2016

YELLOW DOT PILOT PROGRAM EVALUATION FINAL REPORT

Prepared for:
Georgia Department of Public Health

Prepared by:
Economic Evaluation Research Group
& Institute of Gerontology
College of Public Health
University of Georgia

November 2016

Executive Summary

The Yellow Dot program's goal is to help medical professionals make the best decisions possible about the emergency medical treatment of people in the program. In 2015, the Georgia Department of Public Health (GADPH) launched the Yellow Dot program in Athens, Clarke County and Dublin, Laurens County, Georgia, targeting persons aged 55 and older in each county. The GADPH partnered with the Economic Evaluation Research Group and the Institute of Gerontology at the University of Georgia's College of Public Health to conduct a formal evaluation of the Yellow Dot program.

The crucial stakeholders needed for the success of the Yellow Dot program were identified and separated into three main categories: participants, enrollment sites, and providers. The UGA team evaluated the program within each of these categories through two surveys (participants and enrollment sites) and an in-person survey/group discussion (EMS personnel).

As of September 29, 2016, UGA students distributed a total of 460 packets in Athens-Clarke County to 257 participants. Packets were also distributed in Laurens County, and at least 81 people were enrolled in Laurens County. Participant perceptions of the Yellow Dot program were positive, though program, favorability did not necessarily translate into high rates of implementation. In general, respondents understood the overall goal of the program. There appears to be enthusiasm among older adults for the Yellow Dot program. Participants were satisfied with the materials and expressed confidence and support for the program. Enrollees stated that they would recommend the program to others, and many suggested that Yellow Dot should be widely advertised.

Of the providers surveyed, most were aware of the Yellow Dot program. However, none of the providers who completed the survey had seen a Yellow Dot during a work call as of September 2016. When asked about the goal of the program, a majority said the program's purpose was to better inform first responders about the patient's medical history. The survey results suggest that the EMS training gave providers the information they needed to implement the program. It was noted that there may be a need for ongoing training and education among providers to refresh those who have been trained previously and to ensure the training of new hires. We do not know if this training will work in practice because no providers have come in contact with Yellow Dot in the field to date. While provider perceptions were largely positive, some providers expressed concerns regarding the program's efficiency and reliability.

For enrollment sites, perceptions of the Yellow Dot program have been positive. However, time and effort are required at enrollment sites, which must have available staff to dedicate to the program for promoting and enrolling participants.

The second phase of the project proposes to conduct an outcome evaluation of the Yellow Dot program. In this phase, systematic data will be gathered to examine the effectiveness of the program via proximal outcomes.

Introduction

Yellow Dot History

The Yellow Dot program was started in Connecticut in 2002 by the People's United Bank. Since then, the program has been implemented in about 30 states. The Yellow Dot program's goal is to help medical professionals make the best decisions possible about the emergency medical treatment of people in the program. The program gives first responders important information on scene, which they can then use to try to save lives during the critical first hour of an emergency. The program in Georgia is targeted to older adults and people that are medically at-risk, but anyone can take part. While the Yellow Dot program has been around for over a decade, there has been no formal evaluation.

In 2013, the Georgia Department of Public Health (GADPH) partnered with the Department of Human Services' Division on Aging Services, Alliant Quality, and the State Office of EMS to work on the logistics of introducing the Yellow Dot program in Georgia. Prior to this partnership, the GADPH older driver program had been researching the possibility of bringing the program to Georgia. In 2015, the GADPH launched the Yellow Dot program in Athens, Clarke County and Dublin, Laurens County, Georgia, targeting persons aged 55 and older in each county. According to the 2014 American Community Survey, 20,664 people aged 55 and older lived in Clarke County and 13,430 older adults lived in Laurens County. The GADPH partnered with the Economic Evaluation Research Group and the Institute of Gerontology at the University of Georgia's College of Public Health to conduct a formal evaluation of the Yellow Dot program.

People who want to join the Yellow Dot program are given a Yellow Dot packet containing an emergency information form, a Yellow Dot sticker or window cling,[1] and instructions on where to place the materials. Each packet also includes a folder with a magnetic clip to keep the forms together. The emergency information form should be filled out by the participant and includes their medical history, medications, a recent photograph, and emergency contact information. Participants are also asked to attach any advanced directives to the form. The Yellow Dot decal is to be placed in a location conspicuous to emergency responders, letting them know the emergency information form is nearby. For more details on how the Yellow Dot program works, please refer to the Yellow Dot Implementation Guide.

