As a supporting organization of the Jewish Healthcare Foundation (JHF), Health Careers Futures (HCF) works to strengthen today’s healthcare workforce and to help align future supply and demand. This means giving incumbent workers skills to minimize conditions that lead to burnout and attrition, as well as developing champions to drive all aspects of healthcare improvement. HCF has developed a variety of programs designed to recruit new workers, retain existing workers, and provide advancement opportunities. Without building and strengthening the healthcare workforce, progress in areas such as quality and safety will be difficult if not impossible.

In order to accomplish the three tenets of recruitment, retention and advancement, programs span the needs of students and young adults exploring healthcare careers, as well as current healthcare workers seeking improvement and advancement opportunities.

Within HCF, programming is designed to reach workers at all levels of the career ladder. The HCF Web Portal and the Center for Career Learning aim to build awareness about and interest in health careers. Entry level fellowships with collegiate and graduate students provide new healthcare workers with the skills and knowledge to thrive in a healthcare environment that is focused on improvement. The Incumbent Worker Investment and Skills Enhancement (I-WISE) program gives frontline support staff workers (janitors, dietary workers, nursing assistants, nurses and managers who supervise them) the tools to improve their working environments and to play a stronger role in change processes through improved communication and problem-solving skills. Finally, champion programs give both training and support to healthcare professionals in a position to drive change. By expanding the pool of qualified workers, HCF aims to improve the quality of patient care throughout the region’s healthcare system.

The articles within this edition of Branches illustrate the expanding scope of JHF and HCF’s initiatives to build an army of healthcare workers dedicated to improving quality of care. The following graphic illustrates the diversity of JHF and HCF programs working to this end.

“...Our healthcare sector plays a vital role in all of our lives and also in the life of our region’s economy. As major employers to our region, our healthcare institutions provide medical care, but also give birth to high-tech, potentially high-growth businesses such as medical device companies and biotech startups. To sustain these institutions and help them grow, we must ensure them access to the highly-trained, skilled workers that their industry requires.”

David J. Malone
President and Chief Executive Officer of Gateway Financial and Chairman of the PA Workforce Investment Board

CURRENT HEALTHCARE FACTS

- The need for frontline healthcare workers in Pennsylvania, including RNs, LPNs, and Nursing Assistants, is expected to grow by over 28% by 2014. This is double the expected average growth for all employment.
- By 2012, the Pennsylvania Department of Labor projects that the state will need an additional:
  - 12,100 to 22,000 nursing professionals;
  - 3,200 to 4,400 licensed practical nursing professionals;
  - 11,000 nurse assistants.
- Vacancy rates among registered nurses, licensed practical nurses, nursing assistants, pharmacists, and imaging technicians are all over 10%.
- 86 percent of regional healthcare industry members surveyed indicated retention of frontline workers was a top workforce concern.
- In nursing homes and personal care facilities (20.5% of healthcare employment), workforce needs are expected to grow by 25% by 2012; turnover rates are currently over 33%.
- In home health care, employment is expected to grow by 38.3% by 2012; current turnover rates are 25.4%.
Programs aimed at recruitment of new workers and supported by Health Careers Futures and the Southwestern Pennsylvania Healthcare Industry Partnership include:

Center for Career Learning
The Center for Career Learning’s (CCL) mission is to advance strategic collaborations that build career awareness and enhance student preparation for work in the regional healthcare industry.

CCL identifies standard practices and tools connecting academic principles to applications in health care, provides health careers literacy, vocational and job readiness tools, and facilitates (with community organizations) student experience in healthcare settings.

CCL products are based on Center strategy, research and development, partnerships and learning reform initiatives.

RN Pathway Program
The Westmoreland-Fayette Workforce Investment Board’s RN Pathway Program aims to recruit and train new and incumbent healthcare workers – primarily emergency medical technicians (EMTs) in Fayette and Westmoreland counties – to become registered nurses. The program was developed in response to demand for RNs. One objective is to open advancement options to healthcare workers on the lower rungs of the career ladder. In addition to training EMTs, the program provides a paraprofessional career path in collaboration with the Redstone Highlands nursing facility. This has resulted in three new advanced Certified Nursing Assistant (CNA) positions: Geriatric Patient Care Associate (PCA), Senior PCA, and CNA Coordinator. Each has different qualifications, job descriptions, and wage scales. The program enrolled 45 incumbent workers and may be expanded to other regional facilities.

