

# Aging on the Farm

Emerging Issues 2020-21

## Evaluation Report

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January 2023



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# Supporting Agricultural Safety And Health Throughout The Lifespan

## Introduction

UMASH's overarching mission is to improve the health and safety of agricultural workers, owner-operators, and communities in the Upper Midwest. To accomplish this, the UMASH Emerging Issues Program identifies and responds to emerging and re-emerging issues. UMASH collaborates with community organizations, academic institutions, and more through partnership projects to gain knowledge and create innovative solutions for these emerging issues.

"Aging on the Farm" is an important emerging issue because **over a third of U.S. farmers are older than 65** (*Farm Producers*, 2019). Without adequate support, the physical changes of aging, like changes in response time, vision, hearing, memory, and mobility, can make life on the farm more difficult. In addition, rural communities may face a shortage of healthcare providers or may have to travel long distances to see a specialty provider. These issues require innovative and equitable solutions to help keep farmers, farm workers, and their families active, safe, and supported as they age.

## Supporting Aging on the Farm

To ensure that the community needs guided our action, we first consulted the agricultural community and their support systems. UMASH hosted an [All Our Ideas Wiki Survey](#) to understand what issues were the most significant health and safety concerns for aging farmers and [two regional forums](#) with professionals, healthcare providers, farmers, and more to explore the challenges and opportunities for supporting this population.

Central to these forums and subsequent projects was the **Center for Healthy Aging and Innovation (CHAI)** at the University of Minnesota School of Public Health. UMASH utilized our Emerging Issues program and partnership funds from CHAI to fund the work of four partner organizations to design and implement their innovative ideas to address aging on the farm.

The Center for Healthy Aging and Innovation (CHAI) is an interdisciplinary scholarly hub, platform for collaboration between academic researchers and community partners, and one-stop resource for faculty, students, professionals, and communities to obtain information, education, and resources to support healthy aging for all.

## Aging Partner Projects

UMASH partner projects with the [University of Minnesota Occupational Therapy Program](#), [United Church of Christ Zumbrota and Normandale Center for Healing and Wholeness](#), [Big Stone Area Memory Loss Connection](#), and [University of Wisconsin Occupational Therapy and American Parkinson's Disease Association](#) formed transdisciplinary collaborations, designed innovative solutions, and educated healthcare workers and community members.

### Formed Transdisciplinary Collaborations



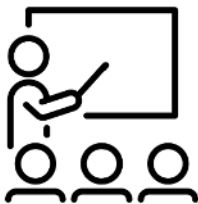
The partner projects **leveraged their professional, academic, and community networks to form transdisciplinary collaborations**. Students and faculty, faith-based organizations, community organizations, and even national organizations collaborated with a desire to support the health and safety of farmers as they age in place in the Upper Midwest.

### Designed Innovative Solutions



They **assessed the challenges of aging on the farm and created innovative solutions** to make aging easier for farmers and their caregivers. These solutions improved access to specialty healthcare services that are sometimes difficult to access in rural environments. These projects creatively found ways to ensure that their solutions maintained health and safety, even during a global pandemic.

### Educated Healthcare Workers and Community Members



They **prioritized educating present and future healthcare workers** (i.e., physicians, nurses, students) and community members about the health issues that rural farmers might experience and ways to support them as they age. Students gained **valuable clinical experience** working with rural older adults and gained **awareness of the unique cultures** of rural and farming communities.

The following sections describe the work of each of these projects in detail, including their project descriptions, accomplishments, and next steps.

## University of Minnesota Occupational Therapy Program

*“When I talked to other faculty or others, I always come back to how the participants all came in with this ‘fierce independence’ - I’m curious about understanding the needs of rural farming and aging populations - and how they can benefit from OT services”*

- [Tamara Vos-Draper](#)

