



RAY MARSHALL CENTER  
for the Study of Human Resources



# CareerAdvance<sup>®</sup> Implementation Study Findings Through July 2014



Prepared for the Health Profession Opportunity Grant Program  
Administration for Children and Families  
U.S. Department of Health and Human Services

# **CareerAdvance<sup>®</sup> Implementation Study**

## **Findings through July 2014**

**Prepared for the Health Profession Opportunity Grant Program  
Administration for Children and Families  
U.S. Department of Health and Human Services**

Tara Smith  
Kristin Christensen  
Christopher King

**October 2014**



---

3001 Lake Austin Blvd., Suite 3.200  
Austin, TX 78703 (512) 471-7891

[www.raymarshallcenter.org](http://www.raymarshallcenter.org)

This report was prepared with funds provided from Grant# 90FX00100 from the Administration for Children and Families, U.S. Department of Health and Human Services. The views expressed here are those of the authors and do not represent the positions of the funding agency or The University of Texas at Austin.

## TABLE OF CONTENTS

List of Tables .....	ii
List of Figures .....	iii
Glossary of Acronyms and Abbreviations.....	1
Acknowledgments.....	2
About CareerAdvance® .....	3
Executive Summary.....	5
CareerAdvance® Implementation Study Update .....	6
through July 2014 .....	6
Implementation Study Research Questions .....	7
Research Data Sources.....	7
Organization of this Report.....	7
Key Program Modifications Over Time.....	8
Career Training Options.....	8
Nursing Career Pathway .....	8
Health Information Technology Pathway.....	10
Other Career Training Options .....	11
Changes in recruitment and enrollment.....	12
Basic Skills Preparation .....	16
Partner Meeting Modifications.....	19
CareerAdvance® Participation and Progress .....	21
Demographics of Participants.....	21
Nursing Pathway Participation and Progress.....	24
Health Information Technology Pathway Participation and Progress .....	27
Participation and Progress in Other Healthcare Career Training .....	30
Summary of Program Outcomes .....	31
July 2014 Participation Snapshot.....	32
Factors that Support or Impede Participant Progress .....	34
Findings from Focus Group Sessions .....	34
Supportive Factors.....	34
Impeding Factors .....	35
Findings from Exit Interviews.....	35
Summary of Exit Interview Participants .....	36
Exit Reasons .....	37
Exits for Employment.....	39
Summary and Next Steps.....	43

**LIST OF TABLES**

Table 1. Changes in CareerAdvance® Eligibility Standards, Application Requirements, and Selection Criteria..... 13

Table 2a. Application, Selection, and Enrollment Data for Nursing Cohorts ..... 14

Table 2b. Application, Selection, and Enrollment Data for HIT Cohorts ..... 14

Table 2c. Application, Selection, and Enrollment Data for Other Training Cohorts ..... 15

Table 3. Entry TABE® Test Scores by Nursing and Other Occupation Cohorts..... 17

Table 4a. Entry COMPASS® Test Scores by Nursing Cohorts ..... 18

Table 4b. Entry COMPASS® Test Scores by All Other Training Cohorts ..... 19

Table 5. Profile of CareerAdvance® Participants and Families, Cohorts 1-9 ..... 21

Table 6. Participant Progress in Nursing Pathway through July 2014 ..... 24

Table 7. Participant Progress in Training for HIT Pathway through July 2014 ..... 27

Table 8. Participant Progress in Other Healthcare Career Training Programs ..... 30

Table 9. Training Outcomes Summary through July 2014..... 32

Table 10a. CareerAdvance® Nursing Participants: Status as of July 2014..... 32

Table 10b. CareerAdvance® Participants in All Other Training Options: Status as of July 2014.. 33

Table 11. Employment Information at Exit from CareerAdvance®, by Exit Point ..... 40

## LIST OF FIGURES

Figure 1. CareerAdvance® Pathway in Nursing through July 2014.....	9
Figure 2. CareerAdvance® Pathway in Health Information Technology as of July 2014.....	10
Figure 3. CareerAdvance® Occupational Training Programs .....	12
Figure 4. CareerAdvance® Application through Enrollment Summary .....	15
Figure 5. Number of Enrollees Per Child Care Center, Cohorts 1-9.....	16
Figure 6. Progress Along Nursing Career Pathways through July 2014.....	26
Figure 7. Health Information Technology (HIT) Pathway through July 2014 .....	29
Figure 8. Other Healthcare Occupations Offered by CareerAdvance® .....	31
Figure 9. Reasons for Exit from CareerAdvance®, by Exit Point .....	38
Figure 10. Exiter Ratings of CareerAdvance® Program Elements.....	41

## **GLOSSARY OF ACRONYMS AND ABBREVIATIONS**

ACF.....	Administration for Children and Families
ADN.....	Associate’s Degree in Nursing
ANS.....	Academic Nursing Skills
AUA.....	Advanced Unlicensed Assistant
CAP or CAP Tulsa .....	Community Action Project of Tulsa County
CNA.....	Certified Nurse Aide
EPP.....	Educational Pathways Program
GED.....	General Educational Development
GPA.....	Grade Point Average
HESI.....	Health Education Systems, Inc.
HIT.....	Health Information Technology
HPOG.....	Health Profession Opportunity Grant
LPN.....	Licensed Practical Nurse
MA.....	Medical Assisting
NCLEX-PN.....	National Council Licensure Examination – Practical Nurse
NCLEX-RN.....	National Council Licensure Examination – Registered Nurse
PCT.....	Patient Care Technician
Pharm Tech.....	Pharmacy Technician
Pre-Reqs.....	Pre-requisite courses in a degree program
RN.....	Registered Nurse
TABE.....	Test of Adult Basic Education
TCC.....	Tulsa Community College
Tulsa Tech.....	Tulsa Technology Center
UPS.....	Union Public Schools
WIA.....	Workforce Investment Act of 1998

## ACKNOWLEDGMENTS

The authors wish to thank our partners in Tulsa for their support and involvement in this research. Frequent communications with CareerAdvance® and CAP Tulsa staff, including especially Grace Nelson, Megan Oehlke, Valerie Osgood-Sutton, and Monica Barczak, have been invaluable to understanding program changes over time.

We would also like to thank our research partners in the CAP Family Life Study for their support of this work. P. Lindsay Chase-Lansdale and Teresa Eckrich Sommer lead an incredible team at Northwestern University, while Jeanne Brooks-Gunn at Columbia University and Hirokazu Yoshikawa at New York University provide important guidance to keep the research on-track.

Over the last year, Amanda Briggs, our capable graduate research assistant, has been particularly helpful to this work. Finally, we want to thank our administrative support team—Susie Riley, Karen White, and Alanna Burney—who make this all possible.

## ABOUT CAREERADVANCE®

CareerAdvance®, administered by the Community Action Project of Tulsa County (CAP Tulsa), is a program for training parents of Head Start and Early Head Start children.<sup>1</sup> It is part of an explicit two-generation strategy focused on promoting family economic security by developing the human capital of parents while their preschool children are achieving in a resource-rich learning environment. CareerAdvance® builds on CAP Tulsa's strong system of Early Head Start and Head Start centers by adding high-quality career-oriented training for parents in occupations that offer family-supporting income, benefits, and opportunities for career advancement in the healthcare sector.

The program began in 2009 as a career pathway program for parents interested in pursuing nursing occupations in the growing healthcare sector. After the initial pilot year, CareerAdvance® moved into regular operations and was subsequently (September 2010) awarded a 5-year expansion grant through the Health Profession Opportunities Grant Program (HPOG) from the Administration for Children and Families (ACF) at the U.S. Department of Health and Human Services. This grant has enabled the program to serve more parents by expanding its training options into other healthcare career pathways, including health information technology and other allied health professions (e.g., medical assisting, pharmacy technician, dental assisting, radiography, and physical therapy assistant).

Key components of the CareerAdvance® program model include:

- A sector-focused career pathways training approach that is generally organized as a progressive, stackable series of trainings, with each step resulting in a credential valued by employers. Training is provided by Tulsa Community College (TCC) and Tulsa Technology Center (Tulsa Tech).
- Career Coaches who serve as counselors, mentors, guides, and advocates for participants help them learn to navigate the often unfamiliar world of postsecondary education. The coaches meet regularly with individual participants to develop goals and career advancement plans and connect them with support services and other resources. Coaches also facilitate partner meetings, which provide a forum for participants to reflect on their experiences, conduct group problem-solving sessions, hear guest speakers address a variety of topics, and practice other skills.

---

<sup>1</sup> For more information about CareerAdvance® see: <http://captulsa.org/our-programs/family-advancement/careeradvance/>

- Peer support networks are facilitated early in the program through weekly partner meetings and cohort-based instruction. Participants benefit from strong connections to other students who are in similar situations (i.e., parents of young children), form study groups, carpool, and encourage each other to persevere.
- Performance incentives provide participants the possibility of earning up to \$3,000 annually to help off-set some of the costs of participation (such as foregone earnings). Participants can earn up to \$200 per month for regular attendance, and bonuses of up to \$300 for accomplishing specific milestones and maintaining at least a B average in all classes attempted per semester.
- A shared expectations participation agreement that spells out the mutual responsibilities and commitments of the participant and the program to one another.

The *CareerAdvance*<sup>®</sup> program is the subject of a multi-methods evaluation, the CAP Family Life Study, which includes implementation, outcomes, and impacts components led by researchers at the Institute for Policy Research at Northwestern University, the Ray Marshall Center at The University of Texas at Austin, Columbia University, and New York University. Previous reports from the *CareerAdvance*<sup>®</sup> implementation evaluation are available on the Ray Marshall Center website at [www.raymarshallcenter.org](http://www.raymarshallcenter.org). A full list of reports on the CAP Family Life Study can be found on the CAP Tulsa website: <http://captulsa.org/innovation-lab/family-life-study/>. Future reports will document additional findings from the implementation study, as well as program outcomes and impacts.

## EXECUTIVE SUMMARY

This report examines changes in the *CareerAdvance*<sup>®</sup> program that directly relate to the experience and progress of participants through July 2014—the end of the fifth program year—and the recruitment of Cohort 10 in spring 2014. A key finding of the implementation study to date is that the Community Action Project of Tulsa County (CAP Tulsa) has approached the design of the *CareerAdvance*<sup>®</sup> program as a continuous improvement process. The program model, its pathways, and other components have all been refined over time to address participant concerns, barriers to progress, and other factors. Because of these changes, few cohorts have experienced exactly the same program. This report examines program modifications over time, documents participation and progress in *CareerAdvance*<sup>®</sup>, and explores factors that appear to impede or support participant progress.

## CAREERADVANCE® IMPLEMENTATION STUDY UPDATE THROUGH JULY 2014

The CareerAdvance® implementation study seeks to document the program as it has evolved from a pilot project, which started in August 2009, into regular operations and subsequently expanded. The study examines modifications in program design in order to understand how, when, and why changes were made. It is an essential source of information for interpreting the outcomes and impacts of CareerAdvance® participation as part of the CAP Family Life Study.<sup>2</sup> Five prior reports document implementation study findings from the pilot demonstration phase in 2009-2010 through the recruitment of Cohort 8 in summer 2013.<sup>3</sup>

This update examines key changes in the CareerAdvance® program that directly relate to the experience and progress of participants through July 2014 (the end of the fifth program year) and the recruitment of Cohort 10. The Community Action Project of Tulsa County (CAP Tulsa) has approached the design of the CareerAdvance® program as a continuous improvement process. As a result, the program model, training offerings, participant eligibility, key features, support services, and other characteristics have all changed over time. These modifications have been driven by diverse factors, including the needs of CAP Tulsa parents, policy changes by education and training providers, and labor market demands. One goal of the implementation study is to track how these program changes affect participant outcomes.

<sup>2</sup> For more information on the CAP Family Life Study (FLS) see: <http://captulsa.org/innovation-lab/family-life-study/>

<sup>3</sup> All reports available at: [www.raymarshallcenter.org](http://www.raymarshallcenter.org)

<b>CareerAdvance® Timeline</b>		
<b>Pilot Demonstration Phase</b>	May 2008	Began labor market and education/workforce systems analyses
	Dec. 2008	Outlined program components
	July 2009	Established partnerships with Tulsa Community College (TCC) and Tulsa Technology Center (Tech)
		Nursing recruitment
	Aug. 2009	1 <sup>st</sup> nursing cohort begins with Certified Nurse Aide (CNA) training
	May 2009	Nursing recruitment
<b>Expansion Phase</b>	Aug. 2010	2 <sup>nd</sup> nursing cohort begins with CNA
	Sep. 2010	Received Health Professions Opportunity Grant (HPOG) award from US Dept. of Health & Human Services
	Oct. 2010	Nursing recruitment
	Jan. 2011	3 <sup>rd</sup> nursing cohort begins
	Apr. 2011	Health Information Technology (HIT) pathway introduced
		Nursing and HIT recruitment
	May 2011	Recruitment expands beyond CAP facilities
	Aug. 2011	Patient Care Technician training launched as part of the nursing pathway
		4 <sup>th</sup> cohort begins with nursing and HIT participants
	Sep. 2011	Nursing and HIT recruitment
		CAP Family Life Study receives HPOG University Partnership funding
	Jan. 2012	5 <sup>th</sup> cohort begins with nursing and HIT participants
	Mar. 2012	1 <sup>st</sup> contracted PCT training class at TCC begins
	Apr. 2012	Nursing, HIT, and Medical Assisting (MA) recruitment
Aug. 2012	6 <sup>th</sup> cohort begins with nursing and HIT career path participants as well as participants solely seeking MA training	

## Implementation Study Research Questions

The implementation evaluation of CareerAdvance® seeks to answer three key research questions:

1. How has CareerAdvance® changed over time and why?
2. What progress have CareerAdvance® participants made over time?
3. What program and institutional factors contribute to or impede participant progress through CareerAdvance®?

