Career*Advance*® Implementation Study Findings through July 2015

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

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

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

ABOUT CAREER*ADVANCE*®

Career*Advance*®, 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.[1] 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. Career*Advance*® 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, Career*Advance*® 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 allied health professions (e.g., medical assisting, pharmacy technician, dental assisting, radiography, and physical therapy assistant).

Key components of the Career*Advance*® 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).

- Educational assistance for participants with basic reading, math, and English language skills, offered by Union Public Schools. Since 2013 (Cohort 7), participants have received tailored services through the Educational Pathways Program (also funded by USHHS/ACF) which sorts them into three groups: Skill Ready (testing at 6th through 8th grade levels), College Bound (testing at 9th through 12th grade levels), and Career Ready (testing at college level).

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[1] For more information about Career*Advance*® see: http://captulsa.org/our-programs/family-advancement/careeradvance/

- 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.

- 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 Career*Advance*® 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 Career*Advance*® implementation evaluation are available on the Ray Marshall Center website at 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 program outcomes and impacts.

EXECUTIVE SUMMARY

This report examines changes in the Career*Advance®* program that directly relate to the experience and progress of participants in the first through tenth cohorts through July 2015—the end of the sixth program year. 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 Career*Advance®* 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 Career*Advance®*, and explores factors that appear to impede or support participant progress.

CAREER*ADVANCE*® IMPLEMENTATION STUDY UPDATE THROUGH JULY 2015

The Career*Advance*® 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 Career*Advance*® participation as part of the CAP Family Life Study.[2] Six prior reports document implementation study findings from the pilot demonstration phase in 2009-2010 through the recruitment of Cohort 10 in summer 2014.[3]

This update examines key changes in the Career*Advance*® program that directly relate to the experience and progress of participants through July 2015 (the end of the sixth program year) for Cohorts 1 through 10. The Community Action Project of Tulsa County (CAP Tulsa) has approached the design of the Career*Advance*® 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.

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[2] For more information on the CAP Family Life Study (FLS) see: http://captulsa.org/innovation-lab/family-life-study/
[3] All reports available at: www.raymarshallcenter.org

Career*Advance*® Timeline

Phase	Date	Event
Pilot Demonstration Phase	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	1st nursing cohort begins Certified Nurse Aide (CNA) training
	May 2010	Nursing recruitment
	Aug. 2010	2nd nursing cohort begins CNA training
Expansion Phase	Sep. 2010	Received Health Professions Opportunity Grant (HPOG) award from US Dept. of Health & Human Services
	Oct. 2010	Nursing recruitment
	Jan. 2011	3rd 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
		4th cohort begins with nursing and HIT participants
	Sep. 2011	Nursing and HIT recruitment
		CAP Family Life Study receives HPOG University Partnership funding
	Jan. 2012	5th cohort begins with nursing and HIT participants
	Mar. 2012	1st contracted PCT training class at TCC begins
	Apr. 2012	Nursing, HIT, and Medical Assisting (MA) recruitment
	Aug. 2012	6th cohort beings with nursing and HIT career path participants as well as participants solely seeking MA training

Implementation Study Research Questions

The implementation evaluation of Career*Advance®* seeks to answer three key research questions:

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

This report will present findings related to each of these questions through July 2015.

Research Data Sources

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

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

Organization of this Report

Following this brief introduction, the report is divided into three main sections: key program modifications over time; Career*Advance®* 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	7th cohort begins with nursing, HIT, and Pharmacy Tech participants
		First RN students begin program classes at TCC
		EPP's 1st cohort launched
	Apr. 2013	Allied Health program introduced
		Nursing, Medical Assisting, Pharmacy Tech, and Allied Health recruitment
Expansion Phase	Aug. 2013	8th 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	9th cohort begins training in nursing, medical assisting, pharmacy tech, allied health, and dental assisting
	Apr. 2014	Recruitment for fall cohort begins
	July 2014	10th cohort selected for training
	Aug. 2014	10th cohort begins training in Nursing, Medical Assisting, and Dental Assisting.
	Sept. 2014	10th cohort begins Pharmacy Technician training
	Dec. 2014	First two RN students graduate
	April 2015	Participants receive letter stating that the program will continue to provide supports through May 2016

KEY PROGRAM MODIFICATIONS OVER TIME

The growth and refinement of the Career*Advance*® 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 Career*Advance*® 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

Career*Advance*® 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 Career*Advance*® nursing career pathway as it has evolved between Cohorts 1 through 10. 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 Career*Advance*® 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, Career*Advance*® staff worked with Tulsa Community College to develop a "PCT Bridge" class to help CNA participants build foundational science skills before advancing farther along the nursing career pathway.

Figure 1. Career*Advance*® Pathway in Nursing through July 2015

Note: The thick black line indicates the original pathway.
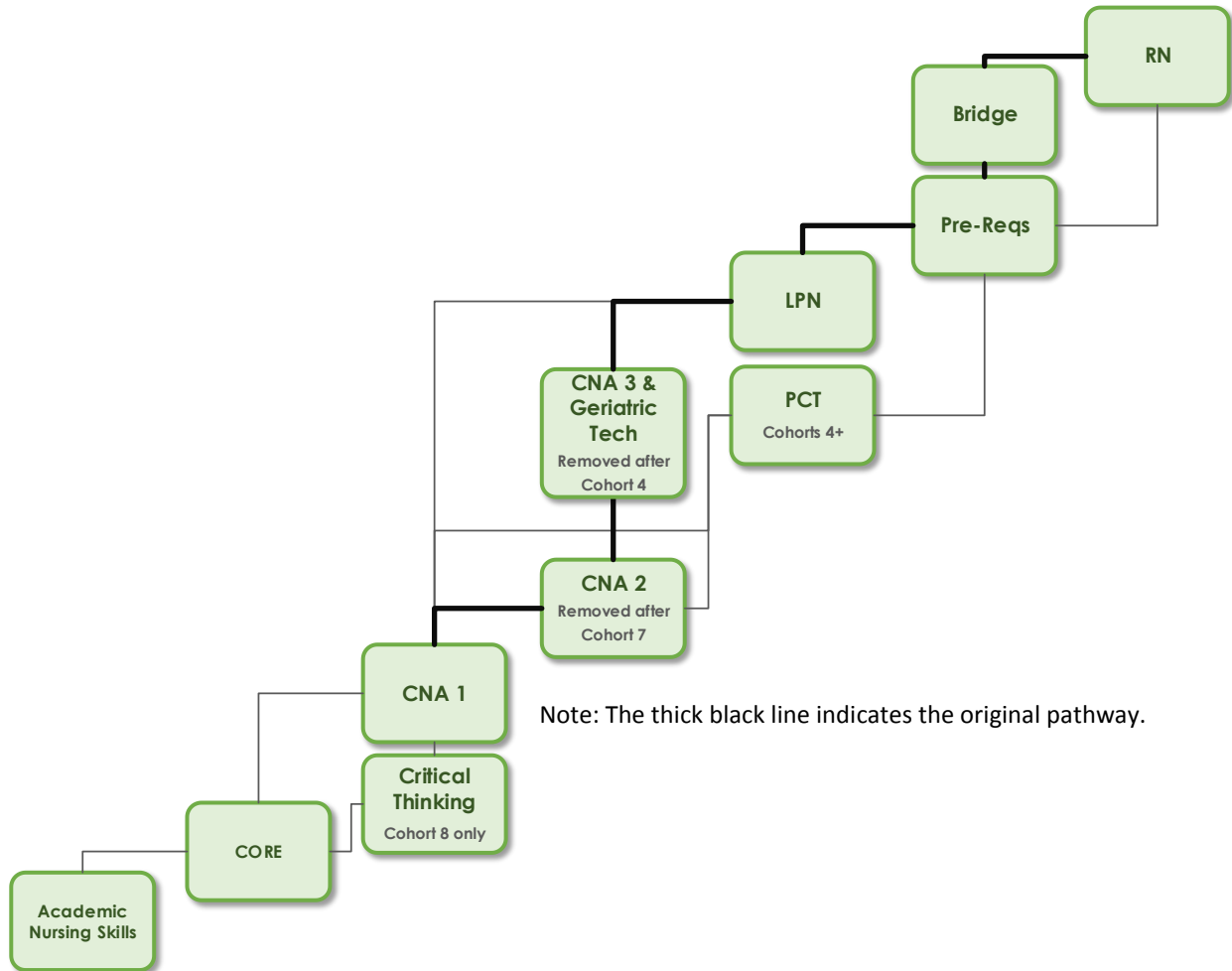
Health Information Technology Pathway

The next occupational pathway introduced by Career*Advanc*e® 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 Career*Advance*® a semester prior to starting in TCC's HIT program. The HIT training option was not offered in the recruitment cycles for Cohorts 8 through 10. Figure 2 below illustrates the various HIT career pathway options that have been offered by Career*Advance*®.