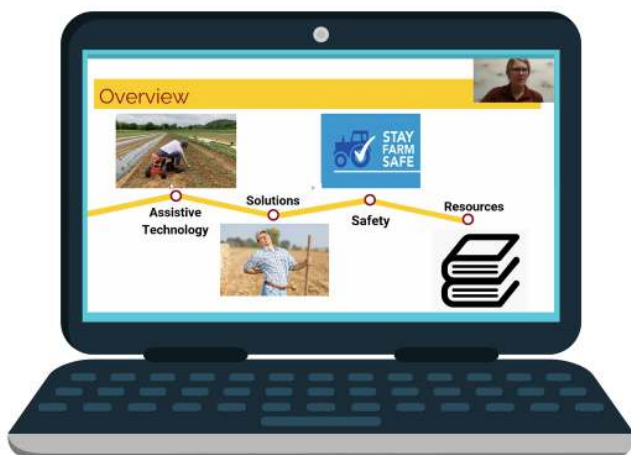
Occupational Therapy (OT) is a valuable resource for farmers as they adapt to aging-related physical and mental changes. By participating in OT, aging farmers can continue to be active and independent on the farm. However, rural older adults may have limited access to OT services due to barriers like a shortage of healthcare providers and long distances between providers and patients (Bopp, n.d.).

In this partner project, OT students facilitated a **six-session, telehealth OT program** for five rural farmers across Minnesota. The students assessed participants' occupational performance and discussed individual activity goals to tailor programming. Some participant goals included:

- Moving around with less pain
- Independently moving from kneeling to standing to continue gardening, and
- Implementing strategies to fit exercise into daily routines.

After participating in the sessions, **80%** of farmers **felt better equipped to manage bodily changes** with aging, helping them to continue age safely on the farm.

After participating in programming, 80% of farmers felt better equipped to manage bodily changes with aging, helping them continue to age safely on the farm.



Further, to increase the accessibility of OT strategies to rural communities, students designed and recorded two webinars available on the [UMASH website](#) and [YouTube](#). The first webinar focused on **introducing OT as a resource** to help farmers maintain a sense of well-being and activity productivity into older adulthood. The second webinar described **adaptive strategies and assistive technology** that can help farmers cope with low vision, hearing loss, aches and pains, arthritis, and

memory loss as they age. Their recommendations are summarized in the following table:

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<b>Low Vision</b>	<ul style="list-style-type: none"><li>● Increase task lighting</li><li>● Use magnifiers</li><li>● Use bright colored tape to mark sharp edges and steps</li><li>● Use eccentric viewing</li></ul>
<b>Hearing Loss</b>	<ul style="list-style-type: none"><li>● Prevent more hearing loss using ear plugs</li><li>● Use hearing aids or a pocket talker to amplify sound</li><li>● Install extended mirrors on tractors or curved mirrors in the barn to increase visual field to compensate for lower hearing</li><li>● Use a paging system that uses flashing lights to communicate with other farm workers</li></ul>
<b>Aches and Pains</b>	<ul style="list-style-type: none"><li>● Use non-slip rugs and mats, a shower bench, a raised toilet seat and grab bars to prevent future injuries</li><li>● Modify home to make items used daily more easy to reach to reduce strain</li><li>● Use an anti-fatigue mat</li><li>● Stretch regularly and use proper lifting technique</li><li>● Purchase boots that are easier to take on and off</li></ul>
<b>Arthritis</b>	<ul style="list-style-type: none"><li>● Use a key adaptor to make gripping keys easier</li><li>● Use a medi-grip bottle opener to reduce strain when opening medicine bottles</li><li>● Install a steering knob on farm equipment steering wheels to make gripping easier</li><li>● Buy gardening tools that have a modified handle that are easier to grip</li></ul>
<b>Memory Loss</b>	<ul style="list-style-type: none"><li>● Use pill boxes to remember to take medications regularly</li><li>● Set reminders in cell phone to remember to do tasks around the home and farm</li></ul>

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Overall, the University of Minnesota OT Program effectively piloted a model for delivering tailored healthcare to rural aging farmers. Moving forward, they plan to **share their findings** widely with academic and professional audiences to bring awareness to the unique OT needs of rural older adults. They are also exploring continuing this program to identify more aging farmers' needs and use OT to improve the quality of life.

## Healthy Aging on the Farm

*“One of the big takeaways was the love that people on the farm have for the farm”.*

- [JD Haas](#)

It is crucial to learn from farmers about what makes aging on the farm more challenging and how their communities can best support them. The United Church of Christ (UCC) - Zumbrota and the Normandale Center for Healing and Wholeness co-led this project, titled “Healthy Aging on the Farm,” forming a team of **faith-based organizations** in Goodhue County, Minnesota, to identify ways to support healthy aging on the farm. The Goodhue County Habitat for Humanity and the Christ Redeemer Lutheran Church also helped facilitate this project.

