness priorities on campus and also to adapt the materials in order to sell and/or license them to other universities, health plans, public health departments, hospitals, medical groups, non profit organizations, private companies, and wellness consultant groups. By disseminating

Stanford's intellectual property, HPRC brings positive recognition to SPRC, the School of Medicine, and Stanford University.

Community Health Promotion through HIP and HPRC

The Stanford Health Improvement Program has a strong commitment to teaching, research, and service on behalf of the University and the School of Medicine. This section presents community service activities provided by HIP or the Health Promotion Resource Center.

The Health Promotion Resource Center provides world visibility to SPRC and the Stanford University School of Medicine. We develop new educational materials and adapt materials developed for interventions by SPRC researchers. We then sell or license these products and curricula through HPRC and the Office of Technology and Licensing (OTL). Millions of people around the world have come to know the Stanford University School of Medicine through the Health Improvement Program.

-Health and Fitness Assessment with Menlo Clinic

Based on positive reviews about our Health and Fitness Assessment, HPRC was asked by two large corporations to provide their executives with the health and fitness assessment combined with medical executive physicals. We asked the Stanford Hospital to partner with us. At the time, Stanford hospital was not interested so HIP collaborated with the Menlo Clinic to provide testing and consultation. The Clinic's physicians provided the medical evaluation and medical consultation while HIP provided the health and fitness testing and lifestyle consultation. HIP also provided follow-up with executives by way of telephone and/or web mail.

-Visiting Delegations

We have hosted delegations that come to Stanford to learn more about population based and worksite based health promotion. Some of the groups are sponsored by medical schools (Mexico, Japan, China, and Czechoslovakia), while others are sponsored by foreign governments (Russia, the Philippines, and Japan).

-Czechoslovakia (now the Czech Republic and Slovakia)

A delegation from the former country of Czechoslovakia visited HPRC in the early 1990's to learn about the Stanford Five City Project and population based health promotion programs. After returning home, the group wrote a grant to the Czech government and received funding to replicate the work of the Five City Project. Dr. Farquhar and one of the academic staff visited Prague and assisted with the design, implementation, and evaluation of the project.

-Mexico

The University of Monterrey (Mexico) visited HPRC to learn about our website and its use in health promotion. Representatives were here for several days. After developing their own website, that was coordinated with local clinics in rural areas, the Dean of the Medical School and CEO of the Medical Center in Monterrey scheduled another visit

with HIP to show us their website. They had good reason to be proud of their new website that was focused on health improvement. Prior to their second visit, we were asked to arrange meetings with medical school administrators here at Stanford so they could discuss matters such as faculty exchange, internet based in-service education, and shared residency programs. HIP arranged meetings with the Dean of the School of Medicine, the Head of Medical In-Service Education (Kelly Skeff), and Peter Rudd, >>>>

-Switzerland

The Cantonal Hospital of Ticino, in Lugano, contacted HIP with an interest in community based health promotion. The Vice President for Human Resources visited HIP for six weeks to learn about health promotion and population health. The hospital held Switzerland's first ever health fair in the piazza using a variety of screenings and support materials developed by staff at HIP. This was the first health fair type event held in Switzerland and the entire community enjoyed the health fair and the focus on health improvement. Ultimately, the hospital licensed HIP materials and began a wellness program both for staff and for residents of the community.

Conferences on Health Promotion

-Women Executive Conference

One of our licensees, Medforma, has a contract to provide health promotion services to Guidant (now Boston Scientific). Guidant was one of the primary sponsors of a national women's executive conference in San Jose and asked Medforma to work with HIP to develop a brief women's health survey that could be completed quickly on line using laptop computers. HIP created the survey and the health education report that was received immediately by each participant. The survey brought attention to lifestyle issues that relate to heart disease. In addition to the several hundred women who completed the survey, Jackie Speier, a keynote speaker took the survey and mentioned that women needed to be more informed about heart disease and its risk factors.

-Linkage Asia Leadership Development

Linkage Asia, which is headquartered in Singapore, is a leadership development program for executives from Asia and the Middle East. Executives visit Stanford and receive lectures on health and stress management from HIP, from faculty in the Graduate School of Business, and from Silicon Valley business executives. These executives currently complete the SHALA, receive health information located on the HIP website, attend lectures while on campus, and re-take SHALA at six months and one year after the program began. HIP will analyze the data and report aggregate progress to Linkage Asia.