Figure 2. Career*Advance*® Pathway in Health Information Technology as of July 2015
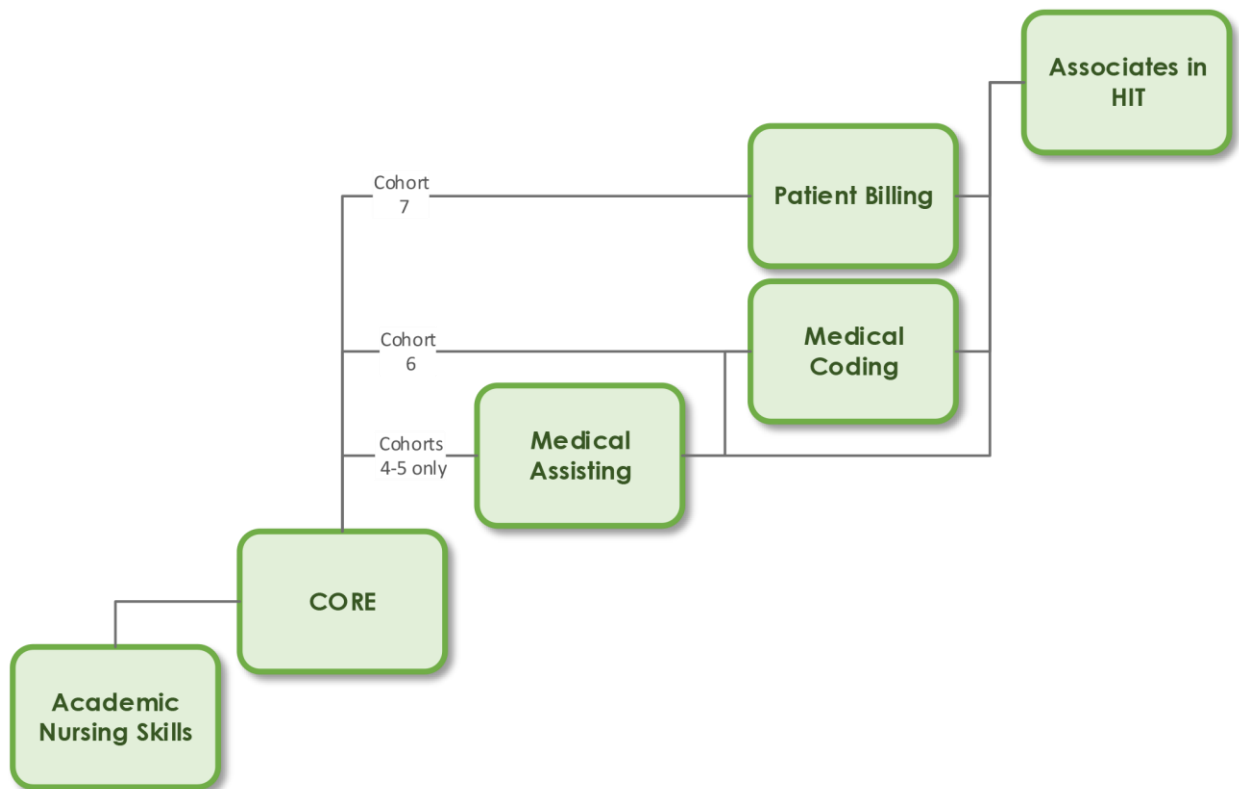
Other Career Training Options

Other occupations[4] supported by the Career*Advance*® program include Pharmacy Technician (added in Cohort 7), Allied Health (added in Cohort 8), and Dental Assisting (added in Cohort 9[5]). Unlike prior Career*Advance*® pathways offerings, the healthcare career training options illustrated in Figure 3 are not explicitly connected to a career pathway with multiple training options. Referenced by Career*Advance*® 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 Career*Advance*® career pathway options.

Allied Health was first offered to Cohort 8 in Fall 2013. It is the first Career*Advance*® 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, Career*Advance*® 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 Career*Advance*® and periodically meet for partner meetings.

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[4] Note that Medical Assisting is included in the HIT pathway and in Other Occupations due to changes in the program structure.

[5] Applications for Dental Assisting were not accepted during the Cohort 10 recruitment period but were discussed with interested participants as an option starting in January 2015.

Figure 3. Career*Advance*® Occupational Training Programs as of July 2015

Cohort 9 — Dental Assisting

Cohort 8+ — Allied Health

Cohorts 7+ — Pharmacy Technician

Cohorts 6,8,10 — Medical Assisting

CORE

Academic Nursing Skills

ANS not required for Allied Health
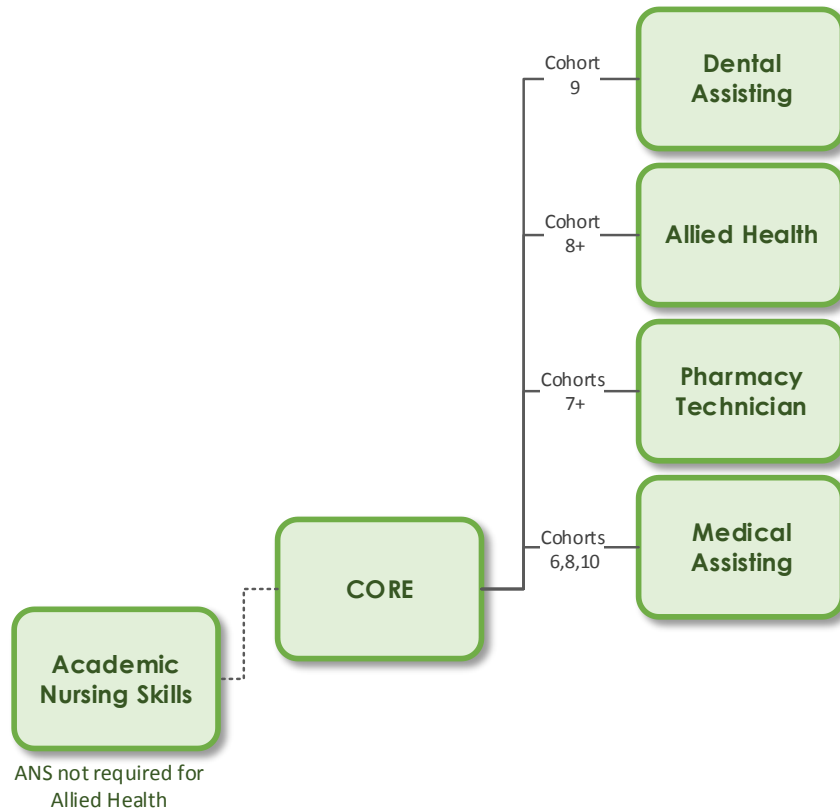
Changes in recruitment and enrollment

Given the program modifications highlighted above, the recruitment and enrollment process for Career*Advance*® 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 Heath 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 Career*Advance*® Eligibility Standards, Application Requirements, and Selection Criteria

Cohort	Eligibility Standards	Application Requirements	Selection Criteria
C 1	• Adult at least 18 years old • Legally qualified to work in the U.S.	• TABE, COMPASS, and WorkKeys testing following application • Interview with program manager • Separate application for Workforce Investment Act (WIA) funding through Workforce Tulsa	• Strong interest in healthcare careers
C 2		• Interview with program manager or Career Coach	•Pass a criminal background check • Tuberculosis test
C 3	• Citizen or legal resident for at least 5 years • Speak English well enough to participate	• TABE and COMPASS scores required as part of the application process • Application for WIA funding dropped	• 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
C 4	• Eligibility tied to workforce standards of healthcare employers	• COMPASS scores required with initial application • TABE scores required prior to interview	• 3 criteria added to rating system: participant dress/language, financial stability, and access to transportation
C 5			• Participants are expected to be able to shoulder some of the financial burden of participation (such as purchasing their own school supplies)
C 6 and 7	• Speak English well enough to participate and succeed	• Complete a career interest inventory • Submit a personal statement of 1-3 paragraphs	• Selected participants must pass a drug test within one week of acceptance into the program • Academic skills at 4th grade or above
C 8 and 9	• Speak, read, and write English well enough to participate and be successful in lecture classes with written homework		• Allied Health program requires testing as *College Ready* based on TABE and COMPASS exams.
C 10	• Any criminal background must not include a felony conviction* • Must be eligible to attend classes at Tulsa Community College, Tulsa Technology Center, and Union Public Schools		

* While this standard had been used in the selection of prior cohorts, it was made explicit in the recruiting materials for Cohort 10.
Source: Career*Advance*® staff and program documents.

Application, selection, and enrollment data for Career*Advance*® Cohorts 1 through 10 are presented in Tables 2a – 2c.[6] 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, or perhaps because of it, nursing programs tended to be highly selective, resulting in lower shares of nursing applicants being selected for enrollment into the program.

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

	Nursing									
	C1	**C2**	**C3**	**C 4**	**C 5**	**C 6**	**C 7**	**C 8**	**C 9**	**C 10**
Began application process	24	21	31	27	34	33	41	39	23	24
Interviewed	21	15	25	25	24	33	24	22	21	18
Selected for enrollment	15	13	15	16	15	18	18	18	7	10
Enrolled in Career*Advance*®	14	10	15	15	12	18	15	18	7	10

Source: Career*Advanc*e® administrative data

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

	Health Information Technology			
	C 4ª	**C 5ª**	**C 6**	**C 7**
Began application process	28	16	12	11
Interviewed	22	14	10	7
Selected for enrollment	16	13	7	7
Enrolled in Career*Advance*®	15	12	6	5

ª 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: Career*Advanc*e® administrative data

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[6] Enrollment numbers for the Career*Advanc*e® implementation study are based solely on Career*Advanc*e® 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 Career*Advanc*e® program would only be tracked with the matched comparison group rather than the participant group. The Career*Advanc*e® 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 8	C 10	C 7	C 8	C 9	C 10	C 8	C 9	C 10	C 9
Began application process	6	14	2	3	13	9	1	8	10	1	8
Interviewed	5	12	2	1	9	9	1	6	8	1	7
Selected for enrollment	6	12	1	1	9	6	1	6	2	1	7
Enrolled in Career*Advance*®	6	7	1	1	8	6	1	4	2	1	6

Source: Career*Advanc*e® 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 439 parents who began the application process ultimately enrolled in Career*Advance*®.

