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A Health Communication Campaign Promoting Transportation Alternatives in Mason City, Iowa

Gina Chieffo   Sefonobong Obot   Miriam Vélez-Bermúdez
Yi Lu   Helaina Thompson

Class led by: Professor Shelly Campo
Course Name: Health Communication Campaigns | College of Public Health
Project Lead: Kara Ruge, Marketing & Public Information Officer, CGCDPH
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Iowa Initiative for Sustainable Communities
Provost's Office of Outreach and Engagement
The University of Iowa
111 Jessup Hall
Iowa City, IA, 52241
Email: iisc@uiowa.edu
Website: http://iisc.uiowa.edu/

Aging in place: A health communication campaign promoting

transportation alternatives in Mason City, Iowa

by

Gina Chieffo, Yi Lu, Sefonobong Obot,

Helaina Thompson, and Miriam Vélez-Bermúdez

University of Iowa
CBH 6220

Introduction

Literature Review

According to the United States Census Bureau (2015), there are approximately 47.8 million people in this country who are 65 years of age or older. Furthermore, as the baby boomer population (i.e. people born from 1946 – 1964) continues to age, that number will increase. Data from 2014 indicates there were 76.4 million baby boomers in the US (Pollard & Scommegna, 2014). Previous research has estimated that by 2020, 1 in 5 Americans will be over the age of 65 (Alley, Liebig, Pynoos, Banerjee, & Choi, 2007).

A large portion of older adults contribute to society through volunteering, caregiving, activism, advocacy, and community involvement (Alley et al., 2007; Liu & Beser, 2003; Wiles & Jayashinha, 2013). However, many older adults who want to contribute to society face difficulties in doing so due to a lack of existing accommodations that would allow them to move independently in their environment (Alley et al., 2007; Bookman, 2008). Because there are inadequate accommodations for older adults, it is hard for them to age in place. Aging in place refers to older adults successfully living independently in their own homes through access to services and support that modify as their needs and abilities change (Alley et al., 2007; Fields & Dabelko-Schoeny, 2016). Aging in place takes planning. Older adults who have not previously prepared to age in place risk facing economic hardships, long-term illness, and social isolation (Bookman, 2008).

An important factor for aging in place is access to transportation alternatives (Evans, 2009; Fields & Dabelko-Scoeny, 2016; Gardner, 2014; Hanson & Hildebrand, 2011). Access to transportation is essential to health and wellbeing as it allows older adults to perform their activities of daily living such as going to work, attending medical appointments, running errands,

engaging in entertaining activities, and spending time with other people (Gardner, 2014; Hanson & Hildebrand, 2011). Most older adults' preferred method of transportation is driving themselves, especially in non-urban and rural areas (Glasgow, 2000; Hanson & Hildebrand, 2011; Hess, 2009). Older adults who can drive are more likely to participate in volunteering, caregiving, activities through religious organizations, and visiting with friends and neighbors compared to older adults who are unable to drive (Glasgow, 2000). In contrast, loss of the ability to drive is related to morbidity, mortality, self-care disability, depression, loss of spontaneity, and social isolation (Adler & Rottunda, 2006; Gardner, 2014). However, despite declines in vision, hearing, muscle strength, and reaction times that would make it dangerous to drive (Adler & Rottunda, 2006), many older adults continue to do so (Adler & Rottunda, 2006; Glasgow, 2000; Kim, 2011). In fact, the number of drivers 65 and older has continued to increase (Glasgow, 2000; Kim, 2011), most likely due to the large number of baby boomers in this population (Pollard & Scommegna, 2014).

This dependence on driving private automobiles is exacerbated in non-urban and rural communities. There are fewer retail establishments per square mile compared to more urban areas, thus increasing the necessity to travel in an automobile (Glasgow, 2000). Although public transportation services are a viable alternative to not being able to drive oneself, many public transportation services in non-urban communities are inadequate. In addition to the lack of paratransit or door-to-door transit services (Glasgow, 2000), many older adults believe their public transit system is inconvenient, unsafe, and does not meet the needs of older adults (Adler & Rottunda, 2006). In a study assessing public transit use among adults 65 and older in two large cities (San José, CA and Buffalo, NY), results indicated that every additional 5 minutes in perceived walking distance to a public transit stop decreased the use of public transit by 5%

among non-drivers and by 25% among drivers (Hess, 2009). These results suggest that planning

for transportation alternatives once driving cessation occurs will be difficult for those who are

currently driving.

Driving cessation can be a temporary or permanent event that occurs when individuals

feel it is too dangerous to drive, or when other people make that decision for them. This can

occur due to medication side effects, fear of driving at night, inclement weather, bodily injury, or

physical and/or cognitive declines (Adler & Rottunda, 2006). Following driving cessation, many

older adults have reported preferring to ask for rides from friends or family. However, they also

report not wanting to be a burden to others so they only ask for rides regarding matters of

necessity, like doctor appointments or groceries, instead of entertainment (Adler & Rottunda,

2006; Glasgow & Blakely, 2000; Hanson & Hildebrand, 2011). While using public

transportation services is an alternative to asking for rides, older adults tend to have negative

attitudes towards public transit like its perceived association with crime and low-income

individuals as well as long walking distances to bus stops (Glasgow, 2000; Hess, 2009). As a

result, many face a decrease in social interaction and a reduction in the number of people who

are a part of their social networks (Adler & Rottunda, 2006; Mezuk & Rebok, 2008).

Additionally, this leaves people who are alone with fewer options for transportation alternatives.

