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Brendan Kelly, Project Officer
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Project Director:
Karen Gardiner
Abt Associates, Inc.
4550 Montgomery Ave,
Bethesda, MD 20814

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Introduction

There is a substantial skills gap between the education and training of the labor force and the needs of employers in many high growth industries, including healthcare and manufacturing. This gap results in unemployment while good-paying jobs go unfilled. At the same time, many low-skilled adults persist in low-wage work with little opportunity for advancement. Career pathways programs are an approach to fill a vital need for skilled workers in the economy and offer low-wage workers the opportunity to obtain occupational and other skills and advance into the middle class.

The goal of career pathways programs is to improve the education and earnings of low-skilled adults by providing well-articulated training and employment steps, combined with promising instructional approaches and supportive services, which are targeted to jobs that are in demand locally. There is great interest in career pathways programs among policy makers and practitioners in part because such programs provide a framework for guiding the development of improved education and training approaches for low-skilled individuals. Along these lines, the Pathways for Advancing Careers and Education (PACE) study is using an experimental design to assess the effectiveness of nine career pathway programs across the country. Additional information about PACE is in Box 1 at the conclusion of this profile.

An experimental evaluation design assigns individuals eligible for a program via lottery to a treatment group that can receive the program or a control group that cannot – but can access other services in the community. Because the assignment process is random, there are no systematic differences between the treatment and control groups at the time they enter the study. Thus, any differences detected during the follow-up period can be attributed to the program. Random assignment is considered the gold standard of program evaluation.
This profile is an overview of the *Pathways to Healthcare Health Profession Opportunity Grant (HPOG)* Program, designed and operated by Pima Community College in Tucson, Arizona. Pathways to Healthcare aims to assist low-income individuals attain high-paying healthcare jobs by providing articulated training in 16 targeted healthcare fields. The program offers a comprehensive service package that includes a contextualized basic skills course for individuals who need academic preparation prior to beginning occupational training, supports, counseling, and in-program and post-program connections to employment.

This profile first describes the career pathway framework used in the PACE evaluation, a framework that provides a common metric for describing and assessing career pathways programs, and then discusses Pima Community College's Pathways to Healthcare program model and how it fits within the career pathways framework.

The career pathways thesis is that post-secondary education and training should be organized as a series of manageable steps leading to successively higher credentials and employment opportunities in growing occupations. Each step is designed to prepare students for the next level of employment and education and also provide a credential with labor market value. To effectively engage, retain, and facilitate learning, programs integrate four core elements: (1) assessment, (2) promising instructional strategies, (3) supports, and (4) employer connections. Individual programs vary in terms of emphasis placed on each core component, although all are comprehensive in nature in order to address the learning and life challenges facing adult students. Mobilizing these components typically requires a partnership between multiple providers, including community-based organizations, community and technical colleges, human services and workforce agencies, and employers and their representatives.

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**The Career Pathways Framework**

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**Figure 1: The Career Pathways Steps**

I. Basic Bridge Programs
   - Prospects for good-paying, stable employment

II. Sectoral Bridge Programs > Semi-Skilled Jobs
   - Occupational, academic, and life skills

III. Short-Term Certificate Programs > Entry Level Skilled Jobs

IV. 1-2 year Certificate to AA Programs > Mid-Level Skilled Jobs

V. BA + Programs > Upper-Skilled Jobs
Although steps in career pathways programs vary with their target populations, focal occupations, and service strategies, the broad training and employment levels shown in Figure 1 provide a basis for classifying programs.

The first two steps (I and II) represent “on ramp” programs designed to prepare low-skilled participants for college-level training and lower-skilled jobs with a career focus. The next two steps (III and IV) provide college-level training for “middle skills” employment—jobs requiring some college but less than a bachelor’s degree (e.g., an associate’s degree or shorter certificate). The final step (V) includes interventions promoting completion of a bachelor’s degree and more advanced credentials. Career pathways are designed to allow entries, exits, and re-entries at each stage—depending on skill levels and prior training, employment prospects, and changing personal situations. Programs vary in terms of entry and exit points as well as steps incorporated.