Figure 4. Career*Advance*® Application through Enrollment Summary

Source: Career*Advanc*e® administrative data

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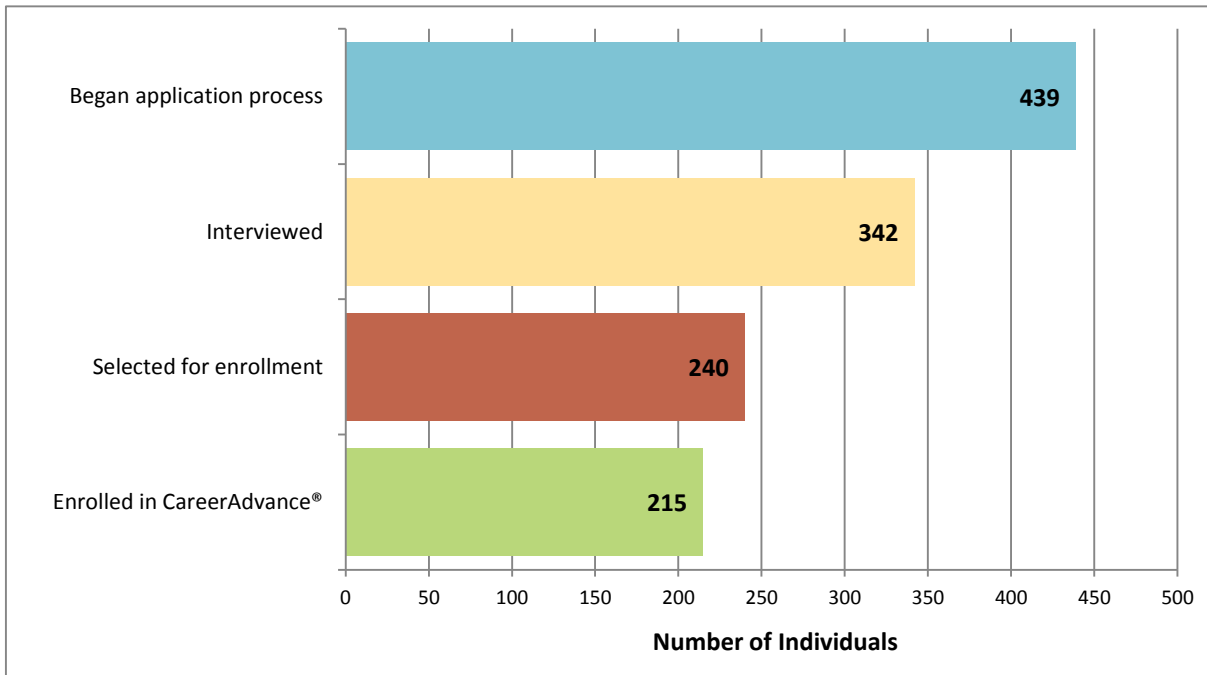
Participants who enrolled in Career*Advance*® were primarily drawn from early childhood care and education centers operated by CAP Tulsa, though a few participants were drawn from other child care providers (such as Tulsa Educare) or through their participation in TANF. Figure 5 below shows the dispersion of Career*Advance*® enrollees in the region.

Figure 5. Percentage of Enrollees by Child Care Center, Cohorts 1-10

Child Care Center
*N/A: Participant is TANF only or child has aged-out.
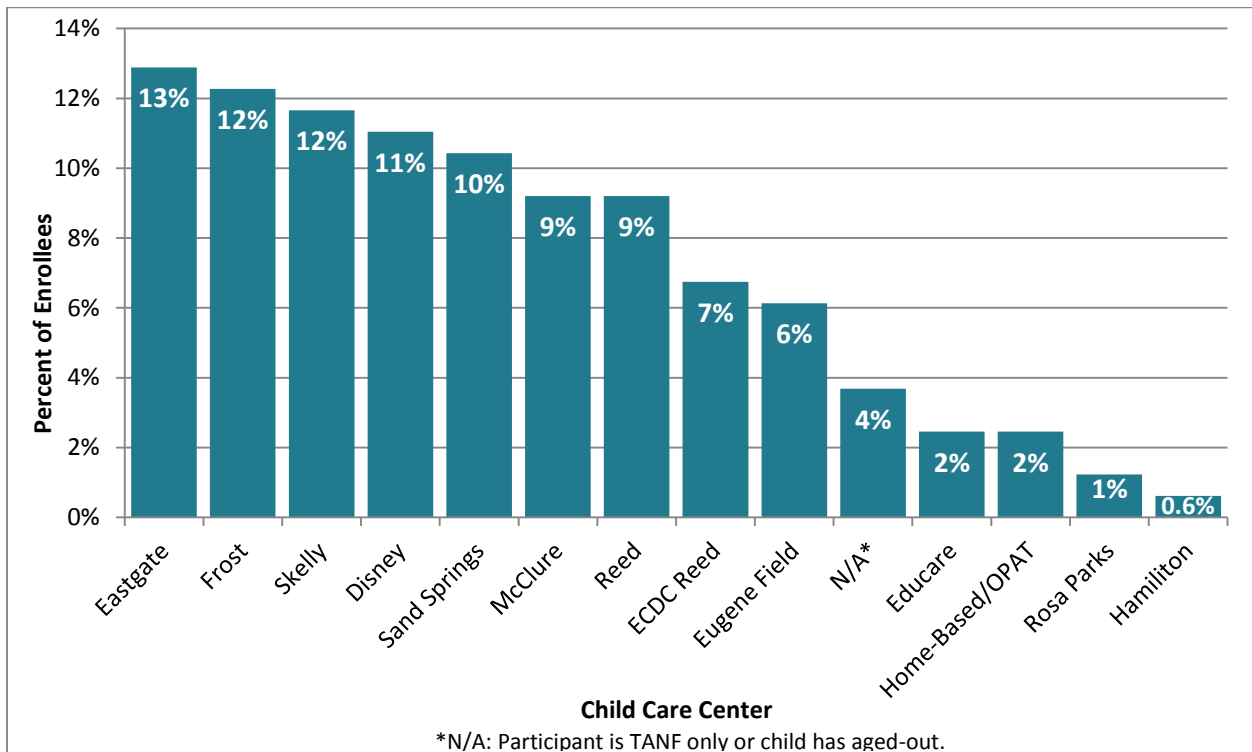
Basic Skills Preparation

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 Career*Advance*® since Cohort 1 (these activities typically occurred in the Academic Nursing Skills or ANS class), the program began requiring all applicants to undergo testing to identify skills needs 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 10th to 12th grade-levels, while mean TABE® Math Computation scores for the cohorts are much lower, around the 8th and 9th 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
Nursing					
Cohort 3	Mean	9.9	10.5	7.9	9.7
(n=15)	Range	6.4 - 12.9	5.6 - 12.9	3.5 - 12.9	6 - 12.9
Cohort 4	Mean	12.2	10.9	8.6	11.0
(n=15)	Range	9.1 - 12.9	4.8 - 12.9	4.9 - 12.9	5.9 - 12.9
Cohort 5	Mean	10.0	8.1	8.0	8.1
(n=11)	Range	6.4 - 12.9	2.9 - 12.9	4.4 - 12.9	2.4 – 11
Cohort 6	Mean	11.9	11.5	7.9	10.8
(n=18)	Range	7.6 - 12.9	7.7 - 12.9	3.5 - 12.1	6.4 - 12.9
Cohort 7	Mean	12.2	11.5	8.8	11.0
(n=15)	Range	10 - 12.9	7.7 - 12.9	5.3 - 12.9	7.6 - 12.9
Cohort 8	Mean	11.9	11.5	9.5	11.2
(n=17)	Range	5 - 12.9	7.4 - 12.9	5.1 - 12.9	8.6 - 12.9
Cohort 9	Mean	11.7	11.8	9.2	12.0
(n=9)	Range	9.1 - 12.9	8.8 - 12.9	6.1 - 12.9	9.0 - 12.9
Cohort 10	Mean	12.6	12.0	9.7	11.1
(n=9)	Range	11.1 - 12.9	10.7 - 12.9	7.0 - 12.9	6.7 - 12.9
HIT / Medical Assisting / Pharmacy Technician / Dental Assisting[a]					
Cohort 4	Mean	11.0	11.5	8.6	10.6
(n=15)	Range	7.6 - 12.9	5.6 - 12.9	3.9 - 12.1	3.5 - 12.9
Cohort 5	Mean	11.0	10.5	8.1	9.7
(n=12)	Range	6.6 - 12.9	0 - 12.9	2.5 - 12.9	1.7 - 12.9
Cohort 6	Mean	10.3	9.7	8.0	10.0
(n=10)	Range	7.4 - 12.9	5.6 - 12.9	4.4 - 12.1	6.7 - 12.9
Cohort 7	Mean	12.4	10.5	7.8	9.3
(n=6)	Range	10 - 12.9	7.7 - 12.9	4.2 - 11.2	6.7 – 11
Cohort 8	Mean	10.8	11.0	9.4	11.4
(n=19)	Range	4 - 12.9	4.8 - 12.9	4.4 - 12.9	7.6 - 12.9
Cohort 9	Mean	11.9	9.7	8.9	10.3
(n=15)	Range	9.1 - 12.9	6.3 - 12.9	3.1 - 12.9	7.6 - 12.9
Cohort 10	Mean	12.3	12.2	8.6	9.4
(n=3)	Range	11.1 - 12.9	10.7 - 12.9	6.3 - 12.9	6.7 - 10.8

Notes: Scores are presented as grade-level equivalents. Data are reported in the entry cohort for each individual.
[a] Due to low numbers of enrollees, test results for these groups are reported together.