Nursing Careers Future
Nursing Careers Future was established to help 35 minority and disadvantaged men and women in Allegheny County prepare for, enroll in and graduate from diploma schools for nursing. Successful participants are supported in finding employment in a local healthcare system. The program is offered by Goodwill Industries, with support from a grant that funds the I-WISE program.

Nursing Careers Future covers educational and personal needs such as: barriers assessment, case management, classes to prepare for the academic requirements of nursing school, computer skills, medical terminology, study skills, stress management, tutoring and mentoring, household budgeting and utility assistance. In addition, students can enroll in adult learners’ discussion groups to help balance work, family and school demands.

So far, the program is achieving impressive results: on average, 82 percent of participants have successfully enrolled in diploma nursing programs.
Strengthening Our Frontline, Improving Our Region’s Health Care

Frontline support staff range from certified nursing assistants and housekeeping staff to dietary technicians and maintenance crews who contribute mightily to the quality of care given to hospital patients and long-term care residents. They provide meals, assist with toileting, bathing and transporting and ensure the cleanliness and safety of the healthcare environment. These workers spend more time with patients than anyone else and often are in the best position to determine when a patient’s health is deteriorating and when intervention is warranted.

Unfortunately, these frontline support staff often are the last to be considered for professional development or skills enhancement. For example, despite the fact that frontline support staff often spend more time with patients than doctors or nurses, they are not required to complete any continuing education credits as nurses and doctors must do. The result of failing to encourage the development of these workers can be suboptimum care, poor patient outcomes and higher costs. When frontline support staff perceive themselves as overburdened, underappreciated or untrained for these responsibilities, the consequences can include job frustration and dissatisfaction leading to retention problems, inefficiency and errors. High vacancy rates in the industry further overextend frontline support staff and strain healthcare facilities. Overtime increases, more outside contractors are needed, more temps are hired. Patient care can suffer. Moreover, without training in interpersonal communication or problem solving, many frontline support staff are unable to manage daily challenges and frustrations appropriately, or be vigilant about safety and quality concerns. A 2005 study by VitalSmarts found that the frequency of communication and the quality of conversations among healthcare workers directly correlate with measures of quality, including medical errors, patient safety, staff commitment, employee satisfaction, discretionary effort, and turnover. The study also found that possibly 60 percent of medical errors stem from problems in interpersonal communication.

To provide frontline support staff with these interaction skills, Health Careers Futures, a supporting organization of the Jewish Healthcare Foundation, developed the Incumbent Worker Investment and Skills Enhancement (I-WISE) program. The training program is aimed at reducing turnover, improving patient safety, and ultimately supporting organizational transformation. I-WISE is based on principles of the Pittsburgh Regional Health Initiative’s Perfecting Patient Care (PPC) system (see “Perfecting Patient Care”, page 6). Modeled after the Toyota Production System, PPC fosters continuous process improvement through standardization of practices, reduction of waste, and the scientific method of problem solving. I-WISE provides short, on-site classes.

The classes are discussion based, enabling participants to work through material together and apply the lessons to their daily work.
Many Trained, Lessons Applied
During the program’s first year, HCF staff trained 2,896 frontline support staff and managers—a total of 7,260 hours of instruction. In follow-up evaluations, 97 percent of respondents said they already had applied the training, and of them, 99 percent deemed the applications successful. Evaluations of each session along with follow-up program evaluations have guided improvements in I-WISE. Since the first round of training, courses have been shortened by an hour to better accommodate tight schedules. More review of prior sessions has been incorporated into each class. In addition, HCF now works more closely with directors and top management to reinforce the principles behind the training.

Large-scale I-WISE training programs have been given at four Presbyterian SeniorCare facilities, Lutheran SeniorLife’s Passavant Retirement Community, Mt. Macrina Manor, Jefferson Regional Medical Center, and Monongahela Valley Hospital. Training large numbers of employees in any facility can optimize results by broadening the base of support for staff-initiated changes. Monongahela Valley Hospital’s experience was a case in point. Susan Campus, Mon Valley’s education specialist, said, “In written evaluations and ongoing dialogue, program participants consistently mention the presentations, new concepts, exercises and team building that I-WISE provided.” At other participating institutions, the feedback has been equally positive.

Accelerating Participation
After two rounds of training, demand for the I-WISE program has grown. HCF now plans to help healthcare institutions build in-house capacity to offer the curriculum. In its third round of training, HCF will offer a “train-the-facilitator” module, permitting participating organizations to train up to three facilitators from their own staffs.