This project aimed to identify the most effective outreach strategies to share health and safety resources with aging farmers. To do this, they designed and administered an extensive qualitative and quantitative survey to 37 older farmers in Goodhue County, Minnesota. The survey assessed **daily activities, level of social support, plans to continue farming, and what help could make farm life easier**. Nine of the surveyed farmers participated in a focus group in person to gather more information about their personal experiences and perspectives on aging on the farm.

Most farmers surveyed shared that they wanted to **continue farming** for “**as long as possible**,” and **97% intended to age on the farm**. When asked what they would do if they became physically dependent on others for care, most would prefer to **stay in their homes** or to **live with another family member** instead of moving to an assisted living facility. Over half listed their spouse as their primary caregiver when asked about who those caregivers would be.

About **43%** of farmers **could have used help** in their home over the past year with home repairs

Farmers shared that some of the greatest challenges of aging on the farm were **maintaining their health and mobility** and **finding help with chores** around the home and farmstead. When asked if they would currently benefit from help with chores, **43% of farmers shared they could have used help in their home** over the past year with minor home repairs like plumbing or painting.

They also described the **need for relationships** with caregivers and their church communities and **help from their support system** as they age. This support system often included their spouse, friends, family, children, and neighbors.



Further, farmers also expected to have **financial needs** as they age on the farm, including:

- Support using retirement benefits
- Help maintaining financial security
- Help paying for long-term care insurance

Finally, farmers shared that challenges could be reduced by **remodeling** their homes to be more accessible as they age. Some ideas included:

- Ensuring that all doors open and close easily
- Installing handrails and ramps in the home and farmstead

These findings were shared with the Goodhue County community through local newspapers. Next, this team plans to **create a resource guide** to increase the awareness and usage of programs already available in their communities for aging farmers. They also plan to **publish their survey findings** widely with academic and professional audiences to contribute to the body of research about the health needs of rural farmers.

*“There is **remodeling** that is needed on **almost every farm** to make sure they can live on the farm as **safely as possible**.”*

- JD Haas, Project Lead

In summary, the Healthy Aging on the Farm project successfully leveraged the power of faith-based communities in understanding and supporting farmers as they age.

## ***Big Stone Area Memory Loss Connection***

*“This is my passion, to give people with dementia quality [of life]”*

- [Ranet Schmeichel](#)

As of 2016, one in 10 Americans over the age of 65 years old had dementia (Manly et al., 2022). Living with dementia can make it more challenging to live independently and age in place on the farm. A shortage of specialty healthcare providers and dementia training in rural communities can make it challenging for people with dementia to receive needed healthcare to get care for their dementia. Community-based initiatives are needed to increase the availability of dementia healthcare services, reduce anxiety for individuals living with dementia, and increase community awareness of the mental and physical health impacts of dementia.

To address these needs in their community, Big Stone Area Memory Loss Connection (BSCAMLC) used a multi-pronged approach to reduce symptoms of dementia, increase community awareness of dementia and enhance the quality of dementia healthcare. These goals were accomplished using **training, community gatherings, and memory loss kits.**

BSCAMLC facilitated three dementia training programs for over 120 community members, including nurses, physicians, business leaders, local police officers, and others. The project team originally planned to utilize an evidenced-based virtual reality training program but was unable to sanitize the equipment sufficiently to prevent COVID-19 transmission. So, they pivoted and collaborated with a local neuropsychologist to develop their own training that could be delivered both in person and virtually. The content of the training was **tailored to each population in order to increase awareness of dementia and provide best practices for caring for and interacting with someone with dementia.**

### **Content for Nurse Training**

- Value of timely detection of dementia
- Caring for patients with different types of dementia
- Simple approaches for working with people with memory loss
- Medication and non-medication practices and treatment
- Best practices in care coordination and the differences it can make to the patient and staff

### **Content for Physician and Clinical Mental Health Professional Training**

- Importance of evaluating cognition and function
- Evaluating and reporting the safety of the patient
- Medication treatment options
- Planning for care needs should the caregiver support be lost in a short-term situation
- Patient case reviews

A notable outcome of the trainings is that **physicians were connected with a local neuropsychology provider.** Patients typically waited six to nine months to get an appointment, so physicians were hesitant to screen and diagnose dementia. After creating this personal connection, the physicians in the community were able to refer their patients directly and their **patients were able to access treatment more quickly.**



BSCAMLC also hosted community gatherings twice per month called “Memory Cafes.” With over **215 attendees**, these events served as a space for people with dementia, caregivers, and community members to **come together to build community, share resources, and increase their understanding of dementia**. The Memory Cafes facilitated discussions on topics like traveling with memory loss, planning for emergencies, transitioning to assisted living, and adapting the home to be more accessible for someone with dementia.