Stakeholders

The crucial stakeholders needed for the success of the Yellow Dot program can be separated into three main categories. These categories are participants, enrollment sites, and providers. The following section will outline these stakeholders, as well as define their role in the program.

[1] Window clings can only stick to glass and are meant to be used in the rear window of a motor vehicle. The sticker can attach to a wider variety of surfaces.

Participants

The Yellow Dot program in Georgia is aimed toward older adults (aged 55+). However, people outside of this age group may also participate. Those who are medically at-risk may have a strong interest in being part of the Yellow Dot program.

Residents of Clarke and Laurens counties were encouraged to enroll in the program, as well as older adults who 1) spend a large portion of their time in these counties or 2) would be transported to a hospital in either of these counties in the case of an emergency.

There are a few ways to enroll in the Yellow Dot program. These include enrolling at a community event, an enrollment event, or an enrollment site. Details about these strategies can be found in the Yellow Dot Implementation Guide.

Enrollment Sites

One way for a participant to enroll in the Yellow Dot program is to visit an enrollment site. Enrollment sites are locations in the community that have partnered with the GADPH to carry out the program. The GADPH gave these sites Yellow Dot materials and trained the sites on how to enroll people in the program. At *open sites*, any community member can visit the site and enroll in the program. At *closed sites*, only the organization's clients are invited to enroll in the program at that location. When receiving Yellow Dot materials at an enrollment site, participants were asked if they would be willing to take part in the program evaluation. If so, they were asked to provide their name and phone number. These data were then used to conduct follow-up surveys.

Providers

There are two main groups of providers. These groups are emergency medical services (EMS) and hospitals.

Emergency Medical Services

Emergency medical technicians (EMTs) and paramedics are likely to be the first providers to come across the Yellow Dot packet during an emergency, and it is therefore critical to have buy-in from EMS. EMS personnel should receive training about the Yellow Dot program, including where to look for the emergency information form, what to do with the form, how to hand over the form to hospital personnel, and how to record the use of the Yellow Dot program in their trip reports. It is important that local EMS personnel are trained before Yellow Dot materials are distributed to the community.

Hospitals

The emergency department (ED) is likely the last stop for the Yellow Dot packet during an emergency. Hospital staff should be trained on the Yellow Dot program so they know how to best use a Yellow Dot packet given to them by EMS. Case managers in the ED can use the packet to get in touch with the participant's emergency contact in a timely manner. The packet also gives the medical providers in the ED quick access to the participant's medical conditions and other information.

UGA Implementation Efforts: Enrollment and Distribution

Participant Implementation

Beginning in June 2016, four UGA students assisted the GADPH in implementing the Yellow Dot program in Clarke County. The students started by finding organizations in the community engaging older adults, such as churches, assisted living facilities, and recreational groups. The students emailed and called the organizations they thought would be interested in the Yellow Dot program. After calling and emailing, the students made contact with potential enrollment partners in person. The students went to several events where they enrolled people in the Yellow Dot program (Table 1).

Table 1: Yellow Dot Enrollment

Date	Location	Description	Packets Distributed	Participants Enrolled
June 11th, 2016	Athens Pregnancy Center Superhero 5K	Attended and enrolled participants	33	11
June 18th, 2016	Morningside of Athens	Hosted BINGO and enrolled participants	6	3
July 5th, 2016	Morningside of Athens	Hosted BINGO	0	0
July 7th, 2016	Osher Lifelong Learning Institute	Attended and enrolled participants	37	15
July 12th, 2016	Osher Lifelong Learning Institute	Attended and enrolled participants at the new member orientation	69	24
July 18th, 2016	Green Acres Baptist Church	Attended and enrolled participants with a group of older adults who meet monthly	14	5
July 22nd, 2016	Athens Community Council on Aging	Held an information and enrollment session	38	18
July 23rd, 2016	Athens-Clarke County Library Wellness Festival	Attended and enrolled participants	58	18
August 25th, 2016	The Oaks	Attended, presented, and enrolled participants at Family Night	16	6
September 9th, 2016	Osher Lifelong Learning Institute	Attended and enrolled participants at the OLLI Bash	171	51

Members of the UGA team also helped with enrollment at two events in Laurens County. On May 17, 2016, a member of the UGA team enrolled people at the Laurens County Senior Center. On September 6, 2016, another member of the team helped at an enrollment event held at the Laurens County Department of Health. Forty-seven packets were distributed at that event.

