INSIGHTS ON DEVELOPING RESEARCH CAPACITY FOR HEALTHY AGING WITH VILLAGES

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ABOUT THIS REPORT

Over the course of the last century, advancements in medicine and public health have driven a dramatic increase in life expectancy in the U.S. These long-term gains in longevity are bringing healthy aging into focus. Healthy aging has many dimensions, but its overarching theme describes a complex process for maintaining functional ability and well-being in older age.[1] The Village Movement in the U.S. consists of a variety of grassroots, community-based initiatives that aim to support aging in place and promote social integration, health, and well-being. As of 2024 there are over 270 Villages in the U.S. with dozens more in development. The scale and growth of Villages presents a key opportunity to advance healthy aging through evidence-based research. An important step toward this aim is to determine the evidence of the effectiveness of Villages in terms of improving individual and community-level outcomes. Notably, the Village Movement is characterized by remarkable diversity in terms of resources, structure, size, membership, and capacity, which can pose an opportunity for and a challenge to engagement with and participation in rigorous research studies to ensure person-centeredness.

This study sought to better understand how Village participants think about healthy aging, how they think Villages help support healthy aging, as well as barriers, facilitators, and research capacity among Villages in the U.S. In this report we summarize findings from five focus groups with a total of 49 participants who had relevant experience, including Village members in general, members with a health care background, paid professionals and officers (such as directors or board members), and leaders of regional networks of Villages. These findings are of interest to healthy aging researchers seeking to partner with Villages and related community-based organizations, policymakers working on aging, health, and community services, health care and social service practitioners who interface with community-dwelling older adults, and Village leaders and members who wish to strengthen the research evidence of Villages as platforms for healthy aging.

[1] *World Health Organization (2020). Healthy Ageing and Functional Ability. https://www.who.int/news-room/questions-and-answers/item/healthy-ageing-and-functional-ability. Accessed February 27, 2024.*

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KEY FINDINGS

 During October-December 2023, we convened five focus groups with individuals who are part of Villages across the U.S. in numerous capacities. We wanted to understand how Village participants think about healthy aging, how they think Villages help support healthy aging, as well as barriers to, and facilitators of, Village engagement in future person-centered, comparative clinical effectiveness research to support healthy aging.

The major themes that emerged were:

● Healthy aging was seen as a facilitator to aging in place. There was a strong desire to reframe aging away from the current view of aging as a negative decline and to emphasize that healthy aging includes being better prepared for changes associated with increasing age.

● Villages are perceived to support healthy aging in many ways, with social connectedness and preventive health services as dominant themes. Villages are perceived to play an important role in maintaining function and independence.

● Village members viewed healthy aging as highly dependent on the health care infrastructure. This necessitates that Villages support interfaces between members and the health care system. Villages differ in how they can or want to meet this demand.

● Participants felt that evidence-based research was vital to the sustainability of Villages, seen as a way to attract more government funding, commercial and philanthropic partnerships, and to better understand the factors contributing to the extent to which Villages promote healthy aging across diverse individuals and communities.

● Participants noted that Village capacity in terms of staffing and data infrastructure were the main barriers to consider in future research partnerships. The networks of volunteers that Villages galvanize and maintain were seen to be facilitators of future research.

● In terms of implications for future comparative clinical effectiveness research, each study should account for the high variability in how Villages are led and how services are delivered (i.e., by volunteers, paid staff, or both), size of membership, selection issues with Village membership (e.g., demographic and health characteristics), geographic context, and what services are priorities for their members.

● Future comparative clinical effectiveness research should carefully consider sampling Villages that have demonstrated some organizational longevity; conduct power analysis to enable detection of sub-group differences and multiple intervention arms; and use existing or develop standardized, person-centered outcomes measures.

● There is also merit in learning lessons both from Villages that succeed in the long term and from Villages that are short lived.

● Given the grassroots nature of Villages, high engagement of Village members and leaders will be especially important to select priority healthy aging outcomes and to clarify the purpose of comparative effectiveness research.

1 INTRODUCTION

Over the course of the last century, advancements in medicine and public health have driven a dramatic increase in life expectancy in the U.S.,[1] from 53.2 years in 1920 to 78.9 years in 2020.[2] This trend, however, has been fluctuating over the past decade, in turn stagnating or dropping due to the COVID-19 pandemic,[3] as well as other pronounced social issues, such as drug use, unbalanced diets, sedentary lifestyles, and suicide.[2,4] Moreover, evidence suggests there are widening social disparities in both life expectancy[5] and healthy life expectancy,[6] explained in part by racism and other systemic factors, such as socio-economic and socio-spatial inequities in access to health care.

The long-term gains in longevity alongside the recent negative trends are bringing healthy aging into focus. Healthy aging has many dimensions, but its overarching theme describes a complex process for maintaining functional ability and well-being in older age.[7,8] It comprises physical, mental, and social well-being, and is influenced by individual and community factors, such as mindsets and self-perceptions,[9-11] lifestyle, genetics, and environmental attributes.[12] Strategies to support longevity and healthy aging range from preventive care, tailored clinical treatment approaches, and access to long-term care in preferred settings (e.g., nursing homes or residential care facilities),[13] to neighborhood and community-level supports.[14,15]

The Village Movement* in the U.S. started around the year 2000, and describes a variety of grassroots, community-based initiatives that aim to support aging in place and promote social integration, health, and well-being.[16] Villages are a social and

*N.B. The Village Movement, member Villages, or the Village to Village Network are not the same as the census-designated Villages in Florida.

community construct rather than a physical place. At its core, the Village Movement shares the values of other movements in the U.S. that focus on community transformation and social reform.[17] There is also considerable alignment between the mission of Villages and the goals of other long-standing community-based organizations for older adults, such as senior centers and Area Agencies on Aging, including with respect to providing resources for aging in place. Typically supported through membership fees, donations, and grants, Villages provide older adults with opportunities for social and civic engagement, as well as access and linkages to supportive services, for instance transportation, nutrition education, technology support, home maintenance, friendly visiting, and health care advocacy.[18] In general, programs and services are delivered through a combination of volunteers, paid staff, and referrals to third-party health and social care providers.[19] Past work found that, nationally, nearly half of Villages had formal contracts or memoranda of understanding with other organizations, with social service agencies, health care providers, and home-health organizations being the most common.[18]

However, evidence of the effectiveness of Villages in terms of improving individual and community-level outcomes is limited. Self-reported survey data suggest that Village membership and engagement with Village activities are perceived to promote awareness of services and confidence about the accessibility of these services.[20] Longitudinal and national survey findings point to gains in confidence to age in place at home, perceived social support, and reduced intent to relocate elsewhere after one year of Village membership.[18,21] However, the effects of Village membership on the breadth of individual long-term health and community outcomes have not been explored. More comparisons are needed within Villages, for instance of member attributes and the extent of Village service use, and across multiple Villages, to provide more rigorous evidence of the benefits of Village membership on individuals' health. Additional comparisons across Villages and other types of aging-in-place resources or programs would also further strengthen the evidence base.

Villages are characterized by remarkable diversity in terms of resources, structure, size of membership, and capacity. For instance, some Villages are all-volunteer, while others have a mix of paid staff and volunteers. Some have hundreds of members, while others have a few dozen. Membership demographics, however, suggest that Village members across the U.S. are disproportionately white, well-educated, financially secure, and in good health. For instance, a recent national survey reported that roughly 70% of members were women, 96% were white, a quarter had college degrees, more than half had graduate degrees, more than two thirds of member households reported an annual income of $50,000 or higher, and almost 60% rated their health as excellent, very good, or good.[22] This heterogeneity of Village structure and homogeneity of membership can pose a challenge to

engagement in rigorous research studies, as well as to drawing conclusions about Village models, factors and mechanisms that may explain outcomes. Nevertheless, the potential role that Villages might play in promoting healthy aging warrants a concerted effort to evaluate the potential population health implications of Villages. This requires us to understand how to overcome barriers to person-centered research to build research capacity, and to identify and maximize facilitators of research engagement.

The broad range of programmatic operations (e.g., wellness programming, one-on-one assistance, coordination with health care providers) may be suited to testing interventions as part of comparative clinical effectiveness research (CER). CER is a type of research that compares the benefits and harms of two or more approaches to health and social care. Moreover, considering their core mission and that they are typically run by and for older adults, Villages are a key partner for engagement, recruitment, implementation, and dissemination of patient-centered outcomes research (PCOR), potentially even beyond evaluating Villages themselves. PCOR is a type of CER that centers on individuals' preferences, values, and needs. PCOR therefore requires understanding what matters most to Villages and their members. To advance PCOR-CER with Villages, it is essential to develop capacity for multi-sectoral collaboration between Village leaders, Village participants, and PCOR-CER researchers. This study is one component of a broader engagement project that

seeks to build such relationships and capacity. For more information, please refer to villagesresearch.org.

