



U.S. DEPARTMENT OF AGRICULTURE



# Supplemental Nutrition Assistance Program (SNAP) Employment and Training Rapid Cycle Evaluation: Minnesota, Hennepin County

Final Report

November 2024

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# Supplemental Nutrition Assistance Program (SNAP) Employment and Training Rapid Cycle Evaluation: Minnesota, Hennepin County

## Final Report

**November 2024**

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## Executive Summary

The Supplemental Nutrition Assistance Program (SNAP) provides food benefits to eligible individuals with low incomes. For some, it also provides employment and training (E&T) services to improve participants' economic self-sufficiency. This report describes the Food and Nutrition Services' use of rapid cycle evaluation to test new, low-cost, small-scale interventions in SNAP E&T operations in Hennepin County, Minnesota. Minnesota operates a statewide, voluntary, county administered SNAP E&T program that serves all adult SNAP participants. In Hennepin County, the Office of Workforce Development (OWD) administers E&T and contracts with three SNAP E&T providers.

### **Intervention**

SNAP participants who are age 18 to 52<sup>1</sup>, able to work, do not have any dependents, and do not meet any Federal exemptions and exceptions must meet work requirements to receive SNAP benefits for more than three months in three years. These able-bodied adults without dependents (ABAWD) time limits were waived during the public health emergency but were set to return in 2023. Hennepin County sought to directly enroll ABAWDs in SNAP E&T to prevent individuals from losing their benefits. The county developed an intervention that consisted of sending a series of text messages with behavioral nudges to encourage ABAWDs to enroll in SNAP E&T in September and October of 2023. FNS's study contractor Mathematica assisted Hennepin OWD with the development of the intervention and conducted an evaluation that included a randomized controlled trial to estimate the intervention's impact on SNAP E&T enrollment, and an assessment of how the intervention was implemented, the challenges encountered and solutions to address them, and participants' experiences.

### **Outcomes**

The intervention was not implemented as intended. The wrong data was extracted, and text messages were sent to SNAP participants with exemptions from general work requirements and not to ABAWDs. Although the text messages were sent to the incorrect population, the number of people enrolled in SNAP E&T increased as a result of the text messages. Relative to individuals that did not receive the text messages, those that received them were more likely to enroll in SNAP E&T.

### **Factors that facilitated or hindered implementation**

Hennepin SNAP E&T staff were not familiar with the county's SNAP data or the data system, and miscommunication and infrequent collaboration between the SNAP E&T unit and the SNAP Eligibility unit meant that there were no processes in place for ensuring correct data was pulled. However, the process for sending text messages and tracking replies was not complex or time consuming.

### **Lessons learned**

Several lessons learned from the intervention will be helpful when considering scaling or replicating the efforts in Minnesota. Sending text messages to the wrong group of SNAP participants illustrates that even a relatively simple intervention for SNAP E&T requires coordination and cooperation between SNAP Eligibility and SNAP E&T program staff, particularly when they are not housed within the same unit or working closely in tandem. Additionally, limitations of the texting platform used need to be carefully assessed and addressed to maximize effectiveness of this outreach method.

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<sup>1</sup> As of October 1, 2024, the age of those subject to the ABAWD time limit increased to age 18-54.

## I. Introduction

The Supplemental Nutrition Assistance Program (SNAP) is the cornerstone of the nation’s nutrition safety net and provides food benefits to individuals with low incomes who are experiencing economic hardship. In addition to providing food assistance, SNAP provides work supports through employment and training (E&T) programs that help SNAP participants gain skills, training, or work experience to increase their ability to obtain regular employment. State agencies are required to operate an E&T program and have considerable flexibility to determine the services they offer and populations they serve. SNAP participants use these programs to meet work requirements, if applicable, and retain their benefits.

One of the U.S. Department of Agriculture’s Food and Nutrition Service’s (FNS) strategic goals and priorities is to ensure the quality of the services and activities offered through SNAP E&T programs by investing resources and providing technical assistance to help States build capacity, create more robust services, and increase engagement in their programs. Over the last 10 years, FNS has invested considerable resources and provided technical assistance to States; however, a typical State has limited time and resources to make substantial changes to its business process, service delivery approach, or service options given their existing responsibilities of Federal compliance operations, running the program, monitoring providers, and growing the program.

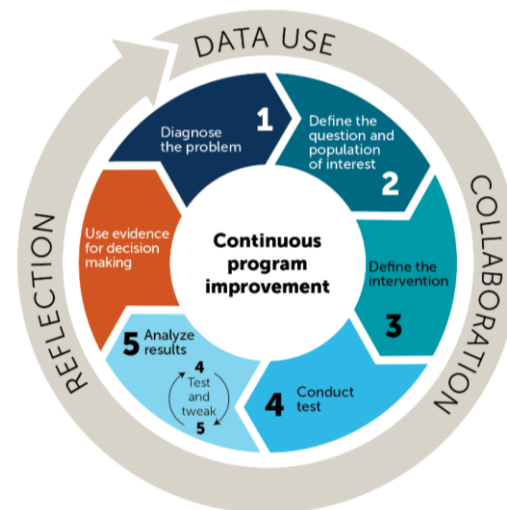
FNS contracted with Mathematica to provide States the opportunity to test low-cost, small-scale interventions in SNAP E&T operations or service delivery using rapid cycle evaluation (RCE). RCE is a powerful method for improving programs’ efficiency and effectiveness. It follows a series of steps to identify challenges and define and test potential solutions (Exhibit I.1).