Lessons Learned

The students found it was important to have a champion present during an enrollment event. When one member of the audience was passionate about the program, other people were more likely to enroll. The students were more successful at enrollment events when someone in the organization supported the program.

Similarly, it was useful to have someone who worked for the organization as a champion. When the enrollment site's staff see the program as valuable, they are much more likely to seek out ways to get their clients enrolled. However, these facilities are often understaffed. They may not have the ability to devote employee time to implementation.

Typically, the students were more successful when someone with authority (e.g., Elizabeth Head, Kerstin Emerson, Nicole La Tournous) was present at the enrollment event. The presence of such a person made individuals more comfortable in signing up for the program.

It was also helpful for the students to bring an instant print camera with them when enrolling older adults in the program. The camera allowed volunteers to provide enrollees with a photo to include in their Yellow Dot packet during enrollment.

Many organizations that became enrollment sites before UGA's involvement did not know there were students to help with enrollment. The sites that took advantage of UGA student assistance were more successful than sites doing enrollment on their own.

Evaluation Design

This evaluation was approved by UGA's Institutional Review Board (STUDY00003569). The purpose of the evaluation of the Yellow Dot program was to address the following questions:

1) How many Yellow Dot packets have been distributed in each community, and by whom?
2) How many stickers versus window clings have been distributed and implemented as planned?
    a. Where are they used? What do participants prefer?
3) What are determinants of saturation of materials within a community?
4) To what extent was the Yellow Dot program implemented as planned?
5) What are the barriers and facilitators to implementation?
6) What are the experiences and perceptions of enrollment sites?
7) How has the program been received by the providers and the participants at both open and closed enrollment sites?
8) How has the program been received by EMS personnel and hospital staff?[2]

[2] Hospital staff were not interviewed at this stage of evaluation. For more information, please see the Future Evaluation section later in this report.

The UGA team addressed these questions with two surveys (participants and enrollment sites) and an in-person survey/group discussion (EMS personnel). For results, please refer to the Outcomes section found below.

Participant Surveys
Approximately two weeks after enrolling in Yellow Dot, people who agreed to participate in the evaluation were called by a member of the UGA team. The interviewer received verbal informed consent and then gave a brief telephone survey (10-20 minutes).

The survey asked participants about the Yellow Dot materials they received at enrollment and the ease/difficulty of the instructions. The survey also asked if the program instructions were followed, as well as the participants' opinions of the program. The survey ended with questions about demographic information.

Enrollment Site Surveys
The UGA team emailed a link to an online survey to all enrollment sites. The surveys were designed to take less than five minutes. The link was sent to all enrollment sites (open and closed) in both Clarke and Laurens counties (seven in Clarke County and six in Laurens County). These surveys asked about each site's experiences with the Yellow Dot program. The survey also asked about any perceived barriers and facilitators to implementation.

EMS Surveys & Group Discussion
EMS personnel completed a brief 5 to 10-minute paper survey. After the paper survey, the UGA research team member led a group discussion about the Yellow Dot program. The goal of the survey and group discussion was to learn about EMS personnel's training, experiences, and opinions of the Yellow Dot program.

Outcomes

Participants
Participant Demographics and Response Rates
As of September 29, 2016, UGA students distributed a total of 460 packets in Athens-Clarke County to 257 participants. Of these 460 packets, 227 contained stickers and 233 contained window clings. Packets were also distributed in Laurens County, and at least 81 people were enrolled in Laurens County.

Of those enrolled, 225 people agreed to participate in the evaluation survey. Forty percent (90) of these participants completed the survey, although not all respondents answered every question. Forty-six percent (104) of participants could not be reached. Ten percent (23) refused to participate in the survey. Three (1%) individuals were ineligible to participate in the survey because they gave their packets away. Five (2%) participants had no recollection of enrolling in the program or the survey. Figure 1 summarizes these results.

Figure 1: Participant telephone survey (n=225)