This study sought to better understand how Village participants think about healthy aging, how they think Villages help support healthy aging, as well as barriers, facilitators, and capacity to engage in healthy aging research among Villages in the U.S. In this report we summarize findings from five focus groups with a total of 49 participants. These participants were Village members in general, members with a health care background, paid professionals and officers, and regional leaders. The methodology is described in detail in Appendix A at the end of this report. Below we present the findings in six sections. First, we review participant characteristics, then what healthy aging means to them. Third, we explore participants' perspectives on what Villages do to support healthy aging. Fourth, we describe ways in which participants felt research could support healthy aging and evaluations of Villages. Fifth, we explore the healthy aging research priorities identified by respondents. Finally, we look to the future, with a view to barriers and facilitators of research partnerships. We conclude with a discussion of practical considerations for future research projects and partnerships. Throughout we provide supporting quotes that were de-identified to protect the confidentiality of the participants and their Villages.

2   FINDINGS

2.1 PARTICIPANT CHARACTERISTICS

Overall, we had 49 participants. Two focus groups included general Village members (n=8 and n=5), one comprised members with health care backgrounds who, for instance worked as health or social care providers (n=12), another included paid professionals and officers, such as Village directors or board members (n=13), and one solicited feedback from leaders of regional networks of Villages (n=11). Some of the participants inevitably had experience with multiple roles included in our sampling strategy. For example, some of the professionals and leaders also had a health care background.

Participants were from 18 states and the District of Columbia: California (n=9), Connecticut (n=1), Delaware (n=1), Florida (n=4), Illinois (n=3), Iowa (n=2), Maryland (n=5), Massachusetts (n=3), Minnesota (n=1), Nevada (n=2), New York (n=1), Ohio (n=1), Oregon (n=3), Pennsylvania (n=1), Rhode Island (n=3), Texas (n=3), Virginia (n=2), Washington (n=1), Washington, D.C. (n=3). Table 1 shows participants' demographic details, demonstrating that the study's participants mirror the demographics reported elsewhere.[22]

Table 1. Demographic information of focus group participants.

	Village Members	Health Care Focused Members	Village Professionals	Regional Leaders
Total (N)	13	14	13	11
Age				
30-39	0	1	1	0
40-49	0	0	1	1
50-59	0	0	0	2
60-69	0	2	5	1
70-79	5	7	2	5
80-89	8	3	4	1
Unreported	0	1	0	1
Gender				
Female	10	12	11	7
Male	1	1	2	3
Other	1	0	0	0
Unreported	1	1	0	1
Race/Ethnicity				
Black/African American	0	1	0	0
Hispanic or Latino	0	0	0	0
White	13	13	13	10
Unreported	0	0	0	1
Degree Level				
Some College	1	1	0	0
Bachelor's Degree	4	2	1	1
Master's Degree	6	7	10	7
Doctorate Degree	2	3	1	2
Professional Degree	0	1	1	0
Unreported	0	0	0	1

2.2 WHAT DOES HEALTHY AGING MEAN TO VILLAGE MEMBERS?

Across all five focus groups, healthy aging emerged as a remarkably broad concept. For many participants, it meant primarily experiencing good physical health (e.g., being active, being able to walk around the neighborhood, having healthy sleep, eating healthy), good mental health (e.g., coping with widowhood), good cognitive health (e.g., mental alertness and acuity, being cognitively stimulated), and a sense of social well-being (e.g., avoiding social isolation, having social connections, meeting new people, feeling a sense of belonging to a community). Ultimately, healthy aging was seen as a facilitator of *"being able to stay in your home as long as possible"* (*Village professional/officer*), a desirable outcome for many because they valued their independence.

Participants in two focus groups felt that a key driver of healthy aging across all these domains was having a sense of purpose, *"something that moves you forward, helps you think forward"* (*Health care-focused member*). This was seen as especially important for some *"because many of us are retired and we had jobs"* (*Regional leader*).

An important attribute of healthy aging is that priorities associated with it may change over time in response to decline, such as loss of dexterity, loss of balance, and loss of hearing.

"I think too often older adults are thought of as one group. We don't think of children as one group. There are stages of childhood and there are stages of elderhood. And I think each stage has different priorities, different sense of purpose, different abilities, and different needs. And I would say, for me, the baseline is to be able to remain as healthy and engaged as possible in place whatever place I choose."

(Health care-focused member)

"There are obvious changes in physical abilities. Sometimes mental acuity isn't as sharp as it used to be. Like figuring out a regular place to put your keys. But also, the bigger planning things would include considering a future with assisted living or other senior housing options. And really just thinking about health issues of a more serious nature before they're forced upon you."

(Village professional/officer)

On a related point, some participants underscored the importance of addressing negative stereotypes about aging as a way to change the public discourse on healthy aging, and ultimately how healthy aging can be empowered through services and feeling prepared.

"So often we think about aging and what you think about is decrepitude, which is all about negative qualities… I'm not old and I don't want to be old and I don't want to be thought of as old. So, I think it's really important, as we live longer and longer, to bring forward the message that people can be quite productive and active and healthy for many, many more years than was true in the past."

(Village member)

"We do live in a culture where aging is seen as a negative… that somehow you're deteriorating as you age and not an empowering perspective on being able to live life to the fullest, especially when you have all of the experience and some resources and some time."

(Village professional/officer)

2.3 WHAT DO VILLAGES DO TO SUPPORT HEALTHY AGING?

Participants outlined numerous ways in which they felt their Villages supported important aspects of healthy aging, such as providing information and referrals to community services, serving as a bridge to the health system, facilitating good physical health through prevention, facilitating social connections, organizing home and yard maintenance services, and advocating for sustainability and funding.

2.3.1 VILLAGES AS HUBS FOR INFORMATION & REFERRALS TO COMMUNITY SERVICES

Discussions suggested that Villages engage in varying types of relationships with other organizations, from less to more formal, which positions them as hubs for information and referrals. A participant described this as a deliberate process to *"understand what those community resources are through asset mapping, to be able to connect into those." (Regional leader)* Their examples suggested that these linkages with resources may support physical, mental, and social well-being. Some maintain directories of traditional aging services and other community-based organizations, so they can raise awareness among their members about the resources offered by other organizations. One Village professional/officer described this aspect:

"Just call us if you need something, even if it's not something we offer, we can connect you to somebody else, another nonprofit that does that, or another group in the community that does that. And I think that that's a really important piece. Just the service as a connector to other resources is an important benefit of Villages that goes almost untracked and unspoken [of] but can provide a huge lifeline to people who may be struggling or feel like they're alone in this aging process."

(Village professional/officer)

Another respondent mentioned a more established vendor vetting process that includes some coordination of services:

"In our Village, we coordinate with a number of outside organizations. We call them our vetted vendors, like home health agencies, home care agencies, skilled nursing facilities, if there's a need, Meals on Wheels, and many, many other organizations, Alzheimer's Association. So we have a good relationship with the leaders in those organizations. Our [local aging service leader] is [involved in our Village] … So there's a lot of coordination that goes on with other organizations."

(Village professional/officer)

2.3.2 VILLAGES AS BRIDGES TO THE HEALTH CARE SYSTEM

One service area that appears to be in demand with Village members is support with navigating the health care system. Here too the range of services mentioned were on a spectrum from less to more intensive across Villages. Some Villages provide volunteer-based services to assist with picking up medications, driving members to medical appointments, accompanying them during medical appointments, helping members prepare for conversations with their providers by writing down questions ahead of time, and helping members navigate patient portals. At the other end of the spectrum, Villages were more actively involved in coordinating their members' care by hiring case managers, as described by these two comments:

"In my own Village, they've used some of the funds and they have hired a professional social worker who is being paid, and also, there are several people within our particular Village with healthcare backgrounds, either in social work or medicine or physical therapy or hospice care, et cetera, and those people are working as we speak on ways of helping people transition because some elders are well-versed with what's available in their community in terms of where they need to go or want to go and others don't have a clue. They just haven't thought about it and then they're faced with a crisis. So that's one solution that I see happening."

(Village member)

"One of the things we did in terms of the physical care needs was we hired a case manager, a care manager, a nurse practitioner to kind of formally go in and assess what we saw and members' declining [health] because they all will decline at some point, and then be able to do some formal intervention with the family and with helping them set up what they need for their next stage in life."

(Health care-focused member)

This role of helping members navigate the healthcare system was seen as vital, and as an area where Villages have a lot more work to do, as several respondents noted:

"What I'd like to see is, and we're not even close to this point yet, but the transition team, so somebody who would help find appropriate home care because there's a shortage of primary care doctors, there's a shortage of home care workers, of skilled nursing beds, and so rather than just wait until something awful happens and you're plunked in someplace, somebody who has already looked at all the options can make a recommendation based on what you need and will act as an interface between you, your family, and your primary care doctor, and wherever it is that you end up, whatever it is that you end up needing next."

(Village member)

"Another concept that someone in my group is just beginning to float, and it's very premature and we're trying to flesh it out, is how could you possibly add a more structured, recognized, formal, next level that links Villages to the care system? It's not there yet, so it's a long way to go, but this concern about frail members is a big one for an increasing number of Villages."

