



Health Care Career Pathways

and Adult English Language Learners

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August 2011

This report was produced under the former National Institute for Literacy Contract No. ED-04-CO-0121/0002 with MPR Associates Inc. It was written by JoAnn (Jodi) Crandall, Professor, University of Maryland-Baltimore County, Heide Spruck Wrigley, Senior Researcher, Literacywork International, and Christopher Spence, Consultant. Lynn Reddy served as the contracting officer's representative. The views expressed herein do not necessarily represent the positions or policies of the National Institute for Literacy. No official endorsement by the National Institute for Literacy of any product, commodity, or enterprise in this publication is intended or should be inferred.

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August 2011

The citation for this report should be: National Institute for Literacy, Health Care Career Pathways and Adult English Language Learners, Washington, DC 20006

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Executive Summary

Health care is the fastest growing employment sector in the United States, with shortages expected at all levels, from entry-level positions in direct care to positions requiring extensive graduate education and experience. At the same time, the fastest growing populations in the United States are Hispanic and Asian, and the growth of the American workforce will depend heavily on foreign-born workers. These populations offer the possibility of a more linguistically and culturally diverse health care workforce. However, if they are to fill the many current and future positions in health care delivery, they need access to a range of education and training programs, including English language training. If a major goal is to enable these immigrants to obtain employment that offers a family-sustaining wage—and to maximize their potential contributions as workers—continued education and training will need to be available to them after they enter the health care workforce.

To achieve this goal, career pathways, with multiple entry and exit points, will be needed. This is especially true for direct care workers, positions requiring limited education and training and paying a limited wage; but it is also true for those seeking to move into technical or professional positions, including internationally trained health professionals who want to apply their previous education and training to jobs in the United States.

This report discusses health care workforce needs in entry-level, midlevel and professional positions and how adult English language learners (ELLs), with their diverse language and cultural backgrounds, could help fill those positions and provide more sensitive medical care to the increasingly linguistically and culturally diverse U.S. population. Health care career pathways can offer advantages to both immigrants and employers.

We provide a profile of the changing American workforce, with a focus on the diverse population of adult immigrants and ELLs and their workforce participation, both present and future. If this potential health care workforce is to be developed, however, several challenges must be addressed. Adult ELLs will need opportunities to develop both English and basic skills and to expand their bilingual proficiency to include the academic language and technical vocabulary used in health care. Programs also must address

personal and structural challenges that make it difficult for adult ELLs to enroll in education and training. These include a lack of knowledge about and access to education and training programs (and possible financial support). Personal responsibilities, such as child care or elder care, transportation and other barriers to participation must be taken into account as well. Programs also will need to address such structural barriers to participation as the lack of alignment of curricula and tests across and within institutions. We provide examples of orientation programs that help adult ELLs understand the range of health care jobs in the United States and their requirements.

We next discuss health care career pathways, including how program providers have attempted to create pathways through diverse collaborations. These include patient care and allied health and medical administration pathways. We also discuss pathways for internationally trained health professionals.

Not all these pathways have been developed for adult ELLs, and some are in the early stages of implementation, but they offer possible models for adaptation or replication. The programs described involve partnerships among a range of providers, including community colleges, adult education programs, universities, community-based organizations (CBOs), employers and unions. While there is limited research to date on program outcomes for adult ELLs, these programs have begun to show promising results.

Among those discussed are the following:

- Carreras en Salud, a Chicago partnership of CBOs, a community college, an employment consortium and an advocacy group that seeks to help Latinos move into such positions as certified nursing assistant (CNA), licensed practical nurse (LPN) and, in the future, registered nurse (RN), while also providing phlebotomy and electrocardiograph technician certification along the way.
- The Health Care Advancement Program, a labor-management partnership seeking to reduce the nursing shortage. We highlight one of its programs in Seattle, a partnership between a community college and a medical center that provides opportunities for incumbent LPNs to become RNs.

- The Washington State Integrated Basic Education and Skills Training (I-BEST) program, which helps connect adults with limited skills, including adult ELLs, to higher-wage jobs requiring some postsecondary education. After discussing the program in general, we describe some sample programs, focusing on the Renton Technical College Allied Health Pathway in Seattle, and then discuss how other sites, such as South Texas and LaGuardia community colleges, have adapted I-BEST to meet their local conditions.
- The Welcome Back Centers in several cities across the country, which provide a range of services to internationally trained health care professionals, including career planning, credentials evaluation, referrals to English as a second language (ESL) medical and other education or training, and employer networks.

Drawing upon these program profiles and information about other health care career pathways for adult ELLs, we attempt to synthesize the information to identify promising practices for future planning of these career pathways. These practices include comprehensive orientation, accelerated progress, flexible scheduling and location, comprehensive support services and effective partnerships—all features to be considered in planning for future health care career pathways. Several challenges still remain, however, that policymakers need to consider. The need to address funding constraints and to increase access by adult ELLs to health care career pathways is especially critical.

The report ends with a brief discussion of needed research. Research on health care career pathways and programs for adult ELLs is very limited, even for the most promising programs. To better understand what features of programs are most effective for which populations, a variety of studies is needed, including extended case studies of existing programs, longitudinal studies of participant progress through career pathways and demonstration projects implementing some of the best practices or extending successful programs to new populations (e.g., extending the Carreras en Salud model to non-Hispanic adults) or different service providers (e.g., adult schools,

community colleges and CBOs). Finally, studies are needed that focus on identifying innovative funding strategies for these costly programs.

Introduction

“Health care is forecasted to remain a large source of job growth in the labor market. The long-term trend toward more employment in health care is expected to continue, with many occupations in health care...expected to grow.”

Council of Economic Advisers, Executive Office of the President, July 2009

In planning workforce education and training for adult immigrants, a variety of employment fields might be considered, including manufacturing, construction, information technology and hospitality. Health care, however, has been the fastest-growing area of employment in the country, and the need for health care workers is widespread. Health care also offers a wide range of possible employment, from jobs requiring only short-term training to those needing advanced graduate degrees.

As this report is being completed, the United States is in the depths of one of the worst recessions in its history. Although the recession has affected even the health care sector of our economy, large numbers of health care workers are needed at all levels. Shortages exist in most health care fields and will only become more critical with the aging of the American population and the retirement of baby boomers currently working in health care.

Health care is also a particularly appropriate employment sector for the growing number of adults who speak languages other than English. The fastest-growing populations in the United States are Hispanic (Latino) and Asian, and the growth in these and other linguistically and culturally diverse populations requires more diverse health care workforce, sensitive to their languages and cultures. With minimal basic skills and English language instruction, many immigrants can take entry-level health care jobs, but to provide employment that offers a family-sustaining wage—as well as maximizes these workers’ potential contributions—continued education and training must be available after they enter the health care

workforce after they enter the health care workforce, if entry-level jobs are not to turn into dead end jobs.

Carefully structured career pathways, with multiple entry and exit points, leading from entry-level positions to those with increasing responsibility and wages, are needed. While this is especially true for direct care workers such as medical aides or nursing assistants, it is also true for those seeking more technical or professional positions, including internationally trained doctors or nurses who want to apply their previous education to jobs in the United States.

This report provides examples of some promising programs and practices in health care education and training for adult English language learners (ELLs), including career pathways designed to enable them to enter employment with higher skills and increased wages. While the number of reports on integrating basic skills and workforce preparation for English-speaking adults is substantial, the literature related to similar preparation for adult ELLs is much more limited. Several promising programs and practices, however, have been developed by a range of providers, including CBOs, community colleges, employers (hospitals, nursing homes, etc.) and unions. These practices that can be adapted by other program providers or considered by state or local adult education agencies.

Health Care Workforce Needs in the 21st Century

The Need for Health Care Workers

Health care workers are needed throughout the country. Among the 30 occupations expected to grow the fastest between 2006 and 2016, many are in health care. They require a range of education and training from short- or moderate-term training for home health care aides and pharmacy technicians, to associate's, bachelor's or graduate degrees for dental hygienists, physical therapists or veterinarians (U.S. Bureau of Labor Statistics, 2006). Shortages exist at all levels, a situation likely to become more critical with the aging of the U.S. population and the retirements of current health care workers (Association of American Medical Colleges, 2004; Kimball & O'Neil, 2002). A report by the Massachusetts Community Colleges on

the extended care industry cites "severe staffing shortages" and daily struggles "to provide a high quality of care" (Dillon & Young, 2003, Executive Summary and p. 1). An additional 800,000 to 1 million direct care workers (home health aides, nursing assistants, etc.) will be needed by 2014 (National Clearinghouse on the Direct Care Workforce, 2006). These entry-level positions may not provide family-sustaining wages, but they can be the first step on a career pathway enabling adult ELLs to move to jobs of increasing responsibility and income, as evident in some promising health care career programs discussed later in this report.

The need for additional workers in midlevel positions (those requiring less than a baccalaureate degree) is expected to be equally great; 1.5 million additional workers will likely be needed by 2014 (Bradley, 2008). These jobs provide family-sustaining wages, and in some cases, the wages are rapidly rising (Holzer & Lerman, 2007). Many positions could be filled if states and communities were to invest in developing training appropriate for adult ELLs who can meet the technical requirements for these jobs, but who still lack some of the academic skills needed for success.

Nursing faces a similar situation. Estimates of nursing shortages range from 340,000 by 2020 (Lee, 2004) to 340,000 by 2020 (Auerbach, Buerhaus, & Staiger, 2007). Nurses are in high demand, but few programs are specifically designed to help ELLs living in the United States to meet admission standards, complete courses and pass licensing exams (Sparks, 2010). To help meet current and future needs for nurses, some hospitals are recruiting trained nurses from countries such as the Philippines and Mexico, though their lack of English proficiency has been a problem (Lee, 2004). Internationally trained nurses already living in the United States can help fill the gap, and the Welcome Back program (discussed later in this report) is moving in that direction.

The Need for Diversity in the Health Care Workforce

There is a strong need to develop a workforce that matches the increasing population diversity in America. As of 2005, about 20 percent of adults between ages 18 and 65 spoke a language other than English at home (U.S. Census Bureau, 2006). Although nonwhite racial and ethnic groups are expected to be a majority of the U.S. population later in this century, minorities and bilingual speakers are a small fraction of the health care workforce. Spanish speakers are particularly underrepresented. Whereas Hispanics comprised 15 percent of the U.S. population in 2006 (U.S. Census Bureau, 2006), they represented only 4.4 percent of all medical records and health information technicians, 2.8 percent of pharmacists, 1.3 percent of emergency medical technicians and paramedics, and 2 percent of registered nurses (Sullivan Commission on Diversity in the Healthcare Workforce, 2004). The situation is especially visible in parts of the country noted for their diverse populations. In California, where Hispanics are 31 percent of the population, they represent only 4 percent of nurses, 4 percent of physicians and 6 percent of dentists (Fernandez-Pena & Day, 2006). In Chicago, where Hispanics are 25 percent of the population, Estrada and Dubois (2009) report that they were not able to identify even one Hispanic licensed practical nurse (LPN).

Increasing the ethnic and linguistic diversity of health care professionals is important in improving the access to and quality of health care, as well as providing enhanced experiences for students in the health professions (Institute of Medicine, 2004). The lack of such diversity may be “compounding the nation’s persistent racial and ethnic health disparities” (Sullivan Commission on Diversity in the Healthcare Workforce, 2004, cited by Fernandez-Pena & Day, 2006). A shared language contributes to patient care and satisfaction, while language differences can be a major barrier (Ricento & Gutierrez, 2008; Timmins, 2002). Limited English proficient (LEP) patients have difficulty understanding basic health information and are less able or willing to ask questions, making it difficult to provide good patient care “to these patients when language services are not available” (Ginsburg, 2007, p. 5). In the absence of bilingual health

care workers, medical care must rely on interpreters, who are not always available or appropriately trained.