In addition, **created and distributed 25 “memory loss kits ”** for community members to check out from their local library to use at home. These kits were **checked out more than 80 times** and contained toy tractors and farm equipment, books on farm animals, farm magazines, and other items to reduce the anxiety of memory loss and bring back memories of life on the farm.

Even though the project has ended, the Memory Cafes are still being held twice monthly to strengthen the local dementia support network. BSCAMLC has also partnered with **a local radio station** to increase awareness of memory loss in their community.

Physicians **built connections** with other providers and a local neuropsychologist, **making referring patients to dementia care easier and quicker.**

Currently, BSCAMLC is creating a driving evaluation tool to **assess the driving ability of older adults to ensure they can operate a vehicle safely**, hopefully preventing vehicle crashes and injuries in the future. In the future, BSCAMLC plans to **provide virtual reality dementia educational experiences** to health classes in schools, ambulance paramedics, and the county sheriff’s department to continue to increase understanding of the unique health challenges of dementia across the community. In summary of the current project, BSCAMLC strategically used a variety of community-based initiatives to reduce symptoms of dementia, increase awareness of dementia, and enhance the quality of dementia care in their community.

## Active @ Home

*“This project has really transformed into something beyond what we planned, deepened connections and built it from something simple and confined to something much larger and potentially more impactful.”*

- [Kristen Pickett](#)

Parkinson’s disease is a progressive neurological disease, so it is important to find ways to try to slow its progression to preserve quality of life for as long as possible. Across the UMASH five-state region, there are almost 41,000 people who are living with Parkinson’s disease (Marras et al., 2018). Although the cause of Parkinson’s disease is unclear, living in a rural environment, being over the age of 60, and pesticide exposure are associated with a higher risk for developing the disease. For these reasons, older rural farmers are at especially high risk of developing Parkinson’s disease. Exercise has been shown to improve some of the physical and mental symptoms of Parkinson’s disease.

To encourage farmers living with Parkinson’s disease to engage in physical activity, the American Parkinson’s Disease Association (APDA) and the University of Wisconsin Occupational Therapy (UW OT) department partnered to create **“Active @ Home” toolkits to 30 households**, containing 11 practical items to **make physical and mental activity easier for people with Parkinson’s disease**.



The items included stretchy bands, putty, stretch straps, and support blocks that assisted participants in developing an exercise and stretching routine to improve musculoskeletal pain and mobility. They also included items like reachers, shoehorns, and jar openers to help participants adapt to changes in strength and balance so they can continue to live independently. The following table provides a detailed description of the toolkit items and their uses.

Item	Description
<b>Stretchy Bands</b>	Bands can be used for different exercises and are colored based on their resistance (four total bands).
<b>Pedometers</b>	A wearable sensor that tracks the number of steps taken each day to measure physical activity.

<b>Putty</b>	Putty can be squeezed to improve grip strength and fine motor skills. Small items can also be hidden in the putty and then pulled out to also improve fine motor skills.
<b>Support Block</b>	When stretching or exercising, place the block on the floor, so you do not need to reach all the way to the ground when doing a stretch.
<b>Stretch Strap</b>	A stretch strap allows you to lengthen, deepen, and maintain proper alignment during exercise.
<b>Reacher</b>	The reacher can be used to pick up objects off the ground without bending.
<b>Shoehorn</b>	Shoehorns can help slide the heel of the foot into the shoe and shorten the distance needed to reach to put shoes on.
<b>Button Aid</b>	The button aid helps to grasp and fasten buttons on clothing.
<b>Activity Journal</b>	This activity journal is for recording a daily step count (obtained from the included pedometer) and other exercises.
<b>Card Holder</b>	A card holder can be used for holding a hand of playing cards instead of holding them in your hands.
<b>Can/jar opener</b>	Modified can/jar opener is non-slip and reduces stress on the wrist.