Pima Community College’s Pathways to Healthcare HPOG Program

The Pathways to Healthcare program brings together several key components of the career pathways framework. First, it features a contextualized 10-week basic skills and open lab course (called College Readiness), which addresses the academic needs of individuals with skill levels initially too low to meet entry requirements for healthcare training programs at the college. Second, the program offers articulated training pathways in 16 targeted healthcare fields leading to credentialing, many of which are taught in an accelerated environment. Comprehensive supports are provided to participants during pre-training activities and occupational training. Finally, the program provides linkages to employers for in-program, work-based learning experiences and post-program employment opportunities. Each of these program facets is further described below.

Program Goals, Target Population And Structure

In 2010, Pima Community College was awarded a Health Profession Opportunity Grant by the U.S. Department of Health and Human Services to provide program funding for the Pathways to Healthcare program. The Pathways to Healthcare program employs a career pathways framework to leverage partnerships with community agencies and healthcare employers to assist low-income individuals in attaining high-paying healthcare jobs. The Pathways to Healthcare career pathways approach was developed based on emerging and best practices research and specifically targets high-demand healthcare professions in Pima County (Tucson area), Arizona. By preparing participants for healthcare careers, the program also aims to help reduce the shortage of healthcare professionals in Arizona.
To participate in the Pathways to Healthcare program, individuals must reside in Pima County and meet the low-income (at or below 70 percent of the Lower Living Standard Income Level) and work authorization guidelines of the HPOG grant. Within that population, specifically targeted groups include displaced workers, refugees, veterans, low-skill adults, previously homeless individuals, and those with no high school diploma or GED. Applicants must be interested in pursuing a health profession.

The primary partner in the Pima Community College Pathways to Healthcare program is the Pima County OneStop. Under the HPOG grant, OneStop staff assist with recruitment, assessment, case management, employment assistance, and support services (described later in this profile).

### Career Pathway Components

#### Assessment

All potential participants in Pathways to Healthcare take the Test of Adult Basic Education (TABE®) prior to enrollment, which allows staff to advise participants on any preparatory work needed prior to enrolling in healthcare training. Specific requirements for entry into each of the 16 healthcare programs vary, but the minimum level for entry is equivalent to approximately a 9th grade score on the TABE®. Depending on their literacy and numeracy scores, Pathways to Healthcare participants may be referred to a remedial course to improve their academic skills prior to taking the required training course assessments:

- Individuals who score below a 4th grade level are referred to a literacy provider or ESL provider, as appropriate.
- Those who score two grade levels below the required entry score are referred to Pathway to Healthcare’s College Readiness program, a 10-week contextualized basic skills course or an open lab. The course helps HPOG participants increase their academic skills to prepare them to pass the necessary placement assessments (either Compass® or ACCUPLACER®).
- If a participant’s TABE® score indicates he or she will likely score in the appropriate range on the Compass® or ACCUPLACER® for the desired training course, the individual works with the college and OneStop staff to schedule a date to take the appropriate assessment at Pima Community College.

In addition to basic skills and academic assessments, each program participant meets with a case manager from Pima County OneStop (called a Workforce Development Specialist) for an assessment of strengths and barriers. Participants complete an assessment form, described by staff as being similar to an individual education plan. As part of this planning, the participant will indicate where areas of need or opportunity exist such as time management, note taking, test taking, or career exploration.

### Key Demographics of PACE Study Participants Enrolled at Pima Community College in the First Year of the Study*

- Nearly two-thirds (65 percent) of study participants live with one or more child;
- More than one-third (36 percent) of study participants are aged 40 or older;
- More than two-thirds (68 percent) of study participants had total family incomes below $15,000 in the prior year; and,
- 85 percent of study participants are female.