Source: CareerAdvance® administrative records submitted in August 2015.

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 (Tables 4a and 4b). Each college establishes its own standards, which often vary within an institution depending on the demands or selectivity 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."[7]

None of the Career*Advance*® 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 Career*Advance*® training programs (Tables 4a and 4b).

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[7] Email from Online Advisement, Tulsa Community College. onlineadvisement@tulsacc.edu. July 25, 2012.

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

		Reading	English	Algebra
Nursing				
Cohort 3	Mean	77.0	60.3	39.6
(n=13)	Range	56 - 93	12 - 97	23 - 98
Cohort 4	Mean	86.7	78.0	39.9
(n=15)	Range	64 - 99	22 - 99	23 - 70
Cohort 5	Mean	71.4	49.4	34.0
(n=11)	Range	50 - 90	7 - 94	19 - 56
Cohort 6	Mean	84.7	71.9	41.4
(n=18)	Range	64 - 99	25 - 99	18 - 75
Cohort 7	Mean	86.5	74.8	46.5
(n=15)	Range	76 - 97	35 - 99	21 - 86
Cohort 8	Mean	86.7	80.8	47.0
(n=17)	Range	71 - 99	52 - 99	27 - 80
Cohort 9	Mean	85.0	86.8	55.6
(n=7)	Range	83 - 87	56 - 99	36 - 80
Cohort 10	Mean	84.0	80.2	47.9
(n=9)	Range	78 - 90	56 - 87	19 - 72

Note: Data are reported in the entry cohort for each individual.
Source: CareerAdvance® administrative records submitted in August 2015.

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

		Reading	English	Algebra
Cohort 4	Mean	83.0	66.5	36.6
(n=14)	Range	71 - 99	5 - 99	26 - 51
Cohort 5	Mean	85.3	65.0	39.4
(n=12)	Range	53 - 98	10 - 99	25 - 61
Cohort 6	Mean	80.8	50.5	32.3
(n=11)	Range	64 - 96	6 - 87	20 - 45
Cohort 7	Mean	86.2	78.5	27.8
(n=6)	Range	80 - 95	42 - 96	21 - 32
Cohort 8	Mean	87.4	74.8	45.1
(n=18)	Range	69 - 95	28- 99	17 - 84
Cohort 9	Mean	75.3	58.0	33.1
(n=12)	Range	19 - 99	2 - 94	17 - 57
Cohort 10	Mean	88.7	85.7	40.3
(n=3)	Range	84 - 92	85 - 94	30 - 52

Note: Data are reported in the entry cohort for each individual.
[a] Due to low numbers of enrollees, test results for these groups are reported together.
Source: CareerAdvance® administrative records submitted in August 2015.

The requirement for testing as part of the Career*Advance*® 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, Career*Advance*® 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 became less frequent 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 years, Career*Advance*® 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. For example, for one semester, partner meetings of various cohorts were joined into one.

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 2015.

Demographics of Participants

Table 5 provides a demographic snapshot of participants and families in the first ten cohorts of CareerAdvance®. Across all cohorts, 96% of participants are female, and approximately two-thirds are single parents with an average of 2.3 children per household. Most had at least a high school diploma or GED at enrollment.

Table 5. Profile of CareerAdvance® Participants and Families, Cohorts 1-10

	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	C 9	C 10	All Cohorts
Number of Adults	14	10	15	30	24	30	21	36	21	15	216
Gender											
Female	100%	90.0%	93.3%	90.0%	95.8%	96.7%	100%	94.4%	100%	100%	95.8%
Male	0%	10.0%	6.7%	3.3%	4.2%	3.3%	0%	2.8%	0%	0%	2.8%
Unspecified	0%	0%	0%	6.7%	0%	0%	0%	2.8%	0%	0%	1.4%
Single Parent Families	35.7%	70.0%	53.3%	73.3%	70.8%	73.3%	71.4%	66.7%	57.1%	73.3%	66.2%
Race/Ethnicity											
Hispanic	14.3%	0%	20.0%	6.7%	25.0%	23.3%	23.8%	16.7%	14.3%	13.3%	16.7%
Black	28.6%	50.0%	33.3%	36.7%	41.7%	46.7%	33.3%	44.4%	38.1%	53.3%	40.7%
White	50.0%	20.0%	40.0%	26.7%	20.8%	20.0%	28.6%	16.7%	38.1%	20.0%	26.4%
Asian	0%	10.0%	0%	0%	0%	0%	4.8%	2.8%	0%	6.7%	1.9%
Native American	7.1%	0%	0%	10.0%	8.3%	0%	9.5%	2.8%	0%	6.7%	4.6%
Multi- or Bi-Racial	0%	0%	0%	6.7%	4.2%	0%	0%	13.9%	9.5%	0%	5.1%
Unspecified	0%	20.0%	6.7%	13.3%	0%	6.7%	0%	2.8%	0%	0%	4.6%
English is Primary Family Language	78.6%	90.0%	73.3%	90.0%	91.7%	90.0%	100%	94.4%	100%	80.0%	90.3%
Mean Age of Adult	30	33	33	31	31	30	30	28	29	33	30

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 Career*Advance*® Participants, Cohorts 1-10 continued

	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	C 9	C 10	All Cohorts
Adult's Education Level											
Less than high school diploma/ GED/12th	7.1%	0%	26.7%	3.3%	25.0%	20.0%	0%	16.7%	4.8%	6.7%	12.0%
High school diploma/GED/12th	71.4%	70.0%	40.0%	60.0%	50.0%	43.3%	52.4%	33.3%	52.4%	26.7%	48.2%
Some college or advanced training	0%	0%	0%	0%	0%	3.3%	14.3%	19.4%	14.3%	40.0%	9.3%
College degree and/or training certificate	21.4%	20.0%	26.7%	26.7%	20.8%	30.0%	33.3%	27.8%	28.6%	20.0%	26.4%
Unspecified	0%	10.0%	6.7%	10.0%	4.2%	3.3%	0%	2.8%	0%	6.7%	4.2%
Adult Employment Status at ECE Application											
Full time (35 hours+)	0%	20.0%	46.7%	26.7%	16.7%	30.0%	14.3%	27.8%	19.1%	20.0%	23.2%
Part time (< 35 hours)	14.3%	10.0%	6.7%	16.7%	8.3%	10.0%	4.8%	19.4%	14.3%	6.7%	12.0%
Full time and training	0%	0%	0%	3.3%	4.2%	0%	14.3%	5.6%	0%	6.7%	3.7%
Part time and training	0%	0%	6.7%	0%	4.2%	3.3%	0%	0%	9.5%	6.7%	2.8%
Training or school only	0%	0%	0%	3.3%	16.7%	13.3%	9.5%	8.3%	4.8%	6.7%	7.4%
Seasonally Employed	0%	0%	6.7%	0%	0%	0%	0%	0%	0%	0%	0.5%
Not employed or unemployed	78.6%	60.0%	26.7%	33.3%	50.0%	36.7%	52.4%	36.1%	52.4%	53.3%	44.9%
Retired or disabled	7.1%	0%	0%	6.7%	0%	3.3%	0%	0%	0%	0%	1.9%
Unspecified	0%	10.0%	6.7%	10.0%	0%	3.3%	4.8%	2.8%	0%	0%	3.7%
Annual Family Eligibility Income											
$0 to $1,000	21.4%	10.0%	6.7%	30.0%	4.2%	13.3%	14.3%	19.4%	9.5%	6.7%	14.8%
$1,001 to 10,000	42.9%	30.0%	20.0%	30.0%	54.2%	30.0%	42.9%	13.9%	28.6%	20.0%	30.6%
$10,001 to 20,000	7.1%	30.0%	26.7%	16.7%	16.7%	20.0%	23.8%	22.2%	28.6%	26.7%	21.3%
$20,001 to 30,000	21.4%	10.0%	20.0%	3.3%	16.7%	16.7%	9.5%	13.9%	14.3%	0.0%	12.5%
Over $30,000	7.1%	20.0%	26.7%	16.7%	8.3%	13.3%	9.5%	11.1%	14.3%	26.7%	14.4%
Unspecified	0%	0%	0%	3.3%	0%	6.7%	0%	19.4%	4.8%	20.0%	6.5%
Mean	$10,607	$18,182	$19,877	$11,955	$12,279	$15,738	$12,064	$14,485	$15,762	$22,357	$14,690

Source: CAP Child Plus data system and CAP staff.
Note: Data collected up to three years prior to enrollment in Career*Advance*®.