UW OT students also offered **optional weekly telehealth programming** to each household to teach the individuals with Parkinson's disease and their caregivers how to use each of the items in their daily life to increase exercise at home, improve independence, and enhance personal well-being. This programming also allowed OT students to **gain clinical experience working with and learning from rural older adults with Parkinson's disease.**



Overall, participants and their caregivers reported that **the toolkits were very beneficial for them in their daily life.** The **telehealth programming was critical to the successful use of the toolkits**, as households who participated in the programming used items in the toolkit more often than households who did not participate in the programming. Households who did not participate in the programming used daily activity items, like the shoehorn and bottle openers, more than the exercise and strengthening items in the toolkit.

UW OT students are **authoring a community-based participatory research paper** about the feedback they received about this program. In February 2023, the team will submit a proposal for the program to be evaluated in a **clinical trial** to increasing the future availability of evidenced-based telehealth programming for rural older adults. Overall, the Active @ Home project effectively distributed exercise and adaptive equipment to rural adults living with Parkinson's disease, provided informative telehealth programming to help lessen the physical and mental symptoms they experience, and piloted a comprehensive program to support the physical and mental health of aging adults in rural communities.

## Evaluation

To write this summary report, members of the UMASH team reviewed the final reports and met with each project team to debrief their experience during the partnership project. These sources of information yielded the following synthesis of program successes, lessons learned, recommendations for the future.

### Successes

Each project successfully created and tested **innovative approaches to supporting the health and safety of farmers as they age in place.**

- The [Active @ Home](#) project created and distributed 30 Active @ Home Kits containing exercise and adaptive equipment and offered telehealth OT programming to rural Wisconsin farmers with Parkinson's disease.
- The [University of Minnesota OT Program](#) created six individualized telehealth OT sessions to help older adults adapt to changes with aging. 80% of farmers felt better able to manage changes related to aging after participating in the program. They also delivered two webinars about strategies to continue aging in place and posted them to the UMASH website so they can be accessed anytime. The webinars have been viewed by almost 100 website users and over 40 times on YouTube.
- [Big Stone Area Memory Loss Connection](#) built connections between healthcare providers and a local neuropsychologist, making diagnosing and referring patients to dementia care easier and quicker. They also gathered over 215 community members for "memory loss cafes" to build community, share resources, and increase their understanding of dementia. Finally, they created memory loss kits to reduce anxiety and bring back memories of life on the farm. These were checked out more than 80 times from a local library.

- The fourth project, [Healthy Aging on the Farm](#), identified the biggest challenges of aging on the farm in their community – maintaining their overall health and mobility and finding help with chores – and strategies to support aging in place.

UMASH's [All Our Ideas Wiki Survey](#) revealed that the top concerns among aging farmers included **financial worries, musculoskeletal and repetitive stress injuries, balance and coordination problems, stress and anxiety, sleep issues, and limited strength and mobility**. The aging partner projects effectively addressed **four of the identified seven top concerns** to support healthy aging on the farm. The following table describes the work of project teams to address access to healthcare, balance and coordination problems, musculoskeletal and repetitive stress injuries, and stress and anxiety.

#### Access to healthcare

- The [University of Minnesota Occupational Therapy \(OT\) Program](#) designed and implemented a six session telehealth OT program for a group of Minnesota farmers and created two on-demand health information videos to share practical strategies to **increase engagement in daily living activities**.
- [Big Stone Area Memory Loss Connection](#) created dementia training programs to **enhance the quality of dementia healthcare services and increase community awareness of dementia**. Physicians at these trainings were able to be connected directly with a neuropsychology provider, enabling them to make referrals to dementia care easier and quicker.
- The American Parkinson's Disease Association and the University of Wisconsin Occupational Therapy (OT) project, [Active @ Home](#), created and distributed toolkits to **increase physical activity** for people with Parkinson's disease. OT students facilitated telehealth OT sessions to provide education about how clients can use each item in the toolkit to **maintain or improve health**.