-Pioneering Healthier Communities

In 2007, a member of the HIP staff attended a Pioneering Healthier Communities conference in Washington DC, as a member of the expert panel on health promotion. This conference led to participation by many YMCAs across the country in this CDC sponsored initiative that seeks to raise the visibility of lifestyle health issues in the national policy debate, and encourage and support local communities in developing more effective strategies to promote healthy lifestyles. Since the launch, 46 communities have

engaged teams to take on the challenge of improving the health of their communities and their residents.

Pioneering Healthier Communities teams are:

- Changing the environment of after-school programs so kids participate in physical activity and are offered healthy nutrition such as fresh fruits, vegetables and water;
- Influencing policy makers to put physical education back in schools and include physical activity in after-school programs;
- Building new or enhancing existing walking/biking trails and sidewalks for residents to be active
- Providing opportunities for residents to purchase and consume fresh fruits and vegetables through community-gardens, farmers markets, and other activities.

-HIP lectures on health promotion as an employee benefit

HIP has lectured at many conferences and covering a wide variety of topics. Among those groups focused on health promotion as an employee benefit: Certified Employee Benefits Specialists (Seattle), Association of Managed Care Organizations (Atlanta).

-HIP on-campus conferences

HIP has occasionally sponsored conferences at Stanford. Twice we have had a conference with Linkage Asia, a leadership development organization for executives from Asia and the Middle East. For many years HIP sponsored the 50 Plus Fitness (now called Lifelong Fitness Alliance) annual conference at Stanford. For two years we sponsored a conference on Celiac disease, organized by a university employee who has the disease. We also sponsored a conference on healthy lifestyle for the Elder Hostel organization.

Current HPRC Materials and Licensing Agreements

HIP develops health promotion materials and curricula for use on campus and then sells or licenses them to community based organizations. Similarly, HIP has received funding from outside organizations to develop materials and then makes them available for use on campus programs directed toward faculty and staff.

-The Stanford Health Risk Appraisals

The Health Improvement Program has developed six different health risk appraisals (HRAs), each one pushing the boundaries for use as a health promotion tool. The first, known as *Stanford Smart*, provided intricate health education messages that were based on responses by the participant. The second, known as the *Stanford Assessment of Risk and Readiness for Change (SEARRCH)*, incorporated motivational assets into the survey so the participant could use this information to create a personal action plan for wellness. This HRA was licensed to Ginality and to the Cantonal Hospital of Ticino.

The third HRA, known as the *Healthy People Survey* focused on lifestyle and biometric measures that appear in the Healthy People 2000 project. To support this tool, we developed the *Readiness for Change* survey that measured motivational assets and

readiness for change. Next, we merged these two surveys so they could be used in a behavior modification program and called the new HRA, the *Stanford Health and Lifestyle Assessment*. HIP also developed the software that produces an aggregate report that can be used to identify priorities for a specific population. The goals established by *Healthy People 2000* and *Healthy People 2010* serve as benchmark comparators. This HRA also was designed as a tool to help wellness coaches consult with participants in one on one meetings. SHALA is licensed to Medforma, AgeWELL Initiatives, Beijing Hexutang, and Asclepieia (which does business in Asia and South Asia as Care Beacon). The fourth HRA is a derivative of SHALA, called *SHALA Activate America*, which was customized at the request of the YMCA of the USA. This HRA is available to all YMCAs within the United States.

-Stanford Healthy Lifestyle Program

HIP developed a ten month long cognitive-behavioral curriculum for lifestyle modification that is used within a support group model. The program is called the Healthy Lifestyle Program. It is available to the Stanford community and it has been licensed to outside organizations including the YMCA of the USA and Dickerson Insurance. HIP trains facilitators as a condition of the licensing agreement. The two-day training has been conducted for YMCAs in Seattle, Tacoma, Boise, Milwaukee, St. Louis, Charlotte (NC), Providence, Hartford, Ann Arbor, Rochester (NY), Los Angeles, Portland, and San Jose. In addition, quality assurance materials are included within the curriculum.

-Stanford Health and Fitness Assessment

With funding from two HMOs, HIP developed a health and fitness assessment and wellness coaching program for faculty, staff and retirees. More than 5,000 assessments have been completed. In addition to these, we have had contracts to provide this assessment and coaching for employees of San Mateo County, Santa Clara County, the city of Palo Alto, and a long-standing contract with the Milpitas Police Department to satisfy mandated “fit for work” testing among their police officers.

-Stepping Out with Stanford

This is an internet based pedometer program that is available to faculty and staff. It has been sold as a corporate account to the City of Palo Alto, Warner Brothers, and the Health Alliance. In addition, the program is licensed to AccuSplit, the manufacturer of a pedometer. This company sells its pedometer and the *Stepping Out With Stanford* program that is packaged to identify Stanford University. The agreement was conducted through the Office of Technology and Licensing.