Table 5. Profile of Career*Advance*® Families, Cohorts 1-10 continued

	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	C 9	C 10	All Cohorts
Poverty Level / Eligibility Status											
100% / Eligible	78.6%	70.0%	60.0%	70.0%	62.5%	56.7%	76.2%	55.6%	57.1%	33.3%	61.6%
101-130%	14.3%	0%	6.7%	0%	8.3%	10.0%	0%	22.2%	4.8%	6.7%	8.3%
> 130% / Over income	0%	10.0%	13.3%	13.3%	8.3%	16.7%	4.8%	0%	4.8%	26.7%	9.3%
Foster child	7.1%	10.0%	0%	0%	4.2%	0%	0%	0%	0%	0%	1.4%
Homeless	0%	0%	6.7%	3.3%	0%	6.7%	4.8%	2.8%	0%	0%	3.2%
Public assistance	0%	10.0%	13.3%	10.0%	16.7%	10.0%	14.3%	16.7%	9.5%	13.3%	12.0%
Unspecified	0%	0%	0%	3.3%	0%	0%	0%	2.8%	19.1%	20.0%	4.1%
Number of Children Served	35	32	40	64	63	57	53	69	32	15	460
Number of Children per Household											
1	7.1%	20.0%	20.0%	33.3%	16.7%	36.7%	19.0%	36.1%	42.9%	0%	26.4%
2	50.0%	40.0%	33.3%	30.0%	37.5%	33.3%	33.3%	33.3%	23.8%	33.3%	33.8%
3	28.6%	10.0%	26.7%	16.7%	29.2%	13.3%	28.6%	13.9%	14.3%	26.7%	19.9%
4	14.3%	0%	0%	13.3%	8.3%	6.7%	14.3%	5.6%	14.3%	0%	8.3%
5 or more	0%	30.0%	20.0%	3.3%	8.3%	6.7%	4.8%	5.6%	4.8%	0%	6.9%
Unspecified	0%	0%	0%	3.3%	0%	3.3%	0%	5.6%	0%	40.0%	4.6%
Mean	2.5	3.2	2.7	2.2	2.6	2.1	2.5	2.1	2.1	2.4	2.4
Ages of Children in Household											
0 to 2	21.6%	17.1%	17.5%	21.2%	22.4%	7.5%	27.8%	7.5%	17.1%	8.3%	17.1%
3 to 4	34.2%	25.7%	37.5%	40.9%	25.4%	38.8%	25.9%	38.8%	17.1%	12.5%	32.0%
5 to 9	40.5%	34.3%	32.5%	21.2%	32.8%	34.3%	24.1%	34.3%	26.8%	33.3%	30.9%
10 to 14	2.7%	12.3%	12.5%	7.6%	10.4%	17.9%	13.0%	17.9%	12.2%	8.3%	12.2%
15 to 19	2.7%	8.6%	0%	6.1%	7.5%	1.5%	5.6%	1.5%	2.4%	0%	3.9%
20 and older	0%	0%	0%	0%	1.5%	0%	3.7%	0%	2.4%	0%	0.8%
Missing	0%	0%	0%	3.0%	0%	0%	0%	0%	22.0%	37.5%	3.2%
Mean	4.7	7.9	5.6	5.7	6.5	6.4	6.1	6.4	6.2	5.9	6.1
Median	4	6	4	4	5	5	4	5	5	6	4.8

Source: CAP Child Plus data system and CAP staff.

Notes: Data collected up to three years prior to enrollment in Career*Advance*®.

[1] Ages of children not reported to RMC for Cohorts 9 and 10.

Nursing Pathway Participation and Progress

Table 6 on page 26 provides information on the progress of nursing pathway participants for Cohorts 1 through 10. As of July 2015, each of these cohorts had completed at least one semester of the Career*Advance®* program. Of the 108 participants who enrolled in the first CNA training, 93% passed the state certification exam, and 76% obtained employment as a CNA over the period examined. Of the 62 participants who subsequently enrolled in the PCT program, 97% completed the program, while just 53% passed the state's required Advanced Unlicensed Assistant (AUA) certification exam in the period examined, and only 40% were employed as an AUA. Fewer than half of participants who applied were accepted into the LPN program. Through July 2015, 79% of Career*Advance®* LPN graduates passed the national NCLEX-Practical Nursing exam. Twelve participants were enrolled in the Registered Nursing program as of September 2015, with two having graduated in 2014 or 2015.

Figure 6 on page 27 looks at the flow of Career*Advance®* 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. Enrollment drops over subsequent stages, with approximately four of five participants going on to the PCT or LPN stage, and almost half entering into the RN bridge or pre-requisite sequence.

Table 6. Participant Progress in Nursing Pathway through July 2015

Career Path Step	Milestone	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Total
CNA	Started[a]	14	10	14	13	9	12	12	14	4	6	108
	CNA 1 Completed	14	8	13	13	7	12	12	14	4	5	102
	CNA Certification Exam Passed	13	8	13	13	7	11	12	14	4	5	100
	Participant had prior CNA certification	*0*	*0*	*1*	*2*	*3*	*3*	*3*	*3*	*3*	*0*	*18*
	CNA 2 Completed	13	5	15	14	9	14	15	N/A[b]	N/A[b]	N/A[b]	85
	CNA 3 Completed	7	5	7	13	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	33
	Geriatric Tech Certificate Obtained	7	5	7	12	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	31
	CNA Employment Obtained	13	3	12	7	7	8	9	14	4	5	82
PCT/AUA	Started	1	1	3	13	5	9	11	11	4	4	62
	Completed	1	1	3	11	5	8	11	9	4	4	57
	AUA Certification Exam Passed	0	0	2	7	3	8	9	4	0	0	33
	PCT/AUA Employment Obtained	0	0	2	7	3	8	1	4	0	N/A	25
LPN	Application	5	6	13	0	1	8	10	11	5	1	60
	Accepted	4	3	5	N/A	1	3	4	4	3	1	28
	Started	4	3	5	N/A	1	3	3	4	3	1	27
	Completed	4	1	4	N/A	1	2	1	1	0	0	14
	NCLEX-Practical Nursing (PN) Exam Passed	4	0	2	N/A	1	2	1	1	0	0	11
	LPN Employment Obtained	4	0	1	N/A	1	2	0	1	0	0	9
RN	Working Towards General Ed Requirement	4	0	4	11	3	9	11	6	0	2	50
	Completed General Ed Requirement	1	0	3	6	1	1	1	0	0	0	13
	LPN-to-RN Bridge Program Application	1	0	1	N/A	N/A	0	0	0	0	0	2
	Application	1	0	3	6	2	1	1	0	0	0	14
	Started	1	N/A	3	6	2	1	1	0	0	0	14
	Completed	1	N/A	1	0	0	0	0	0	0	0	2
	RN Exam Passed	1	N/A	1	0	0	0	0	0	0	0	2
	RN Employment Obtained	1	N/A	1	0	0	0	0	0	0	0	2

Notes: In this and following tables, gray boxes indicate that a cohort has not yet reached a particular milestone.
[a] This number does not include individuals who enrolled but never started the first class.
[b] CNA 3 and its associated Geriatric Tech Certification were dropped from the pathway in Cohort 5.
[c] CNA 2 was dropped from the pathway in Cohort 8.
Source: CAP administrative records submitted in August 2015.

Figure 6. Progress Along Nursing Career Pathways through July 2015

RN Application 14 of 14 accepted

RN 13 of 14 completed or current

RN Exam 2 of 2 passed

Pre-Reqs 40 of 50 completed or current

Bridge 2 of 2 completed

1 Stopped during the RN program

LPN Application 28 of 60 accepted

LPN 14 of 27 completed or current

LPN Exam 11 of 13 passed

8 Stopped after the LPN program

PCT 57 of 62 completed or current

AUA Exam 33 of 43 passed

16 Stopped after the PCT program

CNA Exam 100 of 101 passed

CNA 2 or 3 85 of 86 completed

31 Stopped after the CNA program

CNA 1 102 of 108 completed

Prior CNA 18

Number Who Started Each Training Program

CNA 1 **108**

CNA 2 or 3 **86**

PCT or LPN **89**

Bridge or Pre-Reqs **52**

RN **14**

Health Information Technology Pathway Participation and Progress

The Career*Advance®* 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[8]. At TCC, pathway training leads to an associate's degree in Health Information Technology.

Progress in the HIT pathway was 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 this group of participants first joined Career*Advance®.* Since that time the conversion was delayed twice by Congress, first to October 2014 and then to October 2015.[9] 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.[10] Career*Advance®* participants have received a mix of instruction in both ICD-9 and ICD-10.

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[8] The Patient Billing and Insurance program was added only for Cohort 7 to accommodate participants starting in Career*Advance®* a semester prior to starting in TCC's HIT program.

[9] 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

[10] See the ICD-10 Exam Delay FAQs here: http://www.ahima.org/certification/delay

Table 7. Participant Progress in Training for HIT Pathway through July 2015

Milestone	C4	C5	C6	C7	Total
Medical Assisting Start	15	11	N/A[a]	N/A[a]	26
Medical Assisting Completed	9	10	N/A[a]	N/A[a]	19
Registered Medical Assistant (RMA) Exam Passed	9	8	N/A[a]	N/A[a]	17
MA Employment Obtained	8	3	N/A[a]	N/A[a]	11
Patient Billing Start	N/A[b]	N/A[b]	N/A[b]	5	5
Patient Billing Completed	N/A[b]	N/A[b]	N/A[b]	5	5
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	1	0	0	0	1
HIT Start	5	7	4	3	19
Certified Coding Associate's Exam Passed	1	1	0	0	2
HIT Certificate Completed	3	2	0	0	5
HIT Associate's Degree Completed	3	1	0	0	4
Registered HIT Exam Passed	0	0	0	0	0
HIT Employment Obtained	0	1	0	0	1

Notes: [a] In Cohort 6, MA was removed from the HIT pathway.
                  [b] Patient Billing added to the HIT pathway for Cohort 7 only.
Source: CAP administrative records submitted in August 2015