Older adults who have adapted to life after driving have done so by fostering positive

relationships with those who give them rides and transit employees. For example, a participant in

a series of focus groups ($N = 12$, ages 70 – 85) said she would thank her driver for being taken

along on a shopping trip by buying them lunch (Adler & Rottunda, 2006). In an ethnography

following six older adults ($M_{age} = 82.5$), the author noticed that personal relationships and

interactions with cab drivers and transit employees played an important role to these older adults

as they aged in place. It made them feel noticed in a world that often ignores the elderly. One of these older adults who often rode the bus to get around would always converse with the bus driver. Another was fortunate enough to develop a relationship with a cab driver who he could call any time he needed a ride, and often enjoyed pleasant conversations with him as well (Gardner, 2014). Although driving has been considered the ideal form of transportation, older adults can be encouraged to carpool and use public transportation because it is a great way to build a sense of community, particularly between those receiving rides and giving rides, and among users of public transportation. Another important factor that was necessary to cope with not being able to drive was the ability to employ various strategies on a daily basis. These strategies included bringing along support tools when walking outside (e.g. a scooter or bundle buddy), altering plans (e.g. waiting until it gets warmer in the day to run errands), or making sure one is well rested enough to have energy to go on daily trips (Gardner, 2014).

Older adults require transportation support; however, they perceive their options are limited whether or not they actually are (Adler & Rottunda, 2006; Glasgow, 2000; Glasgow & Blakely, 2000; Hess, 2009). Potential avenues for transportation support are religious organizations, where they often preach about helping those in need and are sources of social support (Krause & Wulff, 2005; Strawbridge, Cohen, Shema, & Kaplan, 1997). In addition, previous evidence has suggested that religious establishments, such as churches, are settings where social marketing programs have been successful in getting older adults to participate in balance classes for fall prevention (DiGuiseppi et al., 2014) and walking for exercise (Reger et al., 2002). Social marketing techniques were employed in churches by getting church leaders to announce marketed messages to their congregation during church-related services and by placing these marketed messages in church bulletins (DiGuiseppi et al., 2014; Reger et al., 2002).

Similar strategies could be employed in promoting transportation alternatives for older adults. Recommendations from the participants in the Adler & Rottunda (2006) focus groups suggested a public campaign where a trusted and well-known member of the community is recruited to promote the idea that there is "life after driving." Broader suggestions to improve transportation support for older adults include: improving the quality, availability, and convenience of public transit in rural areas; providing education on public, private, and volunteer transportation as well as how to use these options effectively and flexibly; and encouraging older adults to plan to stop driving earlier, in collaboration with friends and family members (Glasgow, 2000).

Significance of the Problem

In the U.S.

With the aging of the U.S. population, concerns of older Americans have become increasingly pressing. One such concern is transportation. A majority of America's older adults today have spent their lives driving themselves. Consequently, the decreased driving patterns that are related to aging tend to place limitations on the older adults' mobility, thereby reducing health and quality of life (Glasgow, 2000; Glasgow & Blakely, 2000; Syed, Berber, & Sharp, 2013). Travel diary surveys conducted by Hanson and Hildebrand (2011) revealed that most of the older adults who no longer drive prefer getting rides from family and friends as their primary alternative transportation. Inability to get a ride often resulted in canceled trips. (Hanson & Hildebrand, 2011).

The lack of transportation among older adults can have serious impacts to their health and quality of life. Transportation is a key factor influencing one's access to community resources such as fresh food and health care (Strickhouser, Wright, & Donley, 2015; Syed et al, 2013). With limited ability to access food, older adults with transportation issues are at risk for food

insecurity, which is associated with increased stress and the development of chronic diseases (Strickhouser et al, 2015; Lee, Gundersen, Cook, Laraia, & Johnson, 2012). Syed et al (2013) have also found transportation barriers to be related to poorer overall health outcomes and chronic disease management. These impacts on health and quality of life may cause older adults to move to a different residential area or end up in a long-term care facility or nursing home (Lee et al, 2012).

In Mason City, IA

Much like the rest of the U.S., Cerro Gordo County, within which Mason City is located, is seeing a rapid increase in the proportion of older adults (Vogelson, 2017). These older adults have listed ten perceived needs, four of which can be improved through better transportation support. They include: help with groceries and errands; transportation to appointments, running errands, etc; socialization opportunities; and medication and disease treatment (Vogelson, 2017). Mason City's public transit system can provide some transportation support for older adults who cannot drive. However, there are several limitations within the system. Bus lines have fixed routes that can be inconvenient when the trip's destination is not on the route. This is exacerbated in case of inclement weather. The Mason City bus lines do not operate during evening and weekend hours, further increasing inconvenience and limiting access to community resources ("Transit"). Thus, our campaign will seek to more fully address transportation limitations with multiple alternative resources in addition to buses. These resources include the Mason City bus, Mason City Paratransit, carpooling, and local grocery delivery services.

Formative Evaluation

In order to confirm our beliefs that transportation was an important factor in aging in place in Mason City, we conducted interviews with key informants from Mercy Hospital and

Mason City Public Transit, faith leaders and a youth director from churches in Mason City, congregation members from Mason City churches, and the Marketing and Public Information Officer at Cerro Gordo County Department of Public Health and distributed a survey to members of a church congregation and home care patients.