This report will present findings related to each of these questions through July 2014.

## Research Data Sources

The study draws on multiple sources of data to answer the research questions, including:

- Monthly calls with CareerAdvance® staff
- Interviews with CAP Tulsa and CareerAdvance® staff as well as key partners, such as employers and training providers
- CAP Tulsa program and family records through the Child-Plus data system
- CareerAdvance® participant progress data and administrative records
- Reviews of CareerAdvance® program documents, marketing materials, and other resources
- Participant and Career Coach focus group sessions
- Participant exit interviews

## Organization of this Report

Following this brief introduction, the report is divided into three main sections: key program modifications over time; CareerAdvance® participation and progress; and factors that impede or support participant progress. The final section provides a report summary and details next steps for the implementation study.

### CareerAdvance® Timeline

Aug. 2012	Planning for the Educational Pathways Program (EPP) begins
Sept. 2012	Pharmacy Tech training option introduced
	Nursing, HIT, and Pharmacy Tech recruitment
Oct. 2012	First two participants accepted for RN program at TCC: one through LPN-to-RN bridge and one through the traditional program
Jan. 2013	7 <sup>th</sup> cohort begins with nursing, HIT, and Pharmacy Tech participants
	First RN students begin program classes at TCC
	EPP's 1 <sup>st</sup> cohort launched
Apr. 2013	Allied Health program introduced
	Nursing, Medical Assisting, Pharmacy Tech, and Allied Health recruitment
Aug. 2013	8 <sup>th</sup> cohort begins training in nursing, Medical Assisting, Pharmacy Tech, and Allied Health
Sept. 2013	Dental Assisting training option introduced
	Recruitment for Nursing, Medical Assisting, Pharmacy Tec, Allied Health, and Dental Assisting
Jan. 2014	9 <sup>th</sup> cohort begins training in nursing, medical assisting, pharmacy tech, allied health, and dental assisting
Apr. 2014	Recruitment for fall cohort begins
July 2014	10 <sup>th</sup> cohort selected for training

## KEY PROGRAM MODIFICATIONS OVER TIME

The growth and refinement of the *CareerAdvance*<sup>®</sup> program is a key focus area for the implementation evaluation. Knowing how and why the program has changed is important to understanding participant outcomes and impacts. Furthermore, the documentation of the program's evolution over time may help to inform the development of other two-generation programs. This section highlights changes to *CareerAdvance*<sup>®</sup> training options and the program's recruitment and enrollment standards, in addition to changes to the structure and frequency of partner meetings.

### Career Training Options

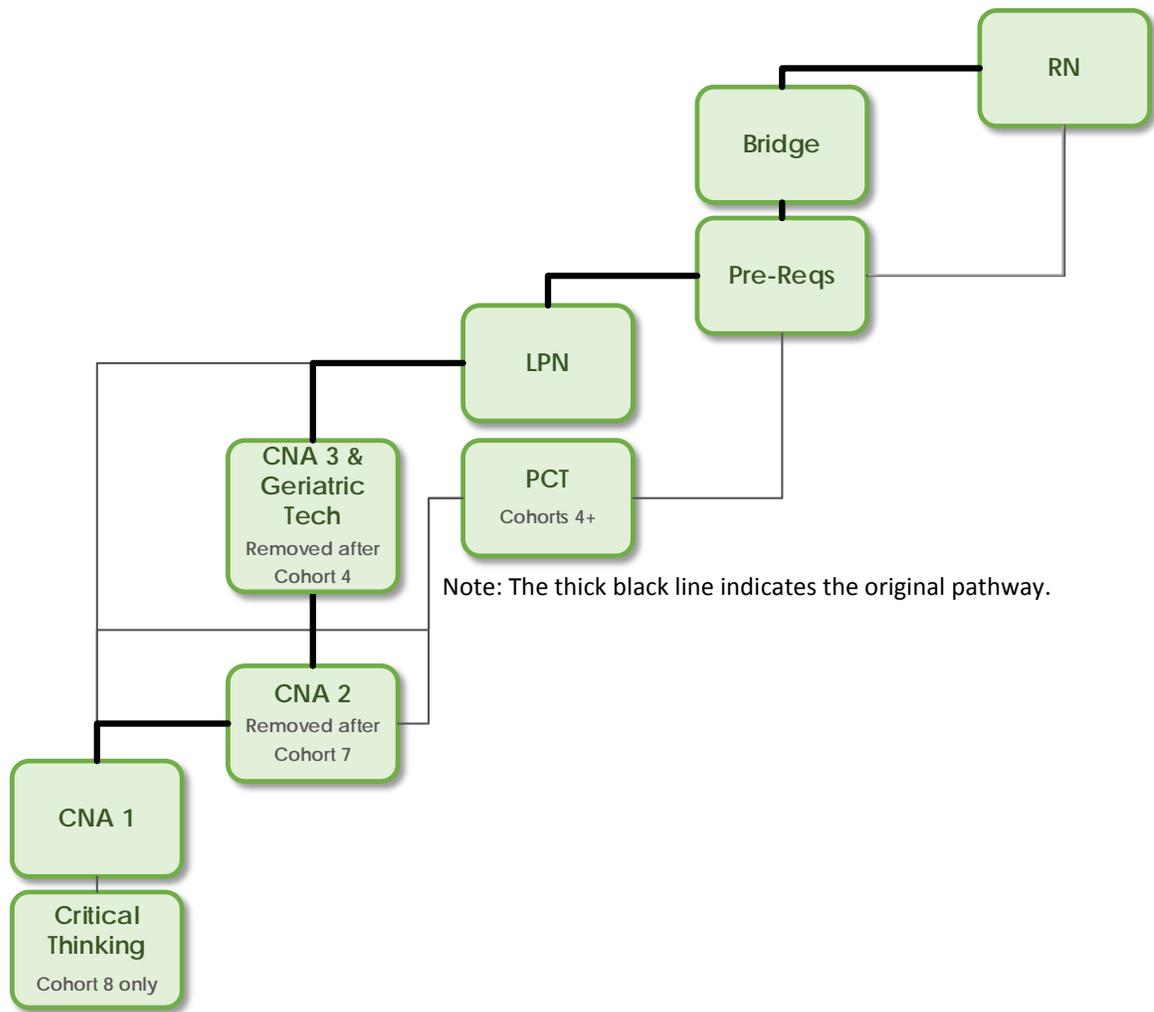
#### *Nursing Career Pathway*

*CareerAdvance*<sup>®</sup> began with a single nursing career training pathway comprised of four sequential steps: Certified Nurse Aide (CNA), Geriatric Technician, Licensed Practical Nurse (LPN), and Registered Nurse (RN). Participant experiences, changes in application and degree requirements at partner education institutions, and other factors have resulted in numerous modifications to the nursing pathway over time. Figure 1 illustrates the complexity of the *CareerAdvance*<sup>®</sup> nursing career pathway as it has evolved between Cohorts 1 through 9. Part of the complexity has resulted from testing and exam hurdles that participants face as they move along the pathway. The introduction of the Patient Care Technician (PCT) training option in Cohort 4 is a key example of this: too few participants in Cohorts 1 through 3 passed the LPN entrance exam to move forward. Other changes were made in response to feedback from students and employers. The elimination of the CNA Level 3 training and its associated Geriatric Technician Certificate after Cohort 4 were a result of evidence that employers did not recognize the credential and feedback from students about the length and utility of the course.

Beginning with Cohort 8, the nursing pathway dropped CNA Level 2 training, and replaced it with "Critical Thinking for Nurses", a class required by TCC in the Registered Nursing sequence. TCC faculty believed that students could benefit from the class earlier in its nurse training programs by helping students build the critical thinking skills needed to succeed in patient care settings. However, the class was dropped from *CareerAdvance*<sup>®</sup> after one

semester as participants, Career Coaches, and TCC faculty determined that the class was not a good fit for students in the CNA sequence. In Cohort 9, CareerAdvance® staff worked with Union Public Schools to develop a “PCT Bridge” class to help CNA participants build foundational science skills before advancing farther along the nursing career pathway. A future report will examine whether participants completing the bridge class have better outcomes in nursing pre-requisite classes.

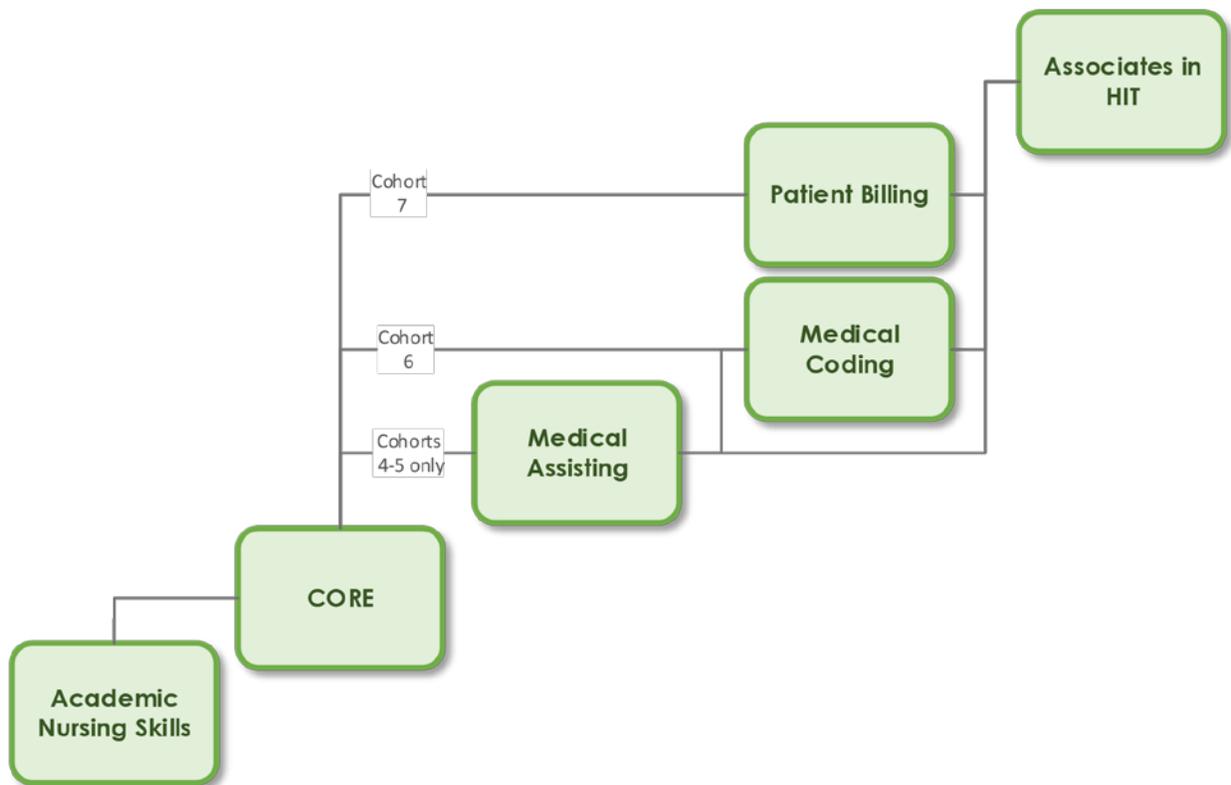
**Figure 1. CareerAdvance® Pathway in Nursing through July 2014**



### Health Information Technology Pathway

The next occupational pathway introduced by CareerAdvance® was the Medical Assisting/Health Information Technology (HIT) pathway in Cohort 4. It has been refined over subsequent cohorts, including the separation of Medical Assisting training into its own training option in Cohort 6. In Cohort 7, a separate patient billing and insurance course at Tulsa Technology Center was added to accommodate participants starting in CareerAdvance® a semester prior to starting in TCC's HIT program. The HIT training option was not offered in the recruitment cycles for Cohorts 8 or 9. Figure 2 below illustrates the various HIT career pathway options that have been offered by CareerAdvance®.

