## Patient Care Pathway Program (PCPP)

Findings from the *Implementation and Early Impact Report* | May 2019 | OPRE Report #2019-25

### WHAT ISSUES DID PCPP SEEK TO ADDRESS?

- **Healthcare is expected to be among the fastest growing occupations** over the next decade, creating opportunities to enter skilled career paths.

- Almost all jobs in healthcare require some level of postsecondary education or training.

- Postsecondary institutions often place students who need to improve their basic academic skills in developmental education courses; many students never progress to occupational or other training.

### WHAT WAS PCPP?

- **Launched** in 2011.

- **Operated by** Madison Area Technical College ("Madison College") in Wisconsin.

- **Funded** by Madison College with support from Open Society Foundations and Joyce Foundation grants.

- **Recruited** low-skilled* students interested in careers in healthcare.

### WHAT WAS PCPP’S APPROACH?

- **One-semester healthcare bridge programs** (called Patient Care Academies) for those with skill levels too low to meet entry requirements into college-level diploma or degree programs; Academies included both remedial basic skills courses and occupational training to accelerate entry.

- **Contextualized basic skills** courses in each academy that integrated occupational content into the curricula.

- **Packaged sets of courses** in each academy that provided academic preparation for and a clear pathway toward enrollment in a healthcare diploma or degree program.

- **Proactive advising** designed to help students navigate the college system and program admission process, develop an academic plan, and identify and address academic and non-academic barriers to enhance academic persistence.

* “Low skilled” based on entry-level test scores (ACT Compass™).
WHO ENROLLED IN THE PATIENT CARE PATHWAY STUDY?

For PACE, the program randomly assigned 499 study participants, 250 to the treatment group and 249 to the control group. Across treatment and control members, at the time of study enrollment, participants were predominately female and white, had limited college experience, varied in age, had moderate income levels, and worked at least part-time.

WHAT WAS THE PATIENT CARE PATHWAY PROGRAM MODEL?

Madison College developed three 1-semester academies (“healthcare bridges”) that packaged occupational courses and basic skills courses contextualized with occupational content. Patient Care Academy 1 (PCA1) laddered into Patient Care Academy 2 (PCA2) or a one-year healthcare diploma program. Patient Care Nursing Assistant (PCNA) laddered into PCA1, PCA2, or employment. PCA2 laddered into two-year healthcare degree programs.
WHAT TRAINING DID TREATMENT GROUP MEMBERS ENROLL IN AND COMPLETE?

All Treatment Group Members: 100%

Participated in Any Training: 94%

Participated in PCNA: 8%

Participated in PCA1: 27%
(26% enrolled directly after random assignment; 1% moved from PCNA to PCA1)

Participated in PCA2: 75%
(57% enrolled directly after random assignment; 18% moved from PCA1 to PCA2)

Enrolled Directly in Other Credit-Bearing Courses: 4%

Percentages are of all treatment group members. Percentages showing participation in the Patient Care Pathway academies and other courses at Madison College do not sum to 94% because some students enrolled in multiple academies.

Of those who enrolled in any training...

ACADEMY COMPLETION RATES

PCNA: 50%
PCA1: 81%
PCA2: 78%

EDUCATIONAL PERSISTENCE

Still enrolled at follow-up: 58%
Admitted to PCA1 or PCA2 Healthcare Destination Program: 7%

Of those who enrolled in other courses outside of the Patient Care Pathway Academies...

Obtained a credential: 15%
WHAT WERE THE IMPACTS OF PCPP ON EDUCATION AND TRAINING?

The program did not increase the number of college credits earned 18 months after random assignment.

**NUMBER OF COLLEGE CREDITS EARNED (AVERAGE)**

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<thead>
<tr>
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<th>Treatment Group</th>
<th>Control Group</th>
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<tbody>
<tr>
<td>Earned</td>
<td>12.0</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Difference is not statistically significant

**Sample size**
- Treatment Group: 250
- Control Group: 249

**Source:** Madison College records data

The program increased the likelihood of enrollment in occupational training, but did not affect average hours of occupational training or receipt of a credential.

Treatment group members were significantly more likely than control group members to enroll in occupational training.

**ENROLLED IN ANY MONTH DURING THE 18-MONTH FOLLOW-UP PERIOD (%)**

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<th>Treatment Group</th>
<th>Control Group</th>
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<tbody>
<tr>
<td>Enrolled</td>
<td>88.1</td>
<td>81.5</td>
</tr>
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6.5**

**Sample size**
- Treatment Group: 250
- Control Group: 249

**Significant at the 5% level**

However, higher enrollment did not increase hours of completed occupational training or credential receipt.

**TOTAL HOURS OF OCCUPATIONAL TRAINING AT ANY INSTITUTION (AVERAGE)**

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<thead>
<tr>
<th></th>
<th>Treatment Group</th>
<th>Control Group</th>
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<tbody>
<tr>
<td>Hours</td>
<td>230.4</td>
<td>226.7</td>
</tr>
</tbody>
</table>

Difference is not statistically significant

**RECEIVED A CREDENTIAL FROM ANY SOURCE (%)**

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<tr>
<th></th>
<th>Treatment Group</th>
<th>Control Group</th>
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<tbody>
<tr>
<td>Received</td>
<td>50.5</td>
<td>48.6</td>
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</tbody>
</table>

Difference is not statistically significant

**Source:** Madison College records and PACE 18-month follow-up survey

Few study participants were admitted to a healthcare “destination” program within 18 months.

PCPP did not increase admission at 18 months, but did have a positive impact at a later follow-up time period.

