



Expanding Opportunities & Reducing Barriers to Work: Mississippi Interim Report

Evaluation of Pilot Projects to Promote Work and Increase State Accountability in the Supplemental Nutrition Assistance Program



September 2021

James Mabli, Gretchen Rowe, Gayle Hamilton, Kristen Joyce, Julie Hartnack, Peter Schochet, Dallas Dotter, Kelley Monzella

Submitted to:

U.S. Department of Agriculture
Food Nutrition Service
1320 Braddock Place
Alexandria, VA 22314
Project Officer: Danielle Deemer
Contract Number: AG-3198-B-15-0002/12319818F0080

Submitted by:

Mathematica
955 Massachusetts Avenue, Suite 801
Cambridge, MA 02139
Telephone: 617.301.8997
Project Director: James Mabli
Reference Number: 50142



USDA is an equal opportunity provider, employer, and lender.

ACKNOWLEDGEMENTS

This report was prepared for the U.S. Department of Agriculture, Food and Nutrition Service (FNS) by Mathematica and MDRC. It would not have been possible without the contributions of many individuals and organizations whose guidance, information, and efforts were critical to the Evaluation of SNAP E&T Pilots and the successful completion of this report. We are especially grateful to the individuals who participated in the SNAP E&T pilots, particularly those individuals who completed surveys and participated in focus groups. We also want to give special thanks to the staff members of the State agencies who implemented the SNAP E&T pilots as well as the pilot partners and service providers. Staff from these organizations worked with us to implement the evaluation, provided important information and data, and participated in interviews and focus groups. We also acknowledge contributions from staff at Insight Policy Research, who played a role in the implementation site visits and led the collection of SNAP administrative data; Koné Consulting, who led the implementation study team for the California site; and Decision Information Resources, who assisted in data collection for the 12-month survey of individuals enrolled in the pilots.

We also are extremely appreciative of the staff at FNS Office of Policy Support (OPS) and FNS Office of Employment and Training (OET) for providing ongoing guidance and feedback on evaluation plans and for reviewing this report. In particular we thank the evaluation's FNS project officer, Danielle Deemer, as well as her predecessors in this role, Wesley Dean and Anita Singh. For this particular evaluation site, we are indebted to Loretta Robertson, the current OET liaison for Mississippi, and Jackie Windfeldt, the former Mississippi OET liaison.

The many individuals who contributed to the evaluation and this report are shown below, under their respective organizations in alphabetical order.

U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support (OPS) and FNS Office of Employment and Training (OET)

Wesley Dean (OPS)	Rachel Gragg (OET)	Anita Singh (OPS)
Danielle Deemer (OPS)	Moira Johnston (OET)	Kaila Wilson (fmr. OET)
Marcie Foster (OET)	Kathryn Law (OPS)	Jackie Windfeldt (fmr. OET)
Leigh Gantner (OET)	Loretta Robertson (OET)	

Mississippi Department of Human Services (MDHS), Mississippi State University National Strategic Planning and Analysis Research Center (NSPARC), East Mississippi Community College (EMCC), Itawamba Community College (ICC), Jones County Junior College (JCJC), Mississippi Delta Community College (MDCC), Mississippi Gulf Coast Community College (MGCCC), Jobs for Mississippi Graduates (JMG), Mississippi Department of Employment Security (MDES)

Drew Boyles (fmr. NSPARC)	Gwendolyn Moncure	Raj Shaunak (EMCC)
Leslie Charlton (NSPARC)	(MDES)	Ryan Walker (NSPARC)
Patricia Craft (MGCCC)	Lee Oswalt (ICC)	Shane Warren (NSPARC)

Acknowledgements

Sandra Giddy (MDHS)
Carol Girod (MDHS)
Mohammed Jalaluddin
(MDES)

Sha'Carla Petty (EMCC)
Johna Peyton (MDCC)
Nirmala Sahoo (MDES)

Ramona Williams (JMG)
Michael Yarbrough (JCJC)

Members of the Technical Working Group

Ed Bolen (Center on Budget
and Policy Priorities)
Stacy Dean (Center on
Budget and Policy Priorities)
Amy Ellen Duke-Benfield
(National Skills Coalition)

David Greenberg (University
of Maryland, Baltimore
County)
Alma Salazar (Los Angeles
Area Chamber of Commerce)

Jeffrey Smith (University of
Wisconsin-Madison)
Whitney Smith (JP Morgan
Chase Foundation)

Mathematica

Adam Bourgault
Jennifer Brown
Felita Buckner
Barbara Carlson
Mason DeCamillis
Amy Defnet
Dallas Dotter
Lisa Dragoset
Brittany English
Mary Kay Fox

Julie Hartnack
Kristen Joyce
Miranda Kharsa
Wamaita Kiambuthi
Cathy Lu
Julia Lyskawa
James Mabli
Sheena McConnell
Kelley Monzella
Quinn Moore

Nora Paxton
Michael Ponza
Linda Rosenberg
Gretchen Rowe
Betsy Santos
Peter Schochet
Dan Thal
Andy Weiss
Dan Welsh

MDRC

Jonathan Bigelow
Stephen Freedman
Barbara Goldman
Gayle Hamilton
Brandon Hawkins
Richard Hendra
Gloriela Iguina-Colón

Anastasia Korolkova
Frieda Molina
David Navarro
Keith Olejniczak
Nikki Ortolani
Liza Paudel
Alexandra Pennington

Natasha Piatnitskaia
Stephanie Rubino
Kelsey Schaberg
Susan Scrivener
Makenzi Sumners
Kemar Taylor
Betsy Tessler
Donna Wharton-Fields

We also want to acknowledge the report reviewers and editors at Mathematica and additional reviewers at MDRC, the staff at the Mathematica's Survey Operations Center, the entire research team's efforts in conducting field research and analyzing the qualitative data as well as the efforts to collect, process, and analyze the quantitative data, and the hard work and additional support from research assistants and administrative assistants.

GLOSSARY

ABAWD	Able-bodied adult without dependents. 18- to 49-year-old adult who is not disabled and does not have dependents
BCCS	Basic Community College Services. One of two treatment groups
Control group	A group of individuals enrolled in a SNAP Employment and Training (E&T) pilot that was eligible for services available through existing SNAP E&T programs if such programs were available to the control group in the pilot location
ECCS	Enhanced Community College Services. One of two treatment groups
EDGE	Ethics, Discipline, Goals, Employment. The SNAP Employment and Training pilot implemented in Mississippi
EMCC	East Mississippi Community College
Food security	Having access at all times to enough food for an active, healthy life. Individuals who experienced food access limitations due to lack of money or other resources are said to be food insecure
GED	General Education Development. A group of subject tests which, when passed, certify that the test taker has high school-level academic skills
ICC	Itawamba Community College
ICP	Individual career plan
JCJC	Jones County Junior College
JMG	Jobs for Mississippi Graduates
LWIA	Local workforce investment area. A group of one or more counties that provide workforce development services
MDCC	Mississippi Delta Community College
MDES	Mississippi Department of Employment Security
MDHS	Mississippi Department of Human Services
MGCCC	Mississippi Gulf Coast Community College
MIS	Management information system
NSPARC	Mississippi State University's National Strategic Planning and Analysis Research Center
Random assignment	An experimental technique for assigning individuals enrolled in a SNAP Employment and Training pilot into research groups (a treatment or control group)
Research group	A group of individuals enrolled in a SNAP Employment and Training pilot that was either eligible for enhanced services (a treatment group) or eligible for services available through existing SNAP E&T programs where available (a control group)

Glossary

SNAP	Supplemental Nutrition Assistance Program. A Federal nutrition assistance program
SNAP E&T	A program that assists SNAP participants in obtaining employment by providing services, such as job search assistance, job skills training, education, work experience, or workfare, and supports, such as assistance with transportation and child care costs
SSI	Supplemental Security Income. A Federal income supplement program
TABE	Test of Adult Basic Education. A standardized placement test to assess academic readiness
TANF	Temporary Assistance for Needy Families. A Federal grant program designed to help needy families achieve self-sufficiency
Treatment group	A group of individuals enrolled in a SNAP Employment and Training pilot that was eligible for the enhanced set of services developed under the pilot
UI	Unemployment insurance. A Federal program to provide unemployment benefits to eligible workers
USDA	U.S. Department of Agriculture
Very low food security	A severe form of food insecurity characterized by disrupted eating patterns and reduced food intake
WIC	Supplemental Nutrition Program for Women, Infants, and Children. A Federal assistance program that provides food, health care referrals, and nutrition education to low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children
WIN	Workforce Investment Network
WIOA	Workforce Innovation and Opportunity Act
Work registrant	SNAP participant who has not met any Federal exemptions from SNAP work requirements and is therefore required to register for work
WorkKeys	A workplace skills assessment that measures a range of hard and soft skills

CONTENTS

ACKNOWLEDGEMENTS	i
GLOSSARY	iii
OVERVIEW	xi
EXECUTIVE SUMMARY	xiii
Mississippi pilot background.....	xiv
Evaluation overview	xiv
EDGE overview, service receipt, and costs	xv
Differences in service receipt for the ECCS, BCCS, and control groups.....	xvii
Impacts of EDGE on employment and SNAP participation	xx
Impacts on other outcomes	xxiv
Main conclusions and next steps	xxv
I. INTRODUCTION.....	1
A. Background of all 10 pilots	1
B. Objectives of the evaluation	2
C. Overview of Mississippi EDGE	3
D. Data sources	5
E. Analysis approach	7
F. Organization of this report	8
II. IMPLEMENTATION ANALYSIS.....	10
A. Pilot background.....	10
B. Pilot planning and implementation	12
C. Pilot services and operations	14
1. Recruitment and enrollment	15
2. Control group services and pathways	17
3. EDGE group services and pathways.....	17
4. Management, collaboration, and communication for EDGE service provision	21
5. EDGE group services and participation trends	22
6. Staffing.....	24
7. Performance management and reporting	25
D. Key implementation analysis findings	26

III. PARTICIPATION ANALYSIS	28
A. Engagement in EDGE	29
1. Overall engagement in EDGE	29
2. Engagement in activities	32
B. Education, occupational skills training, and work-based learning	36
1. Education and occupational skills training	37
2. Work-based learning	39
C. Support services	40
D. Case management	42
E. Exits	43
IV. DIFFERENCES IN SERVICE RECEIPT FOR THE ECCS, BCCS, AND CONTROL GROUPS	45
A. Differences between research groups in the receipt of services overall	46
B. Differences between research groups in program and activity completion	52
C. Differences between research groups in receipt of case management and support services	54
D. Differences between research groups in sanctions for noncompliance	55
V. IMPACTS ON EMPLOYMENT, EARNINGS, RECEIPT OF PUBLIC ASSISTANCE, AND WELL-BEING OUTCOMES	57
A. Impacts of EDGE on labor market outcomes	61
1. Impacts on employment, earnings, and hours worked	61
2. Impacts on characteristics of current jobs	65
3. Conclusion	67
B. Impacts of EDGE on receipt of public assistance	68
1. Impacts on SNAP participation	68
2. Impacts on TANF and other forms of public assistance	71
3. Conclusion	72
C. Impacts of EDGE on food security, health, well-being, and housing status	73
VI. ANALYSIS OF EDGE COSTS	75
A. Analysis of total and service-specific costs	77
1. Total costs	77
2. Costs by service	81
VII. CONCLUSION	83
A. Summary of main findings	83

Contents

1. EDGE implementation	83
2. Service receipt among EDGE group members	83
3. Differences between EDGE and control groups in service receipt	84
4. Short-term impacts of EDGE on individuals' outcomes.....	85
B. Final report and other products	86
REFERENCES.....	88

EXHIBITS

ES.1. Rates of participation in and completion of services were generally higher for the ECCS and BCCS groups than the control group	xviii
ES.2. BCCS group members were more likely than control group members to receive case management	xix
ES.3. ECCS and BCCS group members were more likely than control group members to receive support services	xx
ES.4. EDGE did not affect Quarter 4 employment, but increased the likelihood of participating in SNAP in Quarter 4	xxi
ES.5. EDGE did not affect employment in any follow-up quarter, based on UI data	xxii
ES.6. EDGE decreased employment in Quarters 1 and 2, but did not affect employment in Quarters 3 and 4, based on survey data.....	xxii
ES.7. Quarterly SNAP participation rates were higher for the ECCS and BCCS groups than for the control group in most follow-up quarters.....	xxiii
ES.8. EDGE decreased food insecurity for the BCCS group, relative to the control group	xxiv
I.1. Pilot locations	3
I.2. Pilot characteristics	4
I.3. Baseline characteristics of individuals enrolled in the pilot	5
II.1. Pilot timeline	10
II.2. Pilot flow and pathways.....	15
III.1. Percentage of individuals in ECCS and BCCS groups who engaged in EDGE and intake services	30
III.2. Percentage of ECCS group members who started engagement by quarter after random assignment.....	31
III.3. Percentage of BCCS group members who started engagement by quarter after random assignment.....	32
III.4. Percentage of individuals in ECCS and BCCS groups who started activities	33
III.5. Completion rates for EDGE activities, among individuals who started an activity.....	34
III.6. Percentage of ECCS group members starting activities, by quarter	35
III.7. Percentage of BCCS group members starting activities, by quarter	35
III.8. Number of activities started by ECCS and BCCS group members (percentage).....	36
III.9. Percentage of ECCS and BCCS group members who started any occupational skills training and five most commonly started types of training.....	37

Exhibits

III.10. Among those who started occupational skills training, percentage of ECCS and BCCS group members who completed any training and who completed the five most commonly completed types of training	38
III.11. Among those who received a credential, percentage of ECCS group members who earned the five most common credentials	39
III.12. Among those who received a credential, percentage of BCCS group members who earned the five most common credentials	39
III.13. Percentage of individuals in ECCS and BCCS groups who engaged in work-based learning and average amount of subsidy	40
III.14. Percentage of individuals in the ECCS and BCCS groups who received any support service and received each type of available support service	41
III.15. Among individuals in ECCS and BCCS groups who received a support service, percentage received by type and amount of support.....	42
III.16. Description of contacts with career navigators among ECCS and BCCS group members.....	43
III.17. Percentage of ECCS and BCCS group members who exited over time	44
IV.1. Participation in any EDGE, existing SNAP E&T, or community-offered services	48
IV.2. Participation in specific EDGE, existing SNAP E&T, or community-offered services	48
IV.3a. Time trends in rates of participation in EDGE services, existing SNAP E&T services, or community-offered services (ECCS group members versus control group members)	50
IV.3b. Time trends in rates of participation in EDGE services, existing SNAP E&T services, or community-offered services (BCCS group members versus control group members)	51
IV.4. Length of stay, completion, and credential receipt in EDGE, existing SNAP E&T, or community-offered services	52
IV.5. Receipt of case management through EDGE, existing SNAP E&T, or community-offered programs	54
IV.6. Receipt of support services through EDGE, existing SNAP E&T, or community-offered programs	55
V.1. Employment and SNAP participation rates in Quarter 4	60
V.2. Quarterly employment rates based on UI wage records	62
V.3. Quarterly employment rates based on survey data.....	62
V.4. Quarterly earnings based on UI wage records	63
V.5. Average quarterly earnings based on survey data	64
V.6. Average hours worked per week based on survey data	65
V.7. Characteristics of current jobs, among individuals employed at the time of the interview and based on 12-month survey data	66
V.8. Quarterly SNAP participation rates based on SNAP administrative data	68

Exhibits

V.9. Participation in SNAP based on SNAP administrative data	69
V.10. Impacts on average monthly SNAP benefit amount per Quarter and in Year 1, based on SNAP administrative data	70
V.11. Quarterly TANF participation rates, based on SNAP administrative data	71
V.12. Impacts on participation in other public assistance programs in the 12 months since random assignment, based on 12-month survey data	72
V.13. Impacts on food security, based on 12-month survey data	74
VI.1. Ingredients of cost estimates	75
VI.2. Snapshot of EDGE cost data collection	76
VI.3. Summary of total costs	77
VI.4. EDGE funding from FNS grant and other sources	78
VI.5. Costs by category	79
VI.6. Costs by category and funding source	80
VI.7. Costs by service type	81
VI.8. Average percentage of time direct service provider staff spent on key activities	82

OVERVIEW

This report presents interim findings from the evaluation of a SNAP Employment and Training (SNAP E&T) pilot—Ethics, Discipline, Goals, Employment (EDGE)—that was implemented in Mississippi from March 2016 to February 2019. This was one of 10 pilots Congress authorized and funded as part of the Agricultural Act of 2014 to offer enhanced SNAP E&T services to assist SNAP participants in obtaining employment. The Mississippi Department of Human Services (MDHS) enrolled 3,051 SNAP participants into the pilot, with approximately two-thirds randomly assigned to be eligible for the enhanced services (one-third to the Enhanced Community College Services [ECCS] group and one-third to the Basic Community College Services [BCCS] group), and the remaining one-third eligible for existing SNAP E&T services (the control group). The pilot mostly targeted able-bodied adults without dependents (ABAWDs). In contrast to the State’s existing SNAP E&T program, which was mandatory and focused primarily on job search and workfare, ECCS offered individuals a four-week career readiness course called the EDGE class, intensive case management, and access to three pathways based on an individual’s career plan. ECCS also offered support services, including transportation, training-related items, and work-related items. Under BCCS, individuals were offered the three pathways (the EDGE class was not available to them), support services similar to ECCS, and less-intensive case management.

The following are key interim findings for the four evaluation components from the report, which examines the experiences of individuals enrolled in the pilot through December 2017:

- **Implementation.** Mississippi successfully developed a new service model for EDGE, created partnerships, and enrolled individuals within a year of receiving the grant, which was a notable accomplishment. The pilot model was mostly implemented as intended, but staff found it difficult to do so at the same time they were implementing other major policy changes (a new mandatory SNAP E&T program). Staff also had difficulty attracting ABAWDs and keeping EDGE group members engaged in services after enrollment. Staff reported that many of these individuals dropped off before attending their first appointment at the college, which was often due to a lack of transportation and individuals needing to travel long distances to a college for services.
- **Participation.** Over 90 percent of individuals in the ECCS and BCCS groups met with a career navigator, started an assessment, or received a support service. However, less than two-thirds of the ECCS and BCCS groups ultimately started an employment or training-related activity, such as an EDGE class, occupational skills training, basic education, or work-based learning, and 15 percent or fewer individuals received a credential, certification, or degree. Most individuals (about 90 percent) in both groups left the pilot during their first year and the majority of those left within three months after enrollment, before completing services.
- **Impact.** Although the ECCS and BCCS groups were more likely than the control group to start and complete job search training activities and education and occupational skills training activities, EDGE did not lead to an increase in employment and earnings, but did lead to an increase in the likelihood of participating in SNAP within the first year after individuals

enrolled. These findings do not imply that EDGE ultimately will not be effective in achieving its goal of increasing employment and reducing the need for public assistance, as longer-term results are needed to fully assess the impacts of EDGE.

- **Cost.** MDHS and its partners and providers reported spending about \$6 million from March 2015 to December 2017 on the planning and early implementation of EDGE. Slightly more than a quarter of the costs were for direct services, with case management and job readiness or life skills workshops being the largest of these costs. Direct service costs likely will represent a larger share of total costs when 2018 and 2019 expenditures are analyzed and reported.

This report presents an early assessment of the effects of EDGE. A final report will examine the experiences of all individuals enrolled in the EDGE pilot, present their outcomes over a longer follow-up period, and examine the benefits of the pilot's new services relative to their costs. In doing so, the final report will provide more conclusive evidence about the effectiveness of EDGE.

EXECUTIVE SUMMARY

The Supplemental Nutrition Assistance Program (SNAP) is the primary source of nutrition assistance for many low-income people. By providing a monthly benefit to spend on food, the program aims to ensure that SNAP participants have adequate access to enough food to lead healthy, active lives. For some in the program, it also provides work supports to help them become economically self-sufficient. SNAP's Employment and Training (E&T) program assists SNAP participants in obtaining employment by providing services, such as job search assistance, job skills training, education, work experience, or workfare, and supports, such as assistance with transportation and child care costs.

Despite the importance of SNAP E&T, information about approaches that most effectively connect SNAP participants to gainful employment is limited. For this reason, as part of the Agricultural Act of 2014, Congress authorized and funded pilots to test innovative strategies in the SNAP E&T program. In 2015, the Food and Nutrition Service (FNS), part of the U.S. Department of Agriculture (USDA), awarded grants to 10 States—California, Delaware, Georgia, Illinois, Kansas, Kentucky, Mississippi, Vermont, Virginia, and Washington—which represented diverse service areas and populations. Pilots varied in whether they operated statewide, versus in select areas of a State, and whether they focused on urban communities, rural communities, or both. The majority of individuals the pilots targeted were work registrants¹ who were unemployed or underemployed and had significant barriers to employment, such as being homeless or having a criminal history or substance use disorder. Pilots also varied in the services they offered, but services typically included a skills and/or clinical assessment that determined individuals' work readiness, skills, and barriers to employment; case-management services that developed and supported a detailed and individualized work and barrier-reduction plan for individuals; and support services, such as transportation, housing, and training and work supplies that supported individuals' involvement in activities designed to reduce barriers to employment. Offered services also included a range of E&T activities, such as job readiness training, basic education, occupational skills training, and subsidized employment, although not every pilot offered all of these services. Each pilot enrolled 3,000 to 7,000 individuals for a total of 44,359 individuals across the 10 pilots. Funding for the pilots included a rigorous, longitudinal evaluation to assess whether the services offered through the pilots connected SNAP participants with jobs that would increase their incomes and reduce their need for public assistance benefits.

This interim report focuses on one State—Mississippi. It provides a detailed description of the pilot's design and implementation and, using data for a one-year follow-up period, examines the services individuals received and presents findings about the short-term effectiveness of the pilot's services. A final report will provide more comprehensive and conclusive evidence about

¹ Work registrants are SNAP participants who have not met any Federal exemptions from SNAP work requirements and are therefore required to register for work. Federal exemptions apply to individuals who are younger than 16 or older than 59; physically or mentally unfit for employment; subject to and complying with work requirements for another program; a caretaker of a dependent child younger than 6 or an incapacitated individual; participating in a drug or alcohol treatment and rehabilitation program; employed at least 30 hours a week; or enrolled at least half time in a recognized school or training program.

the effectiveness of Mississippi's pilot services, by examining individuals' experiences over a longer (three-year) follow-up period and examining the benefits of the pilot's new services relative to their costs.

Mississippi pilot background

In March 2016, the Mississippi Department of Human Services (MDHS), which administers SNAP, began enrollment in its pilot, Ethics, Discipline, Goals, Employment (EDGE) in 29 counties. The 29 counties include both urban and rural areas and are located in five community college districts. From March 2016 to September 2018, MDHS enrolled 3,051 SNAP participants into the pilot, mostly targeting able-bodied adults without dependents (ABAWDs). This interim report focuses on the 2,208 individuals who enrolled in the pilot through December 2017.

In contrast to the State's existing SNAP E&T program, which was mandatory and focused primarily on job search and workfare, MDHS' EDGE offered intensive services with two variations: Enhanced Community College Services (ECCS) and Basic Community College Services (BCCS), both mandatory. Under ECCS, individuals were offered a four-week career readiness course called the EDGE class, intensive case management, and access to three pathways based on an individual's career plan. The pathways included academic (basic education, post-secondary education, or occupational skills training), work (subsidized or unsubsidized employment or internships), and life skills (additional work or behavioral skills). ECCS also offered support services, including transportation, training-related items, and work-related items (uniforms, books, and tools). Under BCCS, individuals were offered the three pathways (the EDGE class was not available to them), support services similar to ECCS, and less-intensive case management.

Evaluation overview

The evaluation includes the following four components:

1. An **implementation analysis** that documents the context and operations of each pilot;
2. A **participation analysis** that examines the characteristics, participation levels, and service paths of individuals in the pilots;
3. An **impact analysis** that identifies what works and for whom by examining impacts on employment and earnings, public assistance receipt, and other outcomes such as food security, health, well-being, and housing; and
4. A **cost analysis** that describes the total and component costs of each pilot.²

² The final reports will include additional analyses for two of the study components. The participation analysis will also assess whether the presence of the pilots affected people's decisions to apply for SNAP or to continue to receive SNAP benefits. The cost analysis will also include a cost-benefit analysis which estimates the return on each dollar invested in the pilots.

The evaluation used an experimental research design in which individuals eligible for SNAP E&T who were enrolled into the pilot were randomly assigned into the ECCS group, the BCCS group, or a control group in roughly equivalent numbers. Individuals assigned to the ECCS or BCCS groups (the EDGE group collectively) were eligible for the enhanced set of services described above, whereas control group members were eligible for services available through the existing SNAP E&T program in the State. Through random assignment, the groups were similar when they enrolled into the pilot, on average, in all aspects. They differed only in the services they subsequently were eligible to receive. This design allows the evaluation to confidently attribute differences in outcomes between the groups to the enhanced SNAP E&T services rather than to other potential causes.

Data sources used in the evaluation include administrative service use data to describe engagement and participation in services; unemployment insurance (UI) wage records to measure employment and earnings; SNAP administrative data to measure participation in SNAP and Temporary Assistance for Needy Families (TANF) and the amount of SNAP and TANF benefits; and 12-month follow-up survey data to provide additional information about individuals' service receipt, employment, and earnings, as well as food security, health, well-being, and housing status. The evaluation also used implementation data collected from interviews with EDGE staff and EDGE group members and grantee-provided cost data and time-use data to estimate the cost of services and service components.

EDGE overview, service receipt, and costs

MDHS developed EDGE to offer education, occupational skills training, and support services that would help SNAP participants obtain middle-skill jobs. It targeted ABAWDs because they were most in need of services and, beginning in 2016, would be facing both federally mandated limits on the amount of time they could receive SNAP and mandatory SNAP E&T work requirements. MDHS administered EDGE and contracted with Mississippi State University's National Strategic Planning and Analysis Research Center to help plan and develop systems to monitor and oversee EDGE. MDHS also contracted with five community colleges to provide case management, the EDGE class, and pathway services, and with Jobs for Mississippi Graduates to provide case management and to conduct outreach.

Individuals who were enrolled in the pilot and assigned to the EDGE group were sent to one of the five community colleges, which served 29 counties across Mississippi. Individuals in the ECCS group met with a career navigator and were scheduled to start the next available EDGE class; individuals in the BCCS group met with a career navigator to create an individual career plan (ICP) and start one of the pathways. Individuals in the control group participated in 30 days of up-front job search followed by workfare. Tuition assistance and General Education Development (GED) classes also were available to control group members in some counties.

The following provides details about the planned services, receipt of specific services, and costs of providing services during the interim period:

EDGE class. During the four-week EDGE class, individuals in the ECCS group completed the Test of Adult Basic Education (TABE) and WorkKeys assessments. They then participated in career readiness workshops where they learned about potential careers; learned basic computer concepts; took a Myers Briggs personality test; learned work readiness skills, such as professional image, interviewing skills, and on-the-job behavior; conducted mock interviews; learned about financial awareness; developed communication and customer service skills; and learned about teamwork and problem solving. They also worked on their ICP throughout the four weeks and finalized it at the end of the class.

Pathways. After the ECCS group completed the EDGE class and BCCS group members created their ICPs, individuals entered one of three pathways based on their plan: academic, work, or life skills. The academic pathway allowed individuals to choose basic education courses, preparation for the GED, academic classes at the community college, or occupational skills training. Availability of classes and trainings varied by college. The work pathway provided individuals with an opportunity to get a subsidized job with an employer in the community for up to 320 hours at \$9 per hour. The life skills pathway enabled individuals to participate in activities and classes related to developing work readiness or behavioral skills. Those who completed their pathways received help finding employment and could receive up to 90 days of retention services (case management and support services) after finding employment.

Case management and support services. EDGE group members received case management from career navigators at the colleges. The intention was for the ECCS group to receive intensive career navigation (weekly meetings during the EDGE class and monthly meetings during the pathways or as needed), and the BCCS group to receive a “lighter touch” career navigation (no more than two contacts per month). However, in most of the colleges, the BCCS group received more intensive career navigation than was planned; career navigators often provided intensive case management to both groups, reaching out to all individuals weekly. The meetings for both groups took place in person or over the telephone, and staff contacted individuals through email or via text message in between meetings.

During the meetings, career navigators determined what types of barriers individuals had and what supports might be needed to mitigate them. Generally, both EGDE groups could receive supports for transportation, training or personal needs, and work items. If they successfully completed each week of the EDGE class, ECCS group members also received additional gas cards that were not available to the BCCS group.

Extent of EDGE service receipt. According to administrative service use data, almost all of the individuals randomly assigned to the EDGE group engaged in services in some way, meaning that they at least had a meeting with a career navigator, attended an orientation, started an assessment, or received a support service. However, less than two-thirds of EDGE group members participated in an E&T-related activity, such as an EDGE class, occupational skills training, basic education, or work-based learning. Most of those who started an activity completed it, with the exception of basic education, workfare, and post-secondary education, and fewer individuals received a credential, certification, or degree (including GEDs).

EDGE was designed to provide more intensive case management to ECCS group members than to BCCS group members; however, a higher proportion of the BCCS group had contact with a career navigator than in the ECCS group. The BCCS group also had more contacts, on average. Most EDGE group members received some type of support service, with the majority receiving transportation assistance and few receiving other support services such as training supports or work-related items.

EDGE group members spent an average of five months in EDGE. However, most individuals exited EDGE within their first year, and the majority of exits happened within the first three months of enrollment. Exits often resulted from noncompliance and subsequent sanction. In addition, as shown below, a sizable percentage of individuals who enrolled in the pilot exited SNAP in the first 12 months after random assignment. Because EDGE services were available only to SNAP participants, many exits from EDGE may have reflected exits from SNAP.

Pilot costs. MDHS and its partners and providers reported spending \$5,601,000 from April 2015 to December 2017 on the planning and implementation of EDGE (\$1,090,000 during the planning period and \$4,511,000 on service delivery). The FNS grant funded 76 percent of these costs, and partners and providers leveraged other funding sources for the remaining 24 percent. Almost three-quarters (72 percent) of the costs during the planning period and first 22 months of operations were related to administration, including planning and development, management and oversight, and recruitment and enrollment (\$4,048,000). The remaining 28 percent of costs were for direct services, with case management and job readiness or life skills workshops being the largest costs. The proportion of the total budget that is represented by direct service costs will likely increase over time.

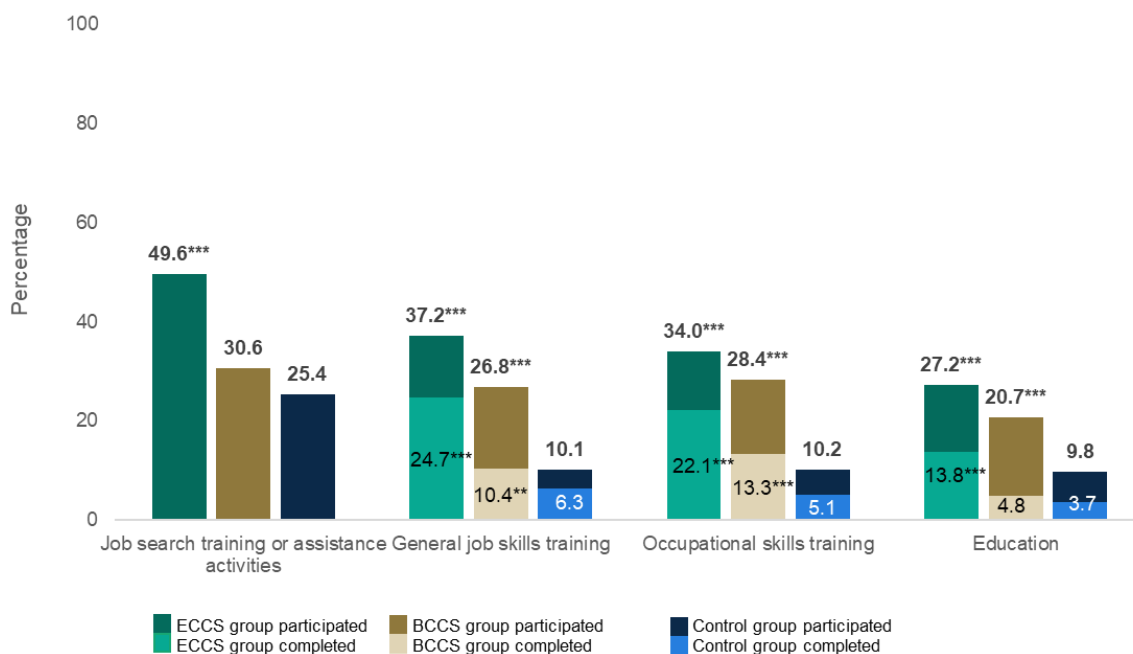
Differences in service receipt for the ECCS, BCCS, and control groups

To provide context for the impacts of EDGE, we examined differences in service receipt between the research groups based on survey data. These data capture any type of service received, regardless of whether it was provided through EDGE or existing SNAP E&T, or whether it was generally available in the community, through programs such as the Workforce Innovation and Opportunity Act (WIOA) or through community colleges, nonprofits, or other organizations. Without a meaningful service differential between the EDGE and control groups, impacts on labor market and public assistance outcomes are unlikely to result.

According to the survey data, service receipt rates were generally higher for individuals in EDGE, relative to the control group. During the 12-month follow-up period considered in this interim report, the EDGE group was more likely than the control group to participate in job search assistance or training activities and in education and occupational skills training. About 59 to 64 percent of the ECCS and BCCS groups participated in one of these activities compared with only 35 percent of the control group. The EDGE group also had higher rates of participation than the control group in almost all types of education and occupational skills training activities. The magnitude of the differences varied for the ECCS and BCCS groups (Exhibit ES.1), but were largest for general job skills training and occupational skills training (17 to 27 percentage points higher than the control group) and smaller for education (11 to 17 percentage points

higher than the control group). There were small differences in participation in work-based learning between individuals in the ECCS or BCCS groups and those in the control group (data not shown in exhibit).

Exhibit ES.1. Rates of participation in and completion of services were generally higher for the ECCS and BCCS groups than the control group



Source: SNAP employment and training evaluation 12-month follow-up survey, weighted data.

Note: The full length of each bar represents the participation rate and the lower portion of each bar represents the completion rate. There is no completion rate available for job search training or assistance.

***Difference between research groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between research groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between research groups is significantly different from zero at the .10 level, two-tailed test.

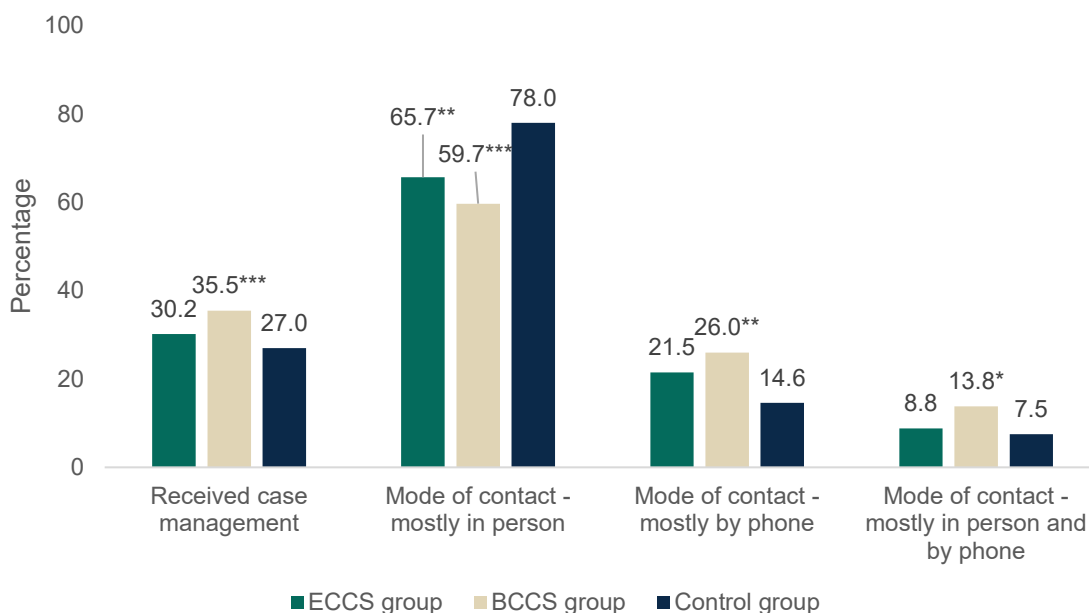
EDGE group members also were more likely than those in the control group to complete activities or programs and to receive an occupational certificate or license. Compared with individuals in the control group, individuals in the ECCS group were 24 percentage points more likely to complete activities or programs and individuals in the BCCS group were 10 percentage points more likely to do so. Individuals in the ECCS and BCCS groups also were more likely to receive an occupational certificate or license than those in the control group (16 and 8 percentage point differences, respectively [not shown]).