**Figure 2. CareerAdvance® Pathway in Health Information Technology as of July 2014**



### ***Other Career Training Options***

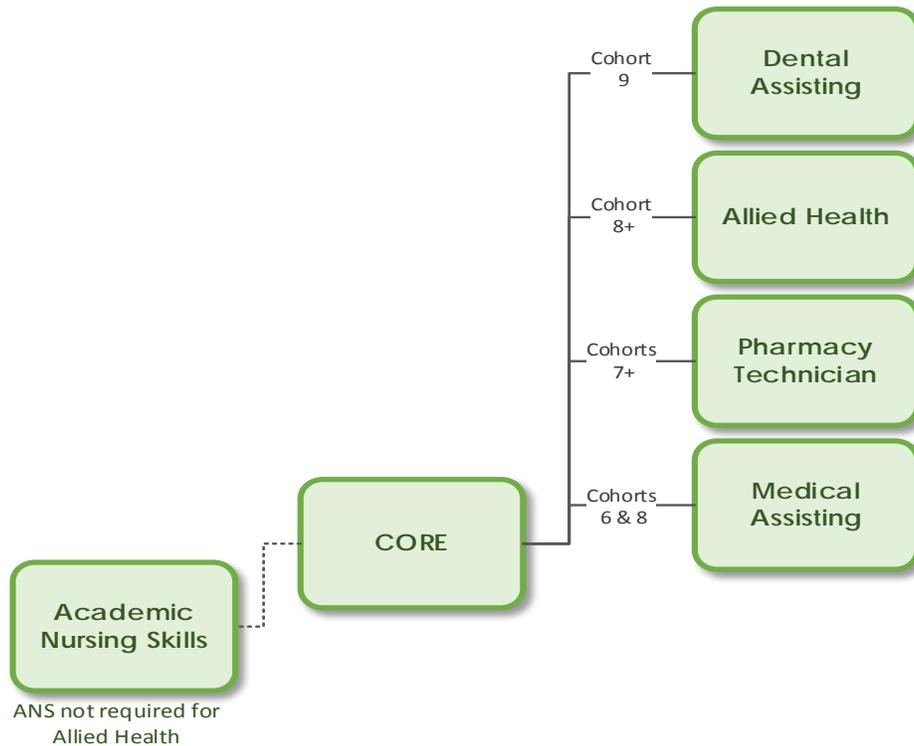
Other occupations<sup>4</sup> supported by the CareerAdvance® program include Pharmacy Technician (added in Cohort 7), Allied Health (added in Cohort 8), and Dental Assisting (added in Cohort 9). Unlike prior CareerAdvance® pathway offerings, the healthcare career training options illustrated in Figure 3 are not explicitly connected to a career pathway with multiple training options. Referenced by CareerAdvance® staff as “one-and-done” trainings, Medical Assistant (9 months), Dental Assisting (10 months), and Pharmacy Technician (6 months) are shorter-term training options targeted at parents who need a quicker connection with living-wage employment than the other pathways may offer. However, starting hourly wages for these occupations also tend to be lower on average (\$10-12/hour for Pharmacy Tech, \$14-19/hour for Dental Assistant, and \$11-19/hour for Medical Assistant) than starting wages for most other CareerAdvance® career pathway options.

Allied Health was first offered to Cohort 8 in Fall 2013. It is the first CareerAdvance® option that focuses on an individual’s progression through their respective training program rather than an entire cohort of students’ progress through an identical pathway. . The Allied Health option supports individuals pursuing an associate’s degree at TCC in one of five occupations: Radiography, Sonography, Occupational Therapy Assistant, Physical Therapy Assistant, or Respiratory Care. Under this model, CareerAdvance® helps individuals complete pre-requisite courses, apply for a career training program, and supports them through to completion. Allied Health participants do participate in the “CORE” curriculum at the start of CareerAdvance® and periodically get together for partner meetings.

---

<sup>4</sup> Note that Medical Assisting is included in the HIT pathway and in Other Occupations due to changes in the program structure.

**Figure 3. CareerAdvance® Occupational Training Programs**



### **Changes in recruitment and enrollment**

Given the program modifications highlighted above, the recruitment and enrollment process for CareerAdvance® has been refined considerably over time. While testing has always played a role in the program, basic skills assessments have become an important part of the screening and selection process, particularly for students pursuing training in one of the five Allied Health occupations. Other changes include the addition of a career interest survey, a required drug test, and a writing sample to better identify individuals most likely to succeed in training. Table 1 below documents changes to the recruitment process from Cohort 1 to Cohort 10. Note that each cohort's requirements build on those of the prior cohort, unless a change is specifically indicated.

**Table 1. Changes in CareerAdvance® Eligibility Standards, Application Requirements, and Selection Criteria**

Cohort	Eligibility Standards	Application Requirements	Selection Criteria
<b>C 1</b>	<ul style="list-style-type: none"> <li>• Adult at least 18 years old</li> <li>• Legally qualified to work in the U.S.</li> </ul>	<ul style="list-style-type: none"> <li>• TABE, COMPASS, and WorkKeys testing following application</li> <li>• Interview with program manager</li> <li>• Separate application for Workforce Investment Act (WIA) funding through Workforce Tulsa</li> </ul>	<ul style="list-style-type: none"> <li>• Strong interest in healthcare careers</li> </ul>
<b>C 2</b>		<ul style="list-style-type: none"> <li>• Interview with program manager <i>or Career Coach</i></li> </ul>	<ul style="list-style-type: none"> <li>• Pass a criminal background check</li> <li>• Tuberculosis test</li> </ul>
<b>C 3</b>	<ul style="list-style-type: none"> <li>• Citizen or legal resident for at least 5 years</li> <li>• Speak English well enough to participate</li> </ul>	<ul style="list-style-type: none"> <li>• TABE and COMPASS scores required as part of the application process</li> <li>• Application for WIA funding dropped</li> </ul>	<ul style="list-style-type: none"> <li>• Implemented interview rating system based on 8 criteria: attitude, desire to work, desire for healthcare employment, work history, healthcare work experience, flexible work schedule, high motivation, low debt ratio</li> </ul>
<b>C 4</b>	<ul style="list-style-type: none"> <li>• Eligibility tied to workforce standards of healthcare employers</li> </ul>	<ul style="list-style-type: none"> <li>• COMPASS scores required with initial application</li> <li>• TABE scores required prior to interview</li> </ul>	<ul style="list-style-type: none"> <li>• 3 criteria added to rating system: participant dress/language, financial stability, and access to transportation</li> </ul>
<b>C 5</b>			<ul style="list-style-type: none"> <li>• Participants are expected to be able to shoulder some of the financial burden of participation (such as purchasing their own school supplies)</li> </ul>
<b>C 6 and 7</b>	<ul style="list-style-type: none"> <li>• Speak English well enough to participate <i>and succeed</i></li> </ul>	<ul style="list-style-type: none"> <li>• Complete a career interest inventory</li> <li>• Submit a personal statement of 1-3 paragraphs</li> </ul>	<ul style="list-style-type: none"> <li>• Selected participants must pass a drug test within one week of acceptance into the program</li> <li>• Academic skills at 4<sup>th</sup> grade or above</li> </ul>
<b>C 8 and 9</b>	<ul style="list-style-type: none"> <li>• Speak, read, and write English well enough to participate and be successful in lecture classes with written homework</li> </ul>		<ul style="list-style-type: none"> <li>• Allied Health program requires testing as <i>College Ready</i> based on TABE and COMPASS exams.</li> </ul>
<b>C 10</b>	<ul style="list-style-type: none"> <li>• Any criminal background must not include a felony conviction*</li> <li>• Must be eligible to attend classes at Tulsa Community College, Tulsa Technology Center, and Union Public Schools</li> </ul>		

Note: \* While this standard had been used in the selection of prior cohorts, it was made explicit in the recruiting materials for Cohort 10.

Source: CareerAdvance® staff and program documents.

Application, selection, and enrollment data for CareerAdvance® Cohorts 1 through 9 are presented in Tables 2a – 2c.<sup>5</sup> The Nursing pathway is presented in Table 2a. Table 2b presents data on cohorts in HIT, and Table 2c provides information on other healthcare training program cohorts. Interest appears to remain high for the Nursing pathway, while interest in the other occupational training programs has been mixed. Despite this higher level of interest, lower shares of nursing applicants are selected for enrollment into the program than are applicants for other occupational pathways.

**Table 2a. Application, Selection, and Enrollment Data for Nursing Cohorts**

	Nursing								
	C1	C2	C3	C4	C5	C6	C7	C8	C9
<b>Began application process</b>	24	21	31	27	34	33	41	39	23
<b>Interviewed</b>	21	15	25	25	24	33	24	22	21
<b>Selected for enrollment</b>	15	13	15	16	15	18	18	18	7
<b>Enrolled in CareerAdvance®</b>	14	10	15	15	12	18	15	18	7

Source: CareerAdvance® administrative data

**Table 2b. Application, Selection, and Enrollment Data for HIT Cohorts**

	Health Information Technology			
	C 4 <sup>a</sup>	C 5 <sup>a</sup>	C 6	C 7
<b>Began application process</b>	28	16	12	11
<b>Interviewed</b>	22	14	10	7
<b>Selected for enrollment</b>	16	13	7	7
<b>Enrolled in CareerAdvance®</b>	15	12	6	5

<sup>a</sup> Medical Assisting was a required first step for participants in HIT in Cohorts 4 and 5.

Note: HIT was only offered in cohorts 4-7.

Source: CareerAdvance® administrative data

<sup>5</sup> Enrollment numbers for the CareerAdvance® implementation study are based solely on CareerAdvance® administrative data. These numbers may not match enrollment numbers reported for the CAP Family Life Study due to differences in the way some individuals are tracked. For example, in the CAP Family Life Study, an individual who was originally assigned to the matched comparison group but who later joined the CareerAdvance® program would only be tracked with the matched comparison group rather than the participant group. The CareerAdvance® implementation study, however, would consider that person as a participant.

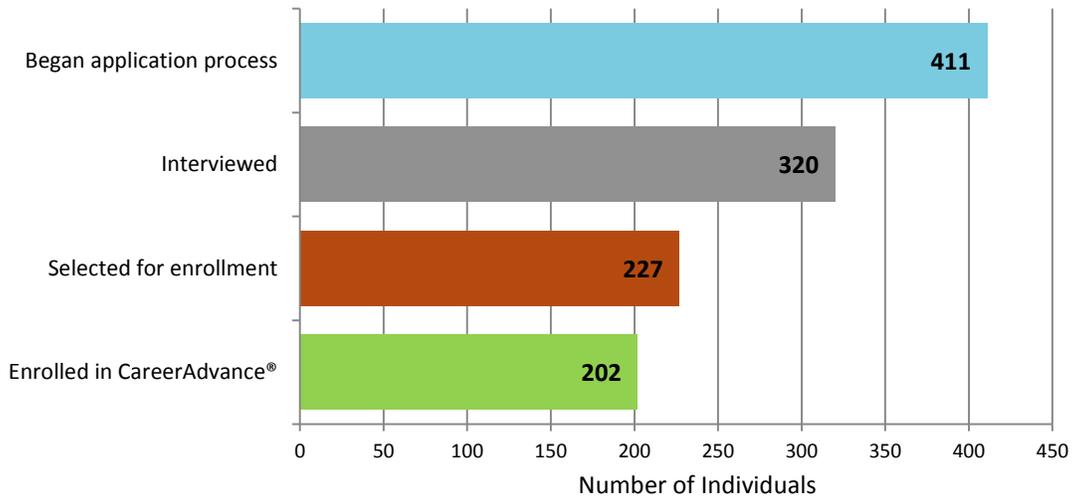
**Table 2c. Application, Selection, and Enrollment Data for Other Training Cohorts**

	Medical Assisting			Pharmacy Technician			Allied Health		Dental
	C 6	C 7	C 8	C 7	C 8	C 9	C 8	C 9	C 9
<b>Began application process</b>	6	N/A	14	3	13	9	8	10	8
<b>Interviewed</b>	5	N/A	12	1	9	9	6	8	7
<b>Selected for enrollment</b>	6	N/A	12	1	9	6	6	2	7
<b>Enrolled in CareerAdvance®</b>	6	N/A	7	1	8	6	4	2	6

Note: N/A indicates that the training was not offered for that cohort.  
 Source: CareerAdvance® administrative data

Figure 4 below summarizes the application, selection, and enrollment data across all cohorts and occupations. Note that across all cohorts, approximately one-half of the 411 parents who began the application process ultimately enrolled in CareerAdvance®.