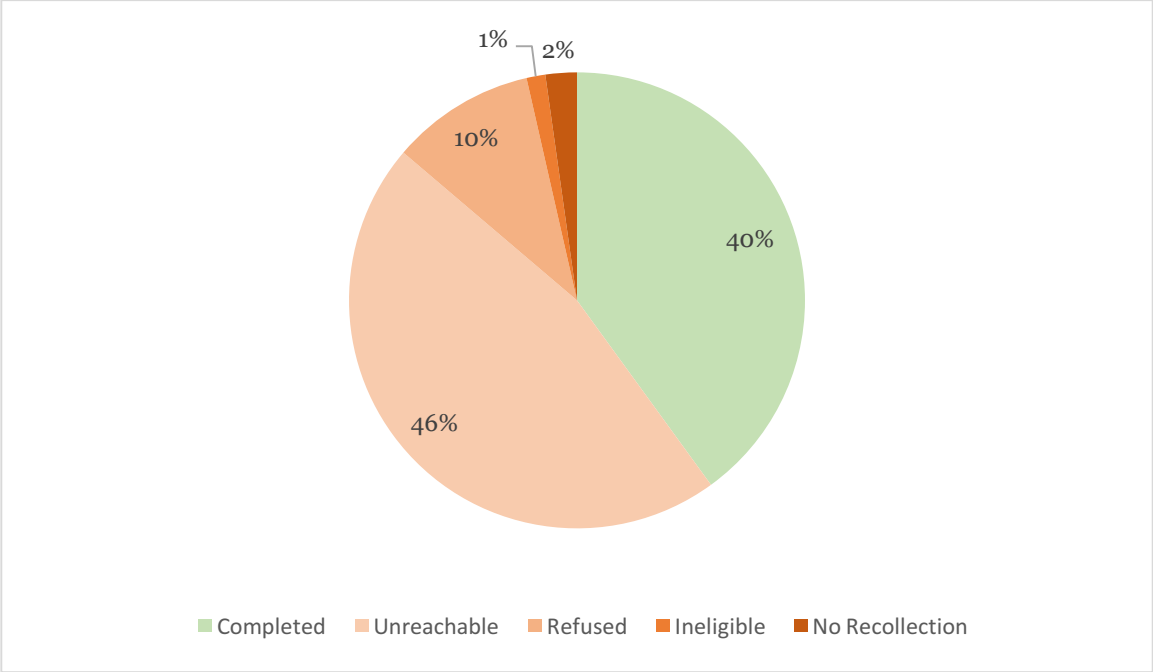


Table 2 summarizes survey respondent demographics. Survey participants ranged in age from 30-91. The average age was 68 years old. Most survey participants (90%) were over 55 years old, matching the program's targeted population. Over half of respondents (79%) were female, and 83% of respondents were white. Additionally, survey participants were highly educated and active drivers. Sixty-two percent of respondents had a college degree, and 86% drive themselves several times per week.

Half of the respondents heard about the Yellow Dot program through UGA's Osher Lifelong Learning Institute (OLLI) (50%). This contributed to the high level of education observed in the survey population. The other half of respondents learned about Yellow Dot from community events, local senior centers, or other participants. Nearly all respondents said the instructions included with the Yellow Dot packet were clear (96%).

Table 2: Respondent demographics

	Number of respondents	Percent of respondents
Sex (*n=89*)		
Female	70	79%
Male	19	21%

Age (*n=87*)		
30-39	3	3.5%
40-49	3	3.5%
50-59	8	9%
60-69	29	33%
70-79	34	39%
>79	10	11.5%
Race (*n=88*)		
Caucasian/White	73	83%
African American/Black	14	16%
Other	1	1%
Education (*n=87*)		
Grades 1-11	5	6%
High school graduate/GED	14	16%
Vocational/technical training	3	3%
Some college	11	13%
College degree (2-4 yr)	16	18%
Master's degree	24	28%
Doctoral degree	14	16%
Relationship status (*n=88*)		
Single	15	17%
Married	43	49%
Divorced	11	13%
Widowed	17	19%
Other	2	2%
Housing (*n=86*)		
Single family home	72	84%
Townhouse/Duplex	1	1%
Apartment	11	13%
Other	2	2%
Persons in household (*n=87*)		
1	36	41%
2	41	47%
3	5	6%
4	4	5%
>4	1	1%

How often do you drive yourself? (*n=86*)		
Several times per week	74	86%
Once a week	1	1%
A few times a month	2	2%
Never	9	11%
How would you rate your health? (*n=87*)		
Excellent	25	29%
Very good	29	33%
Good	24	28%
Fair	7	8%
Poor	2	2%

Participant Implementation

All ninety survey participants reported receiving at least one Yellow Dot packet. The average number of packets received was 2.7 (range: 1-12). Table 3 shows the number of packets received and the distribution of stickers and window clings. Of the 63 individuals who received both types of packet, most reported having no preference between the two (47; 75%). Respondents who did have a preference were evenly split between stickers and window clings. Eight people preferred the Yellow Dot sticker and 8 preferred the Yellow Dot window cling. People who preferred the sticker appreciated that it could attach to any surface. Those who preferred the window cling liked its transferability.