#### Balance and coordination problems

- The [University of Minnesota OT Program](#) facilitated telehealth OT services to rural farmers by introducing practical strategies to **improve mobility, balance, and coordination**.
- The [Active @ Home](#) toolkit contained items like a stretchy band, stretch strap, and support block to help older adults learn to **maintain muscle mass, flexibility, and balance**.
- [Active @ Home](#) assisted rural older adults in developing an exercise and stretching routine to **improve musculoskeletal pain**. Their toolkit

Musculoskeletal and repetitive stress injuries

contained adaptive equipment, like a modified can opener to **reduce stress on the wrist**.

→ The [University of Minnesota OT program](#) created client-centered OT interventions to modify activities to **reduce muscle pain** and increase physical activity to **reduce muscle stiffness**.

Stress and anxiety

→ [Big Stone Area Memory Loss Connection](#) created Memory Loss Kits containing items like toy tractors and farm magazines to **reduce the anxiety of memory loss** and bring back memories of life on the farm.

→ [Healthy Aging on the Farm](#) heard from farmers that they were most worried about **maintaining their health and mobility** and finding someone to **help with chores** as they age on the farm.

UMASH was also given positive feedback about the ease and feasibility of the emerging issues grant application and reporting processes, especially for people who were volunteers and not academic researchers. The feedback is cited below:

*“The fact that you make the reporting so easy for a group of volunteers, I really do appreciate that”*

*“I’ve had grants that were so difficult to do, but this grant was worth it because it was easier”*

*“These grants were focused on the people that were in our community, and it was something that we could carry out”*

Finally, one of the greatest successes across the projects was the teams’ **resiliency in continuing to design and implement their projects during the COVID-19 pandemic**, integrating contactless or socially distanced methods to ensure the health and safety of themselves and participants. Although the pandemic created organizational challenges like staffing shortages and difficulty recruiting participants, the projects **attained or exceeded most of their project goals**.





Although the project funding has ended, our partnership projects **continue to use their expertise and project findings** to support the farmers throughout their lifespan - an impact that has extended far beyond this emerging issues iteration. The debrief conversations with project teams illuminated the many connections between the projects, including their ideas, challenges, and goals. This has also supported visioning across the UMASH team about the Center's role in addressing aging on the farm.

## **Lessons Learned**

The project findings and reflections provide helpful guidance for UMASH's ongoing work to develop resources and engage in effective outreach and communications. The following insights could be applied to support UMASH in becoming a trusted resource that supports agricultural workers and their families throughout the lifespan.

**Support caregivers.** [Healthy Aging on the Farm](#) found that older farmers depend on their social network to provide caregiving support as they age. With over half of the survey respondents saying that their spouse was their primary caregiver, tailored resources towards supporting spousal caregivers could help continue to have the capacity to care for aging farmers. Many respondents also shared that they rely on family, neighbors, and friends for help, suggesting that more general caregiving resources could be beneficial to support a variety of caregivers in their social network.

**Increase awareness and usage of existing aging services.** About 30% of farmers surveyed in [Healthy Aging on the Farm](#) identified “themselves” or “no one” as their primary caregiver even though 97% intended to age on the farm. This finding highlights the need for farmers to be aware of community aging resources to help them get the support they need as they age on the farm. [University of Minnesota OT](#) also found that 60% of their participants were previously unaware of OT, indicating that there may be a lack of awareness and underutilization of some specialty healthcare services that could improve well-being.

Future UMASH content could focus on increasing awareness of how aging farmers could benefit from accessing supportive services and connect farmers to essential resources. One specific agricultural population that is eligible for additional supportive aging services are veteran farmers, with about 14% of respondents in the [Healthy Aging on the Farm](#) survey using veteran financial and medical benefits. Future UMASH content could amplify veteran benefits that are available to them. Increasing awareness of these services could help veteran



farmers continue to age in place on the farm.

### **Provide resources about retrofitting the home and farmstead to be more accessible.**

Respondents in the [Healthy Aging on the Farm](#) survey identified that changes in mobility was one of their greatest obstacles to continuing to age at home on the farm. They suggested that retrofitting their homes could make mobility easier and safer, like installing handrails in doorways, installing ramps, ensuring doors and gates open and close easily.