For some activities, the differences in completion rates between research groups reflect the fact that individuals in the EDGE group were more likely to start services than those in the control group. Among those who started an activity, individuals in the ECCS group were 12 percentage points more likely than those in the control group to complete the activity. In contrast, there was

no statistical difference between the BCCS group and the control group in completion rates among individuals who started an activity.

Findings were mixed regarding whether EDGE group members were more likely than those in the control group to receive case management services. The BCCS group was more likely than the control group to receive case management (36 versus 27 percent), but there was no statistical difference between the ECCS group and the control group (Exhibit ES.2).

Exhibit ES.2. BCCS group members were more likely than control group members to receive case management



Source: SNAP employment and training evaluation 12-month survey, weighted data.

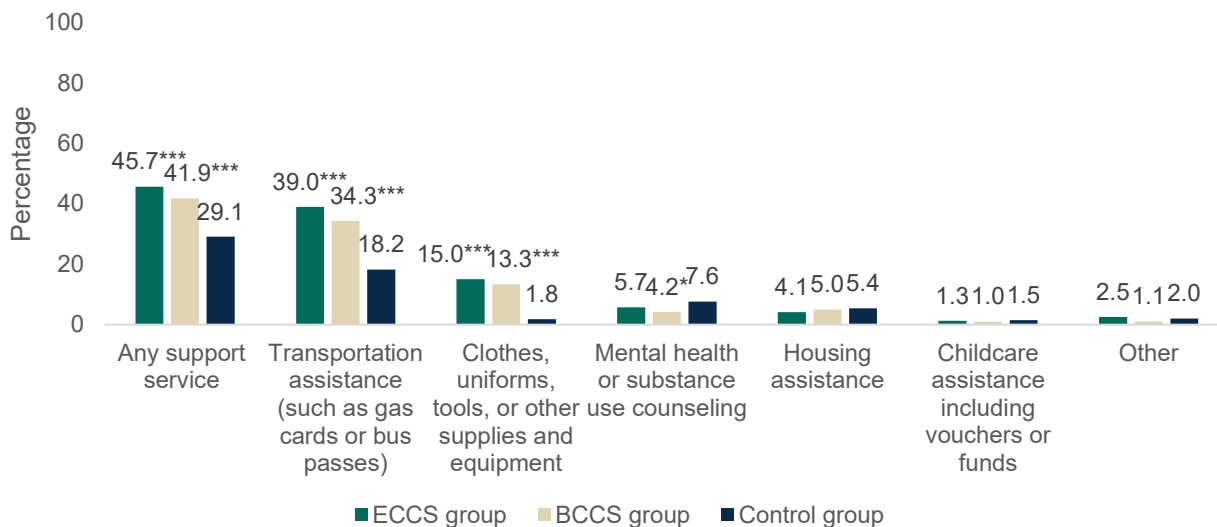
***Difference between research groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between research groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between research groups is significantly different from zero at the .10 level, two-tailed test.

EDGE group members were more likely than those in the control group to receive support services. About 46 and 42 percent of individuals in the ECCS and BCCS groups, respectively, received a support service compared with 29 percent in the control group (Exhibit ES.3). The largest differences were for the receipt of transportation assistance and assistance with clothes, uniforms, tools, and other supplies and equipment.

Exhibit ES.3. ECCS and BCCS group members were more likely than control group members to receive support services



Source: SNAP employment and training evaluation 12-month survey, weighted data. “Other” included assistance with payment of utilities such as electricity, phone, heat, or gas; food assistance; and assistance with medical care.

***Difference between research groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between research groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between research groups is significantly different from zero at the .10 level, two-tailed test.

Impacts of EDGE on employment and SNAP participation

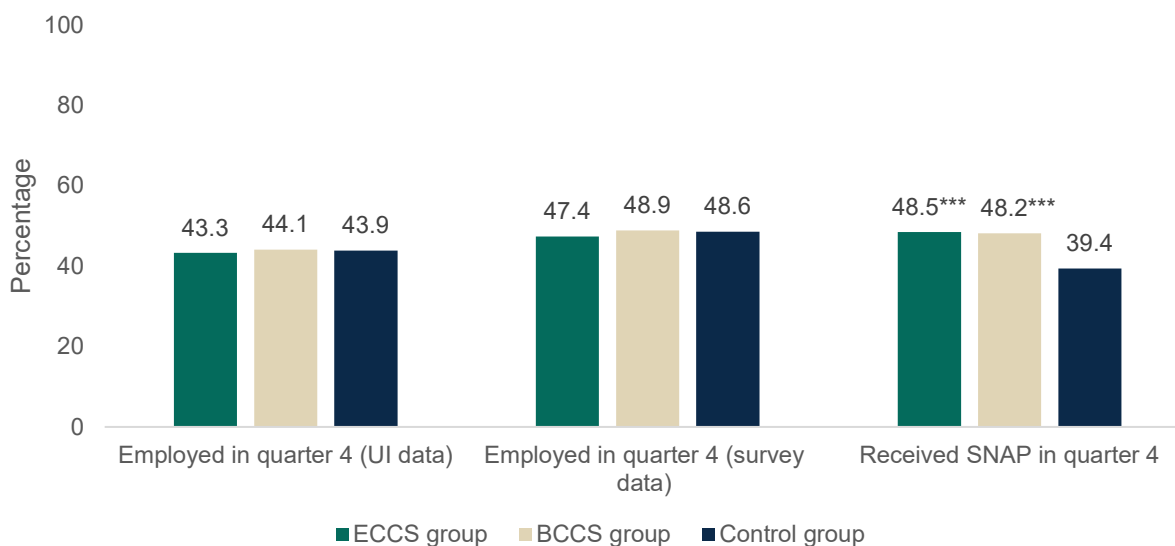
We estimated the impacts of EDGE on individual outcomes over the 12 months following random assignment. The analysis focused on comparing the outcomes for the BCCS and ECCS groups to the control group outcomes.³ Before analyzing the data, we selected two primary (confirmatory) outcomes: employment (based on both the UI and survey data) and SNAP participation—both in the fourth quarter after random assignment, which is the most recent observed quarter. The primary outcomes were defined over the final quarter of available data because many EDGE group members were expected to be engaged in education and training shortly after random assignment, thus possibly reducing their opportunity to be employed during those early quarters.⁴ The estimated impacts on other outcomes are considered exploratory and are used to support findings for Quarter 4 employment and SNAP participation outcomes by examining whether they have similar impacts.

³ The BCCS and ECCS groups were not compared to each other because of low statistical power. That is, the sample sizes for the two EDGE groups were not large enough for us to detect likely magnitudes of differences between the two groups.

⁴ Although the level of earnings was an important outcome in the evaluation, we excluded it from the set of primary outcomes due to the generally greater variation in earnings as opposed to employment, which results in lower statistical power when identifying an impact on earnings relative to employment. Effects on earnings are important to assess because they can affect both SNAP participation status and food security.

Employment and SNAP participation. EDGE did not lead to a statistically significant increase in employment in Quarter 4 using either the UI wage records or the survey data (Exhibit ES.4). Based on the UI data, 43 to 44 percent of individuals in each research group were employed in Quarter 4 and, based on the survey data, about 47 to 49 percent of individuals in each research group were employed during this time. EDGE led to a statistically greater likelihood of participating in SNAP in Quarter 4: 49 percent of ECCS group members and 48 percent of BCCS group members participated in SNAP in Quarter 4 compared to 39 percent of control group members.

Exhibit ES.4. EDGE did not affect Quarter 4 employment, but increased the likelihood of participating in SNAP in Quarter 4



Source: SNAP employment and training evaluation UI wage records, weighted data. SNAP employment and training evaluation 12-month survey, weighted data, SNAP employment and training evaluation SNAP administrative data, weighted data.

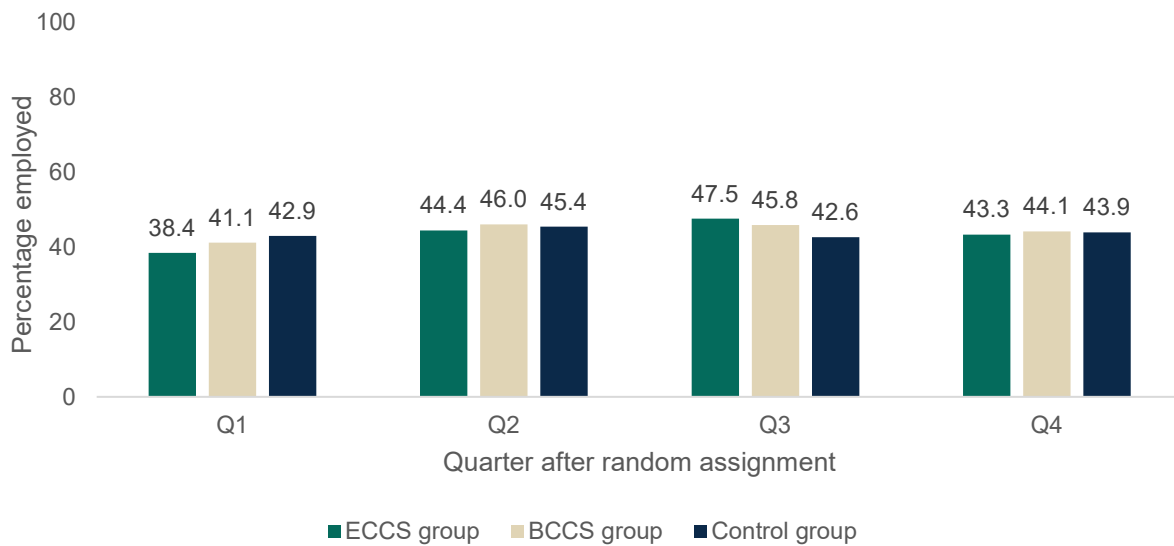
***Difference between research groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between research groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between research groups is significantly different from zero at the .10 level, two-tailed test.

Analyses of employment in Quarters 1, 2, and 3 provided information about changes in these measures throughout the year following random assignment. Based on the survey data, the ECCS and BCCS groups had lower employment rates than the control group in Quarters 1 and 2, when EDGE group members were likely to have been participating in education and training services (Exhibit ES.5 and Exhibit ES.6). The differences in these quarters were statistically significant according to the survey data, but not the UI data. Starting in Quarter 3, the differences between research groups disappeared as the employment rates among EDGE group members caught up to those of the control group.

Exhibit ES.5. EDGE did not affect employment in any follow-up quarter, based on UI data



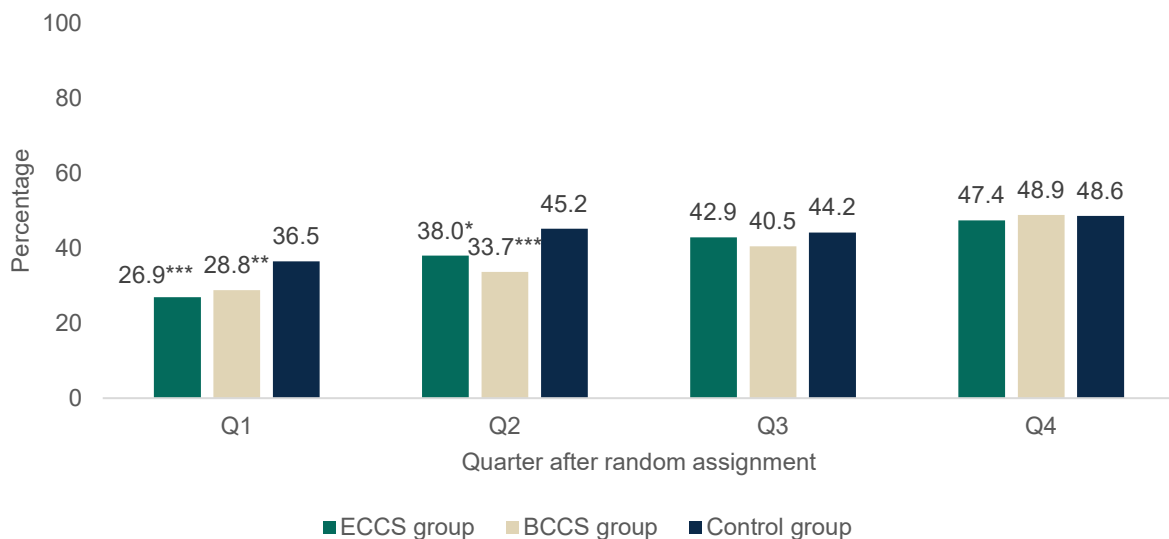
Source: SNAP employment and training evaluation UI wage records, weighted data.

***Difference between research groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between research groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between research groups is significantly different from zero at the .10 level, two-tailed test.

Exhibit ES.6. EDGE decreased employment in Quarters 1 and 2, but did not affect employment in Quarters 3 and 4, based on survey data



Source: SNAP employment and training evaluation 12-month survey, weighted data.

***Difference between research groups is significantly different from zero at the .01 level, two-tailed test.

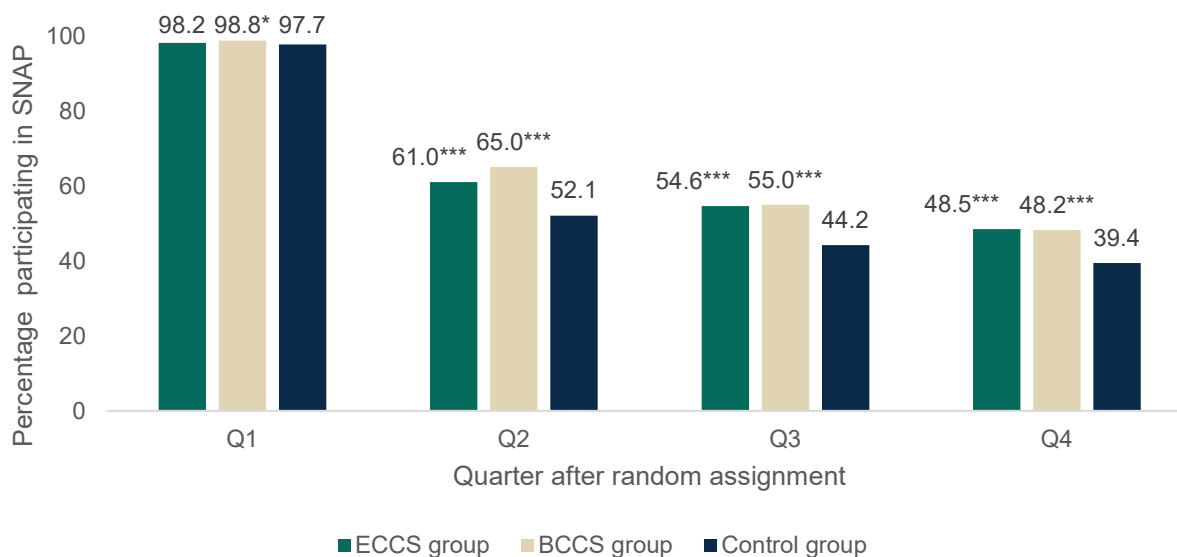
**Difference between research groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between research groups is significantly different from zero at the .10 level, two-tailed test.

Earnings, hours worked, and other job characteristics. Although EDGE did not lead to an increase in employment in Quarter 4, UI wage records indicated that it led to earnings gains in Quarter 3. ECCS group members earned an average of \$260 more and BCCS group members earned \$247 more than individuals in the control group. Both estimated impacts were statistically significant; a similar pattern emerged using the survey data, although the impacts were smaller and not statistically significant. There was generally no impact of EDGE on hours worked or on the characteristics of jobs among the employed.

SNAP participation, benefits, and exit. EDGE group members were more likely than control group members to participate in SNAP in Quarter 4 (49 percent in the ECCS group and 48 percent in the BCCS group versus 39 percent—9 percentage point differences). This finding does not reflect an increase in SNAP participation over time. Rather, it reflects smaller decreases over time in the rate of SNAP participation for the EDGE groups than for the control group (Exhibit ES.7). For example, between Quarters 1 and 4, SNAP participation rates decreased from 98 to 49 percent among ECCS group members—a 49 percentage point change—and from 98 to 39 percent among control group members—a 59 percentage point change. EDGE group members were also more likely than control group members to participate in SNAP in Quarters 2 and 3, when SNAP participation rates were higher for all research groups.

Exhibit ES.7. Quarterly SNAP participation rates were higher for the ECCS and BCCS groups than for the control group in most follow-up quarters



Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

***Difference between research groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between research groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between research groups is significantly different from zero at the .10 level, two-tailed test.

The majority of individuals in each research group exited SNAP within 12 months of random assignment, although SNAP exit rates were lower for EDGE group members than for control group members (76 percent of ECCS group members and 74 percent of BCCS group members exited SNAP compared with 83 percent of control group members). The percentage of

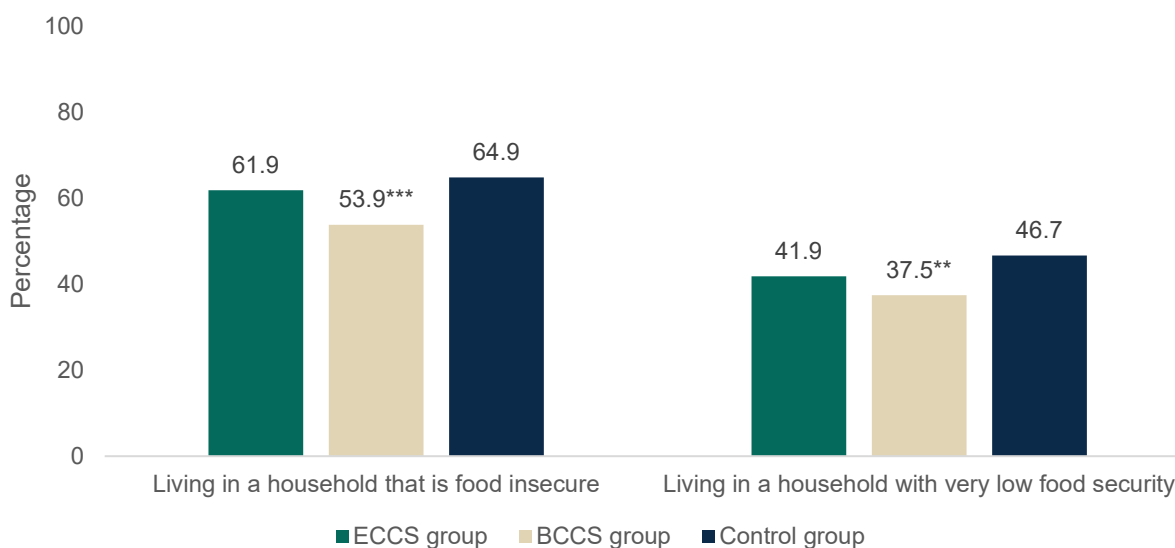
individuals who exited SNAP within the 12 months after random assignment include those who left and did not re-enter SNAP in the 12-month follow-up period, as well as those who left and re-entered before the end of the period. Thus, even though 24 percent of the ECCS group participated in SNAP for the full year, SNAP participation in Quarter 4 was higher (49 percent), reflecting that individuals left and re-entered SNAP by Quarter 4.

Consistent with the findings for SNAP participation rates, average SNAP benefit amounts were significantly higher for EDGE group members than for control group members in all four quarters. Average SNAP benefit amounts were highest in Quarter 1 and decreased in each subsequent quarter, mostly reflecting people leaving SNAP over time.

Impacts on other outcomes

EDGE group members had lower rates of household food insecurity than control group members, but the difference was statistically significant only for the BCCS group. About 54 percent of BCCS group members lived in food insecure households compared to 65 percent of control group members—an 11 percentage point difference (Exhibit ES.8). For very low food security—a severe form of food insecurity, there was a 9 percentage point difference between the BCCS and control groups (38 versus 47 percent).

Exhibit ES.8. EDGE decreased food insecurity for the BCCS group, relative to the control group



Source: SNAP employment and training evaluation 12-month survey, weighted data.

***Difference between research groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between research groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between research groups is significantly different from zero at the .10 level, two-tailed test.

Among other outcomes, there were either no statistically significant differences between the EDGE group and control group members in levels of health, likelihoods of screening positively for depression, and self-esteem and self-efficacy scores, or the magnitude of statistically

significant differences was less than one percent. Exceptions included self-reported health status (for the ECCS group, a seven percentage point decrease in the percentage of individuals reporting very good or excellent health) and incidence of homelessness (for the BCCS group, a three percentage point decrease in the percentage of individuals who reported being homeless). There were no impacts on participation in TANF or on Medicaid coverage.

Main conclusions and next steps

The goal of the 10 SNAP E&T pilots was to test innovative strategies to increase SNAP participants' employment and earnings and reduce their need for public assistance benefits. Although there was a meaningful contrast between the EDGE and control groups in take-up of services, EDGE did not lead to an increase in employment and led to higher participation in SNAP for EDGE group members relative to control group members during the 12-month follow-up period.

The findings related to SNAP participation make sense given the pattern of changes in earnings and employment for EDGE and control group members over the first year of the pilot. Conceptually, SNAP E&T services are designed to increase individuals' employment and earnings and thus reduce their need for SNAP or other public assistance. However, based on the survey data, the EDGE group had lower earnings than the control group in the first two quarters after random assignment. This increased the likelihood that EDGE group members would continue to be eligible for and participate in SNAP—or conversely, decreased the likelihood that they would exit SNAP. This also increased the likelihood that SNAP benefit amounts would be higher for the EDGE group than the control group.

These overall findings do not imply that EDGE will not be effective in achieving its goal of increasing employment and reducing the need for public assistance in the longer term. In fact, past studies of workforce programs have shown that it can take more than a year before economic impacts emerge (Card et al. 2010, 2018; D'Amico et al. 2015). Indeed, a substantial share of EDGE group members participated in education and training in early quarters, likely displacing employment during this period. Results from the longer-term follow-up period to appear in the final evaluation report, which will extend to three years from random assignment, and include information from all individuals enrolled in the pilot are needed to assess the full effects of EDGE.

Whether EDGE will have a longer-term impact on employment and SNAP participation depends, in part, on the degree to which there is a difference between EDGE and control group members in the services available to them, their take-up of services, and, in their completion of programs. This is especially true for occupational skills training and education, particularly if individuals acquire a credential or certificate. The findings in this report suggest that there was a contrast in service participation between individuals in the EDGE and control groups. Relative to the control group, the EDGE group was more likely to participate in job search training activities and in education and occupational skills training during the 12-month follow-up period. EDGE group members also were more likely than control group members to complete activities or programs.

In conclusion, this interim report presents a preliminary assessment of the effects of EDGE. The findings are based on follow-up data from only a portion of all individuals enrolled in the pilot—those who enrolled through December 2017—and cover only the first year following random assignment for each individual. Furthermore, the report’s cost findings cover only the pilot planning and early implementation periods. For these reasons, the short-term outcomes presented in this report do not capture the full potential effects of EDGE on individuals’ outcomes, or the pilot’s full costs. Notably, some individuals (12 to 15 percent of EDGE group members) were still receiving services through EDGE or other programs when the 12-month survey outcomes were measured. In addition, EDGE continued to enroll individuals in 2018 and provided services through 2019. A final report will examine the experiences of all individuals enrolled in the pilot, present their outcomes over a period of up to 36 months after random assignment, and examine the benefits of the pilots’ new services relative to their full costs, thereby providing comprehensive and conclusive evidence about the effectiveness of EDGE.

I. INTRODUCTION

The Supplemental Nutrition Assistance Program (SNAP) is the primary source of nutrition assistance for many low-income people. By providing a monthly benefit to spend on food, the program aims to ensure that SNAP participants have access to enough nutritious food to lead healthy, active lives. For some in the program, it also provides work supports to help them become economically self-sufficient. SNAP's Employment and Training (E&T) program assists SNAP participants in obtaining employment by providing services, such as job search assistance, job skills training, education, work experience, or workfare, and supports, such as assistance with transportation and child care costs.

Despite the importance of SNAP E&T, information about approaches that most effectively connect SNAP participants to gainful employment is limited. For this reason, as part of the Agricultural Act of 2014, Congress authorized and funded the SNAP E&T pilots. These pilots enable the U.S. Department of Agriculture (USDA) Food and Nutrition Service (FNS) and 10 States to test innovative strategies to connect SNAP participants with jobs that increase their incomes and reduce their need for public assistance benefits. This legislation also funded a rigorous, longitudinal evaluation of these pilots.

This report focuses on one State—Mississippi—and provides a detailed description of the pilot's design and implementation, the services individuals received, and findings about the short-term effectiveness of the pilot's services. In the remainder of this chapter, we provide an overview of all 10 pilots (Section A) and the evaluation (Section B), describe the strategies Mississippi sought to implement and the characteristics of individuals enrolled in the pilot (Section C), and summarize the data sources and analytic approach used in conducting the evaluation (Sections D and E). We conclude the chapter by presenting a road map to the subsequent chapters of this report (Section F).

A. Background of all 10 pilots

In 2015, FNS awarded grants to California, Delaware, Georgia, Illinois, Kansas, Kentucky, Mississippi, Vermont, Virginia, and Washington which represented diverse areas and populations (Appendix Table A.1). The service areas varied across pilots, some operated statewide and others operated in select areas of a State, such as counties, community college districts, or local workforce investment areas (LWIAs). They also varied in the geography in which they operated, with some focusing just on rural communities, some just on urban communities, and some serving both. Each pilot enrolled 3,000 to 7,000 individuals for a total of 44,359 individuals across the 10 pilots.

The majority of individuals the pilot targeted were work registrants⁵ who were unemployed or underemployed, but most pilots targeted subsets of this population. Some pilots focused on able-

⁵ Work registrants are SNAP participants who have not met any Federal exemptions from SNAP work requirements and are therefore required to register for work. Federal exemptions apply to individuals who are younger than 16 or older than 59; physically or mentally unfit for employment; subject to and complying with work requirements

I. Introduction

bodied adults without dependents (ABAWDs)—18- to 49-year-old adults who are not disabled and do not have dependents. Other pilots focused on groups with significant barriers to employment, such as individuals who experience homelessness, have a criminal history, or have a substance use disorder.

The services available varied across pilots, but they typically included (1) a comprehensive skills and/or clinical assessment that determines individuals' work readiness, skills, and barriers to employment; (2) case-management services that develop and support a detailed individualized work and barrier-reduction plan for the individual; and (3) support services, such as transportation, housing, and training or work supplies (for example, uniforms, books, clothes, or tools) that support individuals' involvement in activities designed to reduce barriers to employment. Offered services also included a range of E&T activities, such as general job skills training, basic education, occupational skills training, and subsidized employment. Under current statutes, existing SNAP E&T programs are not permitted to fund some of the activities and services the pilots provided, such as subsidized employment, substance use disorder counseling, and mental health counseling. Appendix B provides additional details about SNAP E&T and SNAP work requirements.

B. Objectives of the evaluation

The evaluation includes the following four components:

1. An **implementation analysis** that documents the context and operations of each pilot;
2. A **participation analysis** that examines the characteristics, participation levels, and service paths of individuals in the pilots;
3. An **impact analysis** that identifies what works and for whom by examining impacts on employment and earnings, public assistance receipt, and other outcomes such as food security, health, well-being, and housing; and
4. A **cost analysis** that estimates the costs of pilot services.⁶

A challenge for any impact analysis is that individuals who receive services might differ from those who do not receive services. This makes it difficult to determine whether differences in outcomes are a result of the services or are driven by the preexisting differences between individuals who did and did not receive services. To overcome this challenge, the evaluation of each pilot used an experimental research design in which individuals eligible for SNAP E&T who were enrolled into the pilot were randomly assigned into treatment and control groups that were offered differing arrays of services. Treatment group members were eligible for the

for another program; caretakers of a dependent child younger than 6 or an incapacitated individual; participating in a drug or alcohol treatment and rehabilitation program; employed at least 30 hours a week; or enrolled at least half time in a recognized school or training program.

⁶ The final reports will include additional analyses for two of the study components. The participation analysis will also assess whether the presence of the pilots affected people's decisions to apply for SNAP or to continue to receive SNAP benefits. The cost analysis will also include a cost-benefit analysis which estimates the return on each dollar invested in the pilots.

I. Introduction

enhanced set of services developed under the pilot, and control group members were eligible for services available through existing SNAP E&T programs in the State. Through random assignment, the groups were, on average, similar in all aspects when they enrolled into the pilot. They differed only in terms of the services they subsequently were eligible to receive. This design allowed the evaluation to confidently attribute differences in outcomes between the research groups to the enhanced services rather than to other potential causes.

The reports being issued at this time present interim findings for each evaluation component. The implementation and cost analyses describe the planning and early implementation periods of the pilots, but do not cover the full period in which services were offered and costs were incurred. Similarly, the findings in the participation and impact analyses are based on services received and outcomes measured during the approximate 12 months after each individual entered the pilot, from the start of enrollment (which ranged from January to April 2016 across the pilots) through the end of 2017. In addition, these findings are reported for most of the individuals (87 percent) eventually enrolled in the pilots. The full effects of the new services may not have materialized during this short-term, 12-month follow-up period, especially for some individuals who were still receiving services at the 12-month point. In addition, some pilots continued to enroll individuals in 2018 and provide services in 2018 and 2019. The pilots' final reports will provide more conclusive evidence about the ultimate effectiveness of the pilots' services. These reports will examine the experiences of all individuals enrolled in the pilots and will follow their outcomes over a period of up to 36 months after random assignment. The final reports will also examine the benefits of the pilots' services relative to their costs.

C. Overview of Mississippi EDGE

Mississippi began enrollment in Ethics, Discipline, Goals, Employment (EDGE) in 29 counties on March 23, 2016 (Exhibit I.1). The 29 counties include both urban and rural areas and are located in five community college districts: Itawamba, Mississippi Delta, East Mississippi, Jones County Junior College, and Mississippi Gulf Coast Community Colleges. Among the five districts, the Mississippi Gulf Coast Community College district is the most populated and includes the cities of Gulfport and Biloxi; the East Mississippi Community College district, in a rural area of the State, is the least populated. In the year before Mississippi began EDGE enrollment, the average unemployment rate in the state was 7.0 percent (Bureau of Labor Statistics 2019).

Exhibit I.1. Pilot locations



The Mississippi Department of Human Services (MDHS) administers SNAP. Its SNAP E&T program that existed at the start of the pilot and continued to serve control group members is mandatory for ABAWDs and was first implemented in January 2016. ABAWDs who are not working 20 hours per week or do not meet an exemption must participate in the SNAP E&T program. They must complete a 30-day up-front job search. If they do not find a job after 30 days, they must participate in workfare. A few counties also offer a tuition assistance program through local community

I. Introduction

colleges and General Education Development (GED) classes in the community. Individuals can also access training through Workforce Investment Network (WIN) job centers, funded by the WIOA.

MDHS developed EDGE to offer education, occupational skills training, and support services to help SNAP participants obtain middle-skill jobs. The pilot targeted ABAWDs. MDHS administered EDGE and contracted with Mississippi State University's National Strategic Planning and Analysis Research Center (NSPARC) to help plan and develop systems to monitor and oversee EDGE. MDHS also contracted with the community college in each of the five regions and with Jobs for Mississippi Graduates to offer services to two EDGE treatment groups: the Enhanced Community College Services (ECCS) group and the Basic Community College Services (BCCS) group. The ECCS group received a four-week career readiness course called the EDGE class, intensive case management, and access to three pathways based on an individual's career plan. The pathways were academic (basic education, post-secondary education, or occupational skills training), work (subsidized or unsubsidized employment or internships), and life skills (additional work or behavioral skills). Individuals in the ECCS group also received support services, including transportation, training-related items, and work-related items (uniforms, books, and tools). The BCCS group was offered the three pathways (the EDGE class was not available to them), similar support services, and less-intensive case management. Key characteristics of EDGE are summarized in Exhibit I.2.

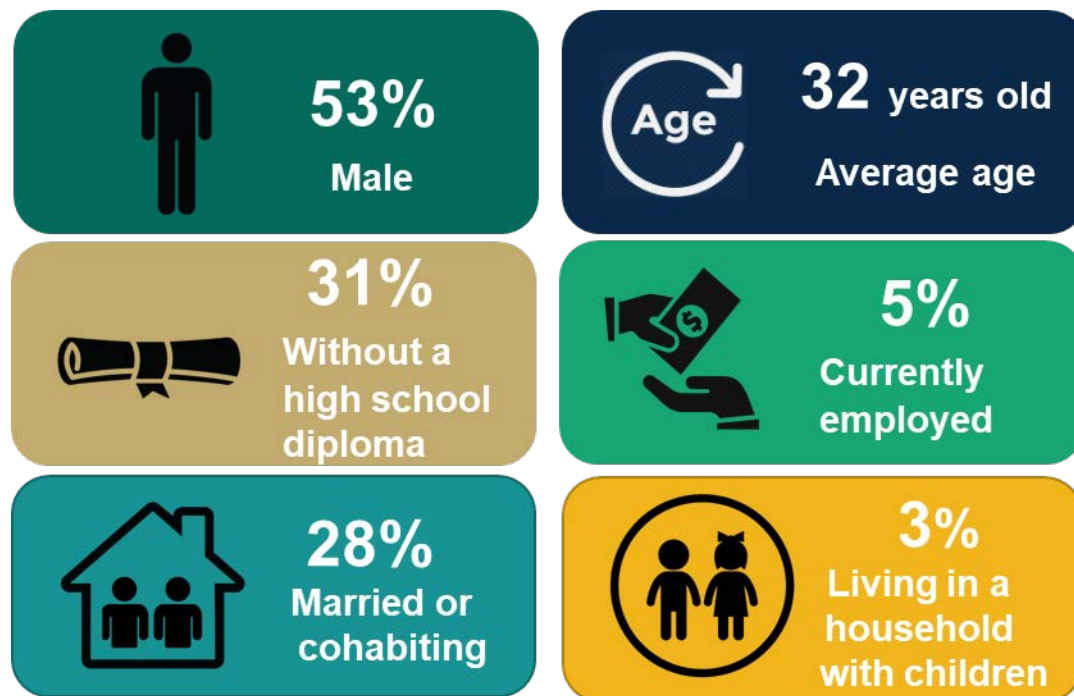
Exhibit I.2. Pilot characteristics

Characteristics	
Pilot operation period	March 2016 to February 2019
Location	29 counties
Grantee agency	Mississippi Department of Human Services
Key partners and providers	Mississippi State University's National Strategic Planning and Analysis Research Center, East Mississippi Community College, Itawamba Community College, Jones County Junior College, Mississippi Delta Community College, Mississippi Gulf Coast Community College, and Jobs for Mississippi Graduates
Target population	ABAWDs
Number enrolled from March 2016 through December 2017	2,208
Program type	Mandatory
Existing SNAP E&T program	Mississippi offered limited services through its mandatory SNAP E&T program; the control group received 30 days of up-front job search followed by workfare, plus transportation support. Tuition assistance and GED classes were available in some counties.
Key EDGE services	For the ECCS group: a four-week EDGE class; intensive case management; three pathways—academic (basic education, post-secondary education, or occupational skills training), life skills (additional work or behavioral skills), or work (subsidized or unsubsidized employment or internships); and support services For the BCCS group: three pathways, support services, and more limited case management

I. Introduction

From March 2016 to December 2017, Mississippi enrolled 2,208 SNAP participants into the pilot. Interested individuals were randomly assigned into the ECCS group, the BCCS group, and a control group in roughly equivalent numbers. Exhibit I.3 displays the key characteristics of all individuals who enrolled in the pilot from March 23, 2016, to December 31, 2017 (see Appendix Table C.1). The characteristics represent individuals' statuses at the point of random assignment. The majority of individuals in the pilot were African American, and a slight majority were male. Individuals were age 32, on average. Over one-quarter (28 percent) of individuals were married or cohabiting, and 3 percent lived in households with children. Over 30 percent of individuals enrolled in the pilot did not have a high school diploma at enrollment. Most individuals had been employed at some point (88 percent), but only 5 percent were employed at the time of random assignment.