Table 3: Yellow Dot Packets

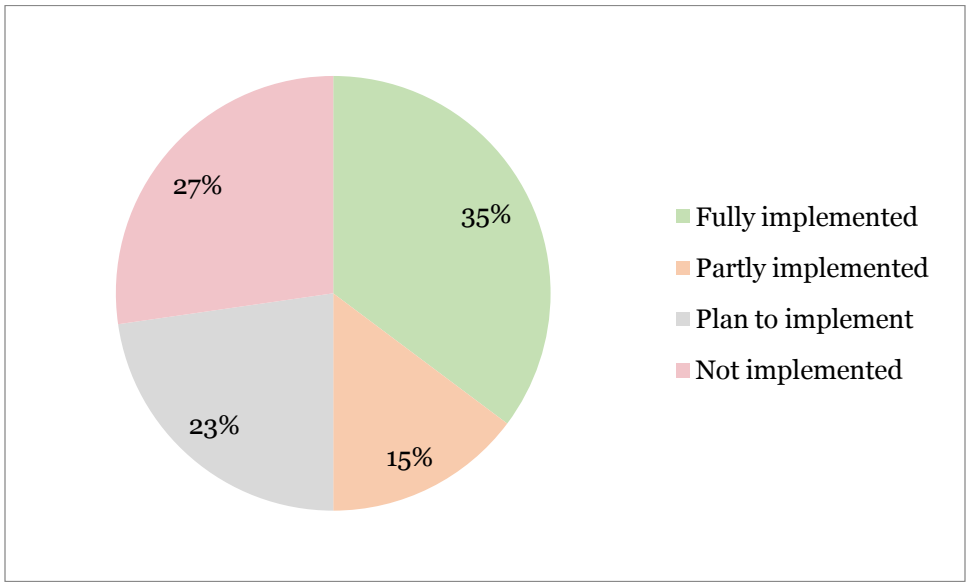
	Number of respondents	**Percent of respondents**
Packets received (*n=90*)		
1	18	20%
2	44	49%
3-4	17	19%
5-6	10	11%
>6	1	1%
Type of packet (n=89)		
Stickers + Clings	63	71%
Stickers only	20	22%
Clings only	6	7%

The telephone survey asked participants about their own implementation of the Yellow Dot program. This included asking about placing the decal on the vehicle and/or home. The survey also asked about filling out and placing the information packet. Half of participants (n=88) had at least partially implemented the program. For example, some participants filled out the form but did not place it in the glove compartment. Another

23% stated that they planned to implement soon. Of the remaining 27% who had neither placed the decal nor filled out the information form, the majority claimed that they hadn't had time or had been out of town. Other reasons given for not implementing the program included "did not feel it was necessary" (1), "cannot put stickers on my door" (1), and "concerns with the program" (1).

Figure 2 summarizes program implementation by Yellow Dot participants. The following paragraphs discuss the differences in implementation among respondents, such as the placement of decals and forms.

Figure 2: Summary of Yellow Dot Implementation (*n=88*)



Twenty-nine respondents reported placing the sticker/window cling on their vehicle (33%). Sixteen respondents reported correctly placing the Yellow Dot on the rear window. Thirty-four respondents reported placing the Yellow Dot sticker/window cling on, or in, their home (38%). Twenty-two respondents reported correctly placing the Yellow Dot on the front door. Almost two-thirds of respondents said they had not placed the sticker/window cling on their house/vehicle (62%). The most common reasons for not placing the sticker/window cling were, "planning on it" (17), "have not had the time" (15), and "have not set up Yellow Dot yet" (12).

When asked if they had completed the emergency information form, 39 participants said they had (44%) and 49 said they had not (56%). The most common reasons for not completing the form were, "planning on it" (20) and "have not had the time" (17). Other reasons given included, "out of town" (2), "did not feel it was necessary" (1), "partly done" (1; *n=89*), and "concerns with the safety of the program" (1).

Twenty-seven respondents reported having placed the form in their vehicle (69%) – twenty-three reported correctly placing the Yellow Dot on the rear window. Thirty-three respondents who completed the emergency information form reported having placed

the form in their home (84%) – thirty reported correctly placing the form on the refrigerator. Only five respondents who completed the emergency information form said they had not placed the form in their house/vehicle (13%). Reasons for not placing the form were, "could not figure it out," "putting it in the car soon," "in the process of moving," "waiting for pictures," and "have not had time."