*Data from the baseline information reported by study participants enrolled between February 1, 2012 and February 7, 2013.
Curriculum

Ten-week College Readiness Course and Open Lab

Pathways to Healthcare’s College Readiness course is designed to increase participants’ academic skills needed to begin training and enhance participants’ college success skills. Although variations of the College Readiness model have been used at Pima Community College for special programs in the past, the current College Readiness course is offered exclusively to Pathways to Healthcare participants. The noncredit course, designed by Pima Community College to utilize adult education principles, offers two models at no cost to participants: a 10-week contextualized basic skills course and an open lab. Participants who score more than two grade levels below the required entry score for their desired training program are referred to the 10-week course. Those who score within two grade levels of the required entry score for their program of interest are referred to the open lab, where they can improve their skills independently, or with the assistance of the lab instructor. The program is flexible in working to meet the needs of individuals referred to a College Readiness component who have time or transportation constraints. More than one-third of HPOG participants are referred to one of the two College Readiness models upon enrollment in the program. Some College Readiness participants concurrently work towards obtaining a GED. A participant completes College Readiness when his/her post-assessment TABE® and COMPASS® scores meet the requirements of the desired program.

The College Readiness curriculum is comprised of adult basic and developmental education contextualized to healthcare professions. College Readiness instructors contextualize reading, writing, and math components through the use of examples (such as medical terminology or healthcare articles) and Aztec, a software product tailored to health professions. In addition, both program models incorporate activities to foster community, academic workshops designed to promote college success (study skills; time management), and career exploration. The models differ in structure and schedule:

• The College Readiness 10-week course meets for 24 hours a week, six hours a day for four days a week. The average class size is 15 participants. In addition to the standard College Readiness curriculum, the course also includes guest lectures from professionals in the field, and field trips.

• The College Readiness open lab model allows participants to work at their own pace to improve their skills. However, they must complete the course in six months. An instructor is available in the lab to assist participants, or to facilitate peer mentoring and tutoring.
Career Pathways Program Profile: Pima Community College Pathways to Healthcare HPOG Program

Healthcare Trainings

Pathways to Healthcare includes 16 defined healthcare training programs within articulated career ladder pathways. The 16 programs are clustered into five pathways with three levels that roughly correspond to beginner (1), intermediate (2), and advanced (3) (See Table 1). While Pima Community College has a long history of offering healthcare programs, what is unique to the Pathways to Healthcare program is an explicit focus on pathways. The career ladders are discussed as part of the training plan development and support services that are available to participants. The clustering of courses was designed to facilitate credential attainment among adult learners with different skill levels and employment needs. As an example, participants may enter in a Level 1 course, then leave with a credential to acquire experience, or may move directly into a Level 2 course. Each training program results in a certificate or degree. Some programs offer occupational credit at the college, while other programs are noncredit (and follow ‘clock hour’ designations, which indicate the number of classroom and, if applicable, clinical hours for a given program).

Pathways to Healthcare participants have a number of reserved spaces in popular career pathway courses. Additionally, Pathways to Healthcare offers two courses exclusively for program participants: an evening nursing assistant program and an evening patient care technician program. Once meeting program entry qualifications, participants are guaranteed a slot in the progressively advanced levels of the articulated career pathways programs. This opportunity for guaranteed ongoing enrollment in progressively advanced training programs is a unique feature available only to the Pathways to Healthcare participants.

Courses are packaged such that enrollment into a training sets up subsequent enrollment for all content in that program. This approach removes much of the onus of navigating class schedules and catalogs from the participants. For those enrolled in credit-bearing courses outside of the college’s Center for Training and Development (CTD), student support specialists (described under “advising”) help to guide HPOG participants through enrolling in pre-requisites or co-requisites, as well as provide support throughout their academic progression. Courses taught within the Center for Training Development, which account for more

Why Pathways to Healthcare Uses the College Readiness Course

Pathways to Healthcare staff describe several benefits of the 10-week College Readiness course, including:

- **Sense of community among participants.** The course encourages peer-mentoring relationships, as well as instructor support, both in and out of class. Nearly all participants are adult learners, many of whom are returning to the classroom for the first time in decades. Staff explain that developing a sense of community helps ease participants’ transition into the college environment.

- **Participant input on the College Readiness curriculum.** The College Readiness instructors tailor the curriculum to the needs of each class, and actively seek input from participants on the content of the course. This helps participants feel invested in their education.