Figure 7. Progress Along Health Information Technology (HIT) Pathway through July 2015
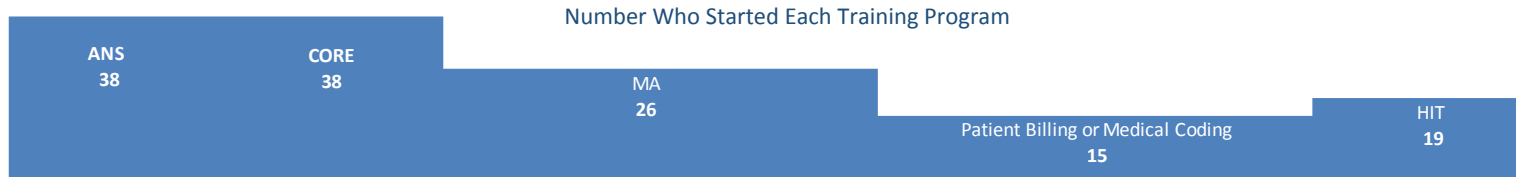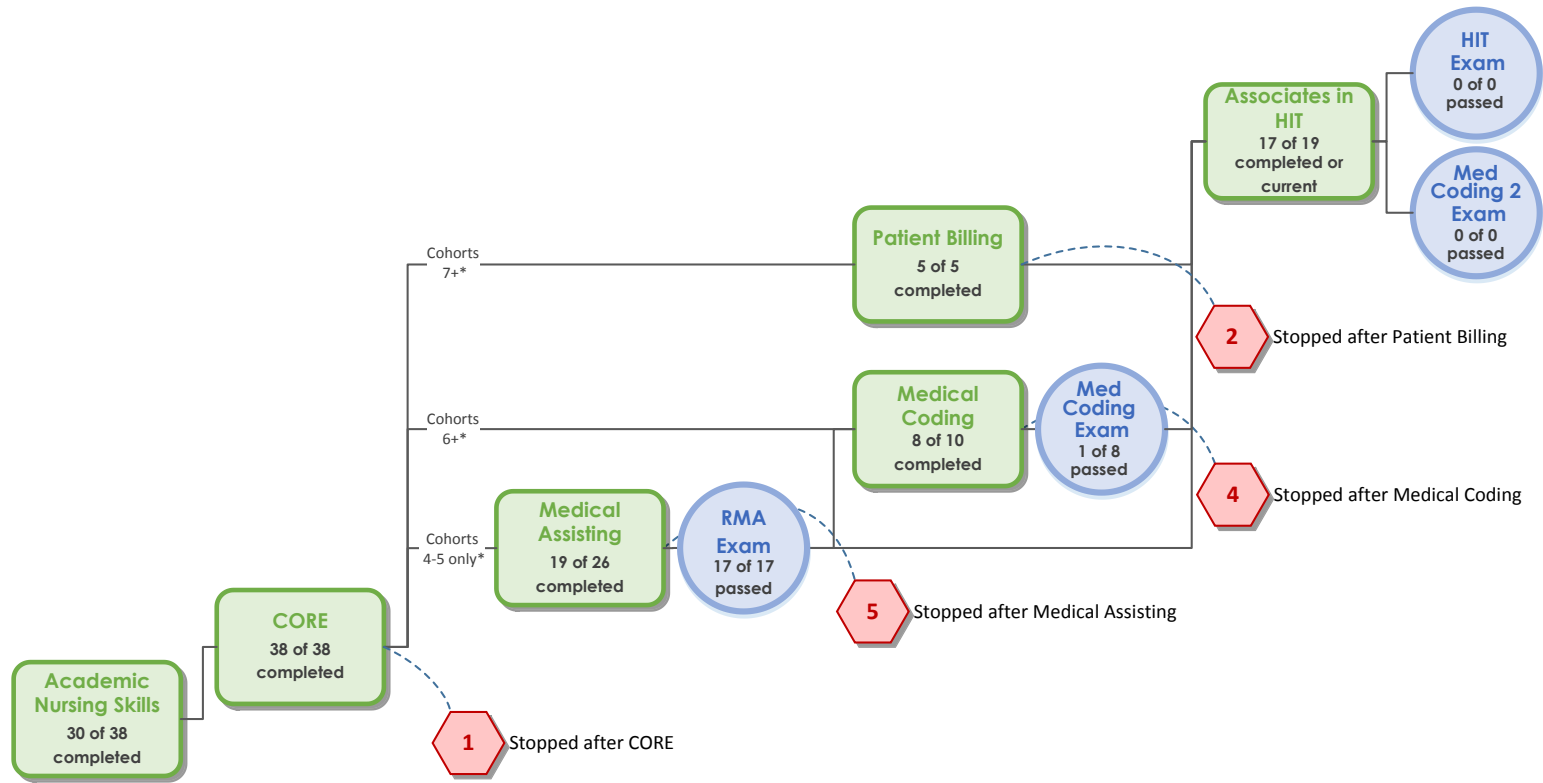
*For Cohorts 4-5, Medical Assisting was part of the pathway to Associates in HIT.
 Patient Billing introduced with Cohort 7.

30

Participation and Progress in Other Healthcare Career Training

Table 8 and Figure 8 detail participant progress in the "one-and-done" Career*Advance*® training options: Medical Assisting (Cohorts 6, 7, 8 and 10), Pharmacy Technician (Cohorts 7 through 10), Allied Health (Cohorts 8 through 10), and Dental Assisting (Cohort 9 through 10). While there are only a few participants in any of these training pathways, completion rates for the short-term options appear strong.

Table 8. Participant Progress in Other Healthcare Career Training Programs through July 2015

	C6	C7	C8	C9	C10	Total
Medical Assisting						
Medical Assisting Start	5	N/A[a]	7	N/A[a]	1	13
Medical Assisting Completed	5	N/A[a]	7	N/A[a]	1	13
Registered Medical Assistant (RMA) Exam Passed	5	N/A[a]	7	N/A[a]	1	13
MA Employment Obtained	4	N/A[a]	7	N/A[a]	0	11
Pharmacy Technician						
Pharmacy Technician Start	N/A[b]	1	7	6	1	15
Pharmacy Technician Completed	N/A[b]	1	7	6	1	15
Pharmacy Technician Exam Passed	N/A[b]	0	0	0	0	0
Pharmacy Technician Employment Obtained	N/A[b]	0	0	0	0	0
Dental Assisting[e]						
Dental Assisting Start	N/A[c]	N/A[c]	N/A[c]	6	0	6
Dental Assisting Completed	N/A[c]	N/A[c]	N/A[c]	4	N/A	4
Dental Assisting Employment Obtained	N/A[c]	N/A[c]	N/A[c]	3	N/A	3
Allied Health						
Applied to Allied Health Program	N/A[d]	N/A[d]	4	0	0	4
Accepted to Allied Health Program	N/A[d]	N/A[d]	4	N/A	N/A	4
Started Allied Health Program	N/A[d]	N/A[d]	4	N/A	N/A	4
Completed Allied Health Program	N/A[d]	N/A[d]	0	N/A	N/A	0

Notes: [a] Medical Assisting not offered in Cohort 7 or Cohort 9.
[b] Pharmacy Technician was added in Cohort 7.
[c] Dental Assisting was added in Cohort 9.
[d] Allied Health was added in Cohort 8.
[e] Certification exams for dental assisting are taken after ending Career*Advance*®, after several years of employment.
Source: CAP administrative records submitted in August 2015.

Figure 8. Progress Along Other Healthcare Occupations Offered by Career*Advance*®
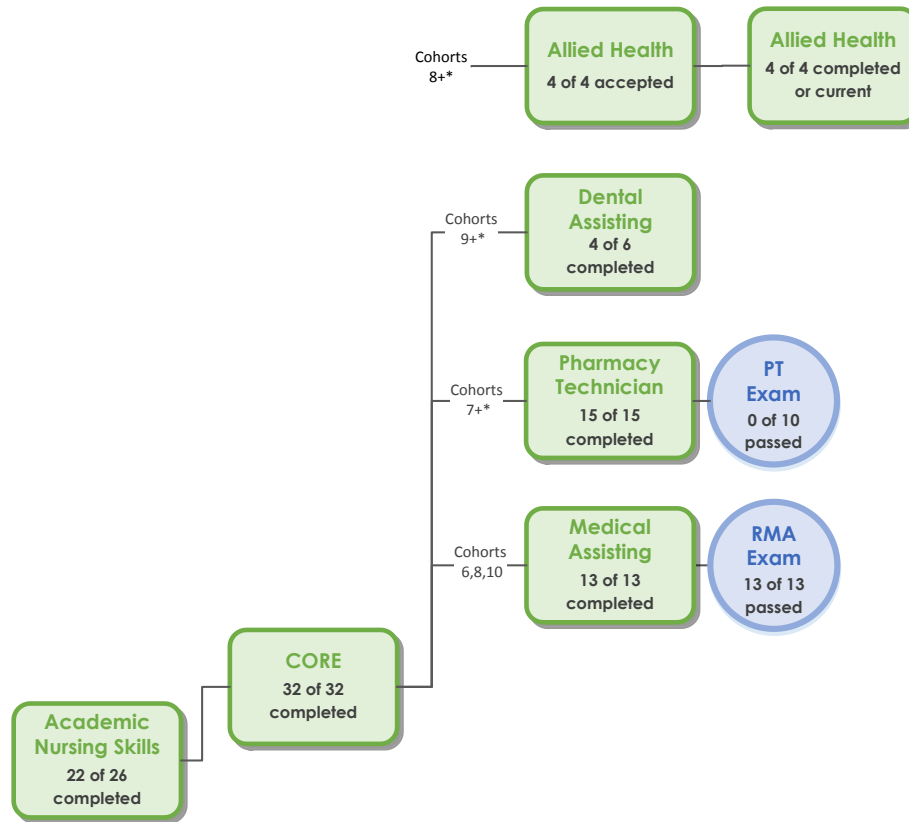
*Beginning with Cohort 6, Medical Assisting is a career training program not part of a pathway. Previously, Medical Assisting was part of the HIT pathway.
Pharmacy Technician classes offered beginning with Cohort 7. Allied Health offered beginning with Cohort 8. Dental Assisting offered beginning with Cohort 9.