Interview Findings

Interviews with Mercy Hospital Representatives

We spoke with two representatives from Mercy Hospital over the phone to gather information about how lack of transportation impacts community members as they age. We were told that driving and general transportation is one of the biggest socio-economic issues that patients face whether it is a permanent or temporary issue. It impacts how people interact with the healthcare system because they may not be able to get to clinic or hospital, so they use emergency care. One issue that was mentioned is that transportation is available during business hours but is difficult to find when the bus is not running (at the end of the day, holidays, etc.) Seasonal changes can also affect people's health conditions and make transportation alternatives more necessary.

According to our interviewees, there are several transportation resources, but it becomes difficult for people to sort through all of the information by themselves. They also mentioned the hospital has transitional health coaches who follow up with people and help them find resources such as alternative transportation, but that the actual point of discharge is not a great time for providing people with resources because they are mostly focused on leaving and going home.

Based on this interview, it sounds like people do not learn about alternative forms of transportation until they already need them. This indicates that bringing these alternatives to

people's attention earlier and changing their perception can both better prepare them for the future and make learning about resources less overwhelming in the future.

Interviews with Church Leaders

We interviewed two church leaders from two Mason City churches in-person about their congregations and transportation needs for their congregation members. Churches were chosen as a focus because talking to church leaders allowed us to easily get information from older Mason City citizens who fall into our target population for this campaign. In both of these churches, most of the members are older adults, most of whom still drive. Aside from driving, the most preferred form of alternative transportation was getting rides/carpooling. Additional forms of transportation mentioned included cabs and buses to get to church-related events.

Each form of transportation came with its own benefits and barriers. During our interview with one church leader, he explained that the main factor preventing people from using cabs is the cost. There tends to be a higher number of low-income church members who are not able to drive. Thus, cabs have not been a popular method of transportation. Still, some community members have successfully used cabs to travel around town. Cabs are convenient as they transport the passenger from a specified point A to point B and do not require extra walking.

According to the church leaders, carpooling has been the most common and most preferred form of alternative transportation among their church members. However, carpooling seems to only occur between close friends and family members, as "people tend to ride with those they feel comfortable with." When asked about the possibilities of starting a carpooling system within their church, one church leader expressed a need for a more coordinated effort to establish a structure for routes, scheduling, and other logistics. This need was echoed by the other faith leader.

In addition to cabs and carpooling, our formative interviews provided us with better insight to Mason City's bus system. While buses are an inexpensive method of transportation, many limitations prevent people from using them. One church leader pointed out the presence of stigma around buses and the people who ride them. A lack of a comfortable waiting spot for buses, especially in the winter, was also indicated as a barrier to using the bus.

Several different community resources were highlighted as key places to which increased transportation support is needed. In general, community members have trouble getting to the outskirts of Mason City, where resources such as the Mercy Hospital, Walmart, and Salvation Army are located. Furthermore, there is a general need for more social interactions and community connections among older adults, especially for those who are homebound and thus less likely to have daily social contacts. Both church leaders articulated that increased transportation support will aid this need, since a lack of transportation often resulted in the absence from community events.

Interview with Youth Director at a Mason City Church and the Marketing and Public Information Officer at Cerro Gordo County Public Health

We spoke to the Youth Director of a church in Mason City and the Marketing and Public Information Officer at Cerro Gordo County Public Health together in person about ways to use churches as messaging tools for a campaign. We were told that while faith leaders (pastors, priests, etc.) often do not have a lot of time, they are effective at disseminating messages to the congregation. The Youth Director said that if he has something important to tell the other congregation members, he will have the pastor say it for him. He said that there is a level of trust and respect that congregation members have for the church leader that makes church leaders especially effective at communicating. We also discussed ways to tailor messages to older

community members. Strategies for this included making sure that older people feel that they have control over their lives and the choices they are making.

This interview helped confirm some of the ideas from the literature about using churches as a setting for social marketing. This also indicated that church leaders could help deliver messages for this campaign by making announcements to the congregation about using transportation alternatives. Through this interview, we were also put into contact with a Mason City community member who could serve as an example for how to use different transportation alternatives effectively.

Interview with A Mason City Resident

We interviewed a community informant, Coni, over the phone. Coni is 71 years old and lost the ability to drive at age 50, so we asked her about her experience navigating transportation alternatives. She uses a combination of bus rides, taxis, and carpooling to get around town. From speaking with her, we gathered some helpful information to consider when making a resource for transportation alternatives. For example, she plans ahead and combines trips to make taxi trips more efficient and affordable, uses Hy-Vee delivery to get groceries, and relies on a network of helpful friends who she asks for rides to exercises classes and other social events.

While this is only one informant, she expressed that she feels safe on public transportation and that the drivers are kind. This attitude contrasts with the stigmatized view of the bus that was expressed by other informants and indicates that reality may not be lining up with the perceptions of the people who do not regularly ride the bus.

She also expressed that losing the ability to drive is "very threatening when you don't know what to do," and that people need a mentor to figure out alternatives. This information was helpful for us in considering which transportation alternatives are available and have been

successfully used by others. Coni also agreed to be in photos as part of our campaign materials and agreed to let us use her name.

Conversations with Congregation Members

Surveys were distributed at First Presbyterian Church at the end of service to gain more information about awareness and usage of driving alternatives in Mason City. Afterwards, we were able to have informal conversations with community members about the survey and their opinions on Mason City transit. Information from our key informant interviews was supported by the conversations that we had with the congregation members. In particular, the stigma attached to riding the bus was apparent when congregation members said that people "smell really bad" on the bus and that they don't want to ride with "those people." One congregation member said, "I don't even know where the nearest bus stop is," and several people around seemed to agree with this statement. This indicated that people have little experience with driving alternatives. This lack of awareness was later supported by our survey data.