- **Improved participant attitudes.** Pathways to Healthcare staff notice that College Readiness graduates tend to have increased motivation and willingness to seek advice and support.

- **Improved academic readiness.** Pathways to Healthcare staff report that more than 90% of individuals who complete the College Readiness curriculum subsequently place into their desired healthcare training.
### Table 1. Details of Pathways to Healthcare Training Programs

<table>
<thead>
<tr>
<th>Healthcare Occupation</th>
<th>Ladder Level</th>
<th>Degree (D) or Certificate (C)</th>
<th>Frequency</th>
<th>Duration to Completion</th>
<th>Credit/ Clock hours</th>
<th>Financial Aid Eligible?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pathway One: Medical Office – Health Information Management Pathway</strong></td>
<td></td>
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</tr>
<tr>
<td>Medical Office Clerk Specialist</td>
<td>1</td>
<td>C</td>
<td>Monthly (except December and June)</td>
<td>Clerk- 1 month; Specialist-6 months</td>
<td>Clerk- 120 clock hours; Specialist-484 clock hours</td>
<td>No</td>
</tr>
<tr>
<td>Medical Records Technician</td>
<td>2</td>
<td>C</td>
<td>Monthly (except December and June)</td>
<td>10 months</td>
<td>924 clock hours</td>
<td>Yes</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>3</td>
<td>C or D</td>
<td>Semester starts (Fall, Spring)</td>
<td>24 months</td>
<td>27-29 credits (+general ed)</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Pathway Two: Nursing Pathway</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Assistant Clock hour and credit courses</td>
<td>1</td>
<td>C</td>
<td>5-6 times a year; (2 times a year for credit)</td>
<td>5 weeks to 2 months (3 months for credit)</td>
<td>120 clock hours (4 credit hours)</td>
<td>No</td>
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<tr>
<td>Patient Care Technician Clock hour and credit courses</td>
<td>2</td>
<td>C</td>
<td>5-6 times a year; (2 times a year for credit)</td>
<td>1 month; (4 months for credit)</td>
<td>120 clock hours (2 credit hours)</td>
<td>No</td>
</tr>
<tr>
<td>LPN</td>
<td>3</td>
<td>C</td>
<td>Every 10 weeks</td>
<td>13 months</td>
<td>1350 clock hours</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Pathway Three: Medical and Physician Support Pathway</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phlebotomy</td>
<td>1</td>
<td>C</td>
<td>January and July</td>
<td>6 months</td>
<td>14 credits</td>
<td>No</td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>2</td>
<td>C</td>
<td>Quarter starts: January, April, July, October</td>
<td>15 months</td>
<td>28 credits</td>
<td>Yes</td>
</tr>
<tr>
<td>Clinical Research Coordinator</td>
<td>3</td>
<td>D</td>
<td>Semester starts (Fall, Spring, Summer)</td>
<td>24 months</td>
<td>33 credits</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Pathway Four: Emergency Medicine Pathway</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMT-Basic</td>
<td>2</td>
<td>C</td>
<td>Semester starts (Fall, Spring, Summer)</td>
<td>5 months</td>
<td>9 credits</td>
<td>Yes</td>
</tr>
<tr>
<td>EMT-Paramedicine</td>
<td>3</td>
<td>D</td>
<td>As needed, average of 2 per year</td>
<td>12 months</td>
<td>56 credits</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Other Pathways</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Health Advisor</td>
<td>1</td>
<td>C</td>
<td>Semester starts (Fall, Spring, Summer)</td>
<td>24 months</td>
<td>16 credits</td>
<td>Yes</td>
</tr>
<tr>
<td>Direct Care Professional</td>
<td>1</td>
<td>C</td>
<td>Semester starts (Fall, Spring, Summer)</td>
<td>6 months</td>
<td>8.25 credits</td>
<td>No</td>
</tr>
<tr>
<td>Surgical Technician</td>
<td>2</td>
<td>C</td>
<td>Annual start in January</td>
<td>12 months</td>
<td>1326 clock hours</td>
<td>Yes</td>
</tr>
<tr>
<td>Behavioral Health Specialist</td>
<td>1</td>
<td>C</td>
<td>Bi-annual start</td>
<td>6 months</td>
<td>18 credits</td>
<td>Yes</td>
</tr>
<tr>
<td>Pharmacy Technology</td>
<td>3</td>
<td>C or D</td>
<td>Semester starts (Fall, Spring)</td>
<td>18 months</td>
<td>49 credits (+ general ed)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
than half of the 16 healthcare programs offered as part of Pathways to Healthcare, use accelerated methods designed to assist participants to complete credentials more quickly than courses delivered in a more traditional college environment. In addition to compressed schedules, many CTD courses are cohort-based and designed to incorporate collaborative learning principles and integrated or contextualized curricula. Participants can also access hands-on learning environments while in the program, such as the medical coding open lab. Staff emphasize that the program’s enhanced support services (described under “Supports”) also aid acceleration by facilitating a more responsive reaction to immediate student needs.