(Regional leader)

"Healthy aging depends on a healthy infrastructure around us. And that infrastructure from a healthcare perspective requires, I think, that there be robust partnerships between physical healthcare organizations and community-based organizations. Illness lives in the hospital, but well-being lives in the community, so there need to be robust partnerships."

(Health care-focused member)

Participants noted that Villages can facilitate specific aspects of the health care delivery system. One Village described a pilot program with a local hospital, which was motivated by high re-admission rates among older adults. As part of the pilot the hospital paid for Village memberships for three months so that discharged patients could receive transportation and other health system navigation from the Village to help with recovery. One health care-focused member noted: *"In the three years this project has been running, the number of readmissions within 30 days and emergency room visits is almost negligible."*

2.3.3 VILLAGES AS FACILITATOR FOR GOOD PHYSICAL HEALTH THROUGH PREVENTION

Related to physical health, participants described Village wellness programs, including activities or more formal programs that aim to maintain good physical health or prevent serious health incidents, such as falls.

> *"Our Village does a good job of keeping people active. So we have walking groups and hiking groups, ping pong groups, and we also have special programs for people who are having trouble walking because of arthritis. It's called 'Walker Program,' and they give them more confidence in a group setting to try walking again if they haven't been walking and fall prevention and that kind of thing."*
>
> (Village professional/officer)

> *"We do a lot in terms of prevention … both by educating, inviting speakers to come and educate us, but also we had an array of fitness programs, hiking programs, fall prevention programs and aerobics classes, tai chi, I mean, all kinds of things that have been proven to keep older people healthier and also to prevent falls, which is one of the number one causes of illness and death for older people."*
>
> (Village member)

2.3.4 VILLAGES AS A CATALYST FOR SOCIAL CONNECTION

One of the perceived benefits that dominated discussions was about how Villages serve as a catalyst for social connection. Many felt that this paid dividends in terms of improving social well-being and preventing social isolation. Participants described a broad range of Village activities that are directly focused on socializing, from Zoom and in-person gatherings to neighborhood circles and friendly visiting. The next excerpt underscores the importance of social connection:

"We try pretty religiously to plan something every week for our members, so that they have the opportunity to come together, have conversation, share ideas, and it gives them that opportunity to go back to all the things that we just sort of shared, like purpose. It gives them a purpose."

(Regional leader)

However, they also pointed out indirect mechanisms through which Village membership may contribute to individual and community social well-being. For example, Villages facilitate social engagement through encouraging members to become volunteers, reinforcing their sense of purpose and tapping into their strengths or interests to benefit the larger community:

"When I'm in the home doing an intake assessment I try to make every new member into a volunteer. And it's amazing when people start volunteering in any capacity, maybe they're home bound, but they can do the calling every day to check in on people, whatever. And people really take to it, and it really gives them purpose. And right away they'll say, or I try to get them to start a group of interest like, 'I'd like to be in a French-speaking group.'"

(Health care-focused member)

"The important one for me is engagement where we're actually having activities together, we're having meals together and classes together and hiking together."

(Village member)

"If a Village offers rides, that's an example, getting around the community and seeing people. As well as the relationship that can develop between the volunteer driver and a member."

(Village professional/officer)

Participants also mentioned social connection as a secondary benefit of other activities and support services, such as fitness programs, hiking groups, and transportation services. Each of these, respectively, are illustrated in more detail by these quotes:

"We find that with fitness programs and the various in-person programs that we run is it serves a dual purpose. It not only serves the purpose of what we're talking about, but it's socialization."

(Village member)

"We tell our volunteers to never underestimate the time they have in the car with those individuals, because that might be the only interaction that those folks have, whether they're going to the grocery store or to one of our planned events. That's 15 or 20 minutes in the car of conversation that's so important. It's that, again, it's the connection and keeping people just able to communicate, right?"

(Regional leader)

Some participants noted that opportunities for social connection may work even for members who describe themselves as introverts since they can engage with the community remotely:

"I have a little bit different appreciation of my local Village. I'm very much an introvert, so the social aspect of the Villages doesn't appeal to me at all, but the strength of the Villages for me has been the number of ways that I can still stay engaged, stay involved, even provide help to people because I can do it from home and don't have to go out and don't have to associate with people, and of course, during COVID, that was extremely helpful to be able to do that. I don't know people here in the community, which is fine with me, that's okay."

(Village member)

"Music and theater, they come over and give us samples of the theater program that they're going to perform, give us reduced priced tickets, usually less than $10. We all support the theater program at the local high school right across the street, so it has been very good to have that connection and to have music brought in to our community from the folks at the high school because we're neighbors within the neighborhood."

(Village member)

A dimension of socialization that Village members felt positively about was building intergenerational connections. Here, they spoke with relish about existing programs that connect Village members to high schools or colleges in the community, as the next quotes illustrate:

"So we're going to be working with the high school students to be providing technical support, which we expect to grow into other sorts of relationships and support within the Village."

(Health care-focused member)

"We started a whole project with a pen pal program with a local school and everybody got involved and everybody wanted a pen pal, and it just brought so many people out of their quiet shells. Then we got together with the students at the end of the year and a lot of them wanted to continue over the summer and it just blossomed, and it just did so much for our Village as well as the kids."

(Health care-focused member)

2.3.5 VILLAGES AS A SOURCE OF HOME & YARD MAINTENANCE SERVICES

Village volunteers who help with home and yard maintenance activities, such as minor repairs, decluttering, snow removal, and yard work, were seen as pivotal in helping people age safely at home. These types of support could also address housing stability as a social driver of health, as illustrated by the next few comments:

"I live in a house, a tall house with the two floors and a basement, and it has helped me in many ways. One of the things is somebody comes in to do light housekeeping. I also have several drivers because I no longer drive. I'm in my late eighties, and I have some spinal cord problems. So I think in order to have what you're calling healthy aging, it's important to have these kinds of resources available."

(Village member)

"We had our snow shovel help. I'm in the northeast and last year, last winter, I got a call from one of the volunteers who said, you need any help shoveling? She came over and we were both out there. It was a help. The other thing the Village gives us... I used to do everything around the house from changing light bulbs to tightening a door hinge to fixing the washing machine, and I can no longer do some of that. [B]ut they have contacts for who's a good handyman, what's a good plumber, what's a good electrician because I can't do those things anymore, or at least not as much as I used to."

(Village member)

"The services that Villages provide that help people stay in their own home longer, short of home care... I mentioned the rides, but in terms of at home, it's minor home repairs. It could be changing the light bulb or battery, and a smoke alarm battery or a light bulb that's on the ceiling, that kind of thing. It can be helping people with errands, with decluttering, with various home maintenance activities, maybe some minor yard work cleanups. And there are others."

(Village professional/officer)

2.3.6 VILLAGES AS ADVOCATES FOR SUSTAINABLE FUNDING TO SUPPORT HEALTHY AGING

Finally, participants across all focus groups described how Villages seek to support healthy aging through advocacy with county, state, and federal lawmakers, health insurers, and health systems. In doing so, they hope to raise awareness about what they see as the benefits of Villages (e.g., keeping people out of the hospital) with a vision for establishing more formal, financially viable partnerships:

"We can't really depend on membership fees to carry us completely. And certainly lots of people can't afford the membership fees. So who's going to advocate for more funding for Villages? Well, that's a problem. And some healthcare systems like Kaiser and others pay for gym memberships and things like that. Well, it'd be nice if they realize that Villages are just as important if not much, much more important than a gym membership and pay the membership fee in a Village for some of their members."

(Village member)

> *"We advocated to get Villages into the master plan for aging for our state. If we're going to narrow down to who are we going after for funding for our Villages, it's healthcare and the state government."*
>
> (Regional leader)

Through advocacy Villages also hope to contribute to improvements in long-term care and optimal care for aging adults (e.g., preventing *"unnecessary, inappropriate care,"* or advocating that hospitals set up emergency room departments dedicated to seniors). Other topics of advocacy seen as important factors for healthy aging include design of physically accessible public spaces, better pay for healthcare workers, safety net program eligibility, and immigration reform to support healthcare staffing pipelines. To sustain this effort, some Villages work with other Villages and organizations to aggregate and represent their interests locally or nationally:

> *"Well, one of the things we're doing is realizing that one little Village isn't going to change much. So the idea is we have a statewide organization called [NAME], and we would love to work with other groups whether they're national Village groups or our state groups, because you have more clout when you have more membership. So that's one of the things we're looking at. We also are trying to work with our local Area Commissions on Aging [sic]. They often are looking for community input. And so that's something that's going on. And we have a coalition of various groups in our area that represent home care, represent Villages, just an array of organizations, and they too form better lobbying groups than one little Village."*
>
> (Village member)

> *"We formed a coalition in our state. It wasn't that we wanted to compete with the Village to Village Network. It's more we recognize there's limited capacity. There's limited capacity for us, and we're only dealing with one state. It was to supplement, not to in any way compete with or take away from [them]."*
>
> (Regional leader)

2.4 HOW MIGHT RESEARCH SUPPORT HEALTHY AGING & VILLAGES

Engaging as partners in future research was perceived by many across all focus groups as vital towards ensuring the sustainability of the Village Movement. Participants described research as an essential endeavor to demonstrate impact (at individual, community, economy, health system levels) and show measurable improvement in outcomes as a result of their work. Regarding outcomes, some said it was imperative to focus on what matters to Village members but also to healthcare providers, insurers, and government agencies. Participants noted that evidence for Villages' impacts on healthy aging can facilitate their success and maintenance: *"Why is it that some Villages don't make it? That helps us understand what it is we need to be at least effective in some way"* (*Health care-focused member*). This type of evidence, they thought, would help Villages attract a larger and more diverse membership base, future investments, and financial partnerships, as the following quotes suggest:

"I've always felt that if we could prove how effective Villages can be and are already in keeping members healthy both mentally and physically, that I think there would be funding opportunities. But we don't have the capacity to prove that. So I think [research could] be really important."