Exhibit I.3. Baseline characteristics of individuals enrolled in the pilot



Source: SNAP E&T baseline information registration form (March 2016 through December 2017 data).

Note: All values are percentages unless otherwise noted. Individuals in the pilot consist of all ECCS, BCCS, and control group members who completed a baseline enrollment registration and did not subsequently choose to revoke their consent to participate in the evaluation (n = 2,208).

This report focuses on individuals who enrolled in the pilot through December 2017. MDHS completed pilot enrollment in September 2018 with a final size of 3,051 individuals and continued providing services through February 2019. The final report will include analysis of data on all individuals enrolled in the pilot from the beginning to the end of pilot operations.

D. Data sources

Data to support the evaluation were collected from multiple sources:

1. **Baseline registration form.** After obtaining study consent, pilot intake staff collected baseline information about individuals in the pilot. This included their demographic characteristics, employment histories, and receipt of public assistance. Baseline data were collected for all EDGE and control group members.
2. **Implementation data.** The implementation data analyzed for this report were collected during two rounds of site visits in August 2016 and June 2017. The site visits included interviews with MDHS staff, partner staff, SNAP eligibility staff, and EDGE service provider staff; structured observations of service provider operations; in-depth interviews with EDGE group members; and focus groups with individuals enrolled in EDGE and employers who worked with them. We also used information obtained during technical assistance and monitoring site visits and telephone calls conducted during the planning period and throughout the interim analysis period.
3. **Administrative service use data.** MDHS and their partners and providers collected and shared administrative data that documented the types of training, education, and services they provided to EDGE group members and, where applicable, to control group members. The administrative data analyzed for this report included information on service receipt from the date of random assignment for each individual through either the last known date of engagement or December 2018.
4. **Unemployment insurance wage records.** Data on employment status and earnings were obtained from State unemployment insurance (UI) wage records. We obtained data for each individual in the pilot with earnings for eight quarters (two years) before the date of random assignment and for four quarters after random assignment (through March 2018)—for individuals randomly assigned through March 2017. The data contain earnings amounts for each quarter, which we also used to construct indicators of quarterly employment status.
5. **SNAP administrative data.** MDHS provided SNAP administrative caseload data. These were used to construct measures of receipt of public assistance (SNAP and Temporary Assistance for Needy Families [TANF]), SNAP and TANF benefit amounts, and income, and to characterize individuals' recent history of SNAP participation. Monthly data were provided for all individuals in the pilot from one year before random assignment through November 2018.
6. **12-month follow-up survey.** The 12-month follow-up survey provided information on service receipt and outcomes. We conducted telephone surveys with individuals enrolled in the pilot through December 2017 (1,182 EDGE and control group members in Mississippi). The survey asked for information about individuals' service receipt, employment, and earnings in the 12 months after random assignment. It also asked for information on food security, health, well-being, and housing status.
7. **Cost data.** To estimate EDGE costs, we collected data from cost workbooks completed by MDHS and partners and providers and from time-use surveys. The workbooks were the basis for calculating total costs and describing the categories of costs for the EDGE group, including costs for staff, direct service, supplies and equipment, and overhead and operations. A staff time-use survey helped estimate the costs of service components by accounting for how staff responsible for providing direct EDGE group services spent their time.

For the final evaluation analysis, we will collect additional follow-up data from several of these sources. These include a second follow-up survey administered about 36 months after random assignment for the same set of individuals who responded to the 12-month survey, and UI wage records and SNAP administrative data through mid- to late 2020 for all individuals enrolled in the pilot. We will present findings from the analyses of these data and describe any changes to each pilot's service model in the final report. The final report also will include implementation data from a third round of site visits conducted in fall 2018 and administrative service use data and cost data obtained through the end of EDGE's service period (February 2019). The final report also will present a benefit-cost analysis that will compare final costs for EDGE and control group services (including estimates of costs per person) with final EDGE benefits, from the perspectives of individuals, government, and society.

E. Analysis approach

The findings presented in this report are based on a comprehensive set of analyses:

- 1. Implementation analysis.** The implementation analysis summarizes and synthesizes the data collected through site visits as well as technical assistance and monitoring telephone calls to describe pilot planning and operations that occurred from the start of the pilot through June 2017. We organized the data by topic, interviewee, and pilot office, facilitating analysis by type of respondent (for example, grantee or partner) and pilot location within the State.
- 2. Participation analysis.** The participation analysis uses administrative service use data to summarize engagement and participation in services over the 12 months following random assignment for all EDGE group members randomly assigned through December 2017. We created timelines for each EDGE group member to describe when they started to receive services and, if services were completed, the end dates. This allowed us to estimate the order in which individuals typically proceeded through activities and the overall length of time they spent in EDGE.
- 3. Analysis of differences in service use between EDGE and control groups.** This analysis statistically compares receipt of services among EDGE and control group members over the 12 months following random assignment. Understanding the differences in service use between treatment and control groups provides context for understanding the impacts on employment, earnings, and receipt of public assistance. The analysis is primarily based on 12-month survey data, which are available for EDGE and control group members. It also uses administrative data analyzed in the participation analysis, when information on the use of specific services is available for EDGE and control group members.
- 4. Analysis of impacts on employment and well-being outcomes.** We estimated impacts of EDGE on individual outcomes over the 12 months following random assignment using UI wage records, SNAP administrative data, and 12-month survey data. Examined outcomes include employment, earnings, and SNAP participation, as well as receipt of public assistance other than SNAP, food security, health, well-being, and housing status. With the exception of the analysis of earnings and employment based on UI wage record data, impacts are estimated for individuals randomly assigned through December 2017. Due to differences in data availability, analyses for Mississippi that use UI wage records assess impacts for

individuals randomly assigned through March 2017. With an experimental design, unbiased impact estimates are attainable from the differences between average outcomes of the treatment and control groups. However, we used regression procedures that controlled for individual characteristics that were highly predictive of the outcomes. We chose these procedures to improve the precision of estimates and adjust for small baseline differences between groups that may have arisen by chance, for survey nonresponse, or for missing administrative records data.⁷

- 5. Cost analysis.** Using data on costs provided by MDHS and service providers, we used the “ingredient” approach to build up total EDGE cost estimates from all reported direct and in-kind costs. We also collected and used data on the percentage of time direct service staff spent on key activities and services to estimate the cost of specific services.

For many of these analyses, we examined subgroups that may have been affected differently by the services offered to the EDGE group. We analyzed impacts and service use for groups of individuals defined by their status at the time of enrollment, such as the presence of children in the household, work experience, income, age, and the presence of severe barriers to employment. The findings for the subgroup analysis are included in the appendices.

F. Organization of this report

The remainder of this report is organized as follows:

1. Chapter II describes the planning and implementation of the pilot, the ways in which its implementation differed from the original design, challenges experienced, and responses to these challenges.
2. Chapter III presents findings from the participation analysis, describing the services that individuals in the EDGE group received during their first year after random assignment.
3. Chapter IV describes differences between EDGE and control groups in terms of receipt of services.
4. Chapter V presents findings from the analysis of the impact of EDGE on employment, earnings, benefit receipt, and other outcomes.
5. Chapter VI describes the costs of services that individuals in the EDGE group received from the community college providers.

⁷Analyses in this report test for statistical significance at the 0.01, 0.05, and 0.10 levels. The 0.10 level was used because the evaluation is assessing the effectiveness of new interventions for which there is no prior evidence of effectiveness for SNAP participants. A more stringent statistical significance threshold is often used when evaluating ongoing programs for which there is an established literature on program effects based on prior studies. Using a more stringent statistical significance threshold in the current evaluation would have reduced statistical power and limited our ability to identify and highlight promising sets of services offered through the pilots. By using a 0.10 statistical significance level, the evaluation aims to build knowledge in the field of workforce development for SNAP participants, on which future SNAP E&T evaluations can expand and eventually apply more stringent tests of effectiveness once programs and service models have been established for a longer period of time.

6. Chapter VII offers conclusions and more fully describes what the final evaluation report will include.

Appendices C to G present findings from auxiliary analyses and for subgroups. A technical supplement in a separate volume includes appendices that describe the data and methodology in more detail.⁸

⁸ The supplement provides additional information about the analysis approach. Specifically, we describe our analytical approach, including additional details on the study design, analytic weights, approach to addressing missing data due to survey-item nonresponse, and impact estimation approach.

II. IMPLEMENTATION ANALYSIS

This chapter describes the planning and implementation of the pilot. Findings are based on qualitative analysis of data collected through telephone calls and in-person interviews with staff from MDHS, partners, and providers; two focus groups with individuals enrolled in the EDGE group (one focus group included individuals actively participating in EDGE and one included individuals who left EDGE before completing all activities); a focus group with employers who provided subsidized jobs to EDGE group members; and case studies of two individuals in EDGE to better understand their experiences (including interviews with the individual, observation of activities, and interviews with EDGE staff working directly with the individual). Information from the focus groups and case studies is included to provide context; however, these data were collected from a small number of individuals, so their experiences and opinions are not necessarily representative of the entire EDGE group. Data presented in this report were collected during the planning and early implementation periods of the pilot, from March 2015 through June 2017 (Exhibit II.1 provides a pilot timeline). Any changes made to EDGE services or operations after the second round of implementation interviews will be discussed in the final report.

Exhibit II.1. Pilot timeline

Pilot activity	Date
Grant awarded	March 2015
Enrollment began	March 2016
Enrollment ended	September 2018
Services ended	February 2019

In Section A of this chapter, we provide information about the pilot background. In Section B, we describe the planning and early implementation process. In Section C, we detail pilot services and operations, including the recruitment and enrollment process; control group services and pathways; and ECCS and BCCS groups services and pathways, EDGE management and collaborations, service receipt patterns, barriers among EDGE group members, staffing, and performance reporting. Finally, in Section D, we summarize the key findings discussed in this chapter.

A. Pilot background

MDHS, in collaboration with NSPARC, applied for the SNAP E&T pilot grant so they could provide SNAP participants the education and training required for middle-skill jobs that would help them reach self-sufficiency. MDHS senior leadership saw the pilot as an opportunity to create a work program similar to what it offers through its TANF program. MDHS chose to target ABAWDs because they were most in need of services and, beginning in 2016, would be facing federally mandated limits on the amount of time they could receive SNAP and mandatory SNAP E&T work requirements. The services made available through the pilot would help ABAWDs meet these requirements.

II. Implementation analysis

At the same time that MDHS was planning for and beginning enrollment in the pilot, staff were redesigning their existing SNAP E&T program. The redesigned program started around the same time as the pilot. Before January 2016, MDHS offered a voluntary E&T program in which few individuals participated. The program, called the tuition assistance program, offered financial support to SNAP participants to take classes at seven community colleges throughout the State. MDHS changed the SNAP E&T policy to make it a mandatory program for ABAWDs starting in January 2016, because the governor decided not to apply for a waiver of the ABAWD time limits. Therefore, MDHS revised their SNAP E&T program to offer assessment, job search, workfare, financial support to attend community college, and referrals to occupational skills training for ABAWDs, so they would avoid reaching their time limit and losing benefits.

MDHS developed the pilot in collaboration with NSPARC, five community colleges, and a community-based organization—Jobs for Mississippi Graduates (JMG). MDHS had a preexisting relationship with NSPARC, JMG, and Itawamba Community College (ICC) through its tuition assistance program, but not with the four other colleges. MDHS chose to collaborate with NSPARC for its expertise in data collection and in managing similar projects. NSPARC's roles were to help develop EDGE services, create the management information system (MIS), and oversee the MIS data collection. MDHS and NSPARC invited all Mississippi community colleges to participate in EDGE. Only 5 of the 15 community colleges ultimately agreed to participate: East Mississippi Community College (EMCC), ICC, Jones County Junior College (JCJC), Mississippi Delta Community College (MDCC), and Mississippi Gulf Coast Community College (MGCCC). The community colleges provided career navigation, employment, and occupational skills training services to individuals assigned to EDGE and monitored compliance with the E&T requirements among ABAWDs. JMG staff also provided career navigation services at each of the five community colleges and helped with recruitment and outreach activities. JMG navigators were expected to work with part of the target population (18 to 24 year olds), as they had experience supporting recent graduates, students at risk of dropping out, and students who needed assistance transitioning from school to work. All partners and providers received funding from the grant to provide services or to support implementation. However, EDGE group members could be referred to services available in the community, such as WIOA, and the pilot would not pay for those services.

The new EDGE services available at the community colleges were offered to individuals enrolled in the pilot across 29 counties that were in close proximity to the five participating community colleges, had low employment, and had training needs for middle-skill jobs. The ECCS group, which were testing more extensive services, received a four-week career course called the EDGE class, plus intensive case management. After completing the EDGE class, individuals moved into one of three pathways (academic, work, or life skills) depending on their individual career plan. They could receive support services designed to mitigate potential barriers, which included providing driver's license fees, immunizations costs, car repairs, or eyeglasses (training or personal supports); transportation assistance; and clothing, tools, and shoes needed for employment (work supports). Individuals in the BCCS group, which received more services than the control group but fewer than the ECCS group, did not receive the EDGE class; rather, they advanced directly into the three pathways. They also received only light-touch case management but were offered similar support services.

B. Pilot planning and implementation

MDHS led the planning process in collaboration with NSPARC, and the community colleges and JMG helped developed EDGE services. Working with NSPARC, MDHS developed the policy and procedures for how the pilot would be implemented and made the necessary changes to its SNAP eligibility system. NSPARC developed the MIS, called CaseMod, and coordinated with the colleges. The community colleges developed the four-week EDGE class curriculum, with input from JMG, and each community college determined how the pilot would be implemented at its location. The planning process started in April 2015 and continued through the beginning of enrollment in the pilot on March 23, 2016.

The partners and providers were selected during the grant application phase, so representatives from all of the partner and provider organizations were involved from the beginning. The collaborations were mostly successful; however, the timing of the hiring of the community college EDGE staff created some challenges. The project director at the college, who oversaw EDGE for the college, and the career navigators were hired during the planning phase and did not have input on the overall design of EDGE. Some project directors and navigators at the college staff felt it would have been beneficial for them to have an opportunity to contribute to the design of the pilot. These staff thought that MDHS set expectations for the colleges that were unrealistic, that perhaps would have been moderated if college staff were part of the planning. For instance, MDHS required EDGE group members to engage in activities for 80 hours a month at the colleges, but not all college courses were available at the time individuals started EDGE and the colleges had breaks when no activities were offered. MDHS staff also agreed it would have been helpful to have all the EDGE staff in place at the community colleges earlier in the process to help develop the pilot.

The pilot was staffed by individuals from all of the partner and provider agencies. Two existing MDHS State office staff managed the pilot—one as the project director and the other as an assistant. The MDHS project director was involved from the beginning of the planning period but was not involved in the grant application process. Existing MDHS county SNAP staff were responsible for pilot recruitment and enrollment. The community colleges hired new, full-time staff to provide EDGE services, including a project director and up to two navigators. JMG also hired five navigators, stationing one at each of the five community colleges. NSPARC used existing staff to create the MIS and manage data collection. New staff at the college and JMG were hired between August 2015 and January 2016, in the middle of the planning phase.

Training for the pilot began in fall 2015 and continued through spring 2016. MDHS staff conducted an in-person training for county staff on the new mandatory E&T program policies and procedures in November 2015 that included a brief description of the pilot process. Then in January 2016, all county staff viewed a set of four webinars on the pilot procedures and later received written guidance describing how the pilot changed intake and eligibility procedures. NSPARC also provided training on using CaseMod via webinar. In April 2016, after the start of the pilot, MDHS reviewed the policies and procedures with county staff during a set of three spring conferences. Two colleges developed the curriculum for the EDGE class and conducted in-person training for the staff at other colleges. Also, NSPARC and MDHS staff provided

II. Implementation analysis

training on pilot policies and procedures, and on using CaseMod. College and JMG staff received written guidance on the pilot policies and procedures in February 2016. In April 2016, after the start of the pilot, MDHS reviewed the policies and procedures with county staff during a set of three spring conferences.

Many county and college staff thought having more training would have been helpful. There was a desire among staff for additional instruction as well as more time between the training and the start of the pilot. Staff reported that policies were evolving at the same time they were enrolling and serving individuals, which created many questions and some confusion. Also, county staff would have liked more in-depth policy training, hands-on demonstrations of systems for enrolling individuals into the pilot, and additional training on what services EDGE offered. College staff suggested that they would have benefited from more training on the career navigator role, on other agencies available for support service referrals, and on MDHS policies and procedures.

The main challenge during the planning period was beginning enrollment in the pilot on time. The start date was pushed back several times—from January 2016 to February 2016 and finally to March 23, 2016. The delays were caused in part by delays in completing CaseMod. It was a work in progress throughout early implementation and underwent several changes, causing some college staff to encounter challenges in learning how to use the system. MDHS State office staff would have liked the system to have been completed before the pilot started, so staff would know more about how the system worked and its capabilities.

Despite these delays, MDHS, partners, and providers felt the planning process was effective. MDHS State office staff thought all of the partners and providers were committed to the pilot and making the required changes to systems and policies. However, MDHS would have liked to have had more time to plan and more staff committed to working on the pilot full time. NSPARC felt the planning process was effective because everyone was engaged in the conversation and could voice their concerns openly. Although most colleges noted the communication and collaboration between the partners and providers was effective, a few colleges suggested that a longer planning period would have been helpful and that more of the frontline staff should have been involved. This would have given them more time to coordinate at the community colleges to connect all of the departments and set up the financial processes, and to make sure all of the staff fully understood the policies and procedures.

On March 23, 2016, the pilot began enrollment and SNAP eligibility staff in the counties started informing ABAWDs about the pilot. Enrollment was not as strong as anticipated during the early implementation period, largely because the size of the target population was smaller than anticipated and staff struggled to enroll individuals. Because MDHS was implementing ABAWD work requirements and a new E&T program at the same time as the pilot, this caused administrative and recruitment challenges for the pilot. As a result of implementing the ABAWD time limit and mandatory E&T, a large proportion of the target population was no longer eligible for SNAP during early implementation, likely because of sanctions. Counties reported that fewer SNAP participants were available to recruit for the pilot than expected because caseloads had dropped after the mandatory program was implemented. Also, MDHS staff found it difficult to

II. Implementation analysis

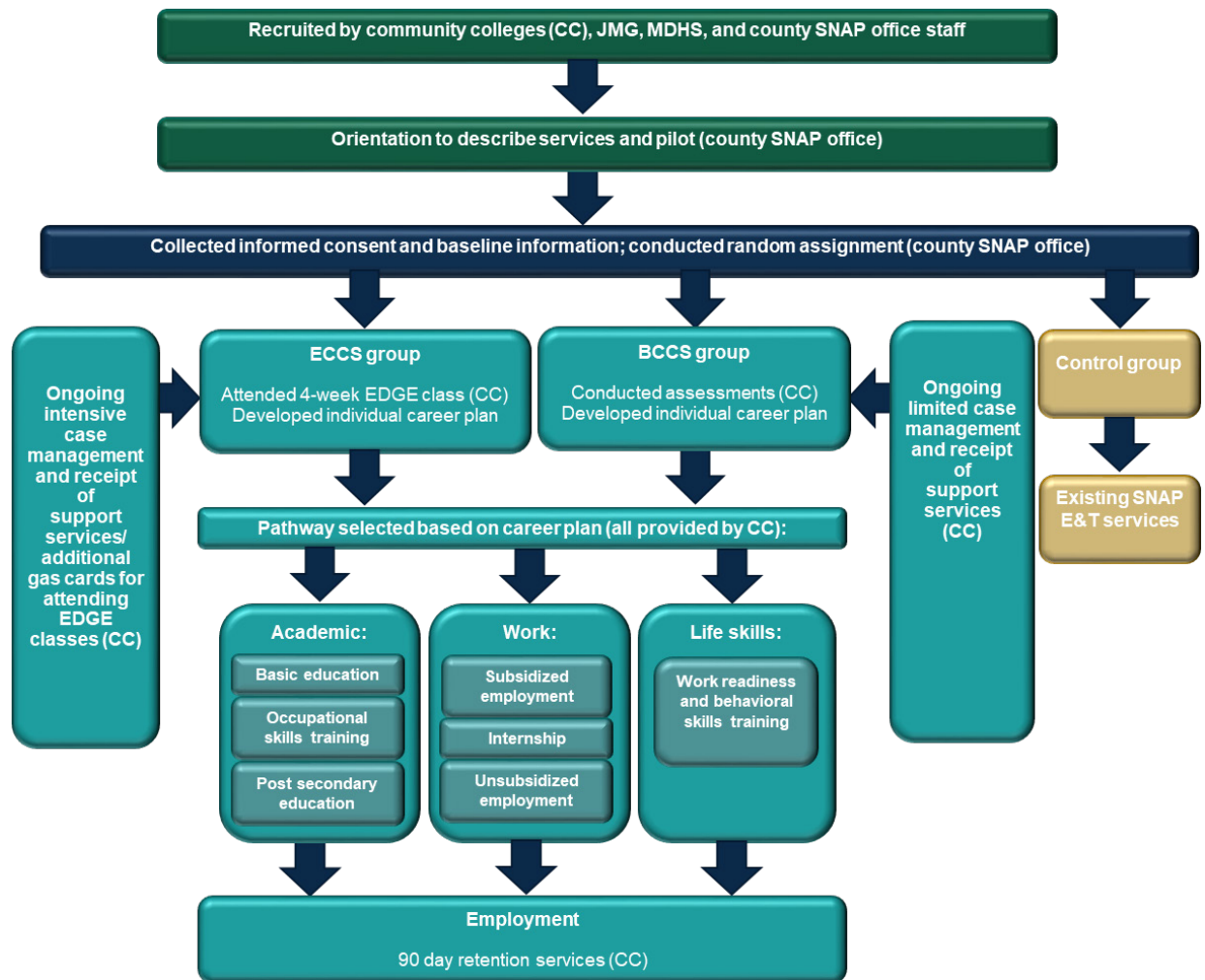
learn and implement all of the systems changes required for the new policies and procedures, as well as for the pilot, at the same time; juggling these new tasks made it difficult for them to focus on pilot enrollment.

Further complicating the recruitment, MDHS did not initially develop a marketing plan because staff believed they would have more than enough ABAWDs to reach their recruitment goals without needing to market the pilot. There were no marketing activities planned beyond telling ABAWDs about the pilot during certification interviews and having the community colleges refer current students if they were receiving SNAP benefits. In response to the low enrollments during the early implementation phase, MDHS State office staff started considering marketing options, described below.

C. Pilot services and operations

When MDHS began enrollment in the pilot in March 2016, it was targeted to non-exempt ABAWDs who were not working 20 hours or more a week. As illustrated in Exhibit II.2, SNAP eligibility staff in county offices recruited ABAWDs during certification interviews. Although SNAP E&T was mandatory in Mississippi, participation in the pilot was voluntary. ABAWDs could choose to participate in the study and potentially be randomly assigned to EDGE, or to opt out of the study and receive existing SNAP E&T services. Individuals who volunteered to participate in the study were randomly assigned to the EDGE group or the control group. Those assigned to the control group received existing SNAP E&T services offered through the county office, and those assigned to the EDGE group were referred to the local community college to meet with a career navigator. Individuals in the ECCS group started the next available EDGE class, and individuals in the BCCS group met with a career navigator to create an individual career plan (ICP). After the ECCS group completed the EDGE class and the BCCS group created their ICP, individuals entered one of three pathways based on their plan: academic, work, or life skills. The ECCS group received intensive case management, gas cards if they successfully completed each week of the EDGE class, and supports for transportation, training or personal needs, and work items. The BCCS group received less-intensive case management and was eligible for support services, but not the EDGE class gas cards. Those who completed their pathways received help finding employment and could receive up to 90 days of retention services (case management and support services) after finding employment.

Exhibit II.2. Pilot flow and pathways



1. Recruitment and enrollment

ABAWDs first learned about the pilot during the SNAP certification interview. If an ABAWD did not meet an exemption and was not working at least 20 hours per week, the eligibility worker told him or her about the mandatory E&T requirements and the pilot as an option to meet those requirements. Individuals were then referred, verbally and through a notice sent in the mail, to meet with county staff to learn more about the pilot and complete an employability assessment form that included questions about their education, work history, and barriers to employment. Staff reviewed the assessment form, conducted the consent process for the pilot, completed the baseline data collection, and conducted random assignment—assigning individuals to the ECCS, BCCS, or control group. Individuals assigned to the control group met with the E&T worker to determine which activities they would complete, usually job search followed by workfare. Individuals assigned to either of the EDGE groups were told (verbally and through a notice) to contact the community college project director within five days to set up an appointment.

II. Implementation analysis

MDHS had trouble meeting its enrollment targets during the first two years of EDGE. Staff reported the following four main recruitment challenges:

1. County office staff struggled to get ABAWDs to attend orientations.
2. Individuals who attended orientation reported that the lack of reliable transportation would prevent them from attending services, so they chose not to enroll.
3. The counties did not have enough staff to dedicate to recruitment and marketing.

To try to mitigate these issues, MDHS and providers did the following:

- **EDGE enrollment process.** In July 2016, MDHS moved the main discussion about EDGE and enrollment from the certification interview to group E&T orientation. Early in the implementation period, MDHS found that one county was successfully using a group E&T orientation with a charismatic staff person to engage and ultimately enroll ABAWDs into the pilot. Instead of focusing on engagement during the certification interviews, county staff would refer ABAWDs (verbally and in writing) to an E&T orientation held on another day at the county office, where they would learn more about the pilot. During the orientation, ABAWDs completed the employability assessment form, and those who were interested then immediately met with a county staff person who conducted enrollment. However, some counties did not implement this approach, because there were too few ABAWDs in their area to use a group process. During this time, the counties also started assessing individuals' barriers—such as lack of any transportation options or severe learning disabilities—before allowing them to opt into the pilot, ensuring the individuals would be able to participate in the pilot. However, some county and college staff reported that this screening process was not done consistently.
- **Transportation.** Because of the large number of ABAWDs who faced transportation barriers, the colleges secured transportation providers. In the second year of the pilot, three of the five community colleges worked with transportation providers. Two colleges collaborated with transportation providers that picked up individuals at their homes, and one college collaborated with a bus service that had dedicated bus stops. In addition, the counties began to give all individuals enrolled in the EDGE group an up-front transportation stipend to help with the cost of getting to the college. Both college and county staff reported that these additional transportation supports helped increase enrollment.
- **Marketing and outreach.** MDHS, the community colleges, and JMG each took steps to try to increase pilot enrollment through marketing and outreach strategies. MDHS created a flyer in July 2016 and instructed the counties, colleges, and JMG to post it in their buildings, distribute it in the community, and mail it to eligible ABAWDs. MDHS also put information about the pilot on its website and created a radio ad that aired in some counties. In addition, MDHS developed a video showing the success story of an individual in the EDGE group that aired in the lobbies of county offices. The colleges took efforts to increase interest in the pilot by attending county orientations to talk to ABAWDs about the available college services and by calling potentially eligible ABAWDs to tell them about the pilot. They also started identifying current college students who were receiving SNAP benefits and referring them to

II. Implementation analysis

MDHS to enroll in the pilot. The JMG navigators focused on recruiting potentially eligible participants in the community by presenting at churches and schools.

Although staff from all organizations agreed these efforts helped to increase enrollment, it continued to lag below the established targets.

2. Control group services and pathways

Existing SNAP E&T services were provided statewide by county SNAP E&T caseworkers. After being randomly assigned to the control group, individuals met one-on-one with a SNAP E&T caseworker to review their employability assessment and, in some counties, make an ICP. Individuals enrolled in the control group were instructed to complete an online employment profile on Mississippi Works (a State-run career website) that included an assessment of their work history and then to complete 30 days of job search. After the 30 days, if they did not find a job, they had to participate in workfare (volunteer opportunities in the community). Individuals in the control group could also attend GED classes, if desired, or seek out other training opportunities at the Mississippi Department of Employment Security (MDES) job centers or at other local providers. Individuals in the ICC district could also receive financial support from MDHS to take classes at ICC. However, most individuals participated in job search and workfare. Individuals in the control group were eligible to receive transportation assistance (\$50 per month) and could be referred to other support services, such as food pantries or free clothing closets, if available in their county.

3. EDGE group services and pathways

Individuals who were randomly assigned to the EDGE group were instructed to call the community college project director to discuss available services in more detail. They were also instructed to complete an online employment profile on Mississippi Works. If the individual was assigned to the ECCS group, he or she was scheduled to attend the next available EDGE class. During the first day of the EDGE class, individuals were oriented to EDGE. In some community colleges, individuals assigned to the ECCS group met one-on-one with the college project director first before starting the class to complete paperwork and the Test of Adult Basic Education (TABE), or, if they could not start the class immediately, to be assigned to other activities while they waited. If the individual was assigned to the BCCS group, he or she was scheduled to meet one on one with a career navigator to get oriented and to complete an ICP. During this initial meeting, the career navigator assessed the individual's education, skills, and work experience and assessed the person's barriers to reaching his or her goals. At some community colleges, everyone assigned to the BCCS group also took the TABE during this initial meeting or subsequent meetings. In other colleges, they only took the TABE if required for the occupational skills training in which they were interested.

EDGE class. All individuals assigned to the ECCS group took the four-week EDGE class as soon as possible after being randomly assigned, depending on the college schedule. During the EDGE class, individuals took the TABE if they did not do so before entering the class, as well as the WorkKeys assessments: Reading for Information, Applied Mathematics, and Locating Information. The individuals also worked on their ICP throughout the four weeks and finalized it

II. Implementation analysis

at the end of the class. Other activities included in the EDGE class were a career readiness workshop, learning about potential careers; basic computer skills; Myers-Briggs personality tests; work readiness skills, such as professional image, interviewing skills, and on-the-job behavior; mock interviews; financial awareness, including balancing a checkbook; communication and customer service skills; and teamwork and problem-solving.

Initially, the EDGE class was offered in only one location at each community college, and individuals were expected to attend the class in person. As noted previously, however, many individuals faced transportation barriers that made it difficult for them to attend the class. During the second year of the pilot, most colleges began offering the EDGE class in multiple locations in an attempt to mitigate this challenge. Some colleges offered the class in satellite campus locations on a rotating basis, and one college allowed individuals to take the class self-directed online. As previously discussed, some colleges also developed free transportation services to help individuals get to the EDGE class.

Education, training, and work pathways. After individuals assigned to the ECCS group completed the EDGE class and after the individuals assigned to the BCCS group completed their ICP, they entered one or more pathways. EDGE group members could choose to enter more than one pathway during their time in EDGE, and if their schedules permitted, they could participate in multiple pathways at the same time.

Education and training. The first pathway was academic. Individuals could choose to take basic education courses or prepare for the GED, take academic classes at the community college, or take occupational skills training classes to train for a particular occupation. Individuals could choose to take any of the courses available at the colleges, but the number and type of available courses varied by college, and not all courses were offered at all times. Some colleges tried to steer individuals into short-term occupational skills training that they could complete within the pilot period and that would lead to employment. Individuals could receive a \$650 voucher toward paying for classes at the college and could receive additional funding if EDGE resources were available.

Most EDGE group members needed occupational skills training to be able to get a job that would pay well. College staff reported that individuals who took short-term training classes, such as the certified nursing assistant training and the manufacturing skills basic certification, were able to get jobs as a result. The most common occupational skills training pursued by EDGE group members were welding, certified driver's license, certified nursing assistant, pharmacy technician, basic manufacturing, and phlebotomy. Individuals had a harder time entering longer-term occupational skills training because often they had to wait for those programs to begin.

Not having more college courses available on an ongoing basis was a challenge. Career navigators shared that having more occupational skills training opportunities available would have made their job easier. They would have been able to place EDGE group members into occupational skills training more quickly and would not have had to find other activities for individuals to complete to meet their 80-hour work requirement. Having more occupational skills training opportunities also would have helped individuals progress more quickly through EDGE.

II. Implementation analysis

Career navigators could only offer an individual the courses that were available when that participant joined EDGE, despite their interests. Some training programs were offered only during certain times of the year, and others were offered only if a minimum enrollment target was met. One navigator shared that it was a challenge to figure out how to serve individuals when occupational skills training that could have been useful was not available at the time they were participating in activities.

Work-based learning. In the work pathway, individuals could get a subsidized job with an employer in the community. Individuals could work 320 hours at \$8.50 an hour. (When appropriate, individuals also could obtain an unsubsidized job or internship.) The colleges were tasked with developing partnerships with employers to offer these opportunities, but doing so proved to be a challenge for most of them. College staff reported that some employers were not interested in working with EDGE and this population. Some employers had previous bad experiences with hiring SNAP participants or were concerned about hiring EDGE group members without knowing their backgrounds. Other employers wanted the college to commit to providing a certain number of employees by a certain date, but the colleges were unable to do so. In April 2017, MDHS reemphasized to the colleges the need to create more subsidized employment opportunities for individuals. As a result, the colleges increased their efforts to create employer partnerships by reaching out to additional employers, attending job fairs, meeting with civic organizations, and partnering with MDES. Their efforts were successful, and the colleges tripled the number of employer partnerships by August 2017.

EDGE group members reported having mixed experiences with subsidized employment opportunities. Some individuals found their placements were helpful because they were related to their occupational skills training (such as at a medical center), while others had less-helpful experiences because they were placed in menial jobs that did not meet their career interests (for example, at a retail store). Most individuals reported that their placements did not lead to full-time employment.

Overall, employers reported having a positive experience with EDGE staff and the individuals placed at their organizations. Some employers said they were planning to hire the individuals full time after their subsidy ended. Employers thought EDGE's subsidized employment offering was beneficial to them as a way of building their workforce and filling their labor needs. They also thought it was beneficial to EDGE group members for building their skills and self-worth.

Life skills. The life skills pathway enables individuals to participate in activities and classes related to developing work readiness or behavioral skills. The community colleges offered these classes to ECCS group members who needed additional work readiness or behavioral skills development after completing the EDGE class, and to BCCS group members who needed to develop these skills at any point in their pathway. EDGE group members could participate in the life skills pathway at the same time as the other pathways or complete it first before moving on to the academic or work pathways.

Case management. EDGE group members received case management from career navigators at the colleges. The ECCS group received intensive career navigation (weekly meetings during the

II. Implementation analysis

EDGE class and monthly meetings during the pathways or as needed), and the BCCS group received a “lighter touch” career navigation (no more than two contacts per month). These meetings took place in person or over the telephone, and staff contacted individuals through email or via text message in between meetings.

In most of the colleges, the BCCS group received more intensive career navigation than was planned. Career navigators in several of the colleges shared that they provided intensive case management to both groups, reaching out to all individuals weekly. One career navigator shared that she reached out to individuals assigned to the BCCS group to make sure they were on the right track and following their career plan. Another shared that the BCCS group had many needs, so she reached out to individuals assigned to the group more often than the EDGE guidance outlined.

Although it was intended for the JMG career navigators to support EDGE group members ages 18 to 24, the colleges had discretion over how to assign EDGE group members to navigators. In most college areas, the JMG navigators were integrated into the college staff and worked with EDGE group members regardless of age. Some JMG navigators worked with only BCCS group members, and others worked with both ECCS and BCCS group members.

An individual’s experience in the Basic Community-College Services group

This individual had no children and had recently moved to Mississippi. She worked full-time in retail and had previously worked in manufacturing. She had a high school diploma and had completed some college courses online. When she applied for SNAP, she had recently been fired from her manufacturing job and was ineligible for unemployment insurance benefits.

