







PACE CAREER PATHWAYS PROGRAM PROFILE:

Madison Area Technical College Patient Care Pathway Program

May 2013





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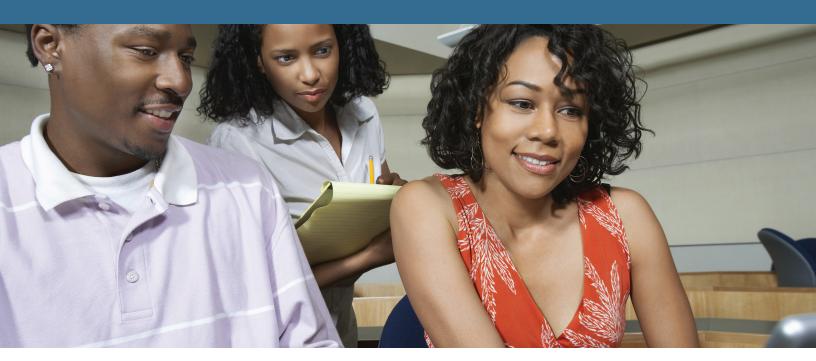
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Introduction

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 goodpaying 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 lowskilled 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.

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 Madison Area Technical College (MATC) *Patient Care Pathway Program (PCPP).*² Designed and operated by MATC in Madison, Wisconsin, PCPP targets students who otherwise would not be able to pursue a post-secondary degree in the health field because of their low skill levels. It is designed to accelerate entry into college-level healthcare programs by allowing students to pursue basic skills and occupational training simultaneously. The program also provides supports and advising.

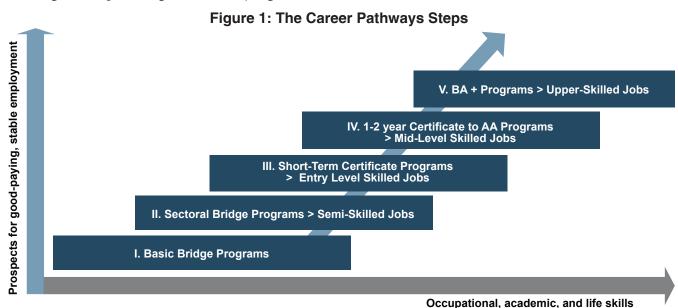
This profile first describes the career pathway framework used in the PACE evaluation, a framework that provides a common approach for describing and assessing career pathways programs, and then discusses MATC's PCPP model and how it fits within the career pathway framework.³

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.

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 lowskilled 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.

MATC's Patient Care Pathway Program

PCPP targets low-skilled adult learners and includes key components of the career pathways model. It features accelerated entry into college-level degree or diploma programs in health for those with skill levels too low to meet entry requirements. The instruction is contextualized, allowing students to build knowledge about the healthcare field while simultaneously increasing their basic skills. Additionally, the program provides a range of support services to encourage students to complete classes, address issues they may face, and plan for future academic, occupational, and employment opportunities.

Program Goals, Target Population and Structure

PCPP is operated by the MATC School of Online and Accelerated Learning, which is responsible for a range of occupational trainings for returning adults. MATC developed PCPP to promote enrollment in and accelerate completion of collegelevel healthcare programs for lower-skilled students. Many students cannot enter their chosen one- or two-year healthcare program each year due to low basic skills. Of those students, 75 percent never complete the necessary remediation to raise their skills and thus do not enroll in a health program. This is likely because remediation can add up to three semesters of school work. PCPP was designed to improve persistence and completion among low-skilled students.

PCPP targets students who are interested in a healthcare career but score too low on the COMPASS® test to enroll in MATC's six one-year health diploma programs (Medical Coding, Advanced Medical Coding, Massage Therapy, Medical Assistant, Optometric Technician, and Licensed Practical Nurse) or eight twoyear health degree programs (Associate Degree Nursing, Dental Hygiene, Medical Lab Technician, Occupational Therapy Assistant, Physical Therapy Assistant, Radiography, Respiratory Therapy, and the one-year Surgical Technician Diploma).4 In the absence of the program, students would first have to raise their skill levels, potentially through basic education courses. They then would move to the course prerequisites

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needed for enrollment, a sequence that may take several semesters. In comparison, PCPP provides basic education in parallel with field-specific coursework within one semester.