Workforce Growth and Immigration

Changing demographics make it likely that health care will be provided increasingly by individuals born outside the United States. Although, in 2008, the number of foreign-born immigrants for the first time in many years, this is likely to be a temporary situation, with immigration rising when the economy improves.

Immigrants are not only the fastest-growing segment of our labor force (Congressional Budget Office, 2005), they also have high labor force participation rates. Between 1990 and 2002, the share of immigrants in the workforce grew 76 percent, compared with an 11 percent growth of the native born (Grieco, 2004). Currently, immigrants represent about one of every eight workers and one of every five low-wage workers (Capps, Fortuny, & Fix, 2007). As baby boomers retire, native-born workers will be replaced by younger immigrants, who are concentrated at both the lowest and the highest levels of education (Holzer & Lerman, 2007). To ensure that these new entrants into the workforce will not be relegated to the lowest rung of the employment ladder, education and training opportunities designed for this population must be found, in particular opportunities that are linked to career pathways.

Challenges Facing Adult English Language Learners in Health Care Pathways

Adult ELLs face several challenges to participating in health care career pathways. In addition to academic preparedness, English language proficiency and other personal challenges, significant challenges result from such structural barriers as the lack of coordination among various educational and training institutions or clear pathways for adult ELLs to follow as they move, for example, from an adult school or community-based literacy or ESL program to a community college ESL or career training program and from there to academic programs in preparation for jobs requiring Associate in Arts (A.A.) or Bachelor of Arts (B.A.) degrees.

Personal Challenges

Educational Background

Many adult ELLs who would be eligible for health care training have limited prior education. The differences in educational backgrounds between native-born and foreign-born workers are most striking at lower education levels. In 2007, 32 percent of the foreign born ages 25 or older had less than a high school education, compared to 12 percent of those born in the United States. On the upper end, the percentage of foreign-born adults with a bachelor's degree or higher is similar to the percentage of U.S.-born adults with college degrees, approximately 27 percent for both, with 12.5 percent holding a graduate degree (Migration Policy Institute, 2009). The number of foreign-born adults with limited education is growing. Among those who arrived in the country within the past 10 years, 50 percent have nine years or fewer of education, while 64 percent have less than a high school diploma (Martinez & Wang, n.d.), and those with the lowest education levels are likely to make up the majority of growth in the foreign-born population between 2000 and 2020 (Jones & Kelly, 2007).

The distribution of immigrants with high and low education levels varies by region. Analysis of the American Community Survey conducted by the Migration Policy Institute shows that:

There is a regional pattern to the educational attainment of LEP adults, with those who are less educated being more heavily concentrated in the Southwest, notably California, Texas, and Arizona...a regional pattern that is likely attributable to the fact that the Southwestern states tend to have relatively large shares of immigrants from Mexico and Central America with low educational attainment (Capps, Fix, McHugh, & Lin, 2009, p. 6).

More highly educated LEP adults (e.g., those with at least a high school education) are concentrated in the Northeast (New York, New Jersey, Massachusetts), Florida, Illinois and Washington state. Education levels also are correlated with English proficiency. Adults with higher education levels are more likely to report higher

English proficiency than those with lower levels, suggesting that both more basic skills instruction and more ESL instruction may need to be integrated into health care-related training for those who have not completed high school in their home country or in the United States.

English Language Proficiency

According to the 2000 census, 15 million (9.5 percent) of all working-age adults either did not speak English at all or spoke less than "very well" (U.S. Census Bureau, 2005). Unemployment rates are higher for limited English proficient immigrants than for those who speak English, and fluent English-speaking immigrants can earn nearly twice as much as non-English-speaking immigrants (Mora, 2003).

Education and English proficiency

Compounding the problem for workforce development is the fact that most of those with limited prior education are also limited in their English proficiency. Nationally, 8.34 million foreign-born individuals have only a high school diploma or less and poor English skills (Jones & Kelly, 2007, citing U.S. Census Bureau, 2005). This problem may be understated, however, given that the National Assessment of Adult Literacy (NAAL) found that 7 million non-native speakers of English could not answer simple test questions, and another 4 million could not be tested because they spoke a language other than Spanish and their English was not proficient enough to qualify them for testing (NAAL 2003, http://nces.ed.gov/naal/kf_demographics.asp).

The combination of limited education and limited English language proficiency among many of those who might enter health care career pathways has important implications for the kinds of career pathways that need to be developed. The high concentration of adults with limited education in their home country suggests the need to create career development models designed to fill educational gaps (in math and science, for example). Since most of those who did not complete high school in their home country are Spanish speakers, and since Spanish speakers tend to be concentrated in the West and Southwest, regional models that include bilingual vocational education deserve consideration. In many of these areas, classes

are conducted by bilingual instructors teaching Spanish-speaking students who are new to English, and many of these classes are de facto bilingual. A model that acknowledges the realities of language use by adults who share the same language and lays out strategic ways of using both English and Spanish may be more effective than informal efforts in which English acquisition is often delayed because of frequent ad hoc translation by the instructor and the students in the class. In contrast, areas where most immigrants have relatively high levels of education might explore options for accelerated learning that take advantage of the knowledge and experience of adults with professional degrees from their home country.

For many of these immigrants, extensive English language training, an introduction to the American health care system and institutions, and specialized training to pass required licensing examinations can enable them to practice as health care professionals, though perhaps initially in a different capacity (for example, physicians practicing as physician assistants or registered nurses practicing as licensed practical/vocational nurses [LPNs/LVNs]). Additional education and training through health care career programs may enable them to reach their prior professional position. However, lack of English language proficiency slows the transition for some of these workers.

Incumbent workers also face difficulties in finding appropriate training programs. Employers traditionally have focused their training efforts on employees with the highest education and income. This is true of business-government partnerships as well. There also may be unintended consequences for certain types of programs. If a training program focuses specifically on lower-educated, lower-wage employees, “it might stigmatize a training partnership as a program only for low-income people and undercut support for it among low-wage workers” (Duke, Martinson, & Strawn, 2006, p. 9). For low-level incumbent workers to participate in additional training, employers may have to offer incentives such as onsite training or release time. The hardest to serve (public assistance recipients or ex-offenders) also face challenges related to entry into and continued participation in education and training programs.

Medical Language Proficiency in the Native Language

Bilingual health care workers who can communicate with patients speaking a language other than English can serve as interpreters between these patients and monolingual English-speaking doctors and nurses. Many of these workers also bring important cross-cultural awareness to patient care, which can help other staff understand why patients may be reluctant to comply with directives or why they might replace Western medicine with traditional cures. Not all bilingual workers, however, are proficient in translating medical terms and specialized language, especially if these workers grew up in the United States and did not receive academic training in their native language or have the opportunity to learn the specialized language of health care and medicine. Courses or seminars may be needed to build the native language capacity of bilingual staff—not just their English proficiency—to enable them to work effectively with patients.

Multiple Responsibilities

Adult ELLs may also confront life challenges affecting their ability to participate in health care training programs. Most need to work, sometimes two jobs, and have limited time to attend classes. Immigrants, like other adults, often have family responsibilities, including child care and elder care, and may lack transportation or the funds to participate in available programs. The length of time required for moving through English language and prerequisite basic skills courses before entering occupational training may be a major obstacle if students must reduce their work hours to attend training. The trauma associated with immigration, including loss of “country, family, professional identity, networks, and social standing,” can also be barriers (Fernandez-Pena & Day, 2006, p. 45).

Structural Challenges

Besides these educational and linguistic challenges, several structural challenges confront adult ELL. These include lack of access to: education and training programs, financial aid, articulation among program providers and appropriate programs.

Access to Education and Training Programs

Lack of knowledge about education or training programs is a primary barrier. When there are no clear partnership agreements among educational institutions—for example, among adult schools, community-based organizations and community colleges—an adult ELL who has taken ESL classes in a Department of Education–funded adult school may not know about training programs at a community college in another part of the city. Similarly, an adult learner with limited English skills who has stopped by a Department of Labor–funded One-Stop Center to get training is likely to be referred to an adult ESL program to improve language skills, though that person is seeking to enroll in a program which provides both language and job skills training.

Another challenge is lack of information about and understanding of the U.S. educational system, including the requirements for admission to certificate programs and two- and four-year colleges, such as admissions tests, specific levels of English language proficiency needed or prior education.

Access to Financial Aid

Lack of knowledge about or access to financial aid is also a barrier. A 2003 Harris Poll revealed that lower-income families and minorities have the least information about financial aid (<http://www.hispanicbusiness.com/news/newsbyid.asp?idx=9607&cat1=news>).

Immigrants coming from countries where higher education is available only to a select group of people may not understand that it is possible to combine work and college attendance in the United States. Students admitted to a health care career education program may also face systemic barriers: Financial aid often is not available for students who can only attend classes part time, and such support services as child care and other family services are seldom available (Jenkins, 2006).

Articulation Among Program Providers

The lack of articulation among programs within one institution (among ESL, GED preparation and training, for example) or among institutions (such CBOs, community colleges and employers) impedes educational advancement. For example, the minimum score or level necessary

for exiting an adult English language program may not be acceptable for admission to a certificate or credit program within the same community college, requiring an adult ELL to delay education or training while participating in more language training (Chisman & Crandall, 2007). The practice of placing ELLs who do not yet qualify for certificate programs into noncredit ESL or developmental education classes often short-circuits potential careers, as students can run out of resources and time. Similarly, adult basic education or developmental education courses can constitute an academic and occupational dead end if they are not articulated or integrated with occupational training.

Health Care Career Pathways for Adult English Language Learners

Despite the high demand for health care workers generally and the need for increasing diversity in the health care workforce, many limited English proficient (LEP) adults have difficulty entering and advancing in the health care workforce, for many of the reasons indicated above. Improved access is needed if they are to obtain health care employment, especially above the entry level. Career pathways can help to increase access for adult ELLs to enter and advance in health care careers.

Definition of Career Pathways

Career pathways are a series of connected education and training programs and support services enabling individuals to secure employment within a specific industry or occupational sector and to advance over time to successively higher positions through advanced education and employment in that sector. Each step on a career pathway prepares an individual for the next level of employment and education. Several metaphors have been used to describe career pathways: an interstate highway where individuals enter and exit at different points and advance according to their resources and desires; a ladder with steps leading from one level to another; or a pipeline (Bragg et al., 2007; Jenkins & Spence, 2006; Workforce Strategy Center, 2002, 2003).

Key features of pathways programs include access for all students, regardless of prior education or skill; multiple entry and exit points aligned with employment that meets both student and employer needs; flexibility and clear transitions. Drawing upon a range of funding and support, career pathway programs “attempt to integrate adult literacy, adult basic education (ABE), English language literacy (ELL), and pre-collegiate developmental education with postsecondary career and technical education (CTE) certificate and associate degree programs, and potentially with the baccalaureate degree” (Bragg et al., 2007, p. vii). These pathways may also include bridge programs, since the pathways especially seek to create routes for career and educational advancement for underrepresented groups (Jenkins & Spence, 2006; Workforce Strategy Center, 2002, 2003). Bridge programs help adults to obtain the necessary academic, English language, and technical skills to enter postsecondary education and make progress toward their career goals. For adult English language learners, these bridge programs usually link ESL courses with career training that leads to career certificates that can yield employment (and academic credit) as well as serve as part of a pathway to more education and career training (Estrada & Dubois, 2010).

States such as Arkansas, California, Kentucky, Massachusetts, Ohio and Oregon are developing or promoting career ladders and pathways (Duke et al., 2006). Through its Worksource Pathways, Oregon has designed pathways to transition students from secondary to postsecondary education; from precollege ABE/GED/ESL/DE (developmental education) programs to postsecondary education; from postsecondary education for skills upgrading and career changers; and from community college to the university system (Worksource Oregon, “What Are Career Pathways?” Retrieved from: <http://www.worksourceoregon.org>).