Supports

Pathways to Healthcare provides a number of supports to program participants, including advising, financial, and social supports.

Advising

Pathways to Healthcare provides advising to participants proactively beginning immediately upon enrollment in the program. Participants are assigned to a Student Support Advanced Specialist (SSAS) from the college, who oversees enrollment of individuals into the Pathways to Healthcare program and coordinates with the Pima County OneStop Center staff. The SSAS provides support with assessments and helps determine what steps are needed prior to enrolling in training (e.g., completion of the College Readiness course). Participants are also immediately assigned to a Pima County OneStop Workforce Development Specialist (WDS) who works with participants to address employment, training, and support service needs. As part of the development process, individuals meet with their WDS to discuss training options that align with their skills, strengths and career aspirations. Program participants who are interested in additional career guidance can take the PESCOSAGE career assessment, as well as a 12-hour career exploration workshop through the OneStop.6

Training Plan

After the initial advising sessions with the WDS and the SSAS, each participant completes a Training Plan that lays out the desired professional pathway and specific training program into which he/she will enroll. Individuals complete a checklist of professional preparatory activities that includes: (1) completing a four-day (16 hour) employability skills workshop at the OneStop, (2) developing a personal budget, and (3) conducting at least two informational interviews with professionals currently working in the field in which they are seeking to enter. The WDS supports the individual to complete the checklist of activities and Training Plan.

Once a participant has been approved and funded for a particular course by completing the College Readiness course or scoring high enough on the Compass® or ACCUPLACER®, a dedicated Pima Community College Student Services Specialist (SSS), who concentrates in the participant’s course

Investing in Student Support

“HPOG contains two elements that are critical to the model it utilizes, enhanced student support and College Readiness. While each element addresses specific needs, together they provide a holistic support model that assesses student needs, provides immediate response, teaches the students to identify and access support, and ultimately it role models and empowers the students so that when they leave the program they develop the skills to meet their own needs without needing the intrusive support.”

– Brian Stewart, Director, Center for Training and Development and Health Professions Opportunity Grant
or pathway of interest, begins serving as the student’s academic case manager. Each SSS provides proactive academic advising. The SSS also helps arrange for education supports, scheduling, book purchases, and intensive tutoring to help participants complete the training. The SSS meets at least monthly with the participant throughout his or her time in the HPOG program, and may meet more frequently if needed. The SSS also advises on next steps in the career pathway. Both WDS and college staff (SSSs and SSASs) responsibilities include case management or comprehensive advising approaches, inclusive of addressing academic and career goals/ strengths/ needs and identifying and attending to barriers to participation.

**Financial Assistance.** Financial assistance (in the form of scholarships for tuition, books, and other academic supports) for the Pathways to Healthcare program is administered through Pima Community College. The average HPOG-funded scholarship is $3,366, though this varies by the training selected. The maximum funding is $3,500, which often covers a Level 1 course and part or all of a Level 2 course, depending upon the course selected. Most Level 3 courses, on their own, fall within this maximum. Not all participants receive this financial support, but more than 90 percent of participants who enrolled in a healthcare training received an HPOG scholarship. In addition to the scholarship, the Pathways to Healthcare program offers some occupational programming at no cost to participants: evening nursing assistant and patient care technician courses. For programs eligible for financial aid (see Table 1), staff help participants file the appropriate paperwork.