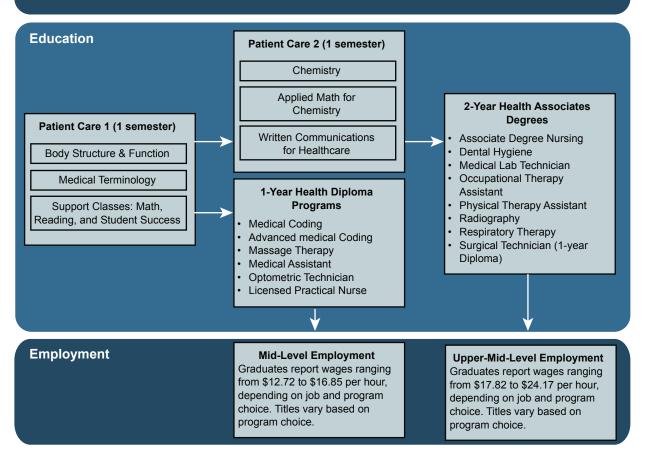
PCPP students generally are at an 8th-10th grade level equivalent in their reading or math skills. Although a high school diploma or GED is not required for program entry, most students have a secondary credential since one is required for entry into college programs. The program does not have an income eligibility requirement, but staff report

that the majority of students are low income.

Within the PACE career pathways model, PCPP is designed so that individuals enter a sectoral bridge program (step II in Figure 1) and then move to one-or two-year diploma or degree programs (step IV). PCPP provides two tracks: Patient Care Academies 1 and 2. Where a student starts depends on his or her interests (diploma or degree) and skill level (as assessed by the COMPASS®). **Figure 2** depicts the PCPP academies and associated pathways, including the six diploma and eight degree programs available. The

Figure 2. PCPP Course Content and Career Pathway

Target Population: Individuals interested in health careers who have placement test scores too low to begin in the programs in the traditional manner. Students interested in a one-year Health Diploma program would take PCA 1. Students interested in a Health Associates Degree program (or the one-year Surgical Technician diploma) can start with either PCA 1 or PCA-2 depending on their placement test scores.



specific program components are described in the next section. Briefly:

- Patient Care Academy 1 (PCA 1) is designed for students interested in a one-year health diploma whose COMPASS® scores are too low to enter directly into the program of choice. As well, students interested in a two-year degree program but who do not have the requisite skills to enter PCA 2 start at PCA 1. During the one-semester academy, students complete a series of non-credit adult basic skills classes and two for-credit health courses needed for the diploma programs. After completing PCA 1, students can move into a one-year health diploma program, if they meet the program admission-required COMPASS® test scores, or they can move into PCA 2 which will prepare them to pursue a two-year degree program.5
- Patient Care Academy 2 (PCA 2) is designed for students interested in pursuing a two-year health Associate's Degree or the one-year Surgical Technician program and whose COMPASS® scores are too low to enter these programs but high enough to test out of PCA 1. While the Surgical Technician program is a one-year diploma, it is most appropriate for those who complete PCA 2 because Chemistry is a prerequisite for the program. Over the course of the semester, students enroll concurrently in Math and Chemistry (rather than taking them sequentially as is typically required) and also take

Written Communications for Healthcare, a course requirement for all of MATC's two-year health programs. Students receive credits for the Chemistry and Written Communications courses. After completing PCA 2, students have fulfilled needed prerequisites for the two-year diploma programs in one semester. PCA 2 completers do not need to retake the COMPASS®; they are directly eligible for their degree programs.

Although students do not receive a certificate or credential at the conclusion of the academies, they are able to move more quickly into the health diploma and degree programs. Each PCA course is staffed by its respective department—the Department of Arts and Sciences operates Written Communications and Chemistry, the Adult Basic Education department operates the basic skills courses, and the Health Department provides occupational skills courses. Staff at the School of Online and Accelerated Learning coordinate the program and provide the advising component. The Admissions department is a key partner for assisting students in enrolling in college programs after completing PCA 1 or PCA 2. Program recruitment is supported by MATC's testing department as well as the local Workforce Investment Board and other local partners.

PCPP builds on existing MATC programs in the manufacturing, information technology, business technology and healthcare fields. It aims to improve students' academic and occupational skills and prepare them to transition to college and earn a post-secondary credential.