(Village member)
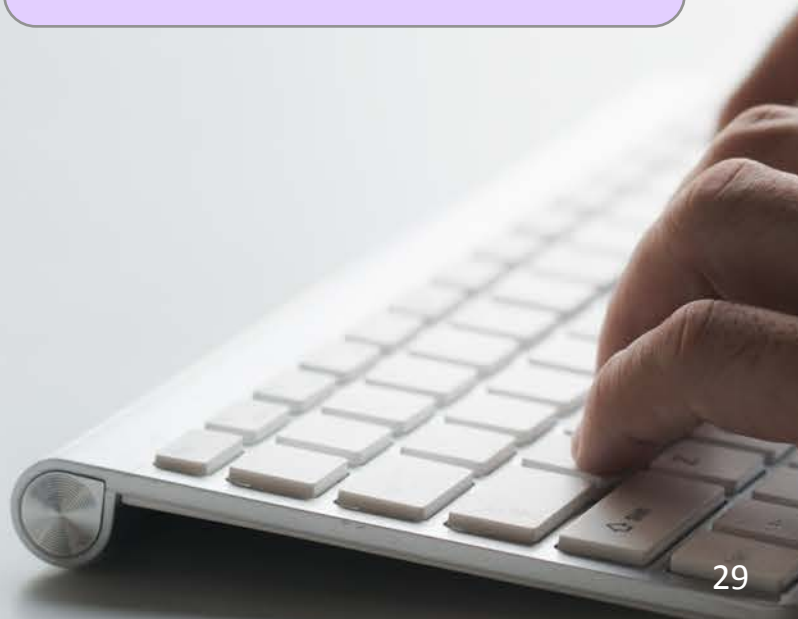
"If we are demonstrating that fewer people are running to emergency rooms, if we can demonstrate that fewer people are needing ambulance care, that the police are not coming to deal with helping people get out of the bathtubs and things, if we can show that Villages are making a difference, it helps them because their funding, that funding never changes. It's always constant. And so you're competing with programs that are already being funded. So it just seems like understanding what it is that politicians would need, information that they would need to persuade them to support Villages would really be helpful."

(Health care-focused member)

"We appeal to philanthropists who are interested in supporting older people. We get our member dues, and we get donations from the general community. We have a business partner program where people contribute. So those are our sources of funding. And if you could document the effect of belonging to a Village, you could find it easier to raise money to support the Village, and that specifically has a benefit in that if we could get money from philanthropies or government sources for money, then we could lower our dues and make it easier for people to join, because our dues level is relatively high at this point, and it's an impediment to people coming and joining."

(Village member)

2.5 WHAT PRIORITIES DO VILLAGE MEMBERS HAVE FOR HEALTHY AGING RESEARCH?

Focus group participants were enthusiastic in their discussion of research topics to be explored in future. Table 2 provides a consolidated list of their suggestions, grouped by research topic. We have kept the participants' suggestions almost verbatim, edited occasionally for clarity. In addition to recommendations that relate expressly to research on healthy aging, participants also demonstrated the desire for their Villages to diversify their membership, by learning – through research – how to message and appeal to new demographics, and thus be more inclusive across racial/ethnic identities, and socioeconomic status. They also felt that research should focus on better understanding the history and trajectory of the Village Movement, as well as advantages and disadvantages of various Village structural models, Village approaches to fee-based memberships and other operational aspects. Finally, they recommended some ideas focused on data management and standardization.

Table 2. Village members' recommendations for future research

Research Topics	Participants' research suggestions
Healthy aging and benefits of Villages	What is the relationship between physical exercise, mental health and memory?
	Where does a Village fit in the continuum of care (for example, receiving health care at home versus in a facility)?
	What is the connection between addressing social isolation and how that can have measurable impacts on physical and mental health?
	What health outcomes do healthcare providers and health insurers care about that Villages can practically meet?
	What does the interface between a Village and the payer system look like?
	Is there a correlation between being a member of a Village and the length of time one spends in the hospital or a rehab center?
	Longitudinal study of Village members over time as they encounter periods of frailty. Is there an adequate understanding of the variations of Village members as they change over time? Do we adequately understand how to care for the frailest adults?
	To what extent can Village members access home care services?

	To what extent are Villages unable to provide (or get access to) the services that Village members need?
	Cost benefit analysis comparing Villages to nursing homes or assisted living facilities
	Do Village members stay at home longer compared to non-Village members?
	Prevalence of elder abuse for individuals living in Villages versus other types of residences such as nursing homes
	How can Villages play a role in addressing negative stereotypes about aging?
Engagement strategies for existing members	Best practices for messaging and outreach to different audiences
	Best practices for engaging men in Village activities
	What is the messaging that would bring the most people to Village events?
Strategies to diversify Village membership	How can we make Villages more diverse?
	How do the perceived needs of older adults differ from one ethnic community to another?
	How do different cultures take care of their aging populations, especially those who are solo aging? What can Villages learn from those cultures that have a different approach to how they treat old people?

How do we translate this model from being primarily white or homogeneous communities into including other cultures?

What resources can Villages utilize to do outreach to individuals who would not typically join a village (due to income, geographic location, etc.)

What steps can be taken to effectively reach out to diverse populations to inform them about Villages?

Trajectory of Villages and Village Movement

Stages of evolution for a Village: what explains Village success or failure

What Village profiles exist (e.g., all volunteer, staffed)?

Do the types and level of activities vary by Village profile?

What is the optimal mix of programs and services for a Village? How does that vary based on the social, economic, ethnic make-up of a Village?

Comparisons among non-profit Villages and how they developed (e.g., grassroots efforts vs. sponsoring organization)

What would a roadmap look like for developing a Village in terms of institutional structure and capacity (particularly one that is created based on grassroots efforts)?

What is the value of the hub and spoke model for Villages?

Use longitudinal history of the organization to understand how leadership development can be improved

Create a database to store different information that can be shared across Villages (e.g., best practices for messaging)

Longitudinal history of Villages to better understand Village sustainability

Longitudinal study about how Villages change demographically over time

Data-driven strategic approaches to identifying opportunities for improvement in Villages

Analysis of return on investment for Village membership dues compared to tasks completed by volunteers

Types of data to collect

Village demographic data, who are Villages serving?

Best practices, benchmarking, and model validation

Data that might be of use to insurance companies (e.g., hospital readmissions, A1C levels, falls, fractures)

Village members' health outcomes and standardized measures of health across Villages

2.6 HOW CAN FUTURE RESEARCH PARTNERSHIPS ACCOUNT FOR PERCEIVED BARRIERS & FACILITATORS?

When discussing future research, focus group attendees offered a range of practical recommendations about how partnerships might be developed to overcome barriers to person-centered research to build research capacity, and identify and maximize facilitators of research engagement.

2.6.1 BARRIERS TO RESEARCH PARTNERSHIPS

The main barriers to person-centered research emerged around the Villages' capacity to contribute to research and even carry out research tasks. Related themes included administrative staffing and data management expertise, resistance to engaging with research based on past negative experiences, and challenges related to Village resources and shifting services (i.e., changes in the potential unit of analysis).

Staffing

First, regarding staffing, there is notable variation in how Villages themselves are organized. For example, some are operated entirely by volunteers, while others have paid staff roles and/or consultants. However, regardless of staffing approach, participants agreed that research funding needs to include financial and technical support for Village staffing. The next set of quotes illustrate this for both staffed and volunteer-only Villages:

"We get many, many, many requests from researchers because we're large. This is a captive audience, and the big issue is what's in it for us, And I think [what] would make it worthwhile again, one would be funding. Villages need money. We need to hire more people, we need to hire care managers as our population ages. To somehow build into the grants and the requests for funding, funding for the Village itself."

(Health care-focused member)

"We have paid staff and we've gotten more paid staff over the years, but we've also taken on all kinds of other things and they are completely over committed. I don't think that if anybody asked them to do a research study and didn't pay for additional staff, I don't think we could do it."