There are numerous benefits to having in-house facilitators. They have more flexibility in scheduling and can accommodate smaller groups for training than HCF can. Over time, in-house facilitators also can train larger numbers of workers, which optimizes the value of the training and helps sustain the benefits.

HCF plans formal program tracking and assessment to measure the impact of I-WISE training on employee retention, job satisfaction, job performance and patient care. For the moment, follow-up evaluations and strong demand for the I-WISE program are early indicators of the value frontline support staff and managers place on the training.

Through the train-the-facilitator module and other new course offerings, HCF hopes to expand its reach, providing more frontline support staff with training and helping institutions sustain the culture changes that come from improving interpersonal skills. HCF will convene focus groups in late 2007 to enhance the value of the train-the-facilitator courses and other new modules to reduce turnover and improve productivity and patient care.
I-WISE ADDRESSES
A PROBLEM AT A RETIREMENT FACILITY

When Passavant Retirement Community’s frontline support staff recommended against purchase of a new piece of equipment that administrators had asked them to try, I-WISE training helped them make their case. Passavant’s CNAs had been asked to use a personal care lift to help maneuver heavier patients. But patients complained about the device and the CNAs felt it was unsafe.

Instead of basing their recommendation on generalities, however, the workers gathered data: they listened to the residents’ concerns, got into the lift themselves, documented their research, and presented it to management. They showed why the lift was uncomfortable and the ways it might prove unsafe.

The CNAs also explained that because of their safety concerns, the lift would probably go unused, wasting any investment Passavant might make.

Administrators took the advice. They brought in a different lift to start a new trial. The response gratified the CNAs. One of the major factors in CNA retention is the level of involvement CNAs have in patient care and in work life decisions; these CNAs felt respected and empowered.

To Roxanne Gwilt, a CNA at Passavant for five years, management’s response meant administrators recognized “the people who do the frontline work are the people who can help solve the problems because they observe what is needed at the point of care.”

I-WISE Statistics

Facilities trained July 2006 – June 2007:
- Concordia Lutheran Ministries
- Jefferson Regional Medical Center
- Jewish Association on Aging
- Mt. Macrina Manor
- Passavant Retirement Community
- Presbyterian SeniorCare: Southmont
- Presbyterian SeniorCare: Southminster Place
- Presbyterian SeniorCare: The Willows
- Presbyterian SeniorCare: Woodside Place
- Squirrel Hill Health Center
- St. Anne Home
- The Western Pennsylvania Hospital
- The Western Pennsylvania Hospital: Forbes Regional Campus
- Torrance State Hospital
- UPMC St. Margaret
- Villa St. Joseph
- Vincentian Collaborative Services: Vincentian Regency
- Vincentian Collaborative Services: Vincentian Home

Numbers of staff trained to date:
- Acute care 734
- Ambulatory care 35
- Long-term care 2,000
- Mental health 127
- Total Frontline managers 979
- Total Frontline support staff 1,917

Courses available:
- Communicating Effectively
- Managing Conflict
- Delegating Successfully
- Team Building
- Problem Solving
- Managing Change
- Train-the-Facilitator

Facilities to be trained July 2007 – June 2008:
- Baldwin Health Center
- Charles M. Morris Nursing and Rehabilitation Center
- John J. Kane Regional Centers
- Monongahela Valley Hospital
WHAT IS PERFECTING PATIENT CARE℠?

Perfecting Patient Care℠ (PPC) is an adaptation of the Toyota Production System developed for health care. The Pittsburgh Regional Health Initiative (PRHI) was a national forerunner in bringing these industrial quality engineering principles to clinical settings.

Like the Toyota model, which American industry adopted widely in the 1980’s and 1990’s to improve quality and regain competitive standing, PPC aims to eliminate waste, inefficiency and error in health care through a cycle of continuous improvement and standardization of work practices.

The principles underlying good work design and redesign have been applied by many “champions” including doctors, nurses, pharmacists, librarians, and trustees. Numerous PRHI applications of PPC in healthcare settings prove its versatility in getting better performance in hospitals, nursing facilities, and community practices. Just as manufacturing problems are more readily identified and solved on a factory floor than in an office or a boardroom, tangible improvements in health care are best made as close as possible to the point of care. Process improvement of any kind also requires an environment in which the discovery of problems is regarded as an opportunity for learning rather than an occasion for blame. In addition, it requires that problems be analyzed and solved immediately in the course of work, not days or weeks after the fact.