FNS selected Minnesota, four other States, and the District of Columbia to operate interventions, with the aim of improving SNAP E&T programs and identifying how to strengthen the technical assistance provided to States. From 2021 to 2024, Mathematica collaborated with the intervention sites to identify the major challenges their SNAP E&T programs faced, which

### Study objectives

1. Describe how RCEs can be used to improve SNAP E&T operations, service delivery, and program outcomes
2. Design and implement RCEs to obtain impact estimates of small-scale changes on SNAP E&T outcomes for each intervention
3. Conduct an implementation evaluation of the small-scale changes and RCEs in each intervention
4. Assess the scalability of the small-scale changes to SNAP E&T operations and service delivery to other local, State, or national policies and programs
5. Determine and document the costs associated with implementing and maintaining the small-scale changes ▲

Exhibit I.1. Rapid cycle evaluation





generally involved recruitment and outreach or participant engagement and receipt of services, and to create and test solutions to them.<sup>2</sup>

RCE addressed five main objectives (see Study objectives box). This report describes the RCE process, intervention design and implementation, and findings from the small-scale changes Minnesota’s Hennepin County made to its SNAP E&T program.<sup>3</sup>

## II. Hennepin County Minnesota’s SNAP E&T Program

Minnesota operates a statewide, county-administered SNAP E&T program that serves all SNAP participants 16 years and older who volunteer to participate in SNAP E&T. This includes work registrants, who are SNAP participants who have not met any Federal exemptions from SNAP work requirements and are therefore required to register for work and meet general work requirements. The county Departments of Human Services have the primary responsibility for administering SNAP and SNAP E&T. Hennepin County is the most populous county in Minnesota and contains Minneapolis and its surrounding suburbs. In Hennepin County, the Human Services and Public Health Department houses the Economic Supports area, which administers SNAP. The Disparity Reduction Department houses the Office of Workforce Development (OWD), which manages SNAP E&T.

A team of four Hennepin County staff (referred to as Hennepin OWD)—one program manager and three program coordinators—administer the SNAP E&T program countywide. Hennepin OWD contracts with and offers support to three SNAP E&T providers that provide a range of SNAP E&T components (or services). One provider’s program is specifically designed for formerly incarcerated people and offers training primarily in construction. All others offer services that include GED assistance and training in information technology, healthcare, and construction. The Minnesota Department of Human Services (DHS)<sup>4</sup> contracts with providers that can provide services to residents of multiple counties, so Hennepin County residents have access to 12 providers’ programs. Providers can also assist with housing, transportation, and clothing.

Prior to the intervention, most SNAP participants in Hennepin County did not choose to participate in SNAP E&T and nearly all SNAP E&T participants were enrolled through reverse referral. To make a reverse referral, providers identify individuals in their programs who are already participating in SNAP and contact Hennepin OWD to confirm their SNAP status and make a referral to SNAP E&T. While direct enrollment is not a common method of entry into SNAP E&T, the process is well-defined: SNAP eligibility



### Hennepin County SNAP E&T program

- **Area served:** Hennepin County
- **Target population:** SNAP participants
- **Number served by E&T:** 50 people per month
- **Referral type:** Direct and reverse referrals
- **Providers:** Three service providers contracted by Hennepin OWD. Twelve providers are available to residents of Hennepin County ▲

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<sup>2</sup> Minnesota tested two interventions. This report presents findings from the intervention in Hennepin County. A separate report presents findings from an intervention in rural counties.

<sup>3</sup> Reports for the other sites in the report are available at <https://www.fns.usda.gov/research-analysis>.

<sup>4</sup> In July 2024, The Minnesota Department of Human Services changed its name to the Minnesota Department of Children, Youth, and Families.

staff inform SNAP applicants about the SNAP E&T program during the application process. The SNAP E&T phone number is also listed on the Hennepin County website for those who are interested in enrolling. When an interested SNAP participant calls, SNAP E&T program coordinators provide information about the E&T program, including provider options, and they can directly enroll individuals in E&T.

### III. Overview of Intervention

#### A. Intervention development

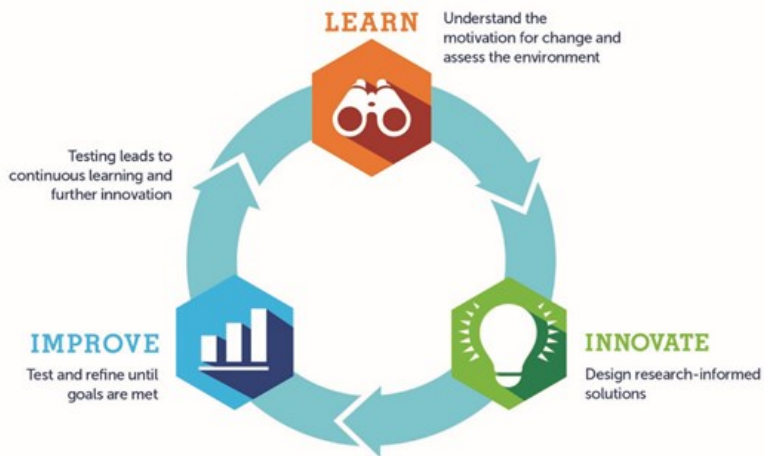
In early 2021, Mathematica began working with the Hennepin OWD to understand their SNAP E&T operations, identify challenges facing their program, and develop potential solutions to test. The Learn, Innovate, and Improve (LI<sup>2</sup>) model was used to guide Hennepin County through this process (Exhibit III.1). This was a collaborative, co-creative partnership between the Mathematica team and Hennepin OWD.