(Village member)

> *"We're an all-volunteer Village. We have no paid staff. I know many Villages and particularly in cities tend to be larger and have more staff, have paid staff, which makes a difference probably in terms of the level of activities that you offer and things like that. And so yeah, I think that's one thing that needs to be considered for smaller communities that just have all volunteer type infrastructure. A thought that comes to my mind that might help is if in the research grants that a researcher gets that built into it is some funds for the Village. And it might be either for an existing staff person to do the data stuff or whatever, or to even hire somebody on contract to work particularly on that project, making sure the researchers get the information that they need. But I've seen lots of research studies where there is nothing in it financially for the participating organizations."*

(Village professional/officer)

Data management

A second dimension of capacity related to data management. Discussions suggested that the infrastructure for collecting, aggregating, and analyzing data, as well as the type and accuracy of data collected by each Village, can vary dramatically. The electronic platforms used to manage data vary as well, including Excel, Salesforce, Club Express, Helpful Village, and others. Some collect only basic demographics about their members, while others focus on service or activity output, member testimonials and exit interviews. Other Villages have struggled to collect accurate data from their members and volunteers. Many participants shared their Village does not collect outcomes data nor share a taxonomy of services. The comments below illustrate the nuances of this issue:

> *"And it does seem consistently that whenever we say we need data on this, the staff says, 'Well, we don't have any current data, or we have to do a survey.' It's true. The data gets old, the membership changes their information about what services they need, there's member satisfaction. I would say at any given point in time, we don't have a lot of up-to-date data, and it's not particularly comprehensive and for some reason, frustratingly enough, it doesn't seem to cover the topic that we need the information on."*

(Health care-focused member)

"The hardest part is getting people in the community to give those hours, to report on a monthly basis because people say, 'Well, I'm just helping a neighbor or I know that my neighbor crossed the hall had surgery and I took meals to her, or I took her to the doctor afterwards but they don't seem to want to record what they're doing on a day-to-day basis.'"

(Health care-focused member)

"We're just beginning to try to document volunteer time. And data collection is always a problem because what you learn is only as good as your data, and getting complete data on something like volunteer time, how much time are people spending doing whatever they're doing in the Village? It's just very hard. We're going to get some partial data and then have to figure out how to make use of that."

(Village member)

"I can't even begin to name what the obstacles are. I mean, it's [Software company name] versus the other software. Let's start with that. If I could dump [Software company name] today, it wouldn't be too soon. Do I have [the financial resources] to take on the new? No. That's the issue. And then you have a difference in perspective from staff using the software, and trying to pull out the data and, "Oh, get me a list of everybody who attended the Thursday dinners for the last year." Versus the volunteers, who they're planning the events, and they want the information, but they don't realize, well, to get the information out, garbage in, garbage out. If we don't put the data in, if we don't teach our members how to log in, and if they don't log in and register, I can't get data out."

(Regional leader)

Negative past experiences

Another point of resistance stemmed from past experiences that Village members had as participants in research studies. They expressed frustration with what they saw as some researchers' lack of clear and open communication about study involvement, decisions, rationales, data confidentiality, and periodic dissemination about study progress and findings. For example, participants said they were not provided with clear and concise information about a study, its purpose, procedures, time/effort required to participate (e.g., long surveys, compiling medical history information from multiple sources), nor any discussion about potential risks or benefits. The comments below describe situations where participants felt that researchers misrepresented or did not specify the amount of time and effort expected of them:

"I just did one recently, and they said it was going to take less than 10 minutes and when I got to 15 [minutes] I said, "What? The heck with this!" And I just exited and didn't want to be a part of it."

(Health care-focused member)

"I answered the email and signed up. It has really, really been frustrating to me, because the requests for medical backup information to participate in the study have taken me hours to try to track down. I don't have it kept in paper, besides, I've got medical records for hip transplants and different surgeries and so on. I haven't kept any of that stuff. And I certainly don't have it at my fingertips. And yet they're asking me to provide this information for the study. So, I guess as researchers, I would say, please, please ask the people who are designing the study to let people know that ahead of time. If I had known... I don't want to back out now because I've already spent several hours participating in this, but I wish now that I'd never signed up to participate."

(Village member)

"I said I would participate at the beginning, and the amount of data that they wanted upfront, and I'm doing this online, but it was pages and pages and pages, and I just said, 'No, I've got other things. I've got a life to live. I can't spend it filling your form out.' So, you need to tell people up front, is this going to take 20 minutes to complete? Is this going to take an hour to complete? Is this going to take four days of your life? Let people know up front because I said, 'Yes.' And then I said, 'I'm sorry, I can't do this regretfully,' but they didn't tell me at the beginning, we've got a 500-question survey we want you to fill out."

(Village member)

"The problem that I have with talking about surveys and research. Research to me connotes time, and, I mean, how much time do we have? So I think we have to be cognizant of what are you going to get out of this, you are asking people to participate, but how do you bring them in and then how do you dish out the findings in a way that people can be satisfied in a short term as well as the long term?"

(Village professional/officer)

They also touched on the need to inform participants about the use and confidentiality of their data, as well as the rationale for restricting access to their individual results. Participants also lamented the limited sharing of early or final study results back to the community. Combined, they felt that these negative experiences from past research engagement can create hesitation and resistance in future. The following excerpts capture some of these issues well:

"I think messaging is very important. The way that whatever you ask the Villages to do, that it's made very clear how it's going to benefit them. Again, that in some way, this information will come back in a form that's useful to them, whether it's something they can put in a grant proposal or whatever that ultimately ends up looking like. I think just being very clear about how this directly benefits them is important."

(Regional leader)

To prevent these issues, participants recommended that researchers use plain language, be transparent about participant burden, and frame participation as an investment in individuals and communities. The next quotes summarize these suggestions:

"Help the potential respondent understand why it was important for their input, how they were making a contribution. And I think that's part of the marketing that researchers have to do, is to explain that this is really important because now their information could potentially help make a big difference in how Villages are seen, Villages are funded and so on. Two, offering to pay them something. And three, if it's maybe even giving them a little gift or something like that, or some sort of acknowledgement that what they're doing is really important. Maybe you promise that when their articles are written or there's a newsletter that comes out, basically giving them some feedback about how things are progressing. Things of that sort so they feel like they're belonging to the process."

(Health care-focused member)

"I think messaging is very important. The way that whatever you ask the Villages to do, that it's made very clear how it's going to benefit them. Again, that in some way, this information will come back in a form that's useful to them, whether it's something they can put in a grant proposal or whatever that ultimately ends up looking like. I think just being very clear about how this directly benefits them is important."

(Regional leader)

Challenges related to shifting services and Village resources

An important challenge for future healthy aging research with Villages is that the landscape of services and supports offered directly or facilitated through third-party organizations is motivated by different factors. Focus group participants described how programs and initiatives across all types of supports and services are formed and implemented within Villages. Support programs facilitated by Villages, such as educational programming, social get togethers, physical activities, transportation, and others came about in at least three different ways. Sometimes they were organized ad hoc through informal connections, for example, one person on the

Village's governing board expressed an interest in a particular program or service, or *"somebody knew somebody"* who had the means to take the initiative to carry out a service or program. Other healthy aging activities were provided based on Village-level data on member needs and preferences (*"Our Village has a lot of data because someone on our board is a statistician"*). In other instances, Villages implemented healthy aging activities because the ideas originated externally from other partner organizations, such as nearby retirement communities.

Further, services and supports may be changing in dynamic ways for different Villages. This responds to the perceived growing care needs among aging members (due to frailty, Alzheimer's disease or related dementias) and the perceived limitations of what Villages can accomplish within their model, existing resources, and infrastructure. As noted in Section 2.3.2. above, some Villages are looking to meet their members' growing needs by hiring case managers, social workers, nurse practitioners who can help members navigate additional care.

"That what's happening here locally is there's a transition team that's in place because as participants age, they inevitably develop more health, physical and/or cognitive problems and so it gets to the point where a Village, I assume this is not unique, faces the issue of participants who no longer can not only utilize the services, but need more than a Village can provide."

(Village member)

However, other Villages cannot meet these changing demands with existing or newly hired staff and therefore need to set clear boundaries to supporting members who may have functional limitations:

"Villages really can't handle some of the more demanding physical needs that people have as they age."