Summary of Program Outcomes

Table 9 provides a summary of outcomes, including course completions, exam pass rates, and the numbers entering training-related employment, through July 2015 based on the number of Career*Advance*® 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 most completing the course and obtaining employment.

Table 9. Training Outcomes Summary through July 2015

Course of Study	Number that Started Course of Study*	Course of Study Completion Rate*	Exam Pass Rate	Employment Rate
Nursing Pathway				
CNA	108	94%	93%	76%
PCT	62	97%	53%	40%
LPN	60	52%	41%	33%
HIT Pathway				
MA	26	73%	65%	42%
Medical Coding	10	80%	10%	10%
HIT	19	40%	0%	10%
Training Programs				
MA	13	100%	100%	85%
Pharmacy Tech	15	100%	0%	0%
Dental Assisting	6	67%	N/A	50%

Source: CAP administrative records submitted in August 2015.
NOTE: Exam Pass Rate represents the percent of students enrolled in the course who passed the exam.

July 2015 Participation Snapshot

Tables 10a and 10b provide a snapshot of the status of participants in Career*Advance*® as of July 2015. Table 10a documents the number of active nursing pathway participants from Cohort 1 through Cohort 10, as well as the number who exited before and after achieving a certificate of completion for a course of study. Over half of nursing participants have completed a course of study through Career*Advance*®, with approximately a third of all nursing participants still active in the program through July 2015.

Table 10a. Career*Advance*® Nursing Participants: Status as of July 2015

	Nursing										
	C1	C2	C3	C 4	C 5	C6	C7	C8	C9	C10	Total
Enrolled	14	10	15	15	13	18	15	18	7	10	135
Active	0	0	2	4	2	4	8	7	5	7	39
Inactive	14	10	13	11	11	14	7	11	2	3	96
Achieved Certificate and Exited	14	8	13	11	8	10	7	8	2	1	**82**
Exited Prior to Achieving Certificate	0	2	0	0	3	4	0	3	0	2	**14**

Source: CAP administrative records submitted in August 2015.
NOTE: Numbers may not equal those reported in Table 9 because not every enrollee started a nursing course.
Note: Certificate is defined as receiving a certificate of completion for a course of study.

Table 10b documents the status of participants in other occupational training programs. Approximately 22% of these participants were still active in the program as of July 2015, and 53% of participants in these other programs had earned a certificate of completion for a course of study through Career*Advance*®.

Table 10b. Career*Advance*® Participants in All Other Training Options: Status as of July 2015

	Health Information Technology				Medical Assisting			Pharmacy Technician				Allied Health			Dental Assisting	Total
	C4	C5	C6	C7	C6	C8	C10	C7	C8	C9	C10	C8	C9	C10	C9	
Enrolled	15	12	6	5	6	7	1	1	7	6	1	4	2	3	6	82
Active	3	2	2	3	0	0	1	0	0	0	0	4	0	2	0	17
Inactive	12	10	4	2	6	7	0	1	7	6	1	0	2	1	6	65
Achieved Certificate and Exited	7	8	3	0	5	7	0	1	7	6	1	0	0	0	4	**49**
Exited Prior to Achieving Certificate	5	2	1	2	1	0	0	0	0	0	0	0	2	1	2	**16**

Source: CAP administrative records submitted in August 2015.
NOTE: Numbers may not equal those reported in Table 9 because not every enrollee started a training course.
Note: Certificate is defined as receiving a certificate of completion for a course of study.

FACTORS THAT SUPPORT OR IMPEDE PARTICIPANT PROGRESS

There are two key sources of information for understanding participants' experiences in the Career*Advance®* 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 were conducted twice annually with participants at all levels of the program. Questions for the focus group sessions centered 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. Reports summarizing responses from focus group participants included findings and recommendations that contributed to program evaluation and improvement efforts. The following sections summarize supportive and impeding factors identified in focus group sessions conducted throughout the program.

Supportive Factors

Focus group participants consistently expressed their appreciation of the opportunity that Career*Advance®* provides. The supports and incentives built into the program design, such as coaching (coaches were described as responsive, encouraging and resourceful) financial incentives, and child care, were identified by participants as essential to their progress and success in the program. Most participants also identified family, including parents, spouse, and children, as key motivators and essential resources for their persistence in Career*Advance®.* Participants reported that the connections they made with others in their cohort provided academic and emotional support, including a sense of accountability toward the group, were key motivators for persistence.

Additional program supports were also identified as contributing to their success including: the availability of extended day child care, a detailed CNA program calendar, the CORE course (focused on study and computer skills, goal setting, and stress management), the True Colors personality assessment that helped individuals communicate better with their peers, support from teachers and other professionals at clinical settings, and the availability of a financial coach.

Impeding Factors

Focus group sessions also explored the challenges participants faced in persisting in and completing the Career*Advance*® program. The impeding factors identified by participants included a range of issues, from personal to academic to financial. Issues within the Career*Advance*® 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 chosen career occupation.

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 Career*Advance*® 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 Career*Advance*® 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.[11] Recently, universities and colleges have also conducted exit interviews to investigate student attrition and faculty retention. Although some criticism arises around biased reporting, 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 Career*Advance*® 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 Career*Advance*® program.

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[11] Doll, Paddy A. and Keith W. Jacobs. (1988)*. "*The Exit Interview for Graduating Seniors." *Teaching of Psychology.* Vol. 15, No. 4, Pp. 213 – 214.

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 Career*Advance*® exit interview focuses on four main areas: exit reasons; employment; education and training information; and participants' perception of their experience with the Career*Advance*® program. The interview form contains both multiple choice questions and questions in an open-ended format.

Summary of Exit Interview Participants

Through June 2015, a total of 119 participants from Cohorts 1 to 10 completed an exit interview.[12] About half (54%) of the exited participants completed the exit interview by themselves, while the Career Coach completed the remainder of the interviews either via a phone conversation with the participant or based on their knowledge of the participant. 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. Some analyses will present results for those who exited at a graduation point and for those who were "early exiters."

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[12] Ten individuals had more than one exit interview; only the most recent exit interview was used in the analysis.
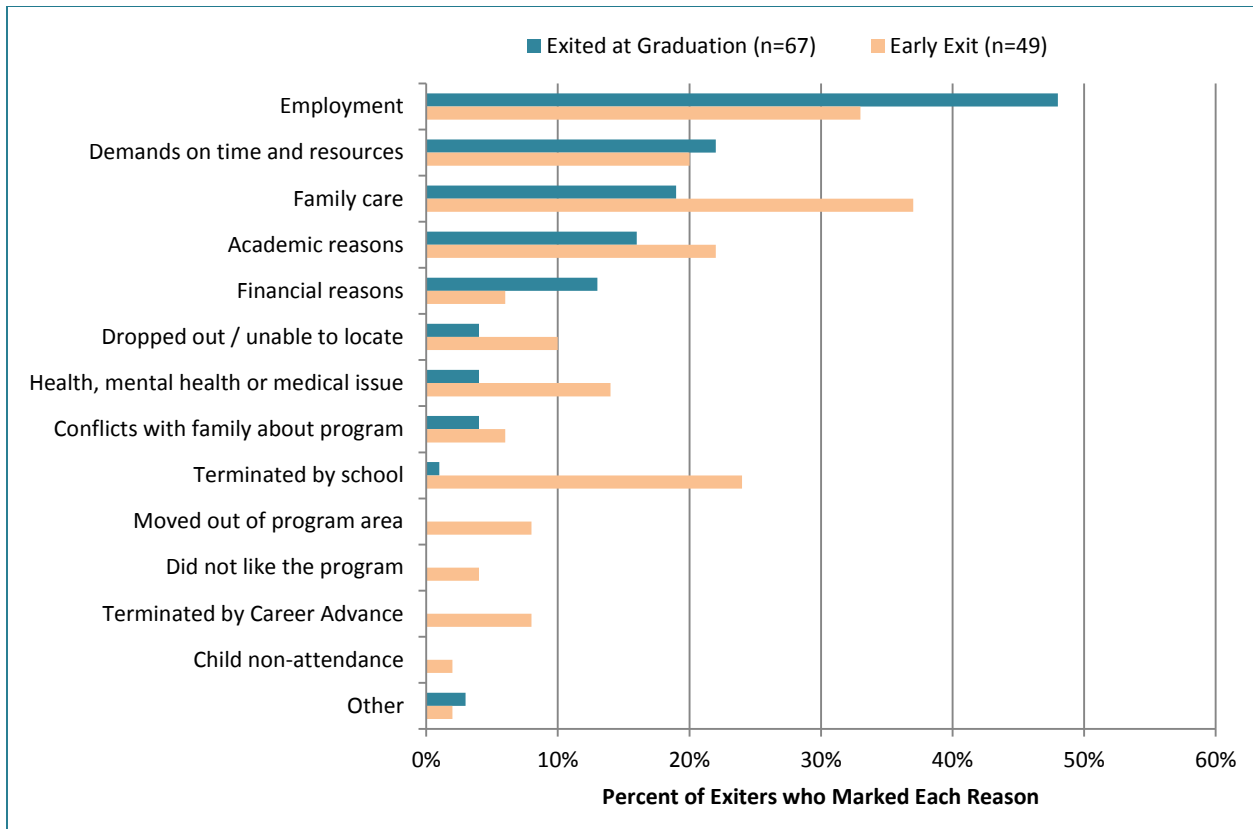
Exit Reasons

The Career*Advance*® 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) [13].