Of those who completed the emergency information form, twenty-three said they have an Advance Directive, Living Will, or Physician Orders for Life-Sustaining Treatment (POLST), but did not attach it to the Yellow Dot packet (59%). Reasons given include, "have not done it yet" (4), "cannot find the item" (3), "did not realize I should" (3), "wrote on the form where they are" (3), "did not trust it" (1), "EMS already knows what to do" (1), and "too big" (1). Four respondents said they have one of the items mentioned above and did attach it to the packet (10%) and 12 respondents reported that they did not have any of those items to include (31%).

When asked if they had included a recent photograph on the emergency information form, about half of respondents said they had (20). The remaining 19 respondents did not include a photograph for a variety of reasons including not having one (11), not "getting around to it" (3), not feeling it was necessary (1), and only including a photograph in some, but not all packets (1). Table 4 summarizes participant implementation of the Yellow Dot program.

Table 4: Yellow Dot Implementation

	Number of respondents	Percent of respondents
Decal placement (n=89)		
Vehicle	29	33%
Rear window	16	
Front windshield	2	
Side window	4	
Other	7	
Home	34	38%
Front door	22	
Back door	2	
Refrigerator	3	
Other	7	
Did not place	55	62%
Completed form placement (n=39)		
Vehicle	27	69%
Glove compartment	23	
Other	4	
Home	33	85%
Refrigerator	30	
Other	3	
Did not place	5	13%

Advanced directives (n=39)		
Attached to form	4	10%
Did not attach to form	23	59%
Not applicable	12	31%
Photo attached (n=39)		
Yes	20	51%
No	19	49%

Participant Perceptions

Overall, participant perceptions of the Yellow Dot program were positive. In general, respondents understood the overall goal of the program. Eighty-eight percent of participants said the goal of the program is to help increase safety and efficiency of care. However, seven respondents, when asked about the overall goal, answered that they "think [Yellow Dot] is a good program" and four answered that they did not know or could not recall.

Ninety-four percent of respondents said that they would recommend the program to friends and family (82). Those who stated they would not recommend the program (5) gave the following reasons: "don't trust it," "undecided, have not started program," "don't have enough information," "concerns with the safety of the program," and "do not have family in the area." When asked if being a part of the program, "increases my trust and confidence that EMS and the hospital will give me the correct medical care in an emergency," there were no negative responses (54 strongly agree; 28 agree; 2 indifferent; 3 no comment). When asked if being a part of the program, "increases my trust and confidence that my family will be quickly notified if I am having a medical emergency," there was only one negative response (54 strongly agree; 27 agree; 2 indifferent; 1 disagree; 3 no comment). Table 5 summarizes the participants' perceptions of the program.

Table 5: Summary of participant perceptions

	Number of respondents	**Percent of respondents**
Would you recommend the program to friends/family? (*n=87*)		
Yes	82	94%
No	5	6%
Increase in confidence that participant will receive correct medical care (*n=87*)		
Strongly agree	54	62%
Agree	28	32%
Indifferent/No comment	5	6%

Increase in confidence that emergency contacts will be quickly notified (*n=87*)		
Strongly agree	54	62%
Agree	27	31%
Disagree	1	1%
Indifferent/No comment	5	6%

Providers: EMS in Clarke County

Provider Demographics

Emergency medical services (EMS) in Clarke County are provided by National EMS. National has 180 full time EMTs and paramedics serving a total of four counties (Rockdale, Morgan, Clarke, Oconee). As of September 21, 2016, 81 of National's EMTs and paramedics had completed the online Yellow Dot training (personal communication, Robby Atkins, Director of Operations, National EMS).

To assess the perceptions of first responders, EMTs and paramedics at National completed a brief paper survey, followed by an in-person group discussion with UGA evaluation staff about the Yellow Dot program. Thirty-eight providers completed the survey, although not all providers answered every question. Seventeen participants in the EMS survey identified as paramedics and 18 as EMTs. Respondents' experience as first responders varied greatly, ranging from <1 year to 10+ years. Age of the providers ranged from 21 to 53 years old, with an average age of 30.5 years. Over half of the respondents were male (59%; *n=34*) and 88% identified as white (*n=33*). The remaining 12% identified as black, Hispanic/Latino, or biracial/multiracial.