She enrolled in EDGE because she saw it as a great opportunity to better herself. When she learned she could receive classes, a certification, a job, and support services for free, she thought, “Are you serious?” She reported that enrolling in EDGE was a “no brainer.”

As a part of the BCCS group, she completed a three month phlebotomy training program and was in the process of signing up for her phlebotomy certification exam. EDGE paid for her tuition, uniform, shoes, and books, and offered to pay for her gas, but she did not take that assistance.

While in EDGE, she did point out that communication with her career navigator and the format of the occupational skills training could have been improved. She pointed out that it was difficult to get in contact with her navigator, who sometimes took as long as four days to respond to her emails. She also found the occupational skills training class less interesting because the instructor would “read right from the book.” She would have preferred more videos, visuals, and hands-on instruction.

Overall, she found EDGE to be useful and said it gave her an opportunity to develop a career. She believed the occupational skills training would help her get a higher-paying job, with health insurance and retirement benefits. She planned to apply for phlebotomy jobs after she was certified and hoped to continue at the college to obtain another medical certification. She recommended that EDGE add work placements and provide training on writing cover letters and resumes to help individuals find employment in their field of interest after occupational skills training.

II. Implementation analysis

Support services. All EDGE group members received support services. Support services included transportation assistance, personal and training supports, and work item supports for tools, uniforms, and other equipment needed for work and training. Support was also available to pay for school supplies and assessment fees. If ECCS group members attended every day of the EDGE class and met class expectations, they could also receive a \$50 gas card at the end of each week.

Many individuals in the EDGE group needed transportation assistance and received transportation support to help pay for gas. When the pilot started, the guidance for the amount of transportation assistance EDGE group members could receive, in addition to the EDGE class gas card, was either a flat amount not to exceed \$50 or 54 cents per mile. In April 2016, soon after EDGE began enrollment, MDHS chose to lower the mileage reimbursement rate to 10 cents per mile due to budget concerns. Some college staff reported that 10 cents per mile was not sufficient to cover individuals' transportation expenses.

During the first two years of EDGE, the number of individuals who received training or personal supports was lower than expected. In April 2017, MDHS State office staff reemphasized to the colleges the importance of offering training and personal supports to EDGE group members to increase service engagement. After receiving additional guidance from MDHS, career navigators reported that they felt better equipped to help individuals with their training and personal needs. During case management meetings, career navigators started talking with individuals about potential barriers and about how EDGE could help. This resulted in an increase in the number of training and personal supports that individuals received.

Job retention. Individuals were offered 90 days of retention services once they completed service and obtained employment. During this period, individuals continued to receive case management as needed, but it generally was expected to include monthly in person meetings. During these meetings, career navigators discussed any issues the individuals may be having at their job and how the career navigator could help.

4. Management, collaboration, and communication for EDGE service provision

MDHS State office staff oversaw implementation of EDGE across the counties and colleges. The MDHS State office project director's role was to manage and monitor the overall implementation of EDGE. However, due to staffing constraints, the project director was not able to provide on-the-ground monitoring. Day-to-day management and monitoring were delegated to college project directors for college implementation, and to regional and county directors for county implementation. MDHS State office staff noted that they would have liked more face-to-face interaction and staff on the ground monitoring performance and overseeing and guiding implementation.

The MDHS project director held weekly and then biweekly calls with NSPARC and the college directors to manage implementation. During the calls, the team would discuss case-specific issues and questions, and all the community college project directors could listen, ask questions, and respond as a group. The team also discussed policy and procedural changes during these

II. Implementation analysis

calls. MDHS shared written bulletins with the county offices to communicate changes in EDGE policy and procedures.

Partner and provider communication was mostly effective during the first two years of EDGE, but there were a few challenges. All partner and provider staff agreed that communication between the organizations worked well overall. All the partners and providers worked together to problem-solve, and their communication was frequent and open. In the second year, most of the colleges instituted monthly meetings with their associated counties to talk over any issues, and discussions about individual cases became more frequent. However, there was a reported communication challenge between JMG and the community college project directors. One JMG career navigator was stationed in each of the community colleges, but the navigator reported to the JMG executive director instead of the college project director and was not a college employee. This caused some communication issues between JMG staff, the project directors, and the JMG executive director. MDHS State office staff also shared that communication to the colleges could have been improved, particularly about needing to place individuals enrolled in EDGE into 80 hours of services each month and monitor their compliance with the SNAP E&T requirements. The colleges seemed surprised by this responsibility and were not prepared at the beginning of EDGE to implement it.

Staff considered the collaboration between MDHS and the community colleges to be successful. MDHS was able to leverage the services the colleges were already providing in the community to help SNAP participants move into employment. The colleges also had a direct link to employers and an understanding of industry needs. In addition, by working together, the colleges and MDHS learned more about each other's services and will be able to work together to better serve individuals in the future. Having multiple community college providers was also an advantage because the colleges could share information and best practices across the State and brainstorm on how best to support individuals in EDGE. The community college directors met monthly to do so.

5. EDGE group services and participation trends

Enrollment numbers were lower than expected, so fewer individuals received services than originally planned. Of those enrolled, many did not ultimately participate in an activity (they exited or were sanctioned before entering an activity). The majority of individuals in the ECCS group did start the EDGE class, as expected, but few individuals in the BCCS group started one of the pathways.

One barrier to participation for EDGE group members was that most of the colleges struggled to provide the required 80 hours of services per month to each participant, due to the timing of available classes and occupational skills training programs. The colleges did not always have a course available for a participant to join and needed to find other activities to fulfill the 80-hour requirement. Some college staff voiced concerns about the 80-hour requirements and felt individuals were being placed into "filler activities" or were forced to do "busy work" in between courses.

II. Implementation analysis

College staff reported that many individuals in EDGE needed basic skills training. Some began to receive that training through the EDGE class or were referred to adult basic education. Individuals who lacked a GED also went into GED classes. Work-based learning was also in high demand among individuals enrolled in the EDGE group. If individuals were work ready, they could be placed in a work-based learning opportunity. Some individuals would take a class and participate in work-based learning at the same time. Others participated in work-based learning while they waited for their occupational skills training course to begin. One college director felt that individuals in the ECCS group were more likely to pursue occupational skills training and education after taking the EDGE class where they were exposed to classroom work, whereas individuals in the BCCS group were more likely to participate in work-based learning.

Drop-off points and exits. The EDGE model included several potential drop-off points, or places in the flow of services that create obstacles or opportunities for individuals to stop participating or not move to the next step in the process. On average, EDGE was expected to last three months, but many EDGE group members exited before that time. Many dropped out before ever meeting with college staff. One college project director suggested that most of the individuals who dropped out did so within the first month after enrollment. The director indicated that some individuals might be intimidated by the EDGE class and the requirement to take the TABE early in the class. Some people took the TABE and never came back.

EDGE had a high rate of exits, commonly due to sanctions. MDHS began the sanction process with individuals who did not engage in services within seven days after referral to the community college. Others who did engage, generally stopped showing up to class or meetings with career navigators, and then the navigators were not able to reach them to learn why or to try to reengage them. After being unsuccessful in reaching an individual, the colleges would refer them back to MDHS to start the conciliation process. If MDHS determined that an individual did not have good cause for not participating in activities, he or she would lose SNAP benefits (and not be eligible for EDGE). Individuals were sanctioned for two months and had to be in compliance for the first offense; were sanctioned for 6 months and needed to be in compliance for the second offense; were sanctioned for 12 months and needed to be in compliance for the third offense; and were sanctioned permanently for the fourth instance. Other common reasons for exiting EDGE were that individuals found a job and left before completing activities or they lacked transportation to attend classes. Staff reported that few individuals in EDGE successfully completed activities and exited because they found a job.

During focus groups, EDGE group members who left the pilot before finishing services reported that they stopped participating because they lost SNAP benefits or they met an exemption and it was no longer mandatory to participate. A few also stopped participating because their career navigator left, at which point either the community college told them erroneously that they had completed services or they chose not to continue with the new navigator. Some individuals in the focus group said that after they were notified that they were noncompliant with their work requirements, they chose not to reengage in services because the reporting requirements were too burdensome and the amount of their benefit was not worth the effort.

II. Implementation analysis

Participation trends. Many EDGE group members faced transportation barriers that prevented them from participating and that the colleges struggled to meet. In some areas, individuals needed to travel upwards of an hour by car to get to the college, which was a disincentive for some individuals or a barrier for those who did not have access to transportation. Even in areas where the commute was not as far, public transportation often was not available and people did not have reliable vehicles. Staff also reported that the transportation stipend (10 cents per mile) was not sufficient to cover the cost of participation. Over time, most of the colleges offered bus or shuttle services through collaboration with other providers to help individuals get to the colleges, but even then, some EDGE group members struggled to get to the bus stop. Transportation was the number one reason cited by MDHS, county, and college staff for why more individuals were not engaging in services.

Another barrier that might have contributed to individuals not engaging in services was low educational attainment. This may have hindered some individuals from engaging in classroom work or obtaining a GED, and some individuals may have been afraid to participate after years of being out of school or having a history of not doing well in school. However, a few college staff perceived that some individuals were not motivated to participate in activities and were reluctant to become employed because they were worried they would lose benefits and not be better off financially. Additional barriers included mental and physical health issues, family responsibilities, criminal histories, and homelessness. College and county staff reported that EDGE group members faced similar barriers when seeking or retaining employment, including lack of transportation, educational attainment (lacking a high school diploma), and training and workplace skills. A number of individuals also experienced unstable housing, which made it difficult to keep a job.

6. Staffing

MDHS used existing staff in the State and county offices to implement the pilot, and the community colleges hired new staff for key roles, such as project directors and navigators. Using existing staff and not hiring additional employees was challenging for MDHS; county staff reported there were too few staff in the county offices to effectively recruit and enroll ABAWDs into the pilot while implementing the ABAWD work requirements and continuing to fulfill their other, ongoing duties. MDHS State office staff also would have liked additional staff assigned to the pilot to help with management and oversight, including monitoring county and college activities “on the ground.” MDHS State office staff found it difficult to manage the pilot on top of other duties.

The MDHS State office, counties, and colleges experienced staff turnover, but these changes had no reported effect on the pilot or delivery of EDGE services. At the MDHS State office, the project director moved to a new role in the department and a new project director was hired, starting in December 2016. However, the original director continued to play an advisory role. Several counties had turnover in eligibility workers, two colleges lost directors, and a few college navigators left their positions. In each case, existing staff filled the gaps until new staff were hired, and staff did not raise any major concerns. However, during focus groups, a few

II. Implementation analysis

EDGE group members spoke about communication issues at one community college when their career navigator left, including being told they had completed EDGE services when they had not.

Staff satisfaction with the pilot was mixed, but county staff generally reported less satisfaction than college staff. MDHS county staff who were focused on recruiting and enrolling SNAP participants into EDGE were frustrated when ABAWDs did not show up for orientation and when those who did attend ultimately did not want to enroll in the pilot. Staff also found it difficult to juggle the new work and their current workload; they often suggested there were not enough staff in the office to get everything done. The county staff also suggested that it was disappointing to have to assign individuals to the control group, especially those who seemed most interested in or in need of the EDGE services, while others assigned to the EDGE group did not engage in services. College staff were more satisfied with the pilot. They believed in the EDGE model, enjoyed working with EDGE group members, and felt accomplished when individuals succeeded. However, college staff did identify a few challenges, including needing more structure and clearer guidelines from MDHS and NSPARC earlier in the process, and needing to adjust processes due to several changes in policies and procedures after the pilot began enrollment. Like the county staff, some college staff also felt disappointed when individuals enrolled in the EDGE group did not continue with services or succeed. As one navigator shared, “When you try so hard to make a difference and [the individual] won’t let you, it’s a frustration.” Another navigator shared that she felt hurt and let down when individuals dropped out of the program after both the individual and the navigator had worked so hard to succeed. She shared that many people faced mental health challenges that made it difficult for them to participate and that the navigators could not provide the counseling they needed.

7. Performance management and reporting

As mentioned previously, county and community college staff used an MIS called CaseMod to document the services individuals enrolled in EDGE received. MDHS State office staff used data from CaseMod to track EDGE performance weekly and shared the reports with county and college staff. MDHS also reviewed the data to monitor whether individuals were progressing through services as expected.

MDHS State office staff also used a report from the SNAP administrative data system to track performance. This report tracked the number of individuals who consented to the evaluation, the number who were still active in the pilot, and the number who had a closed SNAP case, by randomization group and by county. State office staff and the county directors used this report to monitor enrollments and case closures among individuals enrolled in the pilot.

MDHS used several other reports and data collection activities to help manage the pilot and monitor progress. One report was used to track weekly referrals from the counties to the colleges to ensure all individuals assigned to the EDGE group were being picked up by the colleges. In November 2016, the MDHS State office and the counties began tracking the number of individuals who progressed through the up-front enrollment process to help better understand drop-off points. During the same time, the MDHS State office started collecting monthly surveys from county offices and the colleges to track enrollments and service use, and to understand

II. Implementation analysis

barriers to participation. In January 2017, the MDHS State office started tracking participation in the EDGE class in each of the community colleges to understand the number of individuals assigned to the ECCS group who started and completed the EDGE class.

D. Key implementation analysis findings

Key findings from the planning and early implementation period for EDGE are summarized below.

- **Implementing a new mandatory E&T program and the pilot at the same time was burdensome for MDHS county staff.** In January 2016, two months before beginning enrollment in the pilot, MDHS started a new mandatory E&T program for ABAWDs. County staff were tasked with learning and implementing the new E&T requirements at the same time they were recruiting and enrolling ABAWDs in EDGE. Many county staff found it difficult to implement both changes at the same time, on top of their other responsibilities, and enrollment in the pilot likely suffered.
- **Having more full-time MDHS staff dedicated to managing the pilot could have helped identify and resolve issues more quickly.** MDHS assigned one project director to manage and monitor EDGE implementation. EDGE would have benefited from having more MDHS staff on the ground monitoring implementation in the 29 counties and providing guidance and feedback to help increase enrollment and ensure the colleges were adhering to the pilot policies and procedures in real time.
- **Enrolling individuals into the pilot was a continuous challenge.** Most county offices struggled to reach their enrollment targets. MDHS initially did not create a marketing plan, as it expected to have more than enough ABAWDs interested in the pilot. However, the number of ABAWDs decreased rapidly after the ABAWD work requirements were instituted. After early implementation, MDHS tried multiple strategies to increase enrollment, but the numbers continued to lag well below targets.
- **Engaging individuals in EDGE services after enrollment was also challenging.** Many individuals assigned to the EDGE group reportedly never attended their first appointment at the college. College and county staff cited transportation as the number one barrier to engagement. Many individuals lived far from the colleges and did not have access to a car or public transportation. Having transportation providers in place from the beginning might have decreased these engagement challenges.
- **Securing subsidized employment opportunities was difficult for most colleges.** The colleges were tasked with developing subsidized employment opportunities for individuals enrolled in the EDGE group, but few had been developed by the end of the first year of the pilot. College staff reported that employers were hesitant to hire SNAP participants or wanted the colleges to commit to sending a certain number of workers, which was not possible. The colleges increased their efforts in the second year and successfully developed more opportunities.
- **Engaging individuals in 80 hours of activities each month was difficult for college staff.** Due to college schedules, including winter and summer breaks, individuals in the ECCS

II. Implementation analysis

group often had to wait for classes to begin. This made it challenging for individuals to meet the 80-hour-a-month engagement requirement, and college staff often had to assign individuals “filler activities” such as job search and workfare. Staff suggested that the lack of ongoing occupational skills training opportunities affected engagement among EDGE group members.

III. PARTICIPATION ANALYSIS

Chapter II described the potential services available to the EDGE group (both the ECCS and BCCS groups), and this chapter presents findings on the services that individuals in the EDGE group actually received. The chapter examines overall engagement in services, as well as the types of activities in which individuals engaged, the order in which they typically proceeded through activities, and how long they spent in activities and in the pilot overall. The chapter also provides details about the level and type of support services EDGE group members received, the intensity of case management, and the level and timing of exits from the pilot.

All of the findings presented in this chapter are based on administrative service use data recorded by provider staff at the community colleges. For this report, we analyzed engagement in services over a 12-month period for each individual randomly assigned into the EDGE group between March 2016 (when pilot enrollment began) and December 2017. The final report will examine the services received by all individuals enrolled into EDGE (through September 2018) and will include analysis of the entire period in which individuals could have been engaged in services (through February 2019).

After presenting key findings, we provide information about overall engagement and activities for EDGE group members in Section A of this chapter. In Section B, we discuss participation in occupational skills training, education, and work-based learning. We provide information about the support services individuals received in Section C, discuss the case management services received in Section D, and describe exits from the pilot and the timing of those exits in Section E. Additional data on the characteristics of those who completed or did not complete activities and on engagement and service receipt by subgroup are included in Appendix D.

Key findings:

- After random assignment, more than 90 percent of individuals engaged in some type of service such as meeting a career navigator, attending an orientation, starting an assessment, or receiving a support service. However, less than two-thirds participated in an employment and training-related activity, such as an EDGE class, occupational skills training, basic education, or work-based learning.
- Generally, fewer than 60 percent of the individuals who started an employment and training-related activity in either group completed it, with the exception of the EDGE class. About 78 percent of ECCS group members who started the EDGE class completed it.
- Fewer than 15 percent of EDGE group members earned a credential or certification, and 2 percent earned an educational degree or certificate, most of which were GEDs.
- Most EDGE group members received a support service. Virtually everyone who received a support service obtained transportation assistance; a much smaller percentage (17 percent or less) received training or work supports.
- Although contact between career navigators and individuals in the ECCS group was intended to be more intensive than for those in the BCCS group, the percentage of individuals who

III. Participation analysis

had contact with career navigators was higher in the BCCS group than in the ECCS group (75 percent versus 64 percent). The number of contacts also was higher in the BCCS group (four contacts per individual, on average, versus three contacts for the ECCS group).

- Most individuals exited EDGE within their first year, and the majority of exits happened within the first three months after enrollment. Exits often resulted from noncompliance and subsequent sanction.

A. Engagement in EDGE

After random assignment, EDGE group members were instructed to call the community college project director to learn more about EDGE services and to complete an online employment profile in Mississippi Works. After calling the project director, if the individual was assigned to the ECCS group, he or she was scheduled to attend the next available EDGE class. If the individual was assigned to the BCCS group, he or she was scheduled to meet one on one with a career navigator to get oriented and to complete an individual career plan, which assessed the individual's level of education, skills, and work experience, and identified barriers to reaching their goals. The ECCS group were offered (1) the EDGE class, (2) basic education, (3) postsecondary education, (4) occupational skills training, (5) life skills, and (6) work-based learning. The BCCS group were offered activities (2) through (6). EDGE also offered job search and workfare to help individuals meet their work requirement of 80 hours per month, but these were not key activities in the EDGE model.

This section describes engagement among individuals in the ECCS and BCCS groups in the pilot overall, as well as participation in the specific activities offered to each group.

1. Overall engagement in EDGE

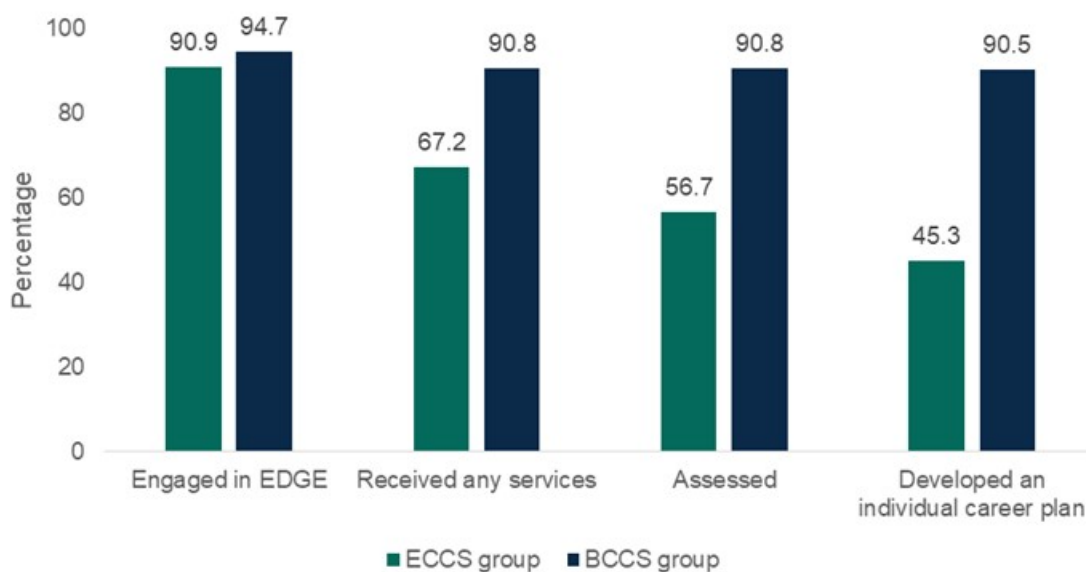
Most individuals in both the ECCS and BCCS groups initially engaged in EDGE services (91 percent and 95 percent, respectively), meaning they received a service after random assignment, including a support service, case management, an assessment, or any of the employment and training-related activities offered by EDGE (Exhibit III.1). This high rate of engagement was driven by most individuals receiving a transportation support payment after random assignment so they could offset costs for their upcoming meeting with the career navigator. However, many of those individuals did not show up for subsequent meetings. When excluding case management meetings and support services from the engagement estimate, about 67 percent of the ECCS group and 91 percent of the BCCS group received any services, meaning individuals were assessed, completed their ICP, or engaged in an employment or training-related activity. The sharp drop in engagement for the ECCS group may be related to the EDGE class; ECCS group members had to attend the classes in specific locations and at set times, whereas the BCCS group members could make appointments for their first meeting that worked for their schedule. Participation dropped off slightly before starting a formal or informal assessment for the ECCS group (57 percent) and remained the same for the BCCS group (91 percent).⁹ Less than half (45

⁹ These percentages include both formal and informal assessments. EDGE staff tracked only formal assessments in their assessment measure, which showed 24 percent of the BCCS group started an assessment. The formal

III. Participation analysis

percent) of ECCS group members developed an ICP as part of the four-week EDGE class. This decrease from the percentage who completed assessments likely stems from individuals' developing their ICP toward the end of the four-week EDGE class; also, those who did not finish the course did not finalize their ICP before leaving the pilot. In contrast, most individuals in the BCCS group (91 percent) completed an ICP during their initial meeting with a career navigator. To understand whether there were any differences in the types of individuals who did and did not engage in services or complete assessments or an ICP, we compared the characteristics of these two groups (age, gender, race and ethnicity, education, employment status, and presence of children in the household) at the time of random assignment. Findings are presented in Appendix Table D.7.

Exhibit III.1. Percentage of individuals in ECCS and BCCS groups who engaged in EDGE and intake services



Source: SNAP employment and training evaluation administrative service use data.

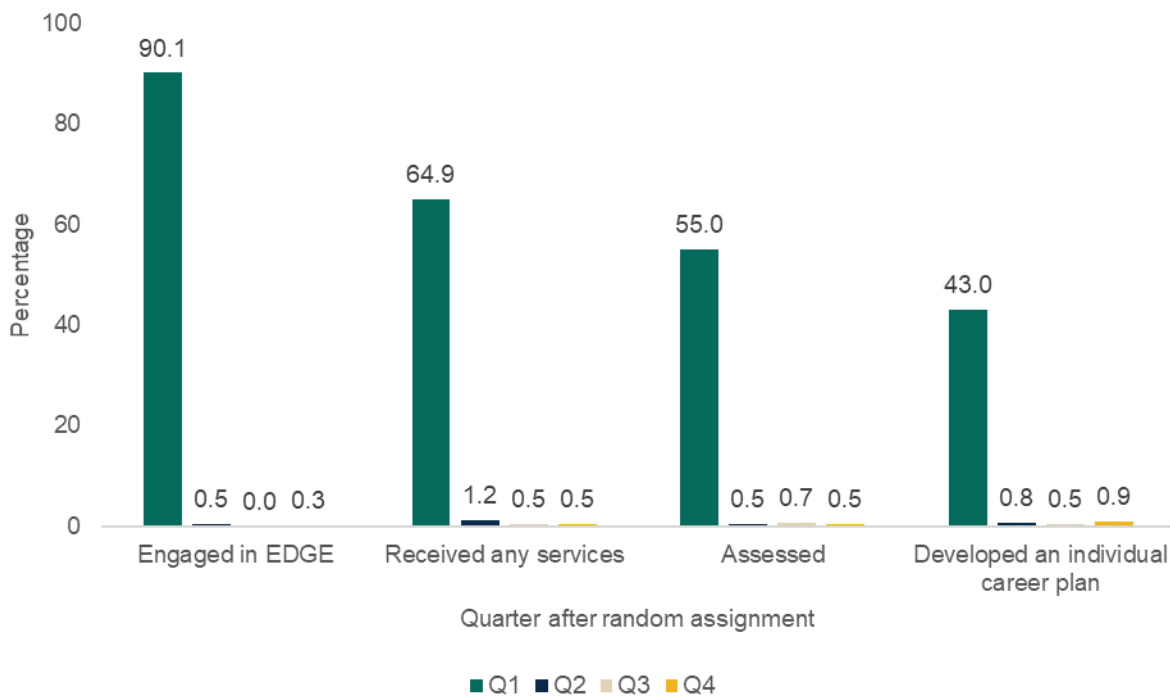
Note: "Engaged in EDGE" measures any drop off between random assignment and first contact with EDGE staff related to services, including attendance at orientations, meetings with case managers, receipt of support services, receipt of skills or needs assessments, or participation in an education, training, or employment activity. "Received any services" measures engagement in activities, including assessments, ICP, and education, training, or employment activities; the measure does not include orientations, case management, and support services because individuals often engaged once to meet with a case manager or get a support service, but then did not return for more meaningful activities and services. Estimates are based on data from 737 ECCS group members and 736 BCCS group members and cover the 12 months following random assignment.

assessment measure captures only whether an individual completed assessments, such as the Test for Adult Basic Education (TABE) or WorkKeys, but does not capture the informal assessments that career navigators conducted with individuals during the four-week EDGE classes or during the first meeting with BCCS group members to assess education level, employment history, and interests. Therefore, individuals in the ECCS group who entered the EDGE classes and those in the BCCS group who created an ICP should also be considered assessed. There was no difference between these numbers of the ECCS group, but when the informal assessments were added, the number of BCCS group members who were assessed increased dramatically.

III. Participation analysis

Length and timing of engagement. Both the ECCS and BCCS group members spent a similar amount of time in EDGE services, and most of those who engaged in the pilot did so within three months of random assignment. Among the individuals who engaged in the pilot, they spent an average of about 5 months in the pilot (143 days for the ECCS group and 151 days for the BCCS group; Appendix Table D.2). Most individuals engaged in the pilot and completed their assessments and ICPs within the first quarter after their random assignment (Exhibit III.2 and Exhibit III.3).

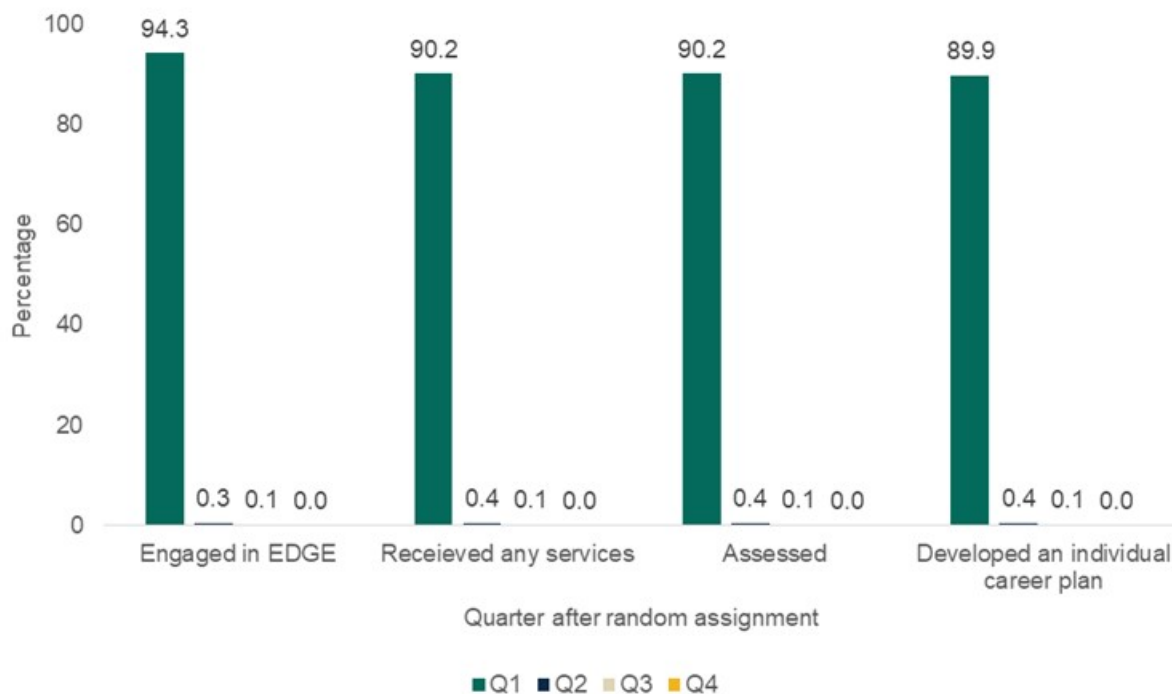
Exhibit III.2. Percentage of ECCS group members who started engagement by quarter after random assignment



Source: SNAP employment and training evaluation administrative service use data.

Note: “Engaged in EDGE” measures any drop off between random assignment and first contact with EDGE staff related to services, including attendance at orientations, meetings with case managers, receipt of support services, receipt of skills or needs assessments, or participation in an education, training, or employment activity. “Received any services” measures engagement in activities, including assessments, ICP, and education, training, or employment activities; the measure does not include orientations, case management, and support services because individuals often engaged once to meet with a case manager or get a support service, but then did not return for more meaningful activities and services. Estimates are based on data from 737 ECCS group members and cover the 12 months following random assignment.

Exhibit III.3. Percentage of BCCS group members who started engagement by quarter after random assignment



Source: SNAP employment and training evaluation administrative service use data.

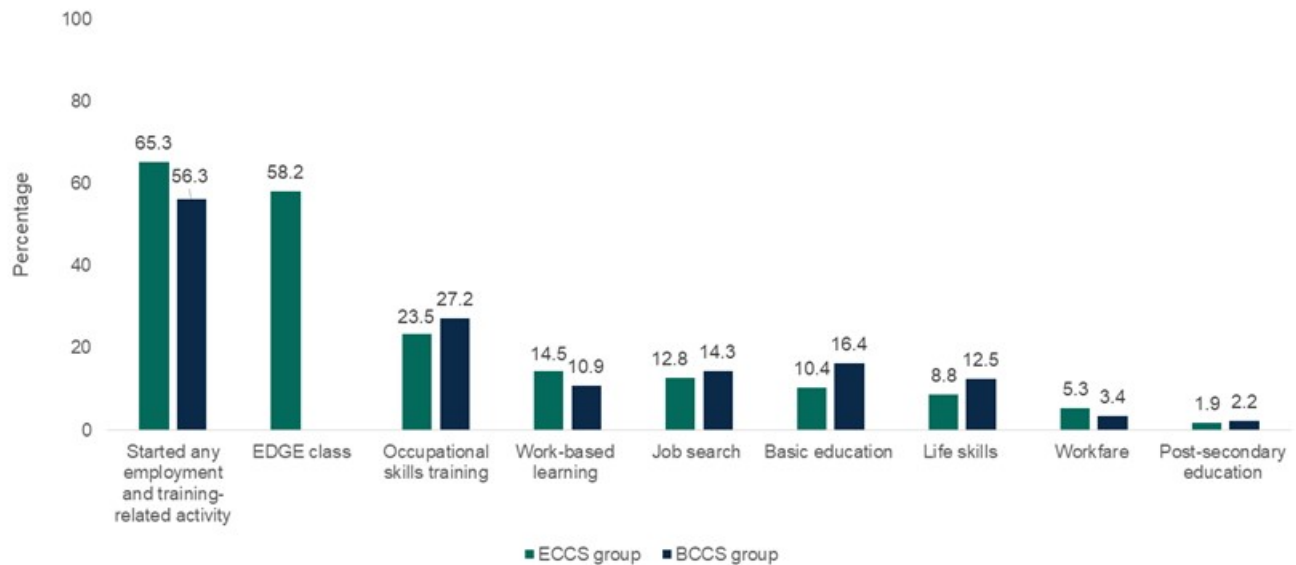
Note: “Engaged in EDGE” measures any drop off between random assignment and first contact with EDGE staff related to services, including attendance at orientations, meetings with case managers, receipt of support services, receipt of skills or needs assessments, or participation in an education, training, or employment activity. “Received any services” measures engagement in activities, including assessments, ICP, and education, training, or employment activities; the measure does not include orientations, case management, and support services because individuals often engaged once to meet with a case manager or get a support service, but then did not return for more meaningful activities and services. Estimates are based on data from 736 BCCS group members and cover the 12 months following random assignment.

2. Engagement in activities

Despite high rates of overall engagement, only 65 percent of ECCS and 56 percent of BCCS group members started an employment or training-related activity after they completed intake and assessments (this does not include receiving a support service or case management). Almost 60 percent of the ECCS group members started the EDGE class, but less than a quarter of group members went on to start other activities—such as occupational skills training (24 percent), work-based learning (15 percent), job search (13 percent), and basic education (10 percent; Exhibit III.4). Less than 30 percent of BCCS group members participated in each type of activity; occupational skills training (27 percent) was the most common activity individuals started (Exhibit III.4).

III. Participation analysis

Exhibit III.4. Percentage of individuals in ECCS and BCCS groups who started activities



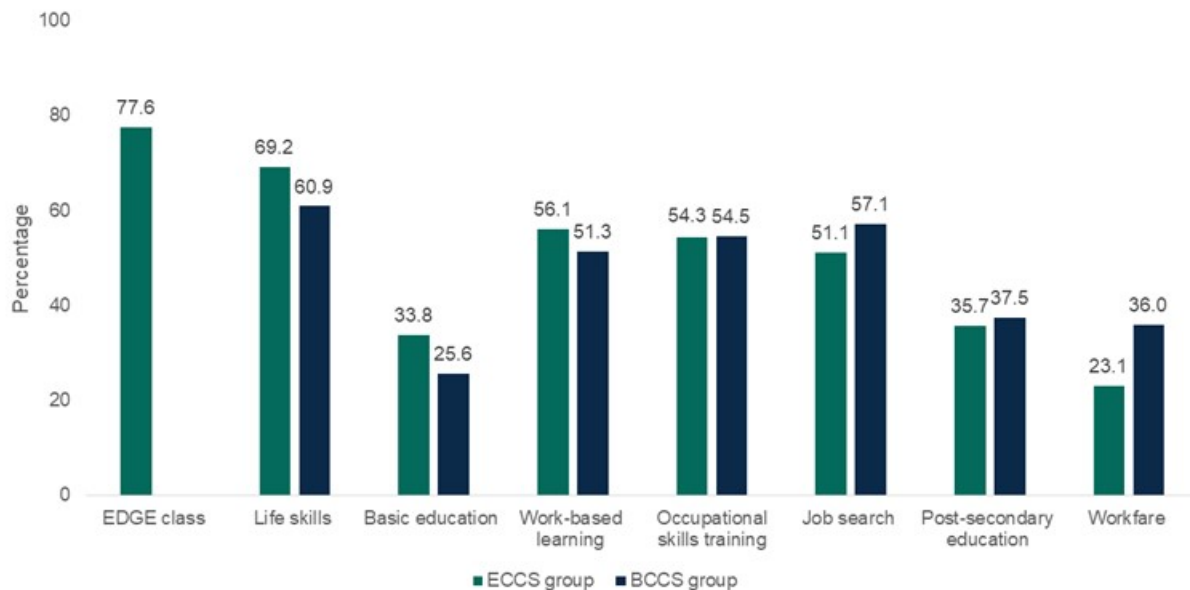
Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 737 ECCS group members and 736 BCCS group members and cover the 12 months following random assignment.