The Pima County OneStop WDS coordinates access to community services funded by Pathways to Healthcare, as well as to publicly available supports (e.g., TANF, child care assistance, rental assistance, transportation). Additionally, the WDS can also approve HPOG-funded emergency services (e.g., emergency personal needs, rent deposits, etc.). The OneStop can administer up to $1,400 for supportive services, and the WDS will also help program participants identify other sources of support.

**Social Supports.** The Pathways to Healthcare program incorporates informal social supports. For example, the open learning lab and college readiness course encourage peer support, as does the location of the lab, which includes a kitchen for the participants. One college readiness instructor notes that the intensity of the 10-week college readiness course (24 hours per week) helps participants to form social networks and share prior professional experience within healthcare. Some occupational training programs also follow a cohort-based model, designed to cultivate a sense of community among participants and encourage peer-mentoring.

In April 2013, Pathways to Healthcare created the “HPOG Student and Alumni Network” with the goal of assisting program participants in developing a professional network, building community and fostering new skill development. The network, a group organized by the program comprised
of participants and program staff, hosts workshops for program participants on topics such as job searching, resume writing, interview skills, study skills, stress management, and other topics of interest to participants. A key component is a “Virtual Lounge,” which utilizes an invitation-only LinkedIn group to encourage professional networking among participants and serves as a platform to share resources and program announcements. An advisory committee of students, program staff, and occupational instructors meet monthly to plan upcoming workshops and to shape the future of the Lounge.

**Employment Connection**

Pathways to Healthcare leadership see connecting individuals to employment as a critical component of the program. Work-based learning opportunities can provide exposure to the professional environment, and in some cases, lead to future employment. Most of the 16 Pathways to Healthcare training programs provide participants with work-based learning opportunities. Work-based learning takes one of three forms: clinicals, internships, and preceptor model.

**Clinicals.** Clinicals are a formal part of class in which an instructor takes a group of students to an employment site to work. These are supported by formal agreements with the employer outlining responsibilities of the college as well as the employer. Students are usually at the site 1-2 days per week for the duration of class. Clinicals begin as early as the second week, and usually begin before the student completes 25 percent of the course. Examples of programs with clinicals are nurse assistant and practical nursing.

**Internships.** Internships may be informal (optional) or formal (mandated by the program). All have a ratio of 75-100 hours of internship experience per credit. Many students can begin internships after they have completed 75 percent of the program, but most occur during the last course a student takes in the program. Students must set up informal internships on their own, and these internships may or may not be paid by the employer. Examples of healthcare programs with optional internships include medical office, patient care technician, and community health advisor. For formal internships, Pathways to Healthcare has a pool of employers that support internships; however, students must interview to secure an internship. Examples of healthcare programs with formal internships include medical assistant, medical records technician/coding, and surgical technician. Staff report that internships, particularly those arranged by the student, can lead to employment upon completion of the program.

**Preceptor model.** The preceptor model is similar in concept to a physician’s residency. If a training program uses the preceptor model, the experience is mandatory. In this model, the student works with one person who has similar or slightly higher levels of qualifications or certifications to learn how the occupation functions at a particular organization. Generally, this is used in level 3 programs such as pharmacy technology and clinical research coordinator.

Pathways to Healthcare staff also view post-program employment as key to the program’s career pathways approach. Through the program, Pima County OneStop provides employment support, including employer outreach and job development. A team from the OneStop obtains projections on jobs, maintains a spreadsheet of job listings, and solicits feedback from local employers. Employers also visit the OneStop each month to speak to potential employees. Although some of this support is available more broadly to the local community through Workforce Investment Act programs, an
employment specialist at Pima County OneStop is dedicated to the Pathways to Healthcare program, and both college and OneStop staff work to assist participants with employment after training. Pathways to Healthcare staff from Pima Community College also follow up with participants after completing training to learn where they are in their careers and whether they are considering additional training to advance in the field.