Provider Knowledge

Of the providers surveyed, 84% were aware of the Yellow Dot program (32; *n=38*). **However, none of the providers who completed the survey had seen a Yellow Dot during a work call as of September 2016**. When asked about the goal of the program, 70% said the program's purpose was to better inform first responders about the patient's medical history (19; *n=27*). The remaining 30% provided similar responses, including to improve accuracy/speed of patient care, to increase provider awareness, and to provide appropriate care more quickly.

Seventy-four percent of providers said they would know where to look for a Yellow Dot sticker/window cling when called to a motor vehicle crash. Almost all of those respondents knew to look on a car window, but only 54% correctly named the rear window of the vehicle. Seventy-nine percent said they knew where to look for the Yellow Dot emergency information form if they were to see a Yellow Dot sticker/window cling at a motor vehicle crash; all correctly named the glove compartment as the place to look for the emergency information form.

Sixty-nine percent of providers said they would know where to look for a Yellow Dot sticker/window cling when called to an emergency at a home. Sixteen of those

respondents said they would look for the decal on the front door and four said they would look for it on the refrigerator. Sixty-three percent of providers said they knew where to look for the Yellow Dot emergency information form if they were called to an emergency in a home. Eighteen of these respondents knew to look for the form on the refrigerator, while two stated they would look for the form inside the refrigerator. Table 6 provides an overview of EMS provider knowledge of the Yellow Dot program.

Table 6: EMS Provider Knowledge

N=38	Number of respondents	Percent of respondents
Have you heard of the Yellow Dot program		
Yes	32	84%
No	6	16%
Where do you look for the Yellow Dot decal on a vehicle?		
Rear window	15	39%
Other window	11	30%
Inside vehicle	2	5%
I don't know	10	26%
Where do you look for the information packet in a vehicle		
Glove compartment	30	79%
I don't know	8	21%

Provider Perceptions

Data were collected for provider perceptions from 24 individuals and are presented in Table 7. Sixty-two percent said they thought Yellow Dot is a useful and effective program (15). The remaining 38% of respondents did not think the program is useful and effective (9). For those who said the program is not useful, two said they felt the program had the potential to be effective. However, they were unsure because they had not yet seen it on a call. Another felt the program was too similar to existing programs, which are already underutilized. There was also concern that medics do not have enough time on calls to look for the emergency information form. Finally, two providers were hesitant to trust information provided by the patient. They felt the information may not be reliable and patients may not update the information regularly.

Seventy-nine percent of providers surveyed felt the program should be expanded throughout the whole state (19). These individuals felt it is helpful for providers to have the emergency information form available when needed. In addition, they felt that expanding the program state-wide would provide consistency in care. Twenty-one percent of those surveyed felt the program should not be expanded statewide (5).

When asked what changes they would make to the program, respondents said there should be more participants enrolled, increased education, and more dissemination of materials. Others suggested that primary care physicians and emergency departments could fill out the emergency information form along with the patient. This would increase the medics' confidence that the information included is accurate and up-to-date. Additional suggestions were explored during discussions following the survey. It was mentioned that the patient's preferred local hospital should be included on the form. Medics also recommended that hospital case managers be included as a partner in implementation of the program.

Table 7: EMS Provider Perceptions

N=24	Number of respondents	Percent of respondents
Do you think the Yellow Dot program is a useful and effective program?		
Yes	15	62.5%
No	9	37.5%
Should the Yellow Dot program be expanded throughout the state?		
Yes	19	79%
No	5	21%

Enrollment Site Experiences

While responses to the enrollment site survey were low, overall perceptions of the Yellow Dot program have been positive. Sites felt that they received adequate training from the GADPH and did not feel burdened by program implementation.

Summary of Findings

This evaluation highlights the need to reorder the process of implementation. Community champions should be identified (see Implementation Guide), providers (EMS and hospitals) should be trained, and enrollment sites should be established before the Yellow Dot program is presented to older adults in the community. It may not be feasible to train every single first responder in a community before implementing the program, but provider training should be well underway before participant recruitment begins. Similarly, it is likely that new community champions and additional enrollment sites will continue to be identified and incorporated into the project after enrollment begins. A dynamic implementation approach that allows for flexibility is encouraged, as long as critical stakeholders are in place before participant enrollment begins.

Providers

After contact with local EMS providers was established, training proceeded quickly. The survey results suggest that the EMS training gave providers the information they needed to implement the program. However, it was noted that there may be a need for ongoing

training and education among providers to refresh those who have been trained previously and to ensure the training of new hires. We do not know if this training will work in practice because no providers have come in contact with Yellow Dot in the field to date.