During the Learn phase, Mathematica sought to systematically explore the top-priority challenges Hennepin OWD was experiencing with their SNAP E&T program. Between May and July 2021, Mathematica held several virtual brainstorming sessions that included interactive human-centered design

activities to help assess the problems they wanted to solve and the underlying causes of those problems. The human-centered design activities included rose-bud-thorn (having individuals name aspects of the program that were positive, areas for growth, or challenges), affinity clustering (sorting named aspects into categories), and problem tree analysis (working through the root causes and effects of challenges). Through this process, Hennepin OWD identified enrolling individuals in SNAP E&T as their main challenge, and a lack of marketing materials as a second, related challenge.

The Innovate phase took place from July to October 2021 and focused on guiding Hennepin OWD staff through a process of identifying and developing potential solutions to the key challenges and detailing the steps to testing and implementing the solutions. By the end of the Innovate phase, Hennepin County selected to test a text messaging campaign aimed at work registrants. Recognizing that the waiver of SNAP time limits for able-bodied adults without dependents (ABAWDs) was set to end in May 2023, Hennepin OWD further fine-tuned their intervention to focus on informing ABAWDs about SNAP E&T and encouraging them to enroll.<sup>5</sup>

**Exhibit III.1.** Learn, Innovate, and Improve (LI<sup>2</sup>) model



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<sup>5</sup> ABAWDs are work registrants who are ages 18 to 52, able to work, and do not have any dependents. ABAWDs must meet both the general work requirement and an additional work requirement to receive SNAP benefits for more than

This phase used a different set of collaborative human-centered design activities, including a persona analysis (getting into the minds of the target population and imagining their hopes and barriers), and a buy-a-feature activity (where participants have limited “budgets” to select elements of an intervention). Mathematica and Hennepin OWD co-designed the text message intervention and Mathematica designed the evaluation strategy, which included a randomized controlled trial (RCT) to measure impact and an implementation study to assess the intervention’s design, operations, staff and participants’ experiences, and replicability. In the Improve phase, the proposed intervention was tested to identify any necessary changes before a full-scale roll-out. In August 2023, Hennepin OWD conducted a road test of the text message campaign by sending messages to a small number of people to ensure all the systems for sending the text messages and tracking the response were in order so that the campaign could proceed as planned. The road test also ensured that the target population could understand the text messages. No changes were made to the intervention process after the road test. Hennepin OWD launched the intervention in September 2023, and it ran for 3 weeks.

### **B. Intervention overview**

During the LI<sup>2</sup> process, the Hennepin County team identified SNAP E&T recruitment as their highest priority, and noted a second related challenge of a lack of marketing materials for SNAP E&T. They designed text messages to encourage enrollment in SNAP E&T among work registrants, specifically ABAWDs. The text messages were intended to allow Hennepin County OWD to reach out to potential participants directly, rather than relying solely on reverse referrals.

The primary goal of the intervention was to determine whether text messaging is a feasible, effective, and sustainable strategy to increase the number of participants who contact the SNAP E&T program and enroll in E&T services. With the return of SNAP time limits, Hennepin OWD decided to target ABAWDs as enrolling in E&T is one way for them to maintain SNAP eligibility. Research has shown that including the recipient’s name in text messages can increase engagement with the communication. Hennepin OWD decided to create two parallel series of text messages to evaluate whether including names would have an increased impact.

Working as a team, Hennepin OWD and Mathematica collaborated in creating the language used in the text messages. The team identified different types of behavioral nudges (small changes to a program, policy, system, or practice that are meant to influence the choices individuals make) that have been shown to spur message recipients to action, and drafted messages that included the behavioral concepts of mere exposure, endowed progress, and loss aversion. They wrote two series of three text messages: the first series was a short message that did not use the participant’s name, and the second series was longer and included the participant’s name. Both series used the same set of behavioral nudges (see Behavioral nudge concepts box). However, Hennepin OWD later learned that Televox, the text messaging system with which the county holds a contract, does not permit inclusion of names or other dynamic text, so names were removed, and the two-text series differed by length only (Appendix A).

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three months in three years. The Fiscal Responsibility Act of 2023 temporarily increased the age limit from 49 to 52 in October 2023 and to 54 again on October 1, 2024; these changes end on October 1, 2030. In Minnesota, ABAWDs are referred to as time-limited recipients, or TLRs. Throughout this report we use the term ABAWD for consistency across States.

The team decided to send the messages in fall 2023 over a 3-week period, before the SNAP time limits were due to return, with the intention of testing whether sending behaviorally informed text messages increased enrollment in SNAP E&T compared to a control group, and if the short messages or long messages had differing effects. To keep the intervention simple and avoid the need to review and clean the recipient lists between messages, they sent individuals all three texts in their assigned series, regardless of whether they enrolled in SNAP E&T between messages.

These messages were sent in addition to communications from the State DHS about the return of SNAP time limits. State communication included a June 2023 letter explaining the return of SNAP time limits sent to households with ABAWDs, followed by a text message, an email, and a robocall in July 2023, and another text message, email, and robocall in September 2023. Additionally, Hennepin OWD sent a letter to ABAWDs in August 2023 explaining the change and inviting people to attend one of multiple in-person or virtual information sessions with the SNAP E&T team.