Ultimately, PCPP strives to help students obtain diplomas and degrees so they can secure a good job or advance to a higher level in the healthcare field and improve their overall economic, personal and family well-being.

Career Pathway Components

Career pathways programs draw from a wide repertoire of services strategies to address the academic and non-academic needs of participants. PCPP incorporates promising approaches to academic and non-academic assessment, basic skills instruction and occupational training, and student supports. PCPP also involves employers in program design. Each approach is described below.

Assessment

PCPP uses the COMPASS® test to assess students' academic skills and determine program placement. COMPASS® is an untimed, computer-based assessment used to gauge academic skill level in math, reading, writing, and English as a Second Language (ESL). Some instructors also use the test scores to help gauge initial student skill level and adjust lessons accordingly.

PCPP also administers a non-academic barriers assessment at the beginning of each academy. Staff created the barriers assessment, which asks students to report:

- Long-term academic and career goals;
- Current employment status and schedule;
- Financial aid status and needs;
- Other coursework being taken;
- Non-academic barriers such as lack of childcare, difficulty paying bills, lack of housing, etc.; and
- Criminal background.

PCPP advisors use the non-academic assessment results in their discussions with students. Starting in

the first advising session, staff and students discuss the reported barriers and potential solutions, including referrals to other service providers as needed.

Curriculum

Both Patient Care Academies include credit-based healthcare-related courses and non-credit basic skills courses. PCA 1 and PCA 2 classes are scheduled consecutively on two (PCA 1) or three (PCA 2) days each week to accommodate working students.⁶

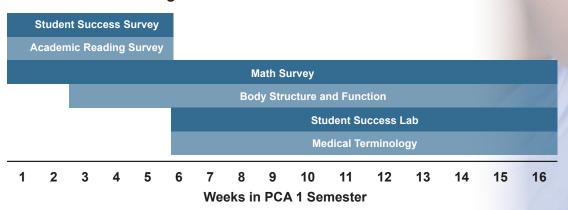
The curriculum of PCA 1 includes:

- Two health diploma prerequisite courses Medical Terminology and Body Structure and Function which provide students with an introduction to fundamentals in health;
- One Lab course that provides unstructured time for the health instructor to answer questions or review material;
- Two classes focused on contextualized basic skills in reading and math – Academic Reading Survey and Math Survey; and
- One course Student Success Survey that
 provides structured instruction in a range of
 non-academic topics including study skills, time
 management, computer skills, financial advising,
 and strategies for navigating college.

All courses are delivered over a 16-week period. The program is designed so that basic skills courses are contextualized for the health field and emphasize "college success" strategies, such as helping students work on time management, goal setting, study skills, and computer skills. While the basic skills and content courses are separate classes, students take all of the courses together as a cohort and instructors work collaboratively to develop the curriculum and communicate about student progress throughout the semester.

As shown in **Figure 3**, the PCA 1 courses are staggered





throughout the semester so that at any time students are enrolled in no more than four courses. For the first two weeks of the academy, students take only the Reading, Student Success, and Math basic skills classes. In the third week of the semester, the Body Structure and Function course begins. After five weeks, the Reading and Student Success classes end and the Medical Terminology course and Student Success Lab begin. Students spend about 12.5 hours in class each week, with the exception of the first two weeks when they are in class approximately 6.5 hours per week.

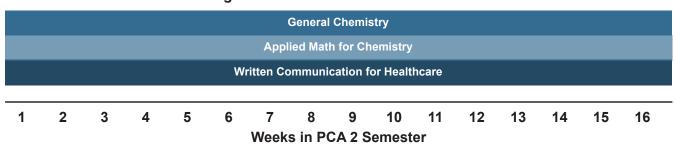
Over the course of the semester, students complete a total of 64 hours in Math Survey, 12 hours in Academic Reading, 24 hours in Student Success Survey, 56 hours in Body Structure and Function, 55 hours in Medical Terminology, and 22 hours in the Student Success Lab. Upon completion, PCA 1 students will have earned 6 credits towards a health diploma, which require between 19 and 33 credits.

PCA 2 includes three courses completed over a 16-week period:

- Chemistry a prerequisite for all twoyear health degree programs – provides college-level Chemistry instruction utilizing, when possible, examples and activities from the health field;
- Applied Math for Chemistry supports the PCA 2 Chemistry course and was developed jointly by the adult basic skills and chemistry faculty; and
- Written Communication for Healthcare is a degree requirement for all health programs and is contextualized for the health field.