(Health care-focused member)

"Our Village is very focused on keeping people at home and not becoming a social service, what's the word, product. Meaning, that if someone needs help, they don't want people to come to us for help. We have resources that we can give them, but that's not the main focus of the Village."
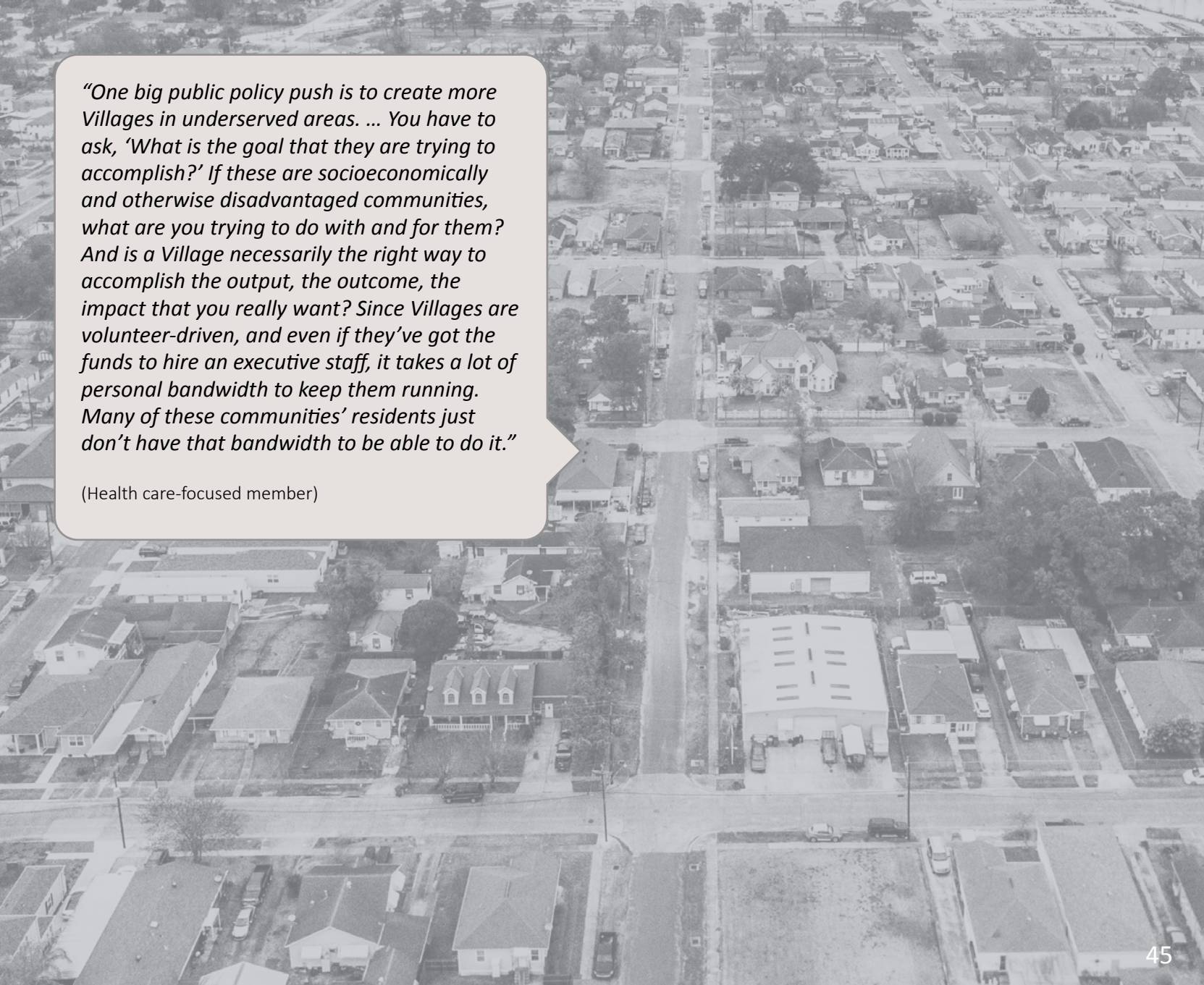
(Health care-focused member)

"Our growing need is for being able to incorporate people, members, who are increasingly having some form of dementia. So whether that is help for the caregiving spouse or some kind of help for an interim time before our Village cannot serve them anymore. I mean there's some point in time, whether it's due to dementia or other healthcare needs, where a Village isn't the right fit, we can't do enough. And so that in-between time, really being able to have effective services and incorporating them into our Village is very important, and that's just a really difficult period of time that we don't feel capable of doing."

(Village professional/officer)

"Something we've been grappling with is how we can respond and serve our members when acute needs arise. We're great at throwing parties and creating a lot of socialization and providing some limited services that fit into our well-defined tiny little boxes, but what if one of our members has an illness or an injury or some other hazardous thing. Their building burns down, you know? How can we respond to that in a systematic and helpful way that doesn't require reinventing the wheel each time, doesn't completely monopolize our resources and burn out all of our helpful volunteers, or doesn't shift the burden to one particular individual who just, out of the goodness of their heart, feels like they want to help this individual. … We don't really establish good boundaries. So when can we say, you know, we've reached our capacity to assist you? Or vice versa. When do we say, no, we can certainly still help this person?"

(Regional leader)

By extension, a similar concern was expressed about what it may mean for Villages to expand their models in underserved areas. Reaching underserved populations and advancing health equity principles should be a critical goal for Villages and research studies alike.

"One big public policy push is to create more Villages in underserved areas. … You have to ask, 'What is the goal that they are trying to accomplish?' If these are socioeconomically and otherwise disadvantaged communities, what are you trying to do with and for them? And is a Village necessarily the right way to accomplish the output, the outcome, the impact that you really want? Since Villages are volunteer-driven, and even if they've got the funds to hire an executive staff, it takes a lot of personal bandwidth to keep them running. Many of these communities' residents just don't have that bandwidth to be able to do it."

(Health care-focused member)

2.6.2 FACILITATORS OF RESEARCH PARTNERSHIPS

Participants also spoke about a range of facilitators that researchers should seek to maximize, including thoughtful engagement of Village volunteers and other staffing roles, and paying close attention to language in study materials. A key facilitator in future research partnerships are the networks of volunteers galvanized and maintained by each Village. In many Villages, members themselves can become volunteers who can bring important expertise and a professional tone to volunteer activities:

"At least for our Village, a third of our members are engaged in some aspect of volunteerism. I'd like to see more, and some Villagers probably have most of their members engaged in volunteerism of some nature."

(Village professional/officer)

"[Villages] might have the capacity through volunteers and they very well might have volunteers that do research or have done research in the past that could do it. … A lot of Village members wouldn't even do a member survey. And as a volunteer, I was asked to call certain members and go through the survey with them for whatever reason. And part of that became more socialization than filling out a survey. Some couldn't use a computer so they couldn't fill out the survey, but some just won't fill out surveys."

(Health care-focused member)

"We're an all-volunteer Village, and whether you're an all-volunteer Village or not, you probably have volunteers who are leading certain things. And the Village structure offers an opportunity to those who want to continue to use their professional skills or their experience, in whatever it is."

(Regional leader)

However, support from volunteers must be balanced with more structured support from paid staff, as discussed previously in terms of capacity:

> *"When we talk about Villagers, there's so many different roles people play and I think there's the end user, the person who receives the services and supports, that's the member. There's the actual volunteer who's actually doing the work. So, you have to be sensitive to the fact that there are different layers of people playing critical roles in Villages and making certain that those positions are represented."*
>
> (Health care-focused member)

When it comes to facilitating research partnerships, participants underscored that language matters, both in terms of motivating partnerships between Villages and researchers, but also in terms of motivating member participation in research activities, such as responding to survey and interview recruitment. For example, a few participants expressed dissatisfaction with the use of *patient-centered*, because to them it felt too medically oriented. Instead, they suggested *person-centered* and *person-centeredness* because the *person-centered* conjures up *living* rather than *institutional care*. Another example related to how we describe core Village activities, such as volunteering, in a way that resonates across cultures. As one participant noted, volunteering is a *"very structurally formalized, traditionally white way of participating in community"* (*Village professional/ officer*), and while the concept of helping others exists across cultures, a more thoughtful framing of volunteering may be needed to resonate across cultures.

3 IMPLICATIONS FOR FUTURE COMPARATIVE CLINICAL EFFECTIVENESS RESEARCH

This study sought to understand how Village participants think about healthy aging, how they think Villages help support healthy aging, as well as barriers, facilitators, and capacity to partner on healthy aging research among Villages in the U.S. Drawing on perspectives from individuals in various Village roles and capacities, our findings highlight 1) the broad range of healthy aging dimensions offered by participants; 2) the many programs, initiatives and activities that Villages offer to support healthy aging, with dominant themes about social connectedness and preventive health services, such as physical and wellness programs; 3) the strategic ways in which research might support healthy aging and Villages towards sustainability; 4) the diverse priority research questions that participants recommended, including a focus on healthy aging and diversifying membership; 5) important barriers to research partnerships, such as limited staff capacity challenges, and inadequate data systems to track services and outcomes; and 6) important facilitators that can be maximized, including the availability of ready and willing volunteers. These findings offer implications for the design and evaluation of interventions, and other healthy aging measures that can be addressed in future research with Villages, including both the topical focus of future research, as well as considerations for their planning and design.

3.1 IMPLICATIONS FOR RESEARCH FOCUS

Participants felt that comparative clinical effectiveness research that measures perceived or real benefits of Villages to healthy aging is vital for the sustainability of the Village Movement, because it could help attract revenue (through increased membership, government funding, and partnerships with health systems and insurers) and ensure sustainability. Village members expressed interest in studies that could show the effectiveness of Villages on healthy aging where the Village itself is the intervention, but also in studies focused on healthy aging in general, such as strategies to improve memory, or understanding the relationship between social isolation and physical and mental health.