Hennepin County OWD staff worked with SNAP eligibility staff to generate a list of all ABAWDs for inclusion in the intervention, pulled from MAXIS, the State of Minnesota's SNAP data system. SNAP participants were randomly assigned to one of three groups (see Exhibit III.2). For both treatment groups, the first text message used the mere-exposure concept to describe how E&T can offer help with finding a job or getting training. The second message used loss aversion and endowed progress concepts to share that SNAP work rules were coming back into effect soon, but SNAP E&T would be available to help. The third message used loss aversion framing to communicate that recipients may soon lose their benefits and can enroll in E&T to prevent this. Text messages were sent to both treatment groups on September 14, September 28, and October 5, 2023 (Appendix A). Hennepin OWD sent text messages using Televox, a text messaging system that the county holds a contract with. All text messages were sent in English. Hennepin OWD launched the intervention in September to give ABAWDs enough time to enroll in E&T to prevent benefit loss in December 2023, the first month where work requirements



### Behavioral nudge concepts

- **Mere exposure strategy:** Sending an initial message to increase the awareness of an offer before sending information about a formal offer. The first message was intended to expose ABAWDs to the existence of E&T with the intention of increasing familiarity with the program when more information is shared later
- **Endowed progress:** Encouraging the participant to reach a goal that they have already made progress towards. The second message was to communicate to ABAWDs that by enrolling in SNAP they have already taken the first step toward finding a new or better job
- **Loss aversion:** Emphasizing inaction could lead to a personal loss, which may be weighted more than commensurate gains when evaluating tradeoffs. The second and third messages were intended to inform ABAWDs that enrolling in E&T is one way to avoid losing SNAP benefits when time limits return

Text messages were not delivered to ABAWDs

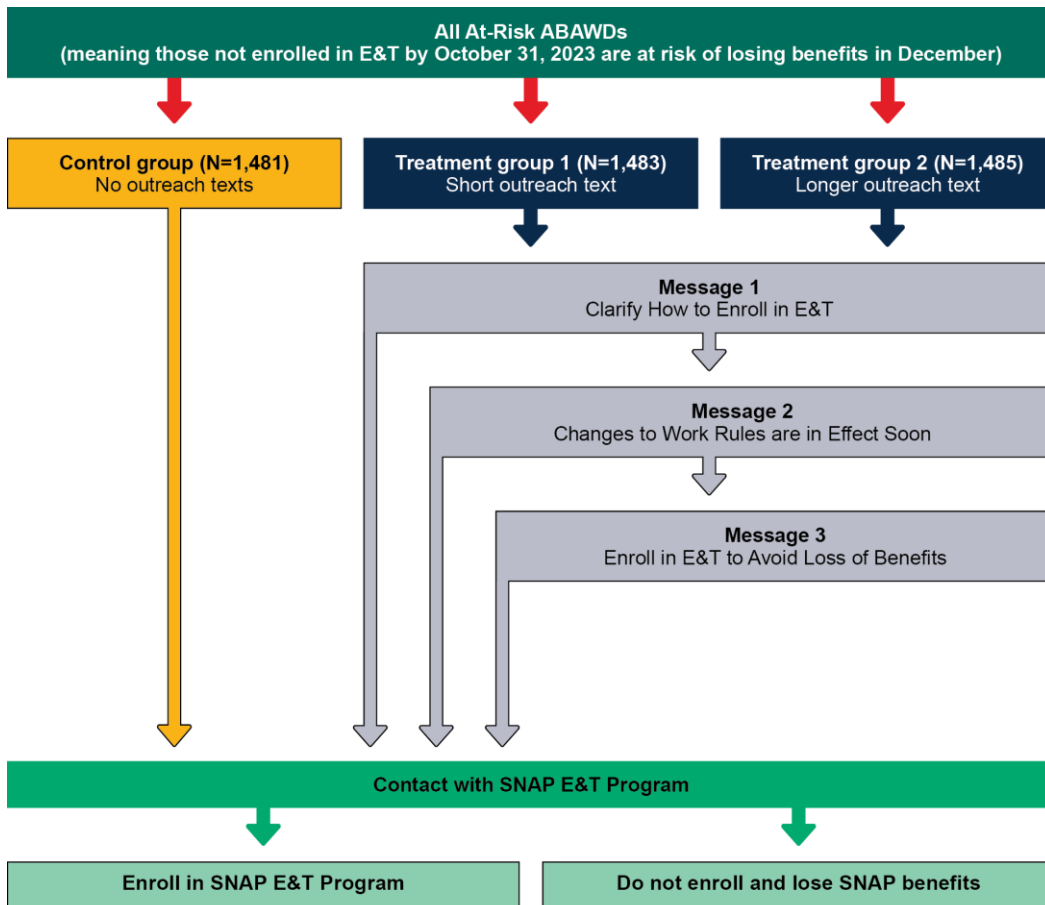


### Intervention groups

1. **Control group:** Received only the State-issued communications about the resumption of SNAP work rules (1,481 individuals)
2. **Treatment groups:** Received State-issued communications and also a series of three text messages using behaviorally informed language encouraging SNAP enrollment. The messages included a phone number to call to start the enrollment process. One treatment group received short messages (1,483 individuals) and another treatment group received long messages (1,485 individuals)

would be in effect. However, after the intervention was complete, Minnesota gave ABAWDs one additional month; the first month of benefit loss was January 2024.

**Exhibit III.2.** Intervention flow diagram



Note: Red arrows indicate points of random assignment.