The Rationale for Health Care Career Pathways

Many adult ELLs face barriers to career advancement. These workers are a diverse group in terms of their English language proficiency, prior education and basic skills. A large percentage lack both English and basic skills, causing them to be unemployed, underemployed or employed in low-wage positions. While Andersson, Holzer, and Lane

(2005) found that some entry-level workers gain higher wages over time, only about one-fourth or fewer permanently advance beyond a low-wage occupation (cited by Duke et al., 2006). Prince and Jenkins (2005), in their longitudinal tracking study of low-skilled participants in Washington State Community and Technical College programs (the “tipping point” study), found that completing one year of college credit and earning a credential is associated with an earnings boost sufficient to earn a family-sustaining wage, while short-term training programs usually do not provide measurable gains. (The I-BEST program described later in this report provides a model for obtaining the college credit and credential.) Incremental educational steps are necessary for low-skill workers to advance in health care careers and pathways offering stackable certificates are a means toward that goal.

A smaller percentage of adults with limited English have baccalaureate or postbaccalaureate degrees, some in health care fields, but they also face challenges in becoming certified to practice their professions or work in a related area in the United States. Career pathways allow these workers to access education and jobs and advance over time to higher levels. (The Welcome Back programs discussed later in the report are a model being implemented in a growing number of cities and regions.)

Health care provides employment opportunities for individuals with varying levels of English proficiency, education and training, from those with little prior schooling to those with undergraduate, graduate or professional degrees. Two-fifths of the direct care workers—nursing assistants, home health aides, and personal and home care aides—in nursing homes have no more than a high school diploma or GED certificate; in some states, workers can enter the health care field with even less education (National Clearinghouse on the Direct Care Workforce, 2006). While many of these entry-level positions pay only a minimum wage and turnover is high, career pathways can make it possible for entry-level, adult ELLs to get jobs with higher wages by incrementally increasing their job responsibilities and educational attainment, though hospitals and educational institutions may need to provide support and incentives. (The Carreras en Salud program, discussed later in this report, is a model of one pathway from entry-level certified nursing assistant positions through LPNs and beyond.)

Some health care career pathways

A number of providers are involved in offering education and training for health care career pathways. They include community colleges, adult basic education programs, CBOs, employers and unions, usually in some kind of partnership. They offer a broad range of programs providing basic skills, ESL, academic education and career training leading to a range of health care careers. Although these providers organize curricula and course catalogues differently and use different terminology (for example, the term “allied health” is used more narrowly to refer to professions that support health care professionals such as doctors, nurses and dentists, and more broadly to include patient care), it may be helpful to think of health care careers as following three basic pathways:

1. Patient care
2. Allied health
3. Medical administration

Patient Care Pathways

Patient care pathways typically begin with entry at the Certified Nurse Assistant (CNA) level. States differ in their requirements for this position, but they usually require a high school diploma and some kind of training certificate. The next tier of occupations—LPNs/LVNs, emergency medical technicians (EMTs) and paramedics—requires an educational certificate and state certification. The Registered Nurse (RN) tier requires an associate’s degree, and a bachelor’s degree in nursing (BSN) tier follows. Above the bachelor’s degree tier are advanced degrees in nursing, health care administration or other patient care specialties.

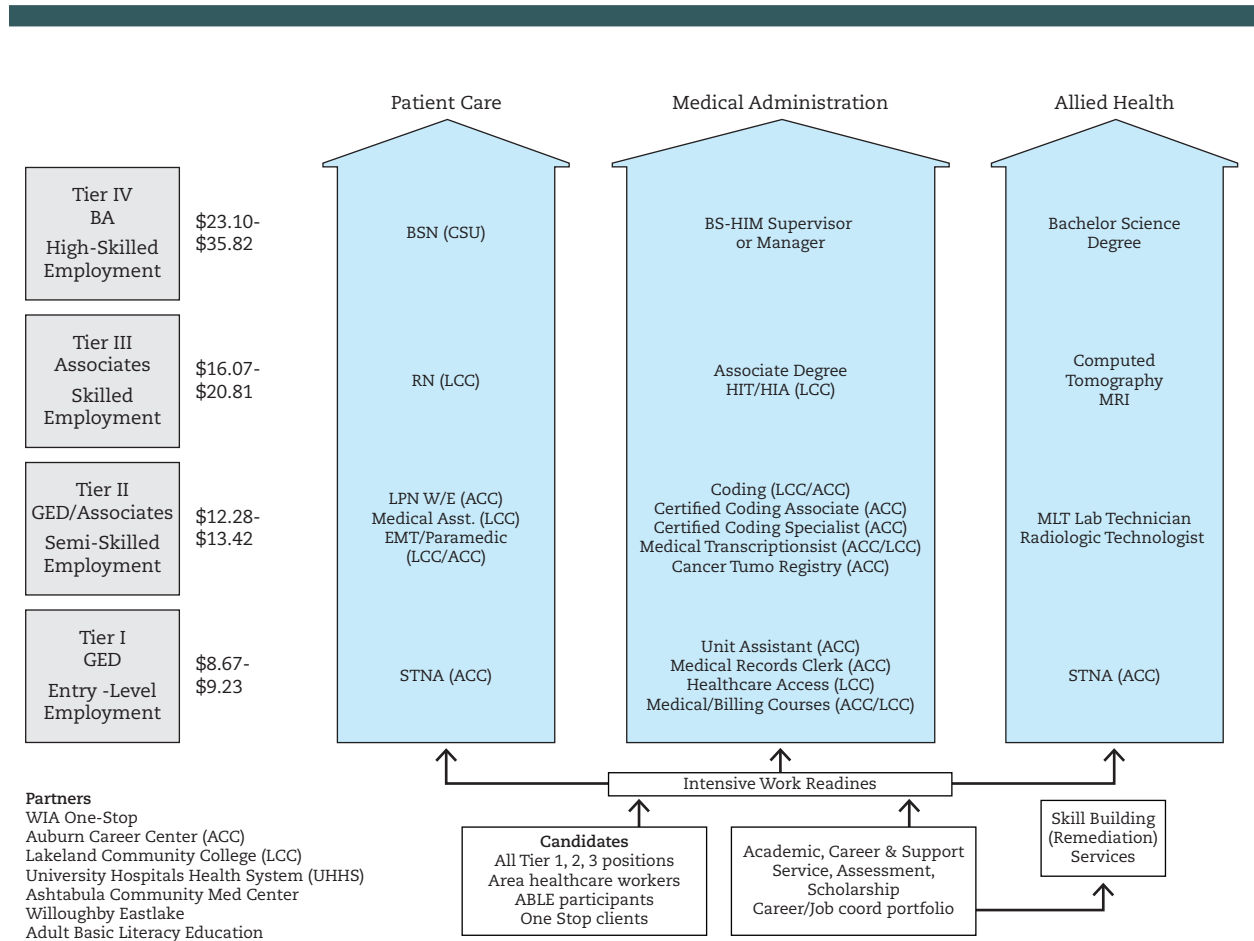
Allied Health Pathways

Allied health workers are technicians, technologists and therapists who support doctors and nurses in providing patient care. Since medical administration career pathways are usually discussed separately, “allied health” typically refers to laboratory, technician, technologist and therapist careers. These career pathways can begin with phlebotomists or electrocardiograph (EKG) technician programs, which introduce workers to health care

technologies. These occupations typically require a high school diploma or GED and some sort of short-term, often noncredit, certificate. The next tier typically requires a one-year certificate or a two-year associate’s degree for positions as respiratory therapy technicians, nuclear medicine technology specialists, radiation therapists or surgical technologists. Other jobs at the associate’s degree level may include laboratory, MRI or radiology technicians. At the bachelor’s degree level, students are prepared for laboratory technologist and laboratory research assistant positions. Several patient care pathways, however, provide opportunities for participants to obtain phlebotomy or EKG technician certificates in the course of their training to become LPNs/LVNs. (See Carreras en Salud and La Guardia Community College, discussed below.) While there are a number of programs providing allied health pathways for English-speaking adults, we found none that focuses specifically on adult ELLs, though some could be adapted to include ELLs.

Medical Administration Pathways

Clinical work in allied health, nursing or other patient care is not the only pathway open to adult ELLs. Those with strong English and literacy skills and those who have worked in hospital or clinic administration in other countries may want to consider medical administration pathways. The medical administration pathway typically begins at the medical billing clerk or office assistant level, requiring only a short-term, noncredit certificate. At the next tier, many colleges offer credit-bearing certificates in administrative medical assistance, health care information management or a related discipline. Graduates of these certificate programs are qualified to work as administrative medical or health assistants or billing and coding specialists. Beyond this, recipients of associate’s degrees in health care information management are prepared to work as medical coders, billers or registered health information technicians. These specialties may require state certification. For those with bachelor’s degrees in health care administrative fields, administrative and management positions are available. The I-BEST program in information technology (described later in this report) at North Seattle Community College is an example of a lower-level administrative pathway.



Three Pathways

The following schematic from Lakeland Community College, near Cleveland, Ohio, provides one overview of these three pathways, with the educational requirements, jobs and average pay rates, as well as the services provided by the range of educational and training institutions involved. The Patient Care pathway depicts careers in nursing and patient care; Medical Administration pathway, careers in medical administration; and the Allied Health pathway, careers as technicians or technologists. While these pathways are not specifically organized to provide access to adult ELLs, they illustrate the types of health care jobs available, the education and training required and the range of wages (<http://www.slideshare.net/brucelee55/lakeland-community-colleges-healthcare-career-pathway>).

Special Considerations in Developing Health Care Career Pathways for Adult ELLs

Several features of health care careers require special consideration in developing career pathways for adult ELLs. Negotiating these health care career pathways can be a challenge for anyone, but especially for those unfamiliar with U.S. education and training or those with relatively low levels of education in their home country. Most health care positions require some kind of certification and/or licensure; many also require continued education to retain those licenses. While there are U.S. licensing examinations for physicians, registered nurses and LPNs, policies and procedures differ among the states and even among community hospitals for certifying or licensing health care workers, especially at the higher levels. Even for entry-level positions, such as CNAs, the requirements vary substantially across the United States. In some states, CNAs do not need a high school diploma or GED. In others, they need only that

level of education. In still others, these CNA students need to complete clinical preservice training, usually provided by a hospital, home health care facility, or another health care employer. The Health Career Advancement Program (HCAP), discussed later in this report, with its focus on helping to increase the supply of registered nurses from among the LPNs/LVNs employed in partner hospitals, had hoped to be a national education program, but the different state and nursing school requirements have made that impossible (Miller & Knapp, 2005).

Besides specific knowledge and skills related to health care, most positions also require “soft skills,” such as teamwork, good communication skills, time and stress management, and conflict resolution (Dillon & Young, 2003). Cross-cultural competence also is expected where health care workers deal with diverse populations. ESL classes, occupational training, work experiences and internships offer ways to acquire these less tangible, but very important, skills. To help students acquire and practice these skills before they enter the health care field, the Texas industry-specific ESL curriculum, discussed in more detail below, includes a set of scenario-based modules that ask students to engage with and respond to critical incidents that might occur in health care situations. These discussions allow teachers to gain insights into what students believe and help them make connections between students’ ideas and the expectations of the U.S. workplace.

Licensing requirements often present barriers for adult ELLs at the end of their academic training. Acquiring a license may involve extensive and costly training and test preparation, including preparation for an English proficiency exam. If adult ELLs are to achieve their goals and if the health care system is to take advantage of a ready pool of adult immigrants interested in health care careers, measures will need to be taken and support systems put into place, particularly for those who are academically unprepared or lack previous training or experience in the field. Expanding programs for internationally trained health care workers, supporting their efforts to retrain and helping them to navigate the system for (re)accreditation can greatly facilitate their entry into the U.S. system. In addition to programs for newcomers to the United States, initiatives for incumbent workers need to be provided.