Among those who started an activity, the completion rates for each activity were generally around 40 to 60 percent, with a few exceptions. Among the ECCS group, 78 percent of those in the EDGE class completed it, and 69 percent of those who started life skills completed it (Exhibit III.5). The BCCS group had slightly higher rates of completion for life skills (61 percent) and job search (57 percent) than other activities. However, both the ECCS and BCCS groups had lower rates of completion for postsecondary education and workfare; these ranged between 23 and 38 percent. These rates provide a snapshot of completion at the end of the 12-month follow-up period; however, some individuals who started these activities may still have been participating and did not yet complete it by the end of the 12 months.

To understand whether there were differences in the types of individuals who completed and did not complete activities, we compare the characteristics of these two groups in Appendix Table D.8.

Exhibit III.5. Completion rates for EDGE activities, among individuals who started an activity



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 481 ECCS group members and 414 BCCS group members and cover the 12 months following random assignment.

Timing of engagement in activities. Individuals in the EDGE group started most activities in the first quarter after random assignment. Exhibits III.6 and III.7 show that a modest percentage of individuals started occupational skills training and work-based learning at least three months after random assignment. For example, in the ECCS group, 13 percent started occupational skills training in the first quarter, and another 7 percent started in the second quarter, after which new engagement tapered off; 9 percent of the group members started work-based learning within the first quarter, and an additional 3 percent of individuals started in the second quarter. For the BCCS group, 20 percent engaged in occupational skills training within the first quarter, and another 4 percent started in the second quarter; 7 percent of the group members started work-based learning within the first quarter, and another 2 percent started in the second quarter.

Exhibit III.6. Percentage of ECCS group members starting activities, by quarter

Started activity (%)	Quarter in which individuals started to participate				Cumulative
	Q1	Q2	Q3	Q4	
EDGE class	56.9	0.5	0.3	0.5	58.2
Occupational skills training	13.3	6.6	2.3	1.2	23.5
Work-based learning	9.0	3.1	1.4	1.1	14.5
Job search	10.0	1.1	1.5	0.1	12.8
Basic education	8.3	1.2	0.5	0.4	10.4
Life skills	6.8	0.8	0.8	0.4	8.8
Workfare	4.6	0.4	0.1	0.1	5.3
Post-secondary education	0.9	0.5	0.1	0.3	1.9
Sample size					737

Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates cover the 12 months following random assignment.

Exhibit III.7. Percentage of BCCS group members starting activities, by quarter

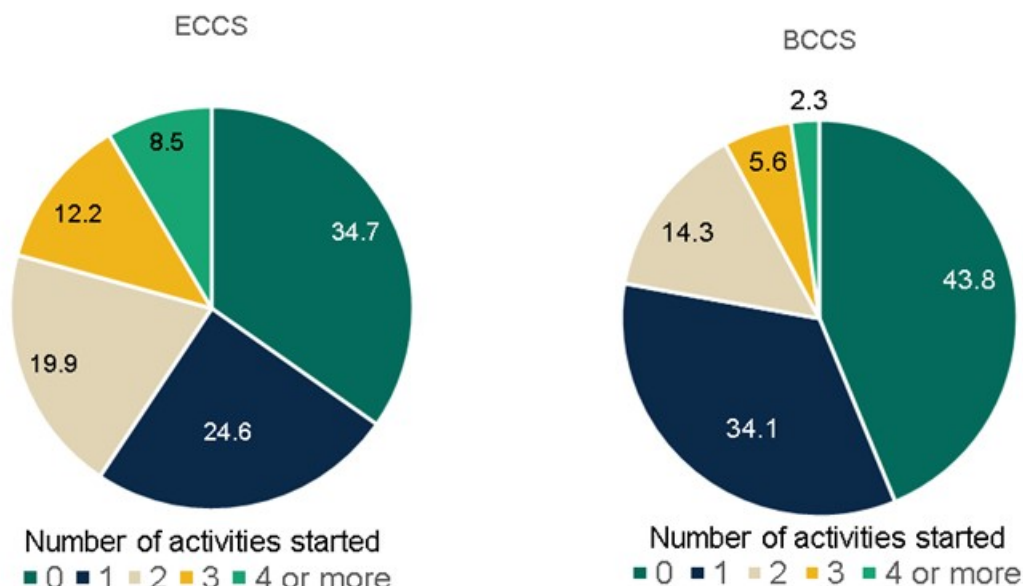
Started activity (%)	Quarter in which individuals started to participate				Cumulative
	Q1	Q2	Q3	Q4	
Occupational skills training	20.4	4.3	1.5	1.0	27.2
Work-based learning	7.2	2.0	0.7	1.0	10.9
Job search	11.5	1.4	1.2	0.1	14.3
Basic education	13.9	1.4	0.7	0.5	16.4
Life skills	10.3	0.8	0.4	1.0	12.5
Workfare	2.6	0.1	0.7	0.0	3.4
Post-secondary education	1.5	0.3	0.4	0.0	2.2
Sample size					736

Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates cover the 12 months following random assignment.

Number and order of activities. Identifying the number of activities individuals started and the sequence of those activities is important for understanding whether the service flow discussed in Chapter II worked as intended. Exhibit III.8 shows that most of the individuals assigned to EDGE either did not start any employment and training-related activities (35 percent of ECCS and 44 percent of BCCS group members) or engaged in just one activity (25 percent of ECCS and 34 percent of BCCS group members). The majority of the individuals in the ECCS group who participated in just one activity participated only in the EDGE class (74 percent), and most of those in the BCCS group participated in only occupational skills training (40 percent) or only basic education (26 percent; Appendix Table D.2).

Exhibit III.8. Number of activities started by ECCS and BCCS group members (percentage)



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 737 ECCS group members and 736 BCCS group members and cover the 12 months following random assignment.

As was expected from the design of EDGE services, the majority (78 percent) of ECCS group members who started an activity started the EDGE class first. Other activities ECCS group members started first were workfare (8 percent) and job search (6 percent; Appendix Table D.2). For the BCCS group, there was much more variation in the pathways into activities; 32 percent of individuals started occupational skills training first and 23 percent started basic education first.

Individuals who started more than one activity most commonly engaged in two activities. ECCS group members most commonly participated in the EDGE class and then occupational skills training (21 percent of individuals). The average length of time between starting the two activities was almost 3 months (83 days), which suggests that it took individuals longer to complete the EDGE class than anticipated (four weeks), but also that they were not moving on to other activities until they completed it (Appendix Table D.2). For those in the BCCS group who started more than one activity, the most common combination was job search first and then training (7 percent of individuals); the average length of time between activities was about two months (66 days). In general, for individuals who started more than one activity, there was more than a month—sometimes four months—between starting the first and second activities. This suggests that individuals generally were not engaging in multiple activities at the same time but rather finishing one and moving on to the next.

B. Education, occupational skills training, and work-based learning

This section explores education, occupational skills training, and work-based learning activities in more detail and describes the types of education and occupational skills training obtained, as

III. Participation analysis

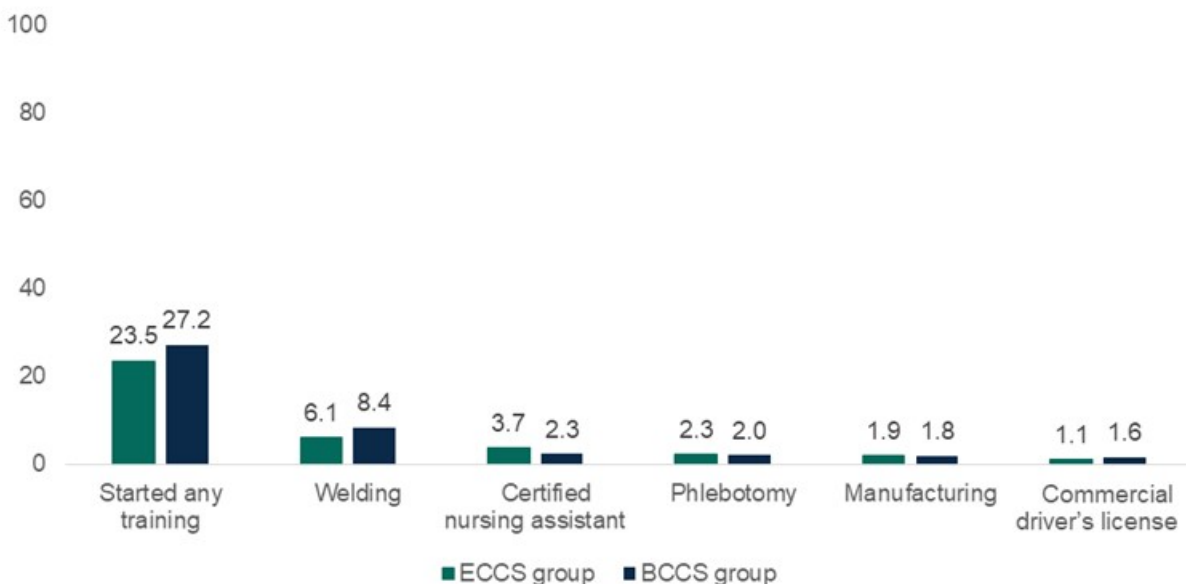
well as any degrees or certifications earned through EDGE. The section also describes the types of work-based learning individuals started and completed, and the average amount of subsidies employers received.

1. Education and occupational skills training

As noted previously, less than a third of ECCS and BCCS group members participated in an education or occupational skills training activity. Engagement in education activities was somewhat higher for the BCCS group than the ECCS group. Over 16 percent of BCCS group members started basic education, and 2 percent started postsecondary education (Exhibit III.4). In the ECCS group, 10 percent started basic education and 2 percent started postsecondary education. Because overall engagement in education was relatively low, few ECCS or BCCS group members obtained an education degree or certificate (2 percent), most of which were high school equivalence diplomas (Appendix Table D.5). Most received their degrees between 6 and 12 months after random assignment (Appendix Tables D.9a and D.9b).

Of those who started occupational skills training (24 percent of the ECCS group members and 27 percent of the BCCS group members; Exhibit III.4), individuals started a wide variety of occupational skills training courses. The five most common types of occupational skills training in which individuals participated were welding, certified nursing assisting, phlebotomy, manufacturing, and commercial driving (Exhibit III.9). Together, these types of occupational skills trainings accounted for over half of the trainings started.

Exhibit III.9. Percentage of ECCS and BCCS group members who started any occupational skills training and five most commonly started types of training



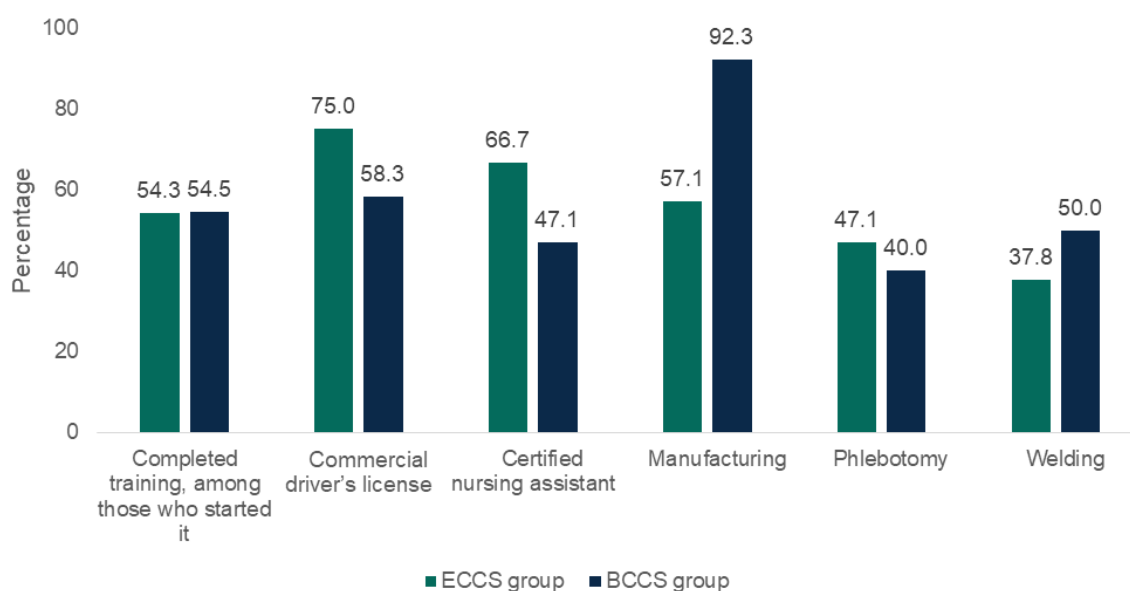
Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 737 ECCS group members and 736 BCCS group members and cover the 12 months following random assignment.

III. Participation analysis

Among the individuals who started occupational skills training, just over half (54 percent for the ECCS group and 55 percent for the BCCS group) completed it. As shown in (Exhibit III.10), among ECCS group members who started each type of occupational skills training, the completion rate was highest for those starting a training in commercial driving (75 percent), certified nursing assistance (67 percent), and manufacturing (57 percent). The most frequently completed occupational skills trainings among BCCS group members who started one included training focused on manufacturing (92 percent), commercial driving (58 percent), and welding (50 percent).

Exhibit III.10. Among those who started occupational skills training, percentage of ECCS and BCCS group members who completed any training and who completed the five most commonly completed types of training started

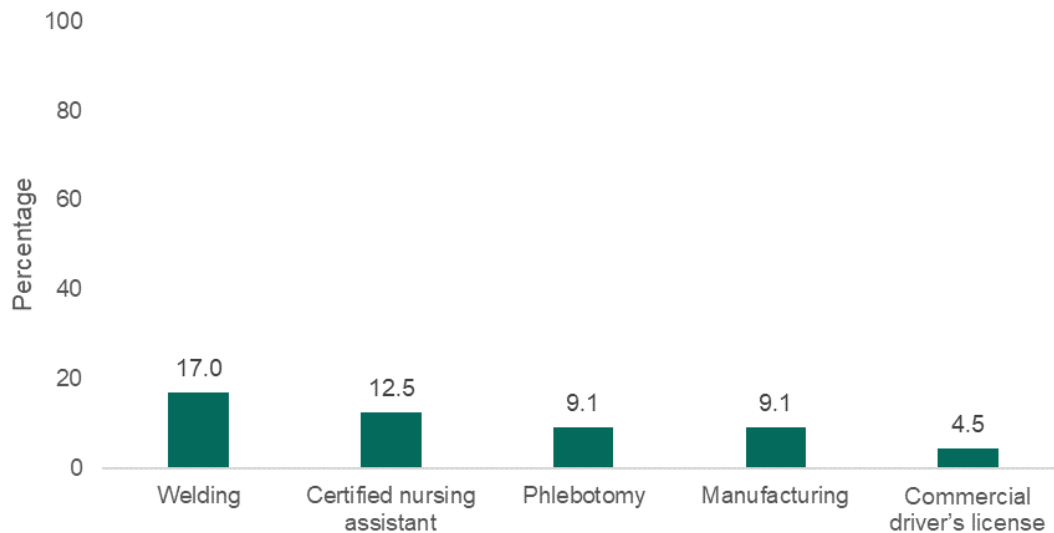


Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 173 ECCS group members and 200 BCCS group members and cover the 12 months following random assignment.

Almost all of the individuals who completed an occupational skills training program received a certification or credential. About 12 percent of the ECCS group and 15 percent of the BCCS group earned an occupational skill training certification or credential (Appendix Table D.5). Similar to the type of occupational skills training completed, the most common credentials or certifications earned were for welding, manufacturing, and phlebotomy (Exhibits III.11 and III.12). Most certifications and credentials were earned between six and nine months after random assignment (Appendix Tables D.9a and D.9b).

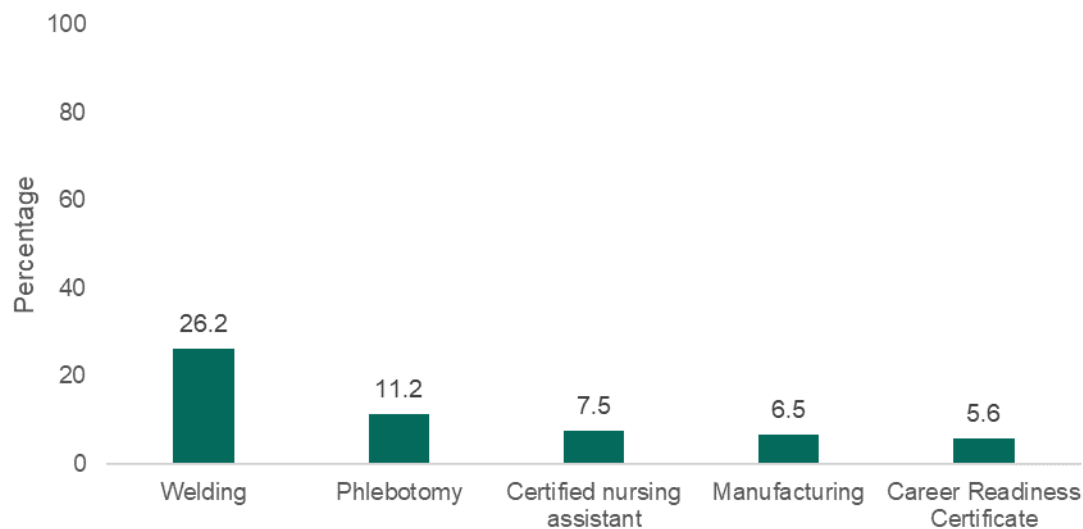
Exhibit III.11. Among those who received a credential, percentage of ECCS group members who earned the five most common credentials



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 88 ECCS group members and cover the 12 months following random assignment.

Exhibit III.12. Among those who received a credential, percentage of BCCS group members who earned the five most common credentials



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 107 BCCS group members and cover the 12 months following random assignment.

2. Work-based learning

Relatively few individuals in EDGE participated in work-based learning activities, most of which were subsidized employment opportunities. As shown in Exhibit III.13, 15 percent of all

III. Participation analysis

ECCS group members started work-based learning, and over half of those who started completed it (56 percent). Most of the individuals in the ECCS group who participated in work-based learning obtained a subsidized job (89 percent). Twelve percent obtained an internship, and 3 percent participated in on-the-job training. ECCS group members who participated in subsidized employment were paid \$9 an hour on average. Fewer BCCS group members started work-based learning (11 percent). As with the ECCS group, over half of those who started completed it, most participated in subsidized employment (85 percent), and individuals were paid \$8 an hour, on average (Exhibit III.13).

Exhibit III.13. Percentage of individuals in ECCS and BCCS groups who engaged in work-based learning and average amount of subsidy

Type of service	ECCS group	BCCS group
Started work-based learning (%)	14.5	10.9
Type of work-based learning, among those who started (%)		
Subsidized employment	88.8	85.0
Internship	12.1	12.5
On-the-job training	2.8	3.8
Completed work-based learning (%)	8.1	5.6
Completed work-based learning, among those who started (%)	56.1	51.3
Average amount of hourly subsidy per person, among those who started (\$)	9	8
Sample size	737	736

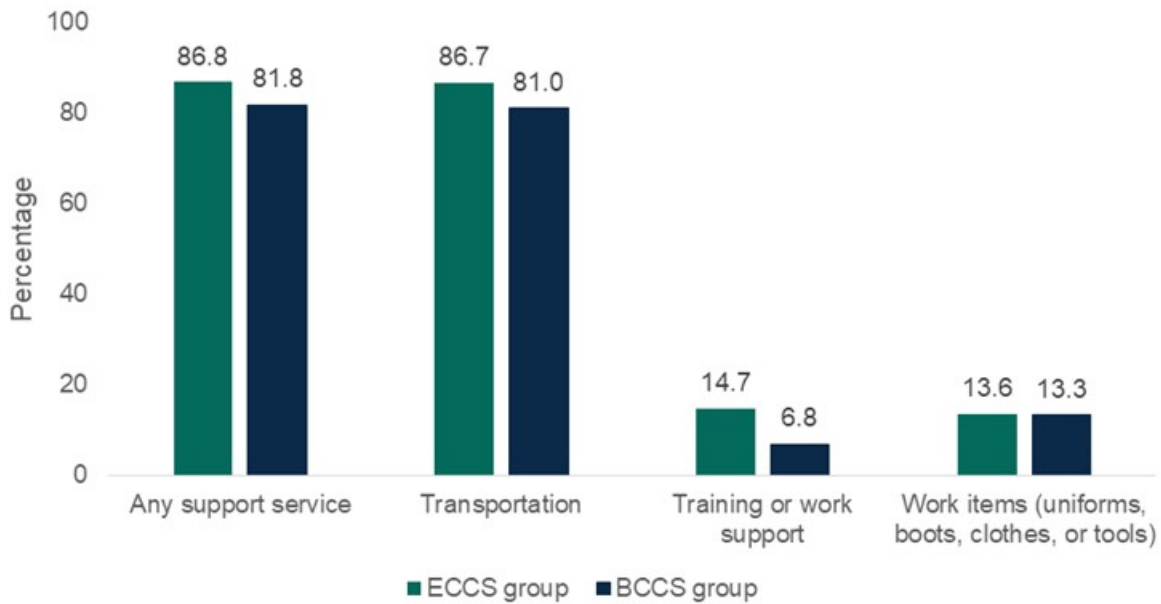
Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates cover the 12 months following random assignment.

C. Support services

Most of the ECCS and BCCS group members received at least one support service (87 percent and 82 percent, respectively). Transportation was the most common support service provided; it was received by 87 percent of all ECCS group members and 81 percent of all BCCS group members (Exhibit III.14). Fifteen percent of ECCS group members and 7 percent of BCCS group members received a training or work support, such as car repairs, eyeglasses, or needed immunizations. Between 13 and 14 percent of both groups received support for purchasing work items, such as uniforms, boots, or tools.

Exhibit III.14. Percentage of individuals in the ECCS and BCCS groups who received any support service and received each type of available support service



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 737 ECCS group members and 736 BCCS group members and cover the 12 months following random assignment.

Among individuals who received a support service, virtually everyone received transportation assistance (Exhibit III.15). Other types of support services were much less common; training- and work-related supports were received by 17 percent of ECCS and 8 percent of BCCS groups. Among the individuals in the ECCS group who obtained supports, on average, they each received a total of \$409 in support service payments. For those who received specific supports, they received an average of \$273 for transportation, \$675 for training or work supports, and \$143 for work items. Although a similar percentage of BCCS group members received supports, the total value of those supports was less than for the ECCS group. BCCS group members received a total of \$214, on average, in support service payments. Group members received an average of \$157 for transportation, \$440 for training or work supports, and \$135 for work items (Exhibit III.15). This difference was expected for transportation payments because the ECCS group were eligible for the EDGE class gas cards, whereas the BCCS group were not.

Exhibit III.15. Among individuals in ECCS and BCCS groups who received a support service, percentage received by type and amount of support

Type of service	ECCS	BCCS
Received support service, by type (%)		
Transportation	99.8	99.0
Training or work support	16.9	8.3
Work items (uniforms, boots, clothes, or tools)	15.6	16.3
Total amounts of support services paid per person (\$)		
Mean	409	214
25th percentile	50	50
50th percentile (median)	250	70
75th percentile	469	240
Average amounts of support services paid per person, by type (\$)		
Training or work support	675	440
Transportation	273	157
Work items (uniforms, boots, clothes, or tools)	143	135
Sample size	640	602

Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates cover the 12 months following random assignment.

D. Case management

The EDGE model was designed to provide intensive case management to the ECCS group consisting of weekly contacts during the EDGE class and monthly contacts when individuals moved into one of the pathways, or as needed. The EDGE model included light-touch case management for the BCCS group, consisting of no more than two contacts per month. However, data show that on average, the BCCS group members had more contact with career navigators than did the ECCS group, which indicates that the model was not implemented as intended. About three-quarters of the BCCS group had at least one contact with a career navigator while participating in EDGE, whereas less than two-thirds of the ECCS group had at least one contact. The BCCS group also had more contacts during the pilot than did the ECCS group. On average, BCCS group members had an average of four contacts per person, and the ECCS group had an average of three contacts (Exhibit III.16). In both groups, the average number of contacts just among individuals who met with a career navigator at least once was higher (six for the BCCS group and five for the ECCS group). For the ECCS group, the number of contacts was relatively consistent in each quarter after random assignment (three contacts per month), but for the BCCS group, contacts were highest during the first quarter after random assignment (four per month) and then decreased over time (Appendix Tables D.9a. and D.9b.). On average, across individuals with contacts, BCCS group members spent over three hours (191 minutes) in contact with a case manager, and ECCS group members spent just over two and a half hours (153 minutes) with case managers. Most contacts were made in person for both groups, and slightly more of the ECCS

III. Participation analysis

group had telephone or electronic contacts than the BCCS group (Exhibit III.16). Although these findings are contrary to the design of EDGE, in which the ECCS group were intended to receive more intensive case management than the BCCS group, several career navigators reported during interviews that they contacted individuals in the BCCS group more than instructed because they felt the individuals needed the support. The results may reflect this.

Exhibit III.16. Description of contacts with career navigators among ECCS and BCCS group members

Type of service	ECCS group	BCCS group
Any contact (%)	64.2	75.4
Average number of contacts per person	3.4	4.1
Average number of contacts per person, among those with a contact	5.3	5.5
Average number of contacts per person per month, among those with contact	1.5	1.6
Average total time in case management contact, among those with contact (minutes) ^a	153.2	190.5
Among those with contact, type of contact (%)		
In person	55.1	63.3
Telephone	39.4	32.1
Electronic (email, text, social media)	3.4	2.8
Other	2.1	1.9
Sample size	737	736

Source: SNAP employment and training evaluation administrative service use data.

Note: Data in this table represents all contacts that case managers documented between themselves and individuals in EDGE. In some cases, this could include contact that was not direct communication (such as mailing documents to an individual). We excluded contacts which consisted of leaving a phone message or sending mass mailings, where applicable. Estimates cover the 12 months following random assignment.

^aThe number of minutes represents the total amount of time each individual was in contact with their case manager among all contacts, averaged across all individuals who had a contact.

E. Exits

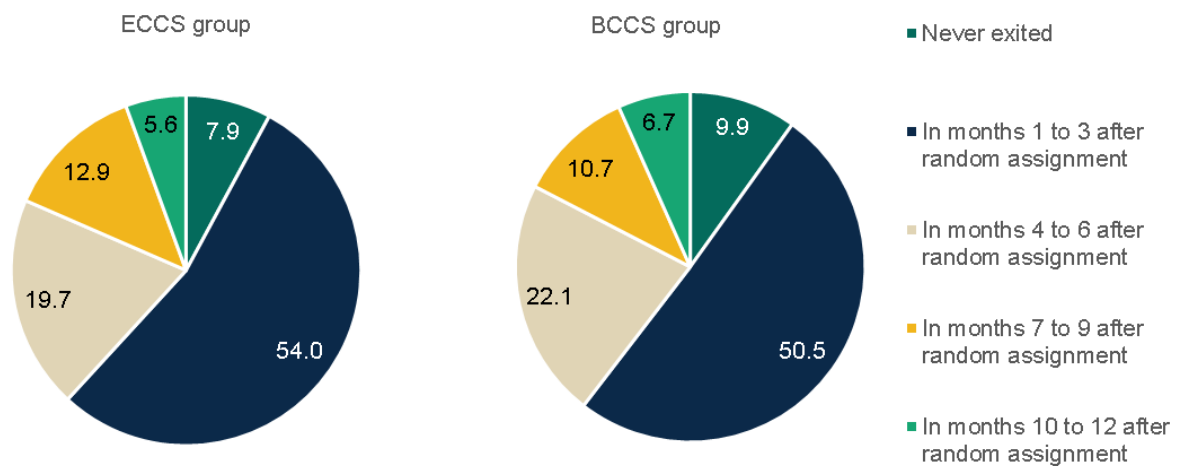
The majority of EDGE group members (92 percent of the ECCS group and 90 percent of the BCCS group) exited the pilot during their first year (Appendix Table D.6).¹⁰ The exits most often occurred during the first three months after random assignment, and often resulted from sanctions for noncompliance. The slightly higher exit rate for the ECCS group could be attributed to the challenges of attending the EDGE class—in most areas, the class was offered at only one or two locations and required that individuals come to the location every day for four weeks. Some ECCS group members may not have been able to commit this amount of time to the class, may have faced transportation barriers to get to the EDGE class, or may have wanted

¹⁰ Due to limited tracking of exit data by EDGE staff, we used SNAP administrative data as a proxy for exits. If an individual had lost his or her SNAP benefits, we considered the individual to have exited the pilot in the month he or she no longer received SNAP. As in all pilots, an individual could return to EDGE and resume services, as long as he or she received SNAP benefits.

III. Participation analysis

or needed a job more immediately. BCCS group members could be placed in a subsidized job or occupational skills training course immediately and could, in most areas, attend classes at multiple locations, which may have made participating easier for the BCCS group. As shown in Exhibit III.17, among both ECCS and BCCS group members, more than 70 percent of each group exited EDGE within six months of random assignment.

Exhibit III.17. Percentage of ECCS and BCCS group members who exited over time



Source: SNAP employment and training evaluation administrative service use data.

Note: Estimates are based on data from 737 ECCS group members and 736 BCCS group members and cover the 12 months following random assignment.

IV. DIFFERENCES IN SERVICE RECEIPT FOR THE ECCS, BCCS, AND CONTROL GROUPS

This chapter describes how engagement and service use differed between EDGE (ECCS and BCCS) and control group members, considering participation in EDGE, existing SNAP E&T, or other services and programs available in communities. These differences provide important context for interpreting the impacts on employment, earnings, and receipt of public assistance (discussed in Chapter V). Without a meaningful difference in services between the EDGE and control groups, impacts on labor market and public assistance outcomes are unlikely to result.

The data discussed in this chapter come primarily from 12-month follow-up survey data collected from EDGE and control group members. These data describe the employment-related services and education and training activities in which respondents participated during the previous year, including type and duration.¹¹ The survey data capture any type of service received, regardless of whether it was provided through EDGE, existing SNAP E&T, or through providers in the community such as WIOA, community colleges, nonprofits, or other organizations.¹²

The analysis compared the receipt of services over the 12 months following random assignment across research groups. We estimated differences in service receipt by comparing regression-adjusted averages of measures across research groups. To improve the precision of the estimates, regressions controlled for the characteristics of individuals as measured at the time of random assignment. The control variables included demographic characteristics such as age, educational attainment, and number of children in the household, and economic characteristics such as employment status and earnings.¹³ We used t-tests to determine whether service receipt differences across research groups were statistically significant. Statistical significance is a measure of how confident we are that an estimate represents a true difference in service receipt

¹¹ The activities measured in the survey included (1) job search assistance or job search training and (2) education and occupational skills training. Job search assistance or job search training activities included those that helped individuals with resume writing, interviewing, and networking. Education and occupational skills training activities included education in the form of adult basic education or GED courses, ESL classes, or college courses; occupational skills training programs that prepared individuals for specific occupations; general job skills training programs that help individuals learn widely-applicable job skills and ready them for work; and work-based learning activities, such as paid or unpaid internships and apprenticeships.

¹² Supplementary tables based on the administrative service use data tracked by MDHS are provided in Appendix E. Because the administrative service use data capture services provided through EDGE and through the existing SNAP E&T program, but do not measure receipt of services provided in the community, these data are less useful than the survey data in assessing the contrast in the service receipt between research groups. In some cases, the administrative service use data were missing or incomplete for control group members, leading to inconsistencies between the EDGE and control groups in the type and quality of data obtained. In contrast, the survey data asked all respondents the same set of questions, fostering consistency in measurement of service receipt across research groups.

¹³ The full set of characteristics and additional information on the selection of these characteristics can be found in the technical supplement.

IV. Differences in service receipt for the ECCS, BCCS, and control groups

between research groups and did not arise purely by chance.¹⁴ We also conducted F-tests to assess research group differences in service receipt across subgroups.

In presenting findings, we begin with a description of differences between the research groups in the receipt of overall services, including job search training, general job skills training,¹⁵ occupational skills training, education, and work-based learning activities (Section A). We then examine differences between research groups in the rates of completion of key activities and the typical amount of time spent in them (Section B), in the receipt of case management and support services (Section C), and in sanction rates for noncompliance (Section D). Additional discussion of variations in these differences across a select number of subgroups is presented in Appendix E.

Key findings:

- Relative to the control group, the EDGE group was more likely to participate in job search training activities or in education and training during the 12-month follow-up period. Rates of participation in the ECCS and BCCS groups were 24 to 28 percentage points higher than in the control group. These differences were observed despite that more than one-third of control group members participated in job search assistance and training activities and programs.
- The EDGE group also had higher rates of participation than the control group in almost all types of activities. The magnitude of the differences varied for the ECCS and BCCS groups, but they were largest for general job skills training and occupational skills training (17 to 27 percentage points higher than the control group) and smaller for education (11 to 17 percentage points higher than the control group). EDGE group members also were more likely than control group members to complete activities or programs and were more likely than control group members to earn an occupational certificate or license.
- EDGE group members were more likely than control group members to receive case management services. They were also more likely to receive support services. The largest differences were observed for the receipt of transportation assistance and work items (clothes, uniforms, tools, and other supplies and equipment).

A. Differences between research groups in the receipt of services overall

As described in Chapter II, ECCS group members first attended the EDGE class at the community college. This four-week course focused on the essential skills needed to find and retain employment. ECCS group members also received intensive case management from career navigators at the community college. The EDGE class was followed by voucher-funded pathways based on the career plan an individual expressed interest in pursuing. The pathways

¹⁴ When we calculated differences in the distributions and averages for research groups, observations were weighted to ensure that the differences were representative of all individuals enrolled in the pilot in Mississippi before the end of 2017. The weights were constructed to reflect the random assignment process, the survey administration design, and survey nonresponse in survey data.

¹⁵ Such training includes job readiness training.

IV. Differences in service receipt for the ECCS, BCCS, and control groups

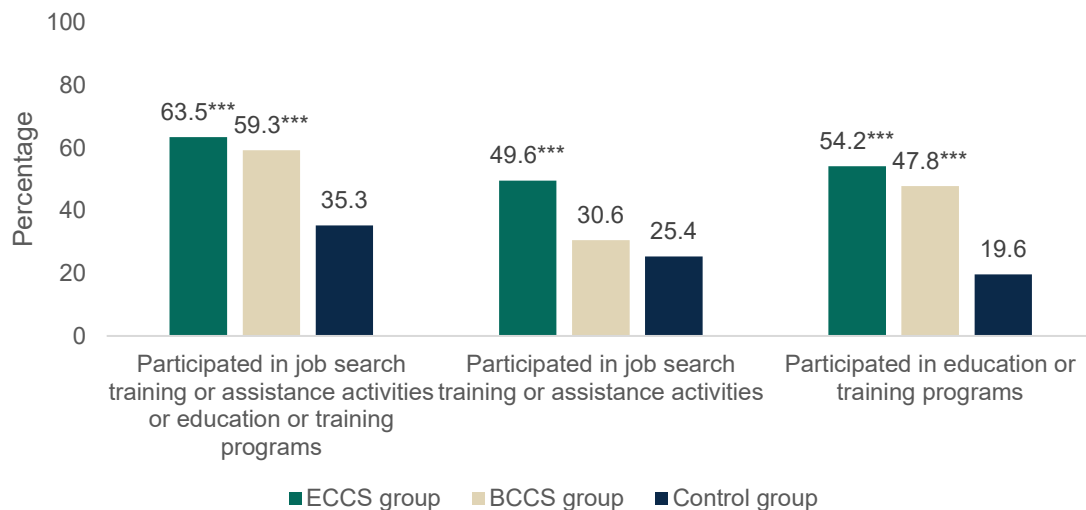
included academic (basic education, post-secondary education, or occupational skills training), life skills (additional work or behavioral skills), or work (subsidized or unsubsidized employment or internship). In contrast, BCCS group members directly entered the voucher-funded pathways without attending the EDGE class. They also received intensive case management, although it was designed to be light touch. Members of both groups received support services, including vouchers for transportation, work-related items, and barrier removal.

