



RAY MARSHALL CENTER
for the Study of Human Resources

THE UNIVERSITY OF TEXAS AT AUSTIN
Lyndon B. Johnson School of Public Affairs

The Evolution of the *CareerAdvance*[®] Program in Tulsa, Oklahoma



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

The Evolution of the CareerAdvance® Program in Tulsa, Oklahoma

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

Tara C. Smith
Rachel V. Douglas
Robert W. Glover

October 2012



RAY MARSHALL CENTER
for the Study of Human Resources



3001 Lake Austin Blvd., Suite 3.200
Austin, TX 78703 (512) 471-7891
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 agencies or The University of Texas at Austin.

TABLE OF CONTENTS

List of Tables	ii
List of Figures	ii
Glossary of Acronyms	iii
Acknowledgments.....	v
Preface	vii
Executive Summary.....	ix
CareerAdvance®: An Overview	1
Building on Early Head Start/Head Start with a Two-Generation Focus.....	1
The Community Action Project of Tulsa County (CAP).....	3
Early Childhood Education at The Community Action Project of Tulsa County	3
The Design of CareerAdvance®	5
Key Components of CareerAdvance®	7
Overview of the Research Plan	10
CareerAdvance® Program Development	11
Challenges Faced and Program Responses.....	12
Evolution of the Training and Career Pathways	12
Participation in Basic Skills Training.....	18
Evolution of Recruiting, Screening, and Selection.....	20
Preliminary Testing	25
Evolution of Shared Expectations and Performance Incentives	27
Peer Group Meetings.....	30
Partner Programs.....	31
Participant Perspectives	32
Benefits of the Program.....	33
Participation Goals.....	34
Developing Life Skills.....	34
Friction Points	35
Advice for Future Participants	35
Progress of CareerAdvance® Participants.....	36
Profile of CareerAdvance® Participants and Their Families	40
Basic Demographics	40
Family Economic Status	41
Children in CareerAdvance® Families	43
Conclusion and Recommendations	45
Continuous Improvement.....	45
What to Expect: Early Signs of Success.....	47
Limitations of this Study	48
References	49

LIST OF TABLES

Table 1. CAP Family Life Study Data Elements.....	10
Table 2. Participation in CareerAdvance® Activities to Promote Basic Skill Attainment.....	20
Table 3. Changes in Eligibility Standards, Application Requirements, and Selection Criteria for CareerAdvance®	23
Table 4. CareerAdvance® Recruiting, Application, and Enrollment Statistics,	24
Table 5. TABE Test Scores by Cohort and Educational Pathway, Cohorts 3-6.....	26
Table 6. COMPASS Test Scores by Cohort and Educational Pathway, Cohorts 3-6.....	27
Table 7. Participant Progress in Nursing Pathway as of August 2012	37
Table 8. Participant Progress in Health Information Technology / Medical Assisting Pathway as of August 2012.....	38
Table 9. CareerAdvance® Participants' Status as of August 2012	39
Table 10. Profile of CareerAdvance® Enrollees, Cohorts 1-6.....	41
Table 11. Profile of CareerAdvance® Family Economic Status, Cohorts 1-6	42
Table 12. Profile of Children in CareerAdvance® Families, Cohorts 1-6.....	44

LIST OF FIGURES

CareerAdvance® Timeline	11
Figure 1. Initial CareerAdvance® Nursing Career Pathway.....	13
Figure 2. Revised CareerAdvance® Nursing Career Pathway	15
Figure 3. CareerAdvance® Initial Health Information Technology (HIT) Pathway.....	17
Figure 4. CareerAdvance® Modified Pathway for Health Information Technology	18

GLOSSARY OF ACRONYMS

ACF.....	Administration for Children and Families
ADN.....	Associate’s Degree in Nursing
AHEC.....	Area Health Education Center
ANS.....	Academic Nursing Skills
AUA.....	Advanced Unlicensed Assistant
CAP.....	Community Action Project of Tulsa County
CLASS.....	Classroom Assessment Scoring System
CNA.....	Certified Nurse Aide
CPR.....	Cardiopulmonary Resuscitation
ECE.....	Early Childhood Education
ECP.....	Early Childhood Program
EITC.....	Earned Income Tax Credit
EOC.....	Education Opportunity Center
GED.....	General Educational Development
HESI.....	Health Education Systems, Inc.
HIT.....	Health Information Technology
HPOG.....	Health Profession Opportunity Grant
IDA.....	Individual Development Account
LPN.....	Licensed Practical Nurse
MA.....	Medical Assisting
NAEYC.....	National Association for the Education of Young Children
NCLEX-PN.....	National Council Licensure Examination – Practical Nurse
NCLEX-RN.....	National Council Licensure Examination – Registered Nurse
PCT.....	Patient Care Technician
RN.....	Registered Nurse
TABE.....	Test of Adult Basic Education
TCC.....	Tulsa Community College
TPS.....	Tulsa Public Schools
UPS.....	Union Public Schools
WIA.....	Workforce Investment Act of 1998
WIB.....	Workforce Investment Board

ACKNOWLEDGMENTS

Workforce development for parents is part of the vision of the Community Action Project of Tulsa County (CAP) to help improve the economic position of low-income parents and to sustain the performance outcomes achieved by the children in CAP's early childhood program. Steven Dow, CAP's executive director, realized the potential of a two-generation approach and was an early supporter of adding parent occupational training to the CAP Early Childhood Program. That program became known as *CareerAdvance*®. We especially want to thank the staff of *CareerAdvance*® including manager Liz Eccleston, and Career Coaches Tanya O'Grady, Grace Nelson, and Megan Oehlke. Elizabeth Harris and Valerie Osgood-Sutton helped maintain excellent records on the program and responded to our numerous inquiries.

During our regular conference calls with CAP staff for more than four years, Hirokazu Yoshikawa of the Harvard Graduate School of Education shared his vast knowledge of relevant academic research and program implementation, which greatly helped in guiding both the research and the program. We also want to thank our research partners at the Institute for Policy Research at Northwestern University, especially P. Lindsay Chase-Lansdale, Teresa Eckrich Sommer, Terri Sabol, and Emily Ross, and Jeanne Brooks-Gunn at Columbia University. Brooks-Gunn, Chase-Lansdale, and Sommer discovered *CareerAdvance*® on a nationwide search funded by the Gates Foundation in 2010 for exemplary two-generation programs. They made us all realize how special *CareerAdvance*® is. By joining the research team, they have enormously strengthened the study of *CareerAdvance*® through their extensive expertise on families and children.

The *CareerAdvance*® project is a collaboration involving many partners, who all have cooperated with project and research staff from the beginning. These partners include Tulsa Community College, Workforce Tulsa, Family & Children's Services, Union Public Schools Community Education Program, Tulsa Technology Center, the Educational Opportunity Center (EOC) at Rogers State University, the Eastern Oklahoma Black Nurses Association, ResCare Workforce Services, and the Northeast Oklahoma Area Health

Education Center (AHEC). Staff of the Capital IDEA program in Austin provided assistance in training *CareerAdvance*[®] staff, sharing their knowledge and experience. We want to thank the leadership and staff from all of these organizations for being helpful colleagues in this project.

We also want to thank the *CareerAdvance*[®] participants who shared their perspectives in focus groups with us. They provided a vital, rich source of information for this study. We thank Teresa Eckrich Sommer of Northwestern, who co-facilitated the focus groups held in December 2011 and helped develop questions for the focus groups conducted in May 2012.

Thanks are due to Brendan Hill, Susie Riley, and Karen White of the Ray Marshall Center who were especially helpful in providing logistical and research support. Finally, we owe our thanks to the Principal Investigator for this project at the Ray Marshall Center—Christopher King—for getting each of us involved. His enthusiasm and commitment to this work has kept us all energized and eager to learn more about what is happening in Tulsa.

PREFACE

This paper is the third in a series of reports focusing on the implementation of *CareerAdvance*[®]—a program for training parents of Head Start and Early Head Start children, administered by the Community Action Project of Tulsa County (CAP). The first report focused on the start-up of the *CareerAdvance*[®] program (Glover et al., 2010). The second reported on the expansion of *CareerAdvance*[®] under a grant from the Administration for Children and Families at the U.S. Department of Health and Human Services (Glover et al., 2012) under its Health Profession Opportunities Program (HPOG).¹ The objective of the HPOG program is to provide low-income individuals with opportunities to become qualified for employment in the healthcare industry.

This report has three aims, addressing three separate audiences:

(1) To report to the CAP and *CareerAdvance*[®] staff and sponsors about progress of the project;

(2) To document activities and modifications made in the *CareerAdvance*[®] design, describing how, when, and why the changes were made, along with effects of the changes where possible. This will be essential to interpreting the results of the outcomes and impacts of the program being examined in the broader CAP Family Life Study. This study involves researchers from the Institute for Policy Research at Northwestern University, Harvard University's Graduate School of Education, Columbia University's Institute for Child and Family Policy, and the Ray Marshall Center at The University of Texas at Austin;

(3) To inform the broader research community regarding lessons learned and to serve as a resource for funders and operators of future two-generation programs that seek to advance the well-being of low-income families through high-quality early childhood education and postsecondary education and workforce training.

¹All reports on *CareerAdvance*[®] are available for viewing and downloading on the website of the Ray Marshall Center at www.raymarshallcenter.org.

EXECUTIVE SUMMARY

CareerAdvance® began in Tulsa in 2009 as the parent training portion of a two-generation strategy to end the cycle of poverty in families with a child enrolled in Head Start or Early Head Start. The driving theory of change behind CareerAdvance® is that family economic success will protect and enhance gains made through high-quality early childhood programs even after children transition into the public school system. The program is operated by the Community Action Project of Tulsa County (CAP), an antipoverty agency with a highly successful record in growing pilot programs into effective large-scale initiatives.

After a year as a pilot program, CareerAdvance® moved into regular operations, at which time funding 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 enabled the program to expand and scale-up. This report reviews the progress of CareerAdvance® during its second year of operations as an HPOG program from September 2011 through August 2012.

Over the past year, CareerAdvance® began classes for Cohort 4 in Fall 2011, started training Cohort 5 in January 2012, and recruited and enrolled Cohort 6 during Summer 2012. Adding to its original focus on nursing occupations, the CareerAdvance® staff developed and implemented training for a new career path in medical assisting/health information technology, which was subsequently split into two separate career paths. CareerAdvance® staff also organized an alternate route in the nursing pathway through the Patient Care Technician (PCT) program. The PCT program offers participants a shorter and more accessible path to the Registered Nurse (RN) credential than the Licensed Practical Nurse (LPN) program. CareerAdvance® further refined its procedures for recruitment, orientation, and enrollment and continued to seek ways to strengthen its approaches to providing supplemental basic skills and college-readiness instruction.

CAREERADVANCE®: AN OVERVIEW

CareerAdvance® began operations in the summer of 2009 as a sectoral workforce training program² for parents of children enrolled in Early Head Start/Head Start. It is part of an explicit two-generation antipoverty 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. The driving theory of change behind CareerAdvance® is that family economic success will protect and enhance gains made through high-quality early childhood programs even after children transition into the public school system. Launched and administered by staff of the Community Action Project of Tulsa County (CAP), CareerAdvance® builds on a strong system of Early Head Start and Head Start programs, adding high-quality training for parents targeted at selected healthcare occupations that offer family-supporting income, benefits and opportunities for career advancement.

It is now widely accepted across the scientific community that ages 0-5 years represent a special period of development when children are especially influenced by their environment (Shonkoff and Phillips, 2000). Evidence is also accumulating to demonstrate that children perform better behaviorally and academically in families with stable employment and rising incomes (Yoshikawa et al., 2006) and who are improving their own educational levels (Magnuson, 2007; Sommer et al., 2012). Increasing the human capital of the parent(s) protects and enhances the investments in their children made through the early childhood education programs, such as Head Start and Early Head Start.

Building on Early Head Start/Head Start with a Two-Generation Focus

Recent research suggests that young children can be a powerful source of motivation for parents to further their own education. Moreover, having children participate in quality early education centers can be a major new resource for promoting postsecondary education and training for parents (Sommer et al., 2012).

² Sector-based initiatives are targeted at a specific industry and designed to address local or regional workforce issues facing employers (See Glover and King, 2010; Maguire et al., 2010; Smith et al., 2011; Conway et al., 2007).

Low-income parents often state that one of the most common barriers to postsecondary enrollment and completion is the lack of accessible, affordable, quality child care (Gardner et al., 2011; Sommer et al., 2012). Early Head Start and Head Start provide up to five years of high-quality child development, allowing parents to further their own education and training.

Well-organized early childhood education (ECE) centers can offer parents peace of mind, a supportive community, and information and resources that create a unique platform for potential postsecondary success (Sommer et al., 2012). If mothers and fathers view themselves as part of a supportive community at the center involving other parents, teachers, support staff and administrators, then adding a postsecondary intervention component for mothers and fathers becomes feasible (Sommer et al., 2012). Parents already perceive ECE centers as reliable sources of information and guidance regarding child development and parenting. Center resources that actively serve the needs of parents could be expanded to include resources and assistance with postsecondary education and workforce development as well (Sommer et al., 2011).³

Theory and research have shown that: (1) postsecondary education and training is likely to increase the financial stability and life-long learning of low-income parents; (2) financial stability and postsecondary education improve child outcomes; (3) increasing a mother's and father's education while their children are still young is more effective and beneficial for parents and children than waiting until children are older and in public school; and (4) early childhood centers can provide an ideal context for implementing adult career and educational pathways while both parents and children are young (Sommer et al., 2012).

To date, few programs have addressed the postsecondary education and training needs of young, low-income parents and children through a family perspective. The innovation of *CareerAdvance*[®] is to create a two-generation educational initiative that is focused on both parents and children advancing together.

³ Recent work by the Ray Marshall Center (King et al., 2011) suggests that dual-generation strategies can build either from high-quality early childhood programs to incorporate sectoral workforce training, or from leading-edge workforce training to high-quality early childhood programs. In some communities it may only require connecting existing excellent programs, while in others it may require creating one or the other from scratch.

The Community Action Project of Tulsa County (CAP)

CAP is a comprehensive anti-poverty agency that addresses the multiple needs of low-income Tulsa families by providing programs in early education, housing, and financial and tax assistance. CAP has a history of partnering with schools and social service organizations in the Tulsa area, including Family & Children's Services, local school districts, Tulsa Community College, and the Tulsa Technology Center.

CAP is an innovator in early childhood education, asset development, financial education and other areas. CAP began the *CareerAdvance*® project with a demonstrated track record of successfully implementing innovative programs, testing their effectiveness, and building them to scale. In their early childhood work, CAP increased the number of children enrolled in its program by 40% in three years, growing from 1,376 in the 2006/07 school year to 1,928 in the 2008/09 school year. CAP operates several early childhood programs, including: Head Start, Early Head Start, the Oklahoma Early Childhood Program, Home-Based Early Childhood Education, and the Parents as Teachers program. While each program has unique eligibility criteria, each is targeted to serve low-income or disadvantaged families.

CAP also started a free tax preparation service for low- and moderate-income Tulsa families. CAP began preparing tax returns with the objective of ensuring that eligible families would receive the Earned Income Tax Credit (EITC) and other child-related tax credits to which they are entitled. Since its inception, CAP has become one of the largest free tax preparation programs of its kind in the country. CAP has also been active in promoting asset development and financial literacy through various programs, including an early Individual Development Account (IDA) program which encouraged household savings by providing matching funds. More recent financial services programs for CAP families include savings bonds and SaveUSA, a tax time matched savings program which offers low- and moderate-income families "a 50 percent match on a portion of their tax refund that they save for approximately one year" (*SaveUSA*, 2012, p. 8).

Early Childhood Education at The Community Action Project of Tulsa County

CAP strives to establish high-quality ECE programs. The National Association for the

Education of Young Children (NAEYC) has certified CAP's ECE centers. CAP staff members are well qualified; all lead teachers have bachelor's degrees and are supported by master teachers and a strong array of professional development programs. Most of the CAP centers are purposefully located adjacent to or on an elementary school campus in the Tulsa or Union public school district in order to provide children and their families a smoother transition from pre-kindergarten to elementary school. Teachers from the elementary schools visit the early childhood centers so that children become familiar with them. Children also tour the elementary schools to become familiar with the facilities before they move up. The co-location facilitates future possibilities to partner with families over expanded time frames, such as in the Pre-K through 3rd grade model advocated by the Foundation for Child Development (Shore, 2009) and the Child Parent Center model (Reynolds et al., 2011).

Each family with a child in Head Start, Early Head Start, or the State of Oklahoma Early Childhood Program is assigned a Family Support Specialist from Family & Children's Services who assesses family needs and works with parents to identify family goals at the beginning of each school year. During the year, the Family Support Specialist works with the family on the goals it has prioritized and helps them to deal with any crises that arise. Family support staff also present workshops to develop parenting skills and knowledge. During the past year, family support staff has presented workshops on *The Incredible Years*, a 14-week program to improve parent-child relationships and help promote the social competence and emotional regulation skills of children. They have also implemented the 12-week *Abriendo Puertas* program for Spanish-speaking parents, which aims to build parental confidence and capacity to advocate for their children. *CareerAdvance*[®] staff collaborate with family support workers to resolve problems and overcome obstacles to success in school.

CAP's classroom environments are annually assessed and analyzed using the Classroom Assessment Scoring System (CLASS[®]) program (La Paro et al., 2004), as well as a Teacher Effectiveness rubric. Professional development for teachers and other initiatives are implemented to make improvements each year on the basis of assessment results.

THE DESIGN OF CAREERADVANCE®

The design of CareerAdvance® was built on extensive research regarding three aspects of the Tulsa environment: (1) an economic and industry sector analysis, (2) a review of the structure and capacity of area education and training providers, and (3) information about the parents and families to be served. The findings of this research are summarized in King, et al. (2009). That report begins with an analysis of the Tulsa labor market and key sectors that provide opportunities for reasonably well-paid work with good employee benefits, job stability, safe working conditions, and opportunities for career advancement and wage growth. Included in the analysis is a discussion of leading employers and key jobs within the chosen sectors. Starting with the demand side of the market—employers' needs—is a significant feature of sectoral workforce development strategies and one that distinguishes them from more traditional workforce programs. Sectoral strategies are based on the principle, grounded firmly in labor market theory and backed by considerable research, that employers control the jobs and that programs must start from where people are and address gaps between this level and what employers need (Glover and King, 2010; Maguire et al., 2010; Smith and King, 2011).

Several candidate industries were considered in researching the Tulsa labor market in 2008-09, including advanced manufacturing, energy, aerospace, and healthcare. The Tulsa Chamber of Commerce and the Oklahoma Governor's Council for Workforce and Economic Development also targeted these industries. However, by 2009 after the Great Recession had begun, only healthcare met the criteria of a growing industry offering the requisite wage and advancement opportunities. Within healthcare, nursing was clearly the occupation with the largest worker shortage.⁴

An assessment of workforce and educational providers in the Tulsa area revealed that the Tulsa workforce system was composed of multiple organizations with varying degrees of connectivity. Workforce Tulsa, the region's workforce investment board (WIB), and the two Tulsa Workforce Centers are primarily funded by federal dollars from the U.S.

⁴ The shortage of nurses in Tulsa was subsequently validated and quantified by Plati (2010), which identified an annual shortage of 700 nurses.

Department of Labor's Workforce Investment Act (WIA) programs. The other organizations include providers of workforce training—Tulsa Technology Center, Tulsa Community College, and Oklahoma State University Institute of Technology—and the Tulsa Chamber of Commerce, which has played an important role in bridging economic and workforce development through the pursuit of sectoral approaches in recent years. Union Public Schools and the YWCA provide instruction in English as a Second Language and GED preparation.

Although Tulsa has strong technical education institutions, including Tulsa Tech and TCC, workforce preparation is fragmented and the Tulsa Workforce Board has purview only over funding from the Workforce Investment Act (WIA). Instructors in some occupational programs at Tulsa Tech and TCC have good connections with employers. However, workforce intermediaries are especially lacking in Tulsa. Workforce intermediaries connect educators and training providers with employers to ensure that workforce training programs develop in-demand skills. Intermediaries may also connect participants to wrap-around support services to enable the individual to engage in training, such as transportation cards and childcare.

To gather information on the parents to be served, CAP staff—with assistance from staff of Family & Children's Services—conducted a pilot survey designed jointly by the research team. The survey, which covered a sample of CAP parents from five centers, confirmed that many mothers of children in Early Head Start/Head Start were interested in pursuing careers in healthcare; some had even tried to do so on their own in the past—without success.

Working closely with CAP staff, the design team developed a project with multiple components that are grounded in the literature on best practices across several fields, including job training and sectoral workforce strategies, work supports, incentives and related areas. The design was tailored to Tulsa's unique labor market context, workforce structure, and capacity (King et al., 2009). Further, the program was to be nested in the CAP Early Childhood Education Program, which already offered a family support worker assigned to each family, parenting education sessions, and opportunities to participate in

screening for benefits eligibility.

Key Components of CareerAdvance®

- ❖ A shared expectations agreement spells out the mutual responsibilities and commitments of the participant and the program to one another. Signed by both parties at enrollment, this document is fundamental to the spirit of CareerAdvance®, which is that the process requires a joint effort to succeed.
- ❖ Sectoral workforce development approach focuses on selective occupations in a specific industry sector that offer family supporting wages with benefits and opportunities for wage growth and advancement (Giloith, 2004; Glover and King, 2010; and Maguire et al., 2010).
- ❖ Effective employer engagement is a key feature of sectoral workforce programs, which operate as workforce intermediaries serving dual customers—both employers and workers/job applicants. They focus on employers in an industrial cluster that they come to know well, identifying shortages of skilled workers, collaborating with employers to clearly identify the skills needed, and finding ways to fulfill those needs. They do not market their program participants as “disadvantaged” but rather prepare participants to become the skilled and competent workers who employers seek.
- ❖ Career path training is organized as a progressive, stackable series of trainings, each step of which offers a credential valued by employers. The result offers a career path on which the higher one progresses, the greater earnings one receives. If a participant needs to stop out to earn income for the family, s/he will have the credentials to gain access to a better job than without the program.
- ❖ Career coaching is a key staff function in the CareerAdvance® model. The Career Coach meets individually with each participant shortly after admission to the program to ascertain goals and to discuss his/her career plans. The Career Coach serves as a counselor, mentor, guide and advocate for participants, helping them negotiate the unfamiliar world of postsecondary education. The Career Coach arranges for school-related childcare, payment of tuition and other school expenses. The Career Coach works with family support staff and participants to resolve problems that impede success in schooling.
- ❖ Facilitated peer support is a central element in the CareerAdvance® model. CareerAdvance® builds a community of peer support for participants by organizing instruction in cohorts and holding weekly partner meetings. Career Coaches plan and facilitate the partner meetings, which provide a forum for program participants to: reflect on their experiences; conduct group problem-solving; hear guest speakers address a variety of topics (e.g., orientation to nursing careers, issues related to balancing work, school, and family, life skills, work readiness and workplace skills, and financial education); and practice exercises on goal setting, anxiety reduction,

and motivation. The meetings include occasional field trips to health care workplaces.

Participants are urged to offer encouragement and support to each other. A culture of collaboration and community of support develops in the group, often resulting in unprompted informal peer support, such as group studying, helping one another with childcare, and car-pooling. The partner meetings also provide a convenient setting for the career coach to accomplish necessary project administrative tasks, such as making announcements, distributing gas cards, and assuring that everyone is on track.

- ❖ Performance Incentives offer CareerAdvance® participants the possibility of earning \$200 per month for good attendance and performance, plus additional \$300 bonuses for accomplishing specific milestones, up to \$3,000 per year. The amount of the incentive is based in part on research regarding the effects of Earned Income Tax Credit (EITC) on children's achievement and later confirmed by Duncan and Magnuson (2011) who indicate that "an annual income increase of \$3,000 sustained for several years appears to boost children's achievement by roughly one-fifth of a standard deviation" or "about two months' advantage in school" (p. 27).

Many participants have quit jobs or reduced their hours in order to enroll in CareerAdvance®. Economists have long estimated that the opportunity cost of foregone income to be three-quarters of the costs incurred by individuals in education or training (Becker, 1993). The incentives partially offset the loss of income for family support during training. Participants are eligible to receive performance incentives only when they are actively taking classes.

- ❖ Instruction to upgrade basic skills and provide preparation for college— CareerAdvance® aims to help assure that its participants are equipped with the basic reading, writing and math skills required to be successful in training and employment. Participants who lack a high school diploma may access GED preparation services. Individuals who test below the 9th grade-level on entrance exams may be required to attend an Academic Nursing Skills (ANS) course.

In summary, the project design was based on familiarity with Tulsa's healthcare industry and its needs, the capabilities and strengths of local educational institutions that could become strong organizational partners with the project, and an understanding of the needs and challenges faced by the target population. One recommendation from the Ray Marshall Center's research design was not implemented. Given that many participants were anticipated to have little or no work experience, researchers proposed adding a component offering temporary paid jobs, following the example of the New Hope program

in Milwaukee, Wisconsin. Opportunities to develop such a program were explored with the City of Tulsa, however, the impact of the Great Recession and subsequent City budget cuts precluded implementation of this component.

OVERVIEW OF THE RESEARCH PLAN

CareerAdvance® is an early pilot of a two-generation approach which aims to break the cycle of poverty by focusing on improving the skills and well-being of two generations simultaneously. The research staff recognized that this project offered a unique opportunity to examine and evaluate a path-breaking program and to learn from it.

The Institute for Policy Research at Northwestern University joined the research team at the Ray Marshall Center at the University of Texas at Austin and Harvard University on this project in 2010. P. Lindsay Chase-Lansdale at Northwestern University, working with Jeanne Brooks-Gunn at Columbia University, and her colleagues brought expertise on child development to supplement the knowledge of workforce programs at the Ray Marshall Center.

The research approach also was substantially broadened and reframed as the *CAP Family Life Study*, with funding by the HPOG University Partnership grants program and from the W.K. Kellogg Foundation. In addition to the ongoing implementation analysis, the study includes an examination of the impact of CareerAdvance® on the parents and children, as well as on family life. A carefully designed nonexperimental (comparison group) methodology was developed and implemented for each cohort group beginning with Cohort 4. This broader investigation offers a suitable strategy for investigating participating families and comparison group families alike. Table 1 lists key data elements of the study.

Table 1. CAP Family Life Study Data Elements

Program and Performance Data	Interview and Survey Data
Program data on children in CAP centers	Individual interviews with participants and matched comparison group members
Program data from CAP on families, including participants and matched comparison group members	Surveys of participants and matched comparison group members
Performance assessments of parents and children (e.g., TABE and COMPASS scores for parents; Bracken scores for children)	CareerAdvance® exit interviews and 6-month follow-up interviews
CareerAdvance® participant progress data	Focus groups with participants, matched comparison group members, and staff at CareerAdvance® and Family & Children's Services
Program data from the Oklahoma Employment Security Commission and the Oklahoma Department of Human Services	Semimonthly conference calls with CareerAdvance® staff and research team members

CAREERADVANCE® PROGRAM DEVELOPMENT

CareerAdvance® began operations in July 2009 with the recruitment of its first cohort of nursing students. By August 2012 the program enrolled its sixth cohort of students. Along the way, CareerAdvance® has evolved from a single career path in nursing offered to parents at two Head Start centers to a multi-pathway program in healthcare careers offered to parents at CAP-operated early childhood programs and Educare⁵ centers throughout Tulsa. Key milestones in the pilot demonstration and expansion phases are detailed in the timeline to the right.

While the first set of students did not begin Certified Nurse Aide (CNA) training until August 2009, more than a year of planning went into the creation of the program. An analysis of Tulsa's labor market conditions in 2008 led to the selection of healthcare as the industry of focus for the career training pathway. A critical step in the program's development process was the establishment of formal partnerships with TCC and Tulsa Tech in July 2009.

The HPOG award to CAP in September 2010 enabled CareerAdvance® to expand its offerings and enrollment into additional career pathways in healthcare. The nursing pathway was expanded to include Patient Care Technician (PCT) training and a new pathway in health information technology (HIT) was established. Between August 2011 and August 2012 three new CareerAdvance® cohorts were launched, involving 84 participants split across nursing and HIT pathways.

⁵ Tulsa-Educare centers are part of a national network of research-based early childhood programs seeking to eliminate the achievement gap between poor and middle income kids. More information available at: <http://www.tulsaeducare.org/>

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

Concurrent with the HPOG expansion, CareerAdvance® is participating in a multi-phase, high-quality impacts analysis based on a matched comparison group examining outcomes for both parents and children. As CareerAdvance® moved toward its third year of HPOG operations in 2012, diversified pathway opportunities and continuous improvement policies were enacted to keep the program on track to meet its objectives.

Challenges Faced and Program Responses

Since the beginning of CareerAdvance®, CAP has approached program development as a continuous improvement process. Program staff and administrators are open to change and actively seek solutions to issues as they arise. This process has resulted in the evolution of multiple program components and procedures, as detailed in the following sections. As the program's operations are refined, participants' experiences and outcomes are expected to improve.

Evolution of the Training and Career Pathways

From the inception of CareerAdvance®, the aim was to build a career ladder of stackable training with credentials so that participants would qualify for a health care job no matter at what level they stopped out. As they moved up the career ladder, participants would become qualified for higher paying occupations that would enable their families to escape poverty. Health care is an economic sector characterized by heavy reliance on formal certifications and licenses. Thus it was important to build certification into the training scheme.

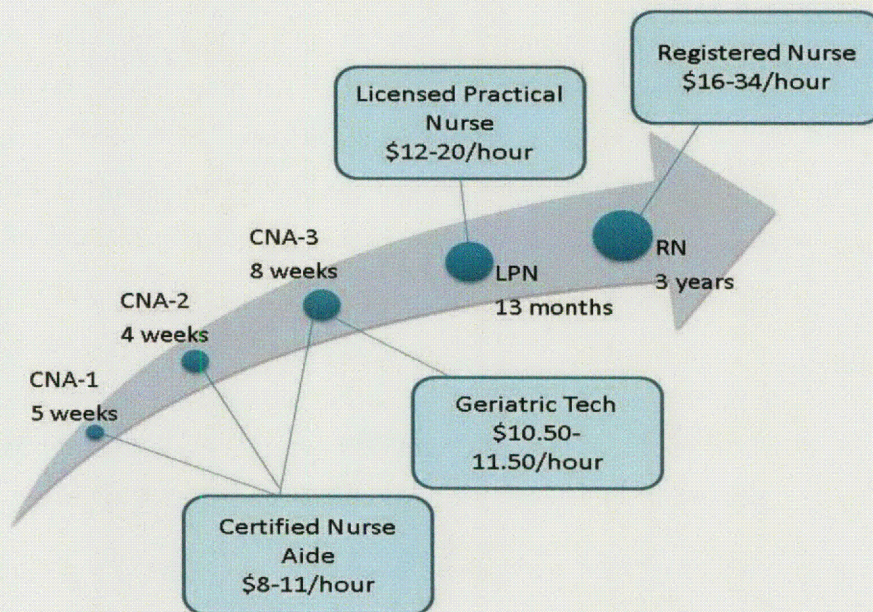
Recognizing that CareerAdvance® would likely serve individuals who had been out of school for several years and many who may have struggled academically for a variety of reasons, the program was designed to gradually build confidence and competence, providing tutoring and supplemental instruction in basic skills to prepare participants for success in college courses.

Tulsa has two major public educational providers of technical training: Tulsa Technology Center (Tulsa Tech) and Tulsa Community College (TCC). Both offer an extensive array of programs in nursing and allied health occupations and both have multiple

campuses across Tulsa. Unfortunately, few course credits earned at Tulsa Tech transfer to TCC. A challenge for CareerAdvance® staff has been to find ways to weave together efficient career paths making use of the resources of these two educational institutions.

CareerAdvance® started in 2009 with an essentially linear career path design in nursing, advancing from Certified Nurse Aide (CNA) to Licensed Practical Nurse (LPN) to Registered Nurse (RN). Figure 1 provides an overview of the initial design of the CareerAdvance® nursing career pathway. The program began with training as a CNA at TCC. This offered the advantage of making participants eligible to take the Oklahoma State CNA assessment and receive a certification after the first 8 weeks of training.⁶ It also provided a continuing path of training into CNA Levels 2 and 3 leading to certification by TCC as a Geriatric Technician, which also entitled recipients to participate in graduation ceremonies at the college. The CNA sequence of courses provided a meaningful start with a high rate of success, thereby building a sense of achievement and confidence among participants, who may have entered training with doubts about their abilities to succeed.

Figure 1. Initial CareerAdvance® Nursing Career Pathway



⁶ The CNA Level 1 training is a 5-week program; but after the program’s experience with Cohort 1, the Strategies for Academic Success program was added, thereby extending completion of CNA Level 1 to 8 weeks.

The Licensed Practical Nurse (LPN) program at Tulsa Technology Center offered a second stage in the nursing career track. The program includes a total of five blocks, beginning with courses in Medical Terminology and Anatomy and Physiology, then progressing to Concepts and Fundamentals of Nursing, followed by coursework in various basic aspects and specialties in practical nursing. Upon graduating from the LPN program and passing the National Council Licensure Examination for Practical Nurses (NCLEX-PN), the individual is certified by the Oklahoma Board of Nursing as an LPN. The third stage of the original nursing pathway was the Associate Degree Registered Nurse (ADN) program at TCC.

Experience with the first two cohorts of *CareerAdvance*[®] participants revealed several key lessons:

1. Few participants were interested in working in geriatric nursing facilities or home care; most wanted to become an RN.
2. Although jobs were available for nurse aides with CNA qualifications, the 3-level CNA course sequence leading to TCC's Geriatric Technician certification generally was not recognized by Tulsa employers nor did it confer the expected advantages, such as improved access to jobs or higher wages.
3. The LPN program at Tulsa Tech became increasingly competitive as more job seekers sought training in nursing as the Great Recession worsened. Relatively few *CareerAdvance*[®] participants were able to score well enough on the placement exam (ACCUPLACER and subsequently the HESI⁷ exam) to gain entrance to the LPN program, even after multiple attempts.
4. Experience showed that the LPN program actually took 15-18 months to complete rather than one year, as initially anticipated. Although the LPN program was represented by Tulsa Tech as "self-paced;" in practice students who advanced through the material more rapidly than others had to wait to take exams and clinical studies with their fellow students.

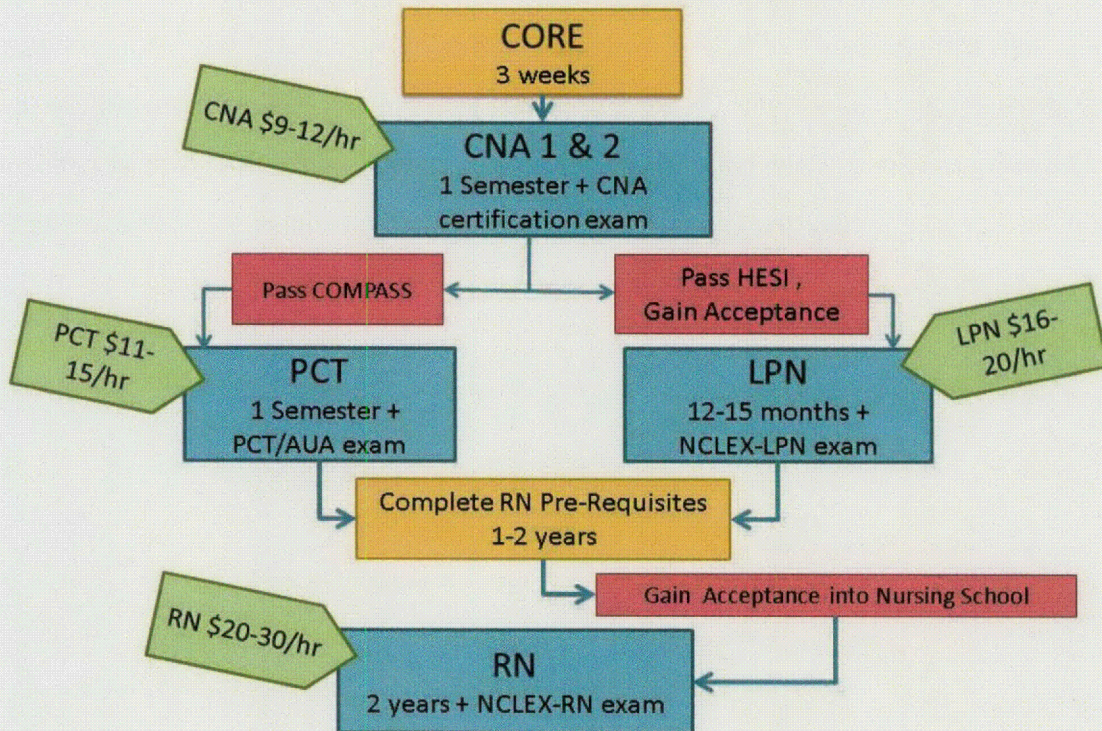
Facing a bottleneck for participants seeking to enter the LPN program, *CareerAdvance*[®] staff developed an alternative pathway through the four-month Patient Care Technician (PCT) course at TCC for individuals who were unable to gain admission to

⁷ The Health Education Systems, Inc. (HESI) A2 exam covers subjects beyond the COMPASS exam, including Anatomy & Physiology and Biology.

the LPN program, or who preferred a shorter training program. Completion of the PCT program qualifies an individual to take the Oklahoma Advanced Unlicensed Assistant (AUA) certification exam. Participants taking this pathway remain eligible to move up into RN training. The alternative pathway through PCT is shown in Figure 2.⁸

The final planned step in the career ladder is the Registered Nurse (RN) program at TCC, which leads to an associate’s degree in applied science and prepares the student to become an RN upon passing the National Council Licensure Examination for Registered Nurses (NCLEX-RN). In order to enter the RN program, a student must have taken and passed 38 credit hours of specific prerequisite and general education courses, including six hours each of English, History, and Psychology; four hours of Chemistry; and 16 hours of Biology. Within the first two years of the CareerAdvance® program, no participant had yet entered the RN program though a few had begun work on pre-requisite courses at TCC.

Figure 2. Revised CareerAdvance® Nursing Career Pathway



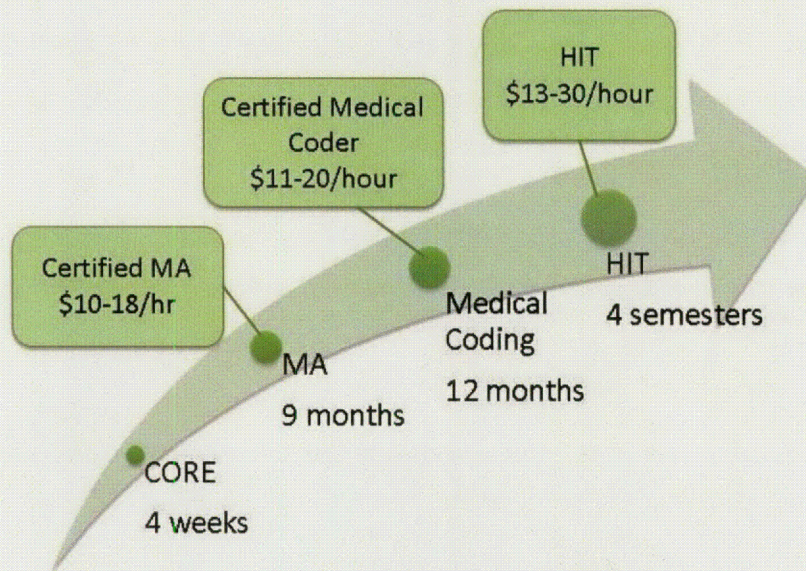
⁸ Differences in wages and training program length from the initial pathways to the revised pathways in Figures 1-4 represent changes in the labor market and new understanding about the actual time commitments of the trainings involved.

New Pathway in Health Information Technology (HIT)

From its inception, *CareerAdvance*[®] planned to expand into healthcare occupations beyond nursing, as well as other industries, should emerging labor market conditions merit supporting them. Starting in 2010, the CAP program staff worked with staff at Tulsa's educational institutions to develop and implement a new career path in health information technology. The resulting pathway design is illustrated in Figure 3. Like the nursing career pathway, the pathway in HIT began with three levels, each resulting in a skill certification. The further along the career path one progresses, the higher the wage level that can be earned. The HIT career path was put into place beginning in fall 2011 with 15 students enrolling as part of *CareerAdvance*[®] Cohort 4.

The first level was a nine-month training program for Medical Assisting (MA). This program aimed to provide aspiring coders and HIT specialists with a practical introduction to healthcare so that they would have some familiarity with medical terms and procedures. It also qualified them to take the exam for Certified Medical Assistant. The second and third levels dealt with medical coding and HIT. Level 2 of the pathway at Tulsa Tech prepared participants to work as medical coders. With two years of work experience, individuals could qualify to take the Medical Professional Coder exam. Level 3 at TCC offered an associate's degree in health information technology and potential to work at advanced jobs in HIT.

Figure 3. CareerAdvance® Initial Health Information Technology (HIT) Pathway



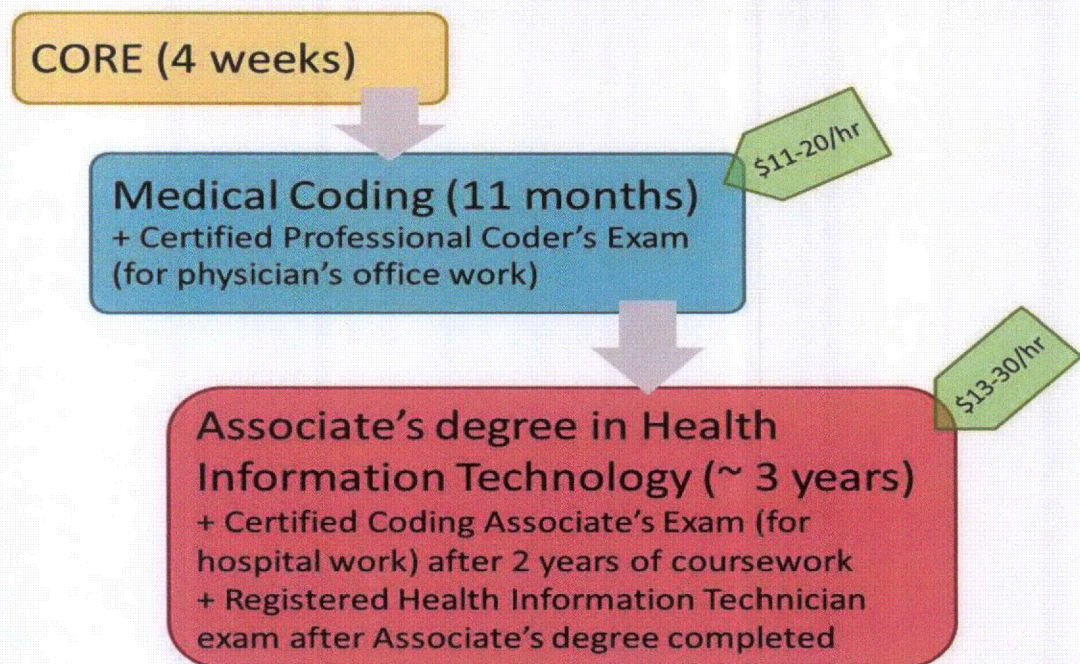
After two cohorts progressed through the initial pathway step in MA, CareerAdvance® staff identified two issues:

1. Medical assisting attracts different personalities than do HIT occupations. Medical assistants interact with patients and provide practical medical care, whereas workers in HIT are not involved in direct patient care and spend much of their time working with computers.
2. Placing a nine-month course in MA at Tulsa Tech on the front end of the HIT track unnecessarily extended the length of the training without providing transfer credits for the program at TCC.

Learning from this experience, CareerAdvance® staff modified the HIT career path (Figure 4) and simplified it into a two-level program, beginning with a shortened 11-month coding course at Tulsa Tech, which prepares participants to sit for the Certified Professional Coder's Exam and work as coders in physicians' offices. Those who want to do more advanced work in HIT can move into the second level, the associate degree program in HIT at TCC. This program prepares participants to sit for two additional certification exams, the Certified Coding Associate's exam for work in hospitals and the Registered Health Information Technician exam.

The MA curriculum was split off from the HIT pathway and offered as a stand-alone training for Cohort 6. This split helped to fill the need for shorter training options in CareerAdvance® and addressed a fundamental issue with the program design: while MA involves direct patient care, medical coding and HIT are both computer-based careers dealing mainly with data.

Figure 4. CareerAdvance® Modified Pathway for Health Information Technology



As CareerAdvance® has developed over time, the program's emphasis has shifted from one focused on helping all participants reach every stage on the pathway to one that is focused on each participant reaching the individual training and employment goals s/he has set. This shift has placed more responsibility for the progress of individual participants on themselves rather than the Career Coach, and underscores that the ultimate purpose of the program is for participants to gain employment in the healthcare field.

Participation in Basic Skills Training

Instruction in basic skills has been a part of the program since its inception; but its structure, approach, and purpose have changed over time. Table 2 summarizes basic skills

preparation offered in the *CareerAdvance*[®] program. In Cohort 1, the program's primary basic skills activity was GED instruction, which served 7 members of the 14-member nursing cohort. In addition, one participant studied English as a Second Language with the GED students. Beginning with Cohort 2, most nursing track participants (and later, HIT pathway participants) prepared to enter training by attending Academic Nursing Skills (ANS) classes, which offer supplemental instruction to raise skills in reading, writing, and math.

In Cohort 3, *CareerAdvance*[®] introduced the Strategies for Academic Success course at TCC, which focuses on developing study skills and other skills participants need to make the transition to college. All but one member of nursing Cohorts 3 through 5 completed this preparatory course. For the HIT Cohorts, program staff worked with staff at Tulsa Tech to develop the CORE course, which is similar to the Strategies course in its focus on study and computer skills, goal setting, and stress management. All of the HIT Cohort 4 participants and the majority of HIT Cohort 5 participants completed the CORE course. Over time, more emphasis on high basic skills in the selection process has resulted in fewer *CareerAdvance*[®] participants needing to work on their GED when starting the program. Further, the combination of ANS and Strategies for Academic Success/CORE courses has helped more participants build the college readiness and study skills necessary to advance along the training pathway.⁹

⁹ Beginning with Cohort 6, the Strategies for Academic Success course was renamed CORE for both of the nursing and HIT pathways.

Table 2. Participation in CareerAdvance® Activities to Promote Basic Skill Attainment

Program / Cohort	Enrolled in CareerAdvance®	Attended Academic Nursing Skills ^a	Completed Strategies for Academic Success / CORE ^b	In GED Studies	Obtained GED
Nursing					
C 1	15	n/a	n/a	7	4
C 2	10	6	n/a	0	0
C 3	15	12	15	1	1
C 4 ^c	14	8	14	1	1
C 5 ^c	12	8	11	1	0
Health Information Technology					
C 4 ^c	15	12	15	2	1
C 5 ^c	12	10	10	0	0
TOTALS	93	56	65	12	7

Notes: ^a GED preparation in Cohort 1 evolved into the Academic Nursing Skills program in subsequent cohorts in which everyone with less than 9th grade skills was enrolled.

^b The Strategies for Academic Success/CORE class became a regular feature of CareerAdvance® beginning with C 3.

^c Includes participants in math and/or reading ANS components.

Source: CareerAdvance® administrative data

Evolution of Recruiting, Screening, and Selection

Recruitment for CareerAdvance® expanded over the second year of HPOG-funded operations to include both Tulsa-Educare Centers, as well as parents in home-based ECE through Early Head Start. In addition, CAP worked to recruit low-income adults, and in particular low-income parents of young children, receiving TANF subsidies. The recruitment process includes the distribution of flyers, promotion through family support workers, and other marketing efforts.

Recruitment for new CareerAdvance® participants begins with information sessions held at various CAP centers and, as the program has opened up, at other locations in Tulsa. During each recruitment period several sessions are offered in the morning and afternoon to accommodate parents' schedules. The recruiting period for Cohort 5, which occurred in Fall 2011, extended from information sessions in October, through TABE testing and interviews with program staff in November, to acceptance letters, immunizations, and cardiopulmonary resuscitation (CPR) training in January. The recruiting period for Cohort 6,

which occurred in Spring 2012, was extended and additional information sessions were held to attract more participants to the MA and HIT career options. CAP revises the presentation used at these information sessions prior to the start of each recruitment period and updates the information packets that parents receive.

During the information sessions, *CareerAdvance*[®] Career Coaches discuss the training timeline, present background information for each career and pathway, and provide details on expected wages and prospective employers. In addition, the sessions detail the program and its components, the supports offered through *CareerAdvance*[®], and expectations for participants. Cohort 6 recruitment placed a stronger emphasis on “work” as the purpose of *CareerAdvance*[®]. The presentation also highlighted the ANS and CORE classes individually, both of which had previously just been noted in the career path detail. This reflects the growing emphasis the program is placing on helping participants develop not just minimal skills, but skills strong enough for academic success. Program expectations emphasized in the Cohort 6 recruitment materials were for the participant to “develop positive and flexible attitudes...[and] be drug free—pass drug testing after selection” (*CareerAdvance*[®], 2012, slide 38).

According to the Career Coaches, Cohort 6 recruitment had an “increased focus on reality”—the trade-offs, choices, and personal responsibility required for students to take full advantage of the *CareerAdvance*[®] opportunity. One change was a new emphasis on the location of classes and other activities to make sure applicants understand the amount of travel required for participation. A second change was to underscore that there is no guarantee of advancement on the career path. The student must meet the standards established by the training provider to continue to the next step. Coaches have noted that more successful students typically score much higher on entrance exams than the minimum skill level required for entry into the training program.

After attending an information session, interested parents must complete several steps to apply for entry into *CareerAdvance*[®]. As with the other components of the program, the application process has also evolved over time. One of the biggest changes relates to the number and sequence of skills testing. In the first cohort, all accepted

applicants were expected to complete three standardized exams including the TABE (Test for Adult Basic Education), COMPASS, and WorkKeys¹⁰, though scores were not available to staff until after enrollment. By the fourth cohort, COMPASS exam scores became a required part of the application and TABE exam scores were required prior to meeting with CareerAdvance® staff for an interest interview. During the enrollment interview, staff focus on understanding a participant's budget: can the parent afford to participate in training? One of the lessons learned by the program is that parents who can manage their obligations without income from work, whether with support from their family or with public assistance, have typically had an easier time adjusting to CareerAdvance®.

In the sixth cohort, applications included a personal statement used by CareerAdvance® coaches to assess writing skills. Another new addition for Cohort 6 was a required drug test for selected applicants within one week of notification of acceptance into the program. In Cohort 6 selections, staff also set a new standard when evaluating an applicant's test scores: the applicant must have "sufficient academic skills to progress to the next step in one semester." This change reflects the program's experience in working with very low-skilled individuals who struggle to enter advanced training programs.

Eligibility and selection standards have evolved over the course of CareerAdvance® operations through more explicit definitions. Changes have been driven by the program's lessons learned, the entry standards of training partners, and HPOG requirements. The focus of these activities is to identify individuals who are likely to succeed in various training elements and ultimately enter into training-related employment. While the first cohort of CareerAdvance® passed minimal selection criteria, the cohort recruited in Spring 2012 had to meet multiple entry standards as detailed in Table 3 below. It is important to note, however, that the standards for selection have varied based on the relative strengths and weaknesses of the applicant pool and the needs of the program to meet minimum class size requirements set by the training providers and the HPOG enrollment goals.

¹⁰ For more information on the TABE see: www.ctb.com/TABE
For more information on the COMPASS exam see: www.act.org/compass
For more information on WorkKeys see: www.act.org/workkeys

Table 3. Changes in Eligibility Standards, Application Requirements, and Selection Criteria for CareerAdvance®

Cohort	Eligibility Standards	Application Requirements	Selection Criteria
C 1	<ul style="list-style-type: none"> • Adult at least 18 years old • Legally qualified to work in the U.S. 	<ul style="list-style-type: none"> • TABE, COMPASS, and WorkKeys testing following application • Interview with program manager • Separate application for Workforce Investment Act (WIA) funding through Workforce Tulsa 	<ul style="list-style-type: none"> • Strong interest in healthcare careers
C 2		<ul style="list-style-type: none"> • Interview with program manager or Career Coach 	<ul style="list-style-type: none"> • Pass a criminal background check • Tuberculosis test
C 3	<ul style="list-style-type: none"> • Citizen or legal resident for at least 5 years • Speak English well enough to participate 	<ul style="list-style-type: none"> • Interview with Career Coach • TABE and COMPASS scores required as part of the application process • Application for WIA funding dropped 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Eligibility tied to workforce standards of healthcare employers 	<ul style="list-style-type: none"> • COMPASS scores required with initial application • TABE scores required prior to interview 	<ul style="list-style-type: none"> • Interview rating system criteria increased from 8 to 11, adding: participant dress/language, financial stability, and access to transportation
C 5			<ul style="list-style-type: none"> • Participants are expected to be able to shoulder some of the financial burden of participation
C 6	<ul style="list-style-type: none"> • Speak English well enough to participate and succeed 	<ul style="list-style-type: none"> • Complete a career interest inventory • Submit a personal statement of 1-3 paragraphs 	<ul style="list-style-type: none"> • Selected participants must pass a drug test within one week of acceptance into the program • Academic skills at 4th grade or above

Note: Criteria are additive from cohort to cohort unless otherwise noted. Source: CA staff and program documents.

Table 4 provides information on recruitment, application, and enrollment in CareerAdvance® by cohort and program track. Row one illustrates that the number of eligible ECE centers has grown from two in Cohort 1 to sixteen in Cohort 6. The career pathways available to parents at eligible ECE centers has also expanded to MA/HIT in

Cohorts 4, 5, and 6. Information sessions for the latest cohorts have attracted over 100 parents. Of those who expressed interest in the *CareerAdvance*® programs, the share of parents who apply to specific educational tracks has varied over time. While those who applied to the HIT pathway fell slightly from Cohort 4 to Cohort 6, the share that began applications for the nursing pathway rose over time. Of recruits who complete all the application steps, a smaller share is ultimately admitted into the nursing program than the HIT program, likely reflecting the more stringent selection criteria imposed by *CareerAdvance*® in later cohorts.

Table 4. *CareerAdvance*® Recruiting, Application, and Enrollment Statistics, by Cohort: July 2009 – August 2012

	Nursing						Health Information Technology			Medical Assisting
	C 1	C 2	C 3	C 4	C 5	C 6	C 4	C 5	C 6	C 6
Began application process	24	21	31	27	34	33	28	16	12	6
Interviewed	21	15	25	25	24	33	22	14	10	6
Completed all application steps ^a	19	15	25	25	30	30	22	13	9	6
Selected for enrollment	15	13	15	16	15	18	16	13	7	6
Enrolled in <i>CareerAdvance</i>®	15	10	15	15	13	18	15	12	6	6
# Eligible ECE centers	2	3	6	12	16	16	14	16	16	16
# ECE centers with families enrolled ^b	3	5	5	7	9	9	7	9	6	4

Notes: ^a Beginning with C 3, a completed application required taking the COMPASS® exam and the TABE tests.

^b In C 1 and C 2, interested parents from ineligible CAP ECE centers were allowed to apply to meet enrollment goals.

In C 4, C 5, and C 6 there were 11 unique centers with families involved in *CareerAdvance*®.

Source: *CareerAdvance*® administrative data

During the selection process for Cohort 6, *CareerAdvance*® staff noted that one of the Career Coaches had assigned consistently higher interview scores than the other coaches despite the fact that all were using the same rubric. Staff concluded that the difference likely reflects the different perspective and outlook each coach brings to the program team. Because the interview score is just one of many elements, some objective and some subjective, staff did not believe this difference had a significant effect on participant selection. The research team suggested that the program consider inter-rater

testing and training based on a subsample of interviews to improve consistency in the use of the scoring rubric across staff.

Preliminary Testing

Tables 5 and 6 explore the mean TABE and COMPASS test scores by cohort and career pathway for *CareerAdvance*® Cohorts 3 through 6. These cohorts were required to complete the TABE and COMPASS tests as part of a full application process. Scores on the TABE are presented as grade level equivalents. The COMPASS test is scored on a 100-point scale; postsecondary institutions set their own cut scores to determine preparation for various levels of coursework. At TCC, “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.”¹¹

The results suggest that the mean basic skill level of participants in nursing Cohorts 3 and 5 are similar, with both reading at about a 10th grade level and performing math computations at about an 8th grade level. It is particularly striking, however, to examine the range of participant scores. While nursing Cohort 6 has a similar reading skill level as nursing Cohort 4 (approximately 12th grade), the computational math scores for Cohort 6 were the lowest of the nursing pathway participants. Cohort 4 appears to have entered the nursing track with the strongest level of basic skills preparation when evaluated using either the TABE or COMPASS test. Only nursing Cohort 4 had the mean COMPASS Reading and English scores required to enter into a college-level writing class. Many of the nursing participants tested will require developmental math classes based on their COMPASS math scores.

The mean basic skill levels of members of the HIT/MA pathway are similar when measured by the TABE. The skill range, however, was widest for Cohort 5 which had participants testing at the 1st and 2nd grade-level as well as the 12th grade-level. This range of ability levels may present a challenge to training instructors, and program operations.

¹¹ Email from Online Advisement, Tulsa Community College. <onlineadvisement@tulsacc.edu>. July 25, 2012.

Cohort 6 scored one or two grade levels lower on reading and language skills than the prior HIT/MA cohorts (which were at approximately the 11th grade level). Math TABE scores were similar across all three cohorts. On the COMPASS tests, low math and English scores prevent many HIT/MA participants from entering college-level math or writing classes without first completing developmental coursework.

Table 5. TABE Test Scores by Cohort and Educational Pathway, Cohorts 3-6

		Reading	Language	Math Computation	Applied Math
Nursing					
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	6.0 - 12.9
Cohort 4 (n=15)	Mean	12.2	10.9	8.6	11
	Range	9.1 - 12.9	4.8 - 12.9	4.9 - 12.9	5.9 - 12.9
Cohort 5 (n=11)	Mean	10.4	8.2	8.1	8.5
	Range	6.4 - 12.9	2.9 - 12.9	4.4 - 12.9	2.4 - 11.7
Cohort 6 (n=17)	Mean	11.9	11.4	7.6	10.5
	Range	8.2 - 12.9	7.7 - 12.9	3.5 - 12.1	6.4 - 12.9
HIT/MA					
Cohort 4 (n=15)	Mean	11	11.2	8.4	10.6
	Range	7.6 - 12.9	5.6 - 12.9	3.9 - 12.1	3.5 - 12.9
Cohort 5 (n=11)	Mean	11	11.3	8.3	10.1
	Range	6.6 - 12.9	8.4 - 12.9	2.5 - 12.9	1.7 - 12.9
Cohort 6 (n=9)	Mean	9.9	9.3	8.1	9.8
	Range	7.4 - 12.9	5.6 - 12.9	4.4 - 12.1	6.7 - 12.9

Note: Scores are presented as grade-level equivalents. Source: CareerAdvance® administrative records

Table 6. COMPASS Test Scores by Cohort and Educational Pathway, Cohorts 3-6

		Reading	English	Algebra
Nursing				
Cohort 3 (n=13)	Mean	77.0	60.3	39.6
	Range	56 – 93	12 - 97	23 – 98
Cohort 4 (n=14)	Mean	87.9	78.1	44.1
	Range	64 – 99	22 - 99	26 – 76
Cohort 5 (n=11)	Mean	74.6	53.5	33.4
	Range	56 – 92	8 - 94	22 – 59
Cohort 6 (n=18)	Mean	84.7	71.9	41.4
	Range	64 – 99	25 - 99	18 – 75
HIT/MA				
Cohort 4 (n=14)	Mean	84.0	73.3	36.4
	Range	70 – 99	28 - 99	23 – 51
Cohort 5 (n=11)	Mean	85.8	64.4	43.8
	Range	50 - 98	7 - 99	19 – 75
Cohort 6 (n=12)	Mean	80.2	49.2	32.3
	Range	64 – 96	6 - 87	20 – 45

Source: CareerAdvance® administrative records

Evolution of Shared Expectations and Performance Incentives

Once applicants are selected for participation, they are presented the CareerAdvance® Policies and Procedures document and asked to sign it at one of the first peer group meetings. This document, which has been revised by program staff over time, outlines the shared expectations between the program and the parent—detailing requirements for participation and the consequences for not meeting those requirements.

The document identifies several key participation elements, including:

- Enrollment
- Attendance
- Grades and testing
- Completion and employment
- Career advancement plans
- Course changes, dropping a course, and expulsion
- Supports and services
- Incentive eligibility policies
- Conduct and consequences
- Exceptions

The connection between the shared expectations of *CareerAdvance*[®] and the performance incentives has resulted in changes and refinements over time. At its core, the intent of the incentive is to encourage high performance and help families adjust to the financial implications of participating in training. The incentive is largely tied to attendance—participants who miss two or fewer required activities (e.g., classes, peer group meetings) each month earn \$200 for their commitment. Other incentives are available for participants who maintain good grades, pass licensing/certification exams, or obtain employment in the healthcare field. As program staff gain more experience and more parents advance through the career pathways, additional requirements, standards, and consequences have been established.

In Spring 2012, an issue arose with participants who were taking a medical terminology course and pursuing independent preparation for either the HESI or COMPASS exams required to enter the LPN or PCT training program. Individuals who chose not to take the exam were offered the opportunity to participate in job-shadowing experiences. Because the participants were “in limbo” between two training programs in the pathway—they had completed the CNA sequence but not yet qualified for the next step—and because their required course load was limited to one class, CAP determined that the semester grade incentive bonus was not available to participants. This led to complaints from participants who had expected to receive the payment, and a clarification from *CareerAdvance*[®] coaches that the incentive is for participants who rise to the opportunity and who are making timely progress through the program. While *CareerAdvance*[®] might make tutoring and additional courses available to participants and tie those activities to the monthly attendance incentive, only coursework required by the training provider is considered for the semester grade incentive.

Beyond those changes, the form of the incentive itself has changed to comply with HPOG requirements. While the first two cohorts of *CareerAdvance*[®] could earn cash payments for meeting the attendance, grade, and completion standards, federal funding guidelines do not allow cash payments. *CareerAdvance*[®] staff worked closely with HPOG administrators to develop a reimbursement and gift-card incentive system that would

achieve similar goals to the cash payment. Some of the modifications to the performance incentive structure required extensive staff time to identify available options in Tulsa that met federal requirements. CAP staff negotiated with a local gas station chain to issue pre-charged gas cards for use at the gas pump only. This designation was required to ensure that participants could not use the card to purchase alcohol, tobacco, or other federally-restricted items available in the co-located convenience stores. Pump-only use is verified through regular reporting; participants who use the card in-store are barred from further gas card receipt.

CAP also developed a reimbursement system for participants to submit receipts for authorized expenditures (such as rent, utility bills, and groceries—with restrictions). This system has added an administrative burden for CAP staff, who must quickly turn-around the processing, review, and payment tasks each month. Other changes include a restriction on the employment retention incentive. Participants may only earn the \$300 employment incentive, which is paid after three continuous months of employment, one time during their participation in the program. HPOG grant guidelines have stipulations against any payment that might be considered a wage supplement.

Another challenge that CAP faced in administering the incentive program was the receipt of incorrect attendance data. CAP relies on data from TCC, Tulsa Tech, and Union Public Schools to authorize incentive payments. Career Coaches process each report, checking against their own communication records with participants to verify some information. The coach then follows-up on any missing or incorrect data.

For the Fall 2012 semester coaches resolved to review and discuss the shared expectations and performance incentives at the start of each new training component. All participants received binders to organize important *CareerAdvance*[®] materials for the semester, including the shared expectations document (coaches keep separate signed copies). This decision coincided with a restructuring of the performance incentives for monthly attendance and maintaining good grades in response to the number of participants entering less than full-time pre-requisite coursework for the nursing program. The monthly attendance incentive for *CareerAdvance*[®] participation is \$200 for those who are engaged

full-time. Because the program encouraged participants to take a reduced course load as they adjusted to the demands of college-level coursework, participants can continue to earn the \$200 per month incentive for up to two semesters that they take a half-time course load. After that, the monthly incentive drops to \$100 for those who continue part-time.

While the prior incentive for maintaining a B average was defined as \$300 per semester (or \$120 for each LPN block completed), the new incentive is tied to credit hours undertaken. A participant will earn \$25 per credit hour taken while maintaining a B average for each semester. Those taking a full-time course load (as defined for each training program) will still have the ability to earn the full \$300 incentive by maintaining a B average. By reinforcing the shared expectations and performance incentive structure at the start of each semester, *CareerAdvance*® staff hope to minimize participants' confusion and encourage participants to do their best academically while balancing work and family needs.

Peer Group Meetings

Peer group meetings, or partner meetings as they are termed by the program, are a core feature of *CareerAdvance*®. The design of the program purposefully seeks to capitalize on parents becoming their own support group, building the resources and connections that participants need to persevere in training. Changes to peer group meetings in the last year include a new schedule for meetings based on program level. New entrants to the nursing and HIT pathways meet weekly with their cohort and a Career Coach. Participants in subsequent steps on the career path may meet biweekly or monthly, depending on the training schedule and needs of the group.

Topics for peer group meetings are diverse. Some are operational (e.g., scheduling, incentive processing); some are informational (e.g., presentations by the Area Health Education Center (AHEC), hospital human resource staff, or college representatives), and others are more instructional (e.g., creating a résumé, conducting a job search, applying to nursing school). Many of instructional meetings are led by a partner program, ResCare Workforce Services. The intent behind the peer group meetings is to build participants' employment and life skills while also building bonds between participants to encourage

more active peer support within the group. The sessions also keep participants connected to the program through the Career Coach, providing a regular check-in point for feedback from both the program and the parent perspective.

Financial literacy/money management was identified by CareerAdvance® coaches as a needed area of focus for peer group meetings. While budgeting and student financial aid have long been topics for partner meetings, the coaches believe a more structured approach would better help participants take charge of their financial future. One concern for the program has been that participants who obtain Pell grants early in the training pathway to cover their living expenses may limit their ability to pursue advanced training and risk having to pay back the grant funds if they do not succeed in their coursework. The group that appears to have the biggest challenge adjusting their living expenses during the training period are participants who had worked full-time prior to starting CareerAdvance®. A common feeling among participants is that the \$200 incentive each month is nice, but it does not go far—particularly when the cost of gas is so high and so much travel is required for participation in a city as geographically large and poorly served by public transit as Tulsa.

Partner Programs

CareerAdvance® relies heavily on a number of partner organizations throughout Tulsa. These include Tulsa Community College, Tulsa Technology Center, and Union Public Schools that provide education courses and occupational skills training. Tulsa Tech also provides space for peer group meetings and focus groups, while TCC provides space to Career Coaches to help process immunization and other records required by the college. These arrangements also allow the coaches to provide on-site information to participants who may be new to the college campus. CAP pays for an administrative assistant employed by TCC to provide program/participant support for CareerAdvance®, which also strengthens the partnership between the two organizations.

While the program has engaged some Tulsa-area healthcare employers, more work is needed. Saint Simeon Episcopal Nursing Home recently hired a CareerAdvance® participant and has expressed interest in sending a human resources representative to CareerAdvance® peer group meetings. Another potential employer is the network of clinics

run by the University of Oklahoma. Other employer partners include the St. Francis Health System and Hillcrest HealthCare System. CareerAdvance® dropped one employer partner due to the firm's inflexible scheduling policies. Despite assurances that the employer would work to accommodate the CareerAdvance® training schedule of any participants who were employees, the employer ultimately chose not to allow for any schedule changes.

"All-Partners" meetings are held quarterly to facilitate communication and collaboration across organizations involved in CareerAdvance®. An all-partners meeting in January 2012 that focused on ways to improve employment opportunities for graduates was deemed a success by program staff. One Career Coach noted that the partners appeared to be engaged in the discussion and energized about the program. Researchers in attendance agreed with that assessment, noting growing engagement by the partners, including TCC, Tulsa Tech, the Tulsa Chamber, Union Public Schools, and key employers.

Participant Perspectives

As part of the CareerAdvance® evaluation, researchers from both Northwestern University and the University of Texas conduct focus groups with participants and staff at least twice a year to better understand their program experiences and identify key issues and challenges for the CareerAdvance® program. They also discuss the impact of program participation on family roles and routines, and parents' educational expectations for their children. Program-related findings from focus groups are shared with CareerAdvance® staff and CAP administrators, along with recommended solutions and suggestions for further consideration. The following discussion draws from focus group sessions held in September and December 2011 and in May 2012. The September 2011 session was a single focus group for 12 participants in the Cohort 4 HIT pathway. The December and May sessions each involved eight focus groups. Each group was divided along cohort and career pathway, with between two and thirteen participants in each session. Across each of these sessions, participants were asked to reflect on their experiences in CareerAdvance®, identify strengths and weaknesses in the program, share their goals and motivations for participating in CareerAdvance®, and offer advice for individuals who are new to the program or those who are considering joining.

One key theme that comes through is the challenge for participants to juggle their multiple roles and responsibilities as parents, students, employees, and spouses. Time management—whether struggling to figure it out, or recognizing that their skills in this area have grown—is frequently cited by participants as an essential skill for success in *CareerAdvance*®. Parents who continue to work during the program report more stress in trying to juggle the competing demands on their time, with many feeling like no one area (whether it is school, work, children, home, or even their own sleep) gets the full attention it deserves. *CareerAdvance*® staff also emphasize the development of time management skills as key for family success: “Kids benefit by having parents who follow a regular schedule, who bring them to school on time, and who develop consistent routines.”

Benefits of the Program

Participants highlight many factors that drew them to the program. Many had dreamed of a career in nursing or healthcare for years. Some had previously enrolled in college or a training program, only to struggle with classes and finances while feeling isolated from other students. *CareerAdvance*® offers a package of services and supports that many participants describe as “a once in a lifetime opportunity” or as “an answer to my prayers.” For some, the program is “a second chance” and an opportunity “to get myself back” after years spent working in low-wage jobs or as a stay-at-home parent. The program’s structure, which encourages participants to develop connections to the Career Coach and to the other parents in their cohort, gives some participants the motivation they need to continue—to feel like there is someone who understands their situation and to know that they are not in it alone. “The coach believes in us even when we don’t believe in ourselves” “She always returns my phone calls.” “She steers us in the right direction, but doesn’t hold our hands.”

Participants appreciate that the program is structured so that they are all in class together during the initial training stages. They like having friends in class. They help each other with childcare, carpools, homework, and other problems. Some participants noted that morning phone calls or texts from another participant helped to get them up and going each day. Asked to highlight the best features of *CareerAdvance*®, participants are very

vocal. A common sentiment expressed among participants is appreciation “They support you all the way; they are always there.” The Career Coach is at the heart program, participants acknowledge. “She is the best support system. She helps with everything. She listens to everything.”

Participation Goals

Participants report high goals for themselves, with many setting career targets well beyond the CareerAdvance® program. It is not unusual for participants in the nursing pathway to set goals for earning a Bachelor’s degree in nursing, or becoming a nurse practitioner, or hospital administrator. The foundation they receive in CareerAdvance®—particularly the sense of self and confidence in their own abilities—helps many parents to open their eyes to the possibilities ahead of them. Despite the years of training ahead of them, many participants believe their goals are achievable. Yet participants also have goals that may not be achievable due to academic concerns or financial issues that may limit their ability to reach a goal such as becoming an RN. Program staff have worked hard to help parents set realistic expectations for program advancement and career goals as well as the time needed to achieve them.

While participants pursue training to reach personal goals, their role as parents and their dreams for their children are also tied tightly to their motivation. Many participants report that they are pursuing a healthcare career to give their children a better life and more opportunity. They do not want to see their children struggle the way they have; they want their children to have the chance to go to college. Participants report that when they start training and bring school work home, the dynamics in the family change. Parents and children do homework together, and children are excited to learn and eager to help their parents study. Parents recognize that the example they are setting for their children today may have a lasting effect on their family’s future (Chase-Lansdale et al., 2012).

Developing Life Skills

Beyond the classroom and occupational skills that participants develop through the CareerAdvance® program, participants also describe developing new interpersonal and life

skills that carry forward into other aspects of their life. Some participants note that they have developed more empathy for other people and that they are learning to work with people from different cultures and backgrounds. Other participants report that the experience has helped them to find their own voice—the confidence to express themselves in public. One participant noted that since joining CareerAdvance® she has stopped procrastinating, a habit that had prevented her from achieving her goals.

Friction Points

Despite all of these benefits, participants are also quick to note issues and challenges with the program. Many report feeling like “a guinea pig” as the program works out coordination issues with education providers on new training components in ways that have added to their stress levels. Communication breakdowns between CAP and the training providers can result in participants missing a required activity or misinformation being passed along to participants. Some participants felt that their training provider needed to update practices and policies to reflect the needs of parenting students rather than solely focusing on young adults straight out of high school.

A number of participants also indicate that they have considered dropping out of CareerAdvance® for financial reasons. While all participants express appreciation for the monthly incentive, many report that it is simply not enough to make ends meet. Others report frustration with the strict standards in place for earning incentives; they feel like the standards are punitive and undermine their independence as adults to set their own priorities. Participants were particularly frustrated with the focus on attendance and tardiness, reporting that the reality of being a parent often means that delays and absences are beyond their control. Many parents were also worried about the lack of time with their young children, some wondering whether the tradeoffs were justified in the short run, while others focused on the increased income that would benefit their children in the long term.

Advice for Future Participants

Participants are eager to share advice with other parents considering the

CareerAdvance® program. Many reveal that they have encouraged neighbors, family members, and other parents at CAP centers to attend information sessions. A commonly repeated phrase is “Just go for it.” Other advice for new participants or those considering applying to the program includes: “Develop a support system;” “Stay focused;” “Avoid falling behind;” “Be on time;” “Have back up plans A to D; A, B, and C may fall through;” “Prepare for change in your life:” “You just have to have the time—they [CAP] take care of everything else;” “This is free. You might have to sacrifice something for it, but it is worth it;” “You have to earn it—it won’t be handed to you:” “Overall CAP is doing a great thing. They are focused on helping us become self-sufficient.”

Progress of CareerAdvance® Participants

Table 7 displays current participant progress through the nursing career pathway as of August 2012. The starting cohort enrollment is presented at the top of each column, and the number of participants progressing through different stages in the pathway is listed from the top to the bottom of the column. Participant progress is reported up to the cohort step obtained by Summer 2012.

Across cohorts, it is evident that most participants who complete training in the Certified Nursing Assistant 1 (CNA1) curriculum go on to complete subsequent CNA milestones, including obtaining either their Geriatric Technician Certificate or employment as a CNA. In early cohorts, many participants stopped out after graduating from CNA training and obtaining CNA employment. To date, cohort progress data suggest that a small share of participants is likely to progress through the entire educational pathway. Of the 41 who completed the final CNA training step¹², 17 went on to enroll in PCT training.

Having the credentials necessary for acceptance in the LPN program seems to be a major factor in educational advancement. In Cohorts 1, 2, and 3, there were a total of 23 applicants to the LPN program. Of these, ten participants were accepted and enrolled. Fewer than half who apply to the LPN program are accepted, and only half of those who are accepted into the program ultimately graduate. In Cohort 1, all those who enrolled in the

¹² CNA3 was dropped from the training pathway after Cohort 4.

LPN program graduated and passed the LPN Exam; two Cohort 1 nursing track participants have secured LPN employment. One LPN graduate has gone on to apply to the RN program, as has one participant from Cohort 5. Sixteen students from Cohorts 1, 3, and 4 are working to obtain the general education requirements to apply to the RN program.

Table 7. Participant Progress in Nursing Pathway as of August 2012

Career Path Step	Milestone	C 1	C2	C3	C4	C5	C 6	Totals
CNA	Enrolled	14	10	15	15	12	18	84
	CNA 1 Completed	14	8	14	13	7		56
	CNA Certification Exam Passed	13	8	14	13	7		55
	CNA 2 Completed	13	5	15	14	9		56
	CNA 3 Completed ^a	7	5	7	13			32
	Geriatric Tech Certificate Obtained ^a	7	5	7	12			31
	CNA Employment Obtained	10	3	12	4			29
PCT/ AUA	Enrolled	1	1	3	12			17
	Completed	0	0	3	11			14
	AUA Certification Exam	0	0					0
LPN	Med Term & A&P Courses Only	1	3	3				7
	Application	4	6	13				23
	Accepted	4	3	3				10
	Enrolled	4	3	3				10
	Graduated	4	1					5
	Passed LPN Exam	4	1					5
	LPN Employment Obtained	2	1					3
RN	Working Towards General Ed Requirement	3		3	10			16
	Completed General Ed Requirement							
	LPN-to-RN Bridge Program Application	1						1
	Application					1		1
	Enrolled							
	Graduated							
	Passed RN Exam							
RN Employment Obtained								

Note: ^aCNA3 and its associated Geriatric Tech Certification were dropped from the pathway in Cohort 5. In this and following tables, gray boxes indicate that a cohort has not yet reached a particular milestone. Source: CAP administrative records on August 22, 2012.

Table 8 presents similar information on participant progress through the HIT/MA pathway as of August 2012. In Cohort 4, nine of 15 participants who started medical assisting training completed it; eight passed the Registered Medical Assistant (RMA) exam. In Cohort 5, eight of 12 participants who started MA training completed it; six passed the RMA exam. Five participants from each of those cohorts chose to go into the HIT associate's degree program at TCC, while a total of four participants chose to enter the medical coding program at Tulsa Tech. In August 2012, six participants from Cohort 6 began the HIT associate's degree program and six participants began the shorter Cohort 6 MA training option.

Table 8. Participant Progress in Health Information Technology / Medical Assisting Pathway as of August 2012

	C 4	C 5	C 6 - HIT	C 6 - MA	Totals
Enrollment	15	12	6	5	38
MA Start	15	12		5	32
MA Completed	9	8			17
Passed Registered MA exam	8	6			14
Medical Coding Start	3	1	6		10
Medical Coding Completed					
Passed Certified Professional Coder exam					
HIT Start	5	5			10
Passed Certified Coding Associate's exam					
HIT Associate's Degree					
Passed Registered HIT exam					

Source: CAP administrative records on August 22, 2012.

Table 9 presents the enrollment status of participants from Cohorts 1-5 in the Nursing and HIT/MA pathways as of August 2012. Inactivity and exits from the program are more characteristic of nursing pathway cohorts than of HIT/MA pathway cohorts. In the nursing pathway's Cohorts 1 and 2, the majority of participants who started are now inactive (ten of 15 in Cohort 1 and nine of 10 in Cohort 2). In Cohorts 3 and 4, two thirds of

participants remain active; in Cohort 5, half of participants are active. Across the nursing pathway cohorts, common reasons for inactive or exit status are the participant's choice to leave the program for employment or personal reasons, termination of the participant by the school or CAP, or the participant's inability to overcome academic obstacles. Less commonly reported reasons for inactive or exit status are referrals to other basic education programs at CAP (e.g. Adult Learning Initiative), relocation, and loss of interest.

Participants in the HIT/MA pathway are more likely to remain active in the program. Of the few who have transitioned into inactive or exit status, reasons are either unknown or related to the participant's medical reasons or termination by the school or CAP.

Table 9. CareerAdvance® Participants' Status as of August 2012

	Nursing						HIT			MA
	C 1	C 2	C 3	C 4	C 5	C 6	C 4	C 5	C 6	C 6
Enrolled	14	10	15	15	12	18	15	12	6	5
Active	5	1	10	10	6		11	10		
Inactive	10	9	5	5	6		4	2		

Source: CAP administrative enrollment records on August 22, 2012.

CareerAdvance® was designed to allow participants to earn intermediate credentials, stop-out for employment, and return to training when they were ready to commit to the next step. It remains to be seen if participants who are currently inactive will rejoin the program, what share will continue to work in the healthcare field, and which choose to pursue education and training on their own.

PROFILE OF CAREERADVANCE® PARTICIPANTS AND THEIR FAMILIES

Tables 10-12 provide a profile comparing CareerAdvance® families in the first six cohorts of participants. Table 10 presents basic demographic information on enrollees, Table 11 explores family economic status, and Table 12 considers the characteristics of children in families served by CareerAdvance® programs.

Basic Demographics

Table 10 shows that the typical program participant is an unmarried female parent in her late 20s to early 30s. This demographic profile has been consistent across cohorts. The racial composition varies from cohort to cohort. The largest share of participants in most cohorts is Black (33-50%), followed by White (10-47%), and Hispanic (7-20%). Compared with earlier cohorts, participants in later cohorts are more likely to speak English as the primary language in the home. Later cohorts are also more likely to have at least a high school diploma, GED, or 12th grade level education. This likely reflects greater selectivity on basic educational attainment by the CareerAdvance® program for later cohorts.

Table 10. Profile of CareerAdvance® Enrollees, Cohorts 1-6

	C 1	C 2	C 3	C 4	C 5	C 6
Enrollees	15	10	15	30	24	30
Gender						
Female	100.0%	90.0%	93.3%	96.7%	95.8%	96.7%
Male	0.0%	10.0%	6.7%	3.3%	4.2%	3.3%
Single Parent Families	40.0%	70.0%	53.3%	76.7%	70.8%	70.0%
Race/Ethnicity						
Asian	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%
Black	33.3%	50.0%	33.3%	36.7%	41.7%	46.7%
Hispanic	13.3%	10.0%	20.0%	6.7%	12.5%	10.0%
Native American	6.7%	0.0%	0.0%	10.0%	8.3%	3.3%
White	46.7%	10.0%	40.0%	26.7%	33.3%	26.7%
Multi- or Bi-Racial	0.0%	0.0%	0.0%	6.7%	4.2%	6.7%
Other	0.0%	20.0%	6.7%	13.3%	0.0%	6.7%
English is Primary Family Language	80.0%	90.0%	73.3%	96.7%	95.8%	90.0%
Mean Age of Adult	32.3	35.1	26.3	29.9	30.5	29.1
Adult's Education Level						
Less than high school diploma/GED/12th	46.7%	0.0%	26.7%	6.7%	25.0%	20.0%
High school diploma/GED/12th	20.0%	70.0%	40.0%	63.3%	50.0%	43.3%
Some college or advanced training	20.0%	10.0%	0.0%	16.7%	8.3%	10.0%
College degree and/or training certificate	13.3%	10.0%	26.7%	13.3%	12.5%	23.3%
Unspecified	0.0%	10.0%	6.7%	0.0%	4.2%	3.3%

Note: Child Plus data collected at the time of the child's enrollment in CAP's ECE program, which could be as much as three years prior to the parent's enrollment in CareerAdvance®.

Source: CAP Child Plus data system and CAP staff.

Family Economic Status

Table 11 illustrates that the typical program adult did not have full-time, full-year employment and, as a consequence, the majority of participant families earn at or below 100% of the Federal Poverty Level.¹³ The share of families with adults who are not

¹³ The Federal Poverty Level, or more accurately Federal Poverty Guidelines, is established each year by the U.S. Department of Health and Human Services. In 2012, the guideline for a family of three was \$19,090. For more information see: <http://aspe.hhs.gov/poverty/12poverty.shtml>.

employed prior to their child’s enrollment at CAP varied from a high of 73.4% in Cohort 1 to a low of 26.7% Cohorts 3, suggesting that members of new cohorts are more likely to work in low-paying jobs when they enter their educational pathways, as opposed to being out of work, and are trying to transition to better-paying health care industry careers. Members of Cohorts 4 and 5 have lower mean family incomes of just over \$12,000 per year, compared with mean family earnings of \$18,000-\$20,000 in Cohorts 2 and 3.

Table 11. Profile of CareerAdvance® Family Economic Status, Cohorts 1-6

	C 1	C 2	C 3	C 4	C 5	C 6
Enrollees	15	10	15	30	24	30
Adult Employment Status at ECE Application						
Full time (35 hours or more /week)	0.0%	20.0%	46.7%	30.0%	16.7%	30.0%
Part time (< 35 hours)	13.3%	10.0%	13.3%	16.7%	8.3%	10.0%
Full time and training	0.0%	0.0%	0.0%	6.7%	4.2%	0.0%
Part time and training	0.0%	0.0%	6.7%	0.0%	4.2%	3.3%
Training or school only	0.0%	0.0%	0.0%	3.3%	16.7%	13.3%
Not employed ^a	73.4%	60.0%	26.7%	33.3%	50.0%	36.7%
Retired or disabled	13.3%	0.0%	0.0%	3.3%	0.0%	3.3%
Unspecified	0.0%	10.0%	6.7%	6.7%	0.0%	3.3%
Annual Family Income						
\$0 to \$1,000	20.0%	10.0%	6.7%	30.0%	4.2%	13.3%
\$1,001 to 10,000	40.0%	30.0%	20.0%	26.7%	54.2%	30.0%
\$10,001 to 20,000	13.3%	30.0%	26.7%	20.0%	16.7%	20.0%
\$20,001 to 30,000	20.0%	10.0%	20.0%	6.7%	16.7%	23.3%
Over \$30,000	6.7%	20.0%	26.7%	16.7%	8.3%	13.3%
Mean	\$10,593	\$18,182	\$19,877	\$12,401	\$12,278	\$16,097
Eligibility for CAP ECE						
Income as % of Federal Poverty Level						
≤ 100%	80.0%	70.0%	60.0%	73.3%	62.5%	56.7%
101-130%	13.3%	10.0%	6.7%	0.0%	8.3%	6.7%
> 130%	0.0%	0.0%	13.3%	16.7%	8.3%	16.7%
Foster child	6.7%	10.0%	0.0%	0.0%	4.2%	0.0%
Homeless	0.0%	0.0%	6.7%	3.3%	0.0%	6.7%
Public assistance	0.0%	10.0%	13.3%	6.7%	16.7%	13.3%

Note: Child Plus data is collected up to three years prior to enrollment in CareerAdvance®.

^a Includes those unemployed as well as those not in the labor force.

Source: CAP Child Plus data system and CAP staff.

Children in CareerAdvance® Families

Across the cohorts, the typical CareerAdvance® family is comprised of an unmarried parent raising one to three children (Table 12). The distribution of the age of children in CareerAdvance® homes is skewed towards younger children, with a large majority of children in households served under age 10, as expected from a program largely targeted at parents with children enrolled CAP's early childhood program. The median age of children in CareerAdvance® homes across cohorts falls between 4 and 6 years old. It is also notable that across cohorts, few CareerAdvance® children enrolled in ECEs are infants or toddlers (age 1 or 2). Over 50% of children enrolled in ECEs with CAP are age 3 or older. The older age of children served suggests that low-income parents in Tulsa, who may be eligible for ECE care, may choose to stay at home to care for their children for several months after the birth of their youngest child.

Table 12. Profile of Children in CareerAdvance® Families, Cohorts 1-6

	C 1	C 2	C 3	C 4	C 5	C 6
Total Number of Children in CareerAdvance® Families	37	32	40	66	67	67
Number of Children per Household						
1	6.7%	20.0%	20.0%	33.3%	16.7%	36.7%
2	53.3%	40.0%	33.3%	33.3%	37.5%	30.0%
3	26.7%	10.0%	26.7%	16.7%	29.2%	16.7%
4	13.3%	0.0%	0.0%	13.3%	8.3%	10.0%
5 or more	0.0%	30.0%	20.0%	3.3%	8.3%	6.7%
Mean	2.5	3.2	2.7	2.2	2.6	2.2
Ages of Children in Household						
0 to 2	21.6%	17.1%	17.5%	21.2%	22.4%	7.5%
3 to 4	34.2%	25.7%	37.5%	40.9%	25.4%	38.6%
5 to 10	40.5%	34.3%	32.5%	21.2%	32.8%	34.3%
10 to 15	2.7%	12.3%	12.5%	7.6%	10.4%	17.9%
15 to 20	2.7%	8.6%	0.0%	6.1%	7.5%	1.5%
Over 20	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%
Missing	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%
Mean	4.7	7.9	5.6	5.7	6.5	6.4
Median	4.0	6.0	4.0	4.0	5.0	5.0
Number of Children Enrolled in ECP with CAP						
	17	15	19	40	35	33
Ages of Children Enrolled in ECP with CAP						
1	5.9%	6.7%	5.3%	12.5%	22.9%	6.1%
2	11.8%	6.7%	21.1%	17.5%	8.6%	3.0%
3	23.5%	20.0%	15.8%	20.0%	34.3%	30.3%
4	35.3%	33.3%	47.4%	45.0%	22.9%	45.5%
5	23.5%	33.3%	10.5%	5.0%	11.4%	15.2%

Source: CAP Child Plus data system.

CONCLUSION AND RECOMMENDATIONS

During the second year as an HPOG program, *CareerAdvance*[®] began classes for Cohort 4 in fall 2011, started training Cohort 5 in January 2012, and recruited and enrolled Cohort 6 during summer 2012. *CareerAdvance*[®] staff organized an alternate route in the nursing pathway through the Patient Care Technician program at TCC in August 2011. The PCT program offers participants a shorter and more accessible path to the RN credential than the LPN program. Adding to nursing occupations, the *CareerAdvance*[®] staff developed and implemented training for a new career path in MA/HIT, which was subsequently split into two separate career paths in August 2012. *CareerAdvance*[®] also refined its procedures for recruitment, orientation, and enrollment and continued to seek ways to strengthen its approaches to providing supplemental basic skills and college-readiness instruction.

Over the program year ending September 29, 2012, *CareerAdvance*[®] recruited and enrolled a total of 54 new participants in Cohorts 5 and 6, which was slightly fewer than the goal of 60 projected in CAP's original proposal to the Administration for Children and Families at the U.S. Department of Health and Human Services. Of these, 30 were in the nursing track and 24 were in the HIT/MA pathway.

Continuous Improvement

The *CareerAdvance*[®] program has been in a continuous improvement mode during the past year, refining operations to make them more effective. CAP staff have responded thoughtfully to researchers' recommendations from focus groups and previous implementation reports. For example, they have worked with their educational partners to minimize time gaps in the pathways. CAP also provided administrative support for Career Coaches, enabling them to focus more on supporting parents in schooling and career decision-making and less on filling out paperwork. *CareerAdvance*[®] has built stronger relationships with health care employers. The program has also improved messaging to applicants and participants in such areas as program expectations.

As the program has grown and become established, recruitment has been improved substantially. *CareerAdvance*[®] staff have clarified and improved their communications with applicants and participants. Several program documents were revised, including the

presentations used in information sessions to introduce the program. The Policies and Procedures document, which outlines the responsibilities of participants, is now not only introduced at the start of *CareerAdvance*[®] but is also reviewed at the beginning of each training step.

The program is offering shorter-term training options in addition to more advanced opportunities to increase credentials and potential earnings. There are trade-offs. The longer a program takes to complete, the less likely participants are to complete higher levels of training and the more likely they are to stop before reaching their career goal. However, a shorter-term training credential is less likely to lead to earnings sufficient for the family to escape poverty. While the original *CareerAdvance*[®] design does include short-term training credentials, the other credentials are explicitly connected to training for more advanced and higher-paying occupations.

CareerAdvance[®]'s original program design is for participants to build a series of credentials (CNA→PCT→LPN→RN); it is naturally lengthier than a design that places participants into the highest-level program (RN) right away. In nursing, for example, earning a series of credentials takes more time than immediately starting college courses which could count toward the associate degree RN program. If the nursing student drops out before achieving the RN, however, she leaves with no certifications that will help her in the labor market. A participant along the slower path has earned useful credentials to seek better-paying employment if she stops-out early. This design also helps individuals who may have been out of school for many years or who lacked a high school credential to build college-readiness skills before taking college-level classes. The highly competitive nature of RN programs means that participants need to earn A's and B's in order to be competitive in the applicant pool.

The changes made to the HIT pathway in the last year are likely to result in better outcomes. Coaches noted that MA was not a good first credential for that pathway as the personalities of individuals suited to MA differed from those suited to HIT. While MA involves direct patient care, medical coding and HIT are both computer-based careers dealing mainly with data. By splitting this pathway in two the program has expanded its

potential to serve low-income parents, whether they are seeking short- or long-term training, and whether they prefer work in an office or clinical setting. The limited number of applicants the MA program received during Cohort 6 recruitment may indicate that there is little interest in the career among current CAP families. For Cohort 7, CAP is considering alternative programs including Pharmacy Technician and Dental Assisting.

What to Expect: Early Signs of Success

Reaching the top level of a career pathway may take several years of training and preparation. Not all participants will reach this level. Some participants will leave the program with stackable credentials at various points along the career path, effectively receiving a “lower dosage” of the designed program (or “treatment”). Others will leave the program temporarily with credentials to earn somewhat higher income to support their family. They may rejoin the program later to continue their training along the career pathway.

Major impacts of *CareerAdvance*[®] will be analyzed over several years based on comparisons with a carefully matched sample of CAP parents and families not participating in the program.¹⁴ Likewise, examining and documenting impacts on the children of participants will be a long-term endeavor. However, indications that *CareerAdvance*[®] is successful should become apparent sooner, including:

1. The completion rate for each training segment should be higher for *CareerAdvance*[®] participants than for others not in *CareerAdvance*[®] who are in training.
2. Employers will find that *CareerAdvance*[®] trainees and graduates perform satisfactorily and will agree that the program helps to meet their needs.
3. The pass rates on credentialing exams will be equal or higher for *CareerAdvance*[®] participants than the general passing rates on those exams.
4. Individuals who leave the program at an intermediate stage to become employed will gain greater earnings and more stable employment than they experienced prior to the program.
5. *CareerAdvance*[®] participants will be able to use their credentials to find jobs in

¹⁴ A random assignment experiment will not be feasible until *CareerAdvance*[®] grows and becomes oversubscribed with a substantial waiting list.

health care.

6. Students in GED preparation will be more likely to achieve GED certification.
7. The well-being of children and parents involved in *CareerAdvance*® will improve over time.

Researchers are linking data from Oklahoma's Employment Security Commission and Department of Human Services to determine how participation in *CareerAdvance*® affects parental earnings and receipt of public benefits. Additional data on completion rates for programs at TCC and Tulsa Tech, as well as passing rates for certification exams (e.g., CNA, AUA, NCLEX-PN, and NCLEX-RN), will be sought to provide the context needed for understanding the participant outcomes described above.

At this point in time, participants in the earliest cohorts are just completing the LPN program and entering the RN associates' degree program at TCC. Since training and certification to become an RN takes a high school graduate five years or more to attain, no one has completed the full nursing career ladder and entered the labor market. Participants in the HIT track are just completing the first step of their pathway, and moving into medical coding. As the program progresses over the next year, researchers will focus on the experiences of participants as they move into these steps and develop lessons learned for program staff as they continue to refine operations.

Limitations of this Study

This formative evaluation reports on the implementation, early operations and expansion of *CareerAdvance*®. It aims to document what was accomplished and how. It also discusses the challenges faced by the program and its participants and the changes made in *CareerAdvance*® to make the program more effective. The study presented here does not measure the net impact of *CareerAdvance*® on participants or their children. A separate summative evaluation of *CareerAdvance*®, the CAP Family Life Study, is using a quasi-experimental evaluation design to compare outcomes for *CareerAdvance*® participants and their families to a matched comparison group within the CAP early childhood program. Results from that study will not be available for several years.

REFERENCES

- Becker, Gary. (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Chicago, IL: The University of Chicago Press, Third Edition.
- CareerAdvance® Information Sessions for Application: Spring 2012. PowerPoint Presentation. April 5, 2012. Tulsa, OK: Community Action Project of Tulsa County.
- Chase-Lansdale, P. Lindsay, Teresa Eckrich Sommer, Terri J. Sabol, Christopher T. King, Robert W. Glover, Hiro Yoshikawa, and Jeanne Brooks-Gunn. (2012). *CareerAdvance® Outcomes Study Year 1 Report: September 30, 2010 – September 29, 2011*. Evanston, IL: Northwestern University. February.
- Conway, Maureen, Amy Blair, Steven L. Dawson, and Linda Dworak-Munoz. (2007). *Sectoral Strategies for Low-Income Workers: Lessons from the Field*. Washington, DC: Workforce Strategies Initiative, Aspen Institute.
- Duncan, Greg J. and Katherine Magnuson. (2011). "The Long Reach of Early Childhood Poverty." *Pathways*. Winter. Pp. 22-27.
- Gardner, Margo, Jeanne Brooks-Gunn, P. Lindsay Chase-Lansdale, Teresa E. Sommer, Diana M. Rauner, and Karen Freel. (2011). "The barriers to postsecondary education among low-income mothers of young children and the promise of a two-generation intervention approach." Manuscript under review.
- Giloth, Robert P., editor. (2004). *Workforce Intermediaries for the Twenty-first Century*. Philadelphia, PA: Temple University Press.
- Glover, Robert W. and Christopher T. King. "The Promise of Sectoral Approaches to Workforce Development: Towards More Effective, Active Labor Market Policies in the United States," In Charles J. Whalen, Ed., *Human Resource Economics: Essays in Honor of Vernon M. Briggs, Jr.*, Kalamazoo, Michigan: The W. E. Upjohn Institute for Employment Research, 2010, pp. 215-251.
- Glover, Robert W., Christopher T. King, and Tara C. Smith. (2012). *Expanding the CareerAdvance® Program in Tulsa, Oklahoma*. Austin, TX: Ray Marshall Center for the Study of Human Resources, LBJ School of Public Affairs, The University of Texas. January.
- Glover, Robert W., Tara Carter Smith, Christopher T. King, and Rheagan Coffey. (2010). *CareerAdvance®: A Dual-Generation Antipoverty Strategy*. Austin, TX: Ray Marshall Center for the Study of Human Resources, LBJ School of Public Affairs, The University of Texas. August.
- King, Christopher T., Robert W. Glover, Tara Carter Smith, Rheagan Coffey, Brian Levy, Hirokazu Yoshikawa, William Beardslee, and Micah Kordsmeier. (2009). *The CareerAdvance® Pilot Project: Recommended Jobs Strategy for Families Served by the Community Action Project of Tulsa County*. Austin, TX: Ray Marshall Center for the Study of Human Resources, LBJ School of Public Affairs, The University of Texas. August.

- La Paro, Karen M., Robert C. Pianta, and Megan Stuhlman. (2004). "The Classroom Assessment Scoring System: Findings from the Prekindergarten Year." *The Elementary School Journal*. Vol. 104, No. 5.
- Magnuson, Katherine. (2007). *Investing in the Adult Workforce: An Opportunity to Improve Children's Life Chances*. Baltimore, MD: Prepared for the Annie E. Casey Foundation Initiative on Investing in Workforce Development, March 20. Available: <http://www.aecf.org/news/fes/dec2008/pdf/Magnuson.pdf>.
- Maguire, Sheila, Joshua Freely, Carol Clymer, Maureen Conway, and Deena Schwartz. (2010). *Tuning into Local Labor Markets: Findings from the Sectoral Employment Impact Study*. Philadelphia, PA: Public/Private Ventures. July.
- Reynolds, Arthur J., Judy A. Temple, Suh-Ruu Ou, Irma A. Arteaga, and Barry A.B. White. (2011). "School-based early childhood education and age-28 well-being: effects by timing, dosage, and subgroups." *Science*. Epub, June 9.
- SaveUSA Program Implementation: Insights from the Field*. New York, NY: The City of New York. April.
- Shonkoff, Jack P.; and Deborah A. Phillips, editors. (2000). *From Neurons to Neighborhood: The Science of Early Childhood Development*. Washington, D.C.: National Academy Press.
- Shore, Rima. (2009). *The Case for Investing in PreK-3rd Education: Challenging Myths about School Reform*. Policy to Action Brief No. 1. New York, NY: Foundation for Child Development. January.
- Sommer, Teresa Eckrich; P. Lindsay Chase-Lansdale; and Jeanne Brooks-Gunn. (2011) "Promoting Dual-Generation Anti-Poverty Programs for Low-Income Families: Three Approaches and Their Implications for Practitioners." Paper presented at the Annual Research Conference of Association of Public Policy Analysis and Management, Washington, D.C. December 5, 2011.
- Sommer, Teresa Eckrich, P. Lindsay Chase-Lansdale, Jeanne Brooks-Gunn, Margo Gardner, Diana M. Rauner, and Karen Freel. (2012). "Early Childhood Education Centers and Mothers' Postsecondary Attainment: A New Conceptual Framework for a Dual-Generation Education Intervention." *Teachers College Record*. October.
- Smith, Tara C. and Christopher T. King. (2011). *Exploratory Return on Investment Analysis of Local Workforce Investments*. Austin, TX: Ray Marshall Center for the Study of Human Resources, LBJ School of Public Affairs, The University of Texas.
- Yoshikawa, Hirokazu, Thomas S. Weisner, and Edward D. Lowe, editors. (2006). *Making it Work: Low-Wage Employment, Family Life, and Child Development*. New York, NY: Russell Sage Foundation.