**Figure 4. CareerAdvance® Application through Enrollment Summary**

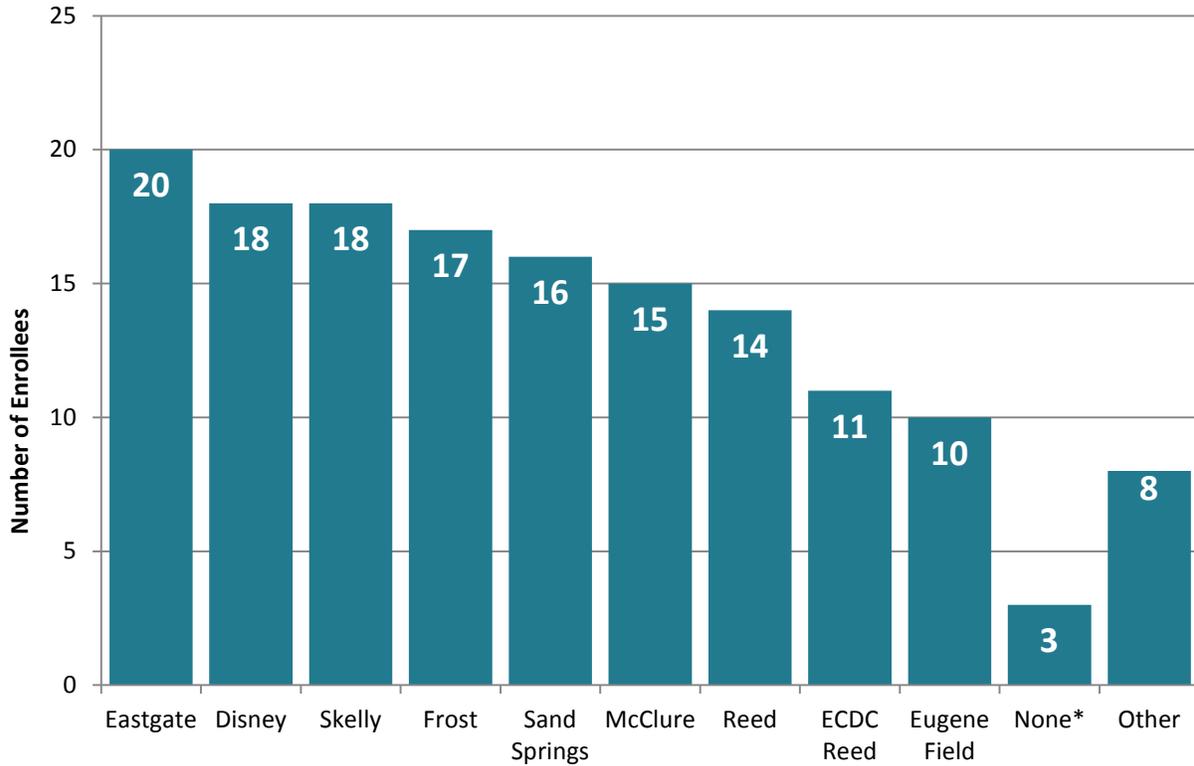


Source: CareerAdvance® administrative data

Participants who enrolled in CareerAdvance® were primarily drawn from early childhood care and education centers operated by CAP Tulsa, though a few participants have been drawn

from other childcare providers (such as Tulsa Educare) or through their participation in TANF. Figure 5 below shows the dispersion of CareerAdvance® enrollees in the region.

**Figure 5. Number of Enrollees Per Child Care Center, Cohorts 1-9**



**Child Care Center**

\*None = TANF only or child aged-out

Source: CareerAdvance® administrative data

**Basic Skills Preparation**

Many CAP Tulsa parents lack high school-level skills or credentials, and typically have been out of school for several years. While Adult Basic Education and GED preparation have been key components of CareerAdvance® since Cohort 1 (these activities have typically occurred in the Academic Nursing Skills or ANS class), the program moved to require all applicants to undergo testing to identify skills needs beginning with Cohort 3. Two exams are used in the application process: the Test of Adult Basic Education (TABE®) and the COMPASS® Exam.

The TABE® covers four subjects: Reading, Language, Math Computation, and Applied Math, with scores given as grade-level equivalents (Table 3). Mean TABE® Reading scores for the cohorts typically fall between the 10<sup>th</sup> to 12<sup>th</sup> grade-levels, while mean TABE® Math Computation scores for the cohorts are much lower, around the 8<sup>th</sup> and 9<sup>th</sup> grade-levels. Skill levels range widely within individual cohorts and pathways.

**Table 3. Entry TABE® Test Scores by Nursing and Other Occupation Cohorts**

		Reading	Language	Math Computation	Applied Math
<b>Nursing</b>					
Cohort 3 (n=15)	Mean	9.9	10.5	7.9	9.7
	Range	6.4 - 12.9	5.6 - 12.9	3.5 - 12.9	6 - 12.9
Cohort 4 (n=15)	Mean	12.2	10.9	8.6	11.0
	Range	9.1 - 12.9	4.8 - 12.9	4.9 - 12.9	5.9 - 12.9
Cohort 5 (n=11)	Mean	10.0	8.1	8.0	8.1
	Range	6.4 - 12.9	2.9 - 12.9	4.4 - 12.9	2.4 - 11
Cohort 6 (n=18)	Mean	11.9	11.5	7.9	10.8
	Range	7.6 - 12.9	7.7 - 12.9	3.5 - 12.1	6.4 - 12.9
Cohort 7 (n=15)	Mean	12.2	11.5	8.8	11.0
	Range	10 - 12.9	7.7 - 12.9	5.3 - 12.9	7.6 - 12.9
Cohort 8 (n=17)	Mean	11.9	11.5	9.5	11.2
	Range	5 - 12.9	7.4 - 12.9	5.1 - 12.9	8.6 - 12.9
Cohort 9 (n=9)	Mean	11.7	11.8	9.2	12.0
	Range	9.1 - 12.9	8.8 - 12.9	6.1 - 12.9	9.0 - 12.9
<b>HIT / Medical Assisting / Pharmacy Technician / Dental Assisting<sup>a</sup></b>					
Cohort 4 (n=15)	Mean	11.0	11.5	8.6	10.6
	Range	7.6 - 12.9	5.6 - 12.9	3.9 - 12.1	3.5 - 12.9
Cohort 5 (n=12)	Mean	11.0	10.5	8.1	9.7
	Range	6.6 - 12.9	0 - 12.9	2.5 - 12.9	1.7 - 12.9
Cohort 6 (n=10)	Mean	10.3	9.7	8.0	10.0
	Range	7.4 - 12.9	5.6 - 12.9	4.4 - 12.1	6.7 - 12.9
Cohort 7 (n=6)	Mean	12.4	10.5	7.8	9.3
	Range	10 - 12.9	7.7 - 12.9	4.2 - 11.2	6.7 - 11
Cohort 8 (n=19)	Mean	10.8	11.0	9.4	11.4
	Range	4 - 12.9	4.8 - 12.9	4.4 - 12.9	7.6 - 12.9
Cohort 9 (n=15)	Mean	11.9	9.7	8.9	10.3
	Range	9.1 - 12.9	6.3 - 12.9	3.1 - 12.9	7.6 - 12.9

Notes: <sup>a</sup> Due to low numbers of enrollees, test results for these groups are reported together.

Scores are presented as grade-level equivalents. Data are reported for the entry cohort for each individual.

Source: CareerAdvance® administrative records submitted in August 2014.

The COMPASS® Exam is administered by many colleges and universities to assess college readiness and identify any need for remedial/developmental education courses. The test has three sections: Reading, English, and Algebra; each section is scored on a 100-point scale (Table 4). Each college establishes its own standards, which often vary within an institution depending on the demands of specific programs. At Tulsa Community College, “A COMPASS® Placement score of 66+ on the Algebra test is needed to go straight into college level math. A COMPASS® Placement score of 75+ is needed on the English test as well as a score of 80+ on the Reading test to go straight into college level writing.”<sup>6</sup>

None of the CareerAdvance® cohorts have met TCC’s standard for college-level math based on their average COMPASS® Algebra scores. Results from the COMPASS® Reading and English sections are mixed. Several cohorts have, on average, met TCC standards for college-level writing by meeting the necessary combined scores for Reading and English. Overall, the COMPASS® English section also appears to be a significant barrier for participants in CareerAdvance® training programs (Table 4a&b).

**Table 4a. Entry COMPASS® Test Scores by Nursing Cohorts**

		Reading	English	Algebra
<b>Nursing</b>				
Cohort 3 (n=13)	Mean	77.0	60.3	39.6
	Range	56 - 93	12 - 97	23 - 98
Cohort 4 (n=15)	Mean	86.7	78.0	39.9
	Range	64 - 99	22 - 99	23 - 70
Cohort 5 (n=11)	Mean	71.4	49.4	34.0
	Range	50 - 90	7 - 94	19 - 56
Cohort 6 (n=18)	Mean	84.7	71.9	41.4
	Range	64 - 99	25 - 99	18 - 75
Cohort 7 (n=15)	Mean	86.5	74.8	46.5
	Range	76 - 97	35 - 99	21 - 86
Cohort 8 (n=17)	Mean	86.7	80.8	47.0
	Range	71 - 99	52 - 99	27 - 80
Cohort 9 (n=7)	Mean	85.0	86.8	55.6
	Range	83 - 87	56 - 99	36 - 80

Note: Data are reported for the entry cohort for each individual.

Source: CareerAdvance® administrative records submitted in August 2014.

<sup>6</sup> Email from Online Advisement, Tulsa Community College. [onlineadvisement@tulsacc.edu](mailto:onlineadvisement@tulsacc.edu). July 25, 2012.

**Table 4b. Entry COMPASS® Test Scores by All Other Training Cohorts**

		Reading	English	Algebra
Cohort 4 (n=14)	Mean	83.0	66.5	36.6
	Range	71 - 99	5 - 99	26 - 51
Cohort 5 (n=12)	Mean	85.3	65.0	39.4
	Range	53 - 98	10 - 99	25 - 61
Cohort 6 (n=11)	Mean	80.8	50.5	32.3
	Range	64 - 96	6 - 87	20 - 45
Cohort 7 (n=6)	Mean	86.2	78.5	27.8
	Range	80 - 95	42 - 96	21 - 32
Cohort 8 (n=18)	Mean	87.4	74.8	45.1
	Range	69 - 95	28 - 99	17 - 84
Cohort 9 (n=12)	Mean	75.3	58.0	33.1
	Range	19 - 99	2 - 94	17 - 57

Note: <sup>a</sup> Due to low numbers of enrollees, test results for these groups are reported together. Data are reported for the entry cohort for each individual.

Source: CareerAdvance® administrative records submitted in August 2014.

The requirement for testing as part of the CareerAdvance® application process led to other changes at CAP Tulsa. In 2013, the agency launched the Educational Pathways Program, a new adult education initiative to help more parents earn the basic skills and credentials they need to pursue employment and education opportunities, whether in healthcare or in another field. That effort is part of a new research study, the CAP Family Advancement Study currently being led by Northwestern University researchers.

### **Partner Meeting Modifications**

As originally designed, CareerAdvance® participants were expected to attend weekly “partner meetings” – meetings facilitated by a Career Coach and attended by every member of the cohort. These meetings were designed to help participants develop their own peer support group, and to provide an opportunity for developing interpersonal, communications, and job search skills, while also serving as a platform for program operations (e.g., collecting attendance sheets and report cards for incentive payments, relaying schedule changes). While participants in CNA classes and new participants in other training pathways continue to meet weekly, the partner meeting schedule has changed for those further along in the program.

Some participants, such as those in PCT training, may have partner meetings twice a month, while those in the LPN or pre-requisite course sequence may only meet monthly. This change was driven largely in response to the fact that participants' class schedules made weekly meetings too difficult to schedule, as well as participant feedback that the frequency of the meetings and the repetitive nature of meeting topics was becoming a burden. In focus groups, participants have reported that the monthly partner meeting schedule is a better fit for their needs and appreciate that the program staff listened to their feedback on this issue.

Over the last year, CareerAdvance® has experienced significant staff turnover including the loss of its long-time manager, followed soon afterwards by the departure of its longest serving Career Coach. These losses, combined with additional turnover at the Career Coach position, meant that staffing levels and capacities became key drivers of changes in the program. One significant change is related to the composition and frequency of the coach-facilitated partner meetings. Whereas each cohort or individuals at a given training level had previously met separately with an assigned coach, participants in all but the first steps of the program are now allowed to attend large meetings with others in different cohorts or training programs on set days. Responses from coaching staff and participants to this new arrangement were mixed, with participants further along in the program least likely to find the new arrangement helpful. Students near the end of a career pathway require a different level of information and engagement compared to participants earlier in the training sequence.