As described in more detail in Section IV.B, the process described above was the intended intervention; however, due to difficulty accessing and understanding the participant data provided by the SNAP Eligibility unit, Hennepin OWD did not ultimately send the text messages to the ABAWDs and instead sent them to SNAP participants who were exempt from general work requirements. Individuals who received the texts were largely women with dependents under age 6. Therefore, the text message wording about loss of program eligibility and benefits for not meeting work requirements was not relevant.

### C. Evaluation design

Mathematica conducted an RCT to estimate the impact of the intervention components on outcomes related to enrollment in SNAP E&T and continuation of SNAP benefits after the return of time limits. The experimental design answers the following research questions:

- Did the text messaging intervention lead to more enrollment in SNAP E&T compared to the control group?
- Which of the two text messaging outreach approaches was most effective in increasing enrollment in SNAP E&T, compared to existing outreach?
- Which approach (existing versus text messaging intervention) resulted in higher SNAP participation in January and February 2024?
- Were there differential impacts for subgroups?

The evaluation also included an implementation study that assessed the intervention’s design and administration, the challenges encountered and solutions to address them, and participants’ experience with the intervention.

Mathematica collected and analyzed several types of data to support evaluation analyses:

1. **SNAP administrative data** describe demographic and economic characteristics of individuals at the time of or just prior to random assignment.
2. **SNAP E&T outcome data and intervention tracking data** measure SNAP E&T enrollment, ongoing SNAP participation, and responses to text outreach.
3. **Implementation data** describe staff and participant experiences with the interventions, lessons learned, and factors that facilitated or hindered successful implementation. For this intervention, Mathematica collected these data through staff interviews and participant focus groups.

Additional detail on the data collected and evaluation methodology is available in the Technical Supplement to the SNAP E&T RCE final reports.

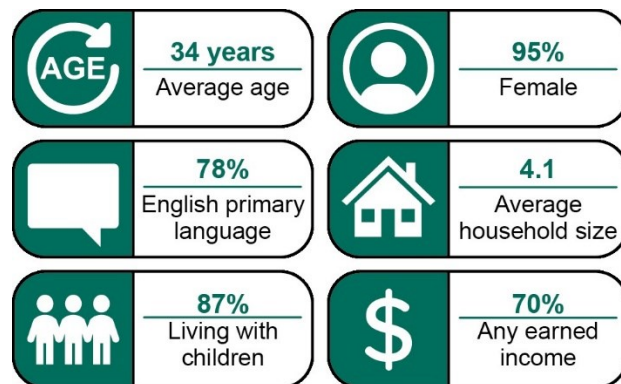
## D. Characteristics of individuals in the analysis

Hennepin OWD included 4,468 treatment and control group members in their intervention. Exhibit III.3 shows key baseline characteristics of the individuals in the analysis.

The average age was 34 years, with 93 percent between 25 and 49 years old, and 7 percent between 18 and 24 years old. Twenty-seven percent did not have a high school diploma or equivalent education (Technical Supplement Table A.1).

Most of the individuals’ primary language was English, with 16 percent reporting Somali as their primary language. The average household size was 4.1, and about 87 percent of individuals in the intervention lived in a household with children. Almost 70 percent of

**Exhibit III.3.** Baseline characteristics of individuals in the analysis



Source: SNAP administrative data.

Note: See Technical Supplement for additional characteristics.

individuals lived in households that had earned income such as wages and nearly 34 percent lived in households that had unearned income such as unemployment benefits, cash assistance, or contributions from family members (Technical Supplement Table A.1).

## IV. Findings

### A. Impact evaluation

Text messages increased the percentage of individuals who enrolled in SNAP E&T. Relative to individuals that did not receive behaviorally informed text messages, those that received short messages were more likely to enroll (0.18 versus 0 percent; Exhibit IV.1 and Appendix Table B.1). The same was true for individuals that received any text message, regardless of its length (0.16 versus 0 percent).

Treatment group members who were age 25 to 49, female, and spoke primarily English were most likely to enroll in SNAP E&T (Technical Supplement Table C.1b).

### B. Implementation evaluation

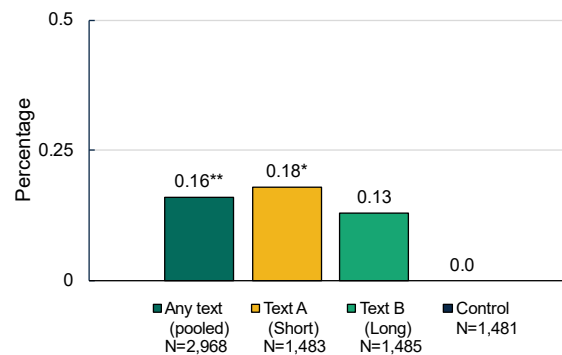
The implementation evaluation assessed the intervention’s design and administration, the challenges encountered and solutions to address them, and participants’ experience.

#### 1. Factors that facilitated or hindered implementation

Hennepin OWD’s text message outreach intervention was simple, straightforward, and easy to carry out. All SNAP E&T staff were aware of their roles and the process for implementing the campaign. Hennepin staff uploaded the lists of individuals in each treatment group to Televox and within minutes and “a couple of clicks” Televox sent the messages. Televox produced automated reports confirming that messages had been successfully sent, which indicated that most client phone numbers were linked to valid mobile phones that could receive texts; there were only a small number of undeliverable text messages. After the messages were sent, staff fielded calls from individuals in the intervention who contacted the number provided in the messages. They used a shared Excel document to track the calls, including the time of the call, the person taking the call or returning the voicemail, and the outcome of the conversation including whether the individual was referred to a SNAP E&T provider or directed to call the SNAP Eligibility unit. The tracking tool was easy to use, and the SNAP E&T coordinators continued to use it after the intervention ended.