Under the PPC approach, each time problems or errors occur, workers trained in quality engineering principles identify possible causes and implement countermeasures. These rapid-cycle experiments yield incremental improvements in care. The experiments and the incremental changes continue, bringing about best practices. As best practices are standardized, waste and errors are eliminated, costs are lowered and care is perfected.

Like Toyota, PPC holds that pursuit of perfection is the only tenable goal. Anything less would set limits on achievement, rather than setting the stage for continuous improvement.

PPC may begin in a single unit or department. But once work redesign gets underway, problems often are traced to practices outside that unit, creating a ripple effect that extends improvements to other units. The quality improvements in one unit also often inspire emulators in others. Either way, the result is spreading quality.

NURSE WORK READINESS

The transition from nursing school to the nursing floor is a difficult one. At least 35 percent of new graduate nurses leave their first professional positions within the first year of employment. The high attrition rates can diminish the quality of patient care.

Nurse Work Readiness is a program HCF developed for nursing students in their final year of diploma, associate, baccalaureate, and second-degree programs. HCF hypothesizes that retention rates among nurses would likely increase if healthcare workers were given tools and skills to improve their work environments and reduce on-the-job stress. Improved retention would, in turn, contribute to more efficient, safe and effective care, better patient outcomes, lower healthcare costs and fewer recruitment expenditures.

With funding from the Department of Labor’s Employment and Training Administration, the Nurse Work Readiness program relies on components of other Jewish Healthcare Foundation professional development programs including I-WISE training modules; Perfecting Patient Care℠ principles; and the RN Pathway program. The eight-week course, which began in the fall of 2007, will provide 100 nursing students with 36 hours of training, including group discussion, reflective journaling, expert presentations, and case studies.

AT LEAST 35 PERCENT OF NEW GRADUATE NURSES LEAVE THEIR FIRST PROFESSIONAL POSITIONS WITHIN THE FIRST YEAR OF EMPLOYMENT
ADVANCEMENT PROGRAMS

Programs supported by HCF to promote the advancement of current healthcare workers and to develop healthcare quality champions include:

**Nurse Navigator Fellowship**
When experienced nurses become frustrated with the healthcare environment and their own inability to effect change, they often leave the workplace. As a result, quality suffers. Completed in 2006, the Nurse Navigator Fellowship, co-sponsored by the Robert Wood Johnson Foundation and the Jewish Healthcare Foundation, was designed to address the problems that undermine nurse retention and reduce the quality of care.

JHF hypothesized that if nurses were given the tools to make improvements, as well as encouragement from their employers to institute those improvements, they would feel greater satisfaction with their work and patients would, in turn, receive higher quality care. To test this hypothesis, JHF awarded grants to a group of nine nurses and engaged them in a twelve-month program that included training in PPC, monthly meetings with area experts, support from their employers to launch quality improvement demonstrations and coaching to implement their projects.

In the end, each nurse came away from the program with a completed quality improvement intervention and encouraging results. Projects targeted issues such as response times, falls, infection rates, patient identification, organization of supply closets, wait times, communication during hand-offs and nurse turnover. Among the findings: one of the nurse investigators traced patient falls at her institution to bed alarms that so frequently sounded false signals that caregivers disconnected them. In looking further, it became clear that improper storage was causing the false alarms. Once storage procedures were corrected, the false alarms ceased, use of bed alarms increased, and falls began to decline.

Each nurse left the program with a similar experience of investigation, experimentation, and successful redesign, demonstrating that with the right training and tools, frontline workers can significantly improve the safety and quality of patient care. Participating nurses all agreed that the program and the success of their projects gave them the motivation and confidence to seek further improvements.

**Gerontology Advancement Program**
Staff turnover in long-term care far exceeds turnover rates in other areas of health care. According to the U.S. Census Bureau, there are 36.7 million Americans over age 65 and the number is expected to reach 54.6 million, about 16 percent of the population, by the year 2020.

To help ensure there are enough frontline workers to care for the aging population, JHF funded the Gerontology Advancement Program (GAP) at the University of Pittsburgh Institute on Aging (UPIA). The hypothesis behind GAP is that creating a career advancement ladder through gerontology certification programs for CNAs, LPNs and RNs will make it possible not only to enhance clinical skills, but also reward and recognize caregivers. Added rewards and recognition would improve recruitment and retention of nursing staff.

The curriculum for GAP incorporates elements of the I-WISE program, work management, PPC principles and methods, and specialized geriatric training. The curriculum also will help staff work together to redesign care processes specific to the long-term care environment.