## CAREERADVANCE® PARTICIPATION AND PROGRESS

One of the goals of the CareerAdvance® program is to help participants progress through an occupational training program and obtain career employment at a level that provides for family financial stability over time. This section will first describe the participants in the CareerAdvance® program, and then document participation and progress in the various training options through July 2014.

### Demographics of Participants

Table 5 provides a demographic snapshot of participants and families in the first nine cohorts of CareerAdvance®. Across all cohorts, 97% of participants are female, and approximately two-thirds are single parents with an average of 2.3 children per household. Just over half of all participants had a high school diploma or GED at enrollment.

**Table 5. Profile of CareerAdvance® Participants and Families, Cohorts 1-9**

	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5	Cohort 6	Cohort 7	Cohort 8	Cohort 9
Adults enrolled	15	8	15	29	24	30	21	36	21
<b>Gender</b>									
Female	100.0 %	90.0%	93.3%	93.3%	95.8%	96.7%	100.0 %	97.2%	100.0 %
Male	0.0%	10.0%	6.7%	3.3%	4.2%	3.3%	0.0%	2.8%	0.0%
Unspecified	0.0%	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Single Parent Families</b>	40.0%	70.0%	53.3%	76.7%	70.8%	73.3%	71.4%	66.7%	57.1%
<b>Race/Ethnicity</b>									
Hispanic	13.3%	0.0%	20.0%	10.0%	25.0%	23.3%	23.8%	16.7%	14.3%
Black	33.3%	50.0%	33.3%	36.7%	41.7%	46.7%	33.3%	44.4%	38.1%
White	46.7%	20.0%	40.0%	26.7%	20.8%	20.0%	28.6%	19.4%	38.1%
Asian	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	4.8%	2.8%	0.0%
Native American	6.7%	0.0%	0.0%	10.0%	8.3%	0.0%	9.5%	2.8%	0.0%
Multi- or Bi-Racial	0.0%	0.0%	0.0%	6.7%	4.2%	3.3%	0.0%	13.9%	9.5%
Unspecified	0.0%	20.0%	6.7%	10.0%	0.0%	6.7%	0.0%	0.0%	0.0%
<b>English is Primary Family Language</b>	80.0%	90.0%	73.3%	93.3%	91.7%	90.0%	100.0 %	97.2%	100.0 %
<b>Mean Age of Adult</b>	30	33	33	30	31	30	30	28	29

Source: CAP Child Plus data system and CAP staff.

Note: Data collected up to three years prior to enrollment in CareerAdvance®.

TABLE 3. PROFILE OF CAREERADVANCE® PARTICIPANTS, COHORTS 1-9 (CONTINUED)

	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5	Cohort 6	Cohort 7	Cohort 8	Cohort 9
<b>Adult's Education Level</b>									
Less than high school diploma/GED/12th	6.7%	0.0%	26.7%	3.3%	25.0%	20.0%	0.0%	16.7%	4.8%
High school diploma/GED/12th	73.3%	70.0%	40.0%	63.3%	50.0%	43.3%	52.4%	36.1%	52.4%
Some college or advanced training	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	14.3%	19.4%	14.3%
College degree and/or training certificate	20.0%	20.0%	26.7%	26.7%	20.8%	30.0%	33.3%	27.8%	28.6%
Unspecified	0.0%	10.0%	6.7%	6.7%	4.2%	3.3%	0.0%	0.0%	0.0%
<b>Adult Employment Status at ECE Application</b>									
Full time (35 hours+)	0.0%	20.0%	46.7%	26.7%	16.7%	30.0%	14.3%	27.8%	19.1%
Part time (< 35 hours)	13.3%	10.0%	6.7%	16.7%	8.3%	10.0%	4.8%	19.4%	14.3%
Full time and training	0.0%	0.0%	0.0%	6.7%	4.2%	0.0%	14.3%	5.6%	0.0%
Part time and training	0.0%	0.0%	6.7%	0.0%	4.2%	3.3%	0.0%	0.0%	9.5%
Training or school only	0.0%	0.0%	0.0%	3.3%	16.7%	13.3%	9.5%	8.3%	4.8%
Seasonally Employed	0.0%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Not employed or unemployed	73.3%	60.0%	26.7%	33.3%	50.0%	36.7%	52.4%	38.9%	52.4%
Retired or disabled	13.3%	0.0%	0.0%	6.7%	0.0%	3.3%	0.0%	0.0%	0.0%
Unspecified	0.0%	10.0%	6.7%	6.7%	0.0%	3.3%	4.8%	0.0%	0.0%
<b>Annual Family Eligibility Income</b>									
\$0 to \$1,000	20.0%	10.0%	6.7%	30.0%	4.2%	13.3%	14.3%	19.4%	9.5%
\$1,001 to 10,000	40.0%	30.0%	20.0%	30.0%	54.2%	30.0%	42.9%	13.9%	19.1%
\$10,001 to 20,000	13.3%	30.0%	26.7%	20.0%	16.7%	20.0%	23.8%	22.2%	28.6%
\$20,001 to 30,000	20.0%	10.0%	20.0%	3.3%	16.7%	16.7%	9.5%	16.7%	9.5%
Over \$30,000	6.7%	20.0%	26.7%	16.7%	8.3%	13.3%	9.5%	11.1%	14.3%
Unspecified	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	16.7%	19.1%
Mean	\$10,593	\$18,182	\$19,877	\$11,920	\$12,279	\$15,738	\$12,064	\$14,849	\$15,602

Source: CAP Child Plus data system and CAP staff.

Note: Data collected up to three years prior to enrollment in CareerAdvance®.

**Table 5. Profile of CareerAdvance® Families, Cohorts 1-9 continued**

	Cohor t 1	Cohor t 2	Cohor t 3	Cohor t 4	Cohor t 5	Cohor t 6	Cohor t 7	Cohor t 8	Cohor t 9
<b>Poverty Level / Eligibility Status</b>									
100% / Eligible	80.0%	70.0%	60.0%	73.3%	62.5%	56.7%	76.2%	56.7%	57.1%
101-130%	13.3%	0.0%	6.7%	0.0%	8.3%	10.0%	0.0%	22.2%	4.8%
> 130% / Over income	0.0%	10.0%	13.3%	13.3%	8.3%	16.7%	4.8%	0.0%	4.8%
Foster child	6.7%	10.0%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%
Homeless	0.0%	0.0%	6.7%	3.3%	0.0%	6.7%	4.8%	2.8%	4.8%
Public assistance	0.0%	10.0%	13.3%	10.0%	16.7%	10.0%	14.3%	16.7%	9.5%
Unspecified	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%
<b>Number of Children Served, All Ages</b>	37	32	40	66	67	67	54	67	43
<b>Number of Children per Household, All Ages</b>									
1	6.7%	20.0%	20.0%	33.3%	16.7%	36.7%	19.0%	33.3%	42.9%
2	53.3%	40.0%	33.3%	30.0%	37.5%	33.3%	33.3%	33.3%	19.1%
3	26.7%	10.0%	26.7%	16.7%	29.2%	13.3%	28.6%	13.9%	14.3%
4	13.3%	0.0%	0.0%	13.3%	8.3%	6.7%	14.3%	5.6%	14.3%
5 or more	0.0%	30.0%	20.0%	3.3%	8.3%	6.7%	4.8%	5.6%	4.8%
Unspecified	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.0%	8.3%	4.8%
Mean	2.5	3.2	2.7	2.2	2.6	20.7	2.5	2.0	2.2
<b>Ages of Children in Household</b>									
0 to 2	21.6%	17.1%	17.5%	21.2%	22.4%	7.5%	27.8%	7.5%	N/A
3 to 4	34.2%	25.7%	37.5%	40.9%	25.4%	38.8%	25.9%	38.8%	N/A
5 to 9	40.5%	34.3%	32.5%	21.2%	32.8%	34.3%	24.1%	34.3%	N/A
10 to 14	2.7%	12.3%	12.5%	7.6%	10.4%	17.9%	13.0%	17.9%	N/A
15 to 19	2.7%	8.6%	0.0%	6.1%	7.5%	1.5%	5.6%	1.5%	N/A
20 and older	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	3.7%	0.0%	N/A
Missing	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	N/A
Mean	4.7	7.9	5.6	5.7	6.5	6.4	6.1	6.4	N/A
Median	4.0	6.0	4.0	4.0	5.0	5.0	4.0	5.0	N/A

Source: CAP Child Plus data system and CAP staff.

Notes: N/A indicates that the data were not available. Data collected up to three years prior to enrollment in CareerAdvance®.

## Nursing Pathway Participation and Progress

Table 6 provides information on the progress of nursing pathway participants from Cohorts 1 through 9. As of July 2014, each of these cohorts had completed at least one semester of the CareerAdvance® program. Of the 102 participants who enrolled in the first CNA training, 93% passed the state certification exam, and 69% obtained employment as a CNA over the period examined. Of the 54 participants who subsequently enrolled in the PCT program, 91% completed the program, while just 61% passed the state’s required Advanced Unlicensed Assistant (AUA) certification exam in the period examined, and only 15% were employed as an AUA. Fewer than half of participants who applied were accepted into the LPN program. Through July 2014, 75% of CareerAdvance® LPN graduates passed the national NCLEX-Practical Nursing exam. Five participants are currently enrolled in the Registered Nursing program, with the first graduates expected in December 2014.

**Table 6. Participant Progress in Nursing Pathway through July 2014**

Career Path Step	Milestone	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	C 9	Total
CNA	Started <sup>a</sup>	14	10	14	13	9	12	12	14	4	102
	CNA 1 Completed	14	8	13	13	7	12	12	14	4	97
	CNA Certification Exam Passed	13	8	13	13	7	11	12	14	4	95
	<i>Participant had prior CNA certification</i>	0	0	1	2	3	3	3	3	3	18
	CNA 2 Completed	13	5	15	14	9	14	15	N/A <sup>c</sup>	N/A <sup>c</sup>	85
	CNA 3 Completed	7	5	7	13	N/A <sup>b</sup>	32				
	Geriatric Tech Certificate Obtained	7	5	7	12	N/A <sup>b</sup>	31				
	CNA Employment Obtained	10	3	14	7	9	6	9	9	5	72
PCT/AUA	Started	1	1	3	13	5	9	11	11		54
	Completed	1	1	3	11	5	8	11	9		49
	AUA Certification Exam Passed	0	0	2	7	3	8	9	4		33
	PCT/AUA Employment Obtained	0	0	1	4	1	2	0	0		8
LPN	Application	5	6	13	0	0	8	10	11	5	58
	Accepted	4	3	5	N/A	N/A	3	4	4	1	24
	Started	4	3	5	N/A	N/A	3	3	4		22
	Completed	4	1	2	N/A	N/A	1				8

Career Path Step	Milestone	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	C 9	Total
	NCLEX-Practical Nursing (PN) Exam Passed	4	0	1	N/A	N/A	1				6
	LPN Employment Obtained	3	0	1	N/A	N/A	2				6
RN	Working Towards General Ed Requirement	4	0	4	10	3	7	11	7		46
	Completed General Ed Requirement	1	N/A	1	2	1					5
	LPN-to-RN Bridge Program Application	1	N/A	1	N/A	N/A					2
	Application	1	N/A	1	6	2					10
	Started	1	N/A	1	2	1					5
	Completed										0
	RN Exam Passed										0
	RN Employment Obtained										0

Notes: In this and following tables, gray boxes indicate that a cohort has not yet reached a particular milestone.

<sup>a</sup> This number does not include individuals who enrolled but never started the first class.