Having an established text messaging system in place prior to the intervention also facilitated implementation. Staff did not have to spend time or effort assessing the benefits and drawbacks of

**Exhibit IV.1.** Impacts of outreach methods on enrollment in SNAP E&T (%)



Source: SNAP administrative and SNAP E&T outcome data.

\*\*/\* Difference between treatment and control group significantly different from zero at the 0.05/0.10 level, two-tailed test.

different text messaging system options, go through any additional processes to ensure the system met data security requirements, or manage any costs associated with using the system.

Some individuals who received the text messages called the SNAP E&T phone number, and some of those who called expressed confusion or frustration about the third text message (which suggested, inaccurately, that the individual might soon lose their SNAP benefits). SNAP E&T staff were able to effectively provide these callers information about exemptions to work requirements and direct them to the SNAP Eligibility unit when appropriate. Callers did not have trouble reaching SNAP E&T when they called. When calls went to voicemail, staff recorded these calls in the tracking tool and called the individuals back, leaving a voicemail when needed.

Despite these positive factors that facilitated the administration of the intervention, Hennepin OWD did not implement the intervention as intended. The text messages were inadvertently sent to a group of people who were exempt from general work requirements and not ABAWDs, as intended. Analysis of the data after the intervention revealed that the SNAP participants selected to receive text messages were largely women with dependents under age 6 (see section III.D, Participant characteristics). Those who received the text messages were still eligible to participate in SNAP E&T (and some did enroll) but the wording of the texts was not relevant to them. The language of the messages was written to warn ABAWDs about potential benefit loss with the return of SNAP time limits, but as text recipients were categorically not ABAWDs, none were at risk of losing their SNAP benefits because of failure to comply with work requirements. Though nearly 100 individuals called the included phone number, this may have been due to fear or uncertainty about their SNAP benefits.

This error was caused mostly by miscommunication between Hennepin County SNAP eligibility and Hennepin OWD SNAP E&T staff, along with Hennepin OWD's unfamiliarity with State data systems. SNAP E&T staff did not have full access to MAXIS, Minnesota's SNAP eligibility data system, were not regular users of the system, and were not they familiar with the definitions of the codes used. The SNAP Eligibility unit did not clearly communicate with OWD how they were defining the target population, and they changed the parameters for the data pull multiple times without informing OWD. Hennepin OWD staff were not able to independently verify that they had identified the correct individuals and did not receive needed support. This error illustrates that even a relatively simple intervention for SNAP E&T requires coordination and cooperation between the SNAP eligibility and SNAP E&T program staff, particularly when they are not housed within the same department or working closely in tandem. Relatedly, Hennepin OWD staff felt that when the focus of the intervention shifted from simple E&T outreach to the more urgent task of ensuring that ABAWDs did not lose their SNAP benefits with the return of time limits, SNAP Eligibility staff should have been more invested partners. Greater collaboration between the two units could have been beneficial on multiple levels.

Limitations of the Televox texting system also hindered implementation of the intervention. After Hennepin OWD wrote the text message language during the Innovate phase and the County's privacy officer approved it, Hennepin OWD discovered that Televox did not permit dynamic text within the messages, meaning that the longer set of messages could not include client names as originally planned. Without including the SNAP participant's name, the intervention could not test whether including names induced more engagement with the texts or enrollment in E&T. Further, the text message language could



only be loaded into Televox by specialized staff who required a two-week lead time. This, combined with the lengthy process of getting messages approved by the privacy officer, limited the team's ability to make language changes closer to the time they were sent. When Hennepin OWD was informed that names could not be included in the messages, there was insufficient time to revise the texts to test a different comparison, such as different types of behavioral nudges. Different length text messages were tested instead.

Finally, the texting platform did not allow messages to be scheduled to be sent and Hennepin OWD staff were not given direct access to the system. Messages could only be sent manually by the Economic Supports staff who maintained Televox, constraining the deployment times to their availability. This meant that messages could not be sent at planned times of day. For one round of messages, the texts were sent after business hours, so if anyone called the number immediately after getting the text, their call went to voicemail, and they would not be able to talk to anyone until the next business day. This was particularly problematic given that the messages were sent to the wrong group of individuals, and they may have been seeking answers due to concern about losing their benefits.

## **2. SNAP participant experience**

Individuals shared their experiences with the intervention through two focus groups that included those who had received the text messages and responded by calling the SNAP E&T phone number or those who did not respond. The members from both focus groups shared three common reactions to the text messages, all of which are particularly understandable given that the messages were intended to be sent to a different group of SNAP participants—ABAWDs who were not exempt from the work requirement.

**Members of both focus groups often found the text messages to be irrelevant or suspicious.** One focus group member said that they assumed the messages were not relevant to them because they were working. These individuals expressed a vague understanding of what SNAP E&T was, either from information given to them when they enrolled in SNAP or through friends or family members. Some reported that they assumed the text messages were a mass text sent to everyone enrolled in SNAP. Others were concerned that the text messages were a scam as they had been warned about SNAP-related scams. Because they had not received text messages from SNAP before, they were surprised and somewhat suspicious about getting texts from SNAP E&T, especially because the messages were sent by a 6-digit short code, not a full 10-digit local phone number.