Interview with Mason City Public Transit

We spoke to a representative from Mason City Public Transit over the phone about public transportation as an alternative to driving. We confirmed that all of the buses have a lift for people who use wheelchairs, walkers, or canes, making them accessible for people who need these forms of assistance to travel by bus.

Our informant also indicated that some of the barriers to using the bus are planning ahead and having to walk a few blocks to get to a stop. However, the bus stops are strategically located near assisted living communities. Encouraging people to learn more about public transit and find the nearest stop to them may be helpful. He also mentioned that "the stigma is real" surrounding the bus, but that there have not been any safety issues reported among people using the bus.

This interview confirmed what we learned about the Mason City bus from our research. We also learned that Mason City Public transit has someone working on community outreach through assisted living and nursing home communities. Her assistance in distributing the campaign materials may be helpful.

Interview Takeaways

Based on these findings, we conclude that three types of messages need to be made to encourage the use of alternative transportation. They are: 1) information on how to use alternative transportation, such as how to combine trips to save money for cabs and where the bus routes run, 2) de-stigmatization and promotion of buses, and 3) the association of independence, control, and empowerment with the ability to utilize alternative transportation methods. As mentioned in our interviews above, religious leaders are often trusted and respected members of their community. Thus, messages conveyed by them are taken seriously. A harder-to-reach population that exists within our target audience is homebound older adults. To address this barrier, we will utilize the radio as a communication channel, as it has high exposure among homebound populations.

Survey Findings

A survey was given to members of First Congregational Church following the church service as well as distributed to home care patients in Mason City, Iowa ($N = 53$; 29 congregation members, 24 home care patients). The participants ranged from 54 to 98 years old (participants 65 and older, $n = 35$). Any participants under 54 years of age were removed from the final data analysis. Of the total participants, 35.9% were male and 64.2% were female ($n = 19$ and $n = 34$, respectively). When asked their likeliness to use different forms of transportation throughout the week ($n = 52$) most respondents (69.2%) said that they were likely to drive often,

a few said they were likely to drive sometimes (5.8%), and the remainder said they would never drive throughout the week (25.0%). These numbers are much different from bus usage (7.7% often, 21.2% sometimes, and 71.2% never), carpooling (3.9% often, 39.2% sometimes, and 56.9% never), walking/biking (22.6% often, 24.5% sometimes, 50.9% never), and use of a door-to-door transportation service (7.8% often, 17.6% sometimes, 74.5% never). These numbers indicate that people are mostly driving throughout the week, and are less likely to use other forms of transportation to get around Mason City.

Additionally, many people are not using services that would help people either get around to where they needed to go or eliminate the need to go somewhere. Even though 84.9% are aware that HyVee will deliver groceries to your home ($n = 53$), only 4.1% said that they get their groceries delivered to their home ($n = 49$). This may be because people do not perceive a need for this service. Additionally, only 61.2% said that they had heard of NIACOG services ($n = 49$). Of those who know about NIACOG, only 20.5% said they had used it ($n = 39$). We asked participants to provide reasons for not using NIACOG in an open-ended question, and responses included not having a need to do so, having a car, being able to drive, using other transportation systems, and not knowing details about NIACOG. These results indicate that there is not a lot of awareness about NIACOG among this population, and that even those who do know about it do may not perceive a need for it yet.

Finally, many participants indicated they do not use the Internet. Among those who answered the question "Do you use the Internet?", 47.9% said they never use it, 16.7% said they use it "sometimes," and 35.4% said they use it "always" ($n = 48$). These results suggest our campaign materials should utilize channels that are not online.

In summary, this data, along with the informal conversations with congregation members gives the overall impression that people are not aware of alternatives to driving. Even those who are aware of alternative services are not using them, meaning they have very little experience using alternatives to driving. Introducing and encouraging the use of transportation alternatives through a campaign can increase people's perception that there are more options available to help them age in place and give them the opportunity to familiarize themselves with these services earlier.

Campaign

Our campaign seeks to help Mason City's older adults maintain their mobility even when they no longer have the option of driving. In this campaign, we aim to: 1) raise awareness of services alternative to driving that improve access to community resources and social activities 2) improve community members' self efficacy in their ability to access those resources regardless of whether driving is an option, and 3) reduce the number of planned trips that are canceled due to a lack of transportation. Through theory-based campaign components, we will promote the use of alternative transportation methods to access community resources and social activities by relating these behaviors to a sense of independence and empowerment.

Theory

This health campaign will employ the elaboration likelihood model (ELM) and social cognitive theory to influence individual and interpersonal-level behaviors within Mason City Christian church communities.

ELM suggests that there are "central" and "peripheral" routes to persuasion, the latter representing processing that is perceived as less important or relevant (low elaboration likelihood). Because older individuals tend not to like reminders of their old age and may avoid

healthy action steps in response, decision-making about alternative transportation when ability to drive is compromised will benefit from "peripheral" persuasion techniques (Moschis, 2003). According to Cacioppo and Petty, "peripheral" persuasion is effective when a credible source shares a message (1984). Mason City faith leaders are considered trustworthy sources in the community; one Mason City church employee said, "If it's something serious, have the pastor communicate it" (N. Ruge, personal communication, October 29, 2017). This campaign encourages faith leaders to share information about transportation options. ELM also suggests that having a sheer number of arguments can influence "peripheral" processors. This campaign will offer a variety of cues about diverse transportation options through a number of outlets— such as churches, television commercials, and the Mason City driver's license station—which will positively influence attitudes about transportation options and self-efficacy available in Mason City when ability to drive is temporarily or permanently lost.