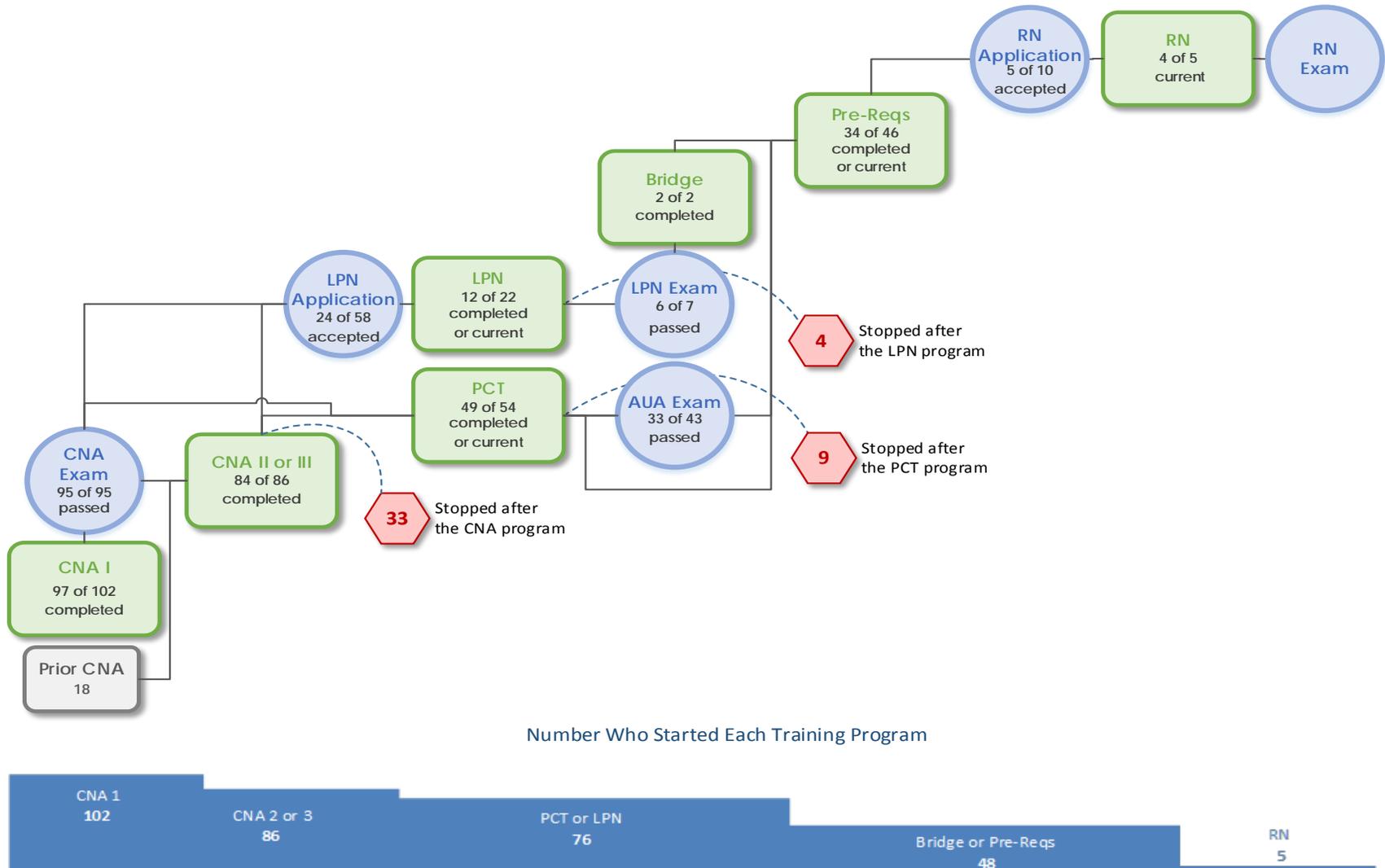
<sup>b</sup> CNA 3 and its associated Geriatric Tech Certification were dropped from the pathway in Cohort 5.

<sup>c</sup> CNA 2 was dropped from the pathway in Cohort 8.

Source: CAP administrative records submitted in August 2014.

Figure 6 looks at the flow of CareerAdvance® nursing participants through the pathway over time. The green squares represent each section of the nursing pathway; blue circles indicate either entrance or certification exams; and red hexagons show the number of participants who stopped out at various points (where “stopped out” includes those who formally exited the program as well as those with no reported data indicating that they continued with courses). The chart at the bottom of the figure illustrates how enrollment declines over successive stages of the nursing pathway. Of the 102 participants who began CNA1, fully 86 enrolled in CNA2 or CNA3. Enrollment drops over subsequent stages, with approximately three-quarters of participants going on to the PCT or LPN stage, and almost half entering into the RN bridge or pre-requisite sequence.

Figure 6. Progress Along Nursing Career Pathways through July 2014



## Health Information Technology Pathway Participation and Progress

The CareerAdvance® HIT pathway is detailed in Table 7 and Figure 7. The HIT pathway spans programs at Tulsa Tech and TCC. At Tulsa Tech, pathway training has included Medical Assisting, Medical Coding, and Patient Billing and Insurance. At TCC, pathway training leads to an associate’s degree in Health Information Technology.

Progress in the HIT pathway has been hindered by the delayed roll-out of the tenth revision of the International Classification of Diseases codes (ICD-10) in the United States, which had been scheduled for October 2013 when participants first joined CareerAdvance®. Since that time the conversion has been delayed twice by Congress, first to October 2014 and now to October 2015.<sup>7</sup> The Commission on Certification for Health Informatics and Information Management (CCHIIM), the organization that oversees certification exams in the field, has responded to the delays by postponing certification in ICD-10 until it is officially adopted by health organizations, and has committed to working with education programs and those seeking certification to develop competencies in the ICD-9 codes that remain in place until October 2015.<sup>8</sup> CareerAdvance® participants have received a mix of instruction in both ICD-9 and ICD-10.

**Table 7. Participant Progress in Training for HIT Pathway through July 2014**

Milestone	C4	C5	C6	C7	Total
Medical Assisting Start	15	11	N/A <sup>a</sup>	N/A <sup>a</sup>	26
Medical Assisting Completed	9	10	N/A <sup>a</sup>	N/A <sup>a</sup>	19
Registered Medical Assistant (RMA) Exam Passed	9	8	N/A <sup>a</sup>	N/A <sup>a</sup>	17
MA Employment Obtained	6	2	N/A <sup>a</sup>	N/A <sup>a</sup>	8
Patient Billing Start	N/A <sup>b</sup>	N/A <sup>b</sup>	N/A <sup>b</sup>	5	5
Patient Billing Completed	N/A <sup>b</sup>	N/A <sup>b</sup>	N/A <sup>b</sup>	5	5
Patient Billing Employment Obtained	N/A <sup>b</sup>	N/A <sup>b</sup>	N/A <sup>b</sup>	0	0
Medical Coding Start	3	1	6	0	10
Medical Coding Completed	2	1	5	0	8
Certified Professional Coder Exam Passed	0	0	1	0	1
MC Employment Obtained	0	0	0	0	0

<sup>7</sup> See the full press release from the Center for Medicaid and Medicare Services here: <http://www.cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2014-Press-releases-items/2014-07-31.html>

<sup>8</sup> See the ICD-10 Exam Delay FAQs here: <http://www.ahima.org/certification/delay>

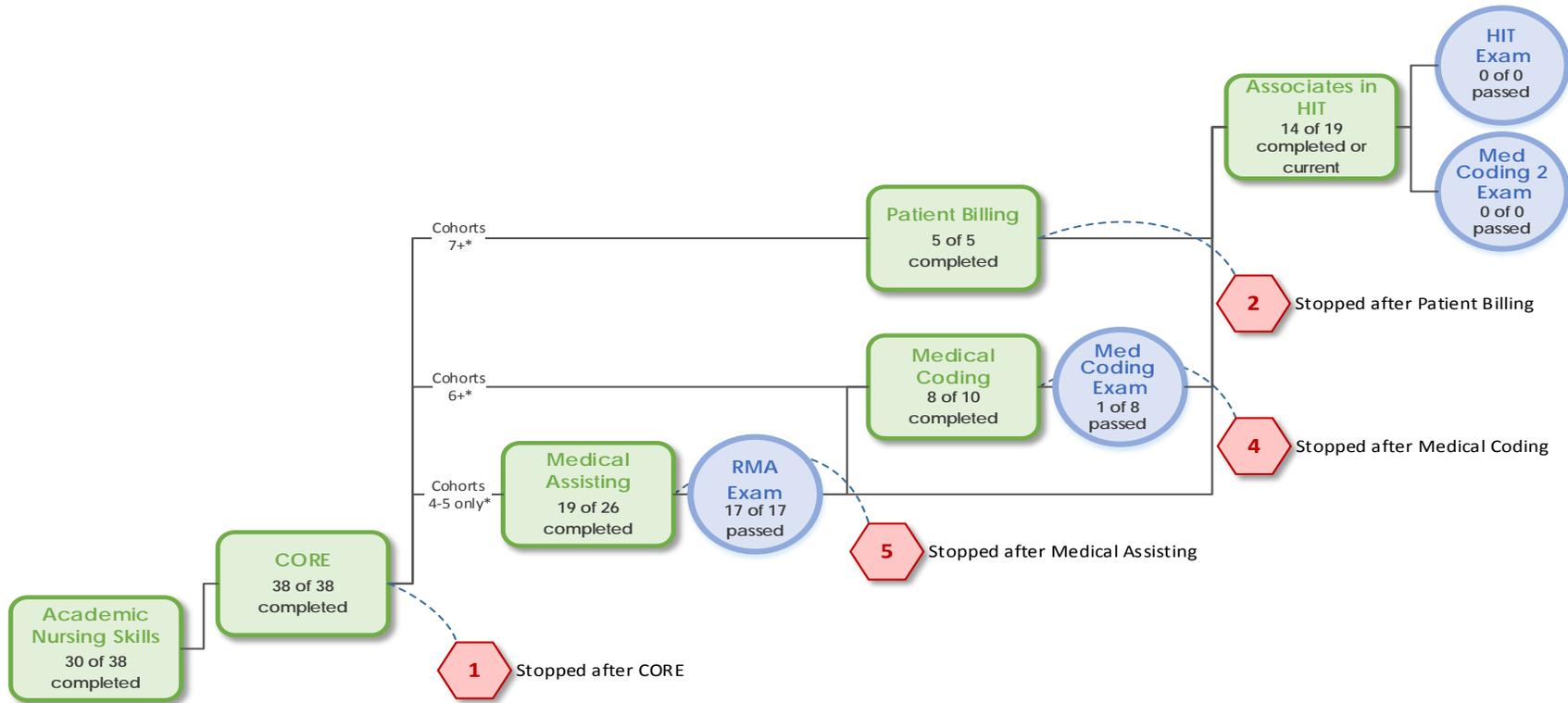
Milestone	C4	C5	C6	C7	Total
HIT Start	5	7	4	3	19
Certified Coding Associate's Exam Passed	0	0	0	0	0
HIT Associate's Degree Completed	3	1			4
Registered HIT Exam Passed	0	0			0
HIT Employment Obtained	0	0			0

Notes: <sup>a</sup> In Cohort 6, MA was removed from the HIT pathway.

<sup>b</sup> Patient Billing added to the HIT pathway for Cohort 7 only.

Source: CAP administrative records submitted in August 2014.

Figure 7. Health Information Technology (HIT) Pathway through July 2014



\*For Cohorts 4-5, Medical Assisting was part of the pathway to Associates in HIT. Patient Billing introduced with Cohort 7.

## Participation and Progress in Other Healthcare Career Training

Table 8 and Figure 8 detail participant progress in the “one-and-done” CareerAdvance® training options: Medical Assisting (Cohort 6), Pharmacy Technician (Cohort 7), Allied Health (Cohort 8), and Dental Assisting (Cohort 9). While there are only a few participants in any of these training pathways, completion rates for the short-term options appear strong. The lack of success on the pharmacy technician certification exam is a concern that should merit further investigation.

**Table 8. Participant Progress in Other Healthcare Career Training Programs**

	C6	C7	C8	C9	Total
<b>Medical Assisting</b>					
Medical Assisting Start	5	N/A <sup>a</sup>	7	N/A <sup>a</sup>	12
Medical Assisting Completed	5	N/A <sup>a</sup>	6	N/A <sup>a</sup>	11
Registered Medical Assistant (RMA) Exam Passed	5	N/A <sup>a</sup>	6	N/A <sup>a</sup>	11
MA Employment Obtained	4	N/A <sup>a</sup>	1	N/A <sup>a</sup>	5
<b>Pharmacy Technician</b>					
Pharmacy Technician Start	N/A <sup>b</sup>	1	7	6	14
Pharmacy Technician Completed	N/A <sup>b</sup>	1	7	5	13
Pharmacy Technician Exam Passed	N/A <sup>b</sup>	0	0	0	0
Pharmacy Technician Employment Obtained	N/A <sup>b</sup>	0	0	0	0
<b>Dental Assisting</b>					
Dental Assisting Start	N/A <sup>c</sup>	N/A <sup>c</sup>	N/A <sup>c</sup>	6	6
Dental Assisting Completed	N/A <sup>c</sup>	N/A <sup>c</sup>	N/A <sup>c</sup>		
Dental Assisting Exam Passed	N/A <sup>c</sup>	N/A <sup>c</sup>	N/A <sup>c</sup>		
Dental Assisting Employment Obtained	N/A <sup>c</sup>	N/A <sup>c</sup>	N/A <sup>c</sup>		
<b>Allied Health</b>					
Applied to Allied Health Program	N/A <sup>d</sup>	N/A <sup>d</sup>	4	0	4
Accepted to Allied Health Program	N/A <sup>d</sup>	N/A <sup>d</sup>	2	N/A	2

Notes: <sup>a</sup> Medical Assisting not offered in Cohort 7 or Cohort 9.