DHS operates a mandatory SNAP E&T (see Chapter I). This policy applies to EDGE group members as well as control group members. Those who fail to comply with their individual requirements without good cause are subject to disqualification from SNAP. The services available to control group members through the existing SNAP E&T program were more limited than those available to EDGE group members. Individuals in the control group had to complete an up-front 30-day job search. If they did not secure employment after 30 days, they had to participate in a workfare or comparable workfare activity. A small number of counties also had GED programs available or a tuition assistance program, which provided funding to attend college classes.

Service receipt rates were generally higher for individuals in EDGE, relative to the control group. Both the ECCS and BCCS groups were more likely than the control group to complete career assessment tests, although the difference was larger for the ECCS group (37 versus 14 percent) than the BCCS group (27 versus 14 percent; Appendix Table E.2). Post assessment, individuals in both the ECCS and BCCS groups participated in some type of activity at higher rates than individuals in the control group. Overall, 64 and 59 percent of the ECCS and BCCS groups, respectively, participated in some type of job search training or assistance activity or education or training activity compared to only 35 percent of the control group (Exhibit IV.1). Relative to individuals in the control group, individuals in the ECCS and BCCS groups were more likely to participate in education or training activities (35 and 28 percentage point differences, respectively). ECCS group members also were more likely than control group members to participate in job search training or assistance activities (24 percentage point difference).

IV. Differences in service receipt for the ECCS, BCCS, and control groups

Exhibit IV.1. Participation in any EDGE, existing SNAP E&T, or community-offered services



Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates cover the 12 months following random assignment. Estimates are based on data from 399 ECCS group members, 415 BCCS group members, and 368 control group members who were surveyed.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

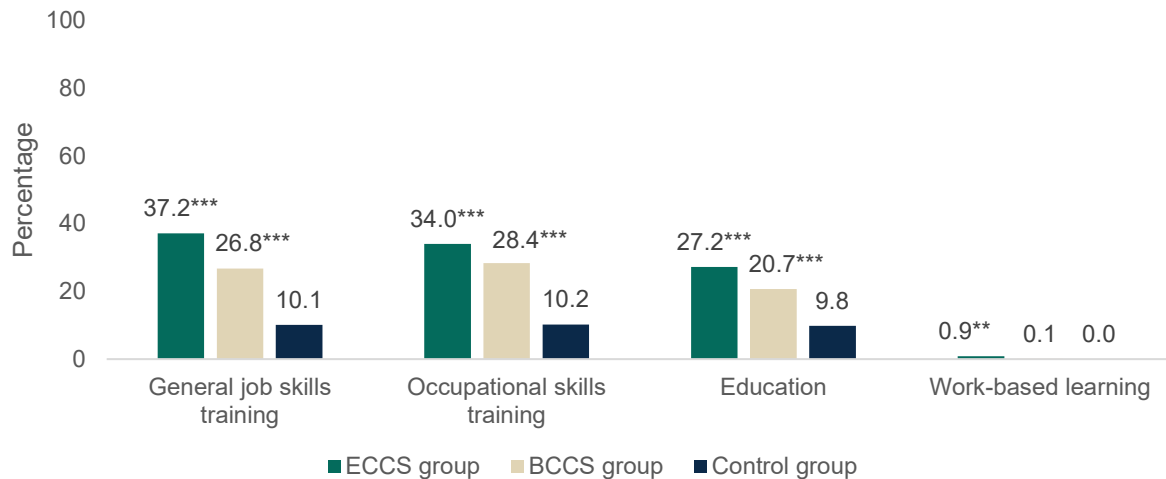
**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

Individuals in the EDGE group were more likely than control group members to start specific components of education or training activities or programs (Exhibit IV.2). The largest differences between the ECCS and BCCS groups, relative to the control group, were for general job skills training (27 and 17 percentage point differences, respectively), occupational skills training (24 and 18 percentage point differences, respectively), and education (17 and 11 percentage point differences, respectively). There were either small differences or no statistical differences for work-based learning between individuals in the ECCS or BCCS groups and those in the control group.

IV. Differences in service receipt for the ECCS, BCCS, and control groups

Exhibit IV.2. Participation in specific EDGE, existing SNAP E&T, or community-offered services



Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates cover the 12 months following random assignment. Estimates are based on data from 399 ECCS group members, 415 BCCS group members, and 368 control group members who were surveyed.

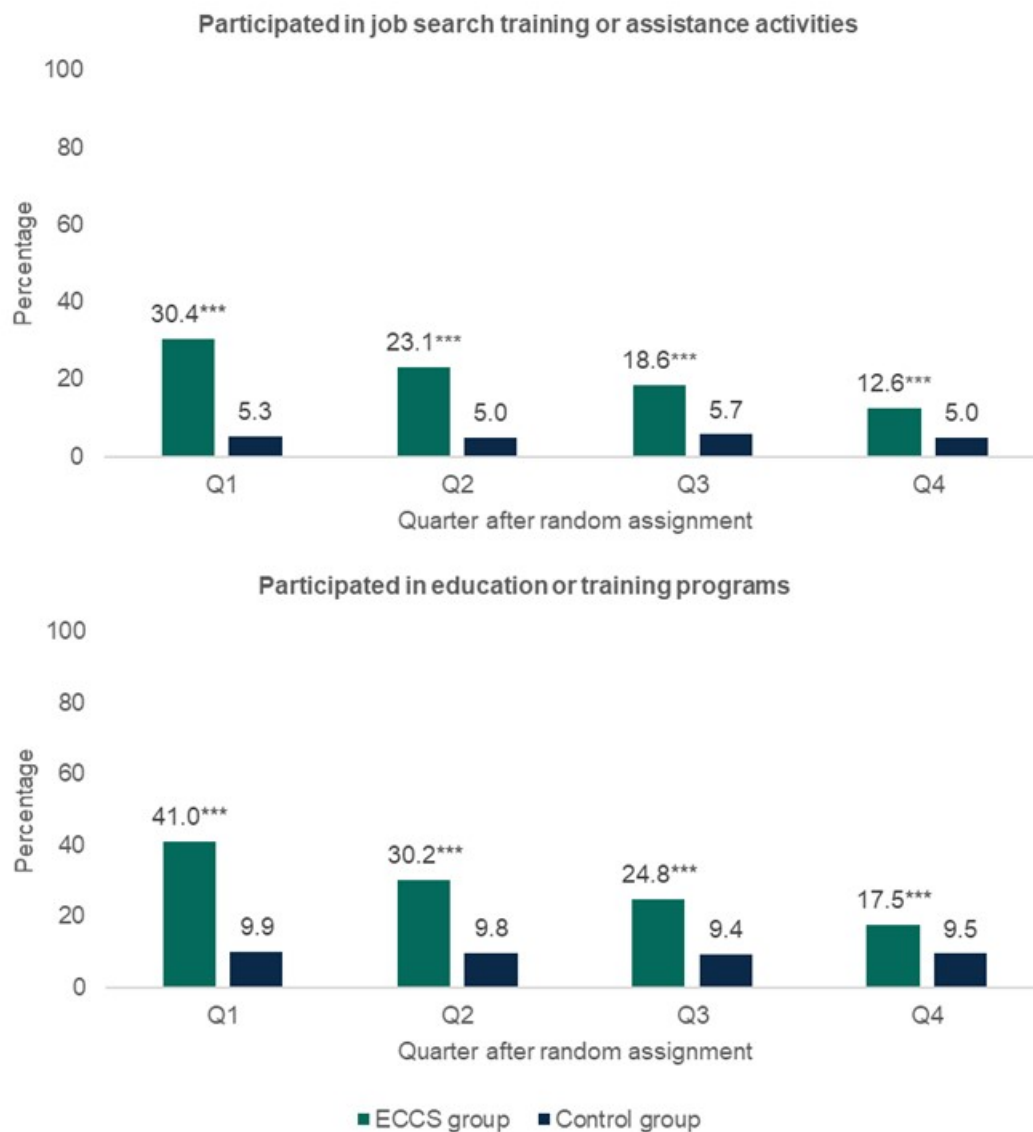
***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

The differences in service receipt between the ECCS and BCCS groups and the control group were largest in the first quarter after random assignment and decreased in size over time (Exhibits IV.3a and IV.3b). For example, differences between the percentages of the ECCS and BCCS groups that participated in education and training programs and the percentage of the control group that participated were 31 and 22 percentage points, respectively, in Quarter 1, and decreased over time to 8 percentage points for both groups in Quarter 4. As expected, because career counseling interactions and assessments occurred up front, these tended to take place shortly after enrollment in EDGE for ECCS and BCCS group members, and were less frequent toward the middle and end of the 12-month follow-up period. In contrast, a smaller proportion of control group members engaged in these activities, and they started them later. As a result, control group participation in these activities was lower and more evenly spread out across the follow-up period.

Exhibit IV.3a. Time trends in rates of participation in EDGE services, existing SNAP E&T services, or community-offered services (ECCS group members versus control group members)



Source: SNAP employment and training evaluation 12-month survey, weighted data.

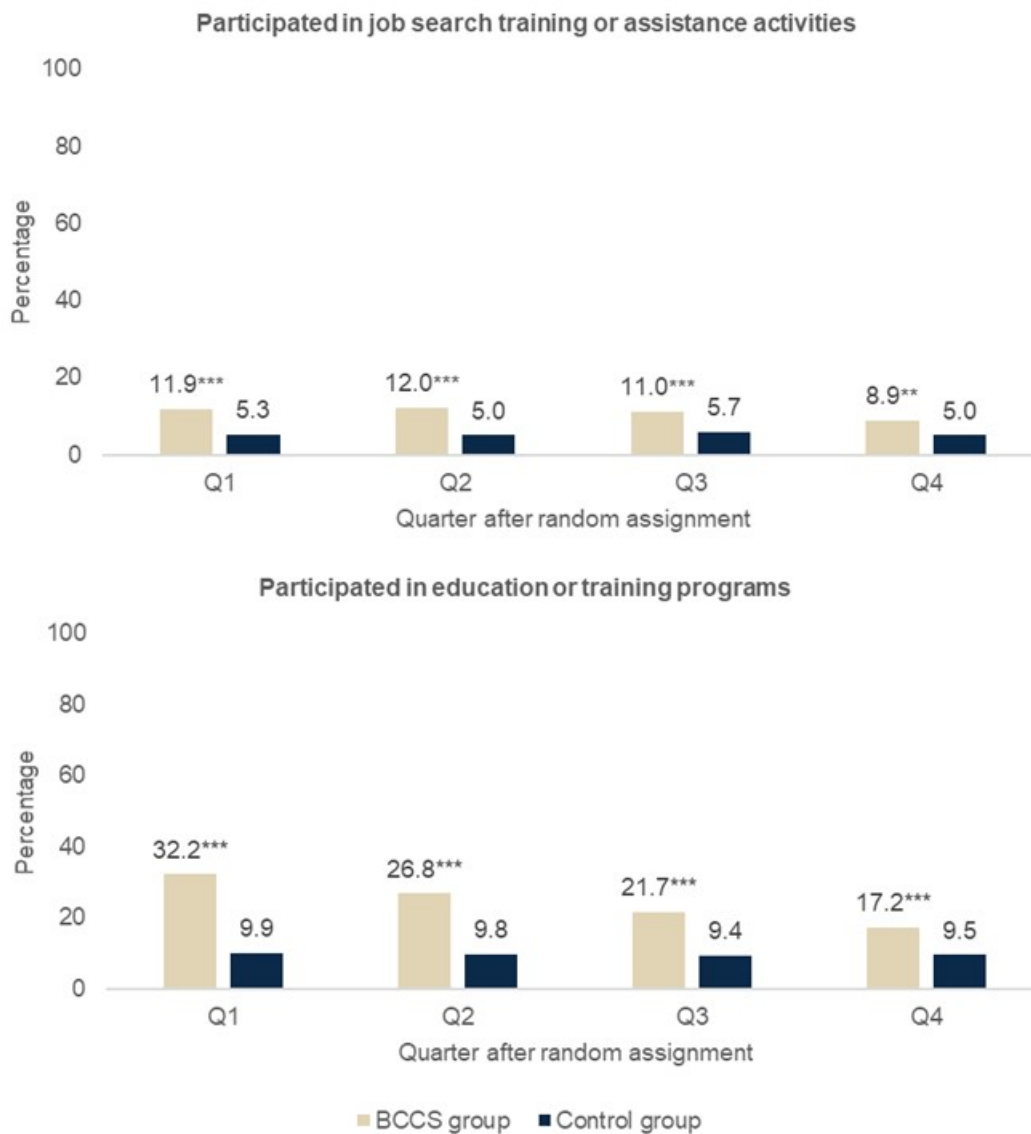
Note: Estimates cover the 12 months following random assignment. Estimates are based on data from 399 ECCS group members and 368 control group members who were surveyed.

***Difference between ECCS and control groups significantly different from zero at the .01 level, two-tailed test.

** Difference between ECCS and control groups significantly different from zero at the .05 level, two-tailed test.

* Difference between ECCS and control groups significantly different from zero at the .10 level, two-tailed test.

Exhibit IV.3b. Time trends in rates of participation in EDGE services, existing SNAP E&T services, or community-offered services (BCCS group members versus control group members)



Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates cover the 12 months following random assignment. Estimates are based on data from 415 BCCS group members and 368 control group members who were surveyed.

***Difference between BCCS and control groups significantly different from zero at the .01 level, two-tailed test.

** Difference between BCCS and control groups significantly different from zero at the .05 level, two-tailed test.

* Difference between BCCS and control groups significantly different from zero at the .10 level, two-tailed test.

B. Differences between research groups in program and activity completion

In addition to the EDGE group having a higher likelihood of starting education and training, relative to the control group, the EDGE group also had higher completion rates for education and training programs or activities. Individuals in the ECCS and BCCS groups spent, on average, about the same number of months (2.8 and 2.3 months, respectively) in all activities and programs, which was about 1.5 to 2 months longer than individuals in the control group (Exhibit IV.4). ECCS and BCCS group members also spent more hours per week in activities and programs than control group members (12 and 8 hours, respectively, versus 3 hours). Some individuals—12 percent of ECCS group members, 15 percent of BCCS group members, and 6 percent of control group members—reported that they were still in an education or training program as of the 12-month follow-up survey. If an individual was engaged in an activity at the time of the survey, he or she most commonly was still in occupational skills training, as reported by 7 to 8 percent of ECCS and BCCS group members and 4 percent of control group members.

Exhibit IV.4. Length of stay, completion, and credential receipt in EDGE, existing SNAP E&T, or community-offered services

	ECCS group	BCCS group	Control group	ECCS group / Control Difference	BCCS group / Control Difference
Mean length of time spent in all activities and programs (months)	2.8	2.3	0.9	1.9***	1.5***
Mean number of hours per week spent in program	11.5	8.1	3.3	8.3***	4.9***
Percentage of individuals who are still in the program as of the survey interview date (%)					
All activities	11.9	14.8	6.4	5.5***	8.3***
Programs with general job skills training	6.5	7.7	2.1	4.4***	5.6***
Programs with occupational skills training	7.2	8.0	4.2	3.0*	3.8**
Programs with education	6.6	8.0	3.8	2.8*	4.1**
Programs with work-based learning	0.0	0.0	0.0	0.0	0.0
Percentage who completed the program (%)					
All activities	34.2	20.1	10.1	24.1***	10.2***
Programs with general job skills training	24.7	10.4	6.3	18.4***	4.3**
Programs with occupational skills training	22.1	13.3	5.1	17.0***	8.3***
Programs with education	13.8	4.8	3.7	10.1***	1.1
Programs with work-based learning	0.9	0.0	0.0	0.9**	0.0
Type of certificate or degree/diploma received (%)					
Participation/attendance	6.1	1.6	0.5	5.5***	1.1
Adult basic education	0.3	0.0	0.0	0.3	0.0
High school diploma / GED	3.7	1.2	1.1	2.7**	0.0
Associate's degree	0.0	0.0	0.8	-0.8*	-0.7*

IV. Differences in service receipt for the ECCS, BCCS, and control groups

Exhibit IV.4. Length of stay, completion, and credential receipt in EDGE, existing SNAP E&T, or community-offered services (*continued*)

	ECCS group	BCCS group	Control group	ECCS group / Control Difference	BCCS group / Control Difference
Bachelor's degree	0.0	0.0	0.0	0.0	0.0
English proficiency certification or TOEFL	0.0	0.0	0.0	0.0	0.0
Occupational certificate or license	21.2	13.0	5.4	15.8***	7.8***
Other	3.8	1.4	1.0	2.8**	0.4
Sample size	399	415	368		

Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates cover the 12 months following random assignment.

***Significantly different from zero at the .01 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

*Significantly different from zero at the .10 level, two-tailed test.

Individuals in the ECCS and BCCS groups were more likely than those in the control group to complete activities or programs (Exhibit IV.4). Compared to individuals in the control group, individuals in the ECCS group were 24 percentage points more likely to complete activities or programs, and individuals in the BCCS group were 10 percentage points more likely to do so. The individuals in EDGE also were more likely than those in the control group to complete specific activities, such as general job skills training, occupational skills training, and, for ECCS group members only, education. The largest completion rate differences between the ECCS group and the control group were for general job skills training (18 percentage points) and occupational skills training (17 percentage points), whereas the largest difference between the BCCS group and the control group was for occupational skills training (8 percentage points). Individuals in the ECCS and BCCS groups were also more likely to receive an occupational certificate or license than the control group (16 and 8 percentage point differences, respectively).

For some activities, the differences in completion rates between research groups reflect that individuals in the EDGE group were more likely to start services than those in the control group. Among those who started an activity, individuals in the ECCS group were 12 percentage points more likely than those in the control group to complete an activity (p-value = 0.05, Appendix Table E.6).¹⁶ In contrast, there was no statistical difference between the BCCS group and the control group in completion rates among individuals who started an activity. Participants in the ECCS group also were more likely to receive a diploma, degree, certification, or license after completing the program, relative to participants in the control group. About 56 percent of individuals who started education or training in the ECCS group received one of these compared to 40 percent of individuals in the control group (Appendix Table E.6).

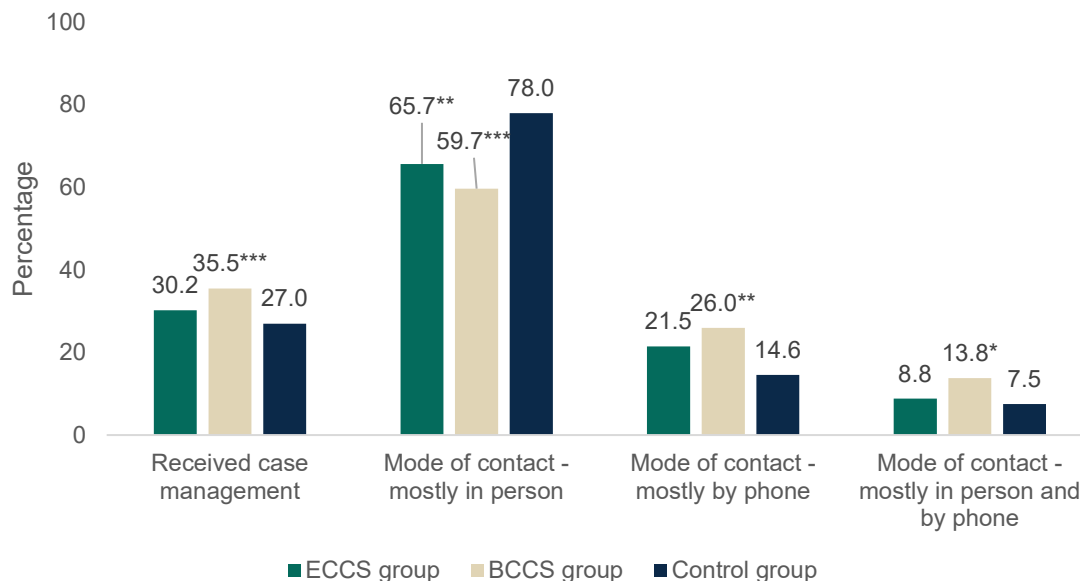
¹⁶ Appendix Table E.6 shows nonexperimental comparisons because the characteristics of participants and activity completers likely differ across the research groups.

C. Differences between research groups in receipt of case management and support services

EDGE group members were more likely than those in the control group to receive support services and were generally more likely than those in the control group to receive case management services.

Although the ECCS group was intended to receive intensive case management and the BCCS group was intended to receive light-touch case management, based on survey data the only significant difference between research groups was that the BCCS group was more likely than the control group to receive career counseling or one-on-one assistance from a career navigator or case manager (36 versus 27 percent; Exhibit IV.5). The average number of contacts was similar across the three groups (7 and 6 contacts for the ECCS and BCCS groups, respectively, and 6 contacts for the control group; Appendix Table E.8). In addition, individuals in the ECCS and BCCS groups were less likely to contact a career navigator or case manager in person; BCCS group members were more likely than control group members to contact career navigators or case managers by phone.

Exhibit IV.5. Receipt of case management through EDGE, existing SNAP E&T, or community-offered programs



Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates cover the 12 months following random assignment. Estimates are based on data from 399 ECCS group members, 415 BCCS group members, and 368 control group members who were surveyed.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

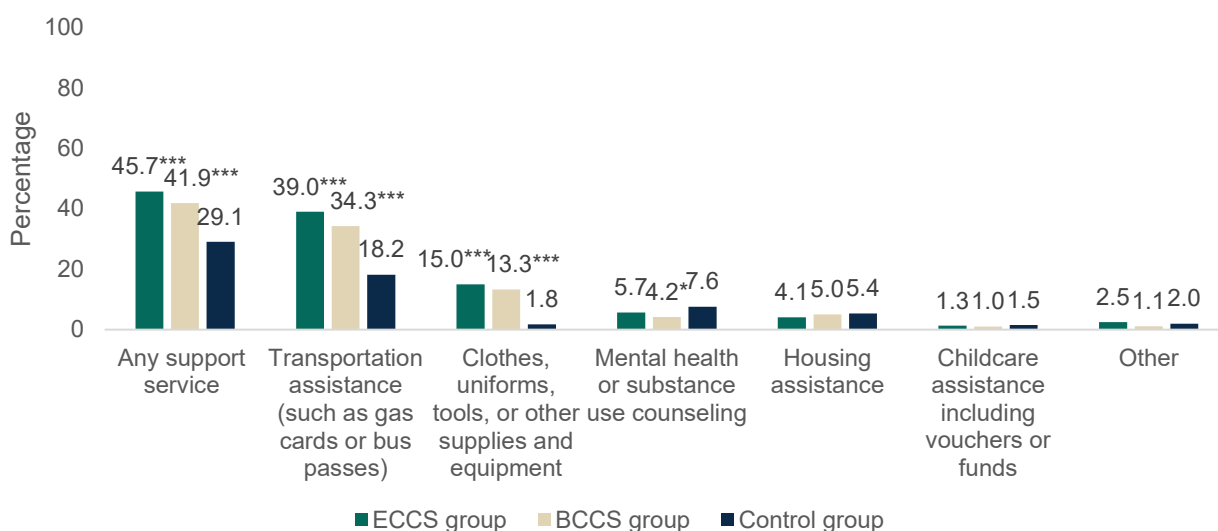
**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

IV. Differences in service receipt for the ECCS, BCCS, and control groups

Support services were more likely to be received by individuals in the ECCS and BCCS groups than by individuals in the control group. About 46 and 42 percent of individuals, respectively, in the ECCS and BCCS groups received a support service, compared to 29 percent in the control group (Exhibit IV.6). The largest differences were for the receipt of transportation assistance and clothes, uniforms, tools, and other supplies and equipment. About 4 percent of BCCS group members reported that they received mental health or substance use counseling during the follow-up period—an activity not included in the support service rates in Section C.1 of this chapter. This proportion was smaller than that for control group members (8 percent, p-value = 0.08).

Exhibit IV.6. Receipt of support services through EDGE, existing SNAP E&T, or community-offered programs



Source: SNAP employment and training evaluation 12-month survey, weighted data. “Other” included assistance with payment of utilities such as electricity, phone, heat, or gas; food assistance; and assistance with medical care.

Note: Estimates cover the 12 months following random assignment. Estimates are based on data from 399 ECCS group members, 415 BCCS group members, and 368 control group members who were surveyed.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

D. Differences between research groups in sanctions for noncompliance

As discussed earlier, Mississippi’s SNAP E&T program was mandatory, therefore those enrolled in the ECCS, BCCS, and control groups could be sanctioned for noncompliance. That is, their SNAP benefits could be suspended for a set period of time if they did not participate in assigned services. EDGE could affect the incidence of sanctioning in several ways. The smaller caseloads of EDGE case managers compared with the caseloads of case managers in the existing SNAP

IV. Differences in service receipt for the ECCS, BCCS, and control groups

program, might have allowed them to monitor EDGE group members' participation more closely than was possible for case managers' monitoring of the control group. Thus, if individuals enrolled in the pilot did not perform activities that met the state's work requirements, sanctions might be more likely for the EDGE group than for the control group. Alternatively, more contact and support from a case manager could encourage those in EDGE to stay engaged in services and decrease their likelihood of being sanctioned for noncompliance. In addition, those in EDGE were offered more services than individuals in the control group, which EDGE group members may have found more beneficial and resulted in more compliance. On the other hand, because some activities were required for EDGE, such as the EDGE class (for the ECCS group), those who were not interested in the class and had no other choices may have not completed the service, and were sanctioned as a result.

Data from the SNAP benefits administrative files indicate that BCCS group members were less likely than control group members to be sanctioned. About 16 percent of BCCS group members and 19 percent of control group members were sanctioned at some point during the 12-month follow-up period. This difference was most pronounced in the first quarter following random assignment (7 percentage point difference), less so in the second quarter (4 percentage point difference) and third quarter (4 percentage point difference), and was not statistically significant in the fourth quarter of follow-up (not shown in exhibit). There was no statistical difference between ECCS and control group members in the percentage of people sanctioned at some point during the 12-month follow-up period. About 11 percent of ECCS group and 14 percent of control group members were sanctioned in the first quarter following random assignment, but there were no statistical differences in subsequent quarters.

V. IMPACTS ON EMPLOYMENT, EARNINGS, RECEIPT OF PUBLIC ASSISTANCE, AND WELL-BEING OUTCOMES

This chapter focuses on whether EDGE was able to increase the likelihood that SNAP participants would obtain jobs that lead to economic self-sufficiency through increasing their income levels and reducing their need for public assistance benefits compared to what would have happened in the absence of EDGE. Specifically, this chapter examines whether the generally higher rates of engagement and service receipt among individuals in EDGE, as described in Chapter IV, translated into impacts on employment, earnings, and receipt of public assistance, as well as job characteristics, food security, health, well-being, and housing.

To estimate how EDGE affected individuals' outcomes, we compared the average outcomes of the EDGE group and the control group over the 12 months following random assignment. Because, on average, EDGE and control group members' baseline characteristics were the same at the time of random assignment (see Appendix C), differences in their outcomes after random assignment can be attributed to differences in the services offered to individuals in each group.

We used three sources of data to measure outcomes: (1) State UI wage records, (2) SNAP administrative data, and (3) 12-month follow-up survey data. UI wage records provided information on quarterly earnings, which were also used to construct measures of quarterly employment status. The SNAP administrative data obtained from MDHS were used to measure whether individuals participated in SNAP and TANF and the amount of benefits they received.¹⁷ The survey data were used to complement the UI wage records and provide more detail on individuals' employment and earnings. The survey asked respondents whether they were employed in the time between random assignment and the survey interview date and, if so, the number of jobs they held over that period and their employment status at the time of the interview. For each job reported, the survey captured the job start date, end date (if applicable), and characteristics of the job, such as hours worked per week, weekly earnings, job type, fringe benefits, and occupation. The survey was also the sole source of information on other outcomes such as self-assessed levels of food insecurity, health, well-being, and housing status.

Outcomes related to earnings and employment were analyzed using both UI wage records and survey data. Findings for these parallel analyses may differ because of differences in data coverage or quality, or differences in analysis samples and time periods covered by the follow-up period. For example, UI data are not subject to the recall error that is a potential problem in surveys. However, UI data do not cover all types of jobs, exclude jobs in certain industries, contain less detailed information on jobs, and are subject to other reporting errors.¹⁸ The omissions are nontrivial, and workers in sectors with no or partial coverage in UI data comprise about 10 percent of U.S. employment (Kornfeld and Bloom 1999; Hotz and Scholz 2002).

¹⁷ MDHS's data system did not integrate information from SNAP and Medicaid, so MDHS was not able to provide administrative data on Medicaid coverage.

¹⁸ In particular, UI data do not cover self-employed workers, railroad employees, workers in service for relatives, most agricultural labor, some domestic service workers, and part-time employees of nonprofit organizations (U.S. Department of Labor 2014).

Additionally, the UI data do not cover workers who are casually employed, such as day laborers or part-time helpers, and exclude most work that is part of the “gig economy” (Abraham et al. 2018; Katz and Krueger 2016, 2019). Survey data also have limitations. In addition to the potential for recall error in the survey data, these data were not available for everyone enrolled in the pilot because some individuals did not respond to the survey. The characteristics and experiences of individuals who responded to the survey may differ from those who did not respond.¹⁹

Further, the time periods for which data are available differ for the UI and survey data, which means that analysis samples for 12 months of follow-up are different for the two data sources. Analyzed survey data include individuals who were randomly assigned from March 2016 through December 2017, whereas analyzed UI wage records for EDGE include individuals who were randomly assigned from March 2016 through March 2017. The shorter time frame for the UI data reflects a typical lag in the availability of these administrative data that is associated with employer reporting schedules and the need for State agencies to process data after the data have been reported. As a result, the specific months included in the 12-month follow-up period covered by the two data sets also differ, with the survey-based results including individuals who were randomly assigned later in the pilot’s enrollment period compared with the UI-based results.²⁰ Differences in UI-based and survey-based results also could reflect changes that occurred over time in the implementation of EDGE activities. Finally, we note that even though there are differences between the data sources, each should provide unbiased estimates of the impacts of EDGE on the outcomes they measure, because the research groups were balanced along individual characteristics at the time of random assignment.

We estimated impacts on outcomes by comparing regression-adjusted averages for each research group. To improve the precision of the estimates, regressions controlled for the characteristics of individuals as measured at the time of random assignment. The control variables included demographic characteristics such as age, educational attainment, and number of children, and economic characteristics such as employment status and earnings at baseline.²¹ The analysis focused on comparing the outcomes for the BCCS and ECCS groups to the control group outcomes.²² We used t-tests to determine whether there were significant differences between the contrasted research groups that were unlikely to have occurred purely by chance. We also conducted F-tests to assess differences in impacts across subgroups.

¹⁹ An analysis of differences between survey responders and non-responders, as well as differences between research groups, in terms of individual characteristics, is presented in the technical supplement.

²⁰ For example, an individual who was randomly assigned in October 2017 and responded to the survey supplied information about their activities over the period of November 2017 through October 2018. Because UI data were not available after September 2018, this individual was included in the survey-based analysis, but not the UI-based analysis.

²¹ The full set of characteristics and additional information on the selection of these characteristics can be found in the technical supplement.

²² The BCCS and ECCS groups were not compared to each other because of low statistical power. That is, the sample sizes for the two EDGE groups were not large enough for us to detect likely magnitudes of differences between the two groups.

We calculated average outcomes for research groups by applying weights to each observation to help ensure that estimated differences between research groups were representative of all individuals enrolled in the pilot in Mississippi. These weights were constructed to reflect the random assignment process, and to adjust for survey nonresponse bias for analyses based on the survey data. (We describe weight construction in greater detail in the technical supplement.)

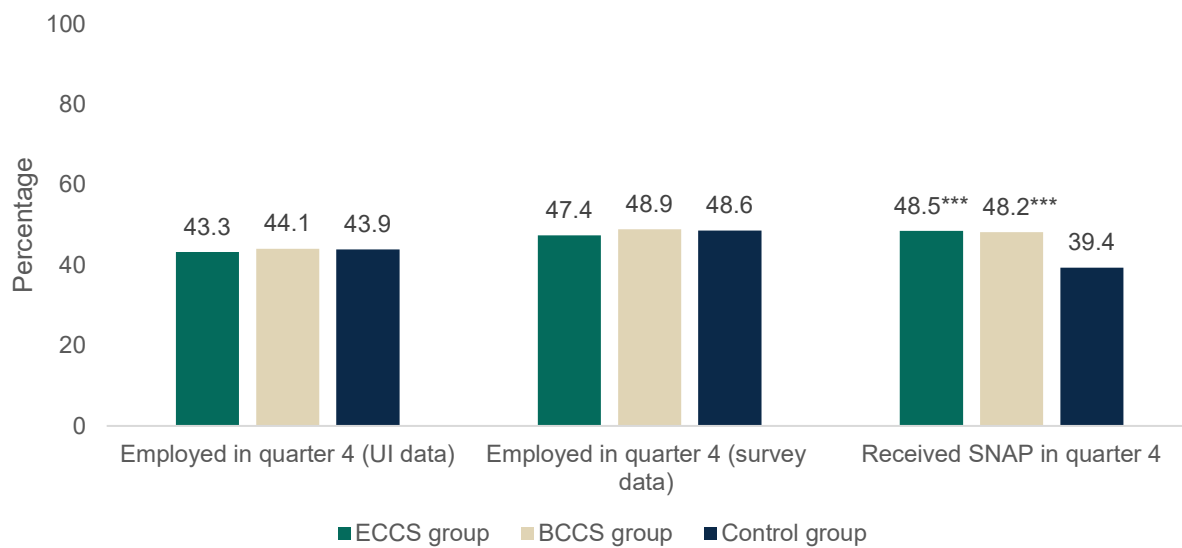
We estimated the impact of EDGE on many outcomes and across several subgroups, performing statistical tests for each. However, the likelihood that some estimates are found to be statistically significant simply by chance increases with the number of estimates tested, leading to false discovery of impacts not actually caused by EDGE. To help guard against this problem, known as multiple comparisons bias, we selected two primary (confirmatory) outcomes before analyzing the data. The primary outcomes were employment (based on both the UI and survey data) and SNAP participation—both in the fourth quarter after random assignment, the most recent observed period. The primary outcomes were defined over the final quarter of available data because many EDGE group members were expected to be engaged in education and training in the early quarters, which could reduce their opportunity to be employed during those early quarters. Although EDGE’s effect on earnings was an important outcome in the evaluation, we excluded it from the set of primary outcomes due to the lower statistical power of identifying an impact on earnings relative to employment. This reflects the large standard deviation of earnings for individuals enrolled in the pilot (and for the SNAP E&T population more broadly), which reduces the precision of the impact estimates. The estimated impacts on earnings and other outcomes and for subgroups are used to support findings for the primary outcomes by examining whether they fit within a pattern of similar impacts. We view these analyses as exploratory, providing policy-relevant but less rigorous evidence about program effects. This information can be valuable for continuous program improvement and for identifying potential hypotheses for more rigorous examination in the future.

Following a summary of key findings for this chapter, we present the impacts of EDGE on labor market outcomes (Section A) and on receipt of public assistance (Section B). We then present impacts on other outcomes, including food security, health, well-being, and housing status (Section C). Additional discussion of variations in the impacts on labor market outcomes, public assistance receipt, and food security across subgroups is presented in Appendix F. The technical supplement includes detailed descriptions of the data and methodology used to estimate impacts of EDGE.

Key findings:

- In Quarter 4, EDGE did not lead to an increase in employment, based on both the UI and survey data, and led to a statistically greater likelihood of participating in SNAP (Exhibit V.1). In Quarter 4, about 43 to 44 percent of individuals in each research group were employed based on the UI data, and 47 to 49 percent were employed based on the survey data. EDGE group members were more likely than control group members to participate in SNAP in Quarter 4 (49 and 48 percent in the ECCS and BCCS groups, respectively, versus 39 percent in the control group—9 percentage point differences).

Exhibit V.1. Employment and SNAP participation rates in Quarter 4



Source: SNAP employment and training evaluation UI wage records, weighted data, SNAP employment and training evaluation 12-month survey, weighted data. SNAP employment and training evaluation SNAP administrative data, weighted data.