The GAP began in May 2007 and is scheduled to run through April 2008, with potential for continuation if successful. Evaluations from participants show overwhelming satisfaction with the program and lessons learned: 100 percent of participants found the material presented to be both valuable and applicable, and more than half mentioned the value of communication training both in relationships with co-workers and in caring for their residents.

**Frontline Manager Fellowship**
Seven years after the seminal Institute of Medicine report, To Err is Human (1999), there is no debate about the need to improve patient safety. Frontline managers play a crucial role in doing so.

To build their capacity to lead improvement, the Jewish Healthcare Foundation and Monongahela Valley Hospital piloted the Frontline Manager Fellowship program. Concluded in late 2006, the initiative trained frontline managers in safety science, work redesign, situational leadership, change management, and the creation of learning organizations and healthy work environments. The goals were to improve patient and staff satisfaction, increase collaboration, improve patient outcomes and reduce staff turnover. Participants applied PPC principles in their work environments through individual demonstration projects. They measured outcomes and documented the business case for quality.

Among other improvements, the hospital saw better communication in hand-offs between shifts, fewer delays in medication delivery, better teamwork, and increased patient bed availability and employee safety. Among the changes made were implementation of a crash cart exchange system and a capital purchasing process to address nursing equipment needs.

**Helping Librarians Make Health Information Connections**
Across the country, consumers are increasingly turning to the Internet to answer health-related questions. Pew Charitable Trusts’ Internet and American Life Project reported that 80 percent of the nation’s 93 million adult Internet users have researched at least one of 16 major healthcare topics online. However, a JHF-funded consumer survey showed that libraries remain a top option for researching healthcare questions, particularly for older or low-income residents without home computers or Internet access.
The Librarian Fellowship responds to increasing consumer need for information about health care and health insurance. More comparative data on the cost and quality of providers are becoming available, and the choices consumers face in selecting healthcare coverage are expanding. In addition, consumers increasingly realize they can access information to participate in their own treatment decisions and to manage chronic illnesses such as diabetes, heart disease, or HIV/AIDS.

“A great many of our patrons rely on us for Internet access,” said Denise Graham, head librarian at the Carnegie Library of Pittsburgh’s Homewood branch. “We’ve had people who come directly from the doctor with prescriptions or other things they want to look up.”

Thanks to JHF’s Librarian Fellowship, she now feels better equipped to guide these patrons to resources that might help them. Graham was one of 19 participants in the 11-session program that JHF funded to give community librarians specialized skills for researching consumer health issues.

Participants developed a reference tool with tips for interviewing patrons and a list of health information resources, including web sites and community resources.

The Librarian Fellowship included presentations on popular topics such as aging, adolescence, cancer, and patient safety. Fellowship participants also toured some of the region’s largest medical information resources, including the Falk Library, and received the 12 hours of online training needed to meet the Medical Library Association’s requirements for certification as consumer health information specialists.

The program was a partnership between Carnegie Library of Pittsburgh and Health Careers Futures. Barbara K. Mistick, PhD, president and director of the Carnegie Library of Pittsburgh, said librarians “emerged from the program with a toolbox for delivering consumer health information to the public.”

The Pennsylvania Workforce Investment Board established the Southwestern Pennsylvania Healthcare Industry Partnership. Health Careers Futures serves as coordinator for the Partnership, which is chaired by Debra L. Caplan, Senior Vice President, Allegheny General Hospital (WPAHS). Among the Partnership’s functions are: convening regional stakeholders; promoting regional initiatives to improve job quality, worker retention and quality of care; and coordinating regional healthcare education efforts.

Current Partnership members include:
- Allegheny County Medical Society
- Center for Minority Health, University of Pittsburgh
- Faith-based Network
- Family Services of Western Pennsylvania
- Forbes Fund
- Goodwill Industries of Pittsburgh
- Health Careers Futures
- Heritage Valley Health System
- Jefferson Regional Medical Center
- Jewish Association on Aging
- Jewish Healthcare Foundation
- John J. Kane Regional Centers
- Monongahela Valley Hospital
- Robert Morris University School of Nursing and Allied Health
- Southwestern Pennsylvania Partnership on Aging
- Three Rivers Workforce Investment Board
- University of Pittsburgh Medical Center
- West Penn Allegheny Health System
- Westmoreland-Fayette Workforce Investment Board

For more information on Health Careers Futures projects, contact Diasmer Bloe at bloe@jhf.org or 412-594-2584.