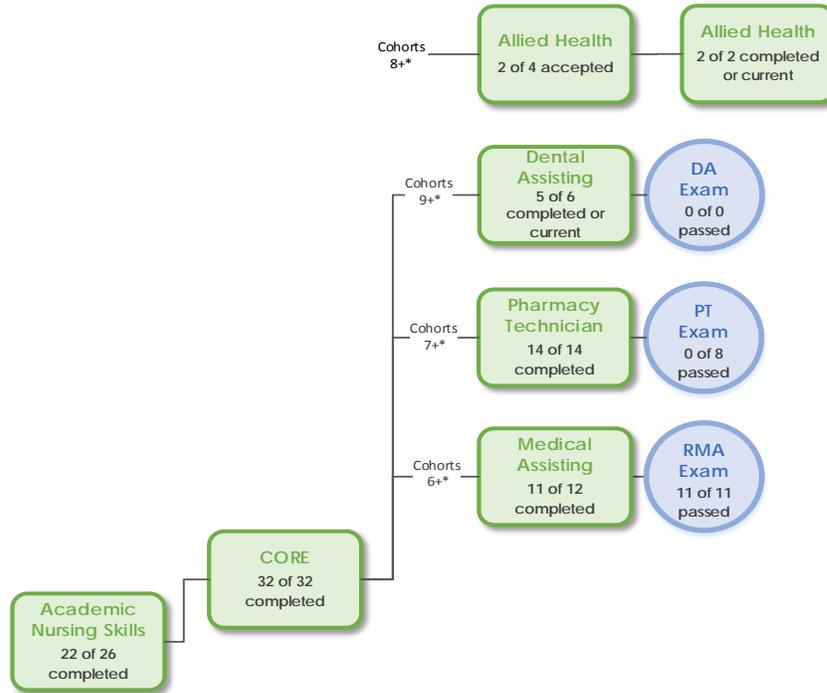
<sup>b</sup> Pharmacy Technician was added in Cohort 7.

<sup>c</sup> Dental Assisting was added in Cohort 9.

<sup>d</sup> Allied Health was added in Cohort 8.

Source: CAP administrative records submitted in August 2014.

**Figure 8. Other Healthcare Occupations Offered by CareerAdvance®**



**Summary of Program Outcomes**

Table 9 provides a summary of outcomes, including course completion, exam pass rates, and the number entering training-related employment, through July 2014 based on the number of CareerAdvance® participants who started each career training option. In the nursing pathway, the course completion rate is strong for CNA and PCT, while a smaller percentage of participants who start the LPN course finish it. In both the HIT pathway and as a stand-alone course, students have had success in the MA course with 74% eventually passing the certification exam (65% as part of the HIT pathway and 92% as a stand-alone course).

**Table 9. Training Outcomes Summary through July 2014**

Course of Study	Number that Started Course	Course Completion Rate	Exam Pass Rate	Employment Rate
<b>Nursing Pathway</b>				
CNA	102	95%	93%	71%
PCT	54	91%	61%	15%
LPN	58	36%	27%	27%
<b>HIT Pathway</b>				
MA	26	73%	65%	31%
Medical Coding	10	80%	10%	0%
HIT	16	25%	0%	0%
<b>Training Programs</b>				
MA	12	92%	92%	42%
Pharmacy Tech	14	93%	0%	0%
Dental Assisting	6	0%	0%	0%

NOTE: Data as of July 2014. For some participants, adequate time may not have elapsed to allow for taking exams or obtaining related employment.

**July 2014 Participation Snapshot**

Table 10 provides a snapshot of the status of participants in *CareerAdvance*® as of July 2014. Table 10a documents the number of active nursing pathway participants from Cohort 1 through Cohort 9, as well as the number who exited after achieving a credential and the number who exited prior to achieving a credential. Half of nursing participants have earned a credential through *CareerAdvance*®, with approximately 40% of all nursing participants still active in the program through July 2014.

**Table 10a. *CareerAdvance*® Nursing Participants: Status as of July 2014**

	Nursing									Total
	C1	C2	C3	C4	C5	C6	C7	C8	C9	
<b>Enrolled</b>	14	10	15	15	12	18	15	18	7	<b>124</b>
<b>Active</b>	2	0	4	6	2	5	11	12	7	<b>49</b>
<b>Achieved Certificate</b>	12	8	11	9	7	9	4	3	0	<b>63</b>
<b>Exited Prior to Achieving Certificate</b>	0	2	0	0	3	4	0	3	0	<b>12</b>

Source: CAP administrative records submitted in August 2014.

Table 10b documents the status of participants in other occupational training programs. Approximately 42% of these participants were still active in the program as of July 2014, and 38% of participants in these other programs had earned a certificate through CareerAdvance® in that time.

**Table 10b. CareerAdvance® Participants in All Other Training Options: Status as of July 2014**

	Health Information Technology				Medical Assisting			Pharmacy Technician			Allied Health		Dental Assisting	Total
	C4	C5	C6	C7	C6	C7	C8	C7	C8	C9	C7	C8	C9	
<b>Enrolled</b>	15	12	6	5	6	0	7	1	8	6	4	2	6	<b>66</b>
<b>Active</b>	3	5	3	3	0	N/A	6	0	2	6	0	1	5	<b>28</b>
<b>Achieved Certificate</b>	7	5	2	0	5	N/A	6	1	5	0	0	0	0	<b>31</b>
<b>Exited Prior to Achieving Certificate</b>	5	2	1	2	1	N/A	1	0	1	0	0	1	1	<b>13</b>

Source: CAP administrative records submitted in August 2014.

## **FACTORS THAT SUPPORT OR IMPEDE PARTICIPANT PROGRESS**

There are two key sources of information for understanding participants' experiences in the CareerAdvance® program: focus groups and exit interviews. This section will summarize findings from both sources to identify factors that appear to support or impede participant progress through a career pathway.

### **Findings from Focus Group Sessions**

Focus groups are conducted twice annually with participants at all levels of the program. Questions for the focus group sessions center around the chosen career pathway and training, program experiences, work and personal finances, home and family issues, personal growth and challenges, and suggestions for program improvement. The following sections summarize supportive and impeding factors identified in focus group sessions in the last year.

#### ***Supportive Factors***

Focus group participants in November 2013 were vocal about their appreciation for the CareerAdvance® program and indicated that the sacrifices they and their families had made to participate in the program were well worth it. These participants identified multiple supportive factors within the program. Participants reported that the connections they had made with others in their cohort and the academic and emotional support that resulted from those connections were key motivators for persistence. Focus group respondents also felt that the skills they had developed through CareerAdvance®, such as time management, study skills, and communications skills, were important for building the self-confidence they needed to pursue their career goals. Finally, focus group respondents reported that the Career Coach helped them to learn to juggle their multiple roles of parent/student/worker.

The April 2014 focus group sessions followed-up on these themes, asking participants to further explore how the Career Coach and partner meetings shaped their program experiences. Focus group respondents identified their Career Coach as a key mentor and advisor – someone who never failed to be responsive, encouraging, and resourceful. Partner meetings, especially those early in the training sequence, were identified as opportunities for participants to

develop strong bonds with one another that positively influence their lives even beyond the program.

### ***Impeding Factors***

The November 2013 and April 2014 focus group sessions also explored the challenges participants faced in persisting in and completing the CareerAdvance® program. The impeding factors identified by participants included a range of issues, from personal to academic to financial. Issues within the CareerAdvance® program that were identified as possibly impeding participant progress included turnover at the Career Coach position leading to less personal engagement, scheduling and transportation challenges resulting from the program being spread across multiple locations, and limited opportunities for job shadowing and other activities to build knowledge about the real day-to-day activities involved in their targeted career occupation. Lack of clarity about their own knowledge and skills gaps, combined with limited knowledge about the academic standards required by Tulsa Community College and Tulsa Tech, were mentioned by focus group respondents as a frustration with the CareerAdvance® program and with the amount of time they were expected to be engaged in academic development activities.

### **Findings from Exit Interviews**

Exit interviews are conducted when a participant has no scheduled next steps, when a participant has decided to leave the program, or when a participant has been terminated from CareerAdvance® by CAP Tulsa staff or expelled from class by one of the education and training providers. As part of the federal HPOG grant requirements, coaches conduct exit interviews when participants leave CareerAdvance® in order to obtain cohort members' perceptions and opinions of various components of the program as well as to document employment.

The exit interview technique has been used in business and industry for over sixty years.<sup>9</sup> Recently, universities and colleges have also conducted exit interviews to investigate student attrition and faculty retention. Although some criticism arises around biased reporting,

---

<sup>9</sup> Doll, Paddy A. and Keith W. Jacobs. (1988). "The Exit Interview for Graduating Seniors." *Teaching of Psychology*. Vol. 15, No. 4, Pp. 213 – 214.

the exit interview continues to be a useful tool for program staff to obtain direct feedback from participants. The exit interview approach is a particularly useful tool for CareerAdvance® staff to collect data on reasons for early exit. Future research will explore the inter-relatedness of various factors in exit decisions. Participants' responses also contribute to the assessment of needs and service quality and provide direction in the planning process for future improvements of the CareerAdvance® program.

Typically, the exit interview is completed in a face-to-face interview with the Career Coach; however, when individuals are not available to meet they may do the interview via mail or by means of telephone survey. Sometimes, if a cohort member is not willing or able to participate in an exit interview, a coach may complete the form based on the best information available to them. The CareerAdvance® exit interview focuses on four main areas: exit reasons; employment; education and training information; and participants' perception of their experience with the CareerAdvance® program. The interview form contains both multiple choice questions and questions in an open-ended format.

### ***Summary of Exit Interview Participants***

Through June 2014, a total of 91 participants from Cohorts 1 to 9 completed an exit interview.<sup>10</sup> Most (72%) of the exited participants completed the exit interview by themselves, while the Career Coach completed less than a third of the interviews based on their knowledge of the participant. It is important to note that, in each cohort, participants progress through the program at a different pace depending on which career path step they are taking at the time. The exit interview form asked individuals to report if they had completed training prior to exiting. Therefore, individuals could either report an exit at a graduation point (the completion of a training step) or an early exit prior to completion.

---

<sup>10</sup> Three individuals had more than one exit interview; only the most recent exit interview was used in the analysis.

### **Exit Reasons**

The CareerAdvance® exit interview captures the reasons participants leave the program. Participants are asked to rank the top three reasons for their exit (the complete list of reasons is shown in the box below) <sup>11</sup>.

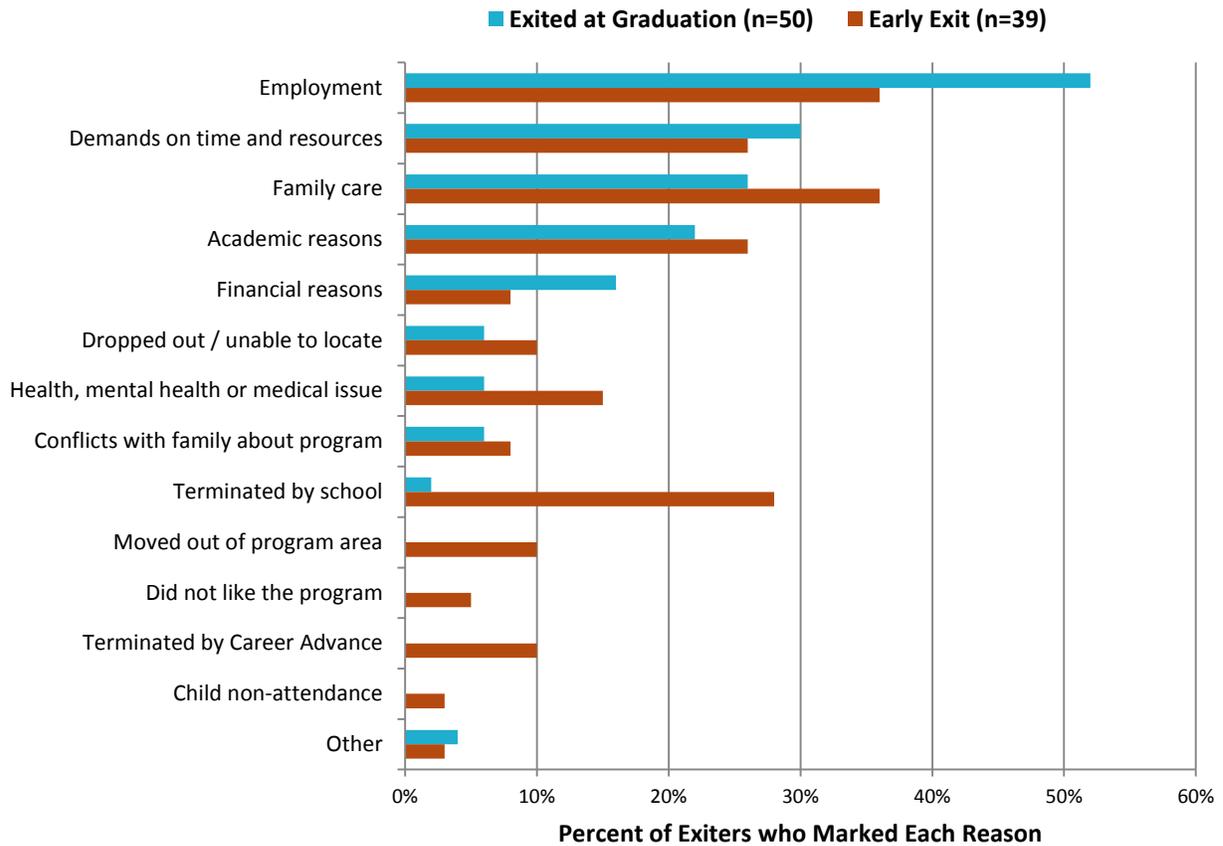
<b><u>Exit Interview List of Possible Reasons for Exit</u></b>	
Employment	Reserve Military called to active duty
Moved out of program area	Relocated to mandated residential program
Health care occupation is "not for me"	Other: Terminated by school
Did not like the program	Other: Terminated by CareerAdvance®
Participant dropped out/unable to locate	Other: Child non-attendance
Institutionalized	Other: Academic reasons
Participant health, mental health, or medical issue	Other: Financial reasons
Deceased	Other: Conflicts about program with family/significant other
Family Care	Other: Demands on time and resources

Figure 9 presents a summary of exit reasons across all cohorts by exit point. For participants whose exit point was at graduation, half indicated “employment” as a reason for their exit. The next most frequently cited exit reasons for this group were “demands on time and resources” and “family care.” Among those who exited prior to a graduation, “employment” and “family care” were the most cited reasons. Not far behind those were “terminated by the school” and “academic reasons”.