The Social Cognitive Theory (SCT) suggests behavior change is shaped by how an individual's personal factors, environmental influences, and behaviors interact (Glanz & Bishop, 2010). Elements of the SCT include knowledge, self-efficacy, environment, and modeling. This campaign will be present in places that serve older individuals, such as churches and elderly care service providers. Through regular reminders in church announcements and through television commercials, this campaign will include information that builds knowledge of transportation options in Mason City. The campaign materials will include peer models demonstrating flexible use of alternative forms of transportation, which will raise self-efficacy in using transportation alternatives in Mason City.

Partnership

This transportation-specific Aging in Place campaign has partnered with Mason City faith leaders and organizations, Mason City Public Transit, and the Cerro Gordo County Department of Public Health. These partners have a vested interest in health and transportation for older adults in Mason City. Furthermore, faith-based organizations are resourceful and community-relevant social networks that produce positive impacts on older adult health outcomes (Averill, 2012).

A strength of partnering with faith-based organizations is that they are well-perceived in their communities as entities to be trusted. Previous health campaigns geared toward older adults have employed churches as settings for message dissemination (DiGuiseppi et al, 2014). Churches in Mason City also represent a number of older community member voices and a convenient participant pool, which brings depth to our understanding of aging and transportation in Mason City.

The Cerro Gordo County Department of Public Health has provided guidance and an initial budget for this campaign. We have also partnered with Mason City Public Transit to feature Mason City buses and drivers in our campaign photos. A comprehensive list of community partners will be listed in Figure 1.

Audience

The audience for this campaign is older adults who may need to diversify their modes of transportation. This may be due to permanent or temporary loss of driving ability as well as the presence of environmental factors that make driving difficult. The loss of ability to drive can include short- or long-term disability, medication use, and inclement weather.

Certain marketing techniques and channels have been shown to be preferred by older audiences. Older adults, in particular, tend to dislike complex decision-making and small typography in marketing messages (Lunsford & Burnett, 1992). Although this campaign intends to improve the lives of older adults in Mason City, future messaging should present intergenerational imagery because transportation is an intergenerational need, and older adults are more receptive to intergenerational messaging (King & Lauder, 2016).

Objectives

The SMART objectives of this campaign include: 1) Increase the use of the bus by 5% over the course of one year as measured by bus usage, 2) Increase the use of Hy-Vee delivery service by 5% over the course of one year as measured by Hy-Vee's sales records, 3) Increase the awareness of transportation alternatives by 5% over the course of one year as measured by pre- and post-surveys.

This campaign will be disseminated through a number of channels in Mason City. According to Moschis (2003), print media and radio programs are successful marketing channels when communicating with older individuals, especially when messages are "short and simple." Other social marketing campaigns targeting older individuals have found success disseminating materials through radio advertisements, church bulletins, and pulpit announcements (DiGuiseppi et al, 2014; Reger et al, 2002).

We suggest campaign materials listed thus far guide the target audience to a website page that contains more detailed information about transportation options and safety in Mason City. Transportation services in Mason City will likely change over time, so it will be important to update information as changes occur. For those without a computer or internet at home, a brochure template has also been included listing transportation options. Again, it will be

important to keep this brochure up-to-date. Brochures should be made available at locations where print materials are displayed. We suggest that at least one "transportation expert" at each church becomes a source for transportation information in order to enhance the campaign through word-of-mouth advice and encouragement.

Message

Based on our formative research through literature reviews, survey data from older adults in Mason City, and informant interviews, our main message to our audience will be to *Enjoy Life on the Go* This type of messaging aims to promote independence by encouraging people to use transportation alternatives flexibly, demonstrating people from Mason City model this kind of behavior in our message materials, and encouraging people to consider alternatives to driving before it is necessary.

Through our communication channels, we will promote the use of the Mason City bus, Mason City paratransit, walking/cycling, Hy-Vee grocery delivery system, and carpooling. We will not actively promote the use of taxis because the data suggests taxis in Mason City are very expensive; however, we will put a note in our pamphlet that using taxis flexibly (i.e. planning trips ahead with a taxi and splitting the fare with a couple other friends) is a viable option for transportation.

Channel & Pilot Materials

Development

Our message channels include radio advertisements, print materials, and in-person announcements. We produced two radio advertisements: one that is 30-seconds and uses a positive anecdotal frame in the format of a skit intended to model the behavior of using transportation alternatives flexibly, and the other that 15-seconds and is informational, but uses

an individualistic/gain frame. We also wrote a suggested script that is appropriate for public

radio. The following includes the script for the anecdotal radio advertisement:

> [Phone Rings]
> Person 1 : Hey Alex are you meeting us for lunch today?
> Person 2 : Of course! My car's not working so-
> Person 1: Oh no! I'm carpooling with Evan and Theresa, should we pick you up?
> Person 2: It's no problem. I'm getting on the bus as we speak
> [Background bus noise]
> [Audible background noise] Person (bus driver): That will be 50 cents.
> Person 2: I'll be there soon.
> Announcer voice: You have places to be. Explore your options to get there. Visit c-g
> health dot com and enjoy life on the go!

This radio advertisement demonstrates Alex's self-efficacy in using transportation alternatives by

not letting car troubles get in their way of meeting friends for lunch. The circumstances that lead

Alex to take the bus instead of driving are not related to any permanent situation, which we hope

will give the impression to others that taking the bus is a reasonable alternative to not driving. In

addition, Alex's actions are rewarded by being able to engage in social interactions with her

friends despite temporary loss of driving.