-Video education

A commercial educational video company contracted with the Stanford Video Services, then located within the President’s Office for a series of programs on various health promotion topics. The Kantola company wanted specific programs from the Health Improvement Program: breast cancer awareness, preventing and managing back pain, heart disease prevention, healthy aging, preventing and managing computer related injuries, the optimal diet for overall health, preventing and managing stress, and

understanding menopause. The staff at HIP developed scripts and served as ‘on-screen talent’ for videos. These videos are still being sold to employers nearly a decade after they were produced.

HPRC also developed a videotape called Images of HIV/AIDS Around the World. The videos focus on PSAs from around the world that communicate effective prevention strategies. The video excerpts 112 PSAs from 27 countries.

-Student Media Awareness to Reduce Television (SMART)

This curriculum was developed by the Youth Group within SPRC, and the Principal Investigator is Tom Robinson, M.D. The curriculum has been re-packaged for community use. SMART is packaged and distributed through HPRC and has been sold to the CDC, the State of Michigan, and to numerous school districts across the country, including several local schools.

Coalitions for Health Improvement

HIP staff have served in leadership roles on behalf of the California Department of Health Services chronic disease block grant; the Governor’s Council on Physical Fitness; the Northern California Cancer Center; Joint Venture Silicon Valley; Lifelong Fitness Alliance; South Bay Business Group on Health; Bay Area Worksite Wellness Coalition; and the Stanford Health Promotion Network.

-Joint Venture Silicon Valley

When the local economy had a significant downturn, Joint Venture Silicon Valley was established as a non-profit business to stimulate the local economy. The Board of JVSV established 43 initiatives, all dealing with the transfer of information technology. The Health Improvement Program played a leadership role in creating a new initiative known as Healthy Community: Healthy Economy that focused on worksite wellness. Employers with exemplary programs such as Stanford, Apple, Applied Materials, and Amdahl agreed to mentor, without charge, companies that were interested in developing wellness programs. Among these employers were the County of Santa Clara, the City of San Jose, the San Jose Mercury News, Granite Rock and many others. This led to the genesis of a large number of local employers eventually developing wellness programs for their employees. The Mayor of San Jose in her “state of the city” address said this wellness program saved the taxpayers of the city more than \$1 million dollars in its first year.

-Stanford Health Promotion Network

In 2002, HIP created a wellness collaboration for local employers. Members paid Stanford a fee. Quarterly meetings were held on campus with SPRC and School of Medicine faculty presenting research findings that focused on lifestyle and health improvement. Principal Investigators distributed information about their studies and provided members with recruitment materials. This program will be re-established to include HMOs, hospitals, and large medical groups.

-Bay Area Worksite Wellness Coalition

In about 1991, Stanford played a leadership role in developing an employer based wellness coalition that started in the South Bay and on the Peninsula, eventually spreading from Monterey to Napa County. Many of the local high tech companies participated, as did Kaiser, Health Net, Stanford Hospital, El Camino Hospital, Good Samaritan Hospital, the Palo Alto Medical Foundation, Camino Medical Group, Washington Hospital, and John Muir Hospital.

-The California Cardiovascular Disease Prevention Coalition

HIP staff members have played key roles in the advancement of health promotion. Leadership for the California Cardiovascular Disease Prevention Coalition resided within HIP. The statewide coalition included representatives from every medical school in California, the California Department of Health Services, non profit organizations focused on heart disease for specific ethnic groups, and the California Heart Association. The coalition wrote a proposal to NHLBI seeking to host a national conference on the prevention of heart disease in honor of the 50th anniversary of both NHLBI and the American Heart Association. HIP staff and SPRC faculty played a leading role in the planning and management of this conference.

HIP and other academic institutions

-Support for the University of California

HIP has been invited twice to meet with the Chancellor's Office to discuss strategies relevant to worksite based health promotion programs on campus. We also presented a lecture on this topic to the Human Resources Departments of all UC campuses during a statewide conference. When the University of California at Berkeley initiated its wellness program, HIP was asked to visit campus to discuss effective strategies. HIP served as the mentor organization for a Fellow in Preventive Medicine.

-Support for the University of Iowa

The University of Iowa School of Public Health has a worksite research project funded by NIOSH. The health promotion project has four separate arms within the study. Two of the four arms involve materials and/or programs developed at Stanford by HIP. Someone from HIP serves on the Advisory Committee and presented a series of lectures to faculty and students of the School of Public Health. The University licenses SHALA and was trained in the facilitation of the Healthy Lifestyle Program.