---

<sup>11</sup> In some instances, reasons were selected by check mark rather than ranked.

**Figure 9. Reasons for Exit from CareerAdvance®, by Exit Point**



Source: CareerAdvance® exit interview data available through June 2014.

Overall, about a quarter (24%) of exiters reported academic reasons as at least one of the reasons for leaving CareerAdvance®. Over time, the application requirements and selection standards for CareerAdvance® have evolved for later cohorts, as program staff realized that individuals who demonstrated stronger academic abilities before enrollment were much more likely to succeed in advanced career training programs. Not surprisingly, the exit interview confirmed this. When a sizable number of participants leave a program due to academic reasons, it is important to continue putting emphasis on candidates’ basic academic skills and their completion of preliminary testing — requirements that can ultimately promote participants’ advancement in both training and future employment, preferably in the healthcare field.

Across all exit interview participants, external stressors like family care and demands on time and resources also influenced exit decisions (30% and 27%, respectively). Thus, the exit interview offers additional insights on the significance of helping participants cope with external pressure during the course of their study. While the CareerAdvance® program provides incentives and childcare assistance for program participants, the support might still be inadequate for those who have extremely limited resources, which often coincides with increased family responsibilities.

### ***Exits for Employment***

In the exit interview, CareerAdvance® participants also provided additional information on their post-program employment status by answering specific job-related questions. Table 11 shows some basic indicators of employment for both graduates and early-exiting individuals. Overall, 70% of those who exited at graduation reported having found employment, compared to less than 60% of “early exiters”. On average, program exiters were engaged in regular employment at less than a full-time basis. Graduates reported an hourly wage of \$11.59, slightly higher than early exiters (\$10.34). Both groups of exiters overwhelmingly secured employment in the healthcare field (71%), and the majority of those entered into a healthcare occupation (70%).

It is worth mentioning that even those who exited CareerAdvance® before training completion largely ended up joining the healthcare labor market. The employment information indicates that during their course of study, program participants gained familiarity with the healthcare industry. Program staff, including both instructors and Career Coaches, might have contributed to this by building connections to employers through clinical training and other activities.

**Table 11. Employment Information at Exit from CareerAdvance®, by Exit Point**

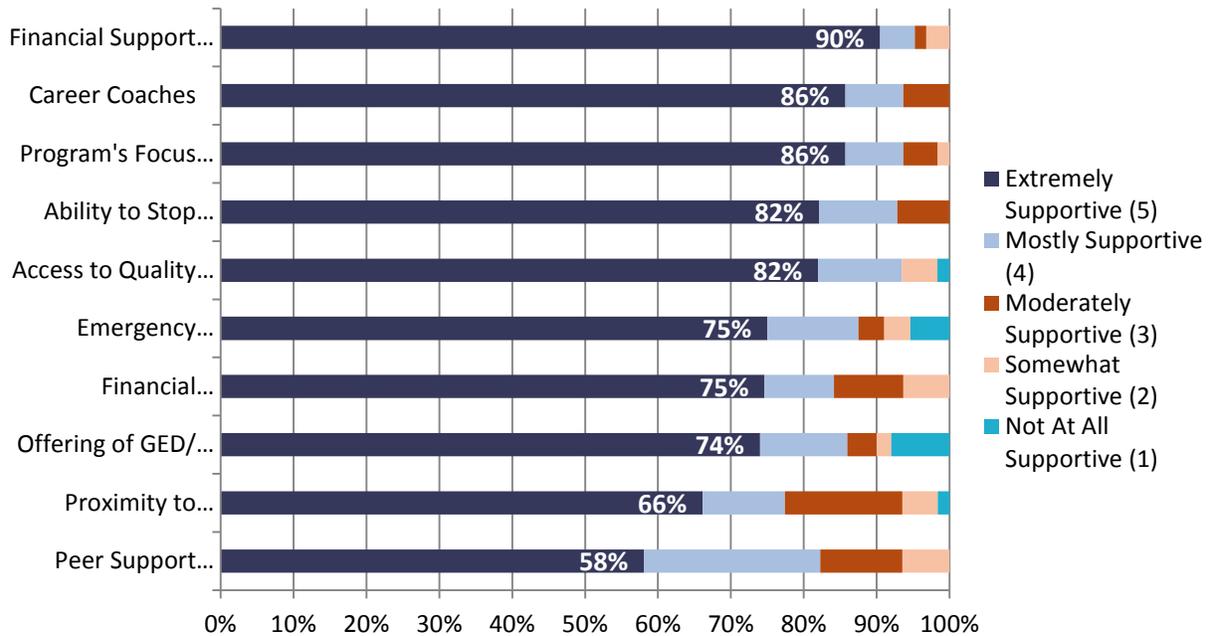
	<b>Exit Point at Graduation N=50</b>	<b>Early Exit N=37</b>
<b>Percent Employed at Exit</b>	70%	58%
<b>Median Starting Hourly Wage</b>	\$11.59	\$10.34
<b>Average Weekly Hours</b>	32	35
<b>Percent with Health Insurance Available through Employer</b>	47%	20%
<b>Percent in Healthcare Occupation</b>	77%	70%
<b>Type of Employer</b>		
<b>Healthcare Employer</b>	80%	71%
<b>Tribal Organization</b>	3%	10%
<b>Other</b>	0%	0%

Source: CareerAdvance® exit interview data available through June 2014.

***Participant Comments***

Participants’ comments and feedback are also gathered as part of the exit interview. Exiters were invited to rate the supportiveness of each program element, to which a numerical value (a Likert scale) of 1 to 5 was assigned. Figure 10 shows a summary of all responses. For almost every program element, the overwhelming majority of participants gave the highest rating, which indicates very high support. The highest rated element was financial support, with Career Coaches and the focus on the healthcare field being close seconds.

**Figure 10. Exiter Ratings of CareerAdvance® Program Elements**



Note: The number in parentheses indicates the Likert-scale ranking.  
 Source: CareerAdvance® exit interview data as of June 2014.

To supplement the ratings and capture participants’ perspectives on a broader range of subjects, the exit interview also asked open-ended questions on a variety of topics, including participants’ most and least favorite things about the CareerAdvance® program; CareerAdvance® staff, operations, and requirements; and program partners (such as TCC and Tulsa Tech). Many participants identified one of the program components from Figure 10 as their favorite thing about CareerAdvance®, especially the financial incentives and the support of the Career Coach. Participant comments often focused on the support of the cohort as a significant benefit in the program, stating that having a group of parents who supported each other was very helpful.

Aside from the positive feedback about CareerAdvance®, participants did raise some concerns about the program. Feedback indicates that participants largely welcomed partner meetings, a unique component of CareerAdvance®. However, some comments indicated that the

● ● ●  
*They are a wonderful group of ladies that really have concerned about participants and individuals.*  
 ● ● ●

partner meetings were most helpful when they focused on industry or career information rather than personal growth or team building.

Some students mentioned that gaps in their respective career pathway were a hindrance. They did not like having to wait several months before continuing to the next step. Furthermore, some participants would have liked to skip a step, such as LPN, and just carry on to the RN program. A couple of exiters felt there was inconsistent or inadequate communication from CareerAdvance® about the program. One felt that the job duties of each career step were not properly communicated (she thought she was being trained to be office staff) and another mentioned that what she was told at the beginning of the program was not what was later expected (exact topic not mentioned). The absence policy was also the topic of several comments – exiters felt that some absences should be excused.

Despite some of the problems, participants did highlight their positive experience with CareerAdvance® overall. Since its initial inception, the program has always valued participants' feedback. The exit interview has provided another venue for cohort members to communicate their experience and put forward suggestions for continuous improvement.

*It was nice to be part of a supportive team, having the support from peers and a career coach was helpful in completing assignments and passing tests.*

● ● ●  
*I loved that our classes became close like a family and helped each other succeed.*  
● ● ●

## SUMMARY AND NEXT STEPS

CareerAdvance® is a highly varied experience for participants that differs by year and training pathway, as no cohort has experienced exactly the same program. CAP Tulsa has approached the program with an orientation toward continuous improvement, which has resulted in significant changes to the model and its components over time. As documented in this report, these changes have influenced participant progress and completion. Given that the program is entering its last year of HPOG funding, it is important to focus on the components and factors most likely to help participants reach their education and career goals.

The CareerAdvance® program should continue to draw on its multiple strengths:

- CareerAdvance® has great flexibility for allowing students to decide how much training they want. Students can stop when they like and still have skills and credentials that will help them obtain employment in the stable, growing field of healthcare. Half of participants in the nursing pathway have earned at least one credential, as have almost 4 in 10 participants in the other career training tracks. Most of these participants continue to pursue additional career training.
- CareerAdvance® has been modified based on feedback from, and the performance of, actual participants. This process makes the program very consumer-focused, something that participants often remark upon in focus group sessions. Knowing that CAP Tulsa wants to hear their feedback, and acts upon it, is important for participants to feel a shared commitment in success.
- CareerAdvance® supports students as a team through cohort-based activities and individually, which helps each person advance toward their education and employment goals. This support is greatly appreciated by participants as evidenced in focus groups and interviews. Peer supports and individual gains in self-confidence are frequently cited as life-changing results from participation.
- CareerAdvance® has shown a genuine interest in ensuring that students are successful in their schooling by developing remedial education programs, tutoring, summer skill enhancement activities, and bridge programs to help individuals prepare for the rigors of college-level coursework. The program has also raised enrollment standards to ensure that those who are accepted have adequate skills to succeed in the classroom. More recently, the program has responded to changes in employers' hiring practices to become more selective about program enrollment. It is important that CareerAdvance® continue to communicate the reasons behind these changes with CAP Tulsa parents and current participants.

Remaining challenges that could be addressed by *CareerAdvance*<sup>®</sup> include:

- Each cohort has essentially been its own pilot project given the nature of change within the program. This means that every group of students has experienced something different and that staff have constantly had to adjust their approach, which can be exacerbated by a lack of institutional knowledge among newer staff. *CareerAdvance*<sup>®</sup> should continue to strive towards a stable and sustainable program model.
- *CareerAdvance*<sup>®</sup> has yet to establish the strong relationships with employers and the Tulsa healthcare industry that would help to guide program development and refinement and lead to stronger employment outcomes for participants. More input from employers would help the program better shape its offerings to match the needs of the labor market. Employer connections might also allow the program to provide participants with the job shadowing experiences they feel they need to truly understand their targeted career goals. Job shadowing experiences for potential applicants may be useful to increase interest in under-enrolled training options.
- Early data shows a disconnect between program completion and credentialing based on occupational certification and licensing exams. The disconnect appears to be driven by two factors: (1) too few participants attempt the licensing/certification exam in a reasonable time period after completing coursework and (2) too few participants pass an exam on the first attempt. *CareerAdvance*<sup>®</sup> should work with training providers to identify preparation barriers and perhaps develop review materials and courses. *CareerAdvance*<sup>®</sup> should also continue to offer financial incentives for credential attainment and enforce program policies that limit continued participation when credentials are not obtained.

In the next implementation study report, researchers will explore how *CareerAdvance*<sup>®</sup> positions itself for sustainability beyond HPOG funding. It is anticipated that this shift will drive programmatic changes and influence the persistence and completion of participants in the program.