The second radio advertisement suggests using other forms of transportation in addition

to using the bus. This radio advertisement utilizes an individualistic and gain framed message by

suggesting actions that can help one cope with the loss of driving, and that loss of driving does

not mean one has to lose anything else. The following includes the script for the informational

radio advertisement:

> Bad weather, car troubles, medication, injury—a lot of things can interrupt driving. But
> this doesn't have to interrupt your life. Choose carpooling, door-to-door Mason City
> paratransit, or the Mason City bus when driving isn't the best option. For more
> information visit c-g health dot com.

The following includes the suggested script appropriate for underwriting for public radio. This suggested script is intended to adhere to Federal Communication Commission guidelines and sound neutral because public radio is not allowed to support or oppose an opinion.

> Support for KNSM comes from the Cerro Gordo County Department of Public Health. When health and inclement weather interrupt driving, your options include Mason City by bus, which runs five days a week, taking a taxi, or joining a carpool. You can find more information at c-g health dot com.

Our print materials include a pamphlet and posters. The pamphlet contains information about transportation alternatives are available to Mason City residents, including the Mason City bus system, Mason City paratransit, carpooling, walking/biking, and Hy-Vee's groceries delivery system. It also includes contact information for each resource, so people know where they can get more information (Figure 2). The posters will have pictures of people from Mason City and the catch phrase *Enjoy Life on the Go.* One example of a poster includes a Mason City woman whose vision declined many years ago but has successfully used transportation alternatives since then. The picture includes her in the passenger seat and a friend in the driver seat both smiling with the message, "Coni enjoys life on the go by carpooling to exercise class. You have places to be. Explore your options to get there. Visit cghealth.com" (Figure 3). Another poster includes a Mason City bus driver. He is smiling in front of the bus with the message, "Darrell helps you enjoy life on the go as your Mason City bus driver. You have places to be. Explore your options to get there. Visit cghealth.com" (Figure 4). These photographs show Mason City residents modeling the use of transportation alternatives. We hope that our audience will identify with the people in these posters. In addition, we suggest using this formula for other alternatives to transportation, such as for walking and biking, and we suggest including people who are in the younger end of the Baby Boomer generation in photographs as well in order to show

intergenerational imagery. These messages can be placed in community establishments such as the public library, the mall, Hy-Vee, Walmart, nursing homes, Mercy Hospital, the Mason City Family YMCA, Elderbridge, and church bulletins.

Finally, the in-person messages are intended to be announced by a community leader (e.g. religious leader, club president, someone leading an exercise class at the Mason City Family YMCA) who can direct people to the Cerro Gordo County Aging in Place website or our pamphlets. The content of the message should be similar to the script for the information radio advertisement, but customized by the community leader. These messages will be endorsed by trusted leaders, which will hopefully encourage our audience to want to learn more about transportation alternatives.
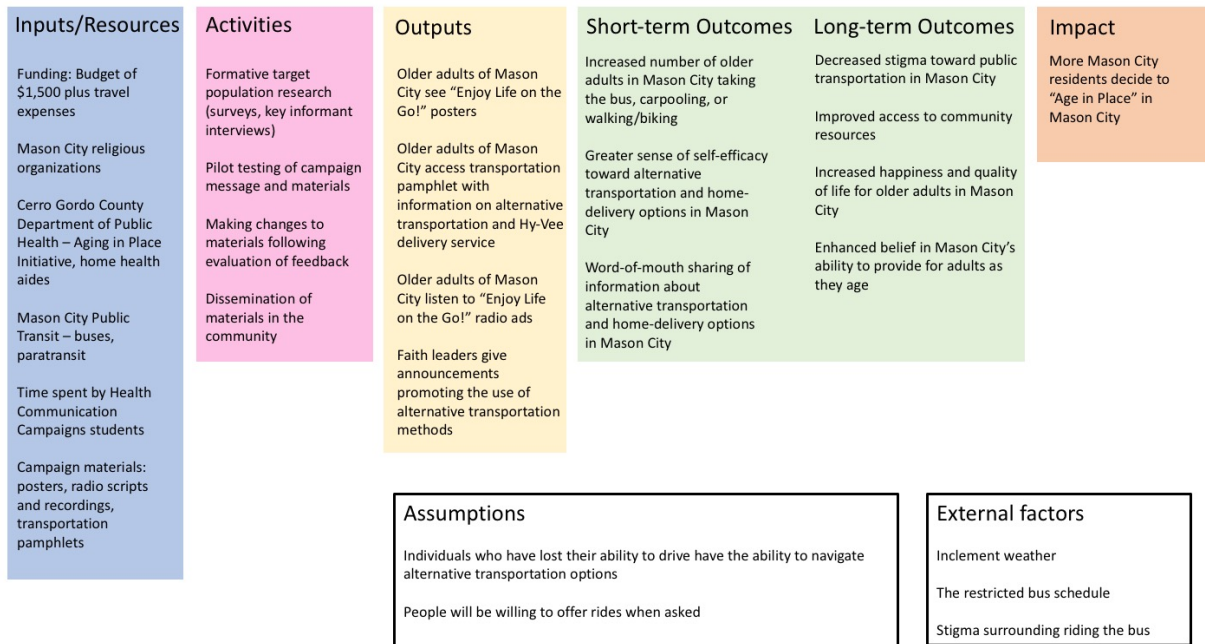
Testing

We spoke to twelve individuals in Mason City regarding the two posters we developed. The overall response was positive. Regarding the "Darrell" poster, people who occasionally used the bus thought it served as a reminder that the bus was available to them if they need it. They remarked the poster looked "friendly." For those who were not familiar with riding the bus, they suggested wanting a poster including the image of the inside of the bus or places where the bus can take them. The "Coni" poster received more mixed messages. Some people recognized Coni, so they reacted positively. However, more people were confused about the message because they believed it was encouraging them to specifically carpool to exercise class, not just utilize carpooling in general. For both posters, they believed the message "Explore your options…visit cghealth.com" should be emphasized more in larger font. We were not able to pilot test our pamphlet because it was created at a later time.