-Support for Lawrence Livermore Laboratories

This organization is part of the University of California at Berkeley. HIP provided assistance to the Lab as it was developing its health promotion program that was to be located within the medical unit. We discussed philosophy, administration, programs, integration with the medical unit, and evaluation research opportunities.

-Santa Clara University Health Psychology Department

Since 1999, staff from HIP have lectured to health psychology graduate students at Santa Clara University. The lecture presents information about health promotion, behavioral

science applied to health promotion, and HIP projects that show students real life application for the principles they have been studying.

HIP and the YMCA of the USA

HIP has a long-standing relationship with the YMCA of the USA. Our West Coast Project was a huge success that brought the YMCA leadership to a meeting at the Cooper Institute in Dallas to discuss whether, in light of America's lifestyle, the YMCA should re-focus its efforts toward health promotion. The change has been characterized as going from "swim and gym" to a philosophy that embraces "health seekers". Each of the bullet points below describes a separate project with the YMCA.

-West Coast Project

In 2001, HIP and the YMCA prepared a proposal to the Robert Wood Johnson Foundation to fund a project that focused on health promotion offered through YMCAs. Stanford provided health risk appraisals, (Healthy People Survey and Readiness for Change) at baseline, six months, and one year. YMCA members and non-members were eligible to participate. Stanford trained YMCA staff in health promotion and taught them to facilitate support groups for behavior modification using the Stanford Health and Lifestyle curriculum. The project was funded and YMCAs from Seattle, Portland, San Francisco, San Jose, and Los Angeles participated. Survey data were conclusive that health promotion on behalf of 'health seekers' when delivered by trained YMCA staff, could produce significant changes among participants vs a comparison group of YMCA members, including better health. Following the study, the YMCA of the USA met at the Cooper Institute in Dallas to discuss the prospect of changing the focus of the YMCA. The decision was made and the YMCA movement (2700 local branches and 19 million members) will evolve into the nation's largest provider of health promotion programming.

-Activate America-

Twenty-three YMCAs from across the country agreed to serve as pilot sites for health promotion. We used a learning model developed by the Institute for Health Care Improvement (IHI), to close gaps that had been identified by an expert panel. There were two chairs for the project; one from HIP who focused on adult "health seekers" and one from the Harvard School of Public Health who focused on child health. The Collaborative took 18 months to complete. An additional Collaborative with nine YMCAs served as a second pilot test and this was completed in twelve months. Significant to this report, during the learning sessions, YMCAs learned about the SHALA and the Stanford Health and Lifestyle Program. As a result, HIP trained YMCA professionals to deliver this program in Seattle, Providence, Indianapolis, Hartford, Milwaukee, Boise, Ann Arbor, Tacoma, Rochester, St. Louis, Metuchen, Charlotte (NC), and Dallas. SHALA was the entry point for "health seekers". The Governor of Rhode Island asked that all YMCAs offer the program and target teachers in public schools so they would become familiar with health promotion and become (in some cases) better role models for children. Funds from the No Child Left Behind Act were used to pay for these health promotion programs.

-Youth Obesity

United States Senator William Frist, M.D., asked the GAO to prepare a report on the relationship between physical inactivity and youth obesity. The GAO indicated that it would do so, however, it prompted the Senator to approach the YMCA, noting that Stanford and Harvard are academic partners with the YMCA. We were asked to prepare a report that was financially supported by the Partnership for Play Everyday, which includes the National Parks and Recreation Association, the National Association for Sport and Physical Education, American Academy of Pediatrics, American College of Sports Medicine, American Council for Fitness and Nutrition, American Cancer Society, American Heart Association, American Diabetes Association, National Park Service, National League of Cities, America on the Move, and a variety of corporate sponsors. A media day was held in Washington D.C. to draw attention to a legislative bill (S 651 and HR 2045) that would fund communities to improve the opportunity for physical activity with a focus on the built environment. Two speakers from Stanford were on the agenda. Interviews with CNN and the Washington Post mentioned Stanford's work on youth obesity. The meeting also was shown on C-Span.

During this media day, four HIP representatives who had written the "Building Generation Play" document were invited to a meeting with the President's Council on Fitness. Discussion focused on community based interventions, the need for data coming from demonstration projects, and the roles of government and non-profit organizations in addressing the youth obesity crisis.

-Community Healthy Living Index

The Institute of Medicine encouraged the development of a community index to assess the opportunities and barriers for health promotion. It suggested that a government agency, a non-profit organization, and an academic institution partner in this effort. The CDC, the YMCA, and Stanford are fulfilling this role by creating an on-line community survey that includes neighborhoods, schools, after school facilities, worksites, and the community at large to assess opportunities for healthy eating and physical activity. Pilot testing is taking place now and the instrument will be available to the nation in July. Data from the project will be made available to researchers who have an interest in physical activity and healthy eating.