Village members also viewed the future of healthy aging as highly dependent on the healthcare infrastructure and noted the role that many Villages can or should serve to interface between Village members and the health care system. This was a significant concern for participants and an area outlined to be considered in future expansion of Village services. Thus, where Villages offer such support, future comparative clinical effectiveness research could evaluate referral or case management interventions embedded within Villages.

In Table 3 we highlight additional research questions that were identified by focus group participants. We modify some of them into comparative clinical effectiveness research questions.

Table 3. Examples of comparative clinical effectiveness research (CER) and other questions

Type of intervention	Examples of research questions
Comparing Villages as the intervention	How well do Villages help prevent elder abuse versus interventions delivered in other types of settings?
	What are the economic savings of being a Village member compared to being resident of nursing homes or assisted living facilities?
	To what extent does Village membership, compared to non-membership, reduce the duration of hospital stays or post-acute services such as inpatient rehabilitation services?
Comparing interventions among Villages	What are the most beneficial components of a physical exercise program to improve Village members' mental and cognitive health outcomes?
	What are the most effective social connection programs that Villages provide in terms of positive impacts to physical and mental health?
Other important research questions	How can Village services be integrated into the continuum of care in home, community, and facility settings?

What kinds of programs can Villages deliver that translate to positive health outcomes that matter most to Village members, health care providers, and health insurers?

What evidence-based services can Villages provide that can be reimbursed by public payer systems (e.g., Medicare and Medicaid)?

How can Village services evolve to meet the changing health care needs of Village members such as dementia-competent care?

What kinds of programs can Villages provide to care for the frailest Village members?

How can Villages most effectively facilitate access to home care services?

Also, in line with patient- or person-centered outcomes research, future research studies should focus on outcomes most meaningful to Village members, including measurement of physical, cognitive, mental, and social well-being, alongside a sense of purpose and feeling prepared for changes associated with aging. Additional engagement is necessary to narrow in on person-centered outcomes for specific projects that focus on particular interventions. Aging in place was another key outcome but considered to be further downstream and driven by healthy aging, as well as health services outcomes that are especially important to health care systems, such as hospital readmissions.

3.2 IMPLICATIONS FOR THE PLANNING, DESIGN, & ANALYSIS OF FUTURE STUDIES

There are several implications for the design and analysis of future comparative clinical effectiveness studies. To ensure diversity of Village and prospective research participants, Villages are increasingly working to engage older adults who do not typically join a Village (e.g., due to income limitations, geographic location, lack of awareness, preferred use of other community supports). Participants also expressed interest in using research to learn how to diversify their membership and how to message and appeal to new demographics, to be more inclusive along the ethnic, racial, and socioeconomic spectrum. Data on the demographic make-up of Villages which is currently not consistently captured across all Villages, can help track progress on diversity and inclusivity.

While the extent of selection into Villages is not known, it is likely that there are characteristics associated with becoming a Village member that could also be predictive of healthy aging outcomes.[22]

For example, having stable and affordable housing may be more common among older adults who choose to belong to Villages and stable housing is protective for social, physical, and cognitive health to the extent that it could mask any potential beneficial effects of a healthy aging intervention delivered by a Village. There are older adults who are socially isolated who may not be aware of Villages, or at the other end of the spectrum, there are older adults who are already socially engaged through other means, e.g., churches, and don't feel the need to join a Village. Both scenarios are challenging to select an appropriate comparison group to ascertain whether Village members versus non-Village members experience different health outcomes attributable to Village membership. The size and composition of intervention and comparison groups, study design, and analytic methods should be carefully considered to account for systematic

differences in individuals or communities to isolate any effects of Villages or programs delivered through Villages.

PCOR-CER should also account for the high variability in how Villages are led and how services are delivered (i.e., by volunteers, paid staff, or both), size of membership, types of members (e.g. demographic and health characteristics), geographic context, how services originated (from Village members vs external partners) and diversity of services. Future comparative clinical effectiveness research should carefully consider sampling Villages that have demonstrated some organizational longevity and should conduct power analysis to enable detection of sub-group differences and multiple intervention arms. There is also merit in learning lessons both from Villages that succeed in the long term and from Villages that are short lived.

Focus group findings revealed that staffing capacity is a significant barrier to Villages' ability to engage and implement research. Villages are largely driven by volunteers, although a good number of Villages have formal paid roles. Future comparative clinical effectiveness research will need to balance the desire to capture standardized measures of well-being domains across sites (i.e., Villages) with mindfulness of participant burden. In addition, Villages need to be able to shift what services are provided in response to diverse and changing needs of Village members (e.g., dementia-specific services), which could have implications for protocol adherence and longitudinal

study designs. Examples include the following scenarios: (a) a program that is being evaluated ceases to be offered during the study period; (b) new services begin to be offered during the study period; or (c) the programs that are evaluated change delivery approach, such that at the start of a study a program may be delivered by Village volunteers and then it transitions to delivery by community partners or other third-party organization.

Other infrastructure challenges include lack of data systems to collect, aggregate, and analyze data regarding Village members' demographic characteristics, health outcomes (e.g., falls, fractures), biomarkers (HgA1C levels), and health care utilization (hospital readmissions). While electronic data platforms are increasingly used by Villages, and researchers can help with data systems, data harmonization within and across Villages is a large endeavor that requires buy-in by Villages, and human and data system capacity for implementation.

Given the grassroots nature of Villages, high engagement of Village members and leaders, especially those who are not familiar with research, will be especially important to select priority healthy aging outcomes and to clarify the purpose of comparative clinical effectiveness research. Because Villages are typically founded by and for older community members, it is essential to design plans for PCOR-CER in the context of shared ownership and commitment among the researchers and the Village members from

the earliest planning stages. For example, on this particular project, the Village to Village Network championed healthy aging research among their member Villages, which was an important facilitator of the recruitment process. Such strong partnership is vital in the implementation of future research, to achieve the intended goals, outcomes and impact.

Three key recommendations emerged to facilitate Village engagement in research. First, researchers should ensure that research funding includes commensurate budgets for Village staffing, participant incentives, and other research support tasks. Second, researchers should ensure research participation provides a benefit to Villages, such as identifying outcomes that are meaningful to the organization and support with developing data infrastructure. Lastly, early and continuous engagement across the project duration including dissemination of results back to Villages is critical for the success of any research project. Any research partnerships with Villages will require considerable commitment and trust on the part of Village leaders and members. For example, even studies that rely entirely on administrative records alone may require consent from individual Village members for the release of their health information to the researchers. Participants offered other important suggestions around researchers' transparency, communication clarity, and managing participant expectations, for example the expected time to complete surveys and level of effort to participate in a study.

3.3   LIMITATIONS

There are several limitations to note. First, the study relied only on self-reported qualitative data, and precluded objective metrics about Village service provision, Village characteristics (e.g., membership, service area) or other Village process measures. Thus, these data only provide part of the story. Second, our qualitative effort was conducted only in English. Third, although the participant sample came from over a third of U.S. states, and although it mirrors the broader demographics of Village members, this sample may still not be representative of all Villages and geographic areas in the U.S. Our sample was predominantly white, female, educated, and with limited representation from central and southeastern U.S. Finally, self-selection bias: individuals who agreed to participate in focus groups may be systematically different from those who did not respond to our recruitment efforts. For instance, focus group participants might have been more motivated to contribute, or might have had more time (e.g., retired) and resources (e.g., reliable internet access), alongside greater interest in participating in research.

4 CONCLUSION

Drawing on data from five focus groups with diverse Village members and leaders across the U.S., this study presents formative insights about Villages and healthy aging, and barriers to, and facilitators of, Village engagement in future patient-centered, comparative clinical effectiveness research to support healthy aging. Healthy aging was seen as a facilitator to aging in place, and Villages are perceived to support healthy aging in many ways, with social connectedness and preventive health services as a dominant theme. The role of Villages in interfacing between members and the health care system emerged as a consistent topic of consideration, although Villages differ in how they can or want to meet this demand.

Participants felt that evidence-based research was vital to the sustainability of Villages; however, Village capacity in terms of staffing and data infrastructure were the main barriers to consider in future research partnerships. The networks of volunteers that Villages galvanize and maintain were seen to be facilitators of future research. In future designs of comparative clinical effectiveness research, studies should aim for continuous engagement, and transparency around the goals and time commitment of research participation for individuals and organizations. Studies should also account for selection issues with Village membership, as well as the high variability in how Villages are set up, what they do, and how they support their members. Continuing to center the voices of Village participants in the planning, design, and implementation of research is valuable for advancing evidence-based and community-centered approaches for healthy aging.