Employer advisory councils for each occupational training program at Pima Community College meet at least two times a year, including those occupations that are part of the Pathways to Healthcare program. These councils are comprised of employers and community agencies working with employer groups and are run by the employer. The primary purpose of the councils is to advise on the occupational programs; a secondary purpose is to inform the college about what trends employers and community agencies are seeing in the community. This employer connection helps Pima Community College “take the pulse” of the local labor market, and enables the college to adapt training programs as needed to better prepare participants for post-program employment.

Summary of Pathways to Healthcare Enhancements

The career pathway components available to Pathways to Healthcare participants – described above – are more robust than the services available to Pima Community College students not participating in the program. Key enhancements include an initial TABE® assessment; contextualized basic skills and college readiness courses; articulated training program career pathways; reserved training program slots; frequent, proactive advising; tuition and other support services; and employment connections. In lieu of Pathways to Healthcare, Pima Community College students who do not qualify for their training program of choice may take remedial non-contextualized basic skills courses to improve their assessment scores. Those who meet the entry requirements of their program can enroll in training (subject to any existing wait lists), assuming financing is available. Figure 2 illustrates the different career pathway services available to participants and to students who enroll via traditional matriculation in training courses at Pima Community College.
### Figure 2: Comparison of Career Pathway Components Available to Pathways to Healthcare HPOG participants and other Pima Community College Students

<table>
<thead>
<tr>
<th>Career Pathway Component</th>
<th>Patient Care Pathway Program</th>
<th>MATC Basic Skills Preparation</th>
</tr>
</thead>
</table>
| **Assessment**           | • TABE®, which is used to identify preparatory needs prior to taking the college placement assessment  
                           • Compass® or ACCUPLACER® test, with multiple opportunities to test  
                           | • Compass® or ACCUPLACER® test |
| **Curriculum**           | • Contextualized basic skills and college readiness  
                           • HPOG Pathways to Healthcare Program training and education  
                           • Clear, articulated pathways  
                           | • Non-contextualized basic skills  
                           • Education and Training outside of HPOG (at PCC or in the community), pending eligibility and financing |
| **Supports**             | • Reserved training program slots in popular career pathways courses  
                           • Tuition and books payment  
                           • Other support services (e.g., uniforms, transportation vouchers, job placement, licensure testing)  
                           • Dedicated Pima Community College Student Support Specialist support throughout time in the program - monthly interactions, which may be more frequent as needed  
                           • Dedicated Pima County OneStop Workforce Development Specialist support throughout time in the program - monthly interactions, which may be more frequent as needed  
                           • Follow-up support after program completion  
                           • Upon meeting certain qualifications, guaranteed continued education opportunities within HPOG healthcare training pathways (does not exist outside of Pathways to Healthcare)  
                           | • Contingent upon meeting a range of eligibility qualifications, Pima County OneStop Workforce Development Specialist support  
                           • Generally available financial aid based on eligibility (Pell, ITA through OneStop if available) |
| **Employment Connections** | • Pima County OneStop provides employment support, including employer outreach and job development. As part of the program, participants are exposed to in-program work experience at local healthcare employers. The HPOG partnership also assists individuals to find short-term employment if needed while they are waiting for a particular vocational training to begin.  
                           | • Employer-based advisory committees for Pima Community College’s degree and diploma programs  
                           • Employment support from the Pima County OneStop, contingent upon meeting eligibility criteria. Services typically conclude upon employment. |
The Pathways to Healthcare HPOG program at Pima Community College aims to increase low-income individuals’ academic and occupational skills to help them attain a high-paying healthcare job and thereby improve their overall economic, personal and family well-being. The program offers a contextualized basic skills course (College Readiness) for those with academic competencies initially too low for their desired healthcare training program. The contextualized instruction allows HPOG participants to improve their basic skills in the context of the healthcare field. Pathways to Healthcare features accelerated occupational training in five articulated training pathways. The program offers training in 16 targeted healthcare fields, providing participants with the opportunity to attain the necessary credentials for healthcare jobs. The program also provides comprehensive supports to participants, including advising, financial assistance, and social supports. In addition, Pathways to Healthcare offers a variety of employment connections to students, including both in-program work-based learning experiences and post-program employment support. To learn more about Pathways to Healthcare, visit http://www.pima.edu/hpog.
Endnotes


2. Pathways to Healthcare is funded through a Health Profession Opportunity Grant (HPOG) from the U.S. Department of Health and Human Services’ Administration for Children and Families (ACF), Office of Family Assistance (OFA). The evaluation of Pathways through PACE is funded by the Office of Planning, Research and Evaluation in the U.S. Department of Health and Human Services’ Administration for Children and Families (ACF).