Orienting Adult ELLs to Health Care Careers

Adult ELLs often are not aware of the opportunities that careers in health care can present. Even if they are aware of these opportunities, they may not believe they can qualify for them or may not know how to upgrade their skills and meet requirements or prepare for admissions tests. Several institutions are trying to remedy this situation by providing orientation programs designed to create awareness and build skills that will increase employability. Orientation is important to ensure that adult ELLs have a clear idea of the challenges and requirements (for example, medical contexts, medical procedures and patient conditions) before they enroll in a health-related career program. Career guidance and counseling are also important to ensure that individuals have a clear sense of their career options and how to achieve them. A career or educational “coach” can help provide that guidance.

Combining orientation to occupations with vocabulary study and English language development seems to be a promising direction for adult ESL programs. Given the amount of time needed for an adult to develop English language proficiency, any approach that integrates ESL with career training and workforce preparation provides an opportunity for language learning in a relevant and motivating context (Grantmakers Concerned With Immigrants and Refugees, 2003).

Several innovations have succeeded in enabling adult ELLs to develop English language proficiency while providing information and teaching the skills needed for health care careers. Most efforts to link English language development with information about careers and understanding of key concepts in health care are targeted toward those with high-intermediate or advanced levels of English proficiency. The Welcome Back program in San Francisco, for example, has developed a high-intermediate ESL curriculum, The Health Train, to prepare adult ELLs for allied health jobs.

A notable exception is the industry-specific health care curriculum developed by Texas Learns. This curriculum targets the high-beginning or low-intermediate levels and is intended to be integrated into adult ESL services not only at community colleges, but also in local educational agencies and CBOs. The health care curriculum seeks

to teach English language, literacy and vocabulary skills within the context of opportunities available in the field. It invites students to explore options, learn about the day-to-day tasks of health care workers and develop the vocabulary specific to patient care. While the curriculum has not been thoroughly field-tested, the approach of offering content-based instruction has been shown to be effective in many contexts (Kaufman & Crandall, 2005; Crandall & Kaufman, 2002; Sticht, 1997) and, when focused on health care in ESL classes that are part of adult basic education, shows a great deal of promise. Given how long it takes for adult ELLs to develop the language and literacy skills necessary to succeed in training classes taught solely in English, introducing key concepts in health care early helps to establish a foundation on which teachers in career skills programs can build.

The Texas Industry-Specific ESL Curriculum

Responding to the high interest in work-related ESL among adult ELLs and the demand for trained workers, the Texas state legislature has funded the development of a set of industry-specific curricula for health care, manufacturing, and sales and service. The health care curriculum includes an interactive DVD allowing both students and teachers to explore jobs in the medical industry. Job clusters that can be explored include primary health care and jobs in adjunct services, such as insurance, information management and patient care in vision and dental services.

In using the DVD or its online version, ESL students can click on a particular occupational area (such as laboratory work) or a specific job and see each job linked to the Department of Labor database, O*Net, at <http://www.onetonline.org>. For example, selecting “surgical technologist” under Patient Care brings up a detailed description of “surg-tech” work, including tasks commonly performed and necessary knowledge, skills and abilities. O*Net also lists the median wage for each job and provides data on projected growth (growth is faster than average for surg-tech). Through the site, students can also link directly to related occupations, such as radiologist or respiratory therapist.

The interactive tool can be used in teacher-led classrooms or by advisers. It can be accessed in a computer lab where students work more or less independently, although less proficient students might need help in understanding

how to navigate each section and interpret O*Net results. Meant for use in adult ESL or bridge classes, the DVD also serves to increase the knowledge base of ESL teachers, who may know very little about career ladders in health care or the requirements for specific jobs.

The “Careers in the Medical Industry” DVD is supplemented by an interest inventory that invites students to explore their goals and values. Students are asked to think about the kind of work and work environment that is important to them (intense vs. stress-free, for example) to help them decide what direction they might want to take.

The most innovative feature of this inventory is the inclusion of videos in which adult immigrant students discuss their experiences learning English and trying to transition to mainstream college programs. The interviews, as well as the interest inventory, can be heard in English or Spanish to allow Spanish-speaking adults in ESL classes to understand the information.

Another orientation approach, used by Elizabethtown Community and Technical College in Kentucky, is career counseling and a course in Spanish for allied health workers, offered to entry-level and nonclinical hospital workers at the workplace. The short-term course introduces employees to the college’s health care training programs and allows them to “experience immediate success, see how learning relates to their jobs, and that they have the potential for continued learning” (Aspen Institute, 2007, p. 11).

Some Promising Health Care Career Pathways Programs for Adult English Language Learners

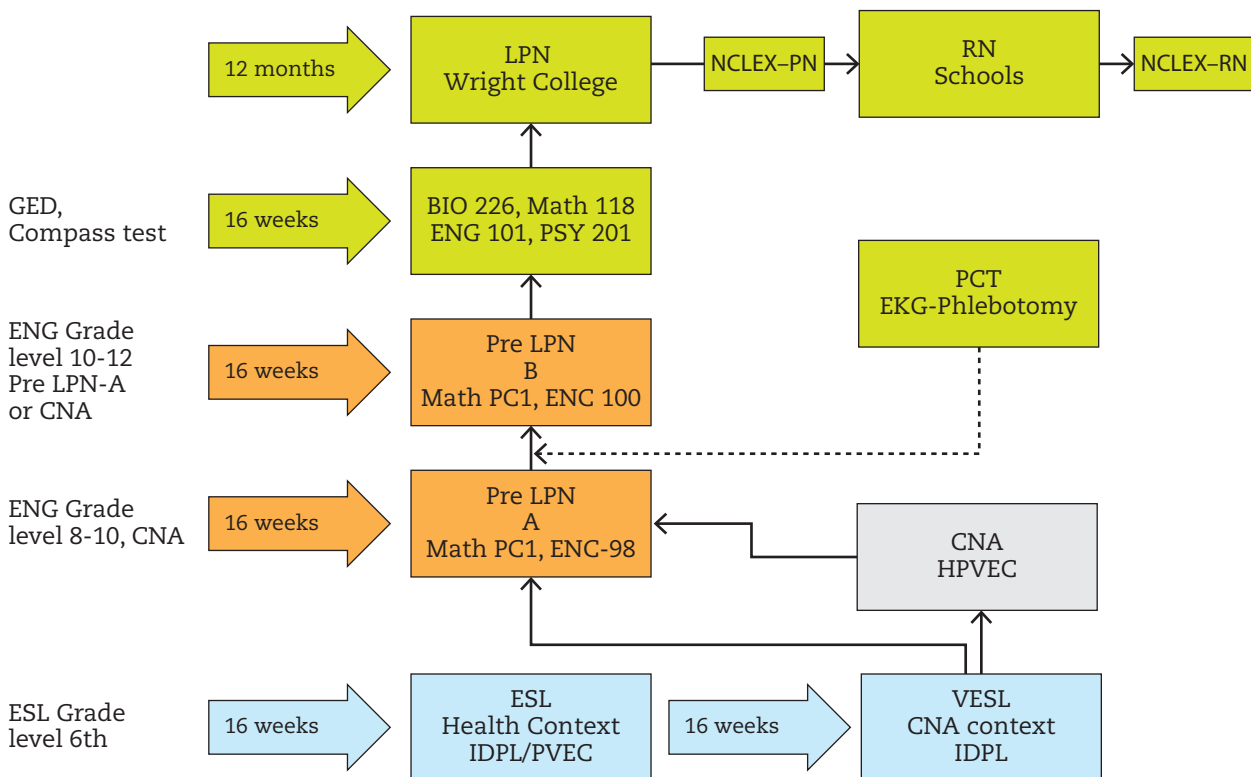
The following are some descriptions of prominent health care career pathways. They are drawn principally from patient care, though some also provide training for allied health and medical administration. Few programs exist to prepare adult ELLs for medical administration pathways, likely because of the advanced English language skills needed for data entry, record keeping and administration. The programs described here include the Carreras en Salud program patient care pathway offered by a consortium in collaboration with the Instituto del

Progreso Latino (a Chicago CBO); the Health Career Advancement Program (HCAP) for incumbent worker training, offered by a partnership among the Service Employees International Union (SEIU), the Swedish Medical Center and South Seattle Community College; the I-BEST program at Renton Technical College in Washington state and adaptations of that model by South Texas and LaGuardia community colleges; the Information Technology Healthcare Program at North Seattle Community College, which prepares adult ELLs for lower-level medical administrative positions; and the Welcome Back programs for internationally trained medical personnel offered by City College of San Francisco, San Francisco State University and other partners.

Patient Care and Allied Health Pathways

The largest number of health care education and training programs offered for adult ELLs is in patient care, especially entry-level programs for nursing assistants. While these jobs offer the potential for moving into higher positions with additional education and training, there is little research documenting the extent to which these programs provide access to “good jobs” in health care and what type of interventions show the greatest promise of success. Several programs, however, have built explicit career pathways, helping individuals to move from the entry-level CNA position to becoming a licensed vocational/practical nurse. One example of a patient care pathway, which also provides some access to allied health positions, is Carreras en Salud, described below.

Career Pathways in Carreras en Salud



Carreras en Salud

An example of a clearly articulated patient care career pathway with multiple entry and exit points for adult ELLs is provided by **Carreras en Salud**, a Chicago bilingual health care partnership of Instituto del Progreso Latino and Association House of Chicago (both CBOs), Humboldt Park Vocational Education Center of Wilbur Wright College (one of the City Colleges of Chicago), the National Council of La Raza (NCLR) and the Metropolitan Chicago Healthcare Council, which consists of 300 hospitals and nursing homes.

The Instituto del Progreso Latino, a CBO that has been working in Chicago with Hispanics since 1977, is the lead organization, building upon its experiences with the Hispanic community and a manufacturing program it previously developed. It administers the three lower levels of the program and is responsible for job placement and support, including counseling. Humboldt Park Vocational Education Center administers the pre-LPN levels, transitioning students into the LPN level at Wilbur Wright College. Association House provides case management during the pre-LPN classes. NCLR assisted in the development of the program by conducting a survey of employment opportunities in the Chicago area, identifying health care as one that offered Hispanics employment possibilities. The Metropolitan Chicago Healthcare Council has provided advice on the curriculum and currently provides training sites and potential instructors and helps to place graduates. It also provides feedback to the program about graduates it has helped to place.

Having determined that Hispanics are 25 percent of the Chicago population but less than 1 percent of the LPNs or RNs in the city, the partnership has developed an integrated, articulated series of courses to prepare bilingual health care professionals, moving Hispanics with limited English and literacy, as well as other personal barriers, from dead-end jobs to positions as CNAs and LPNs, with plans for training RNs in the future. Although patient care is the primary pathway, participants in the pre-LPN training also are prepared for phlebotomy, EKG and other allied health certificates. The program began to provide internationally trained health care professionals, many of whom were working in entry-level positions, with opportunities to become a CNA or LPN.

Over time, it has evolved to include others employed in low-wage positions.

As the following diagram illustrates, the program consists of five levels, beginning with a 6-week ESL in Health Context course, then moving into a 16-week CNA VESL (vocational ESL) course leading to a CNA job. From there, with additional training (and often experience), students can move into pre-LPN, LPN and, eventually, RN training. Throughout the program, career bridges help participants develop the basic skills needed at each stage of the career ladder. College preparatory courses also are provided to strengthen content knowledge where needed. Bilingual ESL teachers provide first-language support. Participants in the program also acquire such skills as computer skills, leadership and team building, and time management.