Unlike the traditional course route, which requires students to take Math and Chemistry sequentially, PCA 2 students take Applied Math and Chemistry concurrently, thus accelerating their completion of prerequisites and entry into degree programs. The instructors collaborate so that the courses are aligned and, like PCA 1, students take all of the classes together as a group. While the PCA 1 classes are staggered throughout the semester, each of the PCA 2 courses runs for the full semester, as shown in **Figure 4**. PCA 2 students are in classes

Figure 4: Schedule of PCA 2 Courses



for 12 hours each week for the 16 week semester. Over the course of the semester, students spend 80 hours in Chemistry, 72 hours in Applied Math for Chemistry, and 40 hours in Written Communication for Healthcare. Upon completion, students earn 7 credits: 4 for Chemistry and 3 for Written Communications. PCA 2 completion meets the admissions requirements for most College health programs, which require between 60 and 70 credits.

Supports

PCPP provides a number of supports to students in PCA 1 and PCA 2, including advising, financial and social supports.

Advising. A PCPP advisor works with each student to identify potential barriers to success, map career goals, identify course requirements, coordinate instructional support, and make referrals to supportive services as needed. It is expected that each student will meet with the advisor a minimum of three times during the semester, and more frequently as needed. Throughout the semester, the advisor also works with the instructors to monitor students' class performance and coordinate instructional supports, such as tutoring, as needed.

 Advising session 1 occurs by the third week in the semester. The student and advisor discuss career and academic goals, early experiences with academy courses, potential barriers to completion, and resource gaps.

- Advising session 2 occurs between weeks three and nine. The advisor and student revisit career and academic goals based on students' exposure to course content and difficulty level; map a plan for completing the required program coursework; set realistic goals based on an understanding of the wage range, work schedule, and tasks associated with the health occupation pursued; and assess student performance and determine any instructional or personal support needs.
- Advising session 3 occurs between week ten and the end of the semester. The advisor reviews the career and educational goals of the student and assists in identifying and completing next steps, including helping the student register for classes for the following semester.

Financial Assistance. Students are required to pay for both

Investing in Advising

"Case management-style intensive advising has the potential to make a huge difference in student outcomes, especially our academically disadvantaged or lower-skilled students. Because so many of them are inexperienced navigating the college system, they can easily become discouraged, confused or caught up in college processes that they don't understand. Our students need someone to be their 'point-person', someone who ties all of the pieces of the college, work and life puzzle together and helps them navigate any hurdles"

-- PCPP Advisor

Patient Care Academies. The cost is based on credit hour. Because non-credit courses are free, PCA 1 is less expensive than PCA 2 (\$800 versus \$980). PCPP does not provide direct financial assistance; however, advisors work with students to help navigate the college's financial aid system and fill out the Free Application for Federal Student Aid (FAFSA). PCPP students rely heavily on Federal aid, particularly Pell grants and subsidized and unsubsidized loans. About five percent also receive Workforce Investment Act (WIA) Individual Training Account (ITA) funds or veterans benefits. The state Division of Vocational Rehabilitation is also a potential funding source for program

Why PCPP uses the Cohort Model

PCPP advisors describe several benefits of the cohort-based structure of the PCPP, including:

- Students are able to meet people who are often at the same life stage and experience similar challenges inside and outside the classroom.
- Bonds are formed among cohort students. They
 work together to solve problems, study, and
 keep one another engaged and motivated. For
 example, one PCPP student had to miss a few
 days of class for a medical issue, and the class
 worked together to figure out who would bring
 her the notes before she returned so she could
 come back to class prepared.
- The relationships formed during the PCAs are often long-lasting. Students tend to maintain these relationships after the program has ended. For example, two recent PCA 2 graduates still take all of their classes together, study together, and share a tutor. This is the case even though they live more than 50 miles apart. One of the students drives several miles to take classes with the other student who has to juggle school, work, and childcare. In many cases, the benefits of the cohort supports continue beyond the one-semester program.

participants. Advisors may refer students to these programs if they are eligible and will also help students complete any necessary paperwork. PCPP staff can also access the School of Online and Accelerated Learning's emergency fund to assist students with short-term financial needs, such as removing a financial hold on a MATC account or covering a car repair.