**ADMITTED TO HEALTHCARE PROGRAM AT 18 MONTHS AFTER RANDOM ASSIGNMENT (%)**

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<thead>
<tr>
<th></th>
<th>Treatment Group</th>
<th>Control Group</th>
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</thead>
<tbody>
<tr>
<td>Admitted</td>
<td>6.8</td>
<td>7.2</td>
</tr>
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</table>

Difference is not statistically significant

**ADMITTED TO HEALTHCARE PROGRAM AT 35 MONTHS AFTER RANDOM ASSIGNMENT (%)**

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<tr>
<th></th>
<th>Treatment Group</th>
<th>Control Group</th>
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</thead>
<tbody>
<tr>
<td>Admitted</td>
<td>27.0</td>
<td>17.3</td>
</tr>
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</table>

9.7***

**Sample size**
- Treatment Group: 250
- Control Group: 249

**Significant at the 1% level**

**Source:** College records

Impacts may not equal the difference between groups due to rounding
WHAT DO WE KNOW ABOUT PATIENT CARE PATHWAY IMPACTS ON EMPLOYMENT?

PCPP positively affected perceived career progress.

Longer-term results will show to what extent PCPP had effects on treatment group members’ employment outcomes.

AVERAGE SCORE ON A 4-POINT SCALE

| Score | 3.57 | 3.43 |

0.14**

Sample size:
- Treatment Group: 181
- Control Group: 173

** Significant at the 5% level

This data shows that 54 percent of treatment group members scored higher on the perceived career progress measure than did the average member of the control group.

TREATMENT GROUP MEMBERS WERE LESS LIKELY TO BE WORKING AT A JOB REQUIRING AT LEAST MID-LEVEL SKILLS (%)

| | | |

12.6 | 20.9 |

-8.4**

One potential explanation for this finding is that more treatment group members than control group members were still in training in the last six months of the follow-up period (65 percent of the treatment group compared to 56 percent of the control group; a statistically significant difference of 10 percentage points).

Source: PACE 18-month follow-up survey

Impacts may not equal the difference between groups due to rounding

FACTORS THAT MAY HAVE INFLUENCED PROGRAM IMPACTS

Though the Patient Care Pathway Program did increase low-skilled adults’ likelihood of college enrollment, it did not affect other key educational outcomes, including total number of college credits, hours of completed occupational training, or credential receipt. Two factors likely contributed to the absence of program impacts.

The Patient Care Pathway Program advising was less intensive than planned, which may have lessened the difference between the experience of treatment group members versus control group members. The program design called for proactive advising, with a recommended minimum of three advising sessions per student each semester. In practice, advisors limited proactive outreach to those students deemed most at risk of failing a course or dropping out of an academy. Less than half of students reported receiving three academic advising sessions.

The program was designed to accelerate entry into healthcare diploma and degree programs by condensing the amount of time needed for remediation through the Patient Care Academies, but it did not address college policies that delayed students’ entry into healthcare diploma and degree programs.

Test of Essential Academic Skills (TEAS) assessment. Partway through the study period, Madison College healthcare programs began requiring that students pass the TEAS assessment prior to program admission. Madison College staff reported that a large share of students at the college failed to achieve the required TEAS scores.

Annual application window. Many two-year healthcare programs had short annual application windows, which, depending on when students completed the program, could result in a wait of up to a year for that enrollment window to open.

Application window one year in advance of enrollment date. Some healthcare programs required that students apply one year in advance of the program start date. Even after successfully being admitted, a student’s actual program start date might not occur until the following year.

Long waitlists for healthcare programs. Many healthcare programs had one- to two-year waitlists, which delayed students’ enrollment and completion of core courses once they were admitted to their “destination programs.” The long waitlists were a barrier to steady program progress and completion because students could not enroll in core program courses and may have had little or no coursework to complete while waiting.

PACE Evaluation: Patient Care Pathway Program
POTENTIAL DELAYS FOR A HYPOTHETICAL STUDENT

HOW DID LEADERSHIP LEARN FROM AND REFINE THE PROGRAM DURING THE EVALUATION?

Though the Patient Care Pathway Program model remained relatively constant over the study period, Madison College program leaders modified some program elements with a goal of helping students succeed academically.

- Program instructors designed and implemented a **workshop to help students prepare for the TEAS assessment** (an exam that became required for healthcare degree program admission partway through the study period).

- The program advisor organized **group tutoring for students** who showed a need for instructional support or expressed an interest in receiving it.

- In response to student difficulties with the PCA2 Chemistry course, the program added a **supplemental instructor to provide students with additional support**.
What is PACE?
The Pathways for Advancing Careers and Education (PACE) evaluation uses a random assignment methodology to assess the effectiveness of nine career pathways programs targeting low-income, low-skilled individuals on credential attainment, employment, and earnings. Key features of career pathways programs include:

1. A series of well-defined training steps;
2. Promising instructional approaches targeted to adult learners;
3. Services to address academic and non-academic barriers to program enrollment and completion; and
4. Connections to employment.

This brief summarizes findings from the implementation study and impacts 18 months following study intake. The study is funded by the Administration for Children and Families, U.S. Department of Health and Human Services.

Next steps in the PACE evaluation of the Patient Care Pathway Program

The next Patient Care Pathway Program report will cover a 36-month follow-up period and will continue to examine educational outcomes, as well as employment outcomes, such as average rate of employment and average earnings over successive follow-up quarters, and job characteristics, such as occupation, hourly wage, receipt of benefits, and career progress. Later, an analysis at 72 months after random assignment will estimate long-term effects of the Patient Care Pathway Program.


The Office of Planning, Research, and Evaluation (OPRE) studies Administration for Children and Families (ACF) programs and the populations they serve through rigorous research and evaluation projects. These include evaluations of existing programs, evaluations of innovative approaches to helping low-income children and families, research syntheses, and descriptive and exploratory studies. OPRE also works to improve the analysis of data and coordinate performance management for ACF.

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