**Members of both focus groups were confused by the messages.** Some focus group participants expressed confusion about the messages. They were not familiar with SNAP E&T and the text messages did not provide enough information to explain the program. One SNAP participant said she thought that "E&T" was supposed to have been "EBT" (Electronic Benefit Transfer, which is the type of debit card used to distribute SNAP). Those who did not respond to the text message mostly expressed that they did not have time or energy to seek out more information about SNAP E&T—all of the people in the non-response focus group were parents of multiple young children, and some were facing substantial health issues.

**In addition to finding the text messages to be irrelevant or confusing, members of both focus groups expressed that the texts caused them to worry that their SNAP benefits were at risk.** The

third text message that said recipients might soon lose their SNAP benefits worried individuals who thought they were fulfilling all the requirements to maintain their SNAP benefits. A few individuals were in the process of recertifying their SNAP benefits when they received the texts and were already feeling overwhelmed by everything they needed to do to maintain their benefits. A worried reaction was mostly expressed by those who did respond to the texts; they were motivated to call the number in the messages to ensure that their SNAP eligibility was properly documented.

The reactions of focus group members are understandable given that the text messages were not intended for them. The participant data error explains why all the individuals in the focus groups described personal circumstances that would exempt them from SNAP work requirements; many were currently employed and most had young children. It also partly explains why people were confused by the messages, as they were not written for this audience in mind. While a few individuals said they had heard about the return of work requirements and SNAP time limits for certain SNAP participants, most did not know about the change. The error also explains why most individuals who called the SNAP E&T phone number after receiving the texts did not enroll in SNAP E&T. Instead, their primary motivation for calling was to confirm that their exemptions from SNAP work rules were documented and ensure that they would not lose their SNAP benefits. The substantial volume of calls to SNAP E&T following the text messages cannot be interpreted with any policy relevance, as this particular intervention—sending messages with loss-aversion language to a non-ABAWD population—will not be replicated. The effect is likely due to worry or anxiety, not the wording and timing of the intervention design.

**Despite these reactions, many individuals did say that the text messages were a good way to reach them about SNAP-related matters.** Participants expressed that the multiple text messages were especially helpful to remind them to contact SNAP E&T. A few said they preferred emails because important information can get lost among other text messages. Many said that for truly important messages, they would expect a phone call and a letter.

## V. Lessons Learned

The implementation of Hennepin County's intervention faced serious challenges, but it pointed to the potential of using text message for outreach in the future. Lessons learned from the evaluation include strengths that can be built upon, changes that would be required to scale or replicate the intervention, and resources needed to continue implementation. Hennepin County OWD's deployment of the text messages to the wrong target population also invites reflection on how to prevent this type of error from occurring.

### A. What worked and can be built upon?

Several aspects of the intervention worked well and could be expanded. Hennepin County OWD SNAP E&T staff had an overall positive experience with the intervention. Prior to learning about the error in the target population, Hennepin OWD staff expressed that they were proud of being responsible for an intervention that may have helped people avoid losing SNAP and said the process of sending the texts was exciting. They would like to make more use of text messaging to reach out to potential SNAP E&T participants to share information about the program.

The intervention suggests that sending text messages is an effective way to reach out to SNAP participants. Among those assigned to receive a text message, nearly all of the phone numbers listed as the primary mobile phone for the SNAP participant were actually mobile phones based on verification of the data. In focus groups, some members noted that receiving text messages was a good way for them to receive information, though they also expected important information to come by mail or phone call. In addition, many people who received texts called the number in the text messages. These calls were mostly made to confirm that individuals' case records properly documented their exemptions from work requirements, but the fact that people took the action suggested by the messages shows that text messages can be a successful way of communicating with clients and providing instructions about next steps.

The intervention spurred some much-needed collaboration between the SNAP E&T and SNAP Eligibility units within the County. For instance, one member of the Hennepin OWD team now sits on an ABAWD working group with people from the SNAP Eligibility unit. The current structure of Hennepin County places the SNAP Eligibility unit in the Economic Supports area of the Human Services and Public Health Department and SNAP E&T in the Office of Workforce Development within the Disparity Reduction Department. This separation has made collaboration difficult. Stronger collaboration between SNAP E&T and SNAP Eligibility will be a necessary component of future outreach efforts that involve extracting SNAP participant data, but these relationships are beginning to be built.

## **B. Changes needed for replicating the intervention and expanding its scale**

Should Hennepin OWD decide to expand text message outreach for SNAP E&T, some changes and process improvements could be made to increase success.

Most importantly, stronger collaboration between the Hennepin County SNAP E&T staff and SNAP eligibility staff is critical. The Hennepin OWD SNAP E&T staff led the intervention without much involvement from the SNAP Eligibility unit. Including a larger coalition of staff, particularly those from the SNAP Eligibility unit, in the process of determining the correct target population, determining the shape of the intervention, and writing the text message language would have created a stronger sense of collaboration and shared ownership across the two partners.

Relatedly, a stronger working relationship between Hennepin County OWD SNAP E&T and the SNAP Eligibility unit, with a recognition of each unit's data expertise and knowledge gaps, could have helped reduce the likelihood of data errors occurring. The Hennepin OWD staff were not very familiar with the State SNAP eligibility system (MAXIS) data and had to rely on the SNAP eligibility staff to provide the SNAP participant data needed to correctly target the pool of text message recipients. Hennepin OWD staff did not have the knowledge or expertise to check or validate the data. As part of the data extraction process, it would be helpful to obtain the input of SNAP eligibility staff who are familiar with SNAP data who could have shared more information about the data, such as the definitions of the fields and values used to filter the administrative data. Even without direct involvement of the SNAP Eligibility unit, Hennepin OWD could have taken more steps to ensure the individuals targeted for the intervention were properly identified by having data experts at the County or State review and confirm that the data was correct. For any future outreach led by SNAP E&T staff in Hennepin OWD, stronger collaboration with

SNAP eligibility staff who have data expertise, including a process for data validation, is needed to ensure that the correct participants are selected.