Only a few people were able to hear the radio advertisements due to loud surrounding noises. We also explained the concept. One man stated he liked the messages, but did not know what "paratransit" was. Another man wanted more messages for each transportation alternative, and did not believe that either message had a "selling point."

Due to limited time, we could not perform more pilot testing with updates to our new materials. However, we suggest utilizing the feedback we received to improve our campaign message materials.

Logic Model

Inputs/Resources	Activities	Outputs	Short-term Outcomes	Long-term Outcomes	Impact
Funding: Budget of $1,500 plus travel expenses	Formative target population research (surveys, key informant interviews)	Older adults of Mason City see "Enjoy Life on the Go!" posters	Increased number of older adults in Mason City taking the bus, carpooling, or walking/biking	Decreased stigma toward public transportation in Mason City	More Mason City residents decide to "Age in Place" in Mason City
Mason City religious organizations	Pilot testing of campaign message and materials	Older adults of Mason City access transportation pamphlet with information on alternative transportation and Hy-Vee delivery service	Greater sense of self-efficacy toward alternative transportation and home-delivery options in Mason City	Improved access to community resources	
Cerro Gordo County Department of Public Health – Aging in Place Initiative, home health aides	Making changes to materials following evaluation of feedback			Increased happiness and quality of life for older adults in Mason City	
Mason City Public Transit – buses, paratransit	Dissemination of materials in the community	Older adults of Mason City listen to "Enjoy Life on the Go!" radio ads	Word-of-mouth sharing of information about alternative transportation and home-delivery options in Mason City	Enhanced belief in Mason City's ability to provide for adults as they age	
Time spent by Health Communication Campaigns students		Faith leaders give announcements promoting the use of alternative transportation methods			
Campaign materials: posters, radio scripts and recordings, transportation pamphlets					

Assumptions

Individuals who have lost their ability to drive have the ability to navigate alternative transportation options

People will be willing to offer rides when asked

External factors

Inclement weather

The restricted bus schedule

Stigma surrounding riding the bus

Implementation

Proposed Timeline For Mason City

Table 1. Implementation Timeline

○ Timeline: 1 year life span
- Preliminary measurements (done within 1st 3 to 5 weeks)
  - Bus usage (can be collected from Mason City Public Transportation)
  - Hyvee usage (can be collected from Hyvee)
  - NIACOG usage (can be collected from NIACOG)
- Implementation of campaign (done within 1 year)
  - Distribution of campaign material

○ Process measurements (collected every 3 months for 1 year during implementation)
- Bus usage (can be collected from Mason City Public Transportation)
- Hyvee usage (can be collected from Hyvee)
- NIACOG usage (can be collected from NIACOG)

○ Post campaign measurements (collected 6 months and then 1 year out from end of campaign)
- Bus usage (can be collected from Mason City Public Transportation)
- Hyvee usage (can be collected from Hyvee)
- NIACOG usage (can be collected from NIACOG)

Budget and budget justification

Table 2. Budget and Budget Justification

Budget	Item	Quantity	Price	Notes
1.	Poster	60 (18X24)	$600	To be posted in places such as: Public library, the mall, Hy-Vee, nursing homes, Elderbridge, churches, Walmart, Mercy Hospital, NIACOG (Krause & Bastida, 2011; Krause & Wulff, 2005; For

				Entrepreneurs: Cost of Radio Advertising in Mason City, IA, 2017)
2.	Pamphlets	400 (16.438 X 8.5)	$300	To be available in places as mentioned in our implementation section (DiGuiseppi et al, 2014; Krause & Bastida, 2011; Krause & Wulff, 2005; Reger et al, 2002; Copy and Print Services, 2017; https://www.mgxcopy.com/products/brochures)
3.	Radio Ads	24	$600	Radio is preferable media for older adults ($25.00 per 30 second ad) (Residential and Commercial Services, 2017)
Total	Mulitmedia		$1500	

Evaluation Plan

In order to ensure that the implementation of our campaign proceeds as intended, and that desired outcomes result from campaign implementation, we suggest the use of both process and outcome evaluations. Process evaluation should seek to measure program quality and reach,

while outcome evaluation should be used to measure the intended effects of the program based on our theoretical framework.