-Living Strong: Living Well Fitness Program for Cancer Survivors

HIP developed a fitness program for cancer survivors with elements focused on muscular strength, cardiovascular endurance, flexibility, and balance. Nine local YMCAs as well as YMCAs in Providence, Charlotte (NC), Canton, (Ohio), Ridgewood, (N.J.), Boise, and Ann Arbor have been trained. The project's data led to a grant from the Stanford Comprehensive Cancer Center to SPRC Investigators Marcia Stefanick and Abby King to study the outcomes in a randomized controlled study.

Research

The Health Improvement Program does research with a “small r”, meaning that our studies are translational in nature and we measure the impact of a specific program. The studies below reflect our interest in projects where data can be used for decision making.

-Can finger stick measurement of cholesterol be measured accurately in a worksite health promotion setting?

During the health and fitness assessments for faculty and staff, HIP simultaneously drew blood intravenously and using a portable machine drawing blood by way of finger stick. Laboratory data for the vena-puncture were compared with finger stick readings from the Cholestech machine. Correlations showed a high degree of accuracy, specificity, and precision.

-National telephone survey on the use of complementary and alternative medicine

HIP developed a survey to assess the use of and satisfaction with services considered to be complementary and alternative to western medical care. A prominent survey firm was hired to draw a representative sample (with over-sampling techniques used for ethnic minorities) and to conduct the telephone surveys. The results showed that most Americans had used at least one such service and many Americans had used multiple services. The satisfaction level was comparable to services offered by physicians using western medical therapies. Members of the HIP staff led groups in the SAGE research project (Successful Aging Growth Experience) funded by the NIH Center for Complementary and Alternative Medicine. HIP also sponsored a conference on campus at Fairchild Auditorium that drew national speakers and attendees as well as national news media outlets.

-Are commonly used techniques to measure percent body fat accurate?

Hydrostatic weighing is the recognized standard to measure percent body fat. Because this technique is impractical, three alternative techniques are commonly used; calipers, bio-electrical impedance, and a near infra-red light beam instrument. Results showed that calipers (skin fold) and bio-electrical impedance produced reasonable results except when individuals were grossly obese, whereas, the infra-red technique was inaccurate for healthy weight, overweight and obese individuals.

-Can a fitness program for cancer survivors improve muscular strength, as well as perceived health, vitality, and stress? HIP developed a fitness program for cancer survivors known as the Living Strong: Living Well program. Results show that individual strength does increase (as measured by a device within the resistance machines), and that perceptions of health, vitality, and stress all improve.

-Can the *BeWell* incentive health promotion program for Stanford faculty and staff effectively impact lifestyle, risk factors, and medical expenses? We are currently in our fifth month of the *BeWell at Stanford* program. Thus far, more than 5,000 faculty and staff have completed SHALA with approximately half of them having then participated in the wellness interpretation workshop, personal training and the health and fitness exam. In May of 2008, HIP and PER&W met with the Benefits Manager and

Blue Shield to discuss ways in which we can collaborate on health promotion and how we can share data to determine impact, particularly return on investment (ROI). Similar meetings will be arranged with the other health plans that cover Stanford faculty and staff. These health plans will be invited to join the Stanford Health Promotion Network along with local large employers, hospitals, and medical groups.

-What is the impact of the Healthy Lifestyle Program?

HIP developed a ten month behavior modification program that was tested in the YMCA West Coast Project. The *BeWell at Stanford* program has encouraged more of the Stanford faculty and staff to enroll in this program. HIP will be assessing factors such as goal achievement, maintenance of healthy lifestyle, risk factor reduction, and impact on health care encounters and costs.

-What are the perceptions of one's health across the lifespan?

HIP developed an internet based survey asking questions about individual perceptions of health. Data were grouped by decade, so that perceptions could be analyzed across the lifespan. Interestingly, and somewhat surprising, the older age groups reported higher levels of health than the lower age groups, despite having more chronic disease. While there are many possible confounding variables and while the assessments were purely self analyzed, it was interesting to observe the significant differences in lifestyle. The older decades had a lifestyle much more reflective of good health behaviors than the younger decades. Using regression analysis, lifestyle factors were determined to be a much greater predictor of perceived health than age.

-Reviewers for the American Journal of Health Promotion

Three members of the HIP staff serve as reviewers for the American Journal of Health Promotion.