In spring 2008, 770 participants were enrolled in some level of the program, with 49 completing the CNA training and 83 completing the LPN training. Of these, about 90 percent obtained licenses and jobs paying \$9–\$12 per hour for CNAs and \$24–\$27 per hour for LPNs. As of that date, more than 100 LPNs have graduated from the program, including some foreign-trained health care workers who were working in low-wage positions (Eric Lujo, personal comm., August 2008).

The program offers support services for participants, including financial aid, academic and career counseling, case management, assistance with transportation, child care services, addiction counseling and support for students with disabilities. Among the strengths identified by Bragg et al. (2007) in their review of career pathways programs for low-skill adults were the following:

- Career paths selected to meet labor market needs
- Strong case management and support services
- Partnerships based on respective strengths
- Accommodating schedules of classes (mostly in the evening)
- “Stop out” points along the way—with certificates
- The use of technology to individualize instruction and accelerate programs

- Innovative instruction, including team teaching and projects

Carreras en Salud received the 2008 U.S. Department of Labor Recognition of Excellence Award for its success in building on the talents of “special populations in the workforce.” More information about Carreras en Salud can be found in the new replicability manual the program produced for the Shifting Gears Initiative (Retrieved from http://iccb.org/pdf/shifting%20gears/Instituto2010_HowToBuildBridgePrograms.pdf).

Health Career Advancement Program (HCAP)

With critical shortages of registered nurses and the prospect of higher income for participants, HCAP, a labor-management partnership of hospital administrators and the Service Employees International Union (SEIU), has focused its efforts nationally on helping to reduce the current and future nursing shortage (Miller & Knapp, 2005). One primary goal of the partnership is to move incumbent LPNs/LVNs and other health care providers along a career pathway that leads to an associate’s degree in nursing and supplies more RNs to the participating hospitals and health care centers. The curriculum for the program is jointly developed by the employing health care institutions and the community colleges, designed to maximize credits for employees’ education and experience and reduce time through distance learning and accelerated courses. The goal for program completion is 18 months to two years, part time. Clinical experiences in the program are designed to prevent workers from having to relearn what they already know. Courses also use online learning and independent study to reduce the time required to complete the program.

One example of an HCAP is the partnership between South Seattle Community College and Swedish Medical Center of Seattle. To facilitate attendance and build on employees’ LPN experiences, the program offers working LPNs classes and clinical experiences at the medical center. It also provides about half the instruction online and organizes the 10-month program into seven-week modules, giving equal credit for onsite and online coursework. Each participant is also assigned a mentor (who is not the participant’s supervisor). The program allows adult ELLs,

as well as English-speaking adults who have difficulty in obtaining the required scores on entry-level tests, to participate in an English literacy course focused on health care language.

Washington State’s I-BEST Program

Washington has taken on the challenge of dealing with the disconnect among basic skills/ESL education, career and technical training, and support for incumbent workers. The state has proposed a continuum of services that seeks to close the gaps among different parts of the system. The model includes traditional basic skills and ESL at the lower levels of the continuum and then moves toward work-focused contextualized basic skills and integrated instruction (combining basic skills/ESL and job skills training). At the high end of the continuum, the model includes incumbent worker training (customized training paid for by employers) and contextualized workplace basic skills and literacy that involve various forms of employer support supplementing public funds.

The I-BEST Program

The goal of the Integrated Basic Education and Skills Training (I-BEST) initiative developed by the Washington State Board for Community and Technical Colleges is to connect adults with low skills and/or limited English to locally important jobs requiring some post-secondary education (Bloomer, 2008; Prince & Jenkins, 2005).

Noting that “relatively few of the more than 2.5 million adults who enroll annually in basic skills programs advance successfully to college-level coursework,” thereby limiting “the ability of such individuals to secure jobs that pay family-supporting wages and that offer opportunity for career advancement” (Jenkins, Zeidenberg, & Kienzl, 2009, Executive Summary), the program sought to accelerate education and to integrate basic skills, ESL and occupational skills. In I-BEST programs for ELLs, ESL and college-level career-technical faculty integrate ESL/basic skills with technical skills by jointly designing and co-teaching vocational skills courses in which ESL and basic skills instruction are contextualized around the specific career area, similar to content-based ESL instruction in K–12 education (Kaufman & Crandall, 2005; Crandall &

Kaufman, 2002; Sticht, 1997). For example, in health care programs, medical vocabulary is integrated into the ESL course, and the ESL instructor is available during at least part of the health care career course for language teaching and assistance.

The premise of this approach is that adults will be more motivated to continue if they see the relevance of what they are learning to their career goals. Additional motivation comes from the credit students receive for the occupational portion of the program (but not basic skills/ESL). These credits “apply to certificate or degree programs that are part of a ‘career pathway’; that is, programs that clearly connect to further education and career-path employment in a given field” (Jenkins et al., 2009, p. 6).

In addition to paired instruction focused on career development, I-BEST programs provide support services through an I-BEST coordinator, or “coach,” who helps reduce barriers to success, such as “housing affordability, lack of reliable transportation, and childcare issues” (Council of Economic Advisers [CEA], 2009, p. 18).

As a result, I-BEST students are more likely than their counterparts outside these programs to continue into credit-bearing coursework, earn more college and vocational credits and career certificates, and make more point gains on basic skills tests (Jenkins et al., 2009). A previous study found that adult ELLs who were “I-BEST students were five times more likely to earn college credits on average and were 15 times more likely to complete workforce training than were traditional ESL students (at similar levels of literacy) during the same amount of time” (Duke & Ganzglass, 2007, p. 5).

All I-BEST programs must be part of a one-year certificate or occupational program known to result in placements in higher-wage jobs (above \$12–\$14 per hour, at one point). The goal of the program is for students to reach the “tipping point”—one year of college credit and an occupational certificate—and, in the process, acquire jobs with significantly higher wages than are possible with just a short-term training certificate.

The program’s success has led the state to reimburse colleges at 1.75 full-time equivalency (FTE) rates, rather than the usual 1 FTE, to pay for the additional costs of two instructors, new curricula, and administrative and support services. Additional funding has also enabled

the state to expand from pilot programs at five colleges in 2004–2005 to programs in all 34 community and technical colleges in the Washington state system (Jenkins et al., 2009). Today, I-BEST programs are offered in a variety of fields, with health care a prominent sector (Bloomer, 2008). Of the 809 programs in existence at the time of the evaluation conducted by Jenkins and others (2009), students were enrolled in the following health care programs:

- 74 in Nursing/Nursing Assistant/Aide and Patient Care/Technician
- 71 in Medical/Clinical Assistant
- 42 in Home Health Aide/Home Attendant
- 20 in Nursing/Registered Nursing (RN, ASN, BSN, MSN)
- 18 in Medical Office Management/Administration
- 17 in Medical Reception/Receptionist
- 5 in Medical Administrative/Executive Assistant and Medical Secretary

Although not all programs are accessible to adult ELLs, it would be possible to create that access through sufficient paired ESL and career courses and other necessary support services.

Allied Health Pathway at Renton Technical College: An I-BEST program

One example of an I-BEST health care career pathway program is that at Renton Technical College, in the Seattle area. Renton offers an intermediate-level ESL class in which English is taught in the context of health care careers. The class is a bridge course toward a pathway that leads students from CNA to LVN to RN, with various options for technical training, such as “surg-tech” certification. The allied health pathway at Renton includes I-BEST classes in which ESL instructors teach side by side with nursing faculty, explaining key concepts, highlighting vocabulary and making difficult language structures accessible. Support for ESL and other under-prepared students includes intensive work in the computer lab, where students use specially designed lessons that reinforce vocabulary and key concepts and reteach

information that might be difficult to grasp. Students are given personal digital assistants (PDAs) so that lessons can be downloaded and studied at home and on the road.

The college reports noteworthy results for students in this program. Grade point averages have increased and retention and completion rates are up. Several students have completed the RN portion of the program, and out of 34 students in cohorts 1 and 2, only four have dropped out (two for personal reasons and two for academic reasons).

The health care career pathway laid out by Renton Technical College does not end at graduation. The college works actively with local hospitals to help them upgrade the skills of their workers, so workers can move from lower-level positions (employees who set up trays, for example) into higher-level positions (as CNAs or LVNs). The college has made a commitment to the health care career pathway, and the program receives full support from both the dean of nursing and the dean of basic skills. The career pathway to nursing is also supported by foundations, incumbent worker training programs in the hospitals and, in part, by the local hospital association.

Challenges still remain. The college was hoping that more students might sign up for the ESL transition class, but, as experiences in other colleges have shown, vocationally oriented students are often reluctant to take noncredit classes. They are eager to take “real” for-credit classes that move them closer to their job goals (Heather Stephen-Selby, Dean, Allied Health, personal comm., July 2008).

Administrative Pathway at North Seattle Community College: I-BEST

The I-BEST model has also been used for a lower-level administrative pathway, the IT (Information Technology) for Healthcare Program at North Seattle Community College. The one-year certificate program prepares students for entry-level jobs requiring IT skills, such as surgery schedulers, medical records technicians or patient coordinators. The program follows the I-BEST model, pairing a VESL instructor with core health course instructors. Following the certificate program, participants can enroll in the associate of applied science transfer degree

program in IT for health care, leading to positions as help/service desk analysts, data center analysts or technical or clinical support staff.

While the I-BEST model shows a great deal of promise, the approach is not easily implemented in other states where the legislature may not support such initiatives. In states where adult education and vocational training are delivered through different systems (through CBOs or local education agencies, for example), the challenges are exponentially greater. Current policies make it difficult to combine Title I Employment and Training funds administered by the Department of Labor and WIA Title II funds from the Office of Vocational and Adult Education of the Department of Education.

However, certain key aspects of the effort are transferable to other states:

- Needs assessment with employers to identify demand occupations where basic skills and ELL students can get good jobs after two years of vocational and technical training
- Incentives to encourage local programs to participate
- Training for teachers and faculty members on how to support and challenge underprepared students, with early adopters of the model leading the way through peer coaching
- Advocacy with legislators to gain funding for these efforts
- Ongoing rigorous data collection to demonstrate how the state cannot afford to continue business as usual
- Relationships with foundations to gain their support for elements of a program that fall within their mission

States other than Washington are recognizing that health care career training programs may cost more than traditional academic programs or other career training. For example, Ohio distributes funding on a per-student basis to community colleges, giving consideration to the program area in which the student is enrolled. Colleges

receive between \$1,048 and \$4,276 per FTE student in general education classes, but for students in nursing and engineering, the FTE allocation is \$7,101.

Adapting I-BEST: LaGuardia and South Texas Community Colleges

Several community colleges have begun to adapt ideas from the I-BEST program to their local contexts. These programs recognize the importance of integrating language and literacy skills with career and technical skills training related to health care, but they find the cost for two instructors for team teaching a barrier to implementation. Two colleges currently designing integrated models for adult ELLs are South Texas Community College in McAllen, Texas, working in collaboration with the local Service Center and VIDA (a CBO), and LaGuardia Community College in New York City.

The South Texas program is planning to combine workforce development funds with ABE/ESL funds, thus overcoming the traditional funding silos, while LaGuardia supports its program with Office of Vocational and Adult Education and Carl Perkins vocational funds. Both programs reflect the call for closer collaboration between funding agencies and federal departments put forth both by the Government Accountability Office in its 2009 report on “English Language Learning” (U.S. Government Accountability Office [GAO], 2009) and policy groups such as the Center for Law and Social Policy and the National Commission on Adult Literacy (see Strawn, 2007). Both programs specifically seek to teach nontraditional pre-GED students (some of whom may have completed high school in their home country). While South Texas Community College offers a cross-agency collaboration, LaGuardia Community College houses its health care program in the college.

LaGuardia’s medical office clinical technician training program for ELLs has adopted ideas from the I-BEST programs, with the exception of team teaching, which proved too expensive. This program provides an articulated pathway leading from phlebotomist and EKG technician to medical office clinical technician.