Process Evaluation

Process evaluation should occur several times throughout the 12 month campaign, ideally every 3 months, during which quality and reach should be assessed separately. We suggest that the interpretation of evaluation results regarding campaign quality be criterion-based, using the following rubric:

Table 3: Rubric for interpreting campaign quality

	Poor (1)	Fair (2)	Good (3)	Excellent (4)
Posters	Posters are not distributed to the intended areas and do not show different forms of alternative transportation.	Posters are distributed to some intended areas around Mason City, but most intended areas do not have the posters. A limited variety of alternative transportation methods are shown.	Posters are distributed to most of the intended areas around Mason City, and multiple posters are used to portray most forms of alternative transportation	Posters are distributed to the intended areas around Mason City, such as grocery stores, the Mall, banks, the YMCA, churches, Mercy Hospital, Elderbridge, etc., and multiple posters are used to portray all existing forms of alternative transportation

Radio Ad	Radio ads are not aired or are only aired between 12 am and 6 am.	One or both radio ads are aired, but air time is mostly between 12 am and 6 am.	Both radio ads are aired on local radio stations, but air time is sometimes between 12 am and 6 am.	Both radio ads are aired on local radio stations during the day time (6am – 12 am).
Transportation Guide	The transportation guide is not distributed to the intended areas, and a digital version is not available	The transportation guide is printed and distributed to a limited number of the intended areas, and/or a digital version is not available on the Cerro Gordo County website.	The transportation guide is printed and distributed to most of the intended areas, and a digital version is linked on the Cerro Gordo County website.	The transportation guide is printed and distributed to the intended areas around Mason City, such as Mason City, such as grocery stores, the Mall, banks, the YMCA, churches, Mercy Hospital, Elderbridge, etc., and a digital version is linked on the Cerro Gordo County website.

Based on this rubric, the overall quality of implementation can then be calculated as an average score out of 4.

The reach of our campaign can be measured in two ways. Secondary data should be collected on the number of listeners to our ads and the number of views of the online version of our transportation guide. This will be monitored by the radio stations and Cerro Gordo County

Department of Public Health, respectively. In addition, surveys should be used to assess the general awareness of our campaign materials. This can be done through convenience sampling within our target audience, in settings such as churches, nursing homes, the senior center, the YMCA, on the streets, etc. This survey should strictly measure awareness. Specific knowledge from campaign materials should not be tested when evaluating reach, as based on our theoretical model, the intended progression of peripheral processing does not involve an individual's logical processing of detailed information (Glanz & Bishop, 2010).

Sample question for process evaluation survey
Have you seen this poster?

If yes, what was this poster about?

a.   Using different transportation

b.   Wearing seatbelts

c.   Going shopping

Outcome Evaluation

  We suggest a single-group, pretest-posttest design for outcomes evaluation. Surveys

should be given before and after our campaign to measure change in the intended outcomes

based on the theoretical constructs: knowledge and self-efficacy. These surveys may also be

done based on convenience sampling. Knowledge should be measured with yes/no questions,

asking the responder to agree or disagree with statements such as: "I know where to find

information on the Mason City bus". Items measuring self-efficacy should use a 4-point Likert

scale, from Strongly Disagree to Strongly Agree (See sample below). In the interpretation of

outcome evaluation results, the evaluator should assess: 1) the change in number of people who

answer "agree" to the knowledge questions and 2) the change in the average score on the 4-point

Likert scale to the self-efficacy questions.

Sample questions for outcome evaluation survey
Knowledge:
1. I know where to find information on the Mason City bus
    a. Agree
    b. Disagree
2. I know what the Mason City Paratransit is
    a. Agree
    b. Disagree
3. I know about Hy-Vee's delivery service
    a. Agree
    b. Disagree
Self-efficacy
If I didn't have the option of driving for one week, I am confident that:
1. I can still find a way to get to where I need to go:
    a. Strongly disagree
    b. Somewhat disagree
    c. Somewhat agree
    d. Strongly agree
2. I can still find a way to attend social activities:
    a. Strongly disagree
    b. Somewhat disagree
    c. Somewhat agree
    d. Strongly agree

3. I can still get my groceries
    a. Strongly disagree
    b. Somewhat disagree
    c. Somewhat agree
    d. Strongly agree
In the past week, I've often had to cancel my plans because I couldn't find a way to get there
    a. Strongly disagree
    b. Somewhat disagree
    c. Somewhat agree
    d. Strongly agree

In addition to the survey, the inclusion of secondary data is recommended to gauge the change in longer term outcomes. Such data includes bus ridership data from the Mason City Public Transit and the rate of use of Hy-Vee delivery services. Both will need to be collected prior to the start of our campaign in order to establish a baseline comparison with the data collected after campaign implementation.

Limitations

The main limitations of this proposal are related to a lack of data to support the materials that were designed. The sample sizes used for the survey and pilot testing were not large, and they were not representative of the entire target population. Due to our distance from Mason City, we were limited in who we could talk to and when we could talk to them. This also limited our campaign materials, which do not feature a diverse group of people and forms of transportation. Older adults are more receptive to intergenerational messaging, but we were not able to access a group of people to be in images that represented a larger age range. Our project also does not incorporate local businesses in any way which could have strengthened the campaign and the distribution of materials. Additionally, because of the winter weather during the photoshoot, we were not able to showcase methods of transportation that are more suitable for warmer weather such as biking or walking.

We recommend more thorough pilot testing to support the use of these materials in a campaign and the creation of more images that feature a broader range of transportation options (including biking and walking) with a more diverse group of people (both in age and race). We also recommend partnering with local bicycle shops and other suitable businesses to disseminate materials for these campaigns in warmer weather.

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Appendix

Figure 1. Comprehensive List of Partners

Comprehensive List of Partners
● Cerro Gordo County Department of Public Health ● Mason City Public Transit ● First Presbyterian Church ● First Congregational Church ● St Joseph's Catholic Church of Epiphany Parish ● Mercy Hospital ● NIACOG

Figure 2. Pamphlet

Outside

Inside

Figure 3. Coni Campaign Poster

Figure 4. Darrell Campaign Poster