Almost half of the EMS providers expressed concerns about the effectiveness of the Yellow Dot program. These concerns were largely attributed to the lack of saturation within the community and doubts that participants will keep the emergency information form updated. It was also noted that training of providers should emphasize that the program is voluntary on the part of participants, and that providers are to use their own discretion when referring to the emergency information form. There was also concern that the Yellow Dot program is too similar to other existing programs, but ongoing evaluation of the Yellow Dot program differentiates it from these other similar programs and may ease concerns about redundancy.

We were unable to evaluate the reach of training within the next layer of providers – hospitals. For future implementation in other counties, it is recommended that this training occur prior to community implementation and that further evaluation plans include hospital staff as a primary target to assess implementation success.

Enrollment
GADPH training for enrollment sites and volunteers was informative. However, implementing the Yellow Dot program in the community requires a significant amount of time and effort.

Time and effort are also required at enrollment sites, which must have available staff to dedicate to the program for promoting and enrolling participants. Additional volunteers are needed at community events. Advertising is necessary to increase program awareness. Enrollment requires a lot of organization and resources (staff time, community commitment, and financial support).

There also may be opportunities to find other ways of engaging older adults in the program. For example, older adults may be reached through primary care providers and pharmacies who can help them fill out the information as they enroll. This can reduce concerns about the medical information being kept up to date.

Participants
There appears to be enthusiasm among older adults for the Yellow Dot program. Participants were satisfied with the materials and expressed confidence and support for the program. Enrollees stated that they would recommend the program to others, and many suggested that Yellow Dot should be widely advertised. However, there was a gap between expressed participant support for the program and actual participant implementation. There may be a substantial time lag between when participants receive the program materials and when they implement the program, and there is a concern that they may never implement the program. The survey revealed a lack of knowledge surrounding Advance Directives, Living Wills, and Physician Orders for Life-Sustaining

Treatment (POLST) among survey respondents. This may present an opportunity to incorporate education about these documents within the Yellow Dot program.

Limitations of the Program Evaluation

Community implementation of the Yellow Dot program began in April 2016. The majority of enrollment occurred in July and August of 2016. The program evaluation concluded in September 2016. Due to this timeline, the evaluation took place before community implementation became widespread (e.g., saturation). Goals for community saturation were not developed in advance and therefore are not included in this evaluation. Complete distribution of packets available (20,000) would result in ~20% saturation in each of the two participating communities, which serves as a good benchmark for future program implementation. The participant surveys were administered at least two weeks after enrollment, which may not have been enough time for participants to properly implement the program. This evaluation is also limited in that we have not included information on providers in the hospital setting.

Future Plans for Evaluation

The above described *process evaluation* was the first phase of the evaluation, which gathered information about the program implementation process for the two participating communities. The second phase of the project proposes to conduct an *outcome evaluation* of the Yellow Dot program. Many states have implemented the Yellow Dot program with anecdotal information attesting to the program's success. However, to date no one has gathered systematic data to examine the effectiveness of the program. One of the overarching goals of the Yellow Dot program is to decrease mortality. However, a mortality outcome can only be measured with a long-term evaluation. Therefore, the second phase proposes to first conduct an evaluation of proximal outcomes through the following goals:

1) Extend process evaluation by continued dissemination and implementation of program and following up with providers
    a. Assist in dissemination of Yellow Dot in both Athens and Dublin, Georgia
    b. Survey EMS personnel to document training effectiveness and knowledge of Yellow Dot program
    c. Interview hospital staff in charge of Yellow Dot training to document barriers/ facilitators at disseminating training to hospital staff

2) Assess outcomes of the Yellow Dot intervention among Yellow Dot participants compared to two comparison groups: (1) older adults using some other system or program for communicating emergency information (e.g., vial of life, cell phone app), and (2) older adults without any emergency documentation. Evaluation questions include:
    a. Reasons for choosing their method for communicating emergency information, experiences (if any) using their method during an emergency, and examining whether there are significant differences between the

Yellow Dot intervention group and the two comparison groups among: 1) trust and confidence that they will receive the correct medical care in an emergency, and 2) trust and confidence that their emergency contacts will be quickly notified

3) Assess barriers and facilitators to EMS implementation and the impact of Yellow Dot program on EMS plan of care
    a. Document use of the Yellow Dot program among EMS in Athens and Dublin – including trends in reporting Yellow Dot during emergency responses across one year
    b. In-person follow up with EMS personnel who reported Yellow Dot in their incidence logs to survey about barriers and facilitators and if there were any changes in plan of care based on Yellow Dot packet