LaGuardia Community College: Medical Office Clinical Technician Training for ELLs

The LaGuardia Community College medical office clinical technician training for ELLs contains several crucial elements:

- The program is free to eligible ELLs, offered in the evenings and on weekends so that working adults can participate, and short term (nine months of training plus three months of internship).
- The technical instructor and the ESL instructor jointly plan lessons to ensure that the ESL class provides the language support necessary to succeed in the occupation. The two instructors do not team teach, but they work closely together and observe each other’s classes. All instructors are full time and carefully selected.
- Classes are offered one course at a time, starting with medical terminology, moving to phlebotomy and ending with electrocardiography. As students complete each course, they are certified and learn the medical terminology, coding and billing skills to become a medical office clinical technician.
- A counselor is dedicated to the program and attends meetings to gain a sense of students’ academic challenges. The counselor also helps students deal with difficulties in their lives through ongoing conversations that take a proactive/preventive approach to helping students to persist and succeed, rather than a crisis-management approach. The counselor works closely with social services in the city to provide help for both families and individuals.
- Ongoing language and cultural support is provided to students after they finish coursework and start a three-month internship. Students have the opportunity to discuss communication challenges and other work-related problems and jointly brainstorm solutions.
- The program has a major focus not only on helping students develop medical vocabulary, but also on increasing academic reading skills. It accepts

students with English reading skills at the fifth-grade level and above and is developing a bridge program designed to improve the reading skills of students who fall below this level.

- Time in a computer lab supports the learning of content and academic language. Students have access to lecture notes on the Web, audio CDs focused on pronunciation of medical terms and videos of the body systems that include task-based questions focused on problem solving.
- The program offers intensive professional development for instructors focused on teaching nontraditional students, helping content teachers move away from a “chalk and talk” model of teaching. It has also set up peer-to-peer learning between LaGuardia and the I-BEST program at Tacoma Community College.

As the program is still in its first year, it is too early to evaluate outcomes or identify the elements most critical to success. The director and staff wanted to offer New York subway passes to make it easier for students to participate, and they feel strongly that offering stipends to students would make such programs accessible to a much wider range of adult ELLs, including those whose family and work obligations make it difficult to participate, but that has not yet been possible (S. Kurien and B. Godley, personal comm., September 2009).

Welcome Back Centers for Internationally Trained Health Professionals

Many health care positions in the United States could be filled with foreign-born nurses, physicians or pharmacists who have been trained internationally, if these individuals had an opportunity to meet U.S. licensing requirements. Besides opportunities to improve their English to meet expectations for professional discourse, patient communication and collaboration with staff and other professionals, these health professionals need assistance with evaluating their credentials and learning what additional education and training they need to meet U.S. and state licensure requirements.

In recent years, both the United States and Canada have created pathways for internationally trained health professionals to facilitate their (re)accreditation and help them consider new pathways requiring less training and lower fees. In response to the needs of the health care system for trained, bilingual professionals and the need for support and services facilitating reaccreditation for foreign-born adults, several U.S. cities have established centers designed to help health care professionals return to their field, either in the same or a related position. These Welcome Back Centers have been established in many parts of the country, including San Francisco, Los Angeles, San Diego, Boston, Providence (Rhode Island), suburban Maryland, Puget Sound (Washington), New York and Texas.

Welcome Back Centers

The goal of Welcome Back Centers is to help health care professionals navigate the complex education and licensure requirements to transfer their skills, to explore career goals and to develop a career pathway plan based on their background and experiences. The centers provide orientation, educational counseling and support. They help participants obtain and evaluate credentials, identify needed education (including medical ESL) and network with health care employers through case management, educational programs and referrals. They also help participants consider other viable career options. Services are free and may be offered in other languages or with the help of interpreters. Interpreters are provided, if possible, for other languages.

Staff at the San Francisco Welcome Back Center, a partnership of City College of San Francisco and San Francisco State University through Community Health Works, learned early on that California had a highly skilled population of foreign-trained health professionals. Half were physicians, about 25 percent were nurses, about 12 percent were dentists and the remainder were speech therapists, physical therapists, psychologists, social workers, midwives and pharmacists. These professionals came from such countries as Mexico, China, El Salvador, Philippines, Peru, Russia, Colombia, Nicaragua and Ukraine. Some were recent immigrants, but others had resided in the United States for 10 years or longer. Of these health professionals, however, 69 percent were not working in health care, and those who were working in

health care were generally underemployed—for example, physicians who were working as nurse aides or hospital orderlies (<http://welcomebackinitiative.org>).

The San Francisco Welcome Back Center was established to help these foreign-trained health professionals find more appropriate employment and to meet the need for trained (bilingual) health professionals. It has served more than 1,700 foreign-educated health professionals, of whom only one-third were previously working in the health sector. The center provides courses to address two of the major barriers to practicing identified by these foreign-trained health professionals: familiarity with the U.S. health care system and English language skills. To offset the frustration felt by professionals in need of substantial English language instruction, the center developed an integrated, accelerated ESL and health program combining classroom instruction and Web-based homework. The program has produced impressive results in participants' oral and written English proficiency (Fernandez-Pena & Day, 2006). The center's offerings include orientation, language for health careers, review courses and courses to prepare individuals for licensure, such as the following:

- Introduction to the U.S. Healthcare System
- English for Health Professionals
- Health Professions: Communications and Careers (an intensive three-semester ESL course designed specifically for internationally trained health professionals)
- Refresher courses for LVNs and RNs
- Review courses for the NCLEX-RN (National Council Licensure for Examination for Registered Nurses) First Time Test Takers or Repeat Test Takers

The program also provides career counseling, identifying potential career paths and helping participants to develop a personal career plan that builds on their education and experience.

Another Welcome Back Center program, at Grossmont College, El Cajon, Calif., prepares physicians to become RNs. Most participants pass the NCLEX-RN on the first try, and most find jobs in area hospitals and clinics. Others

go into nurse practitioner training programs (Domrose, 2008). The Boston Welcome Back Center, a consortium of community colleges, the University of Massachusetts–Boston and the Massachusetts Board of Higher Education, also focuses on RNs.

As of May 2008, the California Welcome Back programs had served 7,623 individuals from more than 60 countries, with the largest percentages from Latin America or Asia. As of that same date, the Boston Welcome Back Center, which focuses on internationally trained nurses, had served nearly 500 health professionals from more than 40 countries, with the largest percentage (21 percent) from Haiti (Welcome Back initiative information PowerPoint presentation, 2008, no longer available).

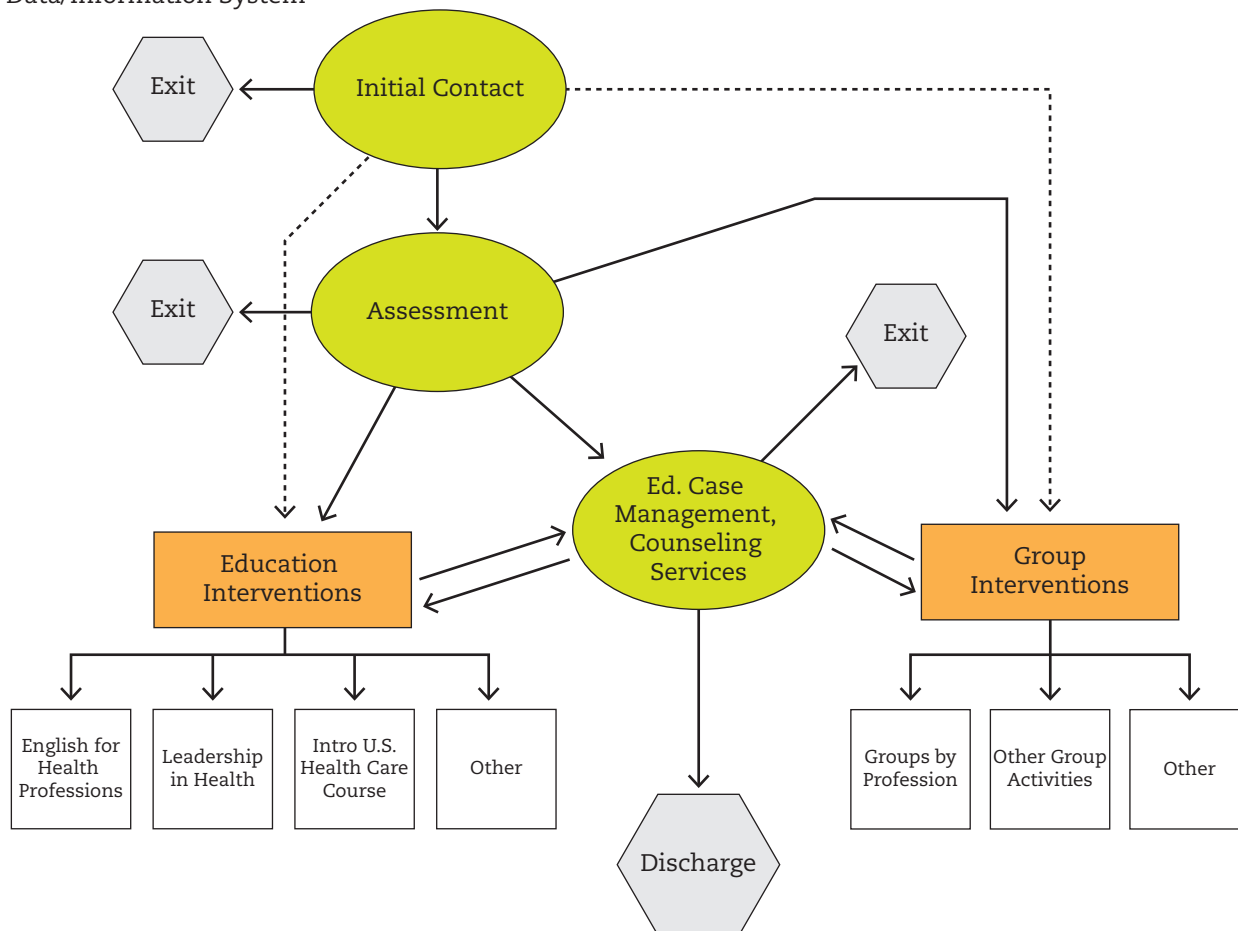
Rhode Island provides case management and supportive group counseling focused on transition. The Providence-based Welcome Back Center links to community services and adult ESL classes and offers pathways into the medical profession for immigrants and refugees who may be new to the United States and relatively new to English. Combining resources from a wide range of funders, including foundations, hospital consortia and a Hispanic association, as well as the Rhode Island Departments of State and Human Services, allows this center to provide support services and pathways to medical careers and an English Language Institute for Immigrant Professionals (<http://www.dorcasplace.org/programs/riwelcomeback.html>).

The following schematic illustrates the service of a Welcome Back Center (from <http://www.welcomebackinitiative.org/wb/>).

While the comprehensive services offered by Welcome Back Centers are expensive, it would be possible for a partnership of educational institutions and health care employers to provide some of these services, such as offering an integrated ESL and medical terminology course, providing guidance related to evaluation of credentials and identification of licensure requirements, and helping to link individuals with potential employers. Some colleges, such as Renton in Washington and LaGuardia in New York City, have started their own gateway centers, largely designed to provide information on reaccreditation, assist in researching licensing requirements and provide advice on what courses to take.

San Francisco Welcome Back Flow Chart System

Data/Information System



Promising Directions in Planning for Health Care Career Pathways for Adult English Language Learners

The previous discussion suggests some important directions for planning future health care career pathways for adult ELLs. This section, discusses some of these directions and practices drawn from these program profiles, augmented by information about others that can be adapted to diverse local contexts and needs.