4. Lower Living Standard Income Level is a measure, determined by the Department of Labor, to establish low-income status. In 2013, for a family of four in Pima County, 70 percent of the Lower Living Standard Income Level is $27,724. In order to be eligible for the Pathways to Healthcare program, individuals must be authorized to work in the United States.

5. Compass® (developed by ACT, Inc.) and ACCUPLACER® (developed by the College Board) are commonly used computer-adaptive college placement assessments. Additional information about these assessments can be viewed on their respective websites (http://www.act.org/products/higher-education-act-compass/ and http://accuplacer.collegeboard.org/).

6. PESCO SAGE is a career assessment that tests academic skills, aptitudes, learning styles, work attitudes, temperament and work ethic. For more information see www.pesco.org.

Box 1: Overview of the PACE Evaluation

The Pathways for Advancing Careers and Education (PACE) evaluation, a ten-year effort funded by the Office of Planning, Research and Evaluation in the U.S. Department of Health and Human Services’ Administration for Children and Families (ACF) and led by Abt Associates Inc., is a random assignment evaluation of nine promising career pathways programs that aim to improve employment and self-sufficiency outcomes for low-income, low-skilled individuals. The goal is to produce methodologically rigorous evidence on the effectiveness of career pathways approaches that will address issues of interest to federal, state, and local policymakers and practitioners and have significant influence on policy and practice. PACE will include implementation, impact, and cost-benefit studies. Key study questions include

• What is the impact of each program on higher levels and quicker achievement of certificates and degrees? On earnings?
• What are the impacts of each program on individual and family well-being?
• Do impacts vary by subgroups, and, if so, which characteristics are associated with larger or smaller effects?

PACE was launched in late 2007 and began with intensive outreach to solicit the views of policymakers, program operators, researchers and advocates on promising program areas to test, resulting in a focus on the career pathways approach. The evaluation team then recruited strong career pathways programs into the study. Random assignment began in November 2011 and will conclude in September 2014.

The nine PACE Partner Sites are: Instituto del Progreso Latino, Des Moines Area Community College, Madison Area Technical College, Pima Community College, San Diego Workforce Partnership, Valley Initiative for Development and Advancement, the Washington I-BEST program in Bellingham Technical College, Everett Community College and Whatcom Community College, Workforce Development Council of Seattle-King County, and Year Up. An important partner in the study is the Open Society Foundations (OSF), which provided resources for many of the programs in the PACE evaluation to expand their scale to meet the requirements of the evaluation, to enhance services in specific areas, or both. Support was also provided to specific sites by The Joyce Foundation and Kresge Foundation.

Data collection activities include two rounds of implementation research visits, two follow-up surveys with individuals in the study, and acquisition of site-specific and national administrative records on education and employment-related outcomes. The evaluation team will produce a series of reports including: program profiles for each of the PACE partner sites, site-specific implementation reports documenting the operation of the program, and site-specific impact reports examining the effect of the program on education, employment, and other related outcomes, including a cost-benefit analysis.

The PACE team includes:

Primary Evaluation Sponsor
The Office of Planning, Research and Evaluation (OPRE), Administration for Children and Families, U.S. Department of Health and Human Services

Other Project Sponsors
Foundations and federal agencies have provided generous grants to support programs in PACE including:
The Open Society Foundation’s Special Fund for Poverty Alleviation www.soros.org
The Joyce Foundation www.joycefdn.org
The Kresge Foundation www.kresge.org
The Meadows Foundation www.mfi.org

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For More Information
www.career-pathways.org