APPENDIX A. METHODS

In this study, we aimed to understand how Village participants think about healthy aging, how they think Villages help support healthy aging, as well as barriers, facilitators, and capacity to engage in healthy aging research among Villages in the U.S. We wanted to see whether Villages want and can engage in research partnerships that may contribute to healthy aging. We were especially interested in how factors such as Village resources, infrastructure, and motivation might feature in study designs that meet patient-centered outcomes research and comparative effectiveness research criteria. Our key research questions were:

What does healthy aging mean to Village members?
How are Villages seen to support healthy aging?
How might research support healthy aging for Village members?
What priorities do Village members have for healthy aging research?
How can future research partnerships account for perceived barriers and facilitators?

To explore these questions, we conducted five virtual focus groups with a broad range of persons with relevant experience across various roles in their Villages: two with general members, and one each with members with a health background, paid professionals and officers, and regional leaders. Below, we describe the methodology in detail.

Focus Group Protocols and Recruitment

Focus groups lasted approximately two hours and were conducted remotely via Zoomgov between October and December 2023. All participants consented and gave their permission for the discussions to be audio recorded and transcribed verbatim.

We anticipated that the variation in participant roles would have implications for the type and extent of knowledge of some topics, such as Village resources, organization, and

governance. Thus, we developed a focus group protocol with a few sets of questions tailored to maximize unique perspectives from certain roles. The questions covered the following domains: 1) priorities for healthy aging research; 2) lessons learned from past Village participation in research (Village members with a health background only); 3) Village governance and infrastructure (Village and regional leaders only); 4) barriers to engagement with researchers; 5) facilitators and motivation to help research; and 6) recommendations for future collaborations between Villages and researchers. Our research partners, including Village to Village Network (VTVN), reviewed the protocol to ensure that the language and concepts resonate with participants. You can read the full protocol in Appendix B.

Participants were recruited using convenience snowball sampling, with assistance from our partner VTVN. VTVN is a national nonprofit founded in 2010 to help support the growth and sustainability of Villages nationwide; it has over 270 member Villages in its network, with dozens more in development. A study flyer was circulated widely on VTVN's website, email newsletters, and advertised at virtual events. Individual outreach via email was conducted by VTVN for the regional leaders focus group. Some of the participants inevitably had experience with multiple roles included in our sampling strategy. For example, some of the professionals and leaders also had a health care background. Where that was the case, we left it up to participants to determine the group they could or wanted to attend. We did not receive any advance requests for accommodations, such as live captions or American Sign Language. During the focus groups, however, participants who were hard of hearing could enable Zoomgov's closed caption function.

All focus groups were conducted in English only. At least two members of the research team attended each focus group. The discussions were audio recorded and transcribed verbatim. Original recordings were reviewed, as needed, to verify accuracy. Each participant received $50 gift cards in recognition of their time.

Focus Group Analysis

All transcripts were uploaded to NVivo, a software package that supports mixed methods data management, collaborative analysis and interpretation.[23] Two researchers with

qualitative experience (AG and AP) developed the codebook. The codebook development was informed in part by the structure of the focus group protocol, and we began the process concurrently with the data collection. We then iterated on the codebook structure and definitions, accounting for new insights shared by respondents, and completed the coding process between November 2023 and January 2024. We thus combined deductive and inductive coding techniques, given that the protocols focused narrowly on some domains, but also allowed participants to bring up issues not captured by our questions.[24]

During the early coding stage, AP and AG analyzed 40% of transcripts independently. Using memos and NVivo's annotation function, we adjudicated differences in coding and refined codebook definitions and coding rules.[25] Inter-coder reliability and percent agreement were computed.[26,27] The kappa score started at 0.69 and eventually we reached 0.71, with 95% agreement. Next, the remaining transcripts were coded by AP.

Our codebook was structured around broad categories of concrete codes (as opposed to more conceptual or more ambiguous ones), with sub-codes that were also concrete and unambiguous; for example, issues related to aging (e.g., meaning of healthy aging, negative stereotypes); Village services (e.g., help navigating health care provision, prevention, advocacy, transportation); Village future (e.g., sustainability, collaborations, membership issues); research infrastructure (e.g., research topics of interest, proposal framing, resistance to research, data collection) and so on. Thus, more than 90% of the codes were captured in the first 2 transcripts. Finally, we exported excerpts for codes that appeared in at least two focus groups, we analyzed them again (across transcripts) and summarized in the Findings section of this report, with occasional illustrative quotes as necessary. unambiguous; for example, issues related to aging (e.g., meaning of healthy aging, negative stereotypes); Village services (e.g., help navigating health care provision, prevention, advocacy, transportation); Village future (e.g., sustainability, collaborations, membership issues); research infrastructure (e.g., research topics of interest, proposal framing, resistance to research, data collection) and so on. Thus, more than 90% of the codes were captured in the first 2 transcripts. Finally, we exported excerpts for codes that appeared in at least two focus groups, we analyzed them again (across transcripts) and summarized in the Findings section of this report, with occasional illustrative quotes as necessary.

APPENDIX B. FOCUS GROUP PROTOCOL

DISCUSSION GROUP PROTOCOL
[for Village members, Village members with health background, Village Executive Directors, and regional Village leaders]

Introduction
In the next 2 hours, we will be talking about how researchers and Villages can collaborate in future research focused on healthy aging, patient-centered outcomes research, and comparative effectiveness research.

This focus group is part of a project aimed at strengthening mutual understanding between Village leaders and researchers and building a shared vision for collaborative research studies that focus on what matters most to older adult Village participants.
You are the experts here. We would like your honest opinions, so please do not be afraid to speak up or to be critical.

Priorities for Healthy Aging Research

1. What comes to mind when you hear "healthy aging"?
2. How do you feel about research in general?
    [PROBE] How do you think research can help you personally?
3. What are some of the factors that you think may help healthy aging? [For example, community support, independence, social engagement, housing stability, access to health and social services, culture, spirituality, volunteer opportunities]
4. In what ways do Villages help you with your healthy aging goals?

[PROBE] Tell us about some of the activities you have been engaged in as part of your Village.

[PROBE] Are there activities you'd like to do but the Village has not yet organized for you?

5. What do you think should be prioritized for research in partnership with Villages when it comes to healthy aging?

6. What health outcomes matter to you? [For example, physical health, mental health, social well-being]

7. How do you think patient-centered research might help improve Village members' outcomes?

What long-term benefits would you anticipate from national research on healthy aging and Villages?

8. How do you feel about equity issues when it comes to research?

[Prepared definition, if discussants ask for it: in simple terms, equity refers to fairness and justice. While equality means providing the same to all, equity recognizes that some individuals have had different starts, different resources in life, and thus equitable approaches seek to redress these imbalances.]

[Additional questions for Village members with a health background]

9. How important is research for the Village movement? Why is research important for the Village movement?

10. If you have already been involved with facilitating research in the context of Villages and healthy aging, what stood out for you from that experience?

How did it, or did it not, generate value for your members, community, or organization?

To what extent was your Village Board and committees involved with the partnership with a research team? Staff?

11. What other groups or organizations need to be included in any research collaboration focused on Villages?

Village Governance and Infrastructure [for Village and regional leaders only]

12. From prior research we know that there is quite a bit of variation in terms of how Villages are organized, governed, services provided, etc. How should these Village characteristics be considered in research planning, design, and implementation?

    [PROBE] For Villages with paid staff, how can research-related tasks be built into their roles as part of grant-funded projects? What is the easiest and fairest way to provide financial compensation for special projects (e.g., through salary support, extra pay, hire consultant)?

    How might participation in research help with operational challenges or opportunities for improvement?

13. Are Villages collecting any data to document their members and/or activities or services provided?

    Does your Village have a point person—staff or volunteer—who oversees data-related projects or reporting? If not, who do you think this person would be in your organization?

SHOW THIS AS SLIDE DURING GROUP TO PREFACE NEXT QUESTION

[For the purposes of this project, Comparative effectiveness research (CER) is a type of research that compares the benefits and harms of two or more approaches to healthcare and health.

Outcomes refer to results that we can measure.

Patient-Centered Outcomes Research (PCOR) is a type of CER and refers to research that is centered on individuals' preferences, values, and needs. In other words, it is research that takes into account what matters most to you.]

14. How might we improve the existing Village to Village infrastructure to facilitate participation in PCOR-CER?

Barriers to engagement with researchers

15. What might prevent you, Villages, and Village members from participating in research?

16. How are these partnership decisions arrived at in your Village?

Motivation to help research

17. What might help you or Village members to participate in research?

Your Recommendations

18. Do you have specific suggestions for how future collaborations between Villages and researchers should be planned? Designed? Implemented?
19. What suggestions do you have for communicating to or educating Villages about PCOR-CER?

> What important messages should we emphasize in future communications to encourage Village participants to participate in healthy aging research projects? How might participant recruitment be best implemented? (For example, financial compensation, being asked to participate by a peer, being asked to participate by staff)

20. Is there anything we're leaving out here that needs to be addressed?

[Additional questions for Village members with a health background]

21.What are factors should we consider when it comes successful research implementation across Villages?

Abbreviations

CER	comparative effectiveness research
COVID-19	coronavirus disease 2019
PCOR	patient-centered outcomes research
VTVN	Village to Village Network

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