Social Supports. PCPP's cohort-based structure is designed to facilitate social support and camaraderie among students. Entering students take all of the courses as a group, with the goal of being able to support one another both academically and socially by forming study groups, working together outside of class, and providing encouragement (e.g., if a student misses class, others will follow up to learn why).

Employment Connection

PCPP is designed to be the first step on the academic ladder. As such, academy completers are encouraged to continue to the next step, be it PCA 2, a diploma program or a two-year degree. Although the program does not directly provide employment connections such as job search assistance, resume building support, job shadowing, or internships, the local Workforce Investment Board and its healthcare alliance were involved in the development of the PCA 1 curriculum. Additionally, the health degree and diploma programs into which PCA 1 and PCA 2 ladder each has an employer-based advisory committee that monitors the job market, industry changes, and the appropriateness of the course curricula.

Comparison of PCPP to other

MATC Offerings

MATC's PCPP incorporates the core career pathways components. The package of services available to participating students is more robust than those available to low-skilled students enrolled in other MATC classes. As noted above, PCPP is being evaluated as part of PACE. Students assigned at random to receive the program will have access to additional barriers assessment; curriculum that is contextualized and collaboratively taught; the ability to enroll immediately in college-level coursework; a specified minimum number of advising sessions; and an emergency fund for short-term financial needs. Those not assigned to the program group will have access to other MATC offerings. The general pathway for low-skilled students who cannot enter directly into a health diploma or degree program is remedial education courses. Figure **5** below illustrates the different career pathway services available to PCPP students and to those who enroll in regular MATC basic skills courses.

Summary

MATC developed the Patient Care Pathway Program in an effort to improve low-skilled students' academic and occupational skills, prepare them for transition to college degree and diploma programs and ultimately secure employment in the healthcare field. PCPP combines accelerated entry into college-level degree or diploma programs in healthcare with instruction that is contextualized, and a range of support services to encourage students to complete classes, address issues they may face, and plan for future academic, occupational, and employment opportunities. In the absence of PCPP, low-skilled students interested in enrolling in healthcare diploma and degree programs would first have to raise their skill levels, potentially through basic education programs, and then move to the course prerequisites needed for enrollment. This sequence may take several semesters, compared to the one-semester Patient Care Academies.

For more information about PCPP, go to http://madisoncollege.edu/patient-care-pathways.

Figure 5: Comparison Career Pathway Components Available to PCPP and Other MATC Students

Career Pathway Component	Patient Care Pathway Program	MATC Basic Skills Preparation
Assessment	COMPASS test Barriers Assessment	COMPASS test
Curriculum	Basic skills plus college-level coursework Contextualized basic skills Collaborative instruction	Basic skills completion prior to college-level coursework Non-contextualized basic skills
Supports	 Advising with a minimum of three sessions per semester Guidance on available financial resources Emergency fund for short-term financial needs Access to MATC support services such as tutoring, disability resources, and the career and employment center 	Access to MATC support services such as tutoring, disability resourc- es, and the career and employ- ment center
Employment Connections	Curriculum input from local WIB (for PCA 1) Employer-based advisory committees for MATC's degree and diploma programs	Employer-based advisory committees for MATC's degree and diploma programs

Endnotes

- 1. Carnevale, A., Smith, N., & Strohl, J. (2010). Help Wanted: Projections of jobs and education requirements through 2018. Georgetown Public Policy Institute, Retrieved from https://cew.georgetown.edu/report/help-wanted/.
- 2. PCPP receives support from the Open Society Foundations and the Joyce Foundation. The evaluation of PCPP 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).
- 3. For more information on the PACE framework, see www.career-pathways.org: Fein, David J. (2012). Career Pathways as a Framework for Program Design and Evaluation: A Working Paper from the Pathways for Advancing Careers and Education (PACE) Project. OPRE Report # 2012-30, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- 4. For one-year technical diploma programs, individuals must score a minimum of 80 in reading, 70

in writing, and 55 in pre-Algebra. For two-year degree programs, individuals must score 85 in reading, 78 in writing, and 30 in Algebra.

5. Completers of PCA 1 must retake the COMPASS® test to become eligible for their programs.

6. About two-thirds of PCPP students are employed while enrolled in the program.

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

http://www.acf.hhs.gov/programs/opre/research/project/pathways-for-advancing-careers-andeducation

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/

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