**Use communications strategies that effectively reach aging populations.** The majority of respondents in the [Healthy Aging on the Farm](#) survey were internet users, with 75% of respondents having reliable access and 67% of all respondents using the internet regularly. These findings support UMASH's goals of increasing online engagement as a strategy to share health and safety information. In alignment with the UMASH strategy focus area of promoting equity, justice and inclusion, UMASH should continue to create innovative outreach strategies to increase access to health and safety information for marginalized groups, including those without internet access, rural communities and older farmers. In addition to receiving information online, respondents also shared they prefer receiving information from local newspapers, from their faith communities, and through word of mouth.

## ***Recommendations***

Project leaders reflected on the challenges they faced in their final reports and at project debrief meetings. Multiple project teams shared that recruiting enough participants was the biggest challenge. Their reflections yielded the following recommendations for improving recruitment in the future:

- **Recruit a community leader who can be a trusted intermediary to promote the project.** Some community members were hesitant to participate in the projects because they were unfamiliar with the partner organization. A trusted 'champion' could serve as a liaison between the project leads and the rest of the community, utilizing their social network to recruit participants.

*"We would need a 'community champion' who has access to people and can talk about the projects at church, at coffee shops and with friends."*

- Tamara, University of Minnesota  
Occupational Therapy Project Lead

→ **Promote the benefits of participation in the projects while considering the cultural context of agriculture.** Many farmers in the University of Minnesota OT project were hesitant to participate because they did not think their pain was severe enough to need OT. To overcome this, the team emphasized how their participation could benefit the students, as well as their current level of functioning. In examining the factors that inform farmers' decisions about participation, it is essential to understand and navigate the cultural context of agriculture – long working hours, busy seasons and characteristics like self-reliance.

*"Participants came in saying 'I'm fine, I don't have any problems' - but as we probed further, some had **significant issues with pain.**"*

*"Once farmers knew that by participating in our project they were **helping students learn**, this was a **game changer.**"*

- Tamara, University of Minnesota Occupational Therapy Project Lead

→ **Collaborate with future project leads to select the most effective recruitment strategies for the program.** The projects used a diversity of recruitment strategies with a wide range of success. Future projects may benefit from understanding the challenges and successes of past projects to inform the development of new strategies that are even more effective. The following table shares the strategies that projects used during 2020-21 and how effective the teams believed they were for their program.

### **Somewhat Effective**

- Publicizing the project in the local newspaper
- Leveraging family connections to spread awareness of the project throughout the community through word of mouth

### **Effective**

- Creating a collaboration between faith-based organizations to recruit participants within a wide social network
- Using e-blasts, social media, leveraging existing social network and forging new social connections

### **Extremely Effective**

- Utilizing an established network of diverse community agencies like churches, libraries and other health organizations was able to recruit [over 330 participants](#)

An additional recommendation to consider for future emerging issues programming is to **connect project leads so they can collaborate together**. Facilitators from the [Healthy Aging on the Farm](#) suggested that iterations should consider connecting project leads at the onset of projects so they can provide **mutual support and collaborate to overcome project challenges**, like recruitment. Being able to consult other project leads when tackling project challenges could make solution-finding easier and quicker, enabling projects to meet or exceed project goals.

## Conclusion

The 2020-21 emerging issues partner projects successfully responded to the issue of aging on the farm. The projects formed transdisciplinary collaborations, designed innovative solutions that increased healthcare access for aging farmers, and educated healthcare workers and community members about the unique challenges that farmers face as they age. By pursuing this topic and funding these projects, UMASH also made progress toward the goals articulated in the [UMASH Strategic Plan 2022-2027](#). Specifically, the Center expanded and strengthened relationships with the agricultural community by inviting conversation about the challenges and opportunities of aging on the farm and worked to enhance research-outreach integration by engaging in this reflective evaluation report. Overall, this report has articulated opportunities for UMASH to support farmers throughout their lifespan, generated recommendations for future emerging issues work, and offers a foundation for UMASH's continued work to support the aging agricultural workforce.

## Acknowledgments

Thank you to our partners at the Center for Healthy Aging and Innovation (CHAI) at the University of Minnesota School of Public Health for their contributions throughout the planning and funding of these partnership projects. Thank you also to the project teams for their work to improve the health and safety of those aging in place on the farm. Most importantly, thank you to those farmers and their families and caregivers who participated in the programming, offering their valuable time and expertise.

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