Another critical ingredient for successful implementation is a careful assessment of the capabilities of the text message system that is used to implement a large-scale text outreach initiative and proactively make modifications where possible. Televox, the text message system used by Hennepin County, had technical limitations that required changes to the planned content of the text messages (they could not contain recipient's names), or the intended schedule (as messages could not be scheduled to send). These were not known to the Hennepin OWD staff prior to the road test phase of the intervention. The biggest challenge, however, was that Hennepin OWD staff were not given permission to send the messages themselves and instead had to go through an Economic Supports staff person which made the process of dispatching the messages less smooth than expected. For the Hennepin OWD SNAP E&T team to send text messages in the future, gaining access to Televox so they can send the messages themselves would be a substantial improvement to the process.

The intervention also provides insights into ways that the text message content could be enhanced and improved. Future text message content should include more information about what SNAP E&T is, including spelling out "Employment and Training," as some focus group participants did not have any prior knowledge of the program. In addition, the length of the text message is important and future interventions should test the effectiveness of sending long and short versions of messages. In order to reduce suspicion that the texts are spam, SNAP recipients could be informed upon enrollment that they may be texted, and that those messages would come from a 6-digit short code, not a 10-digit local phone number. Finally, text messages could be sent in languages other than English. Twenty-two percent of SNAP participants in Hennepin County did not speak English as their primary language. Somali was the most common non-English language, at 16 percent. This small extra effort could improve the reach of any future text messaging outreach.

### **C. Resources needed to continue the changes made through the intervention**

No additional monetary or staff resources would be needed for continuing or expanding a text message program in Hennepin County, primarily because of Hennepin County's established contract with Televox. Current staff could manage the volume of calls that would come with a future text messaging effort. However, Hennepin OWD SNAP E&T staff need the participation of the SNAP Eligibility unit, particularly data staff, to identify the correct individuals for E&T enrollment text messages and extract data effectively. Second, Hennepin OWD would ideally need permission to access to the Televox system themselves to upload text message language and send messages. Hennepin OWD staff felt that the current process of working through Economic Supports staff to send messages was not viable in the long-term.

## Appendix A.

### SNAP RCE Intervention Text Message Content

**Exhibit A.1.** Text messages

Purpose	Behavioral Concept	Series A: Short Message	Series B: Longer Message	Timing
Make it clear how to enroll in E&T	Mere exposure	Hennepin: Hi I'm Colleen with SNAP E&T. For help finding a job or getting training call 612-596-1708.	Hennepin: Hi I'm Colleen with SNAP E&T. I can help you find a job or get training. Call 612-596-1708 to learn about this exciting program!	September 14th, 2023
Clarify that the changes to work rules are in effect soon and apply to the person getting the text. Emphasize that there are not many additional steps to enroll in E&T.	Loss aversion and endowed progress effect	Hennepin: SNAP work rules are in effect soon but we provide help finding a job or training! Call 612-596-1708 now.	Hennepin: Hi, SNAP work rules come back into effect soon, but getting SNAP qualifies you for free job search or training help. Call us at 612-596-1708. Your spot with us is waiting!	September 28th, 2023
Notify participants of upcoming end of ABAWD grace period and consequent benefit disruption	Loss aversion	Hennepin: You may soon lose SNAP. Enroll in our job program to keep your benefits. Call 612-596-1708.	Hennepin: Hi, You may be close to losing your SNAP. I can help you keep your benefits by finding a job or getting training. Call 612-596-1708 today.	October 5th, 2023

Note: The longer message series was initially designed to include the recipient's name, but variable fields, like name, are not possible through Televox.

## Appendix B.

### Supplemental Table

**Table B.1.** Impacts of behaviorally informed text messages

	Treatment group	Control group	Difference
Outcome: Enrolled in SNAP E&T (%)			
Treatment group: received any text	0.16	0.00	0.16**
Treatment group: received text A (short)	0.18	0.00	0.18*
Treatment group: received text B (long)	0.13	0.00	0.13
Outcome: Participating in SNAP, January 2024			
Treatment group: received any text	66.57	62.26	4.31***
Treatment group: received text A (short)	65.49	62.26	3.24*
Treatment group: received text B (long)	66.87	62.26	4.61***
Outcome: Participating in SNAP, February 2024			
Treatment group: received any text	65.02	62.12	2.90*
Treatment group: received text A (short)	64.00	62.12	1.88
Treatment group: received text B (long)	65.36	62.12	3.24*
<b>Number of observations<sup>a</sup></b>	<b>2,968</b>	<b>1,481</b>	

Source: SNAP administrative and SNAP E&T outcome data.

\*\*\*/\*\*/\* Difference between treatment and control group significantly different from zero at the 0.01/0.05/0.10 level, two-tailed test.

<sup>a</sup> Number of observations corresponds to the pooled treatment group receiving any text. The treatment group receiving text A consisted of 1,483 observations. The treatment group receiving text B consisted of 1,485 observations.

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