Comprehensive Orientation

Because of the complexity of health care career pathways and the possibility that adult ELLs may understand neither the range of possible careers nor their own potential for entering these careers, one of the most important features of a health care career pathway is a comprehensive orientation program, some of which is available in other languages. This information can be provided in several ways, but at some point it should be integrated with ESL instruction and/or other basic skills, focusing on health care careers, as well as basic medical terminology, contextualizing the English and basic skills instruction and making it relevant. This will minimize the sense among adult ELLs that English and basic skills courses take so long that they will never progress to career training or

academic credit courses (Grantmakers Concerned With Immigrants and Refugees, 2003).

Many efforts to link English language development with information about careers and key concepts in health care are targeted toward those with high-intermediate or advanced levels of English proficiency. The Texas Learns orientation program demonstrates that using both Spanish and English allows individuals at lower levels to participate. Another approach, used by Cabrillo College in Santa Cruz, California, is to offer a VESL course focused on the world of work, which serves as a gateway to three career modules, one of which is focused on medical careers. The medical careers course is also taught with a focus on the English needed for those careers (Mazzeo, Rab, & Alssid, 2003).

Accelerated Progress

In general, adult ELLs have multiple responsibilities, making it difficult for them to set aside large blocks of time to pursue education or career training. This is especially true for low-wage immigrants, who may be working more than one minimum-wage job and juggling many responsibilities. Programs that can decrease the amount of time spent in “just” English, basic skills or developmental education are critical to encouraging adults to attend and persist in career education. The Breaking Through initiative, administered by Jobs for the Future and the National Council on Workforce Education, which helps low-skill, low-literate adults transition into college credit and certificate programs (though not limited to career pathways), has identified curricula and instruction that accelerate progress as one of its four “high leverage strategies” (Bragg et al., 2007; Duke & Strawn, 2008; Liebowitz & Taylor, 2004).

There are several ways to accelerate instruction. One is co-enrollment in paired ESL and career courses, either with two teachers in the same classroom for part of the time (the I-BEST model) or two teachers who have co-planned their courses so that what is being taught in one is reflected, previewed or reviewed in the other in an integrated fashion. Integrated curricula, which combine ESL with ABE career and technical training, enhancement of job skills for incumbent workers or academic courses, all result in more concentrated instruction, reducing the time needed to complete a program and increasing the

relevance of the instruction for adult ELLs. Courses such as ESL in Health Context offered by Carreras en Salud or the English for Health Professions and Communities and Careers courses offered by the San Francisco Welcome Back Center are examples of integrated instruction.

Wrigley, Richer, Martinson, Kubo, and Strawn (2003) found that integrated programs offering English language instruction, vocational training and basic literacy produced the following benefits:

- Participants gained job skills, while also developing communication skills for employment.
- Language and cultural skills for job search and job retention were more easily integrated into training.
- Instruction was more focused and contextualized and, therefore, more likely to benefit adults with limited formal schooling.
- Motivation was higher, because learning had a clear goal.

Another way to accelerate progress is to permit co-enrollment in career courses while studying ESL. For example, Central Piedmont Community College in Charlotte, North Carolina, permits adult ELLs to enroll in nondegree occupational certification programs by taking an alternative placement test focused on reading proficiency, rather than the college placement test. Individuals may also waive taking the college placement test on the basis of their performance in college-level work, if they subsequently decide to enroll in a degree program (Aspen Institute, 2007). City College of San Francisco (CCSF) also has a policy (as do other California community colleges) of permitting adults still enrolled in noncredit ESL classes to participate in other noncredit classes that do not have prerequisites (Chisman & Crandall, 2007). Adults who participate in more than just ESL are more likely to persist, attending classes for a longer period and making more progress (Spurling, Seymour, & Chisman, 2008).

CCSF also found that adults who participated in its accelerated ESL program, which provides two levels of ESL in one semester, made greater progress and transitioned more often than did those in regular programs. These accelerated ESL courses have been found to be particularly

appropriate for adult ELLs with significant prior education and academic study skills (Chisman & Crandall, 2007; Spurling et al., 2008). Other ways to accelerate learning include providing short-term, intensive courses; modularizing instruction; and individualizing instruction, some of the approaches provided by Renton Technical College (Burt, 2003; Liebowitz & Taylor, 2004).

Building on and offering credit for participants' previous education and experience also can accelerate progress. For example, HCAP, recognizing that its participants have taken courses over the years and have acquired a great deal of experience through their LPN/LVN work, builds its curricula on what participants already know. HCAP ensures that all courses, general and clinical, are transferable to the RN training program and that clinical courses "give credit for what workers already know" (Miller & Knapp, 2005, p. 2). Providing credit for previous coursework and experience and offering opportunities for independent learning can increase participation and reduce the time required to complete a training program.

Flexible Scheduling and Location

Not every adult ELL can be successful in an accelerated program or absorb all the necessary information in a conventional semester-length class. Some students, especially those without strong academic backgrounds, may need extended time to learn. While community colleges are often constrained by semester schedules, other institutions may have more flexibility. The Center for Employment Training (CET) in San Jose, Calif., for example, offers a continuous and variable time frame that allows students to study and train until they have achieved the competencies to meet certification requirements. More advanced students move through the program faster; others can take the time they need. This approach reduces the sense of failure that students in fixed-time models face when they do not pass a class and need to retake an entire course.

Flexible scheduling can increase the likelihood that adult ELLs can participate in health care career programs. Providing classes during the evening and on weekends, as LaGuardia Community College does, facilitates participation by working adults, as does scheduling ESL classes so that they do not conflict with career classes. For example, Mount Hood and Portland community colleges

in Oregon have changed the times of their occupation courses so that they do not conflict with ESL classes, making it possible for ELLs to enroll in both (Aspen Institute, 2007).

Opportunities for individualized or online learning can also give adults with multiple responsibilities access to education and training, provided they are given appropriate orientation to using computers and online instruction. For example, at Renton Technical College, students have access to lecture notes on the Web, audio CDs focused on pronunciation of medical English and videos of the body systems, as well as lessons that can be downloaded and studied at home. Many adult ESL courses build word-processing and Internet research skills into their courses, and students need to develop these skills at the outset.

Offering classes at the hospital or health care center before or after work or during release time not only makes it more convenient for workers, but also increases the likelihood that training will be relevant and up to date and use the technology, procedures and language current at that site. Onsite classes also can help alleviate some of the personal challenges of time, child care and transportation that workers face and make it possible to include mentoring programs building on the training provided, as HCAP does. These programs benefit both employers and employees: they help ensure that training aligns with workforce requirements and goals identified by both employers and employees, enabling employers to have better-trained employees and employees to get better jobs. At the same time, programs to train incumbent workers help retain trained workers (Duff, Wong, & Early, 2002).

To facilitate access to onsite training, incumbent workers need release time and the support of a supervisor willing to rearrange schedules so that patient care is not compromised when workers attend classes. Partial or full release time can be critical to regular attendance and program completion (Duke et al., 2006). In addition to flexible scheduling, it is important to ensure that supervisors and employees know when they will be in training, so that supervisors can adjust staff schedules (Dillon & Young, 2003).

Comprehensive Support Services

A range of support services is needed to help adult ELLs obtain and complete health care training and move through health care career pathways. Breaking Through identified comprehensive “wraparound” support services as another of its four key strategies (Bragg et al., 2007; Liebowitz & Taylor, 2004). These support services include academic guidance and counseling, career counseling, assistance with job placement, case management, academic support and, in some programs, financial aid or free tuition, child care and transportation services.

All the programs described provide support services to participants from orientation through program completion and even beyond, since the pathways are designed for participants to return for additional education and training. Academic guidance and employment counseling are key features of the Welcome Back programs, I-BEST programs and Carreras en Salud. Credentials review and evaluation are important features of the Welcome Back Centers. Carreras en Salud provides other support services, such as child care and transportation assistance.

Free or reduced tuition or release time can enable many more adult ELLs to participate in health care career training. For example, the HCAP LPN to RN program at Swedish Medical Center and Shoreline Community College is free to participating LPNs. These support services help participants develop the important “soft skills” of team building, time management and leadership, as well as to provide ongoing career planning support.

HCAP also has found that incumbent workers need strong mentors while they are in a nursing training program, to help support the development of critical-thinking skills and coach participants in the best practices (Miller & Knapp, 2005). They note that mentors should be nurses who are not in a supervisory or evaluative position. I-BEST programs have a coordinator who acts as a coach to participants, helping reduce barriers to participation. Peer-to-peer learning, such as that established by Tacoma and LaGuardia community colleges, also provides needed assistance and support.

An important form of support offered by many programs, but often not viewed as such, is either bilingual or ESL support. Programs use interpreters who help with academic or career counseling, bilingual instructors who

provide explanations in the first language or ESL support to preview, review or clarify misunderstandings caused by limited English language proficiency.

Effective Partnerships

Effective health care career pathways involve multiple partners. Chisman and Spangenberg (2005) studied six health care career ladder programs that involved partnerships with employers and job training/educational organizations such as community colleges, CBOs, unions and hospital training programs, all coordinated by one agency. Each program described in this report involves multiple partners, each with clearly defined roles.

The Leading Edge Partnerships identified five “core themes” important in all successful partnerships among community colleges, employers and the community in providing programs for Hispanic workers:

- Clear pathways for employment or advancement, with work viewed as an asset, rather than a barrier, to higher education
- Investment by employers
- Innovation in the community college, but not complete reinvention
- Community partnerships for recruitment and retention
- Commitment to developing the potential of working Hispanic immigrants

Effective partnerships provide benefits for all participants. Duke and others (2006) identify the following benefits:

- For employers: Filling skills shortages, increasing productivity, retaining workers, leveraging public resources
- For workers: Obtaining a new or better job, receiving additional training, being paid for time spent in training
- For the public: Increasing income, business productivity and the attractiveness of the location to business

In many of the pathways described in this report, community colleges take the lead, working in collaboration with partners from many other organizations and institutions. Community colleges, sometimes called “the Ellis Islands of higher education,” historically have been the primary avenue for immigrants into postsecondary education, providing access to academic and career or technical skills through their open-door policies, low tuition and significant support services. Under one roof, community colleges can provide ESL, developmental education and health care certificate and associate’s degree programs that can lead to four-year or postgraduate professional programs (Chisman & Crandall, 2007; Workforce Strategy Center, 2002, 2003). Many community colleges also provide access to career guidance and personal counseling, workforce preparation, job search, job development and a range of other support services important to career pathways programs (Chisman & Crandall, 2007; Crandall & Sheppard, 2004), often in partnership with other agencies or institutions.

CBOs, in collaboration with hospitals and other providers, also can provide leadership for health care career pathways, as Carreras en Salud demonstrates. The success of the Instituto del Progreso Latino, a trusted CBO with long-standing ties to the Hispanic community and effective bilingual staff, the Center for Employment Training in San Jose (offering training in 17 occupational areas, most designed for low-income LEP adults) and the International Institute of Minnesota (nursing assistant training) all demonstrate the potential of CBOs, working in collaboration with hospitals and other providers, to provide occupational skills training to adult ELLs, particularly those who lack strong academic backgrounds and are new to the health care field. (See Wrigley et al., 2003, for a discussion of these models.)

Continuing Challenges

While several challenges face providers of health care career pathways and the adult ELLs they serve, the most critical are issues of funding and access. Another challenge is finding ways for programs to share information and curricula, so they can achieve economies of scale to offset their costs.

Funding Constraints

“Preparing the Workers of Today for the Jobs of Tomorrow,” the July 2009 report by the Council of Economic Advisers (CEA) that is available at http://www.whitehouse.gov/assets/documents/Jobs_of_the_Future.pdf, makes several recommendations that align with those emerging from this report. Perhaps the most important is the call for simplifying and making the federal job training program more coherent, especially with respect to funding. The CEA cites the problems Michigan faced in funding its “No Worker Left Behind” initiative to provide unemployed or displaced workers with up to \$5,000 per year for two years to pursue a degree or career certificate in a high-demand field. The state had to cobble together funding from the Workforce Investment Act (WIA), Temporary Aid for Needy Families (TANF), Vocational Rehabilitation Client Services, Trade Adjustment Assistance and the Food Assistance Employment and Training Program, resulting in multiple reporting requirements and high administrative costs (CEA, 2009, p. 20). The CEA also points to the difficulties that innovative programs such as I-BEST have in securing funding, “because basic skills and occupational training are funded under different streams, each with its own requirements and restrictions” (CEA, 2009, p. 20).