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<u>Exit Interview List of Possible Reasons for Exit</u>

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 Career*Advance*®
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

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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, "family care" and "employment" were the most cited reasons. Not far behind those were "terminated by the school" and "academic reasons".

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[13] In some instances, reasons were selected by check mark rather than ranked.

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

Source: Career*Advance*® exit interview data available through June 2015.

Overall, about a one-fifth (19%) of exiters reported academic reasons as at least one of the reasons for leaving Career*Advance*®. Over time, the application requirements and selection standards for Career*Advance*® have evolved 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 (26% and 21%, 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 Career*Advance*® program

39

provides incentives and child care 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, Career*Advance®* 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, 74% of those who exited at graduation reported having found employment, compared to only 56% of early exiters. On average, program exiters were engaged in regular employment on less than a full-time basis, regardless if they had completed a training program or not. Graduates reported an hourly wage of just over $11, slightly higher than early exiters (about $10). It is noteworthy that more than half (53%) of graduates secured employment with healthcare benefits, compared to only about one-fifth (22%) of the early exiters. Both groups of exiters overwhelmingly secured employment in the healthcare field (76% of graduates and 71% of early exiters), and the majority of those entered into a healthcare occupation (81% of graduates and 72% of early exiters).

It is worth mentioning that even those who exited Career*Advance®* before training completion largely ended up joining the healthcare workforce. 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 Career*Advance*®, by Exit Point**

	Exit Point at Graduation N=65	Early Exit N=45
Percent Employed at Exit	74%	56%
Median Starting Hourly Wage	$11.12	$10.31
Average Weekly Hours	34	33
Percent with Health Insurance Available through Employer	53%	22%
Percent in Healthcare Occupation	76%	71%
Type of Employer		
Healthcare Employer	81%	72%
Tribal Organization	2%	8%
Other	0%	0%

Source: Career*Advanc*e® exit interview data available through July 2015.

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. Across all exiters, the highest rated element was financial support, with Career Coaches and the focus on the healthcare field being close seconds. Ironically, peer support was least likely to be rated as 'extremely supportive', although it, too, received high scores on average. The peer group and cohort model are typically cited as one of the favorite features of the program in both the exit interviews and in focus groups. The slightly lower results for this feature may be a result of the way the question is worded ("Peer support (e.g. partner meetings)") which emphasizes the partner meetings and not the support from other participants, which is characteristic of the cohort model.

Figure 10. Exiter Ratings of Career*Advance*® Program Elements
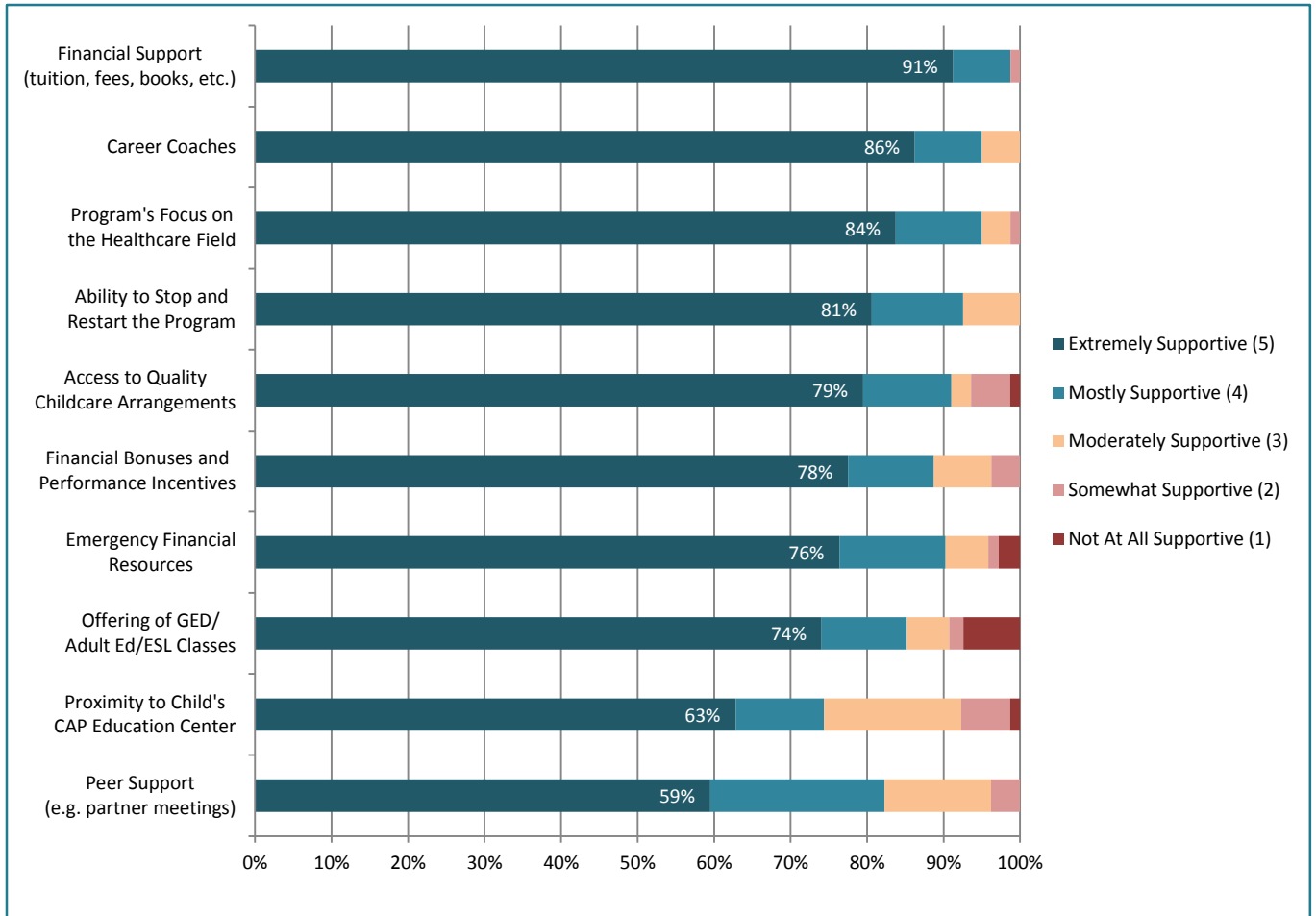
Note: The number in parentheses indicates the Likert-scale ranking.
Source: Career*Advance*® exit interview data as of June 2015.

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 Career*Advance*® program; Career*Advance*® 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 Career*Advance*®, especially the financial incentives and the support of the Career Coach. Participant comments often focused on the

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

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

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 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 proceed 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 of her. The absence policy was also the topic of several comments – exiters felt that some absences, such as time taken to care for a sick child, should be excused since these absences are unavoidable yet could lead to the participant not receiving her incentive payment for the month.

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.

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.

SUMMARY

Career*Advance*® is a highly varied experience for participants that differs by year and training pathway: no cohort has experienced exactly the same program over the years. 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.

Going forward, the Career*Advance*® program should continue to draw on its multiple strengths:

- Career*Advance*® 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.

- Career*Advance*® has been modified based on feedback from, and the performance of, actual participants. This process makes the program very customer-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.

- Career*Advance*® supports students as a team through cohort-based activities and individually, which helps them 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.

- Career*Advance*® 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 Career*Advance*® continue to communicate the reasons behind these changes with CAP Tulsa parents and current participants.

Remaining challenges that could be addressed by Career*Advance®* 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. Career*Advance®* should continue to strive towards a stable and sustainable program model.

- Career*Advance®* 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 even 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 chosen career goals. Job shadowing experiences for potential applicants may be useful to increase interest in under-enrolled training options.

- Data suggests 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. Career*Advance®* should work with training providers to identify preparation barriers and perhaps develop review materials and courses. Career*Advance®* should also continue to offer financial incentives for credential attainment and enforce program policies that limit continued participation when credentials are not obtained.

Tulsa's Career*Advance* is one of the first — if not the first — of what are now being referred to as "2-generation 2.0" programs. It offers the parents of children in high-quality early childhood education the opportunity for stackable training in a sectoral, career pathway approach with substantial supports in the form of career coaches, peer groups, financial incentives, and child care. From the implementation studies conducted over the past several years, it appears the program is largely working as originally intended. Participants, even those who "stop out" prior to completion, are securing credentials valued by employers and obtaining jobs paying good wages in the healthcare field. There is also evidence that its participants are persisting and completing training at rates well above those for broadly similar education and

training programs serving low-income, low-skilled population groups (Sabol et al., 2015)[14]. The

first estimated program impacts for CareerAdvance parents and their children will become

available in late spring 2016.

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[14] Terri J. Sabol, Teresa E. Sommer, P. Lindsay Chase-Lansdale, Jeanne Brooks-Gunn, Hirokazu Yoshikawa, Christopher T. King, Ummul Kathawalla, Rayane Alamuddin, Celia Gomez, and Emily C. Ross (2015). "Parents' Persistence and Completion in a Two-Generation Education and Training Program," *Children and Youth Services Review.* In press.