Note: Estimates are based on UI data from 391 ECCS group members, 387 BCCS group members, and 392 control group members; on survey data from 399 ECCS group members, 415 BCCS group members, and 368 control group members; and on SNAP administrative data from 737 ECCS group members, 736 BCCS group members, and 735 control group members.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

- Although EDGE did not lead to an increase in employment in Quarter 4, there is some evidence from UI wage records that they led to earnings gains in Quarter 3. In Quarter 3, relative to control group members, ECCS group members earned \$260 more and BCCS group members earned \$247 more (p-value = 0.08 between ECCS and control groups; p-value = 0.09 between BCCS and control groups). Both estimated impacts were statistically significant; a similar pattern was seen when using the survey data, although the impacts were smaller and not statistically significant. Findings from prior studies of workforce programs have shown that it can take more than a year before economic impacts begin to emerge (Card et al. 2018). Thus, a longer-term follow-up period will be analyzed in the final evaluation report to fully assess the effects of EDGE on labor market outcomes.
- As in Quarter 4, EDGE led to a statistically greater likelihood of participating in SNAP in Quarters 2 and 3. Consistent with these findings, average SNAP benefit amounts were significantly higher for EDGE group members than for control group members in all four quarters. There were no impacts on TANF participation, TANF benefit amounts, or Medicaid coverage.

V. Impacts on employment, earnings, receipt of public assistance, and well-being outcomes

- EDGE decreased the rate of food insecurity for individuals in the BCCS group, relative to those in the control group (54 versus 65 percent) and decreased the rate of very low food security—a severe form of food insecurity (37 versus 47 percent). However, there were no significant differences in rates of food insecurity between ECCS and control group members.
- Although there were generally no statistically significant differences between the EDGE groups and the control group for other outcome measures related to health and well-being, the ECCS group was less likely than the control group to be in very good or excellent health and the BCCS group was less likely than the control group to be homeless.

A. Impacts of EDGE on labor market outcomes

This section presents impacts on key labor market outcomes for each of the EDGE groups relative to the control group. Outcomes from both the UI wage records and survey are measured by quarter after random assignment and over the full first year after random assignment, starting with the quarter after the one in which random assignment occurred. Some outcomes based on the survey data are measured at the time of the survey, approximately 12 months after random assignment.²³

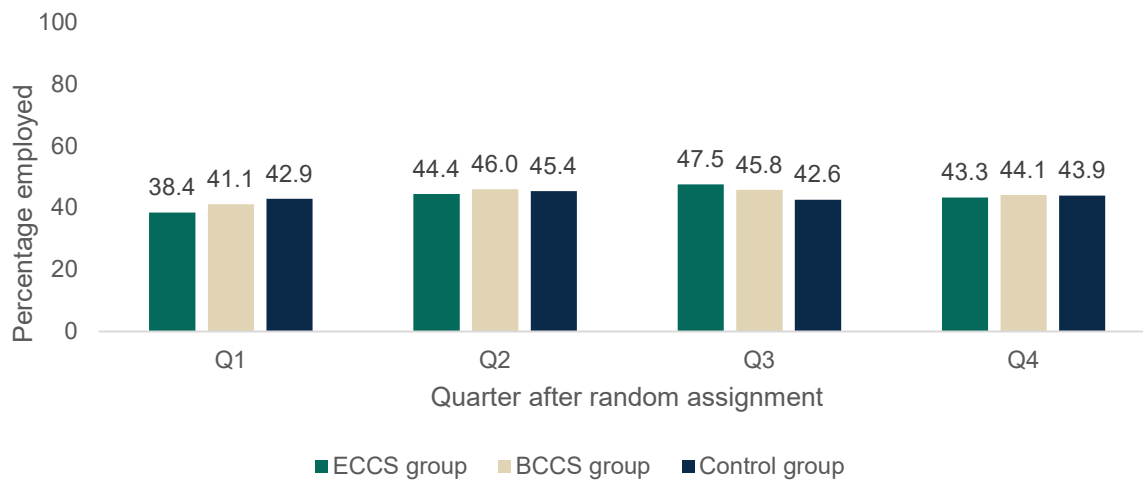
1. Impacts on employment, earnings, and hours worked

Employment. EDGE did not lead to an increase in employment in Quarter 4 using either the UI wage records or the survey data (Exhibits V.2 and V.3). Based on the UI data, about 43 to 44 percent of individuals in each research group were employed in Quarter 4 and, based on the survey data, about 48 to 49 percent of individuals in each research group were employed.

The ECCS and BCCS groups had lower employment rates than the control group in Quarters 1 and 2 when EDGE group members were more likely to have been participating in enhanced education and training services (as discussed in Chapter IV, $p\text{-value} = 0.07$ between ECCS and control groups in Quarter 2). The differences in these quarters were statistically significant according to the survey data, but not the UI data. Starting in Quarter 3, these differences disappeared as the treatment groups' employment rates caught up to the control group's employment rate.

²³ For survey-based outcomes, the quarter after random assignment is defined as the first three months after the month of random assignment. The months included in this quarter sometimes differ from the calendar quarter, which is used to define the first quarter after random assignment for outcomes based on UI wage records.

Exhibit V.2. Quarterly employment rates based on UI wage records



Source: SNAP employment and training evaluation UI wage records, weighted data.

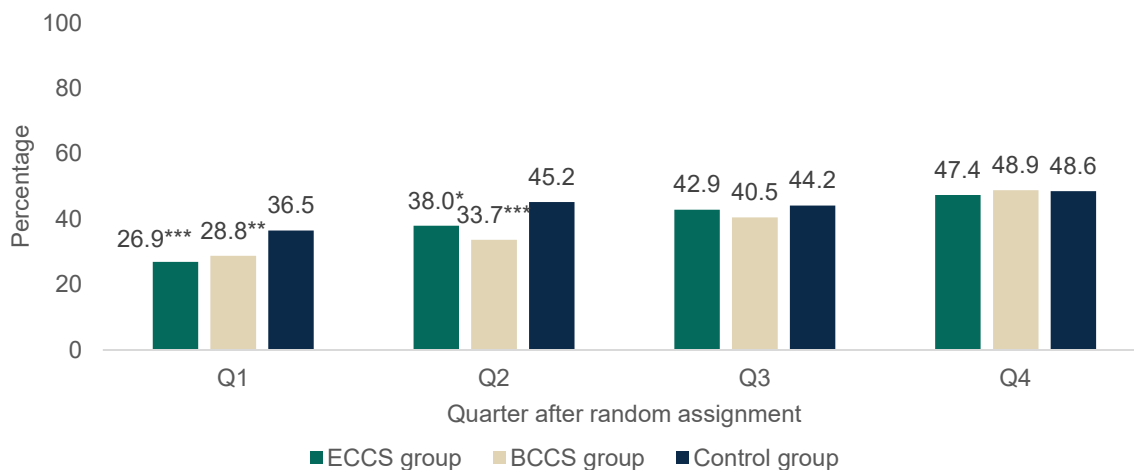
Note: Estimates are based on data from 391 ECCS group members, 387 BCCS group members, and 392 control group members.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

Exhibit V.3. Quarterly employment rates based on survey data



Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates are based on data from 399 ECCS group members, 415 BCCS group members, and 368 control group members.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

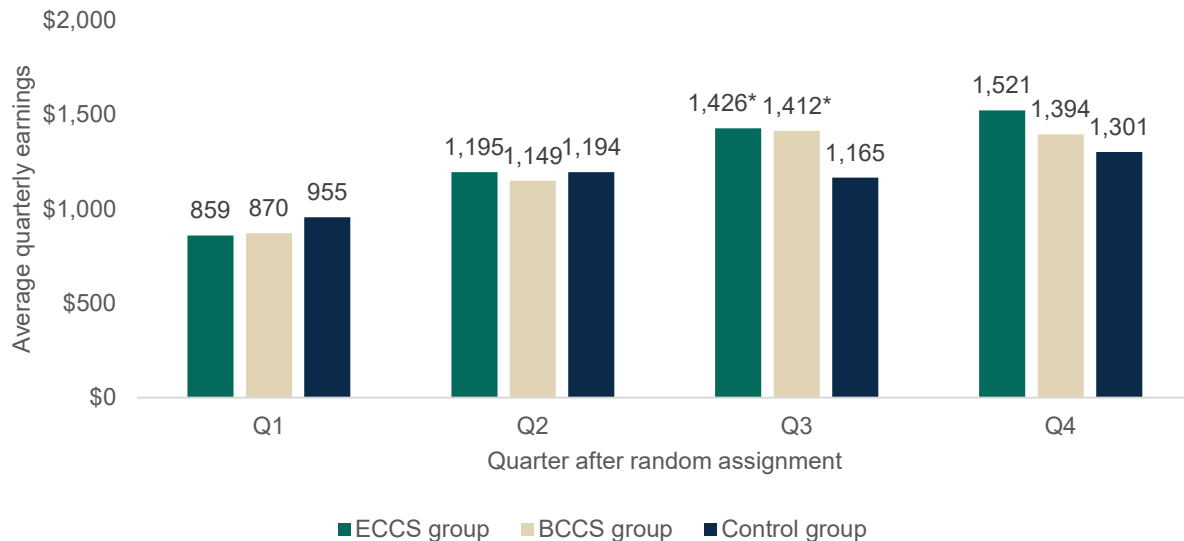
*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

Earnings. As with the findings on employment, there were small—and mostly negative—differences in average earnings between both of the EDGE groups and the control group in Quarters 1 and 2. In Quarter 1, on average, the ECCS group earned \$481 less than the control group, and the BCCS group earned \$557 less than the control group based on the survey data (Exhibit V.4). Using the UI data, we observed a similar pattern of effects for the ECCS and BCCS groups (although the impacts were much smaller and statistically insignificant; Exhibit V.5).

There was some evidence that EDGE led to earnings gains in Quarters 3 and 4 (Exhibits V.4 and V.5). Based on the UI data, the ECCS and BCCS groups earned an average of \$1,426 and 1,412 in Quarter 3, respectively compared to \$1,165 for the control group. The associated \$260 impact for the ECCS group and \$247 impact for the BCCS group are statistically significant (p-value = 0.08 between ECCS and control groups; p-value = 0.09 between BCCS and control groups). The \$220 UI-based earnings impact for the ECCS group in Quarter 4 is not statistically significant but is similar in magnitude to the Quarter 3 estimate.

The survey data do not corroborate these findings. The estimated impact in Quarter 4 was \$24 for the ECCS group and -\$56 for the BCCS group (but not significant), relative to the control group. Average earnings as reported in the survey were somewhat larger than the average earnings reported in the UI wage records.

Exhibit V.4. Quarterly earnings based on UI wage records



Source: SNAP employment and training evaluation UI wage records, weighted data.

Note: Estimates are based on data from 391 ECCS group members, 387 BCCS group members, and 392 control group members.

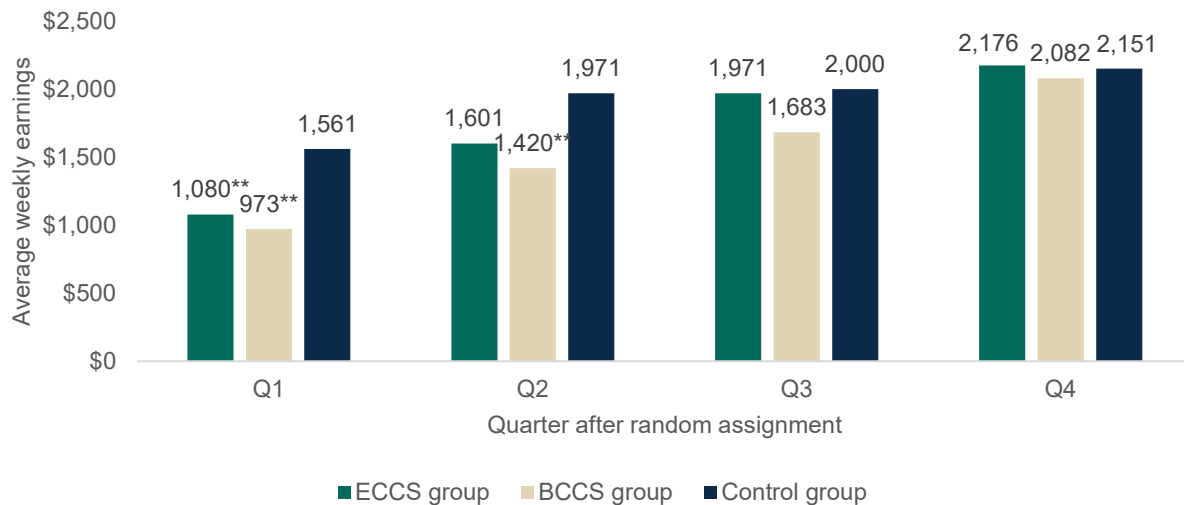
***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

V. Impacts on employment, earnings, receipt of public assistance, and well-being outcomes

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

Exhibit V.5. Average quarterly earnings based on survey data



Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates are based on data from 399 ECCS group members, 415 BCCS group members, and 368 control group members.

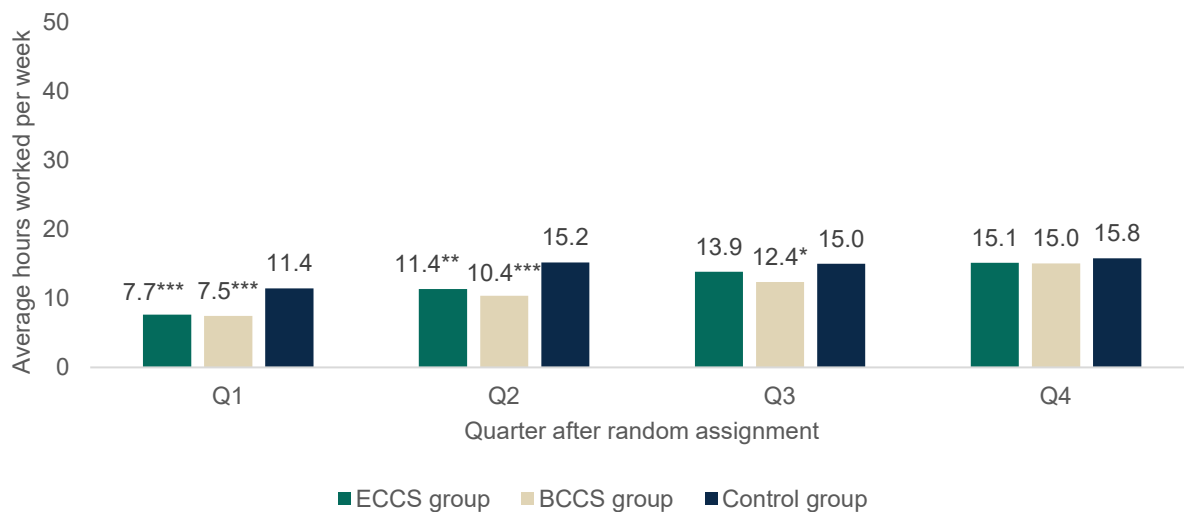
***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

Hours worked. During the first two quarters after random assignment, individuals in the ECCS and BCCS groups worked roughly 4 to 5 hours less per week on average than individuals in the control group (Exhibit V.6). These impacts diminished in the following two quarters to an estimated difference of less than 1 hour in Quarter 4, which was not statistically significant. To put these differences into context, individuals in any research group worked about 11 to 14 hours per week on average in Year 1.

Exhibit V.6. Average hours worked per week based on survey data



Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates are based on data from 399 ECCS group members, 415 BCCS group members, and 368 control group members.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

2. Impacts on characteristics of current jobs

Exhibit V.7 presents characteristics of jobs at the time of the 12-month survey.²⁴ This information was collected in the 12-month follow-up survey and was available only for individuals who were employed at the time of the interview (41 percent of the ECCS group, 37 percent of the BCCS group, and 39 percent of the control group). For this reason, the measures in Exhibit V.7 are non-experimental and the results do not represent the causal effects of EDGE.

Among individuals who were employed at the time of the 12-month follow-up survey, EDGE group members and control group members held jobs with similar characteristics. There were no statistically significant differences in receipt of employer-offered benefits and generally no differences in hours worked per week or weekly earnings across the research groups. The majority of currently employed individuals in each research group worked full time (60 and 61 percent of ECCS and BCCS group members and 53 percent of control group members). Over three-quarters of individuals in all three research groups earned less than \$500 per week. Close to two-thirds of individuals received an employer-offered benefit, with the most common benefits being health insurance and paid time off.

²⁴ For individuals who were employed at the time of the survey, these measures capture the job in which they were working at that time (their “current job”). If sample members were working two or more jobs at the time of the survey, the job where they worked the most hours was considered their “current job.”

Exhibit V.7. Characteristics of current jobs, among individuals employed at the time of the interview and based on 12-month survey data

Characteristic	ECCS group	BCCS group	Control group	ECCS group / Control Difference	BCCS group / Control Difference
Hours worked per week (%)					
Less than 20	23.0	16.2	17.3	5.7	-0.4
21 to 34	17.2	22.7	29.6	-12.4**	-7.4
35 or more (employed full time)	59.8	61.1	53.0	6.8	7.7
Average	33.6	35.0	33.4	0.2	1.4
Weekly earnings (%)					
\$1 to \$499	79.3	77.1	84.4	-5.1	-6.9
\$500 to \$999	17.4	21.9	12.6	4.8	9.1*
\$1,000 to \$1,499	2.4	1.0	3.0	-0.6	-2.2*
\$1,500 to \$2,000	0.9	0.0	0.0	0.9	0.0
\$2,000 and above	0.0	0.0	0.0	0.0	0.0
Benefits available at job (%)					
Any benefit	66.6	65.0	63.3	3.3	1.0
Health insurance or HMO/PPO plan membership	53.3	53.2	46.7	6.6	5.6
Dental insurance	46.1	47.3	42.0	4.1	4.8
Paid vacation	43.0	45.2	39.6	3.4	5.0
Paid holidays	43.8	43.8	34.9	8.9	8.9
Paid sick leave	35.4	32.2	26.2	9.2	6.1
Any paid time off	55.5	53.0	50.0	5.4	3.0
Pension or retirement benefits	46.4	42.0	40.8	5.6	1.1
Tuition assistance or reimbursement	17.8	21.8	17.2	0.5	3.9
Type of employment (%)					
Regular full- or part-time	82.6	81.8	84.1	-1.4	-2.4
Temporary or on-call	8.8	8.8	3.1	5.7**	5.7**
Self-employed or independent contractor or consultant	4.7	8.1	10.6	-5.9**	-2.1
Day laborer	3.9	1.3	2.2	1.6	-1.2
Occupation					

V. Impacts on employment, earnings, receipt of public assistance, and well-being outcomes

Characteristic	ECCS group	BCCS group	Control group	ECCS group / Control Difference	BCCS group / Control Difference
Food and Beverage Serving Workers	6.9	6.6	7.8	-1.0	-1.4
Retail Sales Workers	6.9	7.0	8.2	-1.4	-1.1
Cooks and Food Preparation Workers	4.0	5.3	7.5	-3.5	-2.5
Building Cleaning and Pest Control Workers	3.7	7.7	7.5	-3.7*	0.3
Material Moving Workers	5.7	5.9	5.5	0.2	0.2
Food Processing Workers	3.8	5.6	2.8	1.0	2.7
Material Recording, Scheduling, Dispatching, and Distributing Workers	4.5	1.3	3.5	1.0	-2.1
Other Production Occupations	4.5	2.7	0.7	3.7***	2.0
Construction Trades Workers	3.4	4.1	0.6	2.7**	3.5**
Nursing, Psychiatric, and Home Health Aides	5.8	2.6	1.9	4.0*	1.0
Sample size	161	159	146		

Source: SNAP employment and training evaluation 12-month survey, weighted data.

***Significantly different from zero at the .01 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

*Significantly different from zero at the .10 level, two-tailed test.

Most employed individuals in all three research groups were regular status employees working full time or part time. There were statistically significant differences in the percentages of individuals in other types of employment across research groups. ECCS group members (9 percent) and BCCS group members (9 percent) were more likely to be temporary or on-call employees than control group members (3 percent). ECCS group members were less likely to be self-employed or independent contractors than control group members (5 versus 11 percent). Common occupations included food and beverage services, retail sales, cooking and food preparation, and moving services.

3. Conclusion

EDGE group members earned less than control group members in Quarters 1 and 2 while they were more likely to be receiving EDGE. These earnings differences diminished in Quarters 3 and 4 as individuals in the EDGE group completed services and began looking for and finding jobs. Some positive impacts are seen in those quarters, although not on employment in Quarter 4. Past studies of workforce programs have shown that it can take more than a year before economic impacts emerge (Card et al. 2010, 2018; D'Amico et al. 2015). Indeed, the types of services provided to EDGE group members focused on education and training in early quarters, likely displacing employment during this period. Results from the longer-term follow-up period—

which will extend to 3 years—are needed to fully assess the effects of EDGE on employment and earnings.

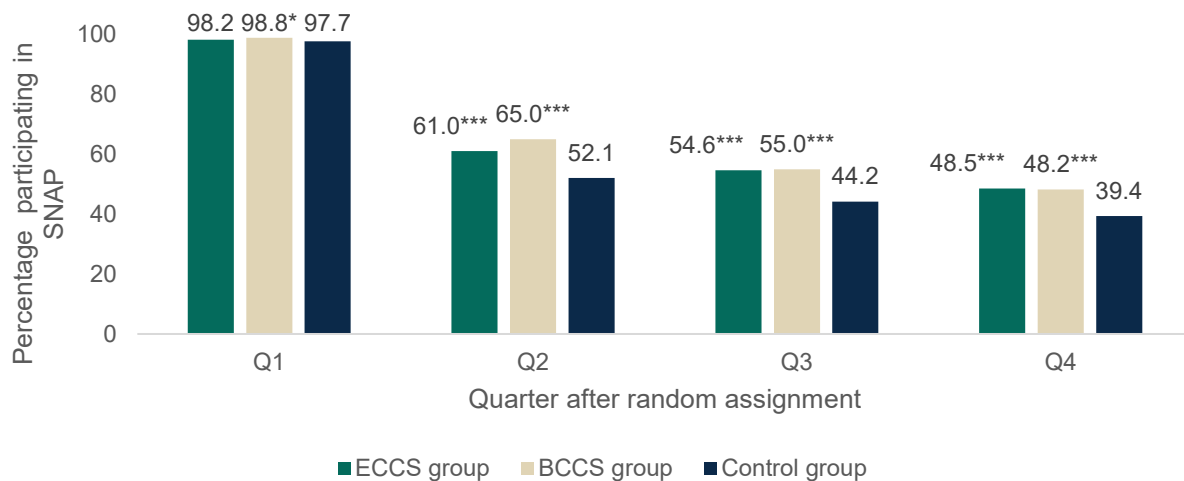
B. Impacts of EDGE on receipt of public assistance

This section presents impacts on the receipt of public assistance, as measured by SNAP administrative records and survey data. Most of the outcomes measuring receipt of SNAP and TANF are based on the administrative data and are measured for each quarter after random assignment and over the first year after random assignment. Receipt of other forms of public assistance are based on the survey data and capture receipt during the first year after random assignment.

1. Impacts on SNAP participation

EDGE led to a statistically greater likelihood of participating in SNAP in Quarter 4 after random assignment. About 49 percent of ECCS group members and 48 percent of BCCS group members participated in SNAP in Quarter 4 compared to 39 percent of control group members (Exhibit V.8). Impacts of EDGE on SNAP participation reflect smaller decreases over time in the rate of SNAP participation for the EDGE groups than for the control group. For example, between Quarters 1 and 4, SNAP participation rates decreased from 98 to 49 percent among ECCS group members—a 49 percentage point change—and from 98 to 39 percent among control group members—a 59 percentage point change. EDGE group members were also more likely than control group members to participate in SNAP in Quarters 2 and 3.

Exhibit V.8. Quarterly SNAP participation rates based on SNAP administrative data



Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

Note: Estimates are based on data from 737 ECCS group members, 736 BCCS group members, and 735 control group members.

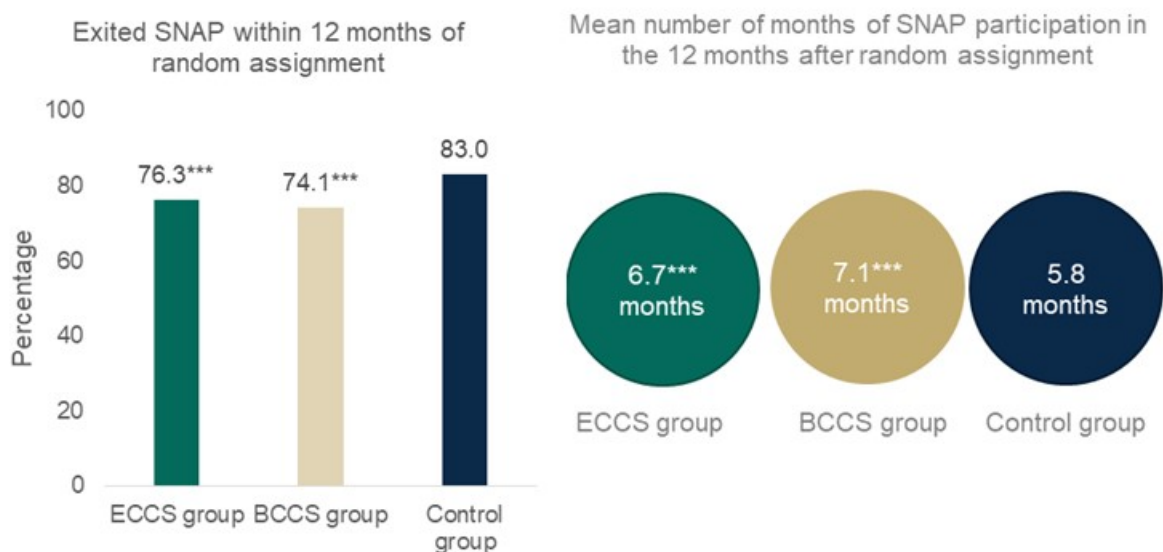
***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

ECCS group members participated in SNAP for 6.7 of the 12 months following random assignment compared to 5.8 months for control group members (Exhibit V.9). The difference was slightly larger for BCCS group members (7.1 versus 5.8 months). The majority of individuals in each research group exited SNAP within 12 months of random assignment, although SNAP exit rates were lower for EDGE group members than for control group members (76 percent of ECCS group members and 74 percent of BCCS group members exited SNAP compared with 83 percent of control group members). The percentage of individuals who exited SNAP within the 12 months after random assignment include those who left and did not re-enter SNAP in the 12-month follow-up period, as well as those who left and re-entered before the end of the period. Thus, even though 24 percent of the ECCS group participated in SNAP for the full year, SNAP participation in Quarter 4 was higher (49 percent), reflecting that individuals left and re-entered SNAP by Quarter 4.

Exhibit V.9. Participation in SNAP based on SNAP administrative data



Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

Note: Estimates are based on data from 737 ECCS group members, 736 BCCS group members, and 735 control group members.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

Consistent with the findings for SNAP participation rates, average SNAP benefit amounts were significantly higher for EDGE group members than for control group members in all four quarters. Relative to the control group, the average benefits received in Year 1 by ECCS and BCCS group members were \$187 and \$273 higher, respectively (Exhibit V.10). Average SNAP benefit amounts were highest in Quarter 1 and decreased in each subsequent quarter, mostly reflecting people leaving SNAP over time. During Quarter 1, the difference in benefit amounts

V. Impacts on employment, earnings, receipt of public assistance, and well-being outcomes

relative to the control group was higher for the BCCS group (\$68) than for the ECCS group (\$27), but by Quarter 4 these differences were roughly equivalent (\$54 and \$53 for BCCS and ECCS, respectively).

Exhibit V.10. Impacts on average monthly SNAP benefit amount per Quarter and in Year 1, based on SNAP administrative data

	ECCS group	BCCS group	Control group	ECCS group / Control Difference	BCCS group / Control Difference
Average SNAP benefits received (\$)					
Quarter 1	512	552	484	27**	68***
Quarter 2	308	339	257	50***	82***
Quarter 3	266	278	209	56***	69***
Quarter 4	241	243	188	53***	54***
Year 1	1,326	1,412	1,139	187***	273***
Average SNAP benefits received as a percentage of maximum benefit amount ^a					
Quarter 1	77.0	81.4	70.4	6.7***	11.1***
Quarter 2	44.9	49.7	36.0	8.9***	13.7***
Quarter 3	37.4	40.2	29.0	8.4***	11.2***
Quarter 4	33.6	35.3	26.3	7.4***	9.0***
Year 1	48.5	51.9	40.7	7.8***	11.1***
Sample size	737	736	735		

Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

^a Maximum household SNAP benefit amounts normalized by household size.

***Significantly different from zero at the .01 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

*Significantly different from zero at the .10 level, two-tailed test.

Looking at SNAP benefit amounts received as a percentage of the maximum possible benefit (based on SNAP unit size) provides a better comparison across SNAP units of different sizes than the nominal benefit amounts. In Quarter 1, EDGE group members received, on average, about 77 to 81 percent of the maximum possible benefit compared to 70 percent for the control group (Exhibit V.10). Benefit amounts for the ECCS and BCCS groups decreased over time, to 34 and 35 percent of the maximum, respectively, in Quarter 4. In comparison, benefits for the control group decreased to 26 percent of the maximum benefit amount in Quarter 4. Thus, in Quarter 4, the average benefit received as a percentage of the maximum possible benefit was about 7 percentage points higher for the ECCS group and 9 percentage points higher for the BCCS group than for the control group. For all research groups, most of the decrease in the percentage of the maximum benefit amount received over time can be attributed to individuals

exiting SNAP. For example, among the EDGE group, the percentage of the maximum benefit amount received decreased by about 45 percent between Quarters 1 and 4. During this same period, the percentage of EDGE group members participating in SNAP decreased by about 45 percent.

2. Impacts on TANF and other forms of public assistance

The impacts on TANF participation were estimated using SNAP administrative data. Although EDGE increased participation in SNAP in all four quarters, there were no impacts on participation in TANF throughout the follow-up period. Very few (or no) individuals in each research group participated in TANF in each quarter (Exhibit V.11).

Exhibit V.11. Quarterly TANF participation rates, based on SNAP administrative data

TANF participation (%)	ECCS group	BCCS group	Control group	ECCS group / Control Difference	BCCS group / Control Difference
Quarter 1	0.0	0.0	0.0	0.0	0.0
Quarter 2	0.0	0.4	0.1	-0.1	0.3
Quarter 3	0.3	0.6	0.3	0.1	0.3
Quarter 4	0.5	0.7	0.5	-0.1	0.1
Sample size	737	736	735		

Source: SNAP employment and training evaluation SNAP administrative data, weighted data.

Note: Estimates are based on data from 737 ECCS group members, 736 BCCS group members, and 735 control group members.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

The impacts on receipt of other forms of public assistance were estimated using the survey data. The survey measured receipt of general assistance; unemployment insurance; Supplemental Security Income (SSI); Section 8, Housing Choice Vouchers, or Public Housing Assistance; Medicaid; and the Supplemental Nutrition Program for Women, Infants, and Children (WIC). With the exception of slightly lower rates of receipt of general assistance and housing assistance for ECCS members relative to control group members, individuals in each research group were equally likely to receive public assistance benefits (p-value = 0.07 for general assistance receipt Exhibit V.12). The most commonly received benefits were Medicaid (about 17 percent) and SSI (about 14 percent).

Exhibit V.12. Impacts on participation in other public assistance programs in the 12 months since random assignment, based on 12-month survey data

Program	ECCS group	BCCS group	Control group	ECCS group / Control Difference	BCCS group / Control Difference
Public assistance receipt in the 12 months since random assignment (%)					
General assistance	0.0	0.4	0.7	-0.6*	-0.3
Unemployment insurance	3.4	2.0	2.0	1.4	0.0
Supplemental Security Income	13.4	14.1	14.5	-1.1	-0.3
Section 8, Housing Choice Vouchers, or Public Housing Assistance	4.2	7.2	7.7	-3.5**	-0.5
Medicaid	17.3	16.5	19.1	-1.8	-2.7
Supplemental Nutrition Program for Women, Infants, and Children (WIC)	4.4	8.0	7.0	-2.6	0.9
Sample size	399	415	368		

Source: SNAP employment and training evaluation 12-month survey, weighted data.

***Significantly different from zero at the .01 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

*Significantly different from zero at the .10 level, two-tailed test.

3. Conclusion

EDGE led to a statistically greater likelihood of participating in SNAP in Quarters 2 through 4. About 48 to 49 percent of ECCS and BCCS group members participated in SNAP in Quarter 4 compared with 39 percent of the control group. These impacts reflect smaller decreases over time in the rate of SNAP participation for the EDGE groups than for the control group.

Conceptually, SNAP E&T services are designed to increase employment and earnings and, thus, reduce the need for receiving SNAP or other public assistance. However, EDGE group members had lower earnings than the control group based on survey data in the first two quarters after random assignment. This increased the likelihood that EDGE group members would continue to be eligible for and participate in SNAP—or, conversely, decreased the likelihood that they would exit SNAP. This also increased the likelihood that EDGE group members' SNAP benefit amounts would be higher than those for the control group. EDGE group members also may have been more likely to continue to participate in SNAP because of the EDGE-provided education and training activities and, for some individuals, because the EDGE-provided services addressing barriers to employment would be discontinued if they no longer participated in SNAP.

Because it can take more than a year before economic impacts emerge, we cannot yet observe the full impact of EDGE on SNAP participation. The analysis based on data from the longer-

term follow-up period will fully assess the effects of EDGE on SNAP participation in the final evaluation report.

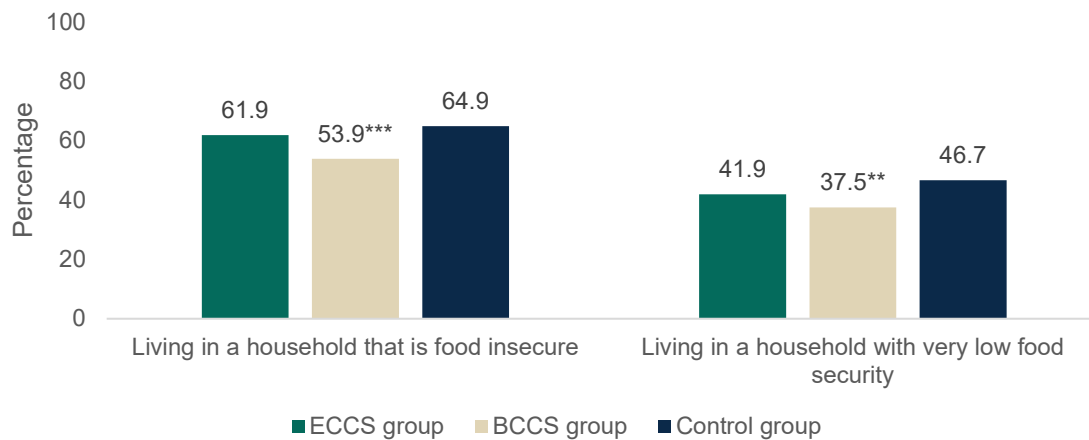
C. Impacts of EDGE on food security, health, well-being, and housing status

This section presents EDGE's effects on food security, health, well-being, and housing status, as reported in survey data. Most of these outcomes reflect individuals' circumstances at the time of the 12-month follow-up survey. An exception was food security status, which was reported based on the 30 days before the survey.²⁵

EDGE group members had lower food insecurity rates than control group members, but the difference was statistically significant only for the BCCS group. About 54 percent of BCCS group members were food insecure compared to 65 percent of control group members—an 11 percentage point difference (Exhibit V.13). For very low food security—a severe form of food insecurity—there was a 9 percentage point difference between the BCCS and control groups (38 versus 47 percent). The differences in food insecurity and very low food security rates between ECCS and control group members were also negative but smaller (between 3 and 5 percentage points) and not statistically significant.