While the state of Washington can be credited with recognizing the additional costs of I-BEST’s integrated basic skills and career or technical education through its 1.75 Full Time Equivalency (FTE) reimbursement, the difficulty in accomplishing this is apparent, especially in times when funding for education in general has declined. Between 1987 and 2003, as a share of total government expenditures, state appropriations for public colleges and universities have decreased by 4 percent, although costs have certainly risen (Couturier & Cunningham, 2006).

Moreover, workforce development and ESL programs rarely get full FTE support, creating a disincentive for schools to engage ESL students in academic pathways. Community colleges need at least to be reimbursed for their adult education students at the same rate as other students, as is the case in Oregon (Mwase, 2008). Further, they should be adequately reimbursed for their part-time students. Funding formulas may not fully recognize part-time attendance and thus punish schools with higher percentages

of adult and low-income students. These formula constraints may inhibit schools from developing programs such as health care career pathways for these students.

Formulas that weight support on the basis of program cost, such as Ohio's policy of providing more financial support for students in more costly programs, or formulas based on the demand for programs, may enable colleges to increase the capacity of health care programs (Mazzeo et al., 2006). But health care pathways programs usually involve several partners, and the needs are greater than the available funds. Cobbling together funds from disparate and declining revenue sources is a continuing challenge for health care career pathways programs, especially at a time when more of those programs are urgently needed.

Recognizing that adult ELLs are playing a large role in national and state economies and will play even larger roles in the future should be sufficient incentive for innovation in identifying funding for programs for LEP students and workers. However, practices in implementing the Workforce Investment Act (WIA) and Temporary Assistance for Needy Families (TANF) or other funds such as those governing dual or co-enrollment impact their access to postsecondary education. Currently, WIA provisions for serving adult ELLs are an underutilized resource. In fact, nationwide, the percentage of LEP speakers receiving services under WIA is declining, despite the fact that their numbers are growing. In 2000, 10 percent of WIA clients who received intensive or training services were LEP, but this number fell to 4.9 percent in 2006 (Baider & Frank, 2008).

Although adult education and literacy services are both allowable training activities under WIA when provided in conjunction with other types of training, only a small percentage of WIA clients receive ABE or ESL training. Between April 2006 and March 2007, only 4.2 percent of clients received ABE or ESL training in conjunction with WIA services (Baider & Frank, 2008). Given the needs of the health care industry for entry-level and bilingual workers, policymakers should expand the use of WIA resources to prepare adult ELLs for health care careers. States also may wish to reconsider how funding formulas treat institutions enrolling large numbers of adult ELLs and make changes that will promote their participation in health care career pathways.

Incentives also should be provided for programs to target those with limited education and English proficiency, as well as those who are hard to serve (e.g., public assistance recipients and ex-offenders). The VESL Immersion Program (VIP) at City College of San Francisco, through a partnership with the Department of Human Services, provides extensive workforce preparation, with stipends and other support, enabling public assistance recipients to participate long enough to gain needed English and workforce skills and, eventually, a job with a family-sustaining wage (Chisman & Crandall, 2007).

Access for Adult ELLs

Given the staffing challenges affecting the health care sector and the projected increase in adult ELLs in the workforce, it is important to increase the presence of bilingual speakers in the health care workforce. Several initiatives would help increase access to postsecondary education and health care training among adult ELLs. These include greater and more effective outreach and publicity for programs, financial support and better alignment of policies to ensure adult ELLs access to postsecondary education and training.

Outreach and Publicity

As indicated in the section on structural challenges, many adult ELLs lack knowledge of both the availability of education and training programs and financial aid that can help them to participate. A 2003 Harris poll found that lower-income (especially Hispanic) families are unlikely to know what financial aid resources are available to help with higher education (For more information, visit: http://www.hispanicbusiness.com/news/2003/3/18/new_harris_poll_commissioned_by_the.htm).

While many states have outreach and publicity campaigns to increase college enrollment, especially among low-income adults and youth, few of these are directed specifically to immigrants or adult ELLs. One exception is the College for Texans campaign, which has added Spanish-language ads specifically for high school students (www.collegefortexans.com). Policymakers should target publicity campaigns to all adult ELLs, focusing on information about programs that provide English, basic skills

and health care career pathways to encourage speakers of other languages to enter health care careers.

Financial Support and Incentives

College affordability is an important issue for all students, especially low-income students. Wherever possible, health care training programs, especially for entry-level positions, should be free or low cost. States seeking to enable low-income students to enroll in postsecondary programs must keep tuition low and work to make financial aid available to nontraditional students. They should consider adapting financial aid policies to the challenges adults face in going back to school. Some states offer financial aid programs with more inclusive standards of eligibility, making needs-based aid available for part-time students. Other policies allow students to use financial aid on a year-round basis, or in short-term occupational programs, rather than just during the traditional academic year. Some states even have made in-state tuition rates available to undocumented immigrants.

Many career education programs are offered on the noncredit side of the community college, to bypass certain entrance requirements (a high school diploma, GED or admissions exams). This may have the unintended consequence of preventing participation for those in need of financial assistance, such as Pell Grants. Some community colleges have made it possible for adults to receive financial aid through Pell Grants by moving ABE to the career or technical side of the college, but that may result in increased tuition for the student. Careful pairing of non-credit and for-credit courses can preserve free or reduced tuition for adult ESL classes, while making it possible for adult ELLs to enroll in for-credit career training with financial aid.

Financial aid also should be made more “adult friendly,” making adults attending less than half time eligible for financial aid. The Illinois Monetary Award Program provides tuition and fees for students who do not have a bachelor’s degree, including students who attend less than half time. In FY 2005, the program paid approximately \$330 million to more than 150,000 students (http://www.collegezone.com/informationzone/3392_3506.htm).

Additional incentives may be needed to encourage participation in health care training for low-income,

entry-level positions, such as those of home health care workers or long-term care providers, since wages in these positions are low. These incentives could be additional income or free or reduced tuition for training for the next job tier. With the exception of the Welcome Back Centers, the major focus of most health care career pathways is on helping adults acquire an entry-level position, though programs such as HCAP and Carreras en Salud help adults move to the second or third tier. Entry-level jobs do not provide a family-sustaining wage, and the turnover, especially among direct care workers, is high. Health care career pathways can promote continued education and training, but incentives may be needed to enable entry-level workers to enter these pathways.

Sharing Curricula and Programs

Most health care training programs are small, and the cost of designing a program for each employer/context is substantial. Finding ways to share program designs or curricula can produce economies of scale. The adaptations of the I-BEST model are one example of such sharing, but this has been accomplished informally. Attention should be paid to the possibility of developing more structured sharing of information about workforce needs and curricula at least statewide, if not nationally, to produce economies of scale.

Research Needed

Research on health care career pathways for adult ELLs is very limited. Research usually has focused on low-skilled English-speaking adults and looked mainly at entry and exit for one program, rather than tracking the long-term progress of participants on the steps of the pathway. With the growing immigrant population and the possibilities for training bilingual health care workers who can provide more culturally sensitive health care, increased research attention needs to be paid to programs for adult ELLs. At a minimum, what are needed are in-depth case studies of programs and practices; demonstration projects, especially those focused on low-literate adult ELLs; longitudinal studies of adult ELL progress and studies of potential funding models.

In-Depth Case Studies of Programs and Practices

Information for this report was obtained principally through published reports, Web sites and limited communication with program providers. To obtain a better sense of promising or exemplary practice, more in-depth research, ideally with co-researchers from a program, is needed. (See Chisman & Crandall, 2007, for an example of this model.) This research would involve site visits, interviews with participants and staff, observations, reviews of program curricula and documents, and analysis of program results. Such research is costly, but the results should make it possible to understand better how current policies and practices might be adapted to serve adult ELLs more effectively and to identify other potential health care career ladders. While some large-scale research on pathways programs has been undertaken (see Bragg et al., 2007), the volume of research and a specific focus on health care career pathways for adult ELLs are lacking. Given the growth of this population and its importance in future workforce participation, such research is critically needed.

Demonstration Projects Focused on Low-Literate Adult ELLs

There is very little research that tells us “what works” for ELLs seeking to move from adult ESL classes into training classes and then further along a career path. We have limited information about what it takes for them to succeed academically and what support is needed to help them persist. The programs described in this report offer a number of insights, but there are limited data documenting which current program models show promise or work well, especially for adult ELLs lacking strong academic backgrounds, or what economic resources are required for full-time participation in a training program. Nor do we know how much of a difference bilingual support of the kind provided by Carreras de Salud makes in helping ELLs achieve or how such a model could be adapted in communities with multiple language groups.

It is also not clear what language and literacy thresholds are necessary for each step on a career path or to what extent models such as I-BEST can be “pushed down” to work for adults with lower levels of ESL. These questions can be answered by establishing demonstration models

focused specifically on a population that shows potential and strong interest in the health care field, but whose academic and language skills still need development. Such demonstration projects can incorporate practices found effective with higher-level learners and provide evidence of how to adapt those practices to enable academically underprepared adult ELLs to move from adult ESL to training and jobs along a health care career path. One approach could be the lab school model, where university-based researchers, teacher trainers and adult ESL service providers collaborate in applied research and instructional experimentation, such as that provided by the ESOL Lab School at Portland State University, in partnership with Portland Community College (<http://www.labschool.pdx.edu>).

Longitudinal Studies of Adult ELL Progress

Longitudinal studies of adult ELLs as they progress through the health care career pathway are needed to identify their growth in skills related to English language proficiency, academics and the workforce, as well as the transitions they make (or fail to make) along the way. Unfortunately, there is very limited research on how long it takes for an adult to develop even intermediate English language proficiency (and program providers, especially employers, often have unrealistic ideas of the amount of time it takes to learn English [see Burt, 2003]), but it is possible to extrapolate from some sources. It takes about 100 hours to advance one level on the National Reporting System. Thus, someone entering at the beginning level will take at least 500 hours, and someone with limited literacy will take even longer. This corresponds to Spurling and others' (2008) analysis of longitudinal data from seven years of adult ESL programs at City College of San Francisco, to date the only study that documents progress over time for adult ELLs. It also corresponds to what we know about children's acquisition of English. While it takes only about two years to acquire speaking proficiency in English for students living in an English-speaking environment, it takes between five and eight years for them to develop the academic English (principally reading and writing proficiency) to function equally with native

speakers in the classroom (Cummins, 1991; Thomas & Collier, 1997).

Following adult ELLs through education and training programs and after their placement would help identify what practices are most profitable for diverse adult ELLs, not only in learning basic and health care–related workforce skills, but also in developing English language proficiency. It could also identify features of workforce programs that increase learner motivation and persistence and motivate other adult ELLs contemplating enrollment in these programs. In programs that enroll both English speakers and adult ELLs, research needs to examine the populations separately and not merge data from the two very different populations.

Information on Potential Funding Models

Better information is needed on possible funding models and constraints on programs and on how successful programs have continued, even when costs are high and financial resources limited. As this report was being written, several successful programs were terminated because of lack of continued funding.

Conclusion

The need for health care workers is growing, and there is a population of possible health care workers whose languages and cultural backgrounds match the growing diversity of the U.S. population. A number of promising practices, programs and health care career pathways to enable adult ELLs to help fill these jobs have been identified. More research can help to illuminate best practices and provide better direction for policy makers and funders of future health care career pathways efforts for adult ELLs.

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