²⁵ Food security is having access at all times to enough food for an active, healthy life. Individuals who experienced food access limitations due to lack of money or other resources are said to be food insecure. Those who cannot afford enough to eat experience a particularly severe form of food insecurity referred to as very low food security. The outcomes of food insecurity and very low food security are based on responses to 10 questions about difficulty meeting basic food needs due to lack of money to be spent on food. Individuals who affirmed at least 3 out of 10 questions were classified as food insecure; those who affirmed at least 6 were classified as having very low food security.

Exhibit V.13. Impacts on food security, based on 12-month survey data



Source: SNAP employment and training evaluation 12-month survey, weighted data.

Note: Estimates are based on data from 399 ECCS group members, 415 BCCS group members, and 368 control group members. Food security measured over the 30 days prior to the survey interview.

***Difference between ECCS/BCCS and control groups is significantly different from zero at the .01 level, two-tailed test.

**Difference between ECCS/BCCS and control groups is significantly different from zero at the .05 level, two-tailed test.

*Difference between ECCS/BCCS and control groups is significantly different from zero at the .10 level, two-tailed test.

Among the other outcome measures in Appendix Table F.24, there were either no statistically significant differences between EDGE group and control group members, or the differences were significant but only a small fraction of one percent in magnitude. One exception was for individuals' self-reported health status. About 27 percent of ECCS group members reported having very good or excellent health at the time of the survey compared to 34 percent of control group members; there was no statistical difference in self-reported health statuses between BCCS and control group members. Another exception was housing status: one percent of BCCS group members were homeless at the time of the 12-month survey compared to 4 percent of control group members; the difference in homeless rates between ECCS and control group members was not statically significant.

VI. ANALYSIS OF EDGE COSTS

This chapter describes the total cost of the planning and implementation of EDGE through calendar year 2017. It builds on the description of services received by EDGE group members by providing additional information about the cost of EDGE overall and for specific services. This chapter presents information about the costs incurred by MDHS and the partners and providers with whom it contracted to set up EDGE before the beginning of enrollment, to recruit people into the pilot, and to provide services to EDGE group members. It presents data on the total costs of services; costs covered by the FNS grant versus other funding sources; costs by category, such as staff costs and overhead costs; and the costs of key services, including occupational skills training and case management. The costs presented in this chapter exclude costs associated with the time pilot staff spent supporting the evaluation, including activities such as random assignment.²⁶

The analyses were based on cost data provided by MDHS and by partners and providers with direct subcontracts through the FNS grant. Cost data were reported through standardized cost workbooks submitted for the planning period and on a quarterly schedule during service delivery. The workbooks captured data on a set of four core cost categories, or cost ingredients, including staff, direct service, supplies and equipment, and overhead and operating costs (Exhibit VI.1). These costs included costs that were paid for with FNS grant funds as well as costs that were paid for with funds leveraged from other sources. The cost ingredients were used to build an estimate of the total costs incurred in planning for and operating EDGE by summing the costs across the four cost categories.²⁷

Exhibit VI.1. Ingredients of cost estimates

Staff costs	Direct service costs	Supply and equipment costs	Overhead and operating costs
• Salaries and fringe benefits • Volunteer time	• Service contracts • Support services • Partner and provider service costs	• Supplies • Leases or purchases of equipment	• Overhead • Facilities • Utilities • Indirect costs

Note: Cost workbooks asked for the total costs of the services provided to individuals receiving EDGE. For all costs reported in the workbooks, respondents were asked to report the percentage of the cost that was funded by the FNS grant. Remaining costs were assumed to be covered by other sources.

²⁶ The cost workbooks asked for the percentage of time each staff member spent on evaluation activities. To exclude evaluation activities from the cost analyses presented in this chapter, we reduced the number of hours each staff member reported spending on EDGE by the percentage of hours they reported spending on evaluation activities. Information about the percentage of time spent on evaluation activities was collected for every staff member listed in the planning period and quarterly workbooks and varied over time.

²⁷ The ingredient, or build-up, methodology used for the cost data collection and analysis has been used in similar evaluations of public workforce programs and is detailed in *Levin, Henry M., and Patrick J. McEwan. Cost-Effectiveness Analysis: Methods and Applications. Thousand Oaks, CA: SAGE Publications, 2001.*

MDHS, partners, and providers each submitted workbooks with their own cost information (Exhibit VI.2). In addition, a web survey collected data on the percentage of time provider staff spent on key services for EDGE group members, such as case management, formal assessments, and structured group activities (such as job readiness training). Information about the average percentage of time staff spent on key services was used to allocate the costs of

Exhibit VI.2. Snapshot of EDGE cost data collection

- DHS, five community colleges, JMG, and NSPARC each submitted workbooks.
- Workbooks were submitted for the planning period (April 2015–March 2016) and seven quarterly service delivery periods (March 2016–December 2017).

staff, supplies and equipment, and overhead and operating costs to the direct services reported in the workbooks. These allocated costs were added to the costs of direct services to estimate the total cost of each service. The estimated costs of support services, other direct service contracts, work-based learning, occupational skills training, and education do not include allocated costs for staff, supplies and equipment, or overhead and operating costs. We assumed the staff time and associated costs for these types of services are represented in the estimated cost of case management.

This chapter summarizes costs from the planning period (April 2015 through March 2016) and service delivery (March 2016 through December 2017).²⁸ Costs presented in the tables and figures have been adjusted to 2016 dollars, as this was the year that MDHS started incurring costs for providing EDGE services. The final report will present the final costs for both the EDGE and control group services, as well as a benefit-cost analysis, which will compare costs and benefits for the EDGE and control group members, from the perspectives of individuals, government, and society. The final report also will include estimates of costs per person for EDGE and control group services. The methodologies used in the cost data collection and in the analyses presented in this chapter are provided in the technical supplement. The following is a summary of key findings.

Key findings:

- MDHS and its partners and providers reported spending \$5,601,000 between April 2015 to December 2017 on EDGE services, including \$1,090,000 on the planning period and \$4,511,000 on service delivery.
- The FNS grant funded 76 percent of EDGE, and providers leveraged other funding sources for the remaining 24 percent.

²⁸ MDHS elected to report costs on a quarterly schedule based on the date of the pilot's start, March 23, 2016. As a result, this report includes costs through December 23, 2017. All grantees were given the choice of adjusting their quarterly reporting periods for cost data collection to one of the following: calendar quarters, rolling quarters from the date of the pilot's start, or rolling quarters from the end of the month after start. MDHS was the only grantee to choose rolling quarters from the date of the pilot's start (most chose calendar quarters).

VI. Analysis of EDGE costs

- Case management was the largest estimated service cost (\$381,000; 7 percent of total costs), followed by job readiness or life skills workshops, which were primarily the EDGE class classes (\$298,000; 5 percent).

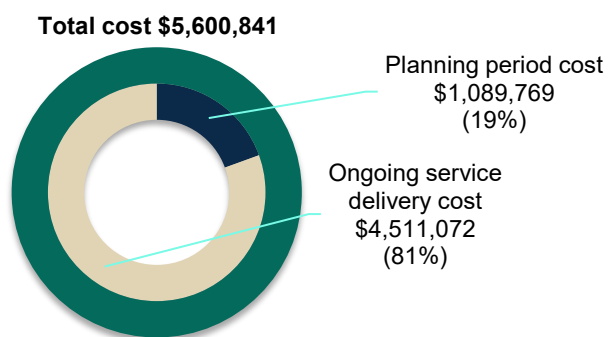
A. Analysis of total and service-specific costs

This section describes total costs as well as costs by funding source and category (staff, direct services, supplies and equipment, and overhead and operating costs). It also presents estimates of the costs of specific services.

1. Total costs

The FNS grant awarded MDHS \$22,246,000 for the planning and implementation of EDGE through February 2018. As shown in Exhibit VI.3, MDHS and its partners and providers reported spending a total of \$5,601,000 through December 2017 on the planning and implementation of EDGE (numbers in the text are rounded to the nearest thousand whereas exhibits show actual costs). These costs included \$1,090,000 for planning (19 percent of total costs) and \$4,511,000 for service delivery (81 percent). The quarterly costs of service delivery were stable through the first four quarters, then increased slightly starting in the fifth quarter of services (Appendix Table G.2).

Exhibit VI.3. Summary of total costs



Source: EDGE cost workbooks 2015-2017.

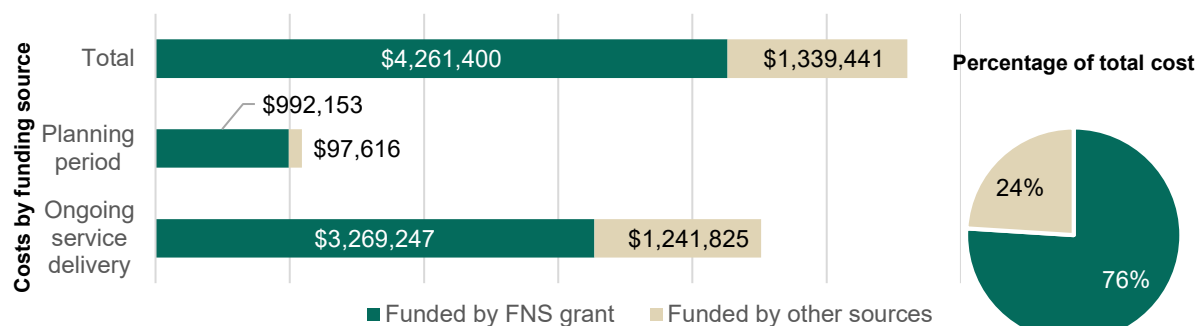
Note: The planning period was considered to encompass the time between the award of the FNS grant and EDGE start (April 2015 to March 2016). Service delivery costs represent the total reported in quarterly workbooks following the start of EDGE. All costs are presented in 2016 dollars.

Through December 2017, EDGE providers reported spending \$4,261,000 of the FNS grant funding (representing 76 percent of total expenditures) and leveraged \$1,339,000 in funding from other sources (representing 24 percent of total expenditures, Exhibit VI.4). Funding from other sources came from MDHS, JMG, and the community colleges. During the planning period, the FNS grant provided the majority of resources (\$992,000), while \$98,000 was contributed by MDHS and other planning partners and providers. During ongoing service delivery, EDGE administration and services were primarily funded by the FNS grant

VI. Analysis of EDGE costs

(\$3,269,000). MDHS, partners, and providers leveraged an additional \$1,242,000 in funding from other sources. The largest source of additional funding—\$900,000—was contributed by one of the community colleges, Mississippi Gulf Coast Community College (MGCCC), a provider of EDGE case management and EDGE classes, which provided facilities using other resources. Another community college, Jones County Junior College (JCJC), a provider of EDGE case management and EDGE classes, contributed \$154,000 in staff resources. The costs of service delivery that were covered by funding from sources other than the FNS grant ranged from \$163,000 to 219,000 over the service delivery period (Appendix Table G.2).

Exhibit VI.4. EDGE funding from FNS grant and other sources

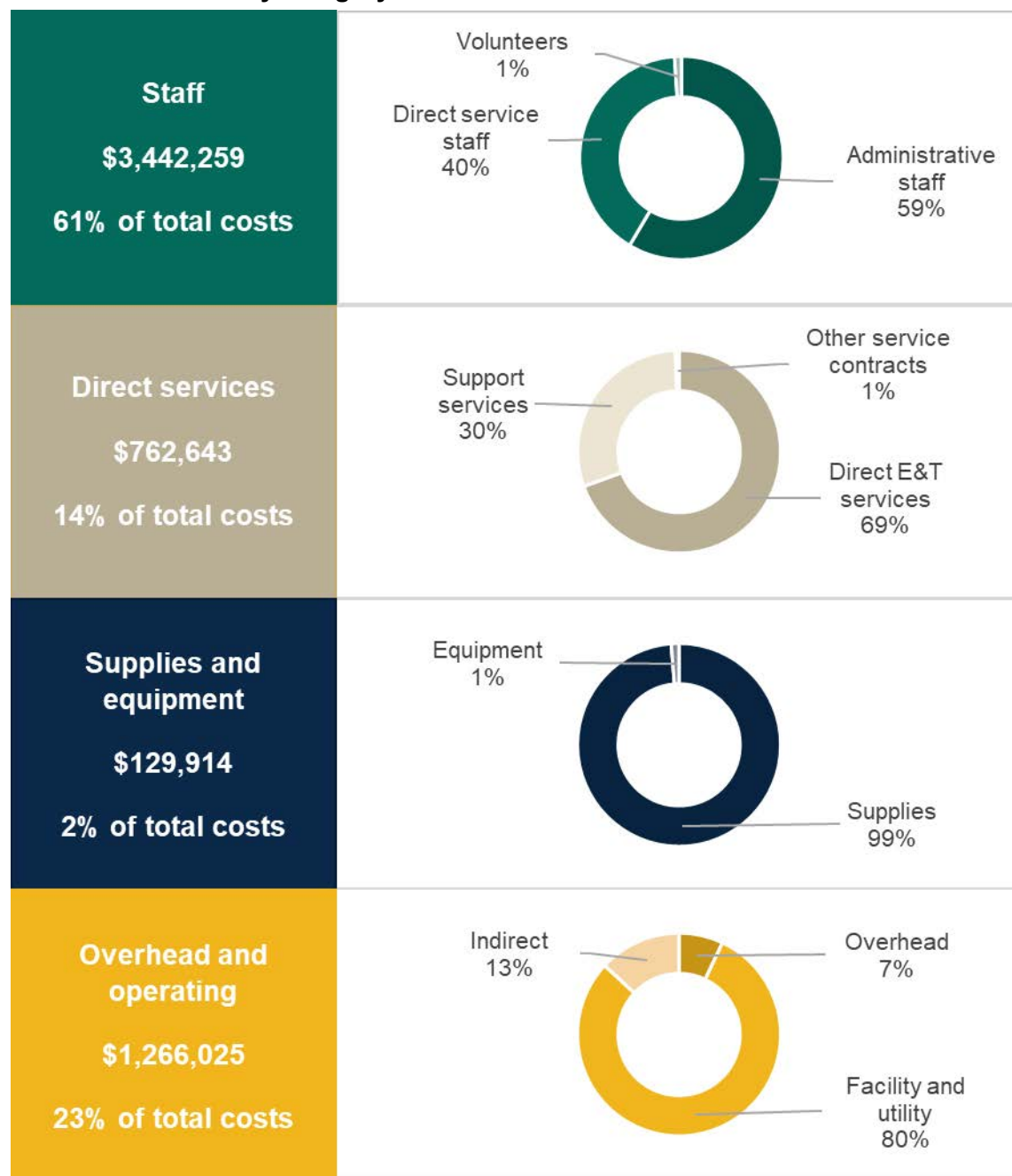


Source: EDGE cost workbooks 2015-2017.

Note: Cost workbooks asked for the total costs of the services provided to individuals in the EDGE group. For all costs reported in the workbooks, respondents were asked to report the percentage of the cost that was funded by the FNS grant. Remaining costs were assumed to be covered by other sources.

Exhibit VI.5 summarizes costs through December 2017 by category paid by FNS grant as well as from other sources, including (1) staff and volunteers' time, which represented 61 percent of total costs; (2) partner and provider direct service costs (14 percent of total costs); (3) supplies and equipment (2 percent of total costs); and (4) overhead and operating costs (23 percent of total costs). Of the \$3,442,000 dedicated to staff costs, the largest share (59 percent) covered costs for administrative staff, and 40 percent covered costs for direct service staff. The remaining 1 percent of staff costs covered volunteers. MDHS and EDGE partners and providers reported spending \$1,266,000 on overhead and operating costs. More than three-quarters of these funds (80 percent) covered costs for facilities and utilities; 13 percent covered indirect costs; and 7 percent covered overhead. About \$900,000 of the facilities costs were for MGCCC's use of facilities for EDGE (which were primarily funded by sources other than the FNS grant). MDHS and EDGE partners and providers also allocated \$763,000 to direct service costs and \$130,000 to supply and equipment costs in the EDGE cost work books.

Exhibit VI.5. Costs by category



Source: EDGE cost workbooks 2015-2017.

Note: Salaries for one partner—NSPARC—were approximated because of confidentiality issues. Salaries were estimated by taking the average of the staff salary range. All costs are presented in 2016 dollars.

Exhibit VI.6 provides additional detail on total costs by category, and costs funded by the FNS grant and by other sources. In all cost categories, FNS covered the vast majority of costs. However, in all cost categories, funding from other sources was also used to cover costs. Funding from other sources supported 78 percent of total overhead and operating costs, which

VI. Analysis of EDGE costs

suggests that MDHS and its providers (primarily MGCCC) did not pay for many of their overhead costs with funds from the FNS grant. Funding from other sources also covered 28 percent of total costs for supplies and equipment, 9 percent of the total staff costs, and less than 1 percent of total direct service costs.

Exhibit VI.6. Costs by category and funding source

Cost category	Total cost	FNS grant		Other sources	
		Costs funded	Percentage of total category cost	Costs funded	Percentage of total category cost
Total cost	\$5,600,841	\$4,261,400	76	\$1,339,441	24
Staff costs	\$3,442,259	\$3,132,153	91	\$310,106	9
Staff	\$3,404,715	\$3,132,153		\$272,562	
Administrative staff ^a	\$2,014,573	\$1,922,708		\$91,865	
Direct service staff	\$1,390,142	\$1,209,444		\$180,698	
Volunteers	\$37,544	\$0		\$37,544	
Direct service costs	\$762,643	\$761,303	100	\$1,340	<1
Direct E&T services	\$529,695	\$528,354		\$1,340	
Support services	\$228,603	\$228,603		\$0	
Other service contracts ^b	\$4,345	\$4,345		\$0	
Supplies and equipment costs	\$129,914	\$94,571	72	\$35,343	28
Supplies	\$128,301	\$92,958		\$35,343	
Equipment	\$1,613	\$1,613		\$0	
Other overhead-operating costs	\$1,266,025	\$273,374	22	\$992,652	78
Overhead	\$89,012	\$74,827		\$14,184	
Facilities and utilities	\$1,011,220	\$32,752		\$978,467	
Indirect costs	\$165,794	\$165,794		\$0	

Source: EDGE cost workbooks 2015-2017.

Note: Cost workbooks asked for the total costs of the services provided to individuals in the EDGE group. For all costs reported in the workbooks, respondents were asked to report the percentage of the cost that was funded by the FNS grant. Remaining costs were assumed to be covered by other sources. Salaries for one partner—NSPARC—were approximated because of confidentiality issues. Salaries were estimated by taking the average of the staff salary range. About \$900,000 of the facilities costs were for MGCCC's use of facilities for EDGE, which the FNS grant did not fund. All costs are presented in 2016 dollars.

^aWe used staff titles and primary responsibilities reported in the cost workbooks to categorize staff and their associated costs as either administrative (including staff such as accountants, executive leadership, or SNAP eligibility staff) or direct service-related.

^bOther service contracts represent costs paid by a partner or provider to another organization for a direct service. We assumed service contracts included all the costs of service, including staff, direct costs, supplies and equipment, and other overhead and operating costs.

2. Costs by service

This section describes estimates of the costs of specific EDGE services, including case management (this includes one-on-one meetings with participants, or time spent on case notes or referrals), structured group activities (such as EDGE classes), work-based learning, support services, occupational skills training, formal assessments, and education.²⁹ To build these estimates, we used data from the staff time-use survey to estimate the average time spent on each service or activity. We then used these estimates to attribute a percentage of the total costs of staff, supplies and equipment, and other overhead and operating costs to the direct service costs and service contracts (which we were able to categorize by service type) in the cost workbooks.

Exhibit VI.7 presents estimated total costs of each type of service and the percentage of the total cost that the service represents. The largest EDGE direct service expenditure was for case management, which accounted for \$381,000 or 7 percent of total costs through December 2017. Structured group activities and work-based learning accounted for smaller shares of direct service costs—\$298,000 (5 percent of total costs) and \$286,000 (5 percent of total costs), respectively.

Exhibit VI.7. Costs by service type

Service type	Total cost	Percentage of total cost
Case management	\$380,948	7
Job readiness and life skills workshops	\$298,398	5
Work-based learning	\$285,694	5
Support services	\$232,948	4
Occupational skills training	\$201,547	4
Assessments	\$148,211	3
Education	\$4,709	0
Other non-direct service costs ^a	\$4,048,385	72
Total costs	\$5,600,841	100

Source: EDGE cost workbooks and time use survey data 2015-2017.

Note: The estimated costs of case management, structured group activities, and formal assessments include costs for staff, supplies and equipment, and overhead and operating costs, which were allocated using the average percentage of time spent on these activities in the time use survey. The estimated costs of support services, other direct service contracts, work-based learning, occupational skills training, and education do not include costs for staff, supplies and equipment, or overhead and operating costs. We assumed these costs were either built into those payments, or the associated staff time and costs were represented as case management. All costs are presented in 2016 dollars.

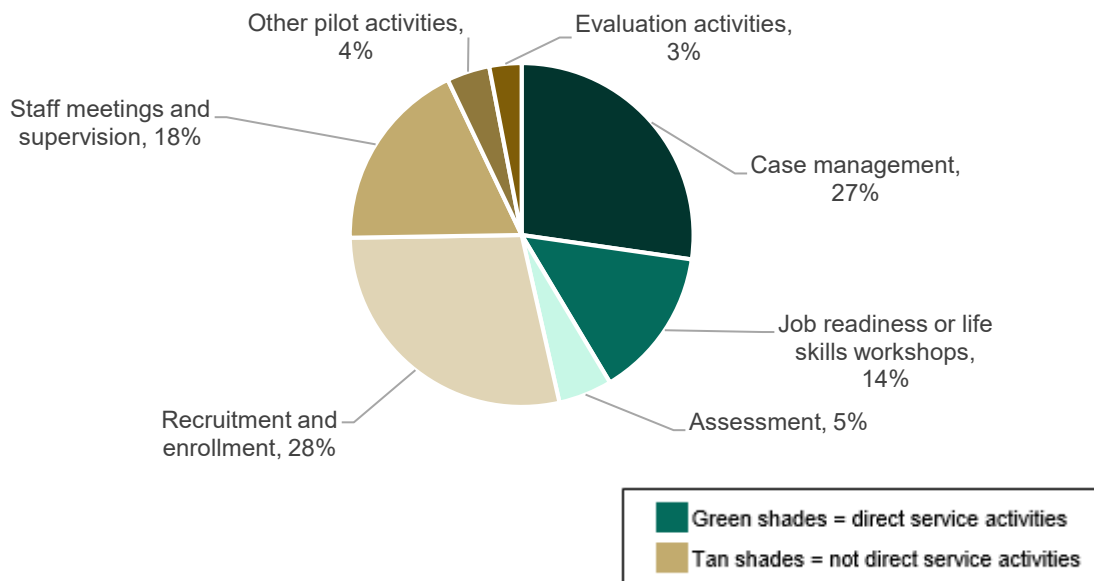
^aOther non-direct service costs include service contracts that cannot be assigned to one of the defined direct services, such as a subcontract for recruiting services. Other non-direct service costs also include the costs of other EDGE-related activities that are not direct services, including the planning period costs, administration, recruitment and enrollment, and staff meetings and supervision.

²⁹ We use standardized titles of services in this chapter to facilitate comparison of findings across pilot projects. In addition, each cost workbook asked questions about direct service costs using these specific service titles.

VI. Analysis of EDGE costs

Exhibit VI.8 shows the average percentage of time direct service staff reported spending on key activities.³⁰ The largest share of direct service staff time was spent on recruitment and enrollment (28 percent of time, on average) and case management (27 percent), which included time administering payments and making referrals for services such as work-based learning, occupational skills training, and education. Staff meetings and supervision accounted for 18 percent of staff time, on average, and structured group activities accounted for 14 percent of staff time.

Exhibit VI.8. Average percentage of time direct service provider staff spent on key activities



Source: Time-use survey 2016-2017.

Note: This graphic shows the average percentage of time direct service staff spent on key activities during the first and second rounds of the time use survey (fall 2016 and summer 2017). Twenty-five direct service staff were randomly selected to respond in each round. Costs for staff time associated with non-direct service activities are not attributed to the above service estimates; rather, they are included in the other non-direct service cost estimate row in Exhibit VI.7. Evaluation costs are excluded from all cost estimates, but this figure includes time staff spent on the evaluation.

³⁰ Direct service provider staff from the following six providers are included in the estimates of the average time spent on key activities: East Mississippi Community College, Itawamba Community College, Jones County Junior College, Jobs for Mississippi Graduates, Mississippi Delta Community College, and Mississippi Gulf Coast Community College.

VII. CONCLUSION

The goal of the 10 SNAP E&T pilots was to test innovative strategies to increase SNAP participants' employment and earnings and reduce their need for public assistance benefits. Through its comprehensive data collection and rigorous experimental design, this evaluation assessed whether EDGE—the innovative E&T program Mississippi designed and implemented targeting ABAWDs—was effective in achieving these outcomes. This interim report presents preliminary findings from the implementation and cost analyses that describe the planning and early implementation periods of the pilot and from the participation and impact analyses that cover one year of follow-up for individuals. This chapter summarizes the report's main findings. It also describes the additional questions that will be answered in the final report, which will present implementation and cost analysis findings covering the full period in which services were offered and costs were incurred and participation and impact findings covering up to three years of follow-up for individuals.

A. Summary of main findings

This section summarizes the main findings from the analysis of implementation data, EDGE group members' service receipt, costs, and differences between research groups in service receipt. It also discusses findings from the impact analyses and considerations regarding whether longer-term impacts may be expected.

1. EDGE implementation

As described in Chapter II, MDHS was able to develop new relationships with several providers and a new service model for EDGE in a relatively short period. MDHS began its pilot with few major challenges. All partner and provider staff agreed that communication between the organizations worked well overall, as they collaborated to identify and implement solutions to problems as they arose. However, MDHS staff found it difficult to implement the pilot at the same time they were implementing other major policy changes (a new mandatory SNAP E&T program). They also needed more staff dedicated to managing the pilot, to respond to issues more quickly. MDHS and provider staff also encountered challenges in attracting ABAWDs and in keeping individuals in the EDGE group engaged in services when they did enroll. Staff reported that many of these individuals dropped off before attending their first appointment at the college, which was often due to a lack of transportation and individuals needing to travel long distances to a college for services.

2. Service receipt among EDGE group members

As described in Chapter III, almost all of the individuals randomly assigned to the EDGE group engaged in some way, meaning that they at least had a meeting with a career navigator, attended an orientation, started an assessment, or received a support service. However, less than two-thirds of EDGE group members participated in an E&T-related activity, such as an EDGE class, occupational skills training, basic education, or work-based learning. Moreover, less than 60

percent the individuals who started an activity, other than the EDGE class, completed it, and fewer individuals received a credential, certification, or degree (including GEDs).³¹

EDGE was designed to provide more intensive case management to ECCS group members than to BCCS group members; however, a higher proportion of the BCCS group had contact with a career navigator than in the ECCS group, and the BCCS group had more contacts, on average. Most EDGE group members received some type of support service, with the majority receiving transportation assistance and few receiving other support services such as training supports or work-related items.

Individuals spent an average of five months in EDGE. Most exited EDGE within their first year, however, and the majority of exits happened within the first three months of enrollment. Exits often resulted from noncompliance and subsequent sanction.

3. Differences between EDGE and control groups in service receipt

Whether EDGE impacts employment, earnings, and SNAP participation depends, in part, on differences between the EDGE and control groups in the services offered to individuals, their receipt of services, and their completion rates. The findings reported in Chapter IV suggest that there were differences in service participation between the EDGE and control groups. Relative to the control group, the EDGE group was more likely to participate in job search training activities and in education and training during the 12-month follow-up period. According to the survey data, rates of participation in these activities in the ECCS and BCCS groups were 24 to 28 percentage points higher than in the control group. These differences existed despite the finding that more than one-third of control group members participated in job search assistance and training activities and programs.

ECCS and BCCS group members also were more likely than control group members to complete these activities. These differences largely reflected differences in the likelihood of starting activities, although ECCS group members who started general job skills training, occupational skills training, education, or work-based learning were more likely to complete these activities than control group members who started such activities. There was no statistical difference between the BCCS group and the control group in completion rates among individuals who started an activity. Both the ECCS group and the BCCS group were more likely than the control group to receive a training credential or certification (10 and 11 percent, respectively, versus 1 percent).

Some individuals were still in activities at the end of the 12-month follow-up period, so some of the differences between research groups in rates of participation in services and activities could change with longer follow-up. In addition, these findings could change when data on all individuals enrolled in the pilot are available.

³¹ The EDGE class, which individuals in the ECCS group had to complete before receiving other services, had a completion rate close to 78 percent.

4. Short-term impacts of EDGE on individuals' outcomes

As described in Chapter V, the findings from the analyses of the two primary outcomes in the fourth quarter show that EDGE did not have a short-term effect on employment and it increased the likelihood of participating in SNAP. There were no statistical differences between research groups in the percentage of individuals who were employed in Quarter 4. EDGE group members earned less than control group members in Quarters 1 and 2—when EDGE group members were more likely to be participating in activities—but these differences became positive in Quarters 3 and 4 as individuals in the EDGE group completed services and began looking for and finding jobs. This led to a positive impact on earnings in Quarter 3, but not on employment in Quarter 4. At the same time, EDGE led to a statistically greater likelihood of participating in SNAP in Quarters 2 through 4. These impacts reflect smaller decreases over time in the rate of SNAP participation for the EDGE group than for the control group.

The findings related to SNAP participation make sense given the patterns of changes in earnings and employment over the first year for EDGE and control group members. Conceptually, SNAP E&T services are designed to increase individuals' employment and earnings and, thus, reduce their need for SNAP or other public assistance. However, based on survey data, the EDGE group had lower earnings than the control group in the first two quarters after random assignment. This increased the likelihood that EDGE group members would continue to be eligible for and participate in SNAP—or conversely, decreased the likelihood that they would exit SNAP. This also increased the likelihood that SNAP benefit amounts for the EDGE group would be higher than those for the control group. EDGE group members also may have been more likely to continue to participate in SNAP because of the EDGE-provided education and training activities and, for some individuals, because the EDGE-provided services addressing barriers to employment would be discontinued if they no longer participated in SNAP.

These findings do not imply that EDGE will not be effective in achieving its goal of increasing employment and reducing the need for public assistance in the longer term. In fact, past studies of workforce programs have shown that it can take more than a year before economic impacts emerge (Card et al. 2010, 2018; D'Amico et al. 2015). Indeed, a substantial share of EDGE group members participated in education and training in early quarters, likely displacing employment during this period. Results from the longer-term follow-up period, which will extend up to three years, are needed to fully assess the impacts of EDGE.

5. EDGE costs

As described in Chapter VI, MDHS and its partners and providers reported spending \$5,601,000 from March 2015 to December 2017 on the planning and implementation of EDGE (\$1,090,000 during the planning period and \$4,511,000 on service delivery). The FNS grant funded 76 percent of these costs, and partners and providers leveraged other funding sources for the remaining 24 percent. Almost three-quarters of the costs during the planning period and first 22 months of operations were related to administration, including planning and development, management and oversight, and recruitment and enrollment (\$4,048,000; 72 percent of total costs). The remaining 28 percent of costs were for direct services, with case management and job

readiness or life skills workshops being the largest costs. The proportion of the total budget that is represented by direct service costs will likely increase over time.

B. Final report and other products

This report presents a preliminary assessment of the effects of EDGE. The participation and impact analysis findings are based on information from only a portion of all individuals enrolled in the pilot—those who enrolled through December 2017—and cover only the first year following random assignment for each individual. For these reasons, the short-term outcomes presented in this report do not fully capture the potential effects of EDGE on labor market and public assistance outcomes. Notably, some individuals (12 to 15 percent of EDGE group members) were still receiving services when the 12-month survey outcomes were measured. In addition, EDGE continued to enroll and provide services to individuals in 2018 and 2019. A final report will examine the experiences of all individuals enrolled in the EDGE pilot, present their outcomes over a period of up to 36 months after random assignment, and examine the benefits of the pilots' new services relative to their costs. In doing so, the final report will provide more conclusive evidence about the effectiveness of EDGE.

The final report will address the following research questions.

- **Did EDGE continue to evolve over time?** What implementation changes occurred in the last one to two years of operations? Was EDGE or parts of EDGE sustained after the end of the pilot?
- **Including all individuals enrolled in EDGE, what were the participation patterns? Did participation patterns change over time, as the programs matured?** The final report will present information for all enrolled individuals. It will also analyze updated administrative data on service use through the end of pilot operations (February 2019).
- **What effects did EDGE have on employment and SNAP participation over a three-year follow-up period?** The final report will present findings based on longer-term follow-up data. Impact analyses will use UI wage records extending through early to mid-2020, SNAP administrative records extending through December 2020, and 36-month survey data also extending through December 2020. These additional data will allow us to examine impacts on outcomes over longer periods—for up to three years after random assignment—for most individuals enrolled in the pilot.
- **What was the total cost of pilot operations?** The final report will include costs through the end of pilot operations. Per-person cost estimates will be presented for both EDGE and control group services.
- **How did three-year EDGE benefits compare with total EDGE costs?** The final report will present a benefit-cost analysis, which will use information from both the cost analyses and the impact analyses to compare costs with benefits for EDGE and control group members, from the perspectives of individuals, government, and society.

Several additional reports will address research questions focused on specific aspects of the services offered. These reports will complement the main evaluation analyses by delving more

VII. Conclusion

deeply into support services, the relationship between the amount of services received and individuals' outcomes, and the potential benefits of work-based learning.

Together with the final report, these additional reports will provide a deeper understanding of the effectiveness of specific services and the role that service receipt plays in affecting individuals' outcomes. Additionally, these findings will be informative not only for SNAP E&T administrators and policymakers seeking to understand the impact of particular services but also for administrators of other workforce programs and State SNAP E&T agencies considering changes to their existing programs.

REFERENCES

- Abraham, Katharine G., John C. Haltiwanger, Kristin Sandusky, and James R. Spletzer. “Measuring the Gig Economy: Current Knowledge and Open Issues.” NBER Working Paper No. 24950. Cambridge, MA: National Bureau of Economic Research, 2018.
- Card, David, Jochen Kluve, and Andrea Weber. “Active Labour Market Policy Evaluations: A Meta-Analysis.” *Economic Journal*, vol. 120, no. 548, 2010, pp. F452–F477.
- Card, David, Jochen Kluve, and Andrea Weber. “What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations.” *Journal of the European Economic Association*, vol. 16, no. 3, 2018, pp. 894–931.
- Cronquist, Kathryn. (2019) *Characteristics of USDA Supplemental Nutrition Assistance Program Households: Fiscal Year 2018*. Prepared by Mathematica Policy Research Under Contract No. AG-3198-F-18-0005. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service. Project Officer: Jenny Genser. Available online at <https://www.fns.usda.gov/research-analysis>.
- D’Amico, Ronald, Kate Dunham, Verenice Chavoya-Perez, Deborah Kogan, Melissa Mack, Marian Negoita, Anne Paprocki, Sheena McConnell, and Linda Rosenberg. “Providing Public Workforce Services to Job Seekers: Implementation Findings on the WIA Adult and Dislocated Worker Programs.” Washington, DC: Mathematica Policy Research, 2015.
- Hotz, V. Joseph, and John Karl Scholz. “Measuring Employment and Income Outcomes for Low Income Populations with Administrative and Survey Data.” In *Studies of Welfare Populations: Data Collection and Research Issues*. Washington, DC: National Academy Press, 2002.
- Katz, Lawrence F., and Alan B. Krueger. “The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015.” NBER Working Paper No. 22667. Cambridge, MA: National Bureau of Economic Research, 2016.
- Katz, Lawrence F., and Alan B. Krueger. “Understanding Trends in Alternative Work Arrangements in the United States.” NBER Working Paper No. 25425. Cambridge, MA: National Bureau of Economic Research, 2019.
- Kornfeld, Robert, and Howard S. Bloom. “Measuring Program Impacts on Earnings and Employment: Do Unemployment Insurance Wage Reports from Employers Agree with Surveys of Individuals?” *Journal of Labor Economics*, vol. 17, no. 1